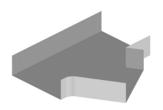
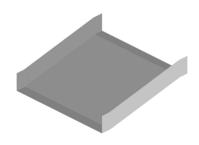
Electrical/Equipment



Dims	Options	Conn's
A=Left Width	Type=Tray	C1=None
B=Depth	Throat Type=Radius	C2=None
C=Right Width	Riser Type=Outside	C3=None
D=Branch Width	Pattern=No	
E=Length	Type=Left	
F=Branch Length	Inlet=1	
G=Left Extension	Outlet=2	
H=Right Extension	Riser=No	
I=Branch Extension		
J=Inner Radius		
K=Angle		Seams
L=Inset		
M=Offset		

Damper:

# Pattern: 872 Electrical/Equipment

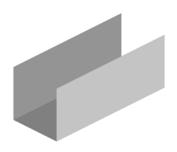


Dims	Options	Conn's
A=Width	Type=Tray	C1=None
B=Depth	Base Depth=0.000	C2=None
C=Length	Use Spacing=No	
D=Offset	Double=No	
E=Left Extension		
F=Right Extension		
G=Wire Diameter		
H=Wire X Spacing		
I=Wire Y Spacing		
		Seams

Damper:

4/18/2016 courtesy of software 1

Electrical/Equipment



Dims	Options	Conn's
A=Width	Type=Tray	C1=None
B=Depth	Pattern=No	C2=None
C=Length	X Size=0.000	
D=Rail Width	Y Size=0.000	
E=Rung Width	Base Depth=0.000	
F=Rung Depth	Use Spacing=No	
G=Rung Height	Rotate=No	
H=Rung Spacing	Oversized Item=No	
I=Wire Diameter	Develop=No	
J=Wire X Spacing		
K=Wire Y Spacing		Seams

Damper:

#### Pattern: 878 Electrical/Equipment



Dims	Options	Conn's
A=Width	Rungs=3	C1=None
B=Depth	Type=Tray	C2=None
C=Angle	Throat Type=Radius	C3=None
D=Inner Radius	Heel Type=Radius	
E=Extension	Base Depth=0.000	
F=Rail Width	Use Spacing=No	
G=Rung Width	Double=No	
H=Rung Depth	Pattern=No	
I=Rung Height	Inlet=1	
J=Rung Inset	Outlet=2	
K=Wire Diameter	Auto Mirror=Yes	Seams
L=Wire X Spacing	X Size=0.000	
M=Wire Y Spacing	Y Size=0.000	
N=Bottom Extension		

Damper:

Electrical/Equipment



Dims	Options	Conn's
A=Width	Type=Tray	C1=None
B=Depth	Throat Type=Radius	C2=None
C=Branch Width	Pattern=No	C3=None
D=Inner Radius	X Size=0.000	C4=None
E=Right Extension	Y Size=0.000	
F=Rail Width	Inlet=1	
G=Rung Width	Outlet=2	
H=Rung Depth	Double=No	
I=Rung Offset	Oversized Item=No	
J=Rung Inset		
K=Wire Diameter		Seams
L=Wire X Spacing		
M=Wire Y Spacing		
N=Bottom Extension		
O=Left Extension		
P=Branch Wire Spacing		Damper:

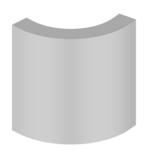
Pattern: 880 Electrical/Equipment



Dims	Options	Conn's
A=Width	Throat Type=Radius	C1=None
B=Depth	Type=Tray	C2=None
C=Radius	Pattern=No	C3=None
D=Extension	X Size=0.000	C4=None
E=Rail Width	Y Size=0.000	
F=Rung Width		
G=Rung Depth		
H=Rung Height		
I=Rung Inset		
J=Wire Diameter		
K=Wire X Spacing		Seams
L=Wire Y Spacing		

Damper:

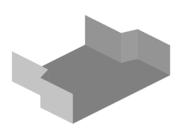
Electrical/Equipment



Dims	Options	Conn's
A=Width	Rungs=3	C1=None
B=Depth	Type=Tray	C2=None
C=Angle	Type=Inside Riser	
D=Nominal Radius	Angle=No	
E=Extension	Pattern=No	
F=Rail Width	Auto Mirror=Yes	
G=Rung Width	Throat Type=Radius	
H=Rung Depth		
I=Rung Height		
J=Rung Inset		
K=Bottom Extension		Seams
L=Wire Y Spacing		
M=Wire X Spacing		

Damper:

# Pattern: 901 Electrical/Equipment



Dims	Options	Conn's
A=Bottom Width	Offset Width=Central	C1=None
B=Bottom Depth	Type=Tray	C2=None
C=Top Width	Angle=Yes	
D=Top Depth	Pattern=No	
E=Angle	X Size=0.000	
F=Length	Y Size=0.000	
G=Extension	Base Depth=0.000	
H=Rail Width	Use Spacing=No	
I=Rung Width	Oversized Item=No	
J=Rung Depth	Offset Depth=Default	
K=Rung Height		Seams
L=Rung Inset		
M=Wire Diameter		
N=Wire X Spacing		
O=Wire Y Spacing		
		Damper:

4/18/2016 courtesy of Applied software 4

Electrical/Equipment



Dims	Options	Conn's
A=Width	Type=Tray	C1=None
B=Depth	Throat Type=Radius	C2=None
C=Branch Width	Type=Outside	C3=None
D=Inner Radius	Pattern=No	C4=None
E=Right Extension	X Size=0.000	
F=Rail Width	Y Size=0.000	
G=Rung Width	Inlet=1	
H=Rung Depth	Outlet=2	
I=Rung Offset	Double=No	
J=Rung Inset		
K=Wire Diameter		Seams
L=Wire X Spacing		
M=Wire Y Spacing		
N=Bottom Extension		
O=Left Extension		
P=Branch Wire Spacing		Damper:

#### Pattern: 909 Electrical/Equipment



Dims	Options	Conn's
A=Width	Type=Tray	C1=None
B=Depth	Base Depth=0.000	C2=None
C=Length	Use Spacing=No	
D=Offset	Oversized Item=No	
E=Left Extension		
F=Right Extension		
G=Wire Diameter		
H=Wire X Spacing		
I=Wire Y Spacing		
		Saame

Damper:

Electrical



Dims	Options	Conn's
A=Width	Type=Left	C1=None
B=Depth	Pattern=None	C2=None
C=Left Extension	Inlet=1	
D=Right Extension E=Offset Width F=Wire Y Spacing G=Wire X Spacing	Outlet=2	

Seams

Damper:

# Pattern: 984 Electrical/Equipment



Dims	Options	Conn's
A=Diameter	Sex Type=Male	C1=None
B=Collar		C2=None
C=Length		
D=Offset		
E=Oval Depth		

Seams

S1=None

Damper:

4/18/2016 courtesy of software 6

Electrical/Equipment

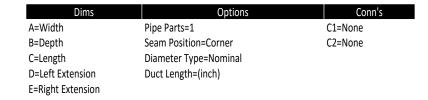


Dims	Options	Conn's
A=Width In	Type=Elbow Left Front	C1=None
B=Depth In	Pattern=None	C2=None
C=Width Out		
D=Depth Out		
E=Length In		
F=Mid Length		
G=Length Out		
H=Extension In		
I=Extension Out		
J=Width Out		
K=Depth Out		Seams
L=Top Edge		S1=None
M=Bottom Edge		
N=Front Edge		
O=Back Edge		
		<b>D</b>

4/18/2016 courtesy of Applied software 7



Flat Oval





Seams S1=None

Damper:



Pattern: 102

Flat Oval



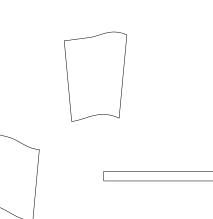
Dims	Options	Conn's
A=Major Axis	Diameter Type BE=Nominal	C1=None
B=Minor Axis	Diameter Type SE=Nominal	C2=None
C=Major Axis	Same Seams On Each Part=No	
D=Minor Axis		
E=Length		
F=Offset Width		
G=Offset Depth		
H=Collar		
I=Collar		
		Saame

Damper:

S1=None

Round/Flat Oval





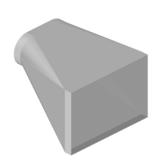
Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Diameter Type BE=Nominal	C2=None
C=Diameter	Diameter Type SE=Nominal	
D=Length	Seam Position=Corner	
E=Offset Width	Inlet=1	
F=Offset Depth	Outlet=2	
G=Oval Collar	Same Seams On Each Part=No	
H=Round Collar		

Seams S1=None

Damper:

#### Pattern: 104 Rectangular/Flat Oval

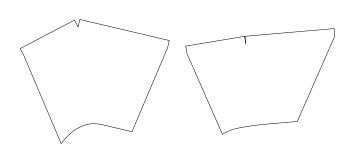
4/18/2016



Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Diameter Type=Nominal	C2=None
C=Oval Width	Marker Type=Notch	
D=Oval Depth	Offset Width=Left In	
E=Length	Offset Depth=Bottom Up	
F=Offset Width	Seam Position=Corner	
G=Offset Depth	Inlet=1	
H=Rect Extension	Outlet=2	
I=Collar	Same Seams On Each Part=No	

Seams S1=None

Damper:



2

Flat Oval

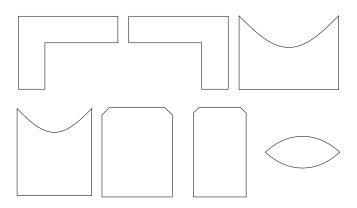


Dims	Options	Conn's
A=Width	Diameter Type=Nominal	C1=None
B=Depth	Splitters=0	C2=None
C=Corner Radius	Splitter Radius=Auto	C3=None
D=Bottom Extension	Splitter Adjust=0.000	
E=Right Extension	Inlet=2	
F=Bottom Collar	Outlet=3	
G=Right Collar		

Seams

S1=None

Damper:



Pattern: 106

Flat Oval



Dims	Options	Conn's
A=Width	Number Of Segments=4	C1=None
B=Depth	Diameter Type=Nominal	C2=None
C=Inner Radius	Nest Break Start Segment=0	C3=None
D=Angle	Nest Break End Segment=0	
E=Bottom Extension	Notch Angle For Seam=0	
F=Top Extension	Leg Lengths=No	
	Length Includes Extensions=No	
	Splitters=0	
	Splitter Adjust=0.000	
	Splitter Shape=Angled	
		Seams
		S1=None
		S2=None

Damper:

Flat Oval



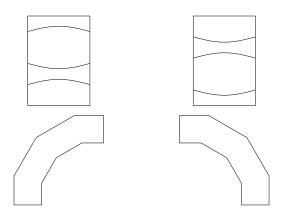
Dims	Options	Conn's
A=Width	Number Of Segments=4	C1=None
B=Depth	Diameter Type=Nominal	C2=None
C=Inner Radius	Seam Position=Throat	C3=None
D=Angle	Single Segments=No	
E=Bottom Extension	Nest Break Start Segment=0	
F=Top Extension	Nest Break End Segment=0	
	Cross Break=1	
	Notch Angle For Seam=0	
	Leg Lengths=No	
	Length Includes Extensions=No	
	Splitters=0	Seams
	Splitter Adjust=0.000	S1=None
	Splitter Shape=Angled	S2=None
	Automatic Nest Break If Oversize=No	

Damper:

Pattern: 108

Flat Oval





Dims	Options	Conn's
A=Width	Number Of Segments=4	C1=None
B=Depth	Diameter Type=Nominal	C2=None
C=Inner Radius	Nest Break Start Segment=0	C3=None
D=Angle	Nest Break End Segment=0	
E=Bottom Extension	Notch Angle For Seam=0	
F=Top Extension	Leg Lengths=No	
	Length Includes Extensions=No	

Seams S1=None S2=None

Damper:

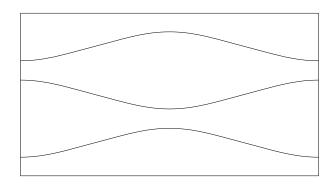
Flat Oval



Dims	Options	Conn's
A=Width	Number Of Segments=4	C1=None
B=Depth	Diameter Type=Nominal	C2=None
C=Inner Radius	Seam Position=Throat	C3=None
D=Angle	Single Segments=No	
E=Bottom Extension	Nest Break Start Segment=0	
F=Top Extension	Nest Break End Segment=0	
	Cross Break=1	
	Notch Angle For Seam=0	
	Leg Lengths=No	
	Length Includes Extensions=No	
	-	Seams
		S1=None
		60. 11

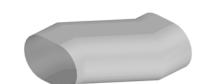
S2=None

Damper:



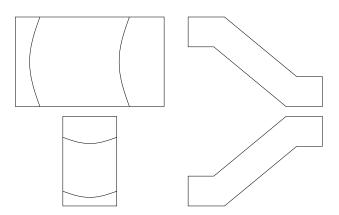
Pattern: 110 Flat Oval

4/18/2016



Dims	Options	Conn's
A=Width	Diameter Type=Nominal	C1=None
B=Depth	"	C2=None
C=Length		C3=None
D=Offset Width		
E=Left Extension		
F=Right Extension		
G=Left Collar		
H=Right Collar		
I=Offset Depth		
•		
		Seams
		S1=None

Damper:



courtesy of 5

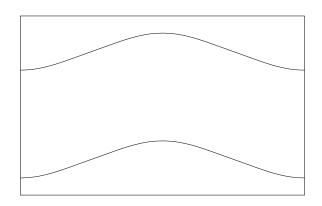
Flat Oval



Dims	Options	Conn's
A=Width	Seam Position=Bottom	C1=None
B=Depth	Single Segments=No	C2=None
C=Length	Diameter Type=Nominal	C3=None
D=Offset Width	Cross Break=1	
E=Left Extension	Automatic Nest Break If Oversize=No	
F=Right Extension		
G=Left Collar		
H=Right Collar		
I=Offset Depth		

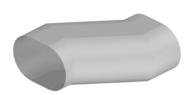
Seams S1=None

Damper:



## Pattern: 112

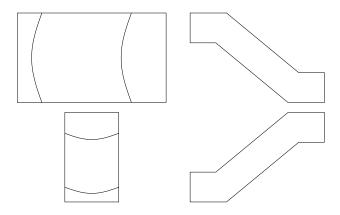
Flat Oval



Dims	Options	Conn's
A=Width	Diameter Type=Nominal	C1=None
B=Depth	Marker Notches On Easy Flats=No	C2=None
C=Length		C3=None
D=Offset Width		
E=Left Extension		
F=Right Extension		
G=Left Collar		
H=Right Collar		
I=Offset Depth		
•		
		Seams

Damper:

S1=None



courtesy of 4/18/2016 6

Flat Oval

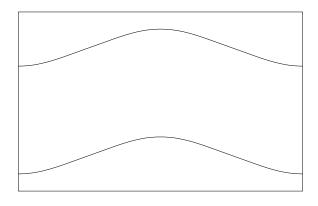


	Options	Conn's
Seam	Position=Bottom	C1=None
Single	Segments=No	C2=None
Diame	ter Type=Nominal	C3=None
Cross	Break=1	

Seams

S1=None

Damper:



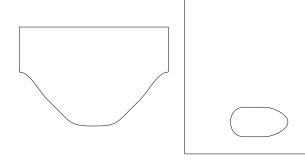
Pattern: 114

Flat Oval



Dims	Options	Conn's
A=Width	Pipe Parts=1	C1=None
B=Depth	Branch Parts=1	C2=None
C=Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Branch Diameter Type=Nominal	
E=Right Extension	Seam Position=0.000	
F=Branch Width #1	Branch Allowance To Pipe=0.000	
G=Branch Depth #1	True Oval Straight=No	
H=Branch Length #1		
I=Angle #1		
J=Inset #1		
K=Offset #1		Seams
L=Extension #1		S1=None
		S2=None

Damper:



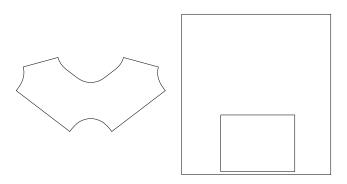
courtesy of Applied Software 4/18/2016

Flat Oval



Dims	Options	Conn's
A=Major Axis	Pipe Parts=1	C1=None
B=Minor Axis	Branch Parts=1	C2=None
C=Pipe Length	Pipe Seam Position=0.000	C3=None
D=Left Extension	Pipe Diameter Type=Nominal	
E=Right Extension	Branch Diameter Type=Nominal	
F=Major Axis	Round Allowance To Pipe=0.000	
G=Minor Axis	Flat Allowance To Pipe=0.000	
H=Branch Length	Hole Adjust=0.000	
I=Angle	Add Collars To Body=No	
J=Angle		
K=Inset		Seams
L=Collar		S1=None
		S2=None
		S3=None





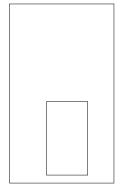
# Pattern: 116

Flat Oval



Dims	Options	Conn's
A=Minor Axis	Pipe Parts=1	C1=None
B=Major Axis	Branch Parts=1	C2=None
C=Pipe Length	Pipe Seam Position=0.000	C3=None
D=Left Extension	Pipe Diameter Type=Nominal	
E=Right Extension	Branch Diameter Type=Nominal	
F=Minor Axis	Round Allowance To Pipe=0.000	
G=Major Axis	Flat Allowance To Pipe=0.000	
H=Branch Length	Hole Adjust=0.000	
I=Angle		
J=Angle		
K=Inset		Seams
L=Collar		S1=None
		S2=None







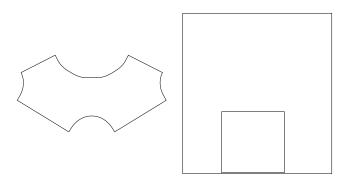
4/18/2016 courtesy of Applied software 8

Flat Oval



Dims	Options	Conn's
A=Major Axis	Pipe Parts=1	C1=None
B=Minor Axis	Branch Parts=1	C2=None
C=Pipe Length	Pipe Seam Position=0.000	C3=None
D=Left Extension	Pipe Diameter Type=Nominal	
E=Right Extension	Branch Diameter Type=Nominal	
F=Minor Axis	Round Allowance To Pipe=0.000	
G=Major Axis	Flat Allowance To Pipe=0.000	
H=Branch Length	Hole Adjust=0.000	
I=Angle		
J=Angle		
K=Inset		Seams
L=Collar		S1=None
		S2=None
		S3=None

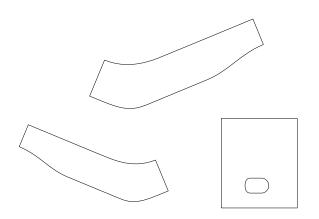
Damper:



# Pattern: 118

Flat Oval





Dims	Options	Conn's
A=Major Axis	Pipe Parts=1	C1=None
B=Minor Axis	Pipe Seam Position=0.000	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	
E=Right Extension	Branch Allowance To Pipe=0.000	
F=Major Axis #1	Branch Diameter Type=Nominal	
G=Minor Axis #1	Branch Parts=2	
H=Branch Length #1	Plate Border=0.000	
I=Angle #1	Plate Type=Rectangular	
J=Inset #1	Sides=Yes	
K=Offset #1	Branch Seam Position=0.000	Seams
L=Rotation #1	Branch Only=No	S1=None
M=Collar #1	Allow Branches On Flats=No	S2=None

Damper:

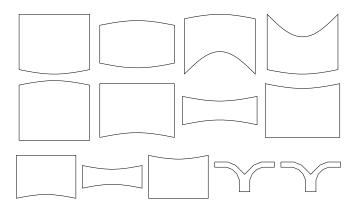
Flat Oval



Dims	Options	Conn's
A=Btm Width	Diameter Type=Nominal	C1=None
B=Depth	Add Collars To Body=Yes	C2=None
C=Top Diameter		C3=None
D=Inner Radius		C4=None
E=Bottom Extension		
F=Left Extension		
G=Right Extension		
H=Bottom Collar		
I=Left Collar		
J=Right Collar		
-		Seams

S1=None

Damper:



Pattern: 120

Flat Oval



Dims	Options	Conn's
A=Width	Diameter Type=Nominal	C1=None
B=Depth	Duct Length=(inch)	C2=None
C=Length	Area Adjust (%)=0.000	
D=Left Extension		
F=Right Extension		

Seams

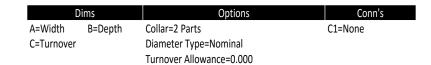
S1=None

Damper:



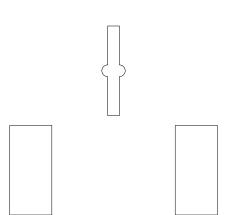
courtesy of 4/18/2016 10

Flat Oval









Damper:

Pattern: 122



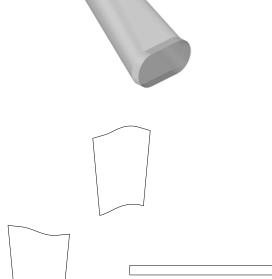
Dims	Options	Conn's
A=Major Axis	Diameter Type BE=Nominal	C1=None
B=Minor Axis	Diameter Type SE=Nominal	C2=None
C=Major Axis	Same Seams On Each Part=No	
D=Minor Axis		
E=Length		
F=Offset Width		
G=Offset Depth		
H=Collar		
I=Collar		
		Seams

S1=None

Damper:

Round/Flat Oval





Dims	Options	Conn's
A=Width	Diameter Type BE=Nominal	C1=None
B=Depth	Diameter Type SE=Nominal	C2=None
C=Diameter	Seam Position=Major Axis	
D=Length	Inlet=1	
E=Offset Width	Outlet=2	
F=Offset Depth	Same Seams On Each Part=No	
G=Oval Collar		
H=Round Collar		

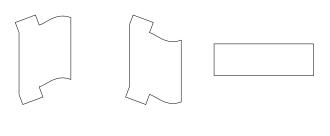
Seams S1=None

Damper:

Pattern: 132 Flat Oval



Dims	Options	Conn's
A=Major Axis	Cross Break=2	C1=None
B=Minor Axis	Diameter Type BE=Nominal	C2=None
C=Major Axis	Diameter Type SE=Nominal	
D=Minor Axis	Collar Arcs - Lap=0.000	
E=Length	Collar Arcs - Allowance=0.000	
F=Offset Width	Same Seams On Each Part=No	
G=Offset Depth	Oval Half Collar=Yes	
H=Extension In		
I=Extension Out		
J=Collar		
K=Collar		Seams
		S1=None



Damper:

courtesy of Applied Software 4/18/2016 12

Round/Flat Oval

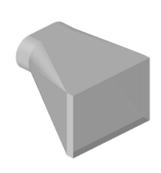


Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Diameter Type BE=Nominal	C2=None
C=Diameter	Diameter Type SE=Nominal	
D=Length	Collar Arcs - Lap=0.000	
E=Offset Width	Collar Arcs - Allowance=0.000	
F=Offset Depth	Seam Position=Corner	
G=Oval Extension	Inlet=1	
H=Oval Collar	Outlet=2	
I=Round Collar	Same Seams On Each Part=No	
	Oval Half Collar=Yes	

Seams S1=None

Damper:

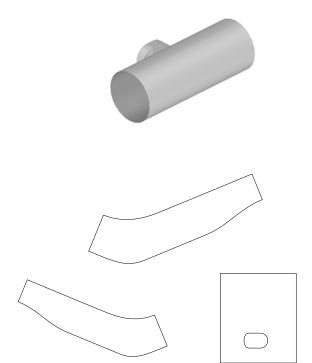
#### Pattern: 134 Rectangular/Flat Oval



Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Diameter Type=Nominal	C2=None
C=Oval Width	Marker Type=Notch	
D=Oval Depth	Offset Width=Left In	
E=Length	Offset Depth=Bottom Up	
F=Offset Width	Seam Position=Corner	
G=Offset Depth	Collar Arcs - Lap=0.000	
H=Rect Extension	Collar Arcs - Allowance=0.000	
I=Oval Extension	Inlet=1	
J=Collar	Outlet=2	
	Same Seams On Each Part=No	Seams
	Oval Half Collar=Yes	S1=None

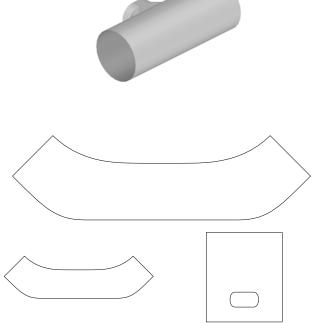
Damper:

Flat Oval



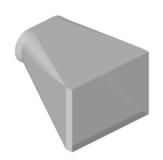
Dims	Options	Conn's
A=Major Axis	Pipe Parts=1	C1=None
B=Minor Axis	Pipe Seam Position=0.000	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	
E=Right Extension	Branch Allowance To Pipe=0.000	
F=Major Axis #1	Branch Diameter Type=Nominal	
G=Minor Axis #1	Branch Parts=2	
H=Branch Length #1	Plate Border=0.000	
I=Angle #1	Plate Type=Rectangular	
J=Inset #1	Branch Seam Position=0.000	
K=Offset #1	Collar Arcs - Lap=0.000	Seams
L=Rotation #1	Collar Arcs - Allowance=0.000	S1=None
M=Collar #1	Branch Only=No	S2=None
N=Oval Half Extension	Branch Seam Position=All	
	Same Seams On Each Part=No	
	Allow Branches On Flats=No	Damper:

#### Pattern: 136 Flat Oval



Dims	Options	Conn's
A=Major Axis	Pipe Parts=1	C1=None
B=Minor Axis	Pipe Seam Position=0.000	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	
E=Right Extension	Branch Allowance To Pipe=0.000	
F=Major Axis #1	Branch Diameter Type=Nominal	
G=Minor Axis #1	Branch Parts=2	
H=Branch Length #1	Plate Border=0.000	
I=Angle #1	Plate Type=Rectangular	
J=Inset #1	Branch Seam Position=0.000	
K=Offset #1	Collar Arcs - Lap=0.000	Seams
L=Rotation #1	Collar Arcs - Allowance=0.000	S1=None
M=Collar #1	Branch Only=No	S2=None
N=Oval Half Extension	Branch Seam Position=All	
	Same Seams On Each Part=No	
		Damper:

Rectangular/Flat Oval

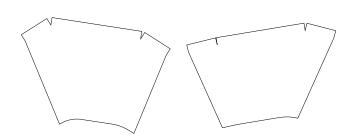


Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Diameter Type=Nominal	C2=None
C=Oval Width	Marker Type=Notch	
D=Oval Depth	Offset Width=Left In	
E=Length	Offset Depth=Bottom Up	
F=Offset Width	Seam Position=Depth	
G=Offset Depth	Inlet=1	
H=Rect Extension	Outlet=2	
I=Collar	Same Seams On Each Part=No	

Seams

S1=None

Damper:



Pattern: 139

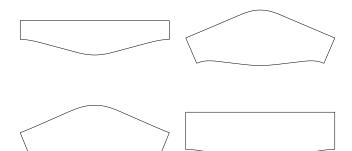
Flat Oval



umber Of Segments=4 ottom Diameter Type=Nominal	C1=None C2=None
ottom Diameter Type=Nominal	C2-None
	CZ-NOTIE
pp Diameter Type=Nominal	C3=None
am Position=Throat	
oss Break=1	
	am Position=Throat oss Break=1

S1=None

Damper:



courtesy of Applied Software 4/18/2016 15

Flat Oval







Dims	Options	Conn's
A=Major Axis	Pipe Parts=1	C1=None
B=Minor Axis	Pipe Seam Position=0.000	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	C4=None
E=Right Extension	Branch Allowance To Pipe=0.000	
F=Branch Width #1	Branch Diameter Type=Nominal	
G=Branch Depth #1	Branch Parts=2	
H=Branch Length #1	Branch Diameter Type=Nominal	
I=Btm Width #1	Branch Parts=1	
J=Angle #1	Plate Border=0.000	
K=Inset #1	Plate Type=Rectangular	Seams
L=Offset #1	Branch Seam Position=0.000	S1=None
M=Rotation #1	Branch Only=No	S2=None
N=Collar #1	Allow Branches On Flats=No	S3=None
O=Branch Width #2	Input=Angle	
P=Branch Depth #2		Damper:
Q=Branch Length #2		
R=Btm Width #2		
S=Angle #2		
T=Inset #2		
U=Offset #2		
V=Rotation #2		
W=Collar #2		
1		
ı		

Pattern: 147 Flat Oval



Dims	Options	Conn's
A=Width In	Seam Position=Major Axis	C1=None
B=Depth In	Cross Break=1	C2=None
C=Width Out	Diameter Type In=Nominal	C3=None
D=Depth Out	Diameter Type Out=Nominal	
E=Length	Mitred=None	
F=Offset Width	Offset Width=Left In	
G=Offset Depth	Offset Depth=Bottom Up	
H=Extension In		
I=Extension Out		
J=Collar In		
K=Collar Out		Seams S1=None

Damper:

Flat Oval

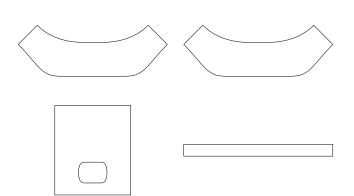


Dims	Options	Conn's
A=Major Axis	Pipe Parts=1	C1=None
B=Minor Axis	Pipe Seam Position=0.000	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	
E=Right Extension	Branch Allowance To Pipe=0.000	
F=Major Axis #1	Branch Diameter Type=Nominal	
G=Minor Axis #1	Branch Parts=2	
H=Branch Length #1	Plate Border=0.000	
I=Angle #1	Plate Type=Rectangular	
J=Inset #1	Branch Seam Position=0.000	
K=Offset #1	Branch Only=No	Seams
L=Rotation #1		S1=None
M=Collar #1		S2=None

Damper:

Conn's

C1=None



## Pattern: 159

Flat Oval



.,.	In the second se	
B=Minor Axis	Pipe Seam Position=0.000	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	C4=None
E=Right Extension	Branch Allowance To Pipe=0.000	
F=Branch Width #1	Branch Diameter Type=Nominal	
G=Branch Depth #1	Branch Parts=2	
H=Branch Length #1	Branch Diameter Type=Nominal	
I=Angle #1	Branch Parts=1	
J=Inset #1	Plate Border=0.000	
K=Offset #1	Plate Type=Rectangular	Seams
L=Rotation #1	Branch Seam Position=0.000	S1=None
M=Collar #1	Branch Only=No	S2=None
N=Branch Width #2	Allow Branches On Flats=No	S3=None
O=Branch Depth #2		
P=Branch Length #2		Damper:
Q=Angle #2		·
R=Inset #2		
S=Offset #2		
T=Rotation #2		
U=Collar #2		

Options

Pipe Parts=1



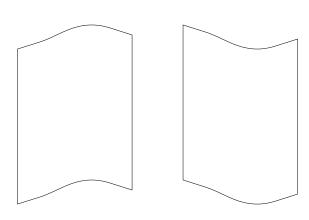


Dims

A=Major Axis

Flat Oval





Dims	Options	Conn's
A=Major Axis	Cross Break=2	C1=None
B=Minor Axis	Diameter Type BE=Nominal	C2=None
C=Major Axis	Diameter Type SE=Nominal	
D=Minor Axis	Seam Position=Major Axis	
E=Length	Same Seams On Each Part=No	
F=Offset Width		
G=Offset Depth		
H=Collar		
I=Collar		

Seams S1=None

Damper:

Pattern: 165

Flat Oval



Dims	Options	Conn's
A=Width	Diameter Type=Nominal	C1=None
B=Depth	Duct Length=(inch)	C2=None
C=Length	Area Adjust (%)=0.000	
D=Left Extension		
E=Right Extension		

Seams

S1=None

Damper:

4/18/2016 courtesy of software 18

Round/Flat Oval

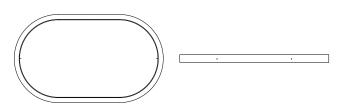


Di	ms	Options	Conn's
A=Diameter	B=Depth	Diameter Type=Nominal	
C=Flange	D=Collar	Adjustment=0.200	
E=Gaps	F=Hole #1	Vee Notch Depth=0.120	
G=Hole #2	H=Hole Inset	Vee Notch Angle=10.000	
		Collar Marker Notches=No	
		Collar Seam Position=Major Axis	

Seams

S1=None

Damper:



Pattern: 318

Flat Oval



Dims	Options	Conn's
A=Radius	Six Parts Left Lap=None	C1=None
B=Depth	Six Parts Right Lap=None	C2=None
C=Length	Vee Depth Female=0.000	C3=None
D=Front Hole Diameter	Vee Angle Female=30.000	
=Six Parts Left Height	Allowance=Left	
=Six Parts Right Height		
G=Turnover Allowance		

Seams S1=None

Damper:

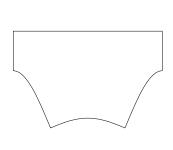
Flat Oval

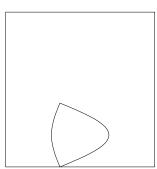


Dims	Options	Conn's
A=Width	Pipe Parts=1	C1=None
B=Depth	Branch Parts=1	C2=None
C=Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Branch Diameter Type=Nominal	
E=Right Extension	Seam Position=0.000	
F=Branch Width #1	Branch Allowance To Pipe=0.000	
G=Branch Length #1	True Oval Straight=No	
H=Angle #1		
I=Inset #1		
J=Extension #1		
		Seams

S1=None S2=None

Damper:

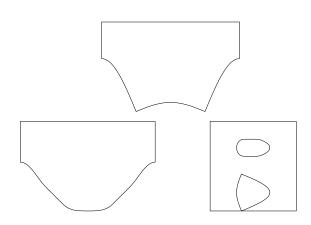




Pattern: 357

Flat Oval



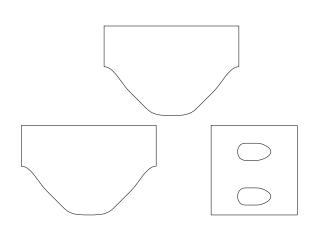


Dims	Options	Conn's
A=Width	Pipe Parts=1	C1=None
B=Depth	Branch Parts=1	C2=None
C=Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Branch Diameter Type=Nominal	C4=None
E=Right Extension	Seam Position=0.000	
F=Branch Width #1	Branch Allowance To Pipe=0.000	
G=Branch Length #1	True Oval Straight=No	
H=Angle #1		
I=Inset #1		
J=Extension #1		
K=Branch Width #2		Seams
L=Branch Depth #2		S1=None
M=Branch Length #2		S2=None
N=Angle #2		S3=None
O=Inset #2		
P=Extension #2		Damper:

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Flat Oval



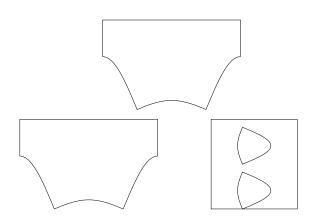


Options	Conn's
Pipe Parts=1	C1=None
Branch Parts=1	C2=None
Pipe Diameter Type=Nominal	C3=None
Branch Diameter Type=Nominal	C4=None
Seam Position=0.000	
Branch Allowance To Pipe=0.000	
True Oval Straight=No	
	Seams
	S1=None
	S2=None
	S3=None
	Damper:
	Damper.
	Pipe Parts=1 Branch Parts=1 Pipe Diameter Type=Nominal Branch Diameter Type=Nominal Seam Position=0.000 Branch Allowance To Pipe=0.000

Pattern: 359

Flat Oval





Dims	Options	Conn's
A=Width	Pipe Parts=1	C1=None
B=Depth	Branch Parts=1	C2=None
C=Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Branch Diameter Type=Nominal	C4=None
E=Right Extension	Seam Position=0.000	
F=Branch Width #1	Branch Allowance To Pipe=0.000	
G=Branch Length #1	True Oval Straight=No	
H=Angle #1		
I=Inset #1		
J=Extension #1		
K=Branch Width #2		Seams
L=Branch Length #2		S1=None
M=Angle #2		S2=None
N=Inset #2		S3=None
O=Extension #2		
		Damper:

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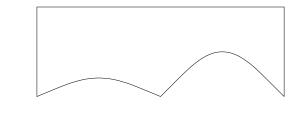
Flat Oval



Dims	Options	Conn's
A=Width	Diameter Type=Nominal	C1=None
B=Depth		C2=None
C=Length In		C3=None
D=Length Out		C4=None
E=Angle		C5=None
F=Bottom Extension		
G=Left Extension		
H=Right Extension		

Seams

S1=None







Damper:

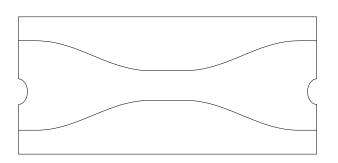
Pattern: 365

Flat Oval



Dims	Options	Conn's
A=Width	Diameter Type=Nominal	C1=None
B=Depth	Seam Position=Throat	C2=None
C=Inner Radius	Single Segments=No	C3=None
D=Bottom Extension	Nest Break Start Segment=0	C4=None
E=Top Extension	Nest Break End Segment=0	
F=Branch Width	Notch Angle For Seam=0	
G=Branch Depth	Leg Lengths=No	
H=Branch Inset	Length Includes Extensions=No	
I=Branch Offset	Branch Parts=No	
J=Branch Length	Branch Seam Position=Width	
K=Branch Angle	Branch Origin=C3 Inline	Seams S1=None
		S2=None

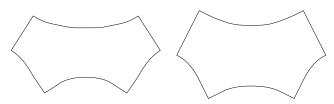
Damper:



Flat Oval



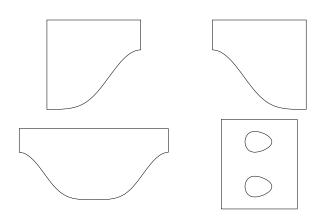
Dims Option	s Conn's
A=Btm Width Bottom Diameter Type=N	Nominal C1=None
B=Btm Depth Left Diameter Type=Nom	ninal C2=None
C=Left Width Right Diameter Type=No	minal C3=None
D=Left Depth Seam Position=Throat	C4=None
E=Right Width	C5=None
F=Right Depth	
G=Left Angle	
H=Right Angle	
I=Height	
J=Left Offset	
K=Right Offset	Seams
L=Left Height	S1=None
M=Right Height	
N=Left Offset	
O=Right Offset	
P=Bottom Collar	Damper:
Q=Left Collar	Sumper.
R=Right Collar	



Pattern: 377

Flat Oval





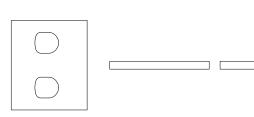
Dims	Options	Conn's
A=Major Axis	Pipe Parts=1	C1=None
B=Minor Axis	Pipe Seam Position=0.000	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	C4=None
E=Right Extension	Branch Allowance To Pipe=0.000	
F=Branch Width #1	Branch Diameter Type=Nominal	
G=Branch Depth #1	Branch Parts=2	
H=Branch Length #1	Branch Diameter Type=Nominal	
I=Angle #1	Branch Parts=1	
J=Inset #1	Plate Border=0.000	
K=Offset #1	Plate Type=Rectangular	Seams
L=Rotation #1	Branch Seam Position=0.000	S1=None
M=Collar #1	Collar Arcs - Lap=0.000	S2=None
N=Branch Width #2	Collar Arcs - Allowance=0.000	S3=None
O=Branch Depth #2	Branch Only=No	
P=Branch Length #2	Branch Seam Position=All	Damper:
Q=Angle #2	Same Seams On Each Part=No	24po
R=Inset #2		
S=Offset #2		
T=Rotation #2		
U=Collar #2		
V=Oval Half Extension		

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Flat Oval







Dims	Options	Conn's
A=Major Axis	Pipe Parts=1	C1=None
B=Minor Axis	Pipe Seam Position=0.000	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	C4=None
E=Right Extension	Branch Allowance To Pipe=0.000	
F=Major Axis #1	Branch Diameter Type=Nominal	
G=Minor Axis #1	Branch Parts=2	
H=Branch Length #1	Branch Diameter Type=Nominal	
I=Angle #1	Branch Parts=1	
J=Inset #1	Plate Border=0.000	
K=Offset #1	Plate Type=Rectangular	Seams
L=Rotation #1	Branch Seam Position=0.000	S1=None
M=Collar #1	Branch Only=No	S2=None
N=Major Axis #2	Allow Branches On Flats=No	S3=None
O=Minor Axis #2		
P=Branch Length #2		Damper:
Q=Angle #2		bumper.
R=Inset #2		
S=Offset #2		
T=Rotation #2		
U=Collar #2		

Pattern: 385

Flat Oval



_	

Dims	Options	Conn's
A=Major Axis	Pipe Diameter Type=Nominal	C1=None
B=Minor Axis	Round Allowance To Pipe=0.000	C2=None
C=Pipe Length	Flat Allowance To Pipe=0.000	C3=None
D=Left Extension	Pipe Parts=1	C4=None
E=Right Extension	Branch Parts=1	
F=Branch Width	Pipe Seam Position=0.000	
G=Branch Depth	Hole Adjust=0.000	
H=Branch Length	Plate Border=0.000	
I=Inset	Castle Width=0.000	
J=Rotation	Castle Angle=30.000	
K=Extension	Plate Border (Width)=Auto	Seams
L=Branch Width		S1=None
M=Branch Depth		S2=None
N=Branch Length		
O=Inset		
P=Rotation		Damper:
Q=Extension		bumper.

Round/Flat Oval/Equipment



Dims	Options	Conn's
A=Diameter	Install Type=Plain	C1=None
B=Length	Sex Type=Male	C2=None
C=Inset	Control Type=None	
D=Sides	Type=Single	
E=Top	Draw Type=None	
F=Bottom	Temperature Type=None	
G=Oval Depth	Draw Type=None	
	Lines=No	
	Cost Supports=No	
	Lines Type=Quantity	
	Lines=3.000	Seams

Damper:

#### Pattern: 522 Round/Flat Oval/Equipment



Options	Conn's
Sex Type=Male	C1=None
	C2=None

Seams

S1=None

Damper:

Round/Flat Oval/Equipment



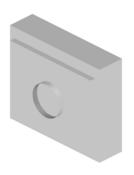
Dims	Options	Conn's
A=Diameter	Sex Type=Male	C1=None
B=Collar	Extension includes Diameter=No	C2=None
C=Length	Type=None	
D=Offset	Circles=0	
E=Oval Depth	Cost Supports=No	

Seams

S1=None

Damper:

Pattern: 533 Round/Flat Oval/Equipment



Dims	Options	Conn's
A=Diameter	Install Type=Plain	C1=None
B=Width	Sex Type=Male	C2=None
C=Depth	Control Type=None	
D=Length	Type=Single	
E=Inset	Draw Type=None	
F=Inset	Temperature Type=None	
G=Sides	Draw Type=None	
H=Top	Lines=No	
I=Bottom	Cost Supports=No	
J=Collar	Lines Type=Quantity	
K=Right Collar	Lines=3.000	Seams
L=Oval Depth		

Damper:

Pattern: 555 Round/Flat Oval/Equipment



Dims	Options	Conn's
A=Diameter	Type=Plain	C1=None
B=Collar	Sex Type=Male	C2=None
C=Length	Pattern=Single	
D=Oval Depth	Mirror=No	
	Mirror View=No	
	X-Offset=0.000	
	Y-Offset=0.000	
	Cost Supports=No	
		Seams
		S1=None

Pattern: 556 Round/Flat Oval/Equipment



Dims	Options	Conn's
A=Diameter	Sex Type=Male	C1=None
B=Collar	Draw Type=Plain	C2=None
C=Length	Lines Type=Quantity	
D=Offset	Lines=3.000	
E=Oval Depth		

Seams S1=None

Damper:

Damper:

Round/Flat Oval/Equipment



Dims	Options	Conn's
A=Diameter	Type=Plain	C1=None
B=Collar	Sex Type=Male	
C=Length	Pattern=Single	
D=Oval Depth	Mirror=No	
	Mirror View=No	
	X-Offset=0.000	
	Y-Offset=0.000	
	Cost Supports=No	

Seams

Damper:

Pattern: 820
Round/Flat Oval



Dims	Options	Conn's
A=Btm Width	Bottom Diameter Type=Nominal	C1=None
B=Btm Depth	Top Diameter Type=Nominal	C2=None
C=Right Width	Right Diameter Type=Nominal	C3=None
D=Right Depth	Left Diameter Type=Nominal	C4=None
E=Left Width	Number Of Segments=2	C5=None
F=Left Depth	Number Of Segments=1	C6=None
G=Right Height	Single Segments=No	
H=Left Height	Marker Type=Notch	
I=Right Radius		
J=Left Radius		
K=Right Angle		Seams
L=Left Angle		S1=None
M=Bottom Extension		
N=Right Extension		
O=Left Extension		
		Damper:

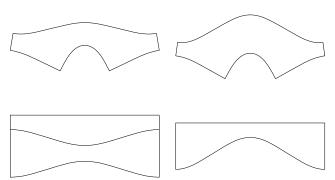
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Round/Flat Oval



Dims	Options	Conn's
A=Btm Width	Bottom Diameter Type=Nominal	C1=None
B=Btm Depth	Top Diameter Type=Nominal	C2=None
C=Right Width	Right Diameter Type=Nominal	C3=None
D=Right Depth	Left Diameter Type=Nominal	C4=None
E=Left Width	Number Of Segments=2	C5=None
F=Left Depth	Number Of Segments=1	C6=None
G=Right Height	Single Segments=No	
H=Left Height	Marker Type=Notch	
I=Right Radius		
J=Left Radius		
K=Right Angle		Seams
L=Left Angle		S1=None
M=Bottom Extension		
N=Right Extension		
O=Left Extension		
		_

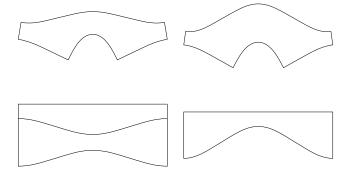




Pattern: 823 Round/Flat Oval



Dims	Options	Conn's
A=Btm Width	Bottom Diameter Type=Nominal	C1=None
B=Btm Depth	Top Diameter Type=Nominal	C2=None
C=Right Width	Right Diameter Type=Nominal	C3=None
D=Right Depth	Left Diameter Type=Nominal	C4=None
E=Left Width	Number Of Segments=2	C5=None
F=Left Depth	Number Of Segments=1	C6=None
G=Right Height	Single Segments=No	
H=Left Height	Marker Type=Notch	
I=Right Radius		
J=Left Radius		
K=Right Angle		Seams
L=Left Angle		S1=None
M=Bottom Extension		
N=Right Extension		
O=Left Extension		
		Damper:



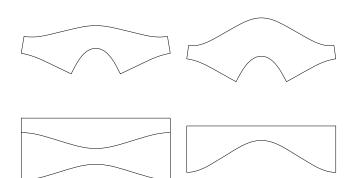
courtesy of Applied Software 4/18/2016 29

Round/Flat Oval



Dims	Options	Conn's
A=Btm Width	Bottom Diameter Type=Nominal	C1=None
B=Btm Depth	Top Diameter Type=Nominal	C2=None
C=Right Width	Right Diameter Type=Nominal	C3=None
D=Right Depth	Left Diameter Type=Nominal	C4=None
E=Left Width	Number Of Segments=2	C5=None
F=Left Depth	Number Of Segments=1	C6=None
G=Right Radius	Single Segments=No	
H=Left Radius	Marker Type=Notch	
I=Right Angle		
J=Left Angle		
K=Bottom Extension		Seams
L=Right Extension		S1=None
M=Left Extension		



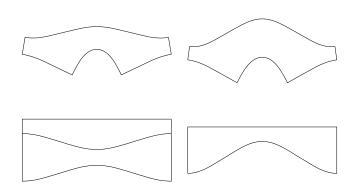


# Pattern: 825 Round/Flat Oval



Dims	Options	Conn's
A=Btm Width	Bottom Diameter Type=Nominal	C1=None
B=Btm Depth	Right Diameter Type=Nominal	C2=None
C=Right Width	Left Diameter Type=Nominal	C3=None
D=Right Depth	Number Of Segments=2	C4=None
E=Left Width	Number Of Segments=1	C5=None
F=Left Depth	Single Segments=No	C6=None
G=Right Radius	Marker Type=Notch	
H=Left Radius		
I=Right Angle		
J=Left Angle		
K=Bottom Extension		Seams
L=Right Extension		S1=None
M=Left Extension		

Damper:



Round/Flat Oval



Dims	Options	Conn's
A=Btm Width	Bottom Diameter Type=Nominal	C1=None
B=Btm Depth	Top Diameter Type=Nominal	C2=None
C=Right Width	Right Diameter Type=Nominal	C3=None
D=Right Depth	Left Diameter Type=Nominal	C4=None
E=Left Width	Number Of Segments=2	C5=None
F=Left Depth	Number Of Segments=1	C6=None
G=Right Height	Single Segments=No	
H=Right Radius	Marker Type=Notch	
I=Left Radius		
J=Right Angle		
K=Left Angle		Seams
L=Bottom Extension		S1=None
M=Right Extension		
N=Left Extension		

Options

Bottom Diameter Type=Nominal

Top Diameter Type=Nominal

Right Diameter Type=Nominal

Left Diameter Type=Nominal



Conn's

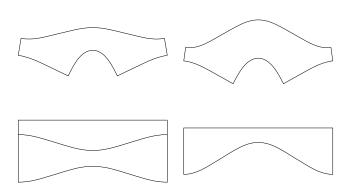
Seams

C1=None

C2=None

C3=None

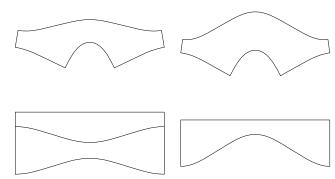
C4=None



Pattern: 827 Round/Flat Oval



o	2010 2101110001 1,750 1101111101	0
E=Left Width	Number Of Segments=2	C5=None
F=Left Depth	Number Of Segments=1	C6=None
G=Right Height	Single Segments=No	
H=Left Height	Marker Type=Notch	
I=Right Radius		
J=Left Radius		
K=Right Angle		Sea
L=Left Angle		S1=None
M=Bottom Extension		
N=Right Extension		
O=Left Extension		
		Damper:
		Damper.



courtesy of 4/18/2016 31

Dims

A=Btm Width

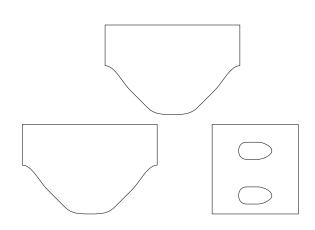
B=Btm Depth

C=Right Width

D=Right Depth

Round/Flat Oval





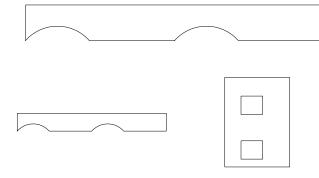
Dims	Options	Conn's
A=Width	Pipe Parts=1	C1=None
B=Depth	Branch Parts=1	C2=None
C=Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Branch Diameter Type=Nominal	C4=None
E=Right Extension	Seam Position=0.000	
F=Branch Width #1	Branch Allowance To Pipe=0.000	
G=Branch Depth #1	True Oval Straight=No	
H=Branch Length #1		
I=Angle #1		
J=Inset #1		
K=Offset #1		Seams
L=(Hole) Rotation #1		S1=None
M=Extension #1		S2=None
N=Branch Width #2		S3=None
O=Branch Depth #2		
P=Branch Length #2		Damper:
Q=Angle #2		bumper.
R=Inset #2		
S=Offset #2		
T=Rotation #2		
U=Extension #2		

## Pattern: 842

Flat Oval

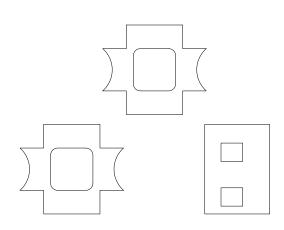


Dims	Options	Conn's
A=Major Axis	Pipe Diameter Type=Nominal	C1=None
B=Minor Axis	Round Allowance To Pipe=0.000	C2=None
C=Pipe Length	Flat Allowance To Pipe=0.000	C3=None
D=Left Extension	Pipe Parts=1	C4=None
E=Right Extension	Branch Parts=1	
F=Branch Width	Pipe Seam Position=0.000	
G=Branch Depth	Hole Adjust=0.000	
H=Branch Length	Plate Border=0.000	
I=Inset	Castle Width=0.000	
J=Offset	Castle Angle=30.000	
K=Rotation	Plate Border (Width)=Auto	Seams
L=Branch Width	Allow Branches On Flats=No	S1=None
M=Branch Depth		S2=None
N=Branch Length		
O=Inset		
P=Offset		Damper:
Q=Rotation		bumper.



Flat Oval



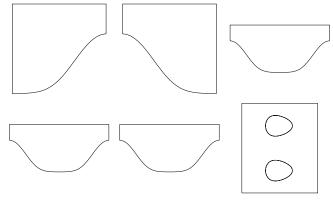


A=Major Axis		
	Pipe Diameter Type=Nominal	C1=None
B=Minor Axis	Round Allowance To Pipe=0.000	C2=None
C=Pipe Length	Flat Allowance To Pipe=0.000	
D=Left Extension	Pipe Parts=1	
E=Right Extension	Pipe Seam Position=0.000	
F=Branch Width	Hole Adjust=0.000	
G=Branch Depth	Plate Border=0.000	
H=Branch Length	Castle Width=0.000	
I=Inset	Castle Angle=30.000	
J=Rotation	Plate Border (Width)=Auto	
K=Hole Width	Fold Notch Depth=0.000	Seams
L=Hole Depth		S1=None
M=Hole Radius		S2=None
N=Branch Width		
O=Branch Depth		
P=Branch Length		Damper:
Q=Inset		Damper.
R=Rotation		
S=Hole Width		
T=Hole Depth		
U=Hole Radius		

Pattern: 844

Flat Oval

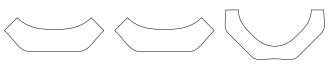


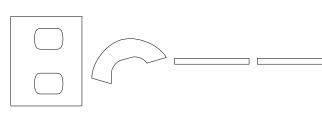


Dims	Options	Conn's
A=Major Axis	Pipe Parts=1	C1=None
B=Minor Axis	Pipe Seam Position=0.000	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	C4=None
E=Right Extension	Branch Allowance To Pipe=0.000	C5=None
F=Branch Width #1	Branch Type=Straight Branch	C6=None
G=Branch Depth #1	Branch Diameter Type=Nominal	
H=Branch Length #1	Branch Parts=2	
I=Angle #1	Branch Type=Straight Branch	
J=Inset #1	Branch Diameter Type=Nominal	
K=Offset #1	Branch Parts=1	Seams
L=Rotation #1	Branch Type=Straight Branch	S1=None
M=Collar #1	Branch Diameter Type=Nominal	S2=None
N=Branch Width #2	Branch Parts=1	S3=None
O=Branch Depth #2	Branch Type=Straight Branch	S4=None
P=Branch Length #2	Branch Diameter Type=Nominal	S5=None Damper:
Q=Angle #2	Branch Parts=1	24pc
R=Inset #2	Plate Border=0.000	
S=Offset #2	Plate Type=Rectangular	
T=Rotation #2	Branch Seam Position=0.000	
U=Collar #2	Branch Only=No	
V=Branch Width #3		
W=Branch Depth #3		
X=Branch Length #3		
Y=Angle #3		
Z=Inset #3		
a=Offset #3		
b=Rotation #3		

Flat Oval



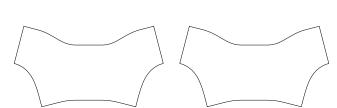




Dims	Options	Conn's
A=Major Axis	Pipe Parts=1	C1=None
B=Minor Axis	Pipe Seam Position=0.000	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	C4=None
E=Right Extension	Branch Allowance To Pipe=0.000	C5=None
F=Major Axis #1	Branch Diameter Type=Nominal	
G=Minor Axis #1	Branch Parts=2	
H=Branch Length #1	Branch Diameter Type=Nominal	
I=Angle #1	Branch Parts=1	
J=Inset #1	Plate Border=0.000	
K=Offset #1	Plate Type=Rectangular	Seams
L=Rotation #1	Branch Seam Position=0.000	S1=None
M=Collar #1	Branch Only=No	S2=None
N=Major Axis #2	Reducer Seam Position=Corner	S3=None
O=Minor Axis #2	Reducer Parts=1	
P=Branch Length #2		Damper:
Q=Angle #2		bumper.
R=Inset #2		
S=Offset #2		
T=Rotation #2		
U=Collar #2		
V=Reducer Width		
W=Reducer Depth		
X=Reducer Length		
_		

Pattern: 854
Rectangular/Round/Flat Oval



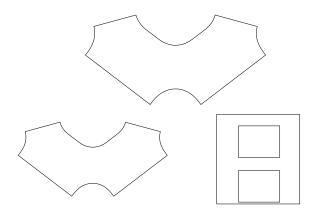


Dims	Options	Conn's
A=Btm Width	Bottom Diameter Type=Nominal	C1=None
B=Btm Depth	Left Diameter Type=Nominal	C2=None
C=Bottom Radius	Right Diameter Type=Nominal	C3=None
D=Left Width	Seam Position=Top	C4=None
E=Left Depth		
F=Left Radius		
G=Right Width		
H=Right Depth		
I=Right Radius		
J=Left Angle		
K=Right Angle		Seams
L=Height		S1=None
M=Left Offset		
N=Right Offset		
O=Bottom Collar		
P=Left Collar		Damper:
Q=Right Collar		Bumpen
R=Left Offset Depth		
S=Right Offset Depth		

4/18/2016 courtesy of software. 34

Flat Oval



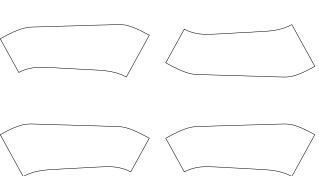


A=Major Axis	Pipe Parts=1	04 11
	riperulto-1	C1=None
B=Minor Axis	Branch Parts=1	C2=None
C=Pipe Length	Pipe Seam Position=0.000	C3=None
D=Left Extension	Pipe Diameter Type=Nominal	C4=None
E=Right Extension	Branch Diameter Type=Nominal	
F=Width #1	Round Allowance To Pipe=0.000	
G=Depth #1	Flat Allowance To Pipe=0.000	
H=Branch Length #1	Hole Adjust=0.000	
=Angle #1		
I=Angle #1		
K=Inset #1		Seams
L=Offset #1		S1=None
M=Rotation #1		S2=None
N=Collar #1		S3=None
O=Width #2		
P=Depth #2		Damper:
Q=Branch Length #2		bumper.
R=Angle #2		
S=Angle #2		
T=Inset #2		
U=Offset #2		
V=Rotation #2		
W=Collar #2		

Pattern: 888

Flat Oval

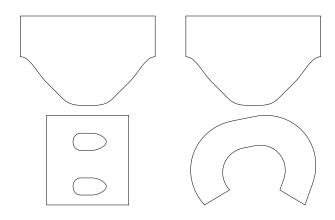




	Dims	Options	Conn's
	A=Width In	Pipe Parts=No Pipe	C1=None
	B=Depth In	Diameter Type In=Nominal	C2=None
	C=Width Out	Diameter Type Out=Nominal	C3=None
	D=Depth Out	Branch Diameter Type=Nominal	C4=None
	E=Length	Seam Position=Major Axis	
	F=Offset Width	Offset Width=Left In	
	G=Offset Depth	Offset Depth=Bottom Up	
	H=Left Collar	Hole Adjust=0.000	
	I=Right Collar	Branch Allowance To Pipe=0.000	
	J=Branch Width #1	Branch Offset=Centres	
	K=Branch Depth #1	Branch Inset=Throat	Seams
	L=Branch Length #1	Branch Length=Throat	S1=None
	M=Inset #1	Branch Parts=2	S2=None
	N=Offset #1	Develop Branch Collars=No	
	O=Extension #1		
	P=Hole Width #1		Damper:
	Q=Hole Depth #1		Damper.
	R=Branch Width #2		
	S=Branch Depth #2		
,	T=Branch Length #2		
	U=Inset #2		
	V=Offset #2		
	W=Extension #2		
	X=Hole Width #2		
,	Y=Hole Depth #2		
	•		

Round/Flat Oval



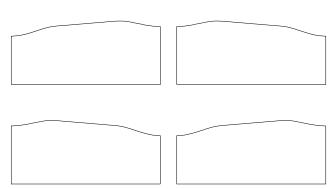


Dims	Options	Conn's
A=Width	Pipe Parts=1	C1=None
B=Depth	Branch Parts=1	C2=None
C=Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Branch Diameter Type=Nominal	C4=None
E=Right Extension	Seam Position=0.000	C5=None
F=Branch Width #1	Right Diameter Type=Nominal	
G=Branch Depth #1	Branch Allowance To Pipe=0.000	
H=Branch Length #1	Reducer Parts=1	
I=Angle #1	True Oval Straight=No	
J=Inset #1		
K=Offset #1		Seams
L=(Hole) Rotation #1		S1=None
M=Extension #1		S2=None
N=Branch Width #2		S3=None
O=Branch Depth #2		
P=Branch Length #2		Damper:
Q=Angle #2		bumper.
R=Inset #2		
S=Offset #2		
T=Rotation #2		
U=Extension #2		
V=Right Width		
W=Right Depth		
X=Right Length		
Y=Offset Width		
Z=Offset Depth		

Pattern: 894

Flat Oval



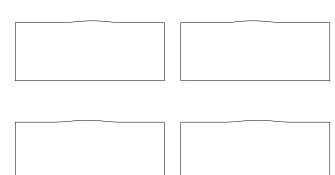


Dims	Options	Conn's
A=Major Axis	Pipe Parts=No Pipe	C1=None
B=Minor Axis	Diameter Type In=Nominal	C2=None
C=Major Axis	Diameter Type Out=Nominal	C3=None
D=Minor Axis	Branch Diameter Type=Nominal	C4=None
E=Length	Seam Position=Major Axis	
F=Offset Width	Offset Width=Left In	
G=Offset Depth	Offset Depth=Bottom Up	
H=Left Collar	Hole Adjust=0.000	
I=Right Collar	Branch Allowance To Pipe=0.000	
J=Branch Major Axis #1	Branch Offset=Centres	
K=Branch Minor Axis #1	Branch Inset=Throat	Seams
L=Branch Length #1	Branch Length=Throat	S1=None
M=Angle #1	Branch Parts=2	S2=None
N=Inset #1	Develop Branch Collars=No	
O=Offset #1		
P=Extension #1		Damper:
Q=Branch Major Axis #2		Damper.
R=Branch Minor Axis #2		
S=Branch Length #2		
T=Angle #2		
U=Inset #2		
V=Offset #2		
W=Extension #2		

4/18/2016 courtesy of software. 36

Flat Oval



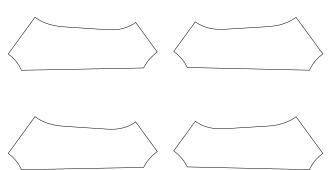


Dims	Options	Conn's
A=Minor Axis	Pipe Parts=No Pipe	C1=None
B=Major Axis	Diameter Type In=Nominal	C2=None
C=Minor Axis	Diameter Type Out=Nominal	C3=None
D=Major Axis	Branch Diameter Type=Nominal	C4=None
E=Length	Seam Position=Major Axis	
F=Offset Width	Offset Width=Left In	
G=Offset Depth	Offset Depth=Bottom Up	
H=Left Collar	Hole Adjust=0.000	
I=Right Collar	Branch Allowance To Pipe=0.000	
J=Branch Width #1	Branch Offset=Centres	
K=Branch Depth #1	Branch Inset=Throat	Seams
L=Branch Length #1	Branch Length=Throat	S1=None
M=Angle #1	Branch Parts=2	S2=None
N=Inset #1	Develop Branch Collars=No	
O=Offset #1		
P=Extension #1		Damper:
Q=Branch Width #2		bumper.
R=Branch Depth #2		
S=Branch Length #2		
T=Angle #2		
U=Inset #2		
V=Offset #2		
W=Extension #2		

Pattern: 896

Flat Oval





Dims	Options	Conn's
A=Major Axis	Pipe Parts=No Pipe	C1=None
B=Minor Axis	Diameter Type In=Nominal	C2=None
C=Major Axis	Diameter Type Out=Nominal	C3=None
D=Minor Axis	Branch Diameter Type=Nominal	C4=None
E=Length	Seam Position=Major Axis	
F=Offset Width	Offset Width=Left In	
G=Offset Depth	Offset Depth=Bottom Up	
H=Left Collar	Hole Adjust=0.000	
I=Right Collar	Branch Allowance To Pipe=0.000	
J=Branch Major Axis #1	Branch Offset=Centres	
K=Branch Minor Axis #1	Branch Inset=Throat	Seams
L=Branch Length #1	Branch Length=Throat	S1=None
M=Inset #1	Branch Parts=2	S2=None
N=Offset #1	Develop Branch Collars=No	
O=Extension #1		
P=Hole Width #1		Damper:
Q=Hole Depth #1		Damper.
R=Branch Major Axis #2		
S=Branch Minor Axis #2		
T=Branch Length #2		
U=Inset #2		
V=Offset #2		
W=Extension #2		
X=Hole Width #2		
Y=Hole Depth #2		
FF -		

Rectangular/Round/Flat Oval/Standard/Equipment

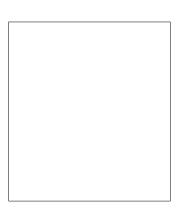
Dims	Options	Conn's
	Inlet=1	
	Outlet=1	
	Pipework=No	
	Show Boundaries=No	

Seams

Damper:

Pattern: 911 Round/Flat Oval



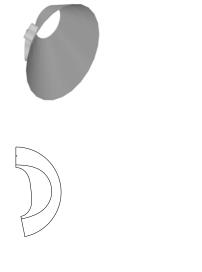


Dims	Options	Conn's
A=Pipe Width	Pipe Diameter Type=Nominal	C1=None
B=Pipe Depth	Reducer Diameter Type=Nominal	C2=None
C=Pipe Length	Pipe Parts=1	C3=None
D=Reducer Width	Pipe Seam Position=0.000	
E=Reducer Depth	Offset Width=Left In	
F=Reducer Length	Offset Depth=Bottom Up	
G=Offset Width	Diameter Reduction=0.000	
H=Offset Depth		
I=Left Extension		
J=Right Extension		
-		Seams
		S1=None

Damper:

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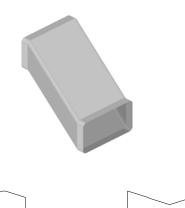
Flat Oval



Dims	Options	Conn's
A=Bottom Diameter	Seam Position=180.000	C1=None
B=Height	Cross Break=1	C2=None
C=Offset	Pipe Diameter Type=Nominal	
D=Height	Branch Diameter Type=Nominal	
E=Left Height	Hole Adjust=0.000	
F=Right Height	Stitch Gap=0.000	
G=Branch Height #1	Number Of Stitches=0	
H=Branch Diameter #1		
I=Branch Length #1		
J=Rotation #2		
K=Branch Diameter #2		Seams
L=Branch Length #2		
M=Centre Point #2		
N=Angle #2		
O=Split Vertical		
P=Top Diameter		Damper:
		···· · ·

Pattern: 967

Flat Oval



DIMS	Options	Conn s
A=Left Width	Cross Break=2	C1=None
B=Left Depth	Diameter Type BE=Nominal	C2=None
C=Right Width	Diameter Type SE=Nominal	
D=Right Depth	Same Seams On Each Part=No	
E=Length	Seam Position=Major Axis	
F=Offset Width		
G=Offset Depth		
H=Left Collar		
I=Right Collar		
J=Corner Radius		
		Seams
		S1=None
		Damper:
		po

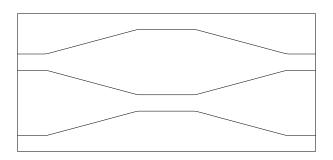
4/18/2016 courtesy of software. 39

Flat Oval



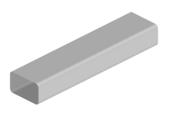
Dims	Options	Conn's
A=Width	Number Of Segments=4	C1=None
B=Depth	Diameter Type=Nominal	C2=None
C=Inner Radius	Seam Position=Throat	C3=None
D=Angle	Single Segments=No	
E=Bottom Extension	Nest Break Start Segment=0	
F=Top Extension	Nest Break End Segment=0	
G=Corner Radius	Cross Break=1	
	Notch Angle For Seam=0	
	Leg Lengths=No	
	Length Includes Extensions=No	
	-	Seams
		S1=None
		S2=None

Damper:



Pattern: 977

Flat Oval



Dims	Options	Conn's
A=Width	Pipe Parts=1	C1=None
B=Depth	Seam Position=Corner	C2=None
C=Length	Diameter Type=Nominal	
D=Left Extension	Duct Length=(inch)	
E=Right Extension		
F=Corner Radius		

Seams S1=None

Damper:

Flat Oval



Dims	Options	Conn's
A=Width	Pipe Parts=1	C1=None
B=Depth	Seam Position=Corner	C2=None
C=Length	Diameter Type=Nominal	
D=Left Extension	Duct Length=(inch)	
E=Right Extension		
F=Corner Radius		

Seams

S1=None

Damper:



Pattern: 988

Flat Oval

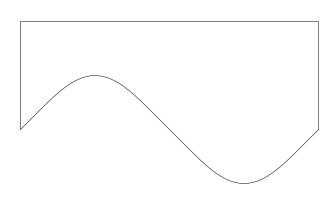


Dims	Options	Conn's
A=Branch Width	Branch Diameter Type=Nominal	C1=None
B=Branch Depth	Branch Allowance To Pipe=0.000	C2=None
C=Branch Length		
D=Angle		
E=Extension		

Seams

S1=None

Damper: None



courtesy of Applied Software 4/18/2016 41

Pattern: 995 Round/Flat Oval/Equipment



Dims	Options	Conn's
A=Diameter B=Collar C=Length D=Offset E=Oval Depth	Sex Type=Male	C1=None C2=None
_		

Seams

S1=None

Damper:

Pattern: 1101

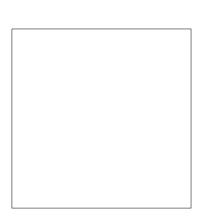
4/18/2016

Rectangular/Round/Flat Oval/Standard/Equipment

Dims	Options	Conn's
	Inlet=1	
	Outlet=1	
	Pipework=No	
	Show Boundaries=No	
	Faces=No	

Seams

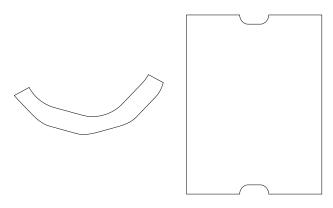
Damper:



42

Flat Oval





Dims	Options	Conn's
A=Width	Pipe Parts=1	C1=None
B=Depth	Pipe Seam Position=Depth	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	C4=None
E=Right Extension	Branch Allowance To Pipe=0.000	C5=None
F=Branch Width #1	Plate Border=0.000	C6=None
G=Branch Depth #1	Plate Type=Rectangular	
H=Branch Length #1	Branch Only=No	
I=Inset #1	Branch Seam Position=Corner	
J=Offset #1	Number Of Branches=1	
K=Rotation #1	Branch Diameter Type=Nominal	Seams
L=Angle #1	Branch Parts=1	S1=None
M=Collar #1	Inlet=1	S2=None
	Outlet=2	S3=None
		S4=None
		S5=None Damper:

Pattern:	11	13
Flat Oval		

Flat Oval

4/18/2016



Dims	Options	Conn's
A=Diameter	Sex Type=Male	C1=None
B=Collar	Marker Notches=No	C2=None
C=Length		
D=Offset		
E=Oval Depth		

Seams S1=None

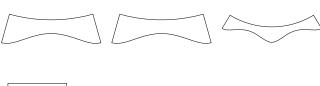
Damper:

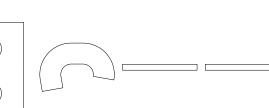


43

Flat Oval





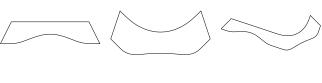


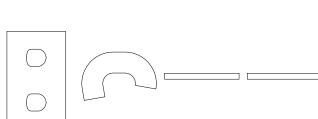
	Dims	Options	Conn's
	A=Major Axis	Pipe Parts=1	C1=None
	B=Minor Axis	Pipe Seam Position=0.000	C2=None
	C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
	D=Left Extension	Hole Adjust=0.000	C4=None
	E=Right Extension	Branch Allowance To Pipe=0.000	C5=None
	F=Branch Width #1	Branch Diameter Type=Nominal	
	G=Branch Depth #1	Branch Parts=2	
	H=Branch Length #1	Branch Diameter Type=Nominal	
	I=Btm Width #1	Branch Parts=1	
	J=Slope Angle #1	Plate Border=0.000	
	K=Inset #1	Plate Type=Rectangular	Seams
	L=Offset #1	Branch Seam Position=0.000	S1=None
	M=Rotation #1	Branch Only=No	S2=None
	N=Collar #1	Input=Angle	S3=None
	O=Tilt Angle #1	Reducer Seam Position=Corner	
	P=Branch Width #2	Reducer Parts=1	Damper:
	Q=Branch Depth #2		bumper.
	R=Branch Length #2		
7	S=Btm Width #2		
	T=Slope Angle #2		
	U=Inset #2		
	V=Offset #2		
	W=Rotation #2		
	X=Collar #2		
_	Y=Tilt Angle #2		
	Z=Reducer Width		
	a=Reducer Depth		
	b=Reducer Length		

Pattern: 1116

Flat Oval



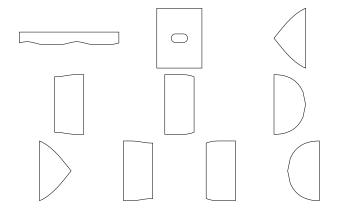




Dims	Options	Conn's
A=Major Axis	Pipe Parts=1	C1=None
B=Minor Axis	Pipe Seam Position=0.000	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	C4=None
E=Right Extension	Branch Allowance To Pipe=0.000	C5=None
F=Major Axis #1	Branch Diameter Type=Nominal	
G=Minor Axis #1	Branch Parts=2	
H=Branch Length #1	Branch Diameter Type=Nominal	
I=Angle #1	Branch Parts=1	
J=Inset #1	Plate Border=0.000	
K=Offset #1	Plate Type=Rectangular	Seams
L=Rotation #1	Branch Seam Position=0.000	S1=None
M=Collar #1	Branch Only=No	S2=None
N=Major Axis #2	Reducer Seam Position=Corner	S3=None
O=Minor Axis #2	Reducer Parts=1	
P=Branch Length #2		Damper:
Q=Angle #2		Damper.
R=Inset #2		
S=Offset #2		
T=Rotation #2		
U=Collar #2		
V=Reducer Width		
W=Reducer Depth		
X=Reducer Length		
ŭ		

Flat Oval



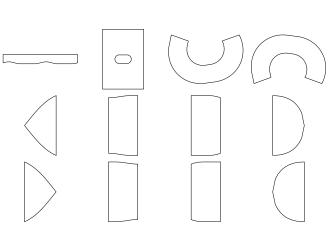


Dims	Options	Conn's
A=Width	Pipe Parts=1	C1=None
B=Depth	Pipe Seam Position=Depth	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	
E=Right Extension	Branch Allowance To Pipe=0.000	
F=Branch Width	Plate Border=0.000	
G=Branch Depth	Plate Type=Rectangular	
H=Branch Length	Branch Only=No	
I=Inset	Branch Seam Position=Corner	
J=Offset	Branch Diameter Type=Nominal	
K=Collar	Branch Parts=1	Seams
	Splitters=4	S1=None
	Splitter Radius=Auto	S2=None
	Splitter Adjust=0.000	
	Inlet=1	
	Outlet=2	Damper:
		bamper.

Pattern: 1118

Flat Oval





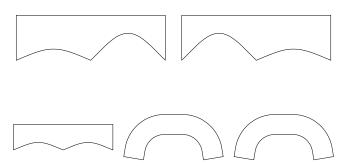
Dims	Options	Conn's
A=Width	Pipe Parts=1	C1=None
B=Depth	Pipe Seam Position=Depth	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	C4=None
E=Right Extension	Branch Allowance To Pipe=0.000	C5=None
F=Branch Width	Plate Border=0.000	
G=Branch Depth	Plate Type=Rectangular	
H=Branch Length	Branch Only=No	
I=Inset	Branch Seam Position=Corner	
J=Offset	Branch Diameter Type=Nominal	
K=Collar	Branch Parts=1	Seams
L=Left Reducer Width	Splitters=4	S1=None
M=Left Reducer Depth	Splitter Radius=Auto	S2=None
N=Left Reducer Length	Splitter Adjust=0.000	
O=Right Reducer Width	Left Reducer Seam Position=Corner	
P=Right Reducer Depth	Left Reducer Parts=1	Damper:
Q=Right Reducer Length	Right Reducer Seam Position=Corner	
	Right Reducer Parts=1	
	Inlet=1	
	Outlet=2	

Flat Oval



Dims	Options	Conn's
A=Width	Diameter Type=Nominal	C1=None
B=Depth		C2=None
C=Length In		C3=None
D=Length Out		C4=None
E=Angle		C5=None
F=Bottom Extension		C6=None
G=Left Extension		
H=Right Extension		
I=Left Reducer Major Axis		
J=Left Reducer Minor Axis		
K=Left Reducer Length		Seams
L=Right Reducer Major Axis		S1=None
M=Right Reducer Minor		
N=Right Reducer Length		

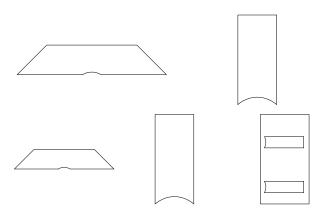
Damper:



Pattern: 1204

Flat Oval





Dims	Options	Conn's
A=Pipe Width	Pipe Diameter Type=Nominal	C1=None
B=Pipe Depth	Pipe Seam Position=Corner	C2=None
C=Pipe Length	Pipe Parts=1	C3=None
D=Left Extension	Branch Parts=2	C4=None
E=Right Extension	Round Allowance To Pipe=0.000	
F=Branch Width #1	Flat Allowance To Pipe=0.000	
G=Branch Depth #1	Hole Adjust=0.000	
H=Branch Length #1	Plate Border (Width)=0.000	
I=Angle #1	Plate Border (Depth)=Same	
J=Inset #1	Throat Clearance=0.000	
K=Offset #1	Castle Width=0.000	Seams
L=Rotation #1	Castle Angle=30.000	S1=None
M=Extension #1	•	S2=None
N=Branch Width #2		S3=None
O=Branch Depth #2		
P=Branch Length #2		Damanau Nana
Q=Angle #2		Damper: None None
R=Inset #2		None
S=Offset #2		
T=Rotation #2		
U=Extension #2		
- Lacionon ne		

Pattern: 1522 Round/Flat Oval/Equipment



Dims	Optio	ns	Conn's
A=Diameter	Sex Type=Male		C1=None
B=Collar			C2=None
C=Length			
D=Offset			
E=Oval Depth			

Seams

S1=None

Damper:

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Pipework/Equipment



Pattern: 883
Pipework/Equipment



Dims	Options	Conn's
A=Diameter #1	Type=Normal	C1=None
B=Diameter #2	Type=Normal	C2=None
C=Diameter #3	Type=Normal	C3=None
D=Diameter #4	Type=Normal	C4=None
E=Length #1	Type=Normal	
F=Length #2	Nut Length=0.000	
G=Length #3	Nut Thickness=0.000	
H=Length #4	Nut Sides=0	
I=Shaft Length #1	Nut Back Fillet=0.000	
J=Handle Diameter	Nut Front Fillet=0.000	
K=Shaft Diameter #1	Handle Inline with Body=No	Seams
L=Handle Angle	Handle Type=Round	
M=Number Of Struts	Handle Rotation=0.000	
N=Strut Diameter	Draw Globe as Disc=No	
O=Collar #1	Rotate Bottom Forward=No	
P=Collar #2	Flex Size=0.000	Damper:
Q=Collar #3	Flex Thickness=0.000	Damper.
R=Collar #4	Flex Gaps=0.000	
S=Handle Length	Flex Length=0.000	
T=Globe X Diameter	End Plate Offset=0.000	
U=Globe Y Diameter	End Plate Length=0.000	
V=Box Width	End Pin Width=0.000	
W=Box Depth	End Pin Offset=0.000	
X=Box Height	End Pin Extension=0.000	
Y=Shaft Diameter #2	End Pin Depth=0.000	
Z=Shaft Diameter #3	End Pins Triangular=No	
a=Shaft Length #2	Inlet=1	
b=Shaft Length #3	Outlet=2	
ŭ		

Dims	Options	Conn's
A=Diameter	Type=Vertical	C1=None
B=Diameter	Flare=Out	C2=None
C=Length	End=Flare	
D=Height	Height=0.000	
E=Height	Thickness=0.000	
F=Inset	Quantity=0	
G=Inset	X Rotation=0.000	
H=Centre Length	Y Rotation=0.000	
I=Offset	Slope Angle=0.000	
J=Offset		
K=Length		Seams
L=Diameter		
M=Length		

Damper:

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Pipework/Equipment



Dims	Options	Conn's
A=Diameter	Type=Straight Branch	C1=None
B=Depth	Rotation=0.000	C2=None
C=Height	Inlet=1	C3=None
D=Y-Offset	Outlet=2	
E=X-Offset	Angle Tolerance=0.000	
F=Bottom Radius	-	
G=Right Radius		
H=Angle Out		
I=Base Angle		
J=C2 Inner Diameter		
		Seams

Damper:

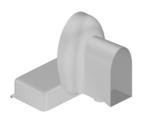
Pattern: 980

Pipework



Dims	Options	Conn's
A=Body Diameter #1	Body Horizontal=Yes	C1=None
B=Body Diameter #2	End Mitred=No	C2=None
C=Body Length	Front Pipe=Yes	C3=None
D=End Length	Centre Support=Circle	
E=Pipe Diameter #1	Square Motor=No	
F=Pipe Length #1	Motor Flange=Yes	
G=Pipe Inset #1	Number Of Fins=16.000	
H=Pipe Diameter #2	Fins Shape=Square	
I=Pipe Length #2	Flat Base=No	
J=Shaft Diameter	Electric Box=No	
K=Shaft Length		Seams
L=Support Diameter		
M=Support Length		
N=Support Extension		
O=Motor Diameter		
P=Motor Length		D
Q=Motor Flange Diameter		Damper:
R=Motor Flange Length		
S=Fin Height		
T=Base Width		
U=Base Height		
V=Base Depth		
v-base beput		

Pipework



Dims	Options	Conn's
A=Base Depth #1	Input Side=Left	C1=None
B=Base Depth #2	Box Type=Rounded	C2=None
C=Front Width #1	Insertion Point=Box Back Centre	
D=Front Width #2	Output=Back	
E=Front Width #3	Inlet=2	
F=Front Depth #1	Outlet=2	
G=Front Height #1		
H=Front Height #2		
I=Front Height #3		
J=Back Width #1		
K=Back Width #2		Seams
L=Back Width #3		
M=Back Height		
N=Back Space		
O=Front Angle		
P=Back Angle		Damper:
Q=Pipe Radius		24
R=Pipe Diameter		
S=Pipe Height		
T=Box Width		
U=Box Height		
V=Box Depth		
W=Input Diameter		
X=Input Length		
Y=Input Inset		
Z=Input Offset		
a=Output Diameter		
b=Output Length		

Pattern: 1106

Pipework



Dims	Options	Conn's
A=Plynth Width #1	Detail=Low	C1=None
B=Plynth Depth #1	Insertion Point=Bowl Back Centre	C2=None
C=Plynth Width #2	Hot Side=Bottom	C3=None
D=Plynth Depth #2	Cold Side=Bottom	
E=Plynth Height	Output Side=Bottom	
F=Bowl Width	Number Of Taps=2	
G=Bowl Height	Plynth=Yes	
H=Bowl Depth	Soap=No	
I=Hot Diameter #1		
J=Hot Length #1		
K=Hot Offset #1		Seams
L=Hot Inset #1		
M=Cold Diameter #2		
N=Cold Length #2		
O=Cold Offset #2		
P=Cold Inset #2		Damper:
Q=Output Diameter #3		bumper.
R=Output Length #3		
S=Output Offset #3		
T=Output Inset #3		
U=Tap Diameter		
V=Tap Height		
W=Tap Length		

Pipework/Equipment



Dims	Options	Conn's
A=Width #1	Corners=Rounded	C1=None
B=Depth #1	Inlet=1	
C=Length #1	Outlet=1	
D=Left Radius #1	Type=Pipework	
E=Right Radius #1	Circular Diameter Type=Outside	
F=Top Radius #1	Round Lines=Yes	
G=Bottom Radius #1	Open Left=No	
H=Front Radius #1	Open Right=No	
I=Back Radius #1	Open Top=No	
J=X Rotation #1	Open Bottom=No	
K=Y Rotation #1	Open Front=No	Seams
L=Z Rotation #1	Open Back=No	

Damper:

## Pattern: 1111

Pipework



Dims	Options	Conn's
A=Pipe Diameter	Width=0.787	C1=None
B=Thickness	Depth=0.079	C2=None
C=Top Diameter #1	Depth=0.394	C3=None
D=Top Length #1	Fix Relative=No	C4=None
E=Length #1	Rotate=No	C5=None
F=Length #2	Cross=No Handle=No	C6=None

Seams

Damper:

Pipework



B=Height Insert C=Depth Input	l=High tion Point=Centre Pack	C1=None C2=None
C=Depth Input		C2=None
	-Back	
'	-Dack	
D=Input Diameter #1 Outp	ut=Bottom	
E=Input Length #1		
F=Input Offset #1		
G=Output Diameter #2		
H=Output Length #2		
I=Output Offset #2		

Damper:

## Pattern: 1151

Pipework



Dims	Options	Conn's
A=Outer Diameter		C1=None
B=Inner Diameter		C2=None
C=Length		
D=Offset		
E=Rotation		

Seams

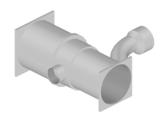
Damper:

Pipework



Dims	Options	Conn's
A=Total Width	Compartments=3	C1=None
B=Total Depth	Taps=1	C2=None
C=Top Height	Compartment Type=Sink	C3=None
D=Surround Size	Compartment Type=Waste	C4=None
E=Outer Radius	Compartment Type=Drain	C5=None
F=Inner Radius	Tap Type=Default	C6=None
G=Width #1	Tap Compartment=2	C7=None
H=Depth #1		C8=None
I=Height #1		C9=None
J=Front Inset #1		C10=None
K=Back Inset #1		Seams
L=Left Inset #1		
M=Right Inset #1		
N=Output Diameter #1		
O=Output Length #1		
P=Output Inset #1		Damper:
Q=Output Offset #1		
R=Width #2		
S=Depth #2		
T=Height #2		
U=Front Inset #2		
V=Back Inset #2		
W=Left Inset #2		
X=Right Inset #2		
Y=Output Diameter #2		
Z=Output Length #2		
a=Output Inset #2		
b=Output Offset #2		

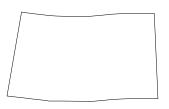
# Pattern: 1189 Pipework/Equipment



Dims		Options	Conn's
A=Bottom Width	Vertical=No	Οριίοτις	C1=None
B=Bottom Depth	Pattern=None		C2=None
C=Bottom Diameter	rattern-None		C3=None
D=Middle Diameter #1			C4=None
E=Middle Diameter #2			C4=None
F=Top Diameter			
G=Top Width			
H=Top Depth			
I=Bottom Height			
J=Middle Height #1			
K=Middle Height #2			Seams
L=Top Height			
M=Bottom Thickness			
N=Top Thickness			
O=Left Diameter			
P=Left Length			B
Q=Right Diameter #1			Damper:
R=Right Length #1			
S=Right Diameter #2			
T=Right Length #2			
U=Right Inset			
V=Right Offset			
W=Right Centre Inset			
X=Right Centre Offset			
Y=Right Radius			
Z=Right Angle			
a=Lines			

Pipework





Dims	Options	Conn's
A=Circular Diameter	Number Of Parts=1	C1=None
B=Quadrant Radius	Seam Position=Curve Start	C2=None
C=Length		
D=Circular Extension		
E=Quadrant Extension		
F=Offset Width		
G=Offset Depth		

Seams S1=None

Damper:

Pattern: 1198
Pipework/Equipment



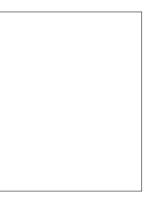
Dims	Options	Conn's
A=Diameter		C1=None
B=Height		C2=None
C=Extension In		
D=Extension Out		
E=Radius In		
F=Radius Out		
G=Angle In		
H=Angle Out		

Seams

Damper:

Pipework



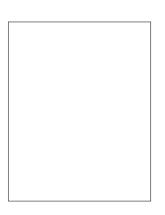


Dims	Options	Conn's
A=Diameter	Seam Position=0.000	C1=None
B=Length	Diameter Type=Nominal	C2=None
C=Left Extension	Pipe Length=(inch)	
D=Right Extension	Area Adjust (%)=0.000	
	Lengths Include Connector Adjust=No	
	Length Adjust=0.000	
	Pipe Parts=1	
	First Break=0.000	
	Second Break=0.000	
	Third Break=0.000	
	Insulate To Nodes=No	Seams
		S1=None

Pattern: 2041

Pipework





Dims	Options	Conn's
A=Diameter	Seam Position=0.000	C1=None
B=Length	Diameter Type=Nominal	C2=None
C=Left Extension	Pipe Length=(inch)	
D=Right Extension	Area Adjust (%)=0.000	
	Lengths Include Connector Adjust=No	
	Allow Multiple Straights=Yes	
	STD Straight=No	
	Length Adjust=0.000	
	Pipe Parts=1	
	First Break=0.000	
	Second Break=0.000	Seams
	Third Break=0.000	S1=None
	Insulate To Nodes=No	

Damper: None None

Damper: None None

4/18/2016 courtesy of software. 8

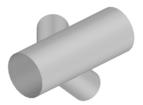
Pipework



Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	First Break=0.000	C3=None
D=Right Extension	Second Break=0.000	
E=Branch Diameter #1	Third Break=0.000	
F=Branch Length #1	Pipe Diameter Type=Nominal	
G=Angle #1	Branch Diameter Type=Nominal	
H=Inset #1	Hole Adjust=0.000	
I=Extension #1	Branch Allowance To Pipe=0.000	
	Branch Seam Position=0.000	
	Throat Cut Back (Degrees)=0.000	Seams
	Plate Border (Circumference)=0.000	S1=None
	Plate Type=Rectangular	S2=None
	Cut Back Allowance (%)=0.000	
	Use Pipe Seam For Branches=No	
	Plate Border (Length)=Auto	Damper: None
	Inlet=1	None
	Outlet=2	None
	End Castle Width =0.000	
	End Castle Angle=30.000	
	Angle Tolerance=0.000	
	Insulate To Nodes=Auto	

Pattern: 2044

Pipework



Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	First Break=0.000	C3=None
D=Right Extension	Second Break=0.000	C4=None
E=Branch Diameter #1	Third Break=0.000	
F=Branch Length #1	Pipe Diameter Type=Nominal	
G=Angle #1	Branch Diameter Type=Nominal	
H=Inset #1	Branch Diameter Type=Nominal	
I=Rotation #1	Hole Adjust=0.000	
J=Extension #1	Branch Allowance To Pipe=0.000	
K=Branch Diameter #2	Branch Seam Position=0.000	Seams
L=Branch Length #2	Throat Cut Back (Degrees)=0.000	S1=None
M=Angle #2	Plate Border (Circumference)=0.000	S2=None
N=Inset #2	Plate Type=Rectangular	S3=None
O=Rotation #2	Cut Back Allowance (%)=0.000	
P=Extension #2	Use Pipe Seam For Branches=No	Damper: None
	Plate Border (Length)=Auto	None
	Inlet=1	None
	Outlet=2	None
	End Castle Width =0.000	None
	End Castle Angle=30.000	
	Angle Tolerance=0.000	
	Insulate To Nodes=Auto	

Pipework



Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	First Break=0.000	C3=None
D=Right Extension	Second Break=0.000	
E=Branch Diameter #1	Third Break=0.000	
F=Branch Length #1	Pipe Diameter Type=Nominal	
G=Angle #1	Branch Diameter Type=Nominal	
H=Inset #1	Hole Adjust=0.000	
I=Extension #1	Branch Allowance To Pipe=0.000	
	Branch Seam Position=0.000	
	Throat Cut Back (Degrees)=0.000	Seams
	Plate Border (Circumference)=0.000	S1=None
	Plate Type=Rectangular	S2=None
	Cut Back Allowance (%)=0.000	
	Use Pipe Seam For Branches=No	
	Plate Border (Length)=Auto	D N
	Inlet=1	Damper: None
	Outlet=2	None
	End Castle Width =0.000	None
	End Castle Angle=30.000	
	Angle Tolerance=0.000	
	Insulate To Nodes=Auto	
	IIISUIALE 10 NOUES=AULO	

Pattern: 2051

Pipework





Dims	Options	Conn's
A=Diameter In	Diameter Type BE=Nominal	C1=None
B=Diameter Out	Diameter Type SE=Nominal	C2=None
C=Length	Cross Break=1	
D=Left Extension	Length Break=1	
E=Right Extension	Seam For Weathering=No	
F=Angle	Input=Length	
	Length Includes Extensions=No	
	Auto Oversize=Normal	
	Insulate To Nodes=No	
		Seams

S1=None

Damper: None None

courtesy of Applied Software 4/18/2016 10

Pipework

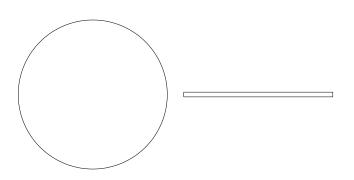
Dims Options Conn's

A=Diameter B=Collar Diameter Type=Nominal C1=None
C=Height



Seams

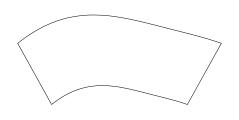
Damper:



Pattern: 2071

Pipework





Dims	Options	Conn's
A=Diameter In	Diameter Type BE=Nominal	C1=None
B=Diameter Out	Diameter Type SE=Nominal	C2=None
C=Length	Cross Break=1	
D=Y-Offset	Seam Position=0.000	
E=Left Extension	Length Break=1	
F=Right Extension	Marker Type=Notch	
G=Round Angle	Length Includes Extensions=No	

Seams

S1=None

Damper: None None

Pipework

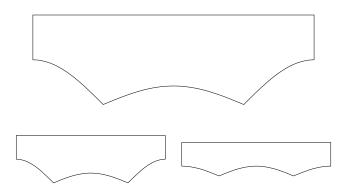


Dims	Options	Conn's
A=Diameter	Diameter Type=Nominal	C1=None
B=Length In	Seam Position=0.000	C2=None
C=Length Out		C3=None
D=Angle		C4=None
E=Bottom Extension		C5=None
F=Left Extension		
G=Right Extension		

Seams

S1=None

Damper:



Pattern: 2082

Pipework



Dims	Options	Conn's		
A=Pipe Diameter	Pipe Parts=1	C1=None		
B=Pipe Length	Branch Parts=1	C2=None		
C=Left Extension	First Break=0.000	C3=None		
D=Right Extension	Second Break=0.000	C4=None		
E=Branch Diameter	Third Break=0.000			
F=Branch Length	Pipe Diameter Type=Nominal			
G=Angle	Branch Diameter Type=Nominal	Branch Diameter Type=Nominal		
H=Inset	Hole Adjust=0.000			
I=Offset	Branch Allowance To Pipe=0.000			
J=Extension	Throat Cut Back (Degrees)=0.000			
K=Collar	Reducer Parts=1	Seams		
	Branch Inset=Front	S1=None		
		S2=None		

Damper:

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Pipework



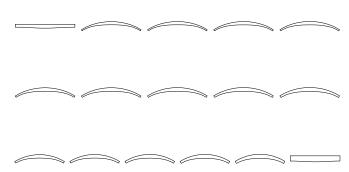
Dims	Options	Conn's
A=Bottom Diameter	Number Of Segments=16	C1=None
B=Top Diameter	Bottom Diameter Type=Nominal	C2=None
C=Centre Radius	Angle Tolerance=0.000	C3=None
)=Angle	Mark Sides=No	
=Bottom Extension	Leg Lengths=No	
=Top Extension	Fixed Radius=Yes	
	Item Volume=Segmented	

Seams

S1=None

Damper: None

None



Pattern: 2108 Pipework/Equipment



Dims	Options	Conn's
A=Diameter	Bend Radius=4.000	C1=None
B=Length	Factor Type=Multiples Of Diameter	C2=None
C=Lead Length	Max Length=0.000	
	Number Of Round Sections=12	
	Length=Auto	
	Length Adjust=0.000	
	Number Of Segments=Auto	
	Straight Annotation=Up	
	Bend Annotation=Front	
	Allowance=Default	
		Seams

Damper:

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Pipework



Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Length	First Break=0.000	C2=None
C=Left Extension	Second Break=0.000	C3=None
D=Right Extension	Third Break=0.000	C4=None
E=Branch Diameter #1	Seam Position=0.000	C5=None
F=Branch Length #1	Pipe Diameter Type=Nominal	C6=None
G=Angle #1	Branch Type=Straight Branch	
H=Inset #1	Branch Diameter Type=Nominal	
I=Offset #1	Branch Parts=2	
J=Rotation #1	Branch Type=Straight Branch	
K=Extension #1	Branch Diameter Type=Nominal	Seams
L=Branch Diameter #2	Branch Parts=1	S1=None
M=Branch Length #2	Branch Type=Straight Branch	S2=None
N=Angle #2	Branch Diameter Type=Nominal	S3=None
O=Inset #2	Branch Parts=1	S4=None
P=Offset #2	Branch Type=Straight Branch	S5=None Damper:
Q=Rotation #2	Branch Diameter Type=Nominal	bumper.
R=Extension #2	Branch Parts=1	
S=Branch Diameter #3	Hole Adjust=0.000	
T=Branch Length #3	Branch Allowance To Pipe=0.000	
U=Angle #3	Shoe Seam Position=Throat	
V=Inset #3	Handle Inline with Body=No	
W=Offset #3	Inlet=1	
X=Rotation #3	Outlet=2	
Y=Extension #3		
Z=Branch Diameter #4		
a=Branch Length #4		
b=Angle #4		

Pattern: 2149

Pipework



Dims	Opt	tions	Со	nn's
A=Pipe Diameter	Pipe Parts=1	Inlet=1	C1=None	
B=Pipe Length	First Break=0.000	Outlet=2	C2=None	
C=Left Extension	Second Break=0.000		C3=None	
D=Right Extension	Third Break=0.000		C4=None	
E=Branch Diameter #1	Seam Position=0.000		C5=None	
F=Branch Length #1	Pipe Diameter Typ		C6=None	
G=Angle #1	Branch Type=Straig		C7=None	
H=Inset #1	Branch Diameter T			
I=Offset #1	Branch Parts=2			
J=Rotation #1	Branch Type=Straig			
K=Extension #1	Branch Diameter T			ams
L=Branch Diameter #2	Branch Parts=1		S1=None	S6=None
M=Branch Length #2	Branch Type=Straig		S2=None	
N=Angle #2	Branch Diameter T		S3=None	
O=Inset #2	Branch Parts=1		S4=None	
P=Offset #2	Branch Type=Straig		S5=None Damper:	
Q=Rotation #2	Branch Diameter T			
R=Extension #2	Branch Parts=1			
S=Branch Diameter #3	Hole Adjust=0.000			
T=Branch Length #3	Branch Allowance			
U=Angle #3	Shoe Seam Position			
V=Inset #3	Branch Type=Straig			
W=Offset #3	Branch Diameter T			
X=Rotation #3	Branch Parts=1			
Y=Extension #3	Handle=Yes			
Z=Branch Diameter #4	Handle Type=Square			
a=Branch Length #4	Diameter Adjust=0			
b=Angle #4	Handle Inline with			

Pipework



Dims	Options	Conn's
A=Diameter	Top Number Of Segments=2	C1=None
B=Height	Bottom Number Of Segments=2	C2=None
C=Top Radius	Diameter Type=Nominal	C3=None
D=Top Angle	Angle Tolerance=0.000	
E=Top Extension	Two Bends=No	
F=Bottom Radius	Item Pattern Length/Angle=Length	
G=Bottom Angle		
H=Bottom Extension		
I=Twist Angle		

Seams

S1=None

Damper:

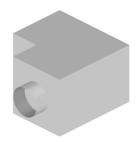
Pattern: 2160

Pipework



Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Right Diameter	Branch Parts=1	C2=None
C=Pipe Length	First Break=0.000	C3=None
D=Right Length	Second Break=0.000	C4=None
E=Left Extension	Third Break=0.000	C5=None
F=Right Extension	Seam Position=0.000	
G=Branch Diameter #1	Pipe Diameter Type=Nominal	
H=Branch Length #1	Branch Diameter Type=Nominal	
I=Angle #1	Branch Diameter Type=Nominal	
J=Inset #1	Hole Adjust=0.000	
K=Offset #1	Branch Allowance To Pipe=0.000	Seams
L=Extension #1	Branch Seam Position=0.000	S1=None
M=Branch Diameter #2	Throat Cut Back (Degrees)=0.000	S2=None
N=Branch Length #2	Right Diameter Type=Nominal	S3=None
O=Angle #2	Plate Border (Circumference)=0.000	
P=Inset #2	Plate Type=Rectangular	Damper: None
Q=Offset #2	Cut Back Allowance (%)=0.000	None
R=Rotation #2	Use Pipe Seam For Branches=No	None
S=Extension #2	Plate Border (Length)=Auto	None
	Inlet=1	None
	Outlet=2	
	End Castle Width =0.000	
	End Castle Angle=30.000	
	Angle Tolerance=0.000	
	Insulate To Nodes=Auto	

Pipework



Dims	Options	Conn's
A=Depth	Lengths Include Extensions=No	C1=None
B=Top Width	Inlet=1	C2=None
C=Top Length	Outlet=2	
D=Top Diameter	Connector 1=Top	
E=Top Extension		
F=Left Width		
G=Left Length		
H=Left Diameter		
I=Left Extension		
J=Right Extension		
K=Bottom Extension		Seams
L=Top Diameter		
M=Left Diameter		

Damper:

Pattern: 2183

Pipework



Dims	Options	Conn's
A=Depth	Lengths Include Extensions=No	C1=None
B=Top Width	Inlet=1	C2=None
C=Top Length	Outlet=2	C3=None
D=Top Diameter	Connector 1=Top	
E=Top Extension		
F=Left Width		
G=Left Length		
H=Left Diameter		
I=Left Extension		
J=Right Width		
K=Right Length		Seams
L=Right Diameter		
M=Right Extension		
N=Bottom Extension		
O=Top Diameter		
P=Left Diameter		Damper:
Q=Right Diameter		

4/18/2016 courtesy of software 16

Pipework



Dims	Options	Conn's
A=Depth	Lengths Include Extensions=No	C1=None
B=Top Width	Inlet=1	C2=None
C=Top Length	Outlet=2	C3=None
D=Top Diameter	Connector 1=Top	C4=None
E=Top Extension		
F=Left Width		
G=Left Length		
H=Left Diameter		
I=Left Extension		
J=Right Width		
K=Right Length		Seams
L=Right Diameter		
M=Right Extension		
N=Bottom Width		
O=Bottom Length		
P=Bottom Diameter		Damper:
Q=Bottom Extension		24
R=Top Diameter		
S=Left Diameter		
T=Right Diameter		
U=Bottom Diameter		

Pattern: 2185

Pipework



Dims		Options	Conn's
A=Diameter	Inlet=1		C1=None
B=Top Diameter	Outlet=2		C2=None
C=Length			C3=None
D=Height			
E=Left Extension			
F=Right Extension			
G=Top Extension			
•			

Seams S1=None

Damper:

Pipework



Dims	Options	Conn's
A=Diameter	Type=Right	C1=None
B=Length	Radius=Inner	C2=None
C=Height	Inlet=1	
D=Left Extension	Outlet=2	
E=Right Extension F=Radius		

Seams

S1=None

Damper:

Pattern: 2187

Pipework



Dims	Options	Conn's
A=Diameter	Radius=Inner	C1=None
B=Length	Inlet=1	C2=None
C=Height	Outlet=2	C3=None
D=Bend Inset		C4=None
E=Left Inset		
F=Right Inset		
G=Radius		
H=Front Left Diameter		
I=Front Left Length		
J=Front Right Diameter		
K=Front Right Length		Seams
		S1=None

Damper:

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Pipework



Dims	Options	Conn's
A=Diameter	Type=Double	C1=None
B=Width	Radius=Inner	C2=None
C=Length	Inlet=1	C3=None
D=Btm Length	Outlet=2	C4=None
E=Depth		
F=Radius		

Seams

S1=None

Damper:

# Pattern: 2189 Pipework/Equipment

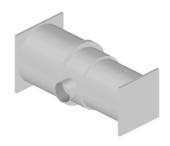


Dims		Options	Conn's
A=Bottom Width	Vertical=No		C1=None
B=Bottom Depth	Pattern=None		C2=None
C=Bottom Diameter	Inlet=2		
D=Middle Diameter #1	Outlet=1		
E=Middle Diameter #2			
F=Top Diameter			
G=Top Width			
H=Top Depth			
I=Bottom Height			
J=Middle Height #1			
K=Middle Height #2			Seams
L=Top Height			
M=Bottom Thickness			
N=Top Thickness			
O=Lines			
			Dampor:

Damper:

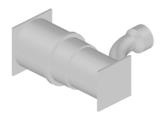
4/18/2016 courtesy of software 19

Pipework/Equipment



Dims A=Bottom Width B=Bottom Depth C=Bottom Diameter D=Middle Diameter #1 E=Middle Diameter #2 F=Top Diameter G=Top Width H=Top Depth	Vertical=No Pattern=None Inlet=2 Outlet=1	Options	Conn's C1=None C2=None
I=Bottom Height J=Middle Height #1 K=Middle Height #2 L=Top Height M=Bottom Thickness N=Top Thickness O=Left Diameter P=Left Length Q=Lines			Seams  Damper:

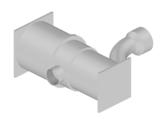
# Pattern: 2191 Pipework/Equipment



Dims		Options	Conn's
A=Bottom Width	Vertical=No		C1=None
B=Bottom Depth	Pattern=None		C2=None
C=Bottom Diameter	Inlet=2		
D=Middle Diameter #1	Outlet=1		
E=Middle Diameter #2			
F=Top Diameter			
G=Top Width			
H=Top Depth			
I=Bottom Height			
J=Middle Height #1			
K=Middle Height #2			Seams
L=Top Height			
M=Bottom Thickness			
N=Top Thickness			
O=Right Diameter #1			
P=Right Length #1			Damper:
Q=Right Diameter #2			'
R=Right Length #2			
S=Right Inset			
T=Right Offset			
U=Right Centre Inset			
V=Right Centre Offset			
W=Right Radius			
X=Right Angle			
Y=Lines			

4/18/2016 courtesy of Applied 20

Pipework/Equipment



Dims		Options	Conn's
A=Bottom Width	Vertical=No		C1=None
B=Bottom Depth	Pattern=None		C2=None
C=Bottom Diameter	Inlet=2		C3=None
D=Middle Diameter #1	Outlet=1		
E=Middle Diameter #2			
F=Top Diameter			
G=Top Width			
H=Top Depth			
I=Bottom Height			
J=Middle Height #1			
K=Middle Height #2			Seams
L=Top Height			
M=Bottom Thickness			
N=Top Thickness			
O=Left Diameter			
P=Left Length			Damper:
Q=Right Diameter #1			·
R=Right Length #1			
S=Right Diameter #2			
T=Right Length #2			
U=Right Inset			
V=Right Offset			
W=Right Centre Inset			
X=Right Centre Offset			
Y=Right Radius			
Z=Right Angle			
a=Lines			

Pattern: 2193

Pipework



Dims	Options	Conn's
A=Diameter	Radius=Inner	C1=None
B=Length	Inlet=1	C2=None
C=Height	Outlet=2	C3=None
D=Bend Inset		
E=Left Inset		
F=Radius		
G=Front Left Diameter		
H=Front Left Length		

Seams S1=None

01 HONE

Damper:

Pipework



Dims	Options	Conn's
A=Diameter	Radius=Inner	C1=None
3=Length	Inlet=1	C2=None
C=Height	Outlet=2	C3=None
D=Bend Inset		
=Right Inset		
=Radius		
G=Front Right Diameter	•	
H=Front Right Length		
		Seams
		S1=None

Damper:

Pattern: 2195

Pipework



Dims	Options	Conn's
A=Diameter	Radius=Inner	C1=None
B=Length	Inlet=1	C2=None
C=Height	Outlet=2	
D=Bend Inset		
E=Radius		

Seams

S1=None

Damper:

4/18/2016 courtesy of software 22

Pipework



Dims	Options	Conn's
A=Pipe Diameter	Inlet=1	C1=None
B=Vent Diameter	Outlet=2	C2=None
C=Trap Height	Angle Tolerance=0.000	C3=None
D=Vent Spacing		C4=None
E=Bend Radius		
F=Left Pipe Length		
G=Left Pipe Offset		
H=Right Pipe Length		
I=Right Pipe Offset		

Seams

Damper:

Pattern: 2197

Pipework



Dims	Options	Conn's
A=Pipe Diameter	Inlet=1	C1=None
B=Radius	Outlet=2	C2=None
C=Height	Angle Tolerance=0.000	C3=None
D=Depth	Radius=Inner	
E=Left Length		
F=Mid Length		
G=Right Length		
H=Vent Diameter		
I=Vent Offset		

Seams

Damper:

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Pipework



Dims	Options	Conn's
A=Pipe Diameter	Inlet=1	C1=None
B=Radius	Outlet=2	C2=None
C=Height	Angle Tolerance=0.000	C3=None
D=Depth	Radius=Inner	C4=None
E=Left Length		
F=Mid Length		
G=Right Length		
H=Vent Diameter		
I=Vent Offset		
		Seams

Damper:

Pattern: 2326

Pipework



Dims	Options	Conn's
A=Bottom Diameter	Number Of Segments=4	C1=None
B=Top Diameter	Pipe Diameter Type=Nominal	C2=None
C=Inner Radius	Branch Diameter Type=Nominal	C3=None
D=Angle	Middle Segment=Yes	C4=None
E=Bottom Extension	Angle Tolerance=0.000	
F=Top Extension	Reducing Branch=0.000	
G=Branch Diameter	Rotation=0.000	
H=Branch Length	Branch Only=No	
I=Branch Angle	Inlet=2	
J=Branch Extension	Outlet=3	
K=Branch Offset	Full Intersections=No	Seams
	Item Volume=Segmented	S1=None
		S2=None

Damper:

Pipework



Dims	Options	Conn's
A=Left Diameter	Left Diameter Type=Nominal	C1=None
B=Right Diameter	Right Diameter Type=Nominal	C2=None
C=Length	,,	C3=None
D=Offset		
E=Left Collar		
F=Right Collar		
G=Inner Radius		
		Coome
		Seams
		S1=None
		Damper: None
		None

Pattern: 2388

Pipework



Dims	Options	Conn's
A=Outer Diameter	Number Of Struts=3	C1=None
B=Length	Allowance To Pipe=25.000	
C=Height	Allowance To Hood=25.000	
D=Pipe Diameter	Hole Diameter=0.000	
E=Pipe Length	Number Of Holes=0	
F=Inner Diameter	Hole Inset=0.000	
G=Inner Length	Strut Hole Width=0.000	
H=Hole Diameter	Strut Hole Length Adjust=0.000	
I=Angle	Insertion Point=Default	
J=Strut Width	Rotation=Default	
		Seams
		S1=None

Damper:

4/18/2016 courtesy of Applied 25

Pipework/Equipment



Dims	Options	Conn's
A=Diameter	Sex Type=Male	C1=None
B=Collar	Number of Sides=0	C2=None
C=Length	Back Fillet=0.000	
D=Offset	Front Fillet=0.000	
E=Right Collar	Width=0.000	
F=Right Diameter	Depth=0.000	
	Height=0.000	
	Height=0.000	
	Width=0.000	
	Depth=0.000	
	Quantity=2	Seams
	Straight=Yes	S1=None
	Length=0.000	
	Angle=0.000	
	Chamfer=Auto	
	Hidden Detail=Yes	Damper:

Pattern: 2523

Pipework



Dims	Options	Conn's
A=Diameter	Number Of Segments=16	C1=None
B=Inner Radius	Diameter Type=Nominal	C2=None
C=Angle	Angle Tolerance=0.000	C3=None
D=Bottom Extension	Mark Sides=No	
E=Top Extension	Leg Lengths=No	
	Fixing Holes On Extension=Yes	
	Square Outer Insulation=No	
	Outer Insulation Extensions=No	
	Centreline Length With Extensions=No	
	Inlet=2	
	Outlet=3	Seams
	Item Volume=Segmented	S1=None

Damper: None None

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Pipework/Equipment



Dims	Options	Conn's
A=Diameter	Sex Type=Male	C1=None
B=Collar	Number of Sides=0	
C=Length	Back Fillet=0.000	
D=Offset	Front Fillet=0.000	
E=Right Collar	Width=0.000	
F=Right Diameter	Depth=0.000	
G=Nut Diameter	Height=0.000	
H=Hex Length	Height=0.000	
	Width=0.000	
	Depth=0.000	
	Quantity=2	Seams
	Straight=Yes	S1=None
	Length=0.000	
	Angle=0.000	
	Chamfer=Auto	
		Damper:

### Pattern: 2751

Pipework



Options	Conn's
Branch Parts=1	C1=None
Seam Position=0.000	C2=None
Pipe Diameter Type=Nominal	C3=None
Branch Diameter Type=Nominal	
Hole Adjust=0.000	
Branch Allowance To Pipe=0.000	
Branch Seam Position=0.000	
Plate Border=0.000	
Plate Type=Rectangular	
Input=Angle	
Plate Border (Width)=Auto	Seams
Reducer Parts=1	S1=None
	S2=None
	Damper: None
	None
	None
	Branch Parts=1 Seam Position=0.000 Pipe Diameter Type=Nominal Branch Diameter Type=Nominal Hole Adjust=0.000 Branch Allowance To Pipe=0.000 Branch Seam Position=0.000 Plate Border=0.000 Plate Type=Rectangular Input=Angle Plate Border (Width)=Auto

Pipework



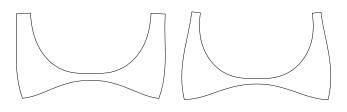
Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	First Break=0.000	C3=None
D=Right Extension	Second Break=0.000	C4=None
E=Branch Diameter	Third Break=0.000	C5=None
F=Branch Length	Seam Position=0.000	C6=None
G=Angle	Pipe Diameter Type=Nominal	
H=Inset	Branch Diameter Type=Nominal	
I=Offset	Branch Diameter Type=Nominal	
J=Rotation	Hole Adjust=0.000	
K=Extension	Branch Allowance To Pipe=0.000	Seams
L=Collar	Throat Cut Back (Degrees)=0.000	S1=None
M=Branch Diameter	Reducer Parts=1	S2=None
N=Branch Length	Branch Inset=Front	S3=None
O=Angle		
P=Inset		Damper:
Q=Offset		bamper.
R=Rotation		
S=Extension		
T=Collar		

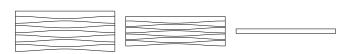
Pattern: 2821

Pipework



Dims	Options	Conn's
A=Bottom Diameter	Bottom Diameter Type=Nominal	C1=None
B=Right Diameter	Right Diameter Type=Nominal	C2=None
C=Left Diameter	Left Diameter Type=Nominal	C3=None
D=Right Radius	Number Of Segments=8	C4=None
E=Left Radius	Number Of Segments=8	C5=None
F=Right Angle	Inlet=1	C6=None
G=Left Angle	Outlet=2	
H=Bottom Extension		
I=Right Extension		
J=Left Extension		
		Seams S1=None





Damper:

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Pipework/Equipment



Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Centre Radius	Branch Diameter Type=Nominal	C2=None
C=Branch Diameter	Rotation=Top	C3=None
D=Branch Length	Angle Tolerance=0.000	
E=Bottom Extension	Leg Lengths=No	
F=Top Extension		
G=Angle		
H=Rotation		
=Bend Angle		
I=Inner Radius		
		Seams

Damper:

# Pattern: 2868 Pipework/Equipment



Dims	Options	Conn's
A=Diameter	Type=Round	C1=None
B=Left Collar	Number Of Struts=6	C2=None
C=Right Collar	Handle Inline with Body=No	
D=Shaft Diameter #1	Handle Type=Round	
E=Shaft Diameter #2	Handle Rotation=0.000	
F=Shaft Diameter #3	Draw Globe as Disc=No	
G=Shaft Diameter #4	Nut Sides=6	
H=Shaft Length #1	Square Handle=Mitred	
I=Shaft Length #2		
J=Shaft Length #3		
K=Shaft Length #4		Seams
L=Handle Diameter		
M=Handle Angle		
N=Strut Diameter		
O=Handle Length		
P=Globe X Diameter		Damper:
Q=Globe Y Diameter		Dainper.
R=Box Width		
S=Box Depth		
T=Box Height		
U=Square Handle Length		
V=Square Handle Thickness		
W=Square Handle Fillet		
X=Bonnet X Offset		
Y=Bonnet Y Offset		
Z=Nut Length		
a=Nut Thickness		
b=Nut Top Fillet		

Pipework/Equipment



Pattern: 2873
Pipework/Equipment



6:	0.15	Consta
Dims A=Diameter	Options Number Of Struts=6	Conn's C1=None
B=Left Length	Handle Inline with Body=No	C1=None
•	'	C2=None
C=Right Length	Handle Type=Round	C3=NOTIE
D=Left Collar	Handle Rotation=0.000	
E=Right Collar	Draw Globe as Disc=No	
F=Branch Diameter	Nut Sides=6	
G=Branch Length	Square Handle=Mitred	
H=Branch Collar	Length Includes Extensions=No	
I=Shaft Diameter #1	Branch Rotation=0.000	
J=Shaft Diameter #2	Inlet=1	<b>C</b>
K=Shaft Diameter #3	Outlet=2	Seams
L=Shaft Diameter #4		
M=Shaft Length #1		
N=Shaft Length #2		
O=Shaft Length #3		
P=Shaft Length #4		Damper:
Q=Handle Diameter		bumper.
R=Handle Angle		
S=Strut Diameter		
T=Handle Length		
U=Globe X Diameter		
V=Globe Y Diameter		
W=Box Width		
X=Box Depth		
Y=Box Height		
Z=Square Handle Length		
a=Square Handle Thickness		
b=Square Handle Fillet		
a aquata transfer filet		

Dims	Options	Conn's
A=Diameter	Spacing=50.000	C1=None
B=Length	Diameter Ratio=1.100	C2=None
C=Item Centre Line Length	Max Length=0.000	
	Draw as Single Line=No	
	Number Of Round Sections=12	

Seams

Damper:

Pipework



Dims	Options	Conn's
A=Pipe Diameter	Branch Parts=1	C1=None
B=Branch Diameter #1	First Break=0.000	C2=None
C=Branch Length #1	Second Break=0.000	C3=None
D=Angle #1	Third Break=0.000	
E=Offset #1	Pipe Diameter Type=Nominal	
F=Extension #1	Branch Diameter Type=Nominal	
	Branch Diameter Type=Nominal	
	Hole Adjust=0.000	
	Branch Allowance To Pipe=0.000	
	Branch Seam Position=0.000	
	Throat Cut Back (Degrees)=0.000	Seams
	Plate Border (Circumference)=0.000	S1=None
	Plate Type=Rectangular	S2=None
	Cut Back Allowance (%)=0.000	
	Use Pipe Seam For Branches=No	
	Plate Border (Length)=Auto	Damper: None
	End Castle Width =0.000	None
	End Castle Angle=30.000	None
	•	NOTIE

Pattern: 2881
Pipework/Equipment



Dims	Options	Conn's
A=Pipe Diameter	Type=Supply	C1=None
B=Branch Diameter	Angle Tolerance=0.000	C2=None
C=Branch Length	Inlet=2	
D=Angle	Outlet=1	
E=Collar	Branch Centreline Length With Collar=No Number Of Segments=12	

Seams

Damper:

Pipework/Equipment



Dims	Options	Conn's
A=Pipe Diameter	Type=Supply	C1=None
B=Branch Diameter #1	Rotation=0.000	C2=None
C=Branch Length #1	Angle Tolerance=0.000	C3=None
D=Pipe Length	Inlet=2	C4=None
E=Inset #1	Outlet=3	C5=None
F=Left Collar	Number Of Segments=12	C6=None
G=Right Collar		
H=Angle #1		
I=Collar #1		
J=Branch Diameter #2		
K=Branch Length #2		Seams
L=Branch Inset #2		
M=Collar #2		
N=Rotation #2		
O=Branch Diameter #3		
P=Branch Length #3		Damper:
Q=Branch Inset #3		bumper.
R=Collar #3		
S=Rotation #3		

#### Pattern: 2883 Pipework/Equipment



Dims	Options	Conn's
A=Pipe Diameter	Type=Supply	C1=None
B=Branch Diameter #1	Rotation=0.000	C2=None
C=Branch Length #1	Angle Tolerance=0.000	C3=None
D=Pipe Length	Inlet=1	C4=None
E=Inset #1	Outlet=2	C5=None
F=Left Collar	Number Of Segments=12	C6=None
G=Right Collar		
H=Angle #1		
I=Collar #1		
J=Branch Diameter #2		
K=Branch Length #2		Seams
L=Branch Inset #2		
M=Collar #2		
N=Rotation #2		
O=Branch Diameter #3		
P=Branch Length #3		Damper:
Q=Branch Inset #3		Dumper.
R=Collar #3		
S=Rotation #3		

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Pipework



	Dims	Options	Conn's
	A=Pipe Diameter	Pipe Parts=1	C1=None
	B=Pipe Length	Branch Parts=1	C2=None
	C=Left Extension	Pipe Seam Position=0.000	C3=None
	D=Right Extension	First Break=0.000	C4=None
	E=Branch Diameter #1	Second Break=0.000	
	F=Hole Width #1	Third Break=0.000	
	G=Hole Depth #1	Pipe Diameter Type=Nominal	
	H=Branch Length #1	Branch Diameter Type=Nominal	
	I=Angle #1	Hole Adjust=0.000	
	J=Inset #1	Branch Allowance To Pipe=0.000	
	K=Offset #1	Branch Seam Position=0.000	Seams
	L=Rotation #1	Plate Border=0.000	S1=None
	M=Collar #1	Plate Border (Width)=Equal	S2=None
	N=Hole Offset #1	Plate Type=Rectangular	
	O=Branch Diameter #2	Inlet=1	
	P=Hole Width #2	Outlet=2	Damper:
	Q=Hole Depth #2		
	R=Branch Length #2		
	S=Angle #2		
	T=Inset #2		
	U=Offset #2		
1	V=Rotation #2		
	W=Collar #2		
	X=Hole Offset #2		

Pattern: 2885 Pipework/Equipment



Dims	Options	Conn's
A=Pipe Diameter	Type=Supply	C1=None
B=Branch Diameter #1	Angle Tolerance=0.000	C2=None
C=Branch Length #1	Inlet=2	
D=Angle #1	Outlet=1	
E=Collar #1	Number Of Segments=12	

Seams

Damper:

courtesy of Applied Software 4/18/2016 33

Pipework/Equipment



Dims	Options	Conn's
A=Pipe Diameter	Access Panel=No	C1=None
B=Pipe Length	Inlet=1	C2=None
C=Left Extension	Outlet=2	C3=None
D=Right Extension	Angle Tolerance=0.000	C4=None
E=Branch Diameter #1	Number Of Segments=Auto	
F=Branch Length #1		
G=Branch Angle #1		
H=Branch Inset #1		
I=Branch Radius #1		
J=Branch Extension #1		
K=Branch Rotation #1		Seams
L=Branch Diameter #2		
M=Branch Length #2		
N=Branch Angle #2		
O=Branch Inset #2		
P=Branch Radius #2		Damper:
Q=Branch Extension #2		24
R=Branch Rotation #2		

### Pattern: 2899

Pipework



Dims	Options	Conn's
A=Pipe Diameter	Number Of Segments=8	C1=None
B=Partial Length	Inlet=1	C2=None
C=Left Extension	Outlet=2	C3=None
D=Right Extension		C4=None
E=Branch Diameter		C5=None
F=Branch Angle		
G=Branch Inset		
H=Bend Inset		
I=Branch Height		
J=Bend Extension		
K=End Reducer Diameter		Seams
L=End Reducer Length		S1=None
M=Branch Reducer Diam		S2=None
N=Branch Reducer Length		

Pipework



Dims	Options	Conn's
A=Pipe Diameter	Diameter Type=Outside	C1=None
B=Partial Length	Number Of Segments=4	C2=None
C=Left Extension	Inlet=1	C3=None
D=Right Extension	Outlet=2	
E=Reducer Diameter	Angle Tolerance=0.000	
F=Reducer Length	Input=Partial Length	
G=Branch Reducer Diame	Lengths Include Collars=Yes	
H=Branch Reducer Length		
I=Branch Diameter		
J=Branch Length		
K=Branch Angle		Seams
L=Branch Height		
M=Branch Inset		
N=Bend Inset		
O=Bend Radius		
P=Bend Angle		Damper:
Q=Bend Extension		Damper.

Pattern: 2901

Pipework



Dims	Options	Conn's
A=Pipe Diameter	Diameter Type=Outside	C1=None
B=Partial Length	Number Of Segments=4	C2=None
C=Left Extension	Inlet=1	C3=None
D=Right Extension	Outlet=2	C4=None
E=Reducer Diameter	Angle Tolerance=0.000	
F=Reducer Length	Input=Partial Length	
G=Branch Reducer Diame	Lengths Include Collars=Yes	
H=Branch Reducer Lengt		
I=Branch Diameter #1		
J=Branch Length #1		
K=Branch Angle #1		Seams
L=Branch Height #1		
M=Branch Inset #1		
N=Bend Inset #1		
O=Bend Radius #1		
P=Bend Angle #1		Damper:
Q=Bend Extension #1		54po
R=Branch Reducer Diame		
S=Branch Reducer Length		
T=Branch Diameter #2		
U=Branch Length #2		
V=Branch Angle #2		
W=Branch Height #2		
X=Branch Inset #2		
Y=Bend Inset #2		
Z=Bend Radius #2		
a=Bend Angle #2		
b=Bend Extension #2		

Pipework



Dims	Options	Conn's
A=Diameter	Radius=Centreline	C1=None
B=Length	Inlet=1	C2=None
C=Extension	Outlet=2	C3=None
D=Branch Diameter	Angle Tolerance=0.000	
E=Branch Length		
F=Branch Extension		
G=Branch Inset		
H=Bend Radius		
I=Branch Angle		

Damper:

Pattern: 2903

Pipework



Dims	Options	Conn's
A=Diameter	Radius=Centreline	C1=None
B=Length	Inlet=1	C2=None
C=Extension	Outlet=2	C3=None
D=Branch Diameter #1	Angle Tolerance=0.000	C4=None
E=Branch Length #1		
F=Branch Extension #1		
G=Branch Inset #1		
H=Bend Radius #1		
I=Branch Angle #1		
J=Branch Diameter #2		
K=Branch Length #2		Seams
L=Branch Extension #2		
M=Branch Inset #2		
N=Bend Radius #2		
O=Branch Angle #2		
		Damnor:

4/18/2016 courtesy of Applied software 36

Damper:

Pipework



Dims	Options	Conn's
A=Diameter	Type=Front	C1=None
B=Length	Radius=Centreline	C2=None
C=Extension	Inlet=1	C3=None
D=Branch Diameter	Outlet=2	C4=None
E=Branch Length	Angle Tolerance=0.000	
F=Branch Extension		
G=Branch Inset		
H=Bend Radius		
I=Branch Angle		
J=Inlet Diameter		
K=Inlet Length		Seams
L=Inlet Extension		
M=Inlet Inset		
N=Inlet Offset		

Damper:

Pattern: 2905

Pipework



Dims	Options	Conn's
A=Diameter	Type=Front	C1=None
B=Length	Radius=Centreline	C2=None
C=Extension	Inlet=1	C3=None
D=Branch Diameter #1	Outlet=2	C4=None
E=Branch Length #1	Angle Tolerance=0.000	C5=None
F=Branch Extension #1		
G=Branch Inset #1		
H=Bend Radius #1		
I=Branch Angle #1		
J=Branch Diameter #2		
K=Branch Length #2		Seams
L=Branch Extension #2		
M=Branch Inset #2		
N=Bend Radius #2		
O=Branch Angle #2		
P=Inlet Diameter		Damper:
Q=Inlet Length		2 2
R=Inlet Extension		
S=Inlet Inset		
T=Inlet Offset		

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Pipework



Dims	Options	Conn's
A=Diameter	Radius=Centreline	C1=None
B=Length	Inlet=1	C2=None
C=Extension	Outlet=2	C3=None
D=Branch Diameter	Angle Tolerance=0.000	C4=None
E=Branch Length		C5=None
F=Branch Extension		
G=Branch Inset		
H=Bend Radius		
I=Branch Angle		
J=Inlet Diameter		
K=Inlet Length		Seams
L=Inlet Extension		
M=Inlet Inset		
N=Inlet Offset		

Damper:

Pattern: 2907

Pipework



Dims	0	ptions	Conn's
A=Diameter	Radius=Centreline		C1=None
B=Length	Inlet=1		C2=None
C=Extension	Outlet=2		C3=None
D=Branch Diameter #1	Angle Tolerance=0.0	000	C4=None
E=Branch Length #1			C5=None
F=Branch Extension #1			C6=None
G=Branch Inset #1			
H=Bend Radius #1			
I=Branch Angle #1			
J=Branch Diameter #2			
K=Branch Length #2			Seams
L=Branch Extension #2			
M=Branch Inset #2			
N=Bend Radius #2			
O=Branch Angle #2			
P=Inlet Diameter			Damper:
Q=Inlet Length			bamper.
R=Inlet Extension			
S=Inlet Inset			
T=Inlet Offset			

4/18/2016 courtesy of software 38

Pipework/Equipment



Dims	Options	Conn's
A=Diameter	Rotation=0.000	C1=None
B=Depth	Inlet=1	C2=None
C=Height	Outlet=2	C3=None
D=Bottom Radius	Angle Tolerance=0.000	
E=Right Radius		
F=Height		
G=Angle Out		
H=Base Angle		
I=C2 Inner Diameter		
J=Bottom Diameter		
K=Bottom Length		Seams
L=Bottom Rotation		

Damper:

Pattern: 2938

Pipework



Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Pipe Length	Branch Diameter Type=Nominal	C2=None
C=Left Extension	Number Of Segments=4	C3=None
D=Right Extension	Correct Branch Insets=Yes	C4=None
E=Branch Diameter #1	Insets To Branch End=No	C5=None
F=Centre Radius #1	Heights To Bend End=No	
G=Angle #1	Inlet=1	
H=Inset #1	Outlet=2	
I=Height #1		
J=Twist Angle #1		
K=Extension #1		Seams
L=Branch Diameter #2		S1=None
M=Centre Radius #2		S2=None
N=Angle #2		
O=Inset #2		
P=Height #2		Damper:
Q=Twist Angle #2		bumper.
R=Extension #2		

Pipework



Dims	Options	Conn's
A=Top Diameter	Inlet=1	C1=None
B=Top Extension	Outlet=2	C2=None
C=Left Diameter	Lengths Include Extensions=No	C3=None
D=Left Length	Body Diameter=Top Diameter	C4=None
E=Left Offset	Central=No	C5=None
F=Left Inset		
G=Left Extension		
H=Right Diameter		
I=Right Length		
J=Right Offset		
K=Right Inset		Seams
L=Right Extension		S1=None
M=Left Collar		S2=None
N=Right Collar		S3=None
O=Body Diameter		
		Damper:

### Pattern: 2966

Pipework



Dims	Options	Conn's
A=Left Diameter	Lengths Include Collars=Yes	C1=None
B=Left Length	Inlet=2	C2=None
C=Left Reducer Length	Outlet=3	C3=None
D=Left Collar	Angle Tolerance=0.000	C4=None
E=Left Extension		
F=Right Diameter		
G=Right Length		
H=Right Reducer Length		
I=Right Collar		
J=Right Extension		
K=Body Diameter		Seams
L=Branch Diameter		
M=Branch Length		
N=Branch Collar		
O=Branch Angle		
		_

4/18/2016 courtesy of software 40

Damper:

Pipework



Dims	Options	Conn's
A=Left Diameter	Lengths Include Collars=Yes	C1=None
B=Left Length #1	Inlet=2	C2=None
C=Left Length #2	Outlet=3	C3=None
D=Left Reducer Length	Angle Tolerance=0.000	C4=None
E=Left Collar		C5=None
F=Left Extension		
G=Right Diameter		
H=Right Length		
I=Right Reducer Length		
J=Right Collar		
K=Right Extension		Seams
L=Body Diameter		
M=Branch Diameter #1		
N=Branch Length #1		
O=Branch Collar #1		
P=Branch Angle #1		Damper:
Q=Branch Diameter #2		
R=Branch Length #2		
S=Branch Collar #2		
T=Branch Angle #2		

Pattern: 2979

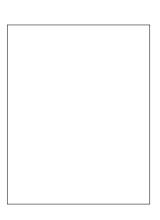
Pipework



Dims	Options	Conn's
A=Diameter		C1=None
B=Distance		C2=None
C=Distance		C3=None
D=Radius		C4=None
E=Width		C5=None
F=Top Collar		
G=Bottom Collar		
H=Height		
I=Height		
J=Hole Diameter		
K=Hole Diameter		Seams
L=Hole Diameter		
M=Distance		
N=Distance		
O=Distance		
P=Hole Angle		Damper:
Q=Hole Angle		bampen.
R=Hole Angle		
S=Height		

Pipework





Seam Position=0.000 Diameter Type=Nominal	C1=None
Diameter Type=Nominal	
	C2=None
Lengths Include Connector Adjust=No	
Pipe Parts=1	
First Break=0.000	
Second Break=0.000	
Third Break=0.000	
	Pipe Parts=1 First Break=0.000 Second Break=0.000

Seams S1=None

Damper: None

None

Pattern: 3051

Pipework





Dims	Options	Conn's
A=Diameter In	Diameter Type BE=Nominal	C1=None
B=Diameter Out	Diameter Type SE=Nominal	C2=None
C=Length	Cross Break=1	
D=Left Extension	Length Break=1	
E=Right Extension	Seam For Weathering=No	
F=Angle	Input=Length	
	Length Includes Extensions=No	
	Auto Oversize=Normal	

Seams

S1=None

Damper: None None

Pipework

Dims Options Conn's

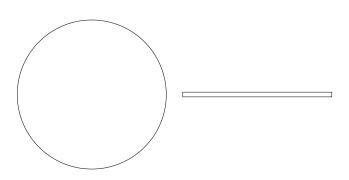
A=Diameter B=Collar Diameter Type=Nominal C1=None

C=Height



Seams

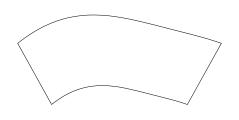
Damper:



Pattern: 3071

Pipework





Dims	Options	Conn's
A=Diameter In	Diameter Type BE=Nominal	C1=None
B=Diameter Out	Diameter Type SE=Nominal	C2=None
C=Length	Cross Break=1	
D=Y-Offset	Seam Position=0.000	
E=Left Extension	Length Break=1	
F=Right Extension	Marker Type=Notch	
G=Round Angle	Length Includes Extensions=No	

Seams

S1=None

Damper: None None

None

4/18/2016 courtesy of software 43

Pipework/Equipment



Dims	Options	Conn's
A=Diameter	Bend Radius=4.000	C1=None
B=Length	Factor Type=Multiples Of Diameter	C2=None
C=Lead Length	Max Length=0.000	
	Number Of Round Sections=12	
	Length=Auto	
	Length Adjust=0.000	
	Number Of Segments=Auto	
	Straight Annotation=Up	
	Bend Annotation=Front	
	Allowance=Default	
		Seams

Damper:

Pattern: 3386

Pipework



	Options	Conn's
A=Left Diameter	Left Diameter Type=Nominal	C1=None
B=Right Diameter	Right Diameter Type=Nominal	C2=None
C=Length		C3=None
D=Offset		
E=Left Collar		
F=Right Collar		
G=Inner Radius		

Damper: None None

Seams S1=None

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Pipework/Equipment



Dims	Options	Conn's
A=Diameter	Sex Type=Male	C1=None
B=Collar	Number of Sides=0	C2=None
C=Length	Back Fillet=0.000	
D=Offset	Front Fillet=0.000	
E=Right Collar	Width=0.000	
F=Right Diameter	Depth=0.000	
	Height=0.000	
	Height=0.000	
	Width=0.000	
	Depth=0.000	
	Quantity=2	Seams
	Straight=Yes	S1=None
	Length=0.000	
	Angle=0.000	
	Chamfer=Auto	
		Damper:

Pattern: 3523 Pipework/Equipment



Dims	Options	Conn's
A=Diameter	Number Of Segments=16	C1=None
B=Inner Radius	Diameter Type=Nominal	C2=None
C=Angle	Angle Tolerance=0.000	C3=None
D=Bottom Extension	Mark Sides=No	
E=Top Extension	Leg Lengths=No	
	Fixing Holes On Extension=Yes	
	Square Outer Insulation=No	
	Outer Insulation Extensions=No	
		Seams
		S1=None

Damper: None None

courtesy of Applied Software 4/18/2016 45

Pipework/Equipment



Dims	Options	Conn's
A=Diameter	Spacing=50.000	C1=None
B=Length	Diameter Ratio=1.100	C2=None
C=Item Centre Line Length	Max Length=0.000	
	Draw as Single Line=No	
	Number Of Round Sections=12	

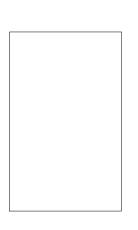
Seams

Damper:

courtesy of Applied Software 4/18/2016 46

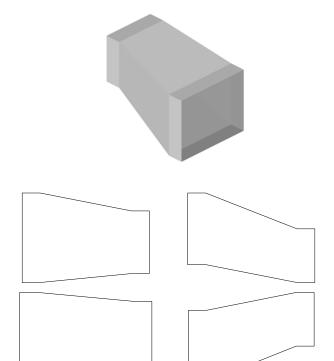
Rectangular





	Dims	Options	Conn's
A=Width C=Length	B=Depth	Straight Type=1 Part Straight Female Allow=Shortest Side 1xU,1xl=Shortest Side Connector Fold Notch=Use Default Vee Notch Depth=Auto Vee Notch Angle=30.000 Maximum Sheet Size=None Maximum Fold Length=None Minimum Fold Length=None Oversize Check=Yes	C1=None C2=None
		Connector Fold Notch=Use Default Vee Notch Depth=Auto Vee Notch Angle=30.000 Beading=No Insulation Parts=Same Insulation UI=Shortest Side	Seams S1=None Damper:

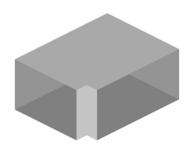
# Pattern: 2 Rectangular/Fabrication

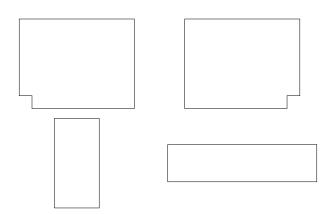


Dims	Opt	ions	Conn's
A=Width In	2 Parts=No	Fixing Holes on Tur	C1=None
B=Depth In	3 Parts=No	Seam Cut Back=0.0	C2=None
C=Width Out	Vee Depth Male=A		
D=Depth Out	Vee Depth Female=		
E=Length	Vee Notch Angle=2		
F=Extension In	Taper Notch If Strai		
G=Extension Out	Female Allow=Shor		
H=Offset Width	2-Sided Part Allowa		
I=Offset Depth	Offset Width=Left In		
J=Angle	Offset Depth=Botto		
	Taper Notch If Strai		Seams
	Use Taper Notch F		S1=None
	Connector Fold Not		
	Vee Notch Depth=		
	Vee Notch Angle=3		
	Input=Length		Damper:
	Vee Notch Depth If		24pc
	Maximum Angle=1		
	Splitter Turnover=0		
	Splitter Extension=		
	Splitter Adjust=0.000		
	Connector Fold Not		
	Vee Notch Depth=		
	Vee Notch Angle=3		
	Splitter Hole Diame		
	Number Of Holes=		
	Splitters=Half		
	Hole Inset=0.000		

4/18/2016 courtesy of software 1

Rectangular



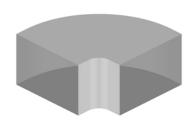


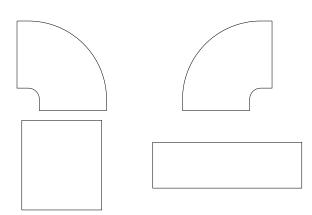
Dims	Options	Conn's
A=Top Width	Length Adjust For Part 4=0.000	C1=None
B=Depth	Length Adjust For Part 3=0.000	C2=None
C=Btm Width	Vee Depth Male=Auto	
D=Top Extension	Vee Depth Female=Auto	
E=Bottom Extension	Vee Angle Male=30	
	Vee Angle Female=30	
	3 Parts=No	
	Seam Number For Throat=	
	2 Part Wrapper=No	
	Attenuator=No	
	Leg Lengths=No	Seams
	Allow Central Tie Rods=Yes	S1=None
	Riser Bend=No	S2=None
	Insulation Parts=Same	

Damper:

# Pattern: 4

Rectangular

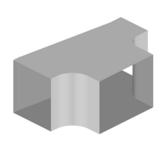




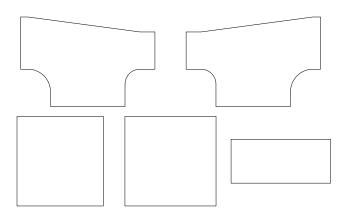
Dims	Options	Conn's
A=Width	Throat Type=Radius	C1=None
B=Depth	Length Adjust For Part 4=0.000	C2=None
C=Angle	Length Adjust For Part 3=0.000	
D=Top Extension	Vee Depth Male=Auto	
E=Bottom Extension	Vee Depth Female=Auto	
F=Inner Radius	Vee Angle Male=30	
	Vee Angle Female=30	
	Auto Oversize=Normal	
	Seam Number For Throat=	
	Leg Lengths=No	
	Allow Central Tie Rods=Yes	Seams
	Riser Bend=No	S1=None
	Mark Splitter Sides=No	
	Insulation Parts=Same	

Damper:

Rectangular



Dims	Options	Conn's
A=Btm Width	Throat Type=Radius	C1=None
B=Depth	3 Parts=No	C2=None
C=Left Width	Vee Depth Male=Auto	C3=None
D=Right Width	Vee Depth Female=Auto	
E=Right Radius	Vee Notch Angle=30.000	
F=Left Radius	Hole Diameter=0.500	
G=Btm Right Extension	Hole Spacing=2.000	
H=Btm Left Extension	Splitters=No	
I=Right Extension	Inlet=1	
J=Left Extension	Outlet=2	
K=Splitter Distance	Insulation Parts=Same	Seams S1=None



# Pattern: 6 Rectangular



Dims	Options	Conn's
A=Left Width	Vee Depth Male=Auto	C1=None
B=Depth	Vee Depth Female=Auto	C2=None
C=Right Width	Vee Notch Angle=30.000	
D=Length	Seam Cut Back=0.000	
E=Left Extension	Allow Central Tie Rods=No	
F=Right Extension	Insulation Parts=Same	
G=Offset Width	Split Mitre=No	
H=Angle		
I=Left Extension		
J=Right Extension		
K=Right Width		Seams
		S1=None

Damper: None None

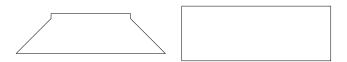
Damper:

Rectangular

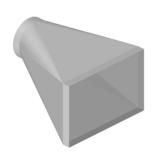


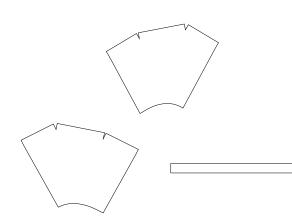
Dims	Options	Conn's
A=Top Width	Throat Type=Mitred	C1=None
B=Depth	2 Parts=Yes	C2=None
C=Height	Vee Depth Male=Auto	
D=Top Extension	Vee Depth Female=Auto	
E=Bottom Extension	Vee Notch Angle=30.000	
F=Btm Width	Connector Fold Notch=Use Default	
	Vee Notch Depth=Auto	
	Vee Notch Angle=30.000	
	Connector Fold Notch=Use Default	
	Vee Notch Depth=Auto	
	Vee Notch Angle=30.000	Seams
	Dynamic Hole Adjust=Auto	S1=None

Damper: None None



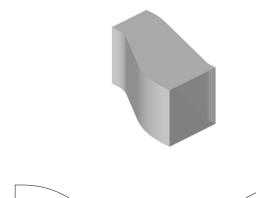
# Pattern: 8 Rectangular/Round





Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Length Break=1	C2=None
C=Diameter	Diameter Type=Nominal	
D=Length	Seam Position=Width	
E=Offset Width	Marker Type=Notch	
F=Offset Depth	Input=Length	
G=Extension	Offset Width=Left In	
H=Collar	Offset Depth=Bottom Up	
I=Corner Radius	Inlet=1	
J=Slope Angle	Outlet=2	
	Maximum Angle=180.000	Seams
	Fold Notch Depth=Full Allowance	S1=None
	Hide Internal Lines=No	
	Show Center Line=No	
	V Notch Rectangular Extension=No	
	Seam Cut Back=None	Damper: None
	Cut Back Allowance (%)=50.000	bumper wone
	2 Parts 90 Degrees Seam=No	

Rectangular

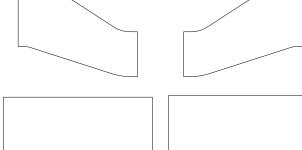


Dims	Options	Conn's
A=Width In	Vee Depth Male=Auto	C1=None
B=Depth	Vee Depth Female=Auto	C2=None
C=Width Out	Vee Angle Male=30	
D=Length	Vee Angle Female=30	
E=Extension In	Offset Width=Left In	
F=Extension Out	Restricted Flow=Warning	
G=Offset Width	Seam Cut Back=0.000	
H=Radius Out I=Radius In	Wraps V Notch If Zero Radius=No	

Seams

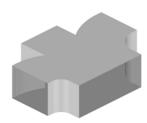
S1=None

Damper:



### Pattern: 10

Rectangular



Dims	Options	Conn's
A=Btm Width	Right Throat Type=Radius	C1=None
B=Depth	Left Throat Type=Radius	C2=None
C=Top Width	Vee Depth Male=Auto	C3=None
D=Right Width	Vee Depth Female=Auto	C4=None
E=Left Width	Vee Angle Male=30	
F=Height	Vee Angle Female=30	
G=Right Height	Right Heel Type=Radius	
H=Left Height	Left Heel Type=Radius	
I=Right Radius	Junction Notch=Use Default	
J=Left Radius	Vee Notch Angle=20.000	
K=Right Angle	2 Part Wrapper=No	Seams
L=Left Angle	Top Right=Straight	S1=None
M=Btm Right Extension	Top Left=Straight	S2=None
N=Btm Left Extension	Outlet=2	
O=Right Extension	Insulation Parts=Same	
P=Left Extension		Damper:
Q=Top Extension		builiper.

Rectangular



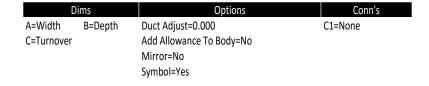
Dims	Options	Conn's
A=Left Width	Vee Depth Male=Auto	C1=None
B=Depth	Vee Depth Female=Auto	C2=None
C=Right Width	Vee Notch Angle=20.000	
D=Length	Insulation Parts=Same	
E=Left Extension		
F=Right Extension		
G=Offset Width		

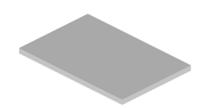
Seams

S1=None

Damper:

Pattern: 12





Seams S1=None

Damper:

4/18/2016 courtesy of software 6

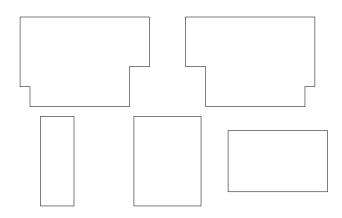
Rectangular



Dims	Options	Conn's
A=Btm Width	3 Parts=No	C1=None
B=Depth	Vee Depth Male=Auto	C2=None
C=Left Width	Vee Depth Female=Auto	C3=None
D=Right Width	Vee Notch Angle=30.000	
E=Bottom Extension	Hole Diameter=0.500	
F=Right Extension	Hole Spacing=2.000	
G=Left Extension	Splitters=No	
H=Splitter Distance	Inlet=1	
	Outlet=2	
	Insulation Parts=Same	
		Seams

S1=None

Damper:



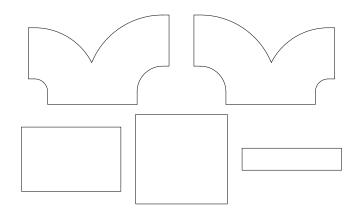
# Pattern: 14

Rectangular



Dims	Options	Conn's
A=Btm Width	Right Throat Type=Radius	C1=None
B=Depth	Left Throat Type=Radius	C2=None
C=Right Width	Vee Depth Male=Auto	C3=None
D=Left Width	Vee Depth Female=Auto	
E=Height	Vee Angle Male=30	
F=Right Radius	Vee Angle Female=30	
G=Left Radius	Right Heel Type=Radius	
H=Right Angle	Left Heel Type=Radius	
I=Left Angle	2 Part Wrapper=No	
J=Btm Right Extension	Back Wrapper=Marker Notch	
K=Btm Left Extension	Outlet=2	Seams
L=Right Extension	Insulation Parts=Same	S1=None
M=Left Extension		S2=None

Damper:



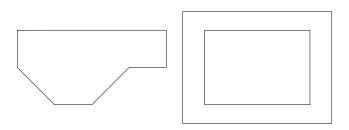
courtesy of Applied Software 4/18/2016 7

Rectangular/Fabrication

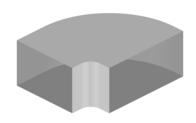


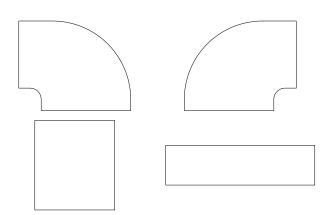
Dims	Options	Conn's
A=Width	Branch Parts=1	C1=None
B=Depth	Plate Parts=1	C2=None
C=Length	Seam Position=Corner	
D=Angle	Hole Adjust=0.000	
E=Plate Width		
F=Plate Depth		
G=Offset Depth		
H=Offset Width		
I=Btm Width		
J=Plate Width Adjust		
K=Plate Depth Adjust		Seams
		S1=None
		S2=None

Damper:



# Pattern: 17 Rectangular/Fabrication

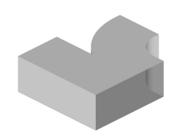




Dims	Options	Conn's
A=Top Width	Throat Type=Radius	C1=None
B=Depth	Length Adjust For Part 4=0.000	C2=None
C=Btm Width	Length Adjust For Part 3=0.000	
D=Angle	Vee Depth Male=Auto	
E=Top Extension	Vee Depth Female=Auto	
F=Bottom Extension	Vee Angle Male=30	
G=Inner Radius	Vee Angle Female=30	
	Auto Oversize=Normal	
	Seam Number For Throat=	
	Leg Lengths=No	
	Allow Central Tie Rods=Yes	Seams
	Riser Bend=No	S1=None
	Mark Splitter Sides=No	
	Insulation Parts=Same	

Damper:

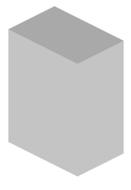
Rectangular

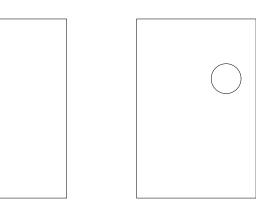


Dims	Options	Conn's
A=Btm Width	Right Throat Type=Radius	C1=None
B=Depth	Vee Depth Male=Auto	C2=None
C=Top Width	Vee Depth Female=Auto	C3=None
D=Right Width	Vee Angle Male=30	
E=Height	Vee Angle Female=30	
F=Right Height	Right Heel Type=Radius	
G=Right Radius	Junction Notch=Use Default	
H=Right Angle	2 Part Wrapper=No	
I=Bottom Extension	Top Right=Straight	
J=Right Extension	Outlet=2	
K=Top Extension	Insulation Parts=Same	Seams
•		S1=None
		S2=None

Pattern: 19

Rectangular



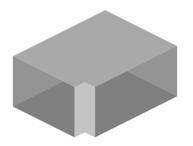


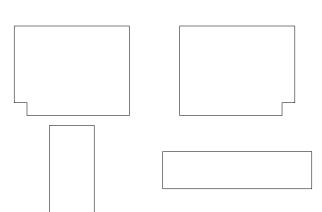
Dims	Options	Conn's
A=Width	Straight Type=1 Part Straight	C1=None
B=Depth	Notch Angle For Lid=45.000	C2=None
C=Length	Collar Allowance=0.000	
D=Hole Width #1	Lid Adjust=0.000	
E=Hole Depth #1	Diameter Type=Nominal	
F=Hole Radius #1	Hole Adjust=0.000	
G=Hole Inset #1	Notch Angle For Seam=Default	
H=Hole Offset #1	Position From=Centre	
I=Hole Collar #1		
J=Hole Rotation #1		
		Seams
		S1=None
		S2=None
		S3=None

Damper: None

Damper:

Rectangular



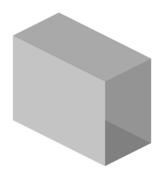


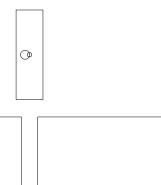
Dims	Options	Conn's
A=Top Width	Length Adjust For Part 4=0.000	C1=None
B=Depth	Length Adjust For Part 3=0.000	C2=None
C=Btm Width	Vee Depth Male=Auto	
D=Angle	Vee Depth Female=Auto	
E=Top Extension	Vee Angle Male=30	
F=Bottom Extension	Vee Angle Female=30	
	3 Parts=No	
	Seam Number For Throat=	
	Attenuator=No	
	Leg Lengths=No	
	Allow Central Tie Rods=Yes	Seams
	Riser Bend=No	S1=None
	Insulation Parts=Same	

Damper:

### Pattern: 21

Rectangular

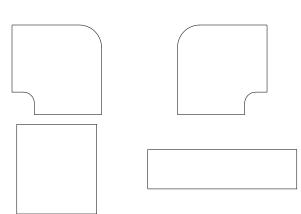




Dims	Options	Conn's
A=Width	Notch Angle For Lid=45.000	C1=None
B=Depth	Collar Allowance=0.000	C2=None
C=Length	Lid Adjust=0.000	C3=None
D=Hole Width #1	1 Part Straight=Yes	
E=Hole Depth #1	Diameter Type=Nominal	
F=Hole Radius #1	Hole Adjust=0.000	
G=Hole Inset #1	Vee Notch Angle=0.000	
H=Hole Offset #1		
I=Hole Collar #1		
J=Hole Rotation #1		
K=Hole Width #2		Seams
L=Hole Depth #2		S1=None
M=Hole Radius #2		S2=None
N=Hole Inset #2		S3=None
O=Hole Offset #2		S4=None
P=Hole Collar #2		Damper: None
Q=Hole Rotation #2		

Rectangular



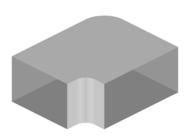


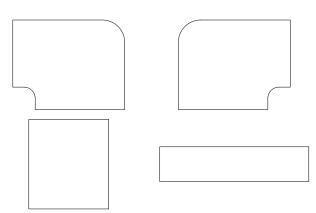
Dims	Options	Conn's
A=Width	Throat Type=Radius	C1=None
B=Depth	Length Adjust For Part 4=0.000	C2=None
C=Angle	Length Adjust For Part 3=0.000	
D=Top Extension	Vee Depth Male=Auto	
E=Bottom Extension	Vee Depth Female=Auto	
F=Inner Radius	Vee Angle Male=30	
G=Outer Radius	Vee Angle Female=30	
	3 Parts=No	
	Auto Oversize=Normal	
	Seam Number For Throat=	
	Leg Lengths=No	Seams
	Allow Central Tie Rods=Yes	S1=None
	Riser Bend=No	
	Mark Splitter Sides=No	
	Insulation Parts=Same	

Damper:

# Pattern: 23

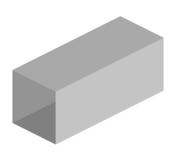
Rectangular

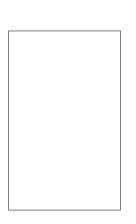




Dims	Options	Conn's
A=Top Width	Throat Type=Radius	C1=None
B=Depth	Length Adjust For Part 4=0.000	C2=None
C=Btm Width	Length Adjust For Part 3=0.000	
D=Angle	Vee Depth Male=Auto	
E=Top Extension	Vee Depth Female=Auto	
F=Bottom Extension	Vee Angle Male=30	
G=Inner Radius	Vee Angle Female=30	
H=Outer Radius	3 Parts=No	
	Auto Oversize=Normal	
	Seam Number For Throat=	
	Leg Lengths=No	Seams
	Allow Central Tie Rods=Yes	S1=None
	Riser Bend=No	
	Mark Splitter Sides=No	
	Insulation Parts=Same	
		Damper:

Rectangular/Fabrication



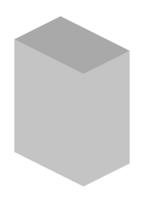


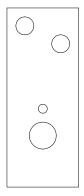
	Dims	Options	Conn's
A=Width C=Length	B=Depth	Straight Type=1 Part Straight Female Allow=Shortest Side 1xU,1xI=Shortest Side Connector Fold Notch=Use Default Vee Notch Depth=Auto Vee Notch Angle=30.000 Connector Fold Notch=Use Default Vee Notch Depth=Auto Vee Notch Angle=30.000	Conn's C1=None C2=None
		Beading=No Insulation UI=Shortest Side	Seams S1=None

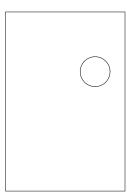
Damper:

## Pattern: 26

Rectangular

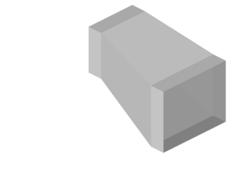


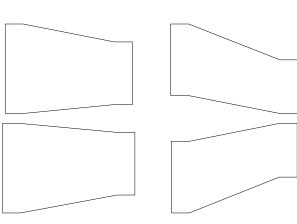




Dims	Options	Conn's
A=Width	Straight Type=1 Part Straight	C1=None
B=Depth	Notch Angle For Lid=45.000	C2=None
C=Length	Lid Adjust=0.000	C3=None
D=Hole Width #1	Diameter Type=Nominal	C4=None
E=Hole Depth #1	Hole Adjust=0.000	C5=None
F=Hole Radius #1	Straight=Yes	C6=None
G=Hole Inset #1		
H=Hole Offset #1		
I=Hole Collar #1		
J=Hole Rotation #1		
K=Hole Width #2		Seams
L=Hole Depth #2		S1=None S6=None
M=Hole Radius #2		S2=None S7=None
N=Hole Inset #2		S3=None
O=Hole Offset #2		S4=None
P=Hole Collar #2		S5=None Damper: None
Q=Hole Rotation #2		Bumperritone
R=Hole Width #3		
S=Hole Depth #3		
T=Hole Radius #3		
U=Hole Inset #3		
V=Hole Offset #3		
W=Hole Collar #3		
X=Hole Rotation #3		
Y=Hole Width #4		
Z=Hole Depth #4		
a=Hole Radius #4		
b=Hole Inset #4		

Rectangular

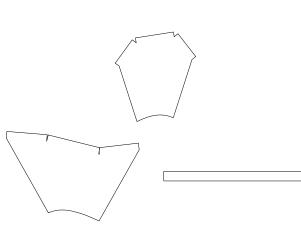




Dims	Options	Conn's
A=Width In	2 Parts=No	C1=None
B=Depth In	3 Parts=No	C2=None
C=Width Out	Vee Depth Male=Auto	
D=Depth Out	Vee Depth Female=Auto	
E=Length	Vee Notch Angle=20.000	
F=Extension In	Female Allow=Shortest Slope	
G=Extension Out	2-Sided Part Allowance=Auto	
H=Offset Width	Offset Width=Left In	
I=Offset Depth	Offset Depth=Bottom Up	
J=Angle	Connector Fold Notch=Use Default	
	Vee Notch Depth=Auto	Seams
	Vee Notch Angle=30.000	S1=None
	Input=Length	
	Vee Notch Depth If Straight Edge (Female)	
	Maximum Angle=180.000	
	Splitter Turnover=0.000	Damner
	Splitter Extension=0.000	Damper:
	Splitter Adjust=0.000	
	Connector Fold Notch=Use Default	
	Vee Notch Depth=Auto	
	Vee Notch Angle=30.000	
	Splitter Hole Diameter=0.000	
	Number Of Holes=0.000	
	Splitters=Half	
	Hole Inset=0.000	
	Fixing Holes on Turnover=No	
	Seam Cut Back=0.000	
	Sedin Cut DdCK=U.UUU	

#### Pattern: 28 Rectangular/Round



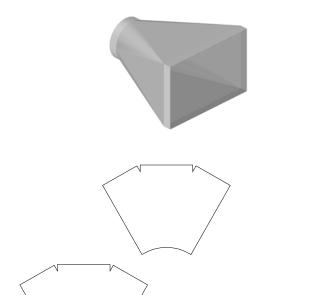


Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Length Break=1	C2=None
C=Diameter	Diameter Type=Nominal	
D=Length	Seam Position=Width	
E=Rectangular Angle	Marker Type=Notch	
F=Offset Width	Offset Width=Left In	
G=Offset Depth	Offset Depth=Bottom Up	
H=Extension	Inlet=1	
I=Collar	Outlet=2	
J=Round Angle	Fold Notch Depth=Full Allowance	
K=Corner Radius	V Notch Rectangular Extension=No	Seams
	Seam Cut Back=None	S1=None
	Cut Back Allowance (%)=50.000	
	2 Parts 90 Degrees Seam=No	

Damper: None

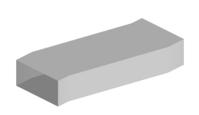
courtesy of 4/18/2016 13

Rectangular/Round



		,
Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Length Break=1	C2=None
C=Diameter	Diameter Type=Nominal	
D=Length	Seam Position=Width	
E=Extension	Marker Type=Notch	
F=Collar	Input=Length	
G=Corner Radius	Offset Width=Left In	
H=Slope Angle	Offset Depth=Bottom Up	
	Inlet=1	
	Outlet=2	
	Maximum Angle=180.000	Seams
	Fold Notch Depth=Full Allowance	S1=None
	V Notch Rectangular Extension=No	
	Seam Cut Back=None	
	Cut Back Allowance (%)=50.000	
	2 Parts 90 Degrees Seam=No	Damper: None

#### Pattern: 30 Rectangular



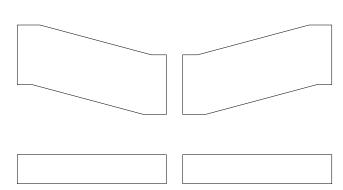
A-WIUIII	vee Deptii Male-Auto	C1-NOILE
B=Depth	Vee Depth Female=Auto	C2=None
C=Length	Vee Notch Angle=30.000	
D=Left Extension	Input=Length	
E=Right Extension	Maximum Angle=180.000	
F=Offset Width	Seam Cut Back=0.000	
G=Angle	Insulation Parts=Same	
H=Left Extension	Split Mitre=No	
I=Right Extension	Inlet=1	
J=Right Width	Outlet=2	
		Seams
		S1=None
		Damper: None
		None

Options

Vee Depth Male=Auto

Conn's

C1=None

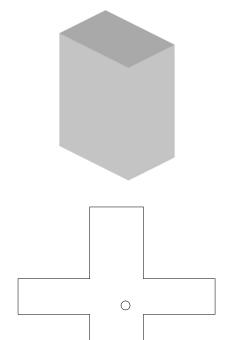


courtesy of Applied Software 4/18/2016 14

Dims

A=Width

Rectangular



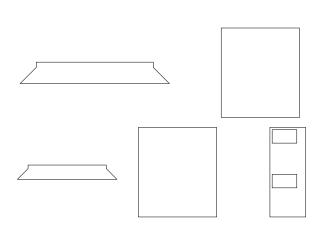
Dims	Options	Conn's
A=Width	Collar Allowance=0.000	C1=None
B=Depth	Diameter Type=Nominal	C2=None
C=Length	Hole Adjust=0.000	
D=Hole Width #1	Position From=Centre	
E=Hole Depth #1	Use Vee Notch=No	
F=Hole Radius #1	Vee Notch Angle=0.000	
G=Hole Inset #1	Cost Supports=No	
H=Hole Offset #1		
I=Hole Collar #1		
J=Hole Rotation #1		
		Seams
		S1=None
		S2=None

Damper: None

## Pattern: 32

Rectangular





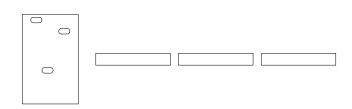
Dims	Options	Conn's
A=Width	Straight Type=1 Part Straight	C1=None
B=Depth	Throat Type=Mitred	C2=None
C=Length	2 Part Branch=Yes	C3=None
D=Branch Width #1	Vee Depth Male=Auto	C4=None
E=Branch Depth #1	Vee Depth Female=Auto	C5=None
F=Height #1	Vee Notch Angle=30.000	C6=None
G=Extension #1	Female Allow=Shortest Side	C7=None
H=Inset #1	1xU,1xI=Shortest Side	C8=None
I=Offset #1	Connector Fold Notch=Use Default	
J=Branch Width #2	Vee Notch Depth=Auto	
K=Branch Depth #2	Vee Notch Angle=30.000	Seams
L=Height #2	Branch Connector Fold Notch=Use Default	S1=None
M=Extension #2	Vee Notch Depth=Auto	S2=None
N=Inset #2	Vee Notch Angle=30.000	S3=None
O=Offset #2	Hole Adjust=0.000	S4=None
P=Branch Width #3	Connector Fold Notch=Use Default	Damper:
Q=Branch Depth #3	Vee Notch Depth=Auto	bamper.
R=Height #3	Vee Notch Angle=30.000	
S=Extension #3		
T=Inset #3		
U=Offset #3		

Rectangular

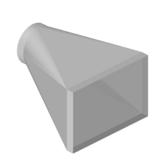


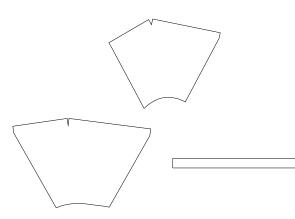
Dims	Options	Conn's
A=Width	Straight Type=1 Part Straight	C1=None
B=Depth	Branch Diameter Type=Nominal	C2=None
C=Length	Branch Diameter Type=Nominal	C3=None
D=Branch Diameter #1	Branch Diameter Type=Nominal	C4=None
E=Height #1	Hole Adjust=0.000	C5=None
F=Extension #1	Branch Allowance To Pipe=0.000	
G=Inset #1	Female Allow=Shortest Side	
H=Offset #1	1xU,1xl=Shortest Side	
I=Branch Diameter #2	Branch Parts=1	
J=Height #2	Branch Seam Position=Default	
K=Extension #2	Branch Insets=From C1 To Branch Center	Seams
L=Inset #2		S1=None
M=Offset #2		S2=None
N=Branch Diameter #3		S3=None
O=Height #3		S4=None
P=Extension #3		Damper:
Q=Inset #3		Daniper.
R=Offset #3		





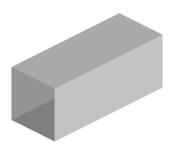
# Pattern: 34 Rectangular/Round/Fabrication

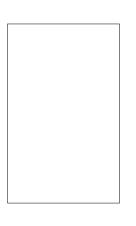




Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Length Break=1	C2=None
C=Diameter	Diameter Type=Nominal	
D=Length	Seam Position=Corner	
E=Offset Width	Marker Type=Notch	
F=Offset Depth	Input=Length	
G=Extension	Offset Width=Left In	
H=Collar	Offset Depth=Bottom Up	
I=Corner Radius	Inlet=1	
J=Slope Angle	Outlet=2	
	Maximum Angle=180.000	Seams
	Fold Notch Depth=Full Allowance	S1=None
	V Notch Rectangular Extension=No	
	Seam Cut Back=None	
	Cut Back Allowance (%)=50.000	
	2 Parts 90 Degrees Seam=No	Damper: None

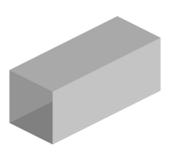
Rectangular





	Dims	Options	Conn's
A=Width C=Length	B=Depth	Straight Type=1 Part Straight Duct Length=(inch) Allow Multiple Straights=Yes Connector Fold Notch=Use Default Vee Notch Depth=Auto Vee Notch Angle=30.000 Maximum Sheet Size=None Allow Split Sides=No Maximum Fold Length=None Minimum Fold Length=None STD Straight=No Connector Fold Notch=Use Default Vee Notch Depth=Auto Vee Notch Angle=30.000 Beading=No Insulation Parts=Same Insulation UI=Shortest Side	C1=None C2=None Seams S1=None S2=None

Pattern: 36 Rectangular



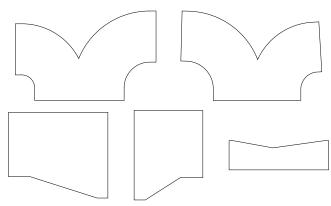
	Dims	Options	Conn's
A=Width C=Length	B=Depth	Straight Type=1 Part Straight Female Allow=Shortest Side 1xU,1xl=Shortest Side Connector Fold Notch=Use Default	C1=None C2=None
		Vee Notch Depth=Auto Vee Notch Angle=30.000 Connector Fold Notch=Use Default Vee Notch Depth=Auto Vee Notch Angle=30.000 Beading=No Insulation Parts=Same Insulation UI=Shortest Side	Seams S1=None

Damper:

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Rectangular

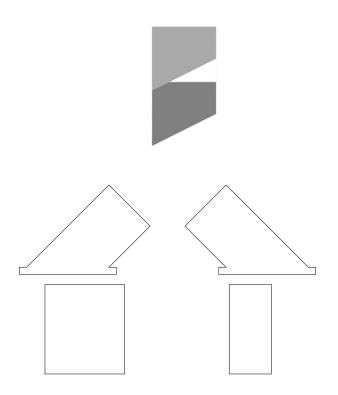




Dims	Options	Conn's
A=Btm Width	Right Throat Type=Radius	C1=None
B=Btm Depth	Left Throat Type=Radius	C2=None
C=Right Width	Vee Depth Male=Auto	C3=None
D=Right Depth	Vee Depth Female=Auto	
E=Left Width	Vee Angle Male=30	
F=Left Depth	Vee Angle Female=30	
G=Right Offset	Junction Notch=Use Default	
H=Left Offset	Vee Notch Angle=20.000	
I=Height	2 Part Wrapper=No	
J=Right Radius	Right Folds=End Point	
K=Left Radius	Left Folds=End Point	Seams
L=Right Angle	Inlet=1	S1=None
M=Left Angle	Outlet=2	S2=None
N=Btm Right Extension		
O=Btm Left Extension		
P=Right Extension		Damper:
Q=Left Extension		Damper.

# Pattern: 38 Rectangular

	Dims	Options	Conn's
A=Width	B=Depth		C1=None
C=Length	D=Angle		C2=None
E=Flange			



Seams S1=None

Damper:

Rectangular

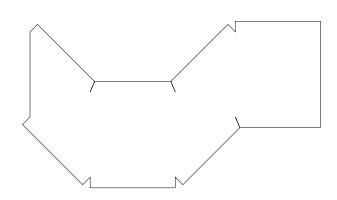


Dims	Options	Conn's
A=Width	Branch Parts=1	C1=None
B=Depth	Seam Position=Corner	C2=None
C=Length	Hole Adjust=0.000	
D=Angle		
E=Top Extension		
F=Bottom Extension		

Seams

S1=None

Damper:



# Pattern: 85 Rectangular/Round

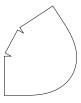


Di	ims	Options	Conn's
A=Width	B=Depth	Diameter Type=Nominal	C1=None
C=Diameter	D=Extension	Top Offset=0.000	C2=None
E=Collar			

Seams

S1=None

Damper:





Rectangular/Flat Oval

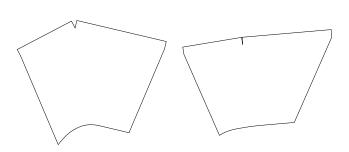


Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Diameter Type=Nominal	C2=None
C=Oval Width	Marker Type=Notch	
D=Oval Depth	Offset Width=Left In	
E=Length	Offset Depth=Bottom Up	
F=Offset Width	Seam Position=Corner	
G=Offset Depth	Inlet=1	
H=Rect Extension	Outlet=2	
I=Collar	Same Seams On Each Part=No	

Seams

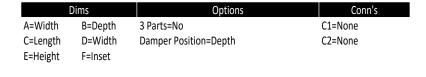
S1=None

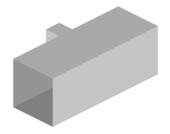
Damper:



Pattern: 124

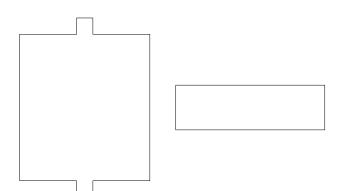
Rectangular





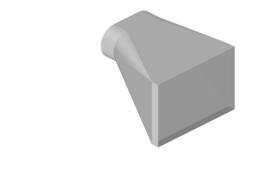
S1=None

Seams

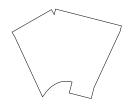


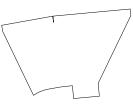
4/18/2016 courtesy of software 20

Rectangular/Flat Oval



Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Diameter Type=Nominal	C2=None
C=Oval Width	Marker Type=Notch	
D=Oval Depth	Offset Width=Left In	
E=Length	Offset Depth=Bottom Up	
F=Offset Width	Seam Position=Corner	
G=Offset Depth	Collar Arcs - Lap=0.000	
H=Rect Extension	Collar Arcs - Allowance=0.000	
I=Oval Extension	Inlet=1	
J=Collar	Outlet=2	
	Same Seams On Each Part=No	Seams
	Oval Half Collar=Yes	S1=None



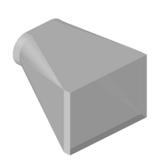






Pattern: 137

Rectangular/Flat Oval

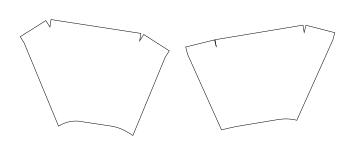


Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Diameter Type=Nominal	C2=None
C=Oval Width	Marker Type=Notch	
D=Oval Depth	Offset Width=Left In	
E=Length	Offset Depth=Bottom Up	
F=Offset Width	Seam Position=Depth	
G=Offset Depth	Inlet=1	
H=Rect Extension	Outlet=2	
I=Collar	Same Seams On Each Part=No	

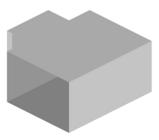
Seams S1=None

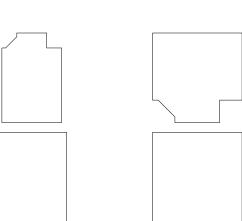
Damper:

Damper:



Rectangular





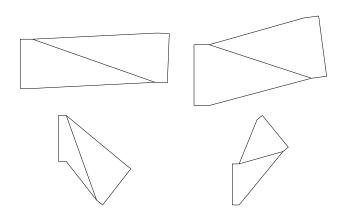
Dims	Options	Conn's
A=Width	Throat Type=Mitred	C1=None
B=Depth	2 Parts=Yes	C2=None
C=Length	Vee Depth Male=Auto	C3=None
D=Branch Width #1	Vee Depth Female=Auto	
E=Height #1	Vee Notch Angle=30.000	
F=Extension #1	Connector Fold Notch=Use Default	
G=Inset #1	Vee Notch Depth=Auto	
	Vee Notch Angle=30.000	
	Hole Adjust=0.000	
	Connector Fold Notch=Use Default	
	Vee Notch Depth=Auto	Seams
	Vee Notch Angle=30.000	S1=None

Damper:

#### Pattern: 151 Rectangular



Dims	Options	Conn's
A=Width In	Folds=Out	C1=None
B=Depth In	Offset Width=Right In	C2=None
C=Width Out	Offset Depth=Bottom Up	
D=Depth Out	New Pattern=No	
E=Length		
F=Angle		
G=Extension In		
H=Extension Out		
I=Offset Width		
J=Offset Depth		
K=Twist Angle		Seams
		S1=None



Damper:

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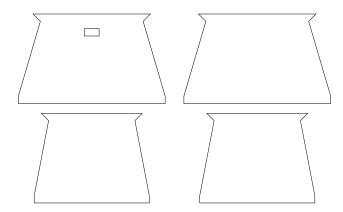
Rectangular



Dims	Options	Conn's
A=Btm Width	Hole Length=4.000	C1=None
B=Btm Depth	Hole Width=2.000	C2=None
C=Top Width	X-Offset=0.000	
D=Top Depth	Y-Offset=2.000	
E=Height	Break=40.000	
F=Flange	Opposite Hole=No	
G=Turnover		
H=Flange		
I=Turnover		

Seams

Damper:



# Pattern: 153

Rectangular

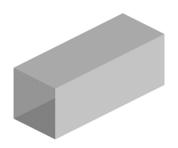


Dims	Options	Conn's
A=Btm Width	Hole Length=4.000	C1=None
B=Btm Depth	Hole Width=2.000	C2=None
C=Top Width	X-Offset=0.000	
D=Top Depth	Y-Offset=2.000	
E=Height	Break=40.000	
F=Turnover	Opposite Hole=No	
G=Turnover		
H=Base Width		
I=Base Depth		
J=Base Height		
K=Extension		Seams
L=Angle		

Damper:

Rectangular/Equipment





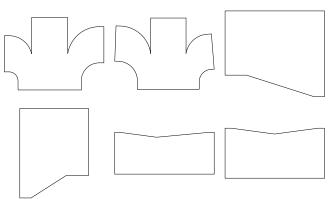
Seams

Damper:

Pattern: 185

Rectangular

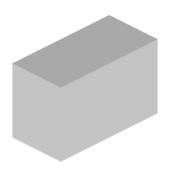




Dims	Options	Conn's
A=Btm Width	Right Throat Type=Radius	C1=None
B=Btm Depth	Left Throat Type=Radius	C2=None
C=Top Width	Vee Depth Male=Auto	C3=None
D=Top Depth	Vee Depth Female=Auto	C4=None
E=Right Width	Vee Angle Male=30	
F=Right Depth	Vee Angle Female=30	
G=Left Width	Right Heel Type=Radius	
H=Left Depth	Left Heel Type=Radius	
I=Top Offset	Junction Notch=Use Default	
J=Right Offset	Vee Notch Angle=20.000	
K=Left Offset	Right Folds=End Point	Seams
L=Height	Left Folds=End Point	S1=None
M=Right Height	Inlet=1	
N=Left Height	Outlet=2	
O=Right Radius	Top Right=Straight	
P=Left Radius	Top Left=Straight	Damper:
Q=Right Angle		Bumpen
R=Left Angle		
S=Btm Right Extension		
T=Btm Left Extension		
U=Right Extension		
V=Left Extension		
W=Top Inset		
X=Top Extension		

4/18/2016 courtesy of software 24

Rectangular



Dims	Options	Conn's
A=Left Width	Six Parts Left Lap=None	C1=None
B=Right Width	Six Parts Right Lap=None	C2=None
C=Depth	Clip Holes=No	C3=None
D=Length	Alternate Weathering=No	
E=Angle F=Six Parts Left Height G=Six Parts Right Height	Ensure Center Closed=No	

Seams S1=None

S2=None

Damper:

	ı			1		
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	l .				l .	
			1			
	I		1			

Pattern: 222

Rectangular

4/18/2016

	Dims	Options	Conn's
A=Width	B=Depth	Notch=	
		Use First For All=No	



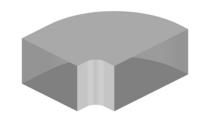
Seams

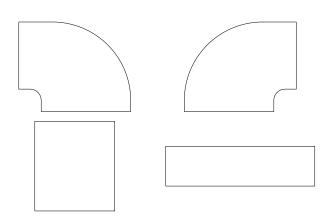
Damper:



25

Rectangular



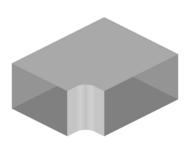


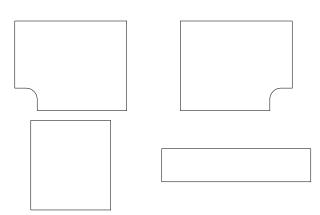
Dims	Options	Conn's
A=Top Width	Throat Type=Radius	C1=None
B=Depth	Length Adjust For Part 4=0.000	C2=None
C=Btm Width	Length Adjust For Part 3=0.000	
D=Angle	Vee Depth Male=Auto	
E=Top Inner Extension	Vee Depth Female=Auto	
F=Bottom Extension	Vee Angle Male=30	
G=Inner Radius	Vee Angle Female=30	
	Auto Oversize=Normal	
	Seam Number For Throat=	
	Leg Lengths=No	
	Allow Central Tie Rods=Yes	Seams
	Riser Bend=No	S1=None
	Mark Splitter Sides=No	

Damper:

### Pattern: 251

Rectangular





Dims	Options	Conn's
A=Top Width	Throat Type=Radius	C1=None
B=Depth	Length Adjust For Part 4=0.000	C2=None
C=Btm Width	Length Adjust For Part 3=0.000	
D=Top Inner Extension	Vee Depth Male=Auto	
E=Bottom Extension	Vee Depth Female=Auto	
F=Inner Radius	Vee Angle Male=30	
	Vee Angle Female=30	
	3 Parts=No	
	Auto Oversize=Normal	
	Seam Number For Throat=	
	Leg Lengths=No	Seams
	Allow Central Tie Rods=Yes	S1=None
	Riser Bend=No	
	Mark Splitter Sides=No	

Damper:

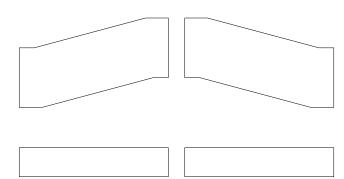
4/18/2016 26

Rectangular



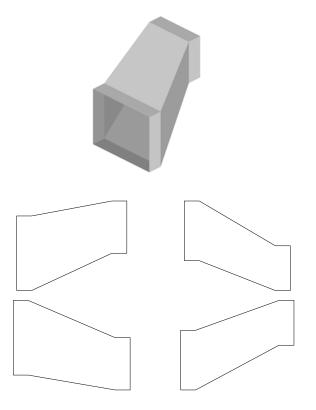
2.	o ::	
Dims	Options	Conn's
A=Width	Vee Depth Male=Auto	C1=None
B=Depth	Vee Depth Female=Auto	C2=None
C=Length	Vee Notch Angle=30.000	
D=Left Extension	Split Mitre=No	
E=Right Extension		
F=Offset Width		
G=Angle		
H=Left Extension		
I=Right Extension		
J=Right Width		
•		Seams
		S1=None

Damper: None None



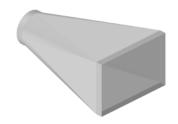
Pattern: 253

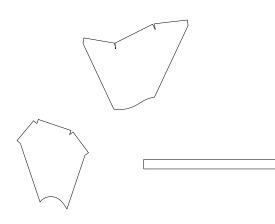
Rectangular



Dims	Opt	ions	Conn's
A=Width In	2 Parts=No	Fixing Holes on Tur	
B=Depth In	3 Parts=No	Seam Cut Back=0.0	
C=Width Out	Vee Depth Male=A		
D=Depth Out	Vee Depth Female=		
E=Length	Vee Notch Angle=2		
F=Extension In	Taper Notch If Strai		
G=Extension Out	Female Allow=Shor		
H=Offset Width	2-Sided Part Allowa		
I=Offset Depth	Offset Width=Left		
J=Angle	Offset Depth=Top Up		
	Taper Notch If Strai		Seams
	Use Taper Notch F		S1=None
	Connector Fold Not		
	Vee Notch Depth=		
	Vee Notch Angle=3		
	Input=Length		Damper:
	Vee Notch Depth If		24po
	Maximum Angle=1		
	Splitter Turnover=0		
	Splitter Extension=		
	Splitter Adjust=0.000		
	Connector Fold Not		
	Vee Notch Depth=		
	Vee Notch Angle=3		
	Splitter Hole Diame		
	Number Of Holes=		
	Splitters=Half		
	Hole Inset=0.000		

Rectangular/Round

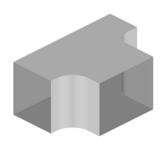




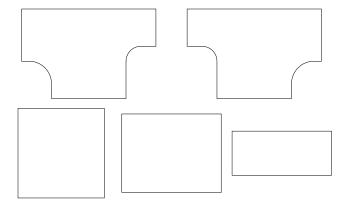
Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Length Break=1	C2=None
C=Diameter	Diameter Type=Nominal	
D=Length	Seam Position=Width	
E=Offset Width	Marker Type=Notch	
F=Offset Depth	Input=Length	
G=Extension	Offset Width=Left In	
H=Collar	Offset Depth=Bottom Up	
I=Corner Radius	Inlet=1	
J=Slope Angle	Outlet=2	
	Maximum Angle=180.000	Seams
	Fold Notch Depth=Full Allowance	S1=None
	V Notch Rectangular Extension=No	
	Seam Cut Back=None	
	Cut Back Allowance (%)=50.000	
	2 Parts 90 Degrees Seam=No	Damper: None

# Pattern: 255

Rectangular

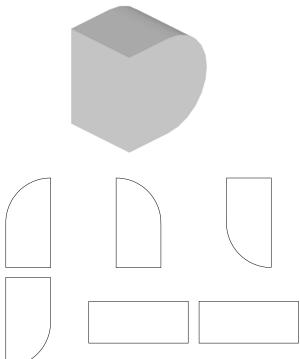


Dims	Options	Conn's
A=Btm Width	Throat Type=Radius	C1=None
B=Depth	3 Parts=No	C2=None
C=Left Width	Vee Depth Male=Auto	C3=None
D=Right Width	Vee Depth Female=Auto	
E=Right Radius	Vee Notch Angle=30.000	
F=Left Radius	Hole Diameter=0.500	
G=Bottom Extension	Hole Spacing=2.000	
H=Right Extension	Splitters=No	
I=Left Extension	Inlet=1	
J=Splitter Distance	Outlet=2	
		Seams
		S1=None



Damper:

Rectangular



Dims	Options	Conn's
A=Radius	Six Parts Left Lap=None	C1=None
B=Depth	Six Parts Right Lap=None	C2=None
C=Angle	Vee Depth Female=0.000	C3=None
D=Length	Vee Angle Female=30.000	
E=Front Hole Diameter	Allowance=Left	
F=Back Hole Diameter		
G=Six Parts Left Height		
H=Six Parts Right Height		

Seams S1=None

S2=None

Damper:

Pattern: 314

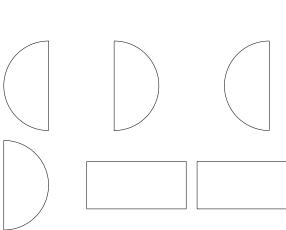
Rectangular



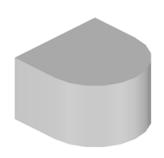
Dims	Options	Conn's
A=Radius	Six Parts Left Lap=None	C1=None
B=Angle	Six Parts Right Lap=None	C2=None
C=Length	Vee Depth Male=0.000	C3=None
D=Front Hole Diameter	Vee Angle Male=180.000	
E=Back Hole Diameter	Vee Depth Female=0.000	
F=Six Parts Left Height	Vee Angle Female=30.000	
G=Six Parts Right Height	Allowance=Left	

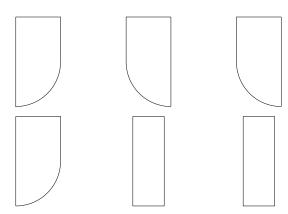
Seams S1=None S2=None

Damper:



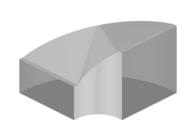
Rectangular

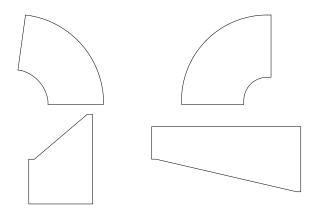




Dims	Options	Conn's
A=Radius	Six Parts Left Lap=None	C1=None
B=Depth	Six Parts Right Lap=None	C2=None
C=Length	Clip Holes=No	C3=None
D=Angle	Vee Depth Male=0.000	
E=Hole Diameter	Vee Angle Male=180.000	
F=Hole Diameter	Vee Depth Female=0.000	
G=Six Parts Left Height	Vee Angle Female=30.000	
H=Six Parts Right Height	Alternate Weathering=No	
	Holes CAD Nodes=No	
	Ensure Center Closed=No	
		Seams
		S1=None
		S2=None

Pattern: 320 Rectangular





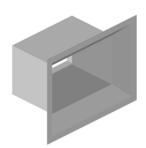
Dims	Options	Conn's
A=Btm Width	Throat Type=Radius	C1=None
B=Btm Depth	Vee Depth Male=Auto	C2=None
C=Top Depth	Vee Depth Female=Auto	
D=Angle	Vee Angle Male=30	
E=Top Extension	Vee Angle Female=30	
F=Bottom Extension	Allow Central Tie Rods=Yes	
G=Inner Radius	Splitter Slit Angle=10.000	
	Intersect Splitter Holes=No	

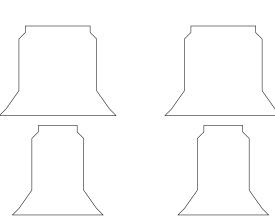
Seams S1=None

Damper:

Damper:

Rectangular





Dims	Options	Conn's
A=Width	Rotation=0.000	C1=None
B=Depth		C2=None
C=Height		C3=None
D=Base Height		C4=None
E=Base Angle		C5=None
F=Flange		C6=None
G=Turnover		
H=Turnover		
I=Straight		

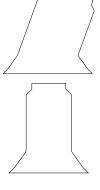
Seams S1=None

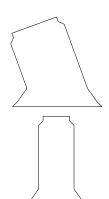
Damper:

Pattern: 322









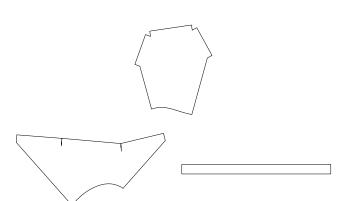
Dims	Options	Conn's
A=Width	X Pitch=Slope Angle	C1=None
B=Depth	Rotation=0.000	C2=None
C=Height		C3=None
D=Angle		C4=None
E=Base Height		C5=None
F=Base Angle		C6=None
G=Flange		
H=Turnover		
I=Turnover		

Seams S1=None

Damper:

Rectangular/Round





Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Length Break=1	C2=None
C=Diameter	Diameter Type=Nominal	
D=Offset Width	Seam Position=Width	
E=Offset Depth	Marker Type=Notch	
F=Extension	Offset Width=Left In	
G=Collar	Offset Depth=Bottom Up	
H=Round Angle	Inlet=1	
I=Twist Angle	Outlet=2	
J=Inner Radius	Fold Notch Depth=Full Allowance	
K=Corner Radius	V Notch Rectangular Extension=No	Seams
	Seam Cut Back=None	S1=None
	Cut Back Allowance (%)=50.000	
	2 Parts 90 Degrees Seam=No	

Damper: None

## Pattern: 328

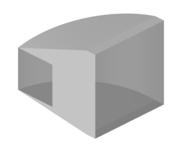
Rectangular



Dims	Options	Conn's
A=Btm Width	Vee Depth Male=Auto	C1=None
B=Btm Depth	Vee Depth Female=Auto	C2=None
C=Left Width	Vee Angle Male=30	C3=None
D=Right Width	Vee Angle Female=30	
E=Top Depth	Offset Depth=Bottom Up	
F=Height	Offset Width=Left In	
G=Offset		
H=Offset Width		
I=Offset Depth		
J=Bottom Extension		
K=Top Extension		Seams
L=Branch Height		S1=None
M=Left Mitre Length		S2=None
N=Right Mitre Length		

Damper:

Rectangular

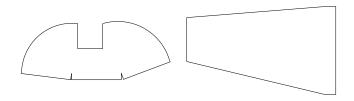


Dims	Options	Conn's
A=Btm Width	Wrapper Length Adjust=0.000	C1=None
B=Btm Depth	Turnover Allowance=0.000	C2=None
C=Height	Vee Notch Angle=5.000	
D=Hole Width	Develop Parts=2	
E=Hole Length		
F=Offset		
G=Bottom Extension		
H=Hole Offset		

Seams

S1=None

Damper:



Pattern: 330

Rectangular



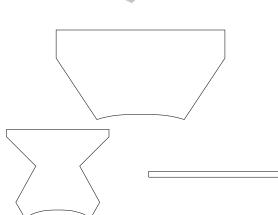
Dims	Options	Conn's
A=Width In	Vee Depth Male=Auto	C1=None
B=Depth In	Vee Depth Female=Auto	C2=None
C=Width Out	Vee Angle Male=30	
D=Depth Out	Vee Angle Female=30	
E=Length	Offset Width=Left In	
F=Extension In	Offset Depth=Top Down	
G=Extension Out	Restricted Flow=Warning	
H=Offset Width	Seam Cut Back=0.000	
I=Offset Depth	Allow Central Tie Rods=No	
J=Left Radius		
K=Right Radius		Seams
-		S1=None

Damper:

4/18/2016 33

Rectangular/Round

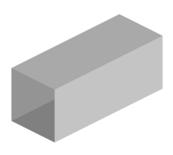


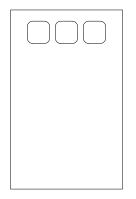


Dime	Outions	Cample
Dims A=Width	Options  Diameter Type=Nominal	Conn's
	"	C2=None
B=Depth	Marker Type=Notch	CZ=NOTIE
C=Diameter		
D=Length		
E=Extension		
F=End Height		
G=Offset		
H=Collar		
I=Bottom Chamfer		
J=Back Chamfer		
J Back channer		Seams
		S1=None
		S2=None

Damper:

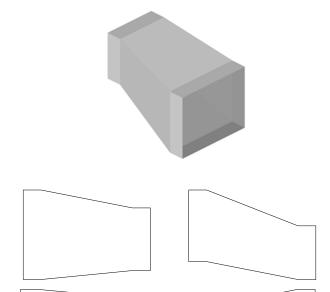
Pattern: 340
Rectangular





Dims	Options	Conn's
A=Width	Straight Type=1 Part Straight	C1=None
B=Depth	Hole Type=Right	C2=None
C=Length	Hole Type=Right	
D=Hole Inset #1	Hole Type=Right	
E=Hole Offset #1	Female Allow=Shortest Side	
F=Hole Length #1	1xU,1xl=Shortest Side	
G=Hole Width #1	Connector Fold Notch=Use Default	
H=Hole Radius #1	Vee Notch Depth=Auto	
I=Hole Inset #2	Vee Notch Angle=30.000	
J=Hole Offset #2	Connector Fold Notch=Use Default	
K=Hole Length #2	Vee Notch Depth=Auto	Seams
L=Hole Width #2	Vee Notch Angle=30.000	S1=None
M=Hole Radius #2	Beading=No	
N=Hole Inset #3	Insulation UI=Shortest Side	
O=Hole Offset #3		
P=Hole Length #3		Damper:
Q=Hole Width #3		bamper.
R=Hole Radius #3		

Rectangular

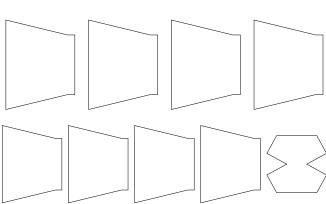


Dims	Opt	tions	Conn's
A=Width In	2 Parts=No	Fixing Holes on Tur	C1=None
B=Depth In	3 Parts=No	Seam Cut Back=0.0	C2=None
C=Width Out	Vee Depth Male=A		
D=Depth Out	Vee Depth Female=		
E=Length	Vee Notch Angle=2		
F=Extension In	Taper Notch If Strai		
G=Extension Out	Female Allow=Shor		
H=Offset Width	2-Sided Part Allowa		
I=Offset Depth	Offset Width=Left In		
J=Angle	Offset Depth=Botto		
	Taper Notch If Strai		Seams
	Use Taper Notch F		S1=None
	Connector Fold Not		
	Vee Notch Depth=		
	Vee Notch Angle=3		
	Input=Length		Damper:
	Vee Notch Depth If		2 apa
	Maximum Angle=1		
	Splitter Turnover=0		
	Splitter Extension=		
	Splitter Adjust=0.000		
	Connector Fold Not		
	Vee Notch Depth=		
	Vee Notch Angle=3		
	Splitter Hole Diame		
	Number Of Holes=		
	Splitters=Half		
	Hole Inset=0.000		

Pattern: 343

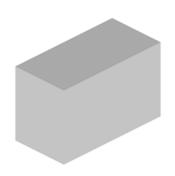
Rectangular





Dims	Options	Conn's
A=Btm Width	Turnover Allowance=0.000	C1=None
B=Btm Depth	Body Allowance=0.000	C2=None
C=Centre Width	Plate Allowance=0.000	
D=Centre Depth	Number Of Struts=0	
E=Top Width	4 Parts=No	
F=Top Depth		
G=Height		
H=Height		
I=Width		
J=Depth		
K=Width		Seams
L=Height		S1=None
M=Bottom Extension		S2=None
N=Top Extension		S3=None
O=Plate Depth		
		Damper:

Rectangular



Dims	Options	Conn's
A=Right Width	Six Parts Left Lap=None	C1=None
B=Depth	Six Parts Right Lap=None	C2=None
C=Length	Clip Holes=No	C3=None
D=Six Parts Left Height	Vee Depth Male=0.000	
E=Six Parts Right Height	Vee Angle Male=180.000	
	Vee Depth Female=0.000	
	Vee Angle Female=30.000	
	Alternate Weathering=No	
	Ensure Center Closed=No	
		Seams
		S1=None

S2=None

Damper:

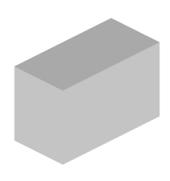
Conn's

Seams

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Pattern: 347

Rectangular

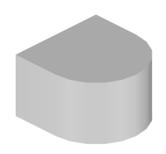


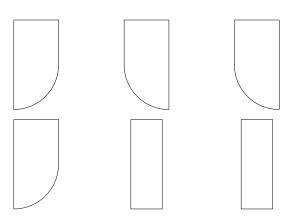
20	0 0 110115	
A=Right Width	Six Parts Left Lap=None	C1=None
B=Depth	Six Parts Right Lap=None	C2=None
C=Length	Clip Holes=No	C3=None
D=Six Parts Left Height	Vee Depth Male=0.000	
E=Six Parts Right Height	Vee Angle Male=180.000	
	Vee Depth Female=0.000	
	Vee Angle Female=30.000	
	Alternate Weathering=No	
	Ensure Center Closed=No	
		Sea
		S1=None
		S2=None
		Damper:
		Damper.

Options

Dims

Rectangular





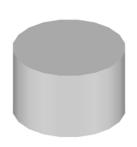
Dims	Options	Conn's
A=Radius	Six Parts Left Lap=None	C1=None
B=Height	Six Parts Right Lap=None	C2=None
C=Length	Clip Holes=No	C3=None
D=Six Parts Left Height	Vee Depth Male=0.000	
E=Six Parts Right Height	Vee Angle Male=180.000	
	Vee Depth Female=0.000	
	Vee Angle Female=30.000	
	Alternate Weathering=No	
	Ensure Center Closed=No	

Seams S1=None S2=None

Damper:

Pattern: 349

Rectangular



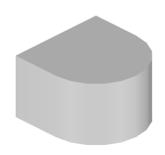
Dims	Options	Conn's
A=Radius	Six Parts Left Lap=None	C1=None
B=Length	Six Parts Right Lap=None	C2=None
C=Six Parts Left Height	Clip Holes=No	C3=None
D=Six Parts Right Height	Alternate Weathering=No	
	Ensure Center Closed=No	

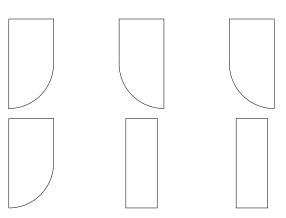
Seams S1=None S2=None

Damper:

4/18/2016 37

Rectangular





[	Dims	Options	Conn's
A=Radius	B=Height	Six Parts Left Lap=None	C1=None
C=Length		Six Parts Right Lap=None	C2=None
		Clip Holes=No	C3=None
		Vee Depth Male=0.000	
		Vee Angle Male=180.000	
		Vee Depth Female=0.000	
		Vee Angle Female=30.000	
		Alternate Weathering=No	
		Ensure Center Closed=No	

Seams S1=None S2=None

Damper:

Pattern: 351 Rectangular



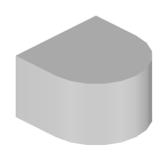
	Dims	Options	Conn's
A=Radius	B=Length	Six Parts Left Lap=None	C1=None
		Six Parts Right Lap=None	C2=None
		Clip Holes=No	C3=None
		Alternate Weathering=No	
		Ensure Center Closed=No	

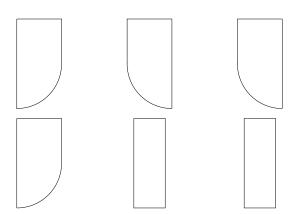
Seams S1=None S2=None

Damper:

4/18/2016 38

Rectangular





Dims	Options	Conn's
A=Radius	Six Parts Left Lap=None	C1=None
B=Height	Six Parts Right Lap=None	C2=None
C=Length	Clip Holes=No	C3=None
D=Six Parts Left Height	Vee Depth Male=0.000	
E=Six Parts Right Height	Vee Angle Male=180.000	
	Vee Depth Female=0.000	
	Vee Angle Female=30.000	
	Alternate Weathering=No	
	Ensure Center Closed=No	

Seams S1=None S2=None

Damper:

Pattern: 353 Rectangular

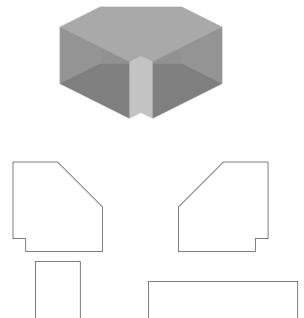


Dims	Options	Conn's
A=Radius	Six Parts Left Lap=None	C1=None
B=Length	Six Parts Right Lap=None	C2=None
C=Six Parts Left Height	Clip Holes=No	C3=None
D=Six Parts Right Height	Alternate Weathering=No	
	Ensure Center Closed=No	

Seams S1=None S2=None

Damper:

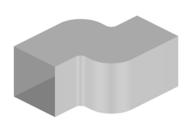
Rectangular



Dims	Options	Conn's
A=Top Width	Length Adjust For Part 4=0.000	C1=None
B=Depth	Length Adjust For Part 3=0.000	C2=None
C=Top Extension	Vee Depth Male=Auto	
D=Bottom Extension	Vee Depth Female=Auto	
	Vee Angle Male=30	
	Vee Angle Female=30	
	Seam Number For Throat=	
	Leg Lengths=No	
	Allow Central Tie Rods=Yes	
	Riser Bend=No	
	Folding Lines=No	Seams
	0	S1=None
		S2=None

Pattern: 366
Rectangular

Nectangulai

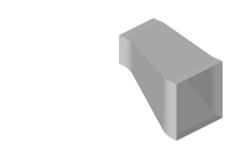


Dims	Options	Conn's
A=Left Width	Vee Depth Male=Auto	C1=None
B=Depth	Vee Depth Female=Auto	C2=None
C=Right Width	Vee Notch Angle=20.000	
D=Length		
E=Left Extension		
F=Right Extension		
G=Offset Width		
H=Top Radius		
I=Left Radius		
J=Bottom Radius		
K=Right Radius		Seams S1=None

Damper:

Damper:

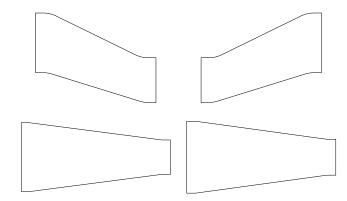
Rectangular



Dims	Options	Conn's
A=Width In	Vee Depth Male=Auto	C1=None
B=Depth In	Vee Depth Female=Auto	C2=None
C=Width Out	Vee Angle Male=30	
D=Depth Out	Vee Angle Female=30	
E=Length	Offset Width=Left In	
F=Extension In	Offset Depth=Top Down	
G=Extension Out	Restricted Flow=Warning	
H=Offset Width	-	
I=Offset Depth		
J=Corner Radius		
		Seams
		C4 No.

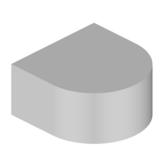
S1=None

Damper:



Pattern: 368

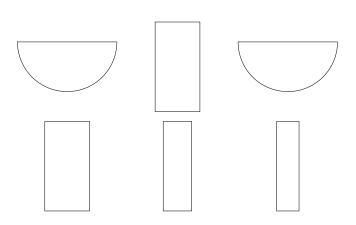
Rectangular



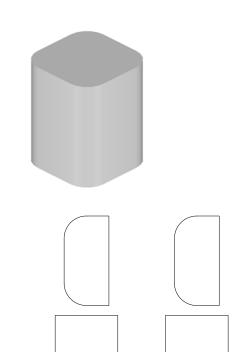
Dims	Options	Conn's
A=Radius	Six Parts Left Lap=None	C1=None
B=Left Height	Connector=Left	
C=Length	Vee Depth Female=0.000	
D=Six Parts Left Height	Vee Angle Female=30.000	
E=Right Height	Alternate Weathering=No	
	Clip Holes=No	

Seams S1=None

Damper:



Rectangular



Dims		Options	Conn's
A=Width	B=Flat Left	Six Parts Left Lap=None	C1=None
C=Flat Right	D=Depth	Six Parts Right Lap=None	
E=Length		Parts=2	

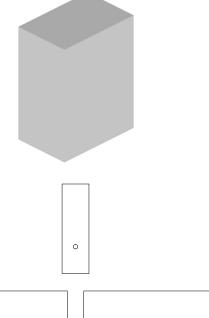
Seams

S1=None S2=None

Damper:

Pattern: 382

Rectangular

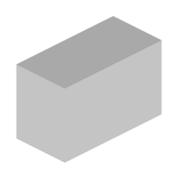


Dims	Options	Conn's
A=Width	Notch Angle For Lid=45.000	C1=None
B=Depth	Collar Allowance=0.000	C2=None
C=Length	Diameter Type=Nominal	
D=Hole Width #1	Hole Adjust=0.000	
E=Hole Depth #1	Hole Type=Front	
F=Hole Radius #1	Vee Notch Angle=Default	
G=Hole Inset #1	Swap Hole Dims For Side=No	
H=Hole Offset #1	Cost Supports=No	
I=Hole Collar #1		
J=Hole Rotation #1		
		Seams
		S1=None
		S2=None

Damper: None

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Rectangular



Dims	Ontions	Conn's
DIIIIS	Options	COIIIIS
A=Left Width	Six Parts Left Lap=None	C1=None
B=Right Width	Six Parts Right Lap=None	
C=Depth	Parts=2	
D=Length		
E=Bottom Radius		
F=Top Radius		
G=Cross Break		

Seams S1=None S2=None

Damper:

Pattern: 397

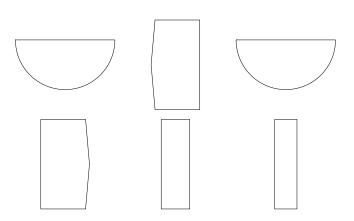
Rectangular



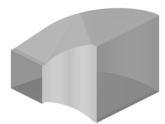
Dims	Options	Conn's
A=Radius	Six Parts Left Lap=None	C1=None
B=Left Height	Connector=Left	
C=Length	Vee Depth Female=0.000	
D=Left Angle	Vee Angle Female=30.000	
E=Six Parts Left Height	Alternate Weathering=No	
F=Right Angle	Clip Holes=No	
G=Right Height	Split Radius Parts=No	

Seams S1=None

Damper:



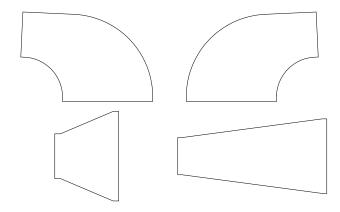
Rectangular



B=Btm Depth	Vee Depth Male=Auto	C2=None
C=Top Width	Vee Depth Female=Auto	
D=Top Depth	Vee Angle Male=30	
E=Angle	Vee Angle Female=30	
F=Top Extension	Offset=Top Down	
G=Bottom Extension	Bending=Left	
H=Inner Radius	Allow Central Tie Rods=Yes	
I=Offset	Splitter Slit Angle=10.000	
	Intersect Splitter Holes=No	
	·	Seams
		S1=None

Throat Type=Radius

A=Btm Width



Pattern: 401 Rectangular

Dims			Options	Conn's
A=a	B=b	C=e	Vee Notch Angle=90	C1=None
			Duct Adjust=0.000	
			Minimum Part Area=0.000	



Seams

Damper:

C1=None

Damper:

courtesy of 4/18/2016 44

Rectangular

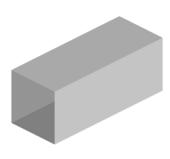




	Dime		Outions	Cample
	Dims		Options	Conn's
A=a	B=b	C=l	Straight Type=1 Part Straight Female Allow=Shortest Side	C1=None C2=None
			1xU,1xl=Shortest Side	
			Connector Fold Notch=Use Default	
			Vee Notch Depth=Auto	
			Vee Notch Angle=30.000	
			Connector Fold Notch=Use Default	
			Vee Notch Depth=Auto	
			Vee Notch Angle=30.000	
			Beading=No	
			Insulation UI=Shortest Side	Seams
				S1=None

Damper:

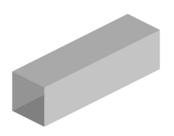
Pattern: 411 Rectangular



A=a R=h C=l Straight Type=1 Part Straight C1=None	Dims		Options	Conn's
Female Allow=Shortest Side C2=None  1xU,1xl=Shortest Side C2=N	A=a B=b	C=I	Straight Type=1 Part Straight Female Allow=Shortest Side 1xU,1xl=Shortest Side Connector Fold Notch=Use Default Vee Notch Depth=Auto Vee Notch Angle=30.000 Connector Fold Notch=Use Default Vee Notch Depth=Auto Vee Notch Depth=Auto Vee Notch Angle=30.000 Beading=No	C1=None C2=None Seams

Damper:

Rectangular

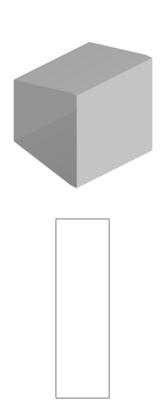




Dim	5	Options	Conn's
A=a B=b C=l	D=e E=f	Straight Type=1 Part Straight	C1=None
F=a G=b		Female Allow=Shortest Side  1xU,1xl=Shortest Side	C2=None
		Connector Fold Notch=Use Default Vee Notch Depth=Auto	
		Vee Notch Angle=30.000 Duct Adjust=0.000	
		Connector Fold Notch=Use Default Vee Notch Depth=Auto	
		Vee Notch Angle=30.000	Seams
		Beading=No Insulation UI=Shortest Side	S1=None

Damper:

Pattern: 415 Rectangular



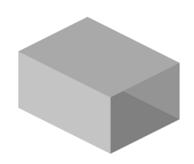
	Dims	5		Options	Conn's
A=a B=	b C=c	D=d	E=e	1 Part Straight=Yes	C1=None
F=f G=	:				C2=None

Seams

S1=None

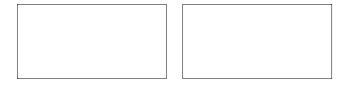
Damper:

Rectangular

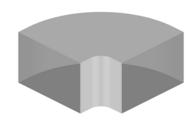


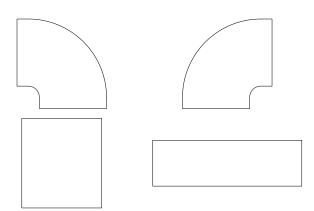
Dims				Options	Conn's
a	B=d	C=b	D=I	Options Throat Type=Mitred 2 Parts=Yes Vee Depth Male=Auto Vee Depth Female=Auto Vee Notch Angle=30.000 Connector Fold Notch=Use Default Vee Notch Depth=Auto Vee Notch Angle=30.000 Connector Fold Notch=Use Default Vee Notch Angle=30.000 Connector Fold Notch=Use Default Vee Notch Depth=Auto Vee Notch Angle=30.000	Conn's C1=None C2=None Seams
				Dynamic Hole Adjust=Auto	S1=None

Damper: None None



Pattern: 420 Rectangular



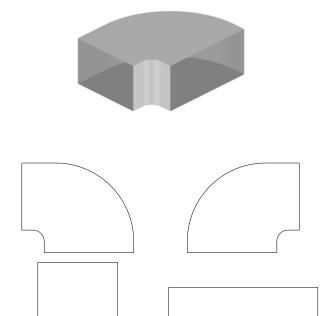


		Dims	;		Options	Conn's
A=a F=I	B=b	C=e	D=f	E=r	Throat Type=Radius Length Adjust For Part 4=0.000 Length Adjust For Part 3=0.000 Vee Depth Male=Auto Vee Depth Female=Auto Vee Angle Male=30 Vee Angle Female=30 Auto Oversize=Normal Seam Number For Throat= 2 Part Wrapper=No Leg Lengths=No Allow Central Tie Rods=Yes Riser Bend=No Mark Splitter Sides=No	C1=None C2=None Seams S1=None S2=None

Damper:

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Rectangular

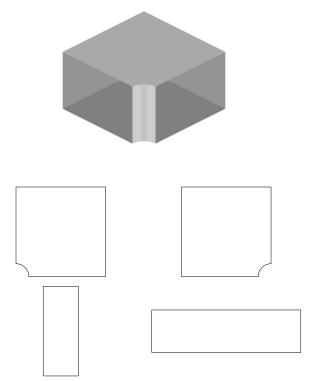


Dims	Options	Conn's
B=b C=d D=e E=f G=l	Throat Type=Radius Length Adjust For Part 4=0.000 Length Adjust For Part 3=0.000 Vee Depth Male=Auto Vee Depth Female=Auto Vee Angle Male=30 Vee Angle Female=30 Auto Oversize=Normal Seam Number For Throat= 2 Part Wrapper=No Leg Lengths=No Allow Central Tie Rods=Yes Riser Bend=No Mark Splitter Sides=No	C1=None C2=None Seams S1=None S2=None

Damper:

Pattern: 430

Rectangular



	D: .			0 ::	
B=b	Dims C=e	D=f	E=r	Options Throat Type=Radius Length Adjust For Part 4=0.000 Length Adjust For Part 3=0.000 Vee Depth Male=Auto Vee Depth Female=Auto Vee Angle Male=30 Vee Angle Female=30 3 Parts=No Auto Oversize=Normal Seam Number For Throat= 2 Part Wrapper=No	Conn's C1=None C2=None
				Leg Lengths=No Allow Central Tie Rods=Yes Riser Bend=No Mark Splitter Sides=No	S1=None S2=None
					Damper:

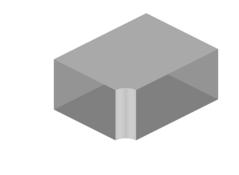
4/18/2016 courtesy of Applied software. 48

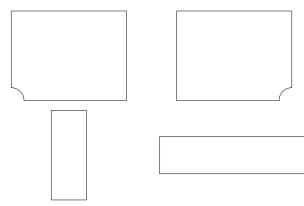
F=r

A=a

F=l

Rectangular



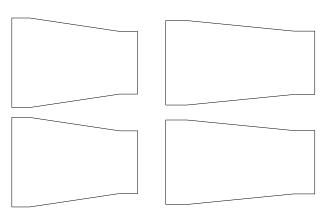


		Dims			Options	Conn's
A=a	B=b	C=d	D=e	E=f	Throat Type=Radius	C1=None
F=r	G=l				Length Adjust For Part 4=0.000	C2=None
					Length Adjust For Part 3=0.000	
					Vee Depth Male=Auto	
					Vee Depth Female=Auto	
					Vee Angle Male=30	
					Vee Angle Female=30	
					3 Parts=No	
					Auto Oversize=Normal	
					Seam Number For Throat=	
					2 Part Wrapper=No	Seams
					Leg Lengths=No	S1=None
					Allow Central Tie Rods=Yes	S2=None
					Riser Bend=No	
					Mark Splitter Sides=No	
					•	

Damper:

Pattern: 440
Rectangular

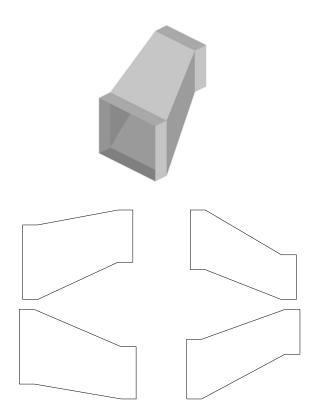




	Dims	Options	Conn's
A=a	B=b	2 Parts=No	C1=None
C=c	D=d	3 Parts=No	C2=None
E=h	F=m	Vee Depth Male=Auto	
G=l	H=Angle	Vee Depth Female=Auto	
		Vee Notch Angle=20.000	
		Taper Notch If Straight Edge (Female)=No	
		Female Allow=Shortest Slope	
		2-Sided Part Allowance=Auto	
		Taper Notch If Straight Edge (Male)=No	
		Use Taper Notch For 2 Parts=Yes	
		Connector Fold Notch=Use Default	Seams
		Vee Notch Depth=Auto	S1=None
		Vee Notch Angle=30.000	
		Input=Length	
		Vee Notch Depth If Straight Edge (Female)	
		Maximum Angle=180.000	Damper:
		Splitter Turnover=0.000	Damper.
		Splitter Extension=0.000	
		Splitter Adjust=0.000	
		Connector Fold Notch=Use Default	
		Vee Notch Depth=Auto	
		Vee Notch Angle=30.000	
		Splitter Hole Diameter=0.000	
		Number Of Holes=0.000	
		Splitters=Half	
		Hole Inset=0.000	
		Fixing Holes on Turnover=No	
		Seam Cut Back=0.000	

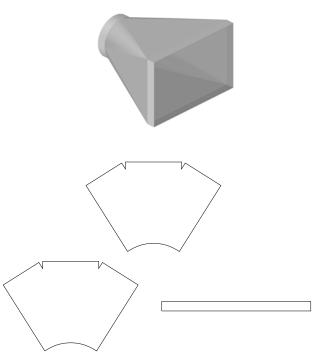
4/18/2016 courtesy of Applied software 49

Rectangular



	Dims	Options	Conn's
A=a	B=b	2 Parts=No	C1=None
C=c	D=d	3 Parts=No	C2=None
E=e	F=f	Vee Depth Male=Auto	
G=h	H=m	Vee Depth Female=Auto	
I=I	J=Angle	Vee Notch Angle=20.000	
		Taper Notch If Straight Edge (Female)=No	
		Female Allow=Shortest Slope	
		2-Sided Part Allowance=Auto	
		Taper Notch If Straight Edge (Male)=No	
		Use Taper Notch For 2 Parts=Yes	
		Connector Fold Notch=Use Default	Seams
		Vee Notch Depth=Auto	S1=None
		Vee Notch Angle=30.000	
		Input=Length	
		Vee Notch Depth If Straight Edge (Female)	
		Maximum Angle=180.000	Damper:
		Splitter Turnover=0.000	bumper.
		Splitter Extension=0.000	
		Splitter Adjust=0.000	
		Connector Fold Notch=Use Default	
		Vee Notch Depth=Auto	
		Vee Notch Angle=30.000	
		Splitter Hole Diameter=0.000	
		Number Of Holes=0.000	
		Splitters=Half	
		Hole Inset=0.000	
		Fixing Holes on Turnover=No	
		Seam Cut Back=0.000	

Pattern: 450
Rectangular/Round

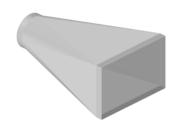


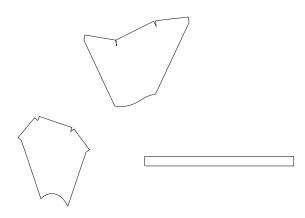
Dims	Options	Conn's
A=a	Cross Break=2	C1=None
B=b	Length Break=1	C2=None
C=d	Diameter Type=Nominal	
D=h	Seam Position=Width	
E=m	Marker Type=Notch	
F=l	Offset Width=Left In	
G=Corner Radius	Offset Depth=Bottom Up	
	Inlet=1	
	Outlet=2	
	Fold Notch Depth=Full Allowance	
	V Notch Rectangular Extension=No	Seams
	Seam Cut Back=None	S1=None
	Cut Back Allowance (%)=50.000	
	2 Parts 90 Degrees Seam=No	

Damper: None

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Rectangular/Round





Dims	Options	Conn's
A=a	Cross Break=2	C1=None
B=b	Length Break=1	C2=None
C=d	Diameter Type=Nominal	
D=e	Seam Position=Width	
E=f	Marker Type=Notch	
F=h	Offset Width=Left In	
G=m	Offset Depth=Bottom Up	
H=l	Inlet=1	
I=Corner Radius	Outlet=2	
	Fold Notch Depth=Full Allowance	
	V Notch Rectangular Extension=No	Seams
	Seam Cut Back=None	S1=None
	Cut Back Allowance (%)=50.000	
	2 Parts 90 Degrees Seam=No	

Damper: None

# Pattern: 460

Rectangular



Dims	Options	Conn's
A=a	Vee Depth Male=Auto	C1=None
B=b	Vee Depth Female=Auto	C2=None
C=e	Vee Notch Angle=30.000	
D=h	Offset=Bottom Up	
E=m	Split Mitre=No	
F=l		
G=Angle		
H=Left Extension		
I=Right Extension		
J=Right Width		
		Seams
		S1=None

Damper: None None

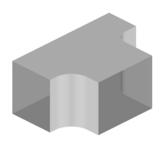
Rectangular

Dims	Options	Conn's
A=a	Vee Depth Male=Auto	C1=None
B=b	Vee Depth Female=Auto	C2=None
C=d	Vee Notch Angle=30.000	
D=e	Offset=Bottom Up	
E=h	Split Mitre=No	
F=m		
G=l		
H=Angle		
I=Left Extension		
J=Right Extension		
K=Right Width		Seams
		S1=None

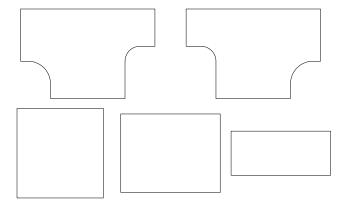
Damper: None None

# Pattern: 470

Rectangular

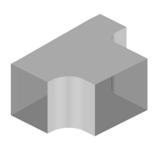


Dims	Options	Conn's
A=a	Throat Type=Radius	C1=None
B=b	3 Parts=No	C2=None
C=d	Vee Depth Male=Auto	C3=None
D=h	Vee Depth Female=Auto	
E=i	Vee Notch Angle=30.000	
F=j	Hole Diameter=0.500	
G=p	Hole Spacing=2.000	
H=q	Splitters=No	
l=r	Inlet=1	
J=Splitter Distance	Outlet=2	Seams
		S1=None

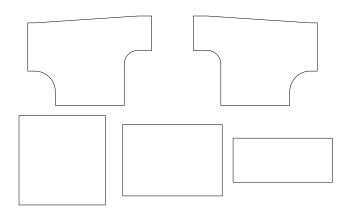


Damper:

Rectangular



Dims	Options	Conn's
A=a	Throat Type=Radius	C1=None
B=b	3 Parts=No	C2=None
C=d	Vee Depth Male=Auto	C3=None
D=e	Vee Depth Female=Auto	
E=h	Vee Notch Angle=30.000	
F=i	Hole Diameter=0.500	
G=j	Hole Spacing=2.000	
H=p	Splitters=No	
I=q	Inlet=1	
J=r	Outlet=2	
K=Splitter Distance		Seams
•		S1=None



Pattern: 472

Rectangular

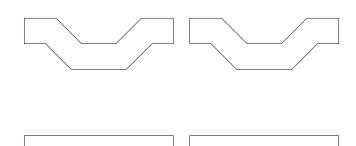


Dims	Options	Conn's
A=Left Width	Vee Depth Male=Auto	C1=None
B=Depth	Vee Depth Female=Auto	C2=None
C=Right Width	Vee Notch Angle=30.000	
D=Centre Length	Length Includes Extensions=No	
E=Left Extension	Centre Width=No	
F=Right Extension		
G=Offset		
H=Angle		
=Total Length		

Damper:

S1=None

Damper:



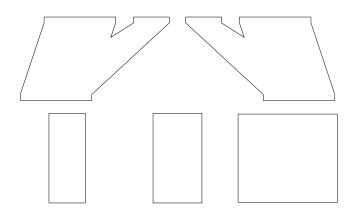
Rectangular



Dims	Options	Conn's
A=a	Vee Depth Male=Auto	C1=None
B=b	Vee Depth Female=Auto	C2=None
C=d	Vee Angle Male=30	C3=None
D=e	Vee Angle Female=30	
E=h	Offset Depth=Bottom Up	
F=i	Offset Width=Left Out	
G=j		
H=I		
I=m		
J=Branch Height		
· ·		Seams

S1=None S2=None

Damper:



Pattern: 501 Rectangular/Equipment



	Dims	Options	Conn's
A=Width	B=Depth	Install Type=Plain	C1=None
C=Length	D=Inset	Control Type=None	C2=None
E=Sides	F=Top	Type=Single	
		Temperature Type=None	
		Draw Type=None	
		Lines=No	
		Cost Supports=No	
		Lines Type=Quantity	
		Lines=3.000	

Damper:

Seams

Rectangular/Equipment



	Dims	Options	Conn's
A=Width	B=Depth	Install Type=Plain	C1=None
C=Length	D=Inset	Control Type=None	C2=None
E=Sides	F=Top	Type=Single	
G=Bottom		Temperature Type=None	
		Draw Type=None	
		Lines=No	
		Connector 1 Outside=No	
		Connector 2 Outside=No	
		Cost Supports=No	
		Lines Type=Quantity	
		Lines=3.000	Seams

Damper:

#### Pattern: 503 Rectangular/Equipment



Dims	Options	Conn's
A=Width	Position From=Edge	C1=None
B=Depth	Lines=3	C2=None
C=Height	Rotation=0.000	
D=Plate Border (Width)	Arrows/Lines=None	
E=Plate Border (Depth)	Arrows/Lines Sides=0	
	Lines/Circles Spacing=1.000	
	Arrows Direction=Auto	
	Circles=No	
	Arrows Type=1	

Seams

Damper:

Rectangular



Dims	Options	Conn's
A=Width	Number Of Locks=0	C1=None
B=Depth	Area Of Influence X=0.000	C2=None
C=Turnover	Area Of Influence Y=0.000	
D=Corner Radius	Area Of Influence Z=0.000	
E=Inner Diameter	Mirror=No	
F=Outer Diameter	Dynamic Hole Adjust=Auto	
G=Depth #1		
H=Depth #2		
I=Inset		

Seams

Damper:

#### Pattern: 505 Rectangular/Equipment



Dims	Options	Conn's
A=Width	Type=Supply	C1=None
B=Depth	Position From=Edge	C2=None
C=Height	Lines=3	
D=Plate Border (Width)	Rotation=0.000	
E=Plate Border (Depth)	Arrows/Lines=None	
	Arrows/Lines Sides=0	
	Lines/Circles Spacing=1.000	
	Arrows Direction=Auto	
	Circles=No	
	Arrows Type=1	
	Cost Supports=No	Seams

Damper:

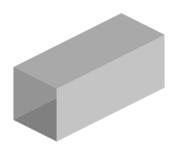
Rectangular/Equipment



]	Dims	Options	Conn's
A=Width	B=Depth	Install Type=Plain	C1=None
C=Length	D=Inset	Control Type=None	
E=Sides	F=Top	Type=Single	
G=Bottom		Temperature Type=None	
		Draw Type=None	
		Lines=No	
		Connector 1 Outside=No	
		Connector 2 Outside=No	
		Cost Supports=No	
		Lines Type=Quantity	
		Lines=3.000	Seams

Damper:

Pattern: 507 Rectangular/Equipment



Dims	Options	Conn's
A=Width	Type=Plain	C1=None
B=Depth	Type=Single	C2=None
C=Length	Type=Multiple Banks	
D=Damper Angle	X-Offset=0.000	
	Y-Offset=0.000	
	Develop=No	

Seams

Damper:

Rectangular/Equipment



Dims	Options	Conn's
A=Width	Type=Plain	C1=None
B=Depth	Type=Single	C2=None
C=Length	Type=Multiple Banks	
D=Damper Angle	X-Offset=0.000	
	Y-Offset=0.000	
	Develop=No	

Seams

Damper:

#### Pattern: 515 Rectangular/Equipment

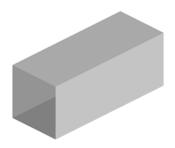


Dims	Options	Conn's
A=Width	Type=Plain	C1=None
B=Depth	Type=Single	
C=Length	Type=Multiple Banks	
D=Damper Angle	X-Offset=0.000	
	Y-Offset=0.000	
	Develop=No	

Seams

Damper:

Rectangular/Equipment



Dims		Options	Conn's
A=Width	B=Depth	Type=Heater	C1=None
C=Length		Chevron=0	C2=None
		Develop=No	

Seams

Damper:

# Pattern: 519 Rectangular/Equipment

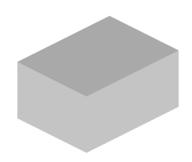


Dims		Options	Conn's
A=Width	B=Depth	Draw Type=Attenuator	C1=None
C=Length		Develop=No	C2=None
		Lines Type=Quantity	
		Lines=3.000	

Seams

Damper:

Rectangular/Standard/Equipment



Dims		Options	Conn's
A=Width	B=Depth	Inlet=1	
C=Length		Outlet=1	
		Library=Duct	
		Type=None	
		Cost Supports=No	

Seams

Damper:

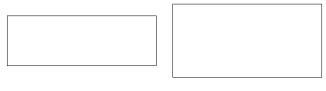
# Pattern: 525

Rectangular



Dims	Options	Conn's
A=Width In	Folds=Out	C1=None
B=Depth In	Offset Width=Right In	C2=None
C=Width Out	New Pattern=No	
D=Depth Out		
E=Length		
F=Angle		
G=Extension In		
H=Extension Out		
I=Offset Width		
		Seams
		S1=None

Damper:

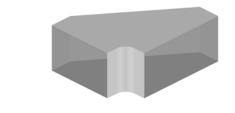


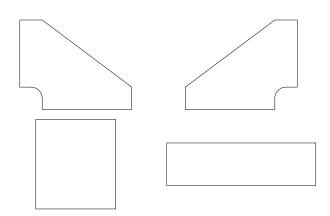




courtesy of 4/18/2016 60

Rectangular





Dims	Options	Conn's
A=Top Width	Throat Type=Radius	C1=None
B=Depth	Length Adjust For Part 4=0.000	C2=None
C=Btm Width	Length Adjust For Part 3=0.000	
D=Top Inner Extension	Vee Depth Male=Auto	
E=Bottom Inner Extension	Vee Depth Female=Auto	
F=Inner Radius	Vee Angle Male=30	
G=Top Outer Extension	Vee Angle Female=30	
H=Bottom Outer Extension	Auto Oversize=Normal	
	Seam Number For Throat=	
	Leg Lengths=No	
	Allow Central Tie Rods=Yes	Seams
	Riser Bend=No	S1=None
	Folding Lines=No	S2=None

Damper:

Pattern: 535
Rectangular/Equipment



	Dims	Options	Conn's
A=Width	B=Depth	Draw Type=None	C1=None
C=Length		Develop=No	C2=None
		Lines Type=Quantity	
		Lines=3.000	

Seams

Damper:

4/18/2016 courtesy of Applied software 61

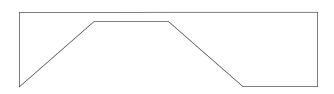
Rectangular

	ims	Options	Conn's
A=Width	B=Depth	Branch Parts=1	C1=None
C=Length #1	D=Angle	Input=Both Lengths	C2=None
E=Length #2	F=Width		



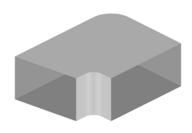
Seams S1=None

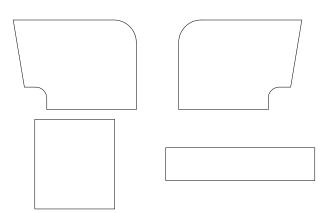
Damper:



# Pattern: 761

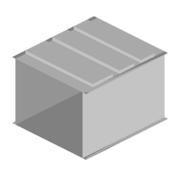
Rectangular



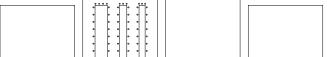


Dims	Options	Conn's
A=Top Width	Throat Type=Radius	C1=None
B=Depth	Length Adjust For Part 4=0.000	C2=None
C=Btm Width	Length Adjust For Part 3=0.000	
D=Angle	Vee Depth Male=Auto	
E=Top Inner Extension	Vee Depth Female=Auto	
F=Bottom Extension	Vee Angle Male=30	
G=Inner Radius	Vee Angle Female=30	
H=Outer Radius	3 Parts=No	
I=Top Outer Extension	Auto Oversize=Normal	
	Seam Number For Throat=	
	2 Part Wrapper=No	Seams
	Leg Lengths=No	S1=None
	Allow Central Tie Rods=Yes	S2=None
	Riser Bend=No	
	Mark Splitter Sides=No	
		Damper:

Rectangular



	Dims		Options	Conn's
A=a B=b	C=c	D=d	Hole=Top	C1=None
E=e F=f	G=g	H=h	Hole=Top	C2=None
l=i J=J:	1 K=J2	L=J3	Hole=Top	
M=K1 N=	K2 O=K3	P=l	Number of Holes - Side A=8	
Q=p R=r	•		Number of Holes - Side L=4	
			Number of Holes - Side L=3	
			Number of Holes - Side L=3	
			Hole Diameter=0.400	
			Hole Inset=Auto	
			Vee Notch Depth=0.100	
			Vee Notch Angle=30.000	Seams
			2 Parts=No	
			Door Size Reduction=0.000	
			Holes Draw Detail=Auto	
			Add CAD Nodes=No	





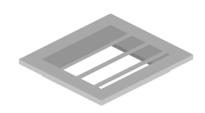






Pattern: 765

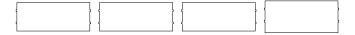
Rectangular



	Dims	Options	Conn's
A=b	B=g	Corners=No	
C=h	D=Angle	Sides=Angle	
E=o	F=p	x=0.200	
G=r	H=s	y=0.400	
l=t		z=0.800	
		v=0.800	
		u=0.080	
		w=0.080	
		e=0.080	
		f=0.080	
		i=0.000	Seams
		j=0.000	

Damper:

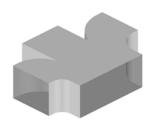
Damper:

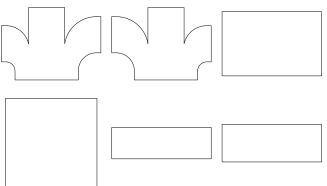




4/18/2016 courtesy of software 63

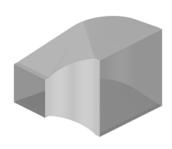
Rectangular





Dims	Options	Conn's
A=Btm Width	Right Throat Type=Radius	C1=None
B=Depth	Left Throat Type=Radius	C2=None
C=Top Width	Vee Depth Male=Auto	C3=None
D=Right Width	Vee Depth Female=Auto	C4=None
E=Left Width	Vee Angle Male=30	
F=Height	Vee Angle Female=30	
G=Right Height	Right Heel Type=Radius	
H=Left Height	Left Heel Type=Radius	
I=Right Radius	Junction Notch=Use Default	
J=Left Radius	Vee Notch Angle=20.000	
K=Right Angle	2 Part Wrapper=No	Seams
L=Left Angle	Top Right=Straight	S1=None
M=Btm Right Extension	Top Left=Straight	S2=None
N=Btm Left Extension	Outlet=2	
O=Right Extension		
P=Left Extension		Damper:
Q=Top Extension		24

#### Pattern: 801 Rectangular

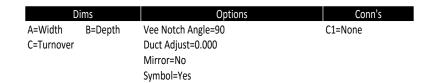


Dims	Options	Conn's
A=Btm Width	Throat Type=Radius	C1=None
B=Btm Depth	Vee Depth Male=Auto	C2=None
C=Top Width	Vee Depth Female=Auto	
D=Top Depth	Vee Angle Male=30	
E=Angle	Vee Angle Female=30	
F=Top Extension	Offset=Top Down	
G=Bottom Extension	Bending=Left	
H=Inner Radius	Allow Central Tie Rods=Yes	
I=Outer Radius	Straight Edge Wrappers=No	
J=Offset	Splitter Slit Angle=10.000	
	Intersect Splitter Holes=No	Seams
	·	S1=None

Damper:

courtesy of Applied Software 4/18/2016 64

Rectangular





Seams

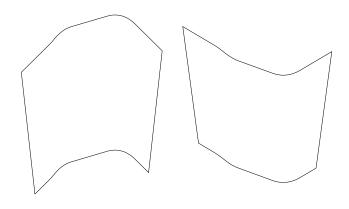
Damper:



Pattern: 810 Rectangular/Round



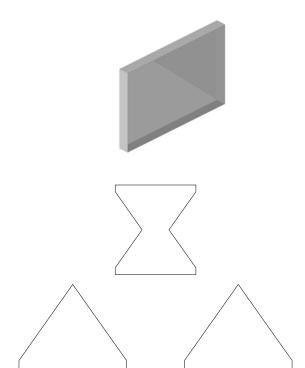
Dims	Options	Conn's
A=Width In	Cross Break=2	C1=None
B=Depth In		C2=None
C=Radius In		
D=Width Out		
E=Depth Out		
F=Radius Out		
G=Length		
H=Angle In		
I=Angle Out		
J=Offset Width		
K=Offset Depth		Seams
L=Extension In		S1=None
M=Extension Out		



Damper:

courtesy of 4/18/2016 65

Rectangular



	ims	Options	Conn's
A=Length	B=Width	Vee Depth Male=Auto	C1=None
C=Height	D=Angle	Vee Depth Female=Auto	
E=Extension		Vee Notch Angle=30.000	
		Use Vee Notch=No	
		Number Of Parts=3	

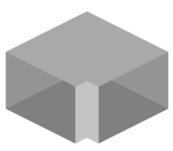
Seams

S1=None

Damper:

Pattern: 819

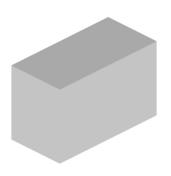
Rectangular



Dims	Options	Conn's
A=Top Width	Length Adjust For Part 4=0.000	C1=None
B=Depth	Length Adjust For Part 3=0.000	C2=None
C=Angle	Vee Depth Male=Auto	
D=Top Inner Extension	Vee Depth Female=Auto	
E=Bottom Extension	Vee Angle Male=30	
	Vee Angle Female=30	
	3 Parts=No	
	Seam Number For Throat=	
	Attenuator=No	
	Leg Lengths=No	
	Allow Central Tie Rods=Yes	Seams
	Riser Bend=No	S1=None

Damper:

Rectangular



		1
Dims	Options	Conn's
A=Left Width	Six Parts Left Lap=None	C1=None
B=Right Width	Six Parts Right Lap=None	
C=Depth	Parts=2	
D=Length		
E=Bottom Radius		
F=Top Radius		
G=Cross Break		

Seams S1=None S2=None

Damper:

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Pattern: 834

Rectangular

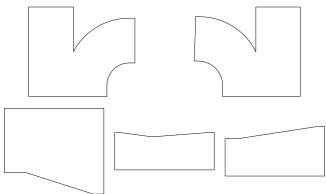


Dims	Options	Conn's
A=Radius	Six Parts Left Lap=None	C1=None
B=Angle	Six Parts Right Lap=None	C2=None
C=Length	Allowance=Left	C3=None
D=Front Hole Diameter		
E=Back Hole Diameter		
F=Lid Pipe Radius		
G=Lid Pipe Length		
H=Base Pipe Radius		
I=Base Pipe Length		
J=Parts Left & Right		
		Seams
		S1=None
		S2=None
		S3=None

S4=None Damper:

Rectangular



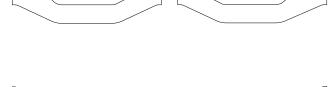


Dims	Options	Conn's
A=Btm Width	Right Throat Type=Radius	C1=None
B=Btm Depth	Vee Depth Male=Auto	C2=None
C=Top Width	Vee Depth Female=Auto	C3=None
D=Top Depth	Vee Angle Male=30	
E=Right Width	Vee Angle Female=30	
F=Right Depth	Right Heel Type=Radius	
G=Top Offset	Junction Notch=Use Default	
H=Right Offset	Vee Notch Angle=20.000	
I=Height	Right Folds=End Point	
J=Right Height	Inlet=1	
K=Right Radius	Outlet=2	Seams
L=Right Angle	Top Right=Straight	S1=None
M=Bottom Extension		
N=Right Extension		
O=Top Inset		
P=Top Extension		Damper:
		bamper.

Pattern: 836

Rectangular

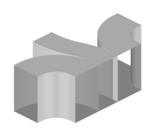


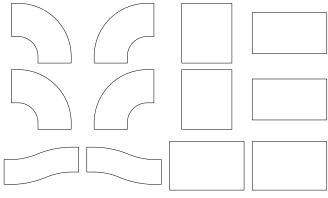


	Dims	Options	Conn's
	A=Left Width	Vee Depth Male=Auto	C1=None
	B=Left Depth	Vee Depth Female=Auto	C2=None
	C=Right Width	Vee Angle Male=30	
	D=Right Depth	Vee Angle Female=30	
	E=Centre Width	Left Offset Depth=Top Down	
	F=Centre Depth	Right Offset Depth=Top Down	
	G=Left Length	Equal Corner Radius=No	
	H=Right Length		
	I=Centre Length		
	J=Left Extension		
	K=Right Extension		Seams
	L=Left Offset Width		S1=None
	M=Left Offset Depth		
	N=Right Offset Width		
	O=Right Offset Depth		
	P=Left Top Radius		Damper:
	Q=Left Bottom Radius		'
	R=Right Top Radius		
	S=Right Bottom Radius		
1			

4/18/2016 courtesy of software. 68

Rectangular

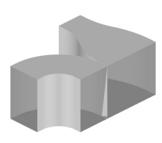


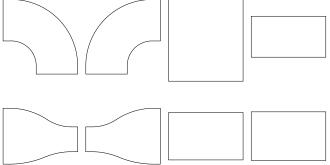


	Dims	Options	Conn's
	A=Btm Width	Right Throat Type=Radius	C1=None
	B=Btm Depth	Left Throat Type=Radius	C2=None
	C=Btm Left Width	Vee Depth Male=Auto	C3=None
	D=Btm Right Width	Vee Depth Female=Auto	C4=None
	E=Top Width	Vee Angle Male=30	C5=None
	F=Top Depth	Vee Angle Female=30	
	G=Right Width	Gaps=0.000	
	H=Right Depth	Add Connector Allowance To One Side On	
	I=Left Width		
	J=Left Depth		
	K=Right Offset		Seams
	L=Left Offset		S1=None
	M=Top Offset		
	N=Top Inset		
	O=Height		
	P=Right Radius		Damper:
	Q=Left Radius		bamper.
	R=Right Angle		
	S=Left Angle		
	T=Btm Right Extension		
	U=Btm Left Extension		
	V=Top Extension		
	W=Right Extension		
	X=Left Extension		
$\neg$			

Pattern: 848

Rectangular

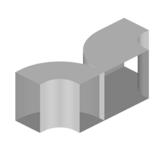


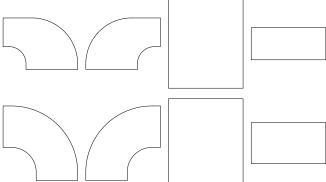


Dims	Options	Conn's
A=Btm Width	Left Throat Type=Radius	C1=None
B=Btm Depth	Vee Depth Male=Auto	C2=None
C=Btm Left Width	Vee Depth Female=Auto	C3=None
D=Top Width	Vee Angle Male=30	C4=None
E=Top Depth	Vee Angle Female=30	
F=Left Width	Gaps=0.000	
G=Left Depth	Add Connector Allowance To One Side On	
H=Left Offset		
I=Top Offset		
J=Top Inset		
K=Height		Seams
L=Left Radius		S1=None
M=Left Angle		
N=Btm Right Extension		
O=Btm Left Extension		
P=Top Extension		Damper:
Q=Left Extension		Damper.

4/18/2016 courtesy of software. 69

Rectangular

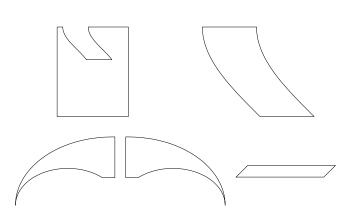




Dims	Options	Conn's
A=Btm Width	Right Throat Type=Radius	C1=None
B=Btm Depth	Left Throat Type=Radius	C2=None
C=Btm Left Width	Vee Depth Male=Auto	C3=None
D=Right Width	Vee Depth Female=Auto	C4=None
E=Right Depth	Vee Angle Male=30	
F=Left Width	Vee Angle Female=30	
G=Left Depth	Gaps=0.000	
H=Right Offset	Add Connector Allowance To One Side On	
I=Left Offset		
J=Right Radius		
K=Left Radius		Seams
L=Right Angle		S1=None
M=Left Angle		
N=Btm Right Extension		
O=Btm Left Extension		
P=Right Extension		Damper:
Q=Left Extension		Damper.

#### Pattern: 852 Rectangular/Round



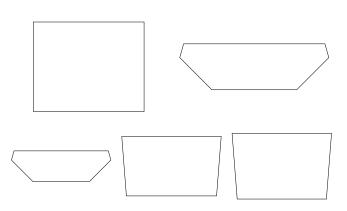


Dims		Options	Conn's
A=Pipe Diameter	Inlet=1		C1=None
B=Angle	Outlet=2		C2=None
C=Pipe Length			C3=None
D=Inset			
E=Branch Height			
F=Branch Depth			
G=Branch Width			
H=Branch Gauge			
I=Extension			

Seams
S1=None
S2=None
S3=None
S4=None
S5=None Damper:

Rectangular

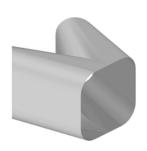


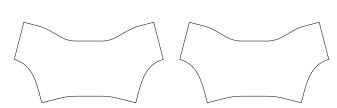


8.	0.11	6 1
Dims	Options	Conn's
A=Top Length	3 Parts=No	
B=Top Width	Vee Notch Angle=20.000	
C=Depth	-	
D=Btm Length		
E=Btm Width		
F=Top Left Ext		
G=Top Right Ext		
H=Btm Left Ext		
I=Left Depth		
J=Right Depth		
K=Gauge		Seams
L=Hole Diameter		S1=None
M=X-Offset		S2=None
N=Y-Offset		

Damper:

Pattern: 854
Rectangular/Round/Flat Oval





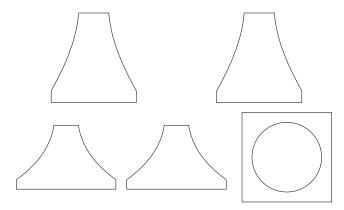
Dims	Options	Conn's
A=Btm Width	Bottom Diameter Type=Nominal	C1=None
B=Btm Depth	Left Diameter Type=Nominal	C2=None
C=Bottom Radius	Right Diameter Type=Nominal	C3=None
D=Left Width	Seam Position=Top	C4=None
E=Left Depth		
F=Left Radius		
G=Right Width		
H=Right Depth		
I=Right Radius		
J=Left Angle		
K=Right Angle		Seams
L=Height		S1=None
M=Left Offset		
N=Right Offset		
O=Bottom Collar		
P=Left Collar		Damper:
Q=Right Collar		24
R=Left Offset Depth		
S=Right Offset Depth		

4/18/2016 courtesy of Applied software 71

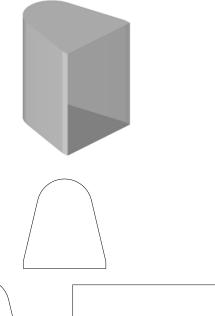
Rectangular



Dims	Options	Conn's
A=Btm Width		C1=None
B=Btm Depth		
C=Top Width		
D=Top Depth		
E=Hole Diameter		
F=Height		
G=Offset Width		
H=Offset Depth		
I=Bottom Extension		
J=Collar		
K=Angle		Seams



Pattern: 860
Rectangular



Dims	Options	Conn's
\=Width	Vee Depth Male=Auto	C1=None
B=Depth	Vee Depth Female=Auto	
C=Height	Vee Angle Male=30	
D=Top Radius	Vee Angle Female=30	
E=Bottom Extension		

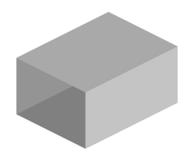
Seams
S1=None

Damper:

Damper:

4/18/2016 courtesy of Applied software 72

Rectangular/Standard

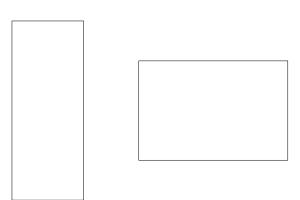


	Dims	Options	Conn's
A=Width	B=Depth	Type=1 Part Straight	C1=None
C=Length		Notch Angle For Lid=45.000	
		Lid Adjust=0.000	
		Cost Supports=No	

Seams

S1=None S2=None

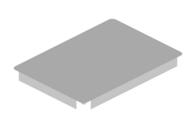
Damper:



Pattern: 862

Rectangular

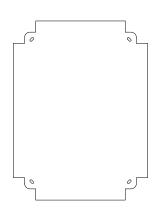
4/18/2016



Options	Conn's
Correct Hole Sizes=No	C1=None
Dynamic Hole Adjust=Auto	C2=None
	Correct Hole Sizes=No

Seams

Damper:



73

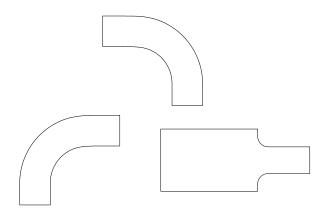
Rectangular



Dims	Options	Conn's
A=Width	Type=Inside	
B=Length		
C=Depth		
D=Top Width		
E=Radius In		
F=Radius Out		
G=Turnover		
H=Extension		

Seams S1=None

Damper:



Pattern: 866

Rectangular



	Dims	Options	Conn's
A=Width C=Length	B=Depth	Connector Fold Notch=Use Default Vee Notch Depth=Auto Vee Notch Angle=30.000 Override=None	C1=None C2=None
		Connector Fold Notch=Use Default Vee Notch Depth=Auto Vee Notch Angle=30.000 Beading=No Lengths Include Connector Adjust=No Override Cut Type=None	Seams
		Insulation Parts=Same Insulation UI=Shortest Side Machine Cut If Dynamic Branches=No	S1=None S2=None

Damper:



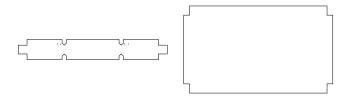
Rectangular



Dims		Options	Conn's
A=Width	3 Parts=No		
B=Depth			
C=Length			
D=Top			
E=Border			
F=Extension			
G=Fixing Hole Diameter			
H=Hole Inset			
I=Hole Spacing			

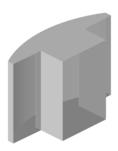
Seams

Damper:



Pattern: 882

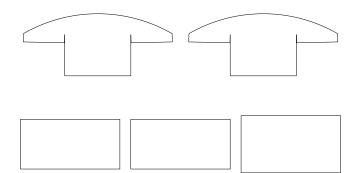
Rectangular



Dims	Options	Conn's
A=Width In		C1=None
B=Depth		C2=None
C=Width Out		C3=None
D=Angle Out		
E=Length		
F=Slope Angle		
G=Extension		

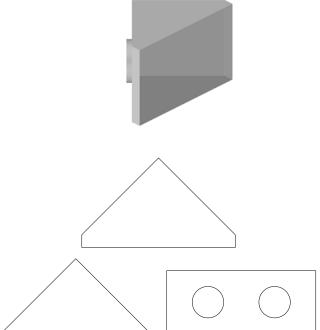
Seams S1=None

Damper:



courtesy of Applied Software 4/18/2016 75

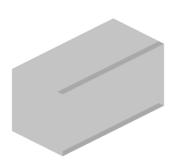
Rectangular



Dims	Options	Conn's
A=Width	Vee Depth Male=Auto	C1=None
B=Depth	Vee Depth Female=Auto	
C=Angle	Vee Notch Angle=30.000	
D=Extension	Use Vee Notch=No	
E=Hole Width		
F=Hole Depth		
G=Hole Radius		
H=Offset Width		
I=Offset Depth		
J=Hole Width		
K=Hole Depth		Seams
L=Hole Radius		S1=None
M=Offset Width		
N=Offset Depth		
O=Step In Depth		
P=Step In Height		Damper:
Q=Depth		bumper.

Pattern: 898 Rectangular/Standard

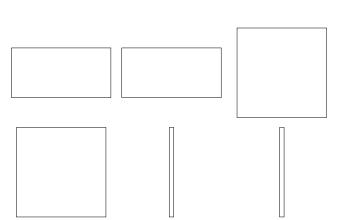
4/18/2016



Dims	Options	Conn's
A=Width	Vertical=1	
B=Height	Horizontal=1	
C=Depth	Shelf Recess=0.000	
D=Kick Height	Kick Recess=0.000	
E=Centre Stile Width	Doors=None	

Seams

Damper:



courtesy of Applied Software 76

Rectangular/Round/Flat Oval/Standard/Equipment

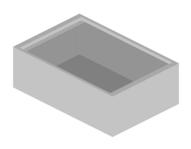
Options Inlet=1 Outlet=1 Pipework=No Show Boundaries=No

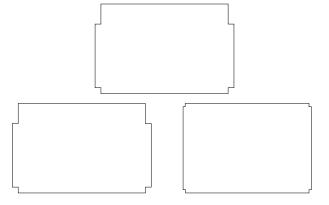
Seams

Damper:

Pattern: 903

Rectangular





Dims Options Conn's A=Width Vee Notch Depth=0.000 B=Depth Vee Notch Angle=0 C=Height D=Door Depth E=Top Thickness F=Side Thickness G=Door Overhang H=Turnover

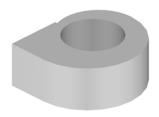
Seams

Damper:

Rectangular/Standard/Structure/Equipment



Pattern: 913
Rectangular/Round/Equipment



Dims	Options	Conn's
A=Depth	Type=Full	C1=None
B=Width	Rotation=Vertical	C2=None
C=Height	Closed=Yes	
D=Flange	Hole Type=Circle/Ellipse	
E=Flange	Draw as Single Line=No	
F=Radius	Full=No	
G=Radius	Connectors=Yes	
H=Web	Hole Rotation=0	
I=Left Horizontal Angle	Export=No	
J=Right Horizontal Angle		
K=Left Vertical Angle		Seams
L=Right Vertical Angle		
M=Turnover #1		
N=Turnover #2		
O=Hole Inset		
P=Hole Offset		Damper:
Q=Hole Width		·
R=Hole Depth		
S=Hole Spacing		
T=Number Of Holes		
U=Plate Width #1		
V=Plate Depth #1		
W=Plate Thickness #1		
X=Plate Inset #1		
Y=Plate Offset #1		
Z=Plate Width #2		
a=Plate Depth #2		
b=Plate Thickness #2		

Dims	Options	Conn's
A=Width	Mirror=No	C1=None
B=Depth	Base Depth=Yes	C2=None
C=Length	Cost Supports=No	
D=Height		
E=X Distance		
F=Y Distance		
G=Diameter		
H=Rotation		
I=Base Height		
J=Base Width		
K=Base Depth		Seams
L=Extension		

Damper:

4/18/2016 courtesy of software 78

Rectangular/Equipment



Dims	Options	Conn's
A=Width	Install Type=Plain	C1=None
B=Depth	Sex Type=Male	C2=None
C=Length	Control Type=None	
D=Inset	Type=Single	
E=Inset	Draw Type=None	
F=Sides	Temperature Type=None	
G=Top	Draw Type=None	
H=Bottom	Lines=No	
I=Extension	Type=Auto	
J=Right Extension	Cost Supports=No	
K=Sides	Lines Type=Quantity	Seams
L=Bottom	Lines=3.000	
M=Top		

Damper:

Pattern: 915

Rectangular

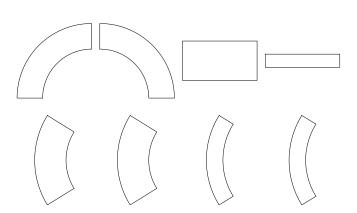


Dims	Options	Conn's
A=Diameter		
B=Inner Radius		

C=Angle

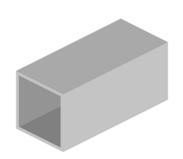
Seams S1=None

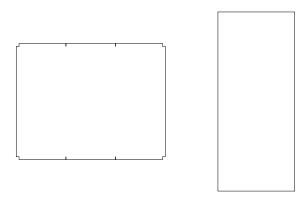
Damper:



4/18/2016 courtesy of Applied software 79

Rectangular





Dims	Options	Conn's
A=Width	Turnover=In	C1=None
B=Depth	Turnover=Top	C2=None
C=Length	Vee Notch Depth=Auto	
D=Turnover #1	Vee Notch Angle=0.000	
E=Turnover #2	Marker Depth=0.000	
	Marker Angle=0.000	
	Type=Rectangular	
	Maximum Stretchout=10000.000	

Seams

Damper:

Pattern: 919

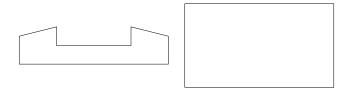
Rectangular



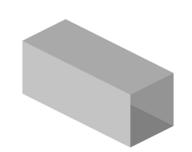
C1=None C2=None
C2=None

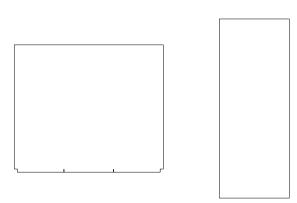
Seams S1=None

Damper:



Rectangular





Dims	Options	Conn's
A=Width	Turnover=In	C1=None
B=Depth	Vee Notch Depth=Auto	C2=None
C=Depth	Vee Notch Angle=0.000	
D=Length	Marker Depth=0.000	
E=Extension	Marker Angle=0.000	
F=Turnover #1	Type=Rectangular	
G=Turnover #2	Maximum Stretchout=10000.000	

Seams

Damper:

Pattern: 921
Rectangular/Standard



Options	Conn's
Type=Rectangular	C1=None
Vee Notch Depth=0.000	
Vee Notch Angle=0.000	
	Type=Rectangular Vee Notch Depth=0.000

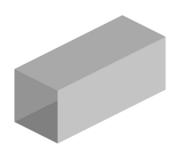
Seams

Damper:



4/18/2016 courtesy of software 81

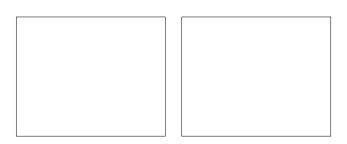
Rectangular



	Dims	Options	Conn's
A=Width C=Length	B=Depth	Connector Fold Notch=Use Default Vee Notch Depth=Auto Vee Notch Angle=30.000 Override=None Connector Fold Notch=Use Default Vee Notch Depth=Auto Vee Notch Angle=30.000 Beading=No Insulation UI=Shortest Side	C1=None C2=None

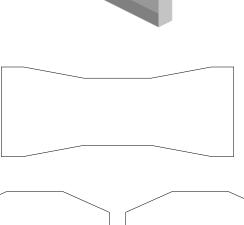
Seams S1=None S2=None

Damper:



Pattern: 926 Rectangular

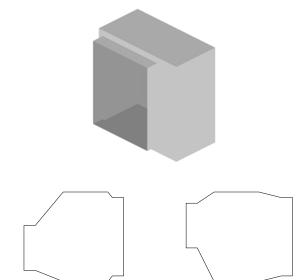




Dims	Options	Conn's
A=Left Width	Item Connector Len1=0.000	C1=None
B=Left Depth	Item Connector Len2=0.000	
C=Length	3 Parts=Yes	
D=Right Width	Connector=No	
E=Right Depth	Seam Extension=No	
F=Offset Width	Vee Depth Male=Auto	
G=Offset Depth	Vee Depth Female=Auto	
H=Left Extension	Vee Angle Male=90.000	
I=Right Extension	Vee Angle Female=90.000	
J=Step In Depth	Use Vee Notch=No	
K=Depth	Chamfer Seam Allowances=Yes	Seams
	Rotation=0	S1=None
	Cost Supports=No	S2=None

Damper:

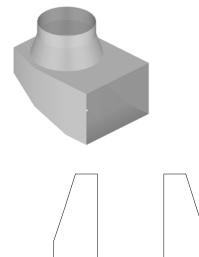
Rectangular



Dims	Options	Conn's
A=Width	Notch Angle For Seam=30.000	C1=None
B=Depth		C2=None
C=Length		
D=Inlet Width		
E=Inlet Depth		
F=Inlet Length		
G=Inlet Offset Width		
H=Inlet Offset Depth		
I=Outlet Width		
J=Outlet Depth		
K=Outlet Length		Seams
L=Outlet Offset Width		S1=None
M=Outlet Offset Depth		S2=None

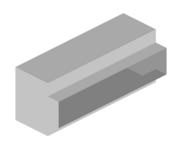
Damper:

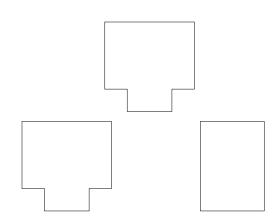
Pattern: 929
Rectangular



Dims	Options	Conn's
A=Width	Front Top and Back Parts=1	C1=None
B=Depth	Pipe Parts=Yes	C2=None
C=Outlet	Hole Adjust=0.000	
D=Diameter	Air Guide=Yes	
E=Height	Air Guide Adjust=0.000	
F=Back	Access Door=Round	
G=Top Width	Pipe Parts=	
H=Sides	Air Guide=	
I=Top Depth	Vee Depth Male=Auto	
J=Pipe Length	Vee Depth Female=Auto	
K=Extension	Vee Angle Male=30	Seams
L=Hole Diameter	Vee Angle Female=30	S1=None
M=Tie Rod Position #1	Front Hole Offset=Centre	S2=None
N=Tie Rod Hole Diameter	Back Hole Offset=Centre	
O=Tie Rod Position #2		
P=Front Hole Offset		Damper:
Q=Back Hole Offset		'

Rectangular





Dims	Options	Conn's
A=Top Width	Vee Angle Female=20	C1=None
B=Btm Width	Vee Angle Male=20	
C=Top Height	Vee Depth Female=Auto	
D=Bottom Height	Vee Depth Male=Auto	
E=Length	Chamfer Notches On Outer Corners=No	
F=Offset	3 Part Wrap=No	
	Connector Allowance=4 Sides	
	Cost Supports=No	

Seams S1=None S2=None

Damper:

Pattern: 939



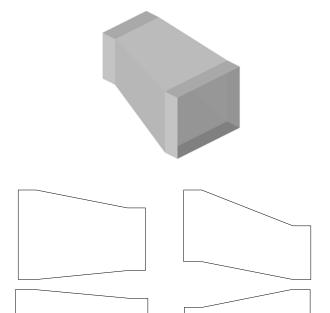


Dims	Options	Conn's
A=Width	Vee Depth Male=Auto	C1=None
B=Depth	Vee Depth Female=Auto	C2=None
C=Length	Vee Angle Male=30	C3=None
D=Extension In	Vee Angle Female=30	C4=None
E=Extension Out	Offset Width=Left In	
F=Offset Width	Restricted Flow=Warning	
G=Radius		
H=Connector Inset		

Seams S1=None S2=None

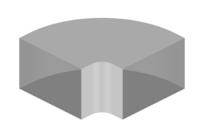
Damper:

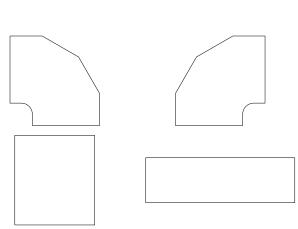
Rectangular/Ductboard



	_		
Dims	Opt	tions	Conn's
A=Width In	2 Parts=No	Fixing Holes on Tur	C1=None
B=Depth In	3 Parts=No	Show Fold Angles=	C2=None
C=Width Out	Vee Depth Male=A		
D=Depth Out	Vee Depth Female=		
E=Length	Vee Notch Angle=2		
F=Extension In	Taper Notch If Strai		
G=Extension Out	Female Allow=Shor		
H=Offset Width	2-Sided Part Allowa		
I=Offset Depth	Offset Width=Left In		
J=Angle	Offset Depth=Botto		
	Taper Notch If Strai		Seams
	Use Taper Notch F		S1=None
	Connector Fold Not		
	Vee Notch Depth=		
	Vee Notch Angle=3		
	Input=Length		Damper:
	Vee Notch Depth If		Damper.
	Maximum Angle=1		
	Splitter Turnover=0		
	Splitter Extension=		
	Splitter Adjust=0.000		
	Connector Fold Not		
	Vee Notch Depth=		
	Vee Notch Angle=3		
	Splitter Hole Diame		
	Number Of Holes=		
	Splitters=Half		

Pattern: 943 Rectangular/Ductboard



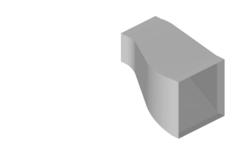


Dims	Options	Conn's
A=Top Width	Throat Type=Radius	C1=None
B=Depth	Length Adjust For Part 4=0.000	C2=None
C=Angle	Length Adjust For Part 3=0.000	
D=Top Inner Extension	Vee Depth Male=Auto	
E=Bottom Extension	Vee Depth Female=Auto	
F=Inner Radius	Vee Angle Male=30	
	Vee Angle Female=30	
	Auto Oversize=Normal	
	Seam Number For Throat=	
	Leg Lengths=No	
	Allow Central Tie Rods=Yes	Seams
	Riser Bend=No	S1=None
	Mark Splitter Sides=No	
	Outer Mitre=300.000	

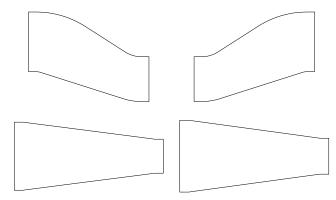
Hole Inset=0.000

Damper:

Rectangular/Ductboard



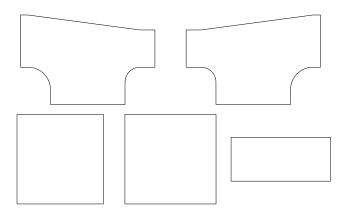
Dims	Options	Conn's
A=Width In	Vee Depth Male=Auto	C1=None
B=Depth In	Vee Depth Female=Auto	C2=None
C=Width Out	Vee Angle Male=30	
D=Depth Out	Vee Angle Female=30	
E=Length	Offset Width=Left In	
F=Extension In	Offset Depth=Top Down	
G=Extension Out	Restricted Flow=Warning	
H=Offset Width		
I=Offset Depth		
J=Left Radius		
K=Right Radius		Seams
-		S1=None



Pattern: 945 Rectangular/Ductboard



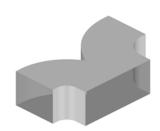
Dims	Options	Conn's
A=Btm Width	Throat Type=Radius	C1=None
B=Depth	Vee Depth Male=Auto	C2=None
C=Left Width	Vee Depth Female=Auto	C3=None
D=Right Width	Vee Notch Angle=30.000	
E=Right Radius	Hole Diameter=0.500	
F=Left Radius	Hole Spacing=2.000	
G=Btm Right Extension	Splitters=No	
H=Btm Left Extension	Inlet=1	
I=Right Extension	Outlet=2	
J=Left Extension		
K=Splitter Distance		Seams
•		S1=None



Damper:

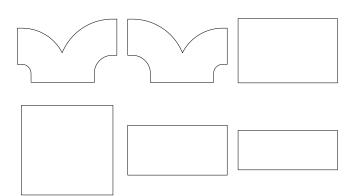
Damper:

Rectangular/Ductboard



Dims	Options	Conn's
A=Btm Width	Right Throat Type=Radius	C1=None
3=Depth	Left Throat Type=Radius	C2=None
C=Right Width	Right Heel Type=Radius	C3=None
D=Left Width	Left Heel Type=Radius	
=Height	2 Part Wrapper=No	
=Right Radius	Outlet=2	
G=Left Radius		
H=Right Angle		
=Left Angle		
=Btm Right Extension		
K=Btm Left Extension		Seams
=Right Extension		S1=None
M=Left Extension		S2=None
N=Top Extension		

Damper:



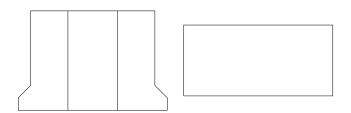
Pattern: 947
Rectangular/Ductboard



Dims	Options	Conn's
A=Top Width	Branch Parts=Auto	C1=None
B=Depth		C2=None
C=Height		
D=Btm Width		
E=Bottom Extension		

Seams

Damper:

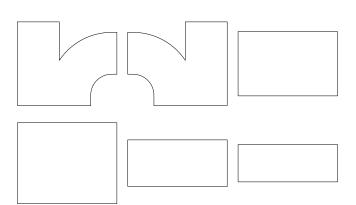


Rectangular/Ductboard

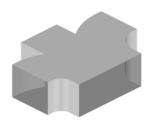


Dims	Options	Conn's
A=Btm Width	Right Throat Type=Radius	C1=None
B=Depth	Right Heel Type=Radius	C2=None
C=Top Width	2 Part Wrapper=No	C3=None
D=Right Width	Top Right=Straight	
E=Height	Outlet=2	
F=Right Height		
G=Right Radius		
H=Right Angle		
I=Bottom Extension		
J=Right Extension		
K=Top Extension		Seams
		S1=None
		S2=None

Damper:

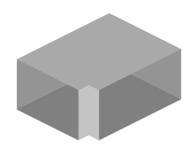


## Pattern: 951 Rectangular/Ductboard



	Dims	Options	Conn's
A=Bti	m Width	Right Throat Type=Radius	C1=None
B=De	pth	Left Throat Type=Radius	C2=None
C=To	p Width	Right Heel Type=Radius	C3=None
D=Rig	ght Width	Left Heel Type=Radius	C4=None
E=Lef	t Width	2 Part Wrapper=No	
F=He	ight	Top Right=Straight	
G=Ri	ght Height	Top Left=Straight	
H=Le	ft Height	Outlet=2	
I=Rig	ht Radius		
J=Lef	t Radius		
K=Rig	tht Angle		Seams
L=Lef	t Angle		S1=None
M=Bt	m Right Extension		S2=None
N=Bt	m Left Extension		
O=Ri	ght Extension		
P=Let	ft Extension		Damper:
Q=To	p Extension		24
7			
1			

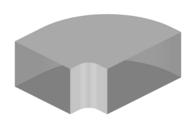
Rectangular/Ductboard

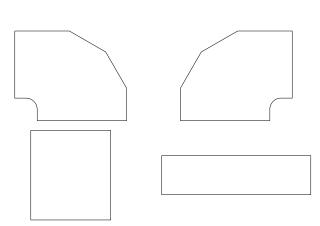


Dims	Options	Conn's
A=Top Width	Length Adjust For Part 4=0.000	C1=None
B=Depth	Length Adjust For Part 3=0.000	C2=None
C=Btm Width	Vee Depth Male=Auto	
D=Angle	Vee Depth Female=Auto	
E=Top Inner Extension	Vee Angle Male=30	
F=Bottom Extension	Vee Angle Female=30	
	3 Parts=No	
	Seam Number For Throat=	
	2 Part Wrapper=No	
	Leg Lengths=No	
	Allow Central Tie Rods=Yes	Seams
	Riser Bend=No	S1=None

Damper:

#### Pattern: 953 Rectangular/Ductboard





Dims	Options	Conn's
A=Top Width	Throat Type=Radius	C1=None
B=Depth	Length Adjust For Part 4=0.000	C2=None
C=Btm Width	Length Adjust For Part 3=0.000	
D=Angle	Vee Depth Male=Auto	
E=Top Inner Extension	Vee Depth Female=Auto	
F=Bottom Extension	Vee Angle Male=30	
G=Inner Radius	Vee Angle Female=30	
	Auto Oversize=Normal	
	Seam Number For Throat=	
	Leg Lengths=No	
	Allow Central Tie Rods=Yes	Seams
	Riser Bend=No	S1=None
	Mark Splitter Sides=No	
	Outer Mitre=300.000	

Damper:

Rectangular/Ductboard



Dims	Options	Conn's
A=Btm Width	3 Parts=No	C1=None
B=Depth	Vee Depth Male=Auto	C2=None
C=Left Width	Vee Depth Female=Auto	C3=None
D=Right Width	Vee Notch Angle=30.000	
E=Bottom Extension	Hole Diameter=0.500	
F=Right Extension	Hole Spacing=2.000	
G=Left Extension	Splitters=No	
H=Splitter Distance	Inlet=1	
	Outlet=2	

Seams

S1=None

Damper:

Pattern: 955 Rectangular/Ductboard



Dillis	Options	COIIII 3
A=Left Width	Split Mitre=No	C1=None
B=Depth		C2=None
C=Right Width		
D=Length		
E=Left Extension		
F=Right Extension		
G=Offset Width		
H=Angle		
I=Left Extension		
J=Right Extension		
K=Right Width		Seams
		S1=None

Damper: None None

Rectangular/Ductboard

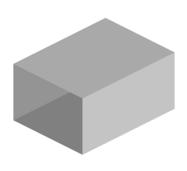


0	

Dims	Options	Conn's
A=Width	Collar Allowance=0.000	C1=None
B=Depth	Diameter Type=Nominal	C2=None
C=Length	Hole Adjust=0.000	
D=Hole Width #1	Position From=Centre	
E=Hole Depth #1	Use Vee Notch=No	
F=Hole Radius #1	Vee Notch Angle=0.000	
G=Hole Inset #1		
H=Hole Offset #1		
I=Hole Collar #1		
J=Hole Rotation #1		
		Seams
		S1=None
		S2=None

Damper: None

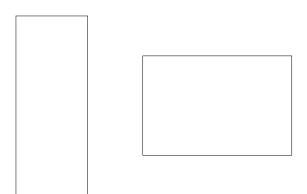
#### Pattern: 957 Rectangular/Ductboard



	Dims	Options	Conn's
A=Width C=Length	B=Depth	Type=1 Part Straight	C1=None

Seams

Damper:



courtesy of Applied Software 4/18/2016 91

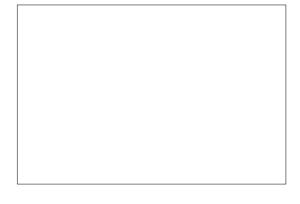
Rectangular/Ductboard

	Dims	Options	Conn's	
A=Width	B=Depth		C1=None	



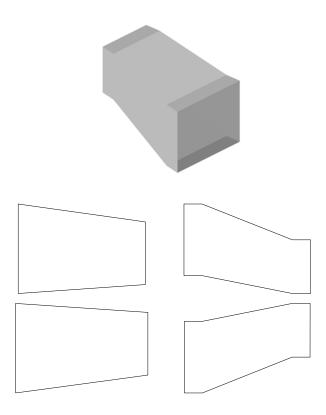
Seams

Damper:



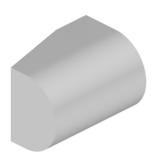
Pattern: 959

Rectangular



Options	Conn's
Vee Depth Male=Auto	C1=None
Vee Depth Female=Auto	C2=None
Vee Notch Angle=20.000	
Taper Notch If Straight Edge (Female)=No	
Female Allow=Shortest Slope	
Offset Width=Left In	
Offset Depth=Bottom Up	
Taper Notch If Straight Edge (Male)=No	
Input=Length	
Vee Notch Depth If Straight Edge (Female)	-
_	Seams
Splitter Turnover=0.000	S1=None
Splitter Extension=0.000	
!	
	Damper:
!	·
3	
Seam Cut Back=0.000	
	Vee Depth Male=Auto Vee Depth Female=Auto Vee Notch Angle=20.000 Taper Notch If Straight Edge (Female)=No Female Allow=Shortest Slope Offset Width=Left In Offset Depth=Bottom Up Taper Notch If Straight Edge (Male)=No Input=Length Vee Notch Depth If Straight Edge (Female) Maximum Angle=180.000 Splitter Turnover=0.000

Rectangular/Round

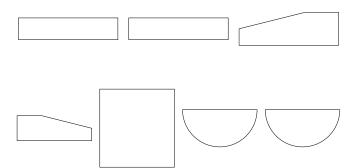


Dims	Options	Conn's
A=Diameter	Vee Depth Male=0.000	C1=None
B=Left Height	Vee Angle Male=30.000	
C=Right Height	Vee Depth Female=0.000	
D=Length	Vee Angle Female=30.000	
E=Right Length	Notch Out=No	
	Use Ends Seam 3=No	
	Split Radius=No	
	Close Middle=No	

#### Seams

S1=None S2=None S3=None

Damper:



#### Pattern: 963 Rectangular/Round

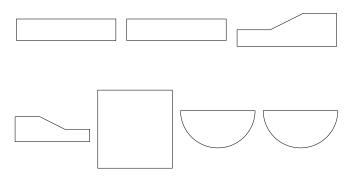


Dims	Options	Conn's
A=Diameter	Vee Depth Male=0.000	C1=None
B=Left Height	Vee Angle Male=30.000	
C=Right Height	Vee Depth Female=0.000	
D=Length	Vee Angle Female=30.000	
E=Left Length	Notch Out=No	
F=Right Length	Use Ends Seam 3=No	
	Split Radius=No	
	Close Middle=No	

5	e	a	Ï	n	į

S1=None S2=None S3=None

Damper:



courtesy of 4/18/2016 93

Rectangular/Round



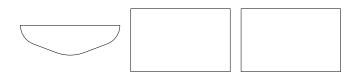
Dims	Options	Conn's
A=Width	Vee Depth Male=0.000	C1=None
B=Depth	Vee Angle Male=30.000	
C=Length	Vee Depth Female=0.000	
D=Left Radius	Vee Angle Female=30.000	
E=Top Radius	Notch Out=No	

Seams

S1=None S2=None

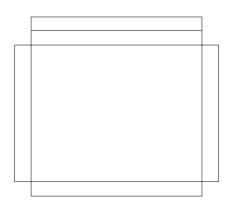
Damper:





Pattern: 966
Rectangular/Standard

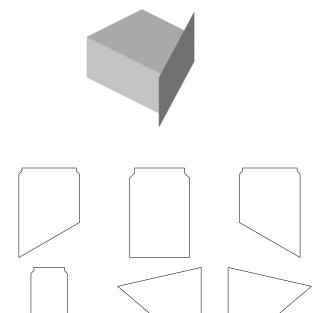




Dims	Options	Conn's
A=Width	Top Folds=2	C1=None
B=Depth	Bottom Folds=1	
C=Top Extension #1	Left Folds=1	
D=Top Fold Angle #1	Right Folds=1	
E=Top Extension #2	Attach=	
F=Top Fold Angle #2	Attacher Side=Top	
G=Bottom Extension #1	Attacher Extension=1	
H=Bottom Fold Angle #1	Mirror Left/Top=Auto	
I=Left Extension #1	Rotate Left/Top=Auto	
J=Left Fold Angle #1	Mirror Right/Bottom=Auto	
K=Right Extension #1	Rotate Right/Bottom=Auto	Seams
L=Right Fold Angle #1	Notch Corners=No	
M=Attach #1		
N=Attach #2		
O=Attach #3		
P=Top Inset		Damper:
Q=Bend Radius		

4/18/2016 courtesy of Applied 94

Rectangular

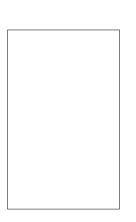


Diver	Outions	Connels
Dims	Options	Conn's
A=Width	Height=Up Slope	
B=Height	Notch=Vee Notch	
C=Depth	Input=Slope Angle	
D=Slope Angle		
E=Rise X On 12		
F=Up Slope Flange		
G=Down Slope Flange		
H=Left Flange		
I=Right Flange		
J=Cant Angle		
K=Cant Height		Seams
L=Cant Depth		S1=None
M=Top Flange Down		S2=None
N=Top Flange In		

Damper:

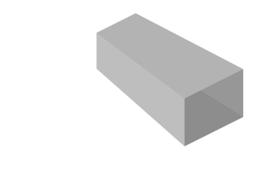
Pattern: 972
Rectangular/Standard

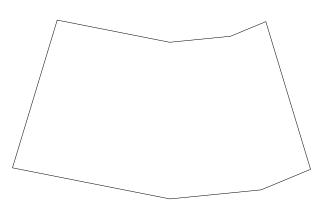




	Dims	Options	Conn's
A=Width	B=Depth	Straight Type=1 Part Straight	C1=None
C=Length		Female Allow=Shortest Side	C2=None
		1xU,1xI=Shortest Side	C3=None
		Connector Fold Notch=Use Default	C4=None
		Vee Notch Depth=Auto	C5=None
		Vee Notch Angle=30.000	C6=None
		Connector Fold Notch=Use Default	
		Vee Notch Depth=Auto	
		Vee Notch Angle=30.000	
		Beading=No	
		Vertical=No	Seams
		Adjust=0.000	S1=None
		Right Offset=6.000	
		Left Offset=6.000	
		Insulation UI=Shortest Side	
			Damper:

Rectangular





Dims	Ontions	Conn's
Dims A=Width In B=Depth In C=Width Out D=Depth Out E=Length F=Offset Width G=Offset Depth H=Angle I=Seam Inset	Type=Auto Offset Width=Left In Offset Depth=Bottom Up Vee Notch Depth=Auto Vee Notch Angle=30.000 Input=Length Maximum Angle=180.000 Splitters=Half Splitter Turnover=0.000 Splitter Extension=0.000 Splitter Adjust=0.000 Splitter Hole Diameter=0.000 Number Of Holes=0.000 Hole Inset=0.000 Fixing Holes on Turnover=No	Conn's C1=None C2=None Seams S1=None

## Pattern: 981

Rectangular



0	0	0	0	0	0	0	0	0	0
0	/							/	0
0	`						/	,	0
0									0
0									0
0									0
0									0
0									0
0		,					`		0
0	0	0	0	0	0	0	0	0	0

Dims	Options	Conn's
A=Width #1	Vee Notch Angle=5.000	C1=None
B=Depth #1	Specify Holes=By Number Of	C2=None
C=Width #2	Holes Across=10	
D=Depth #2	Holes Down=10	
E=Flange Length		
F=Flange Angle		
G=Hole Diameter		
H=Holes Inset		
I=Holes Offset		
		Seams

Damper:

Damper:

Rectangular/Equipment



Dims	Options	Conn's
A=Width	Type=Supply	C1=None
B=Depth	Position From=Edge	C2=None
C=Height	Lines=3	
D=Plate Border (Width)	Rotation=0.000	
E=Plate Border (Depth)	Arrows/Lines=None	
	Arrows/Lines Sides=0	
	Lines/Circles Spacing=1.000	
	Arrows Direction=Auto	
	Circles=No	
	Arrows Type=1	
		Seams

Damper:

### Pattern: 986

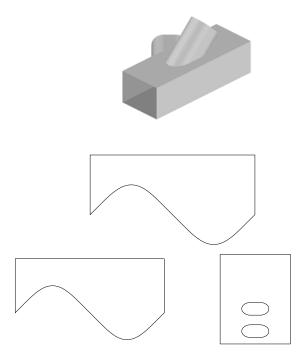
Rectangular



Dims	Options	Conn's
A=Width	Pipe Parts=Yes	C1=None
B=Depth	Branch Parts=Yes	C2=None
C=Length	Branch Diameter Type=Nominal	C3=None
D=Left Extension	Straight Type=1 Part Straight	
E=Right Extension	Female Allow=Shortest Side	
F=Branch Width	1xU,1xl=Shortest Side	
G=Branch Depth	Connector Fold Notch=Use Default	
H=Branch Length	Vee Notch Depth=Auto	
I=Angle	Vee Notch Angle=30.000	
J=Inset	Connector Fold Notch=Use Default	
K=Offset	Vee Notch Depth=Auto	Seams
L=Extension	Vee Notch Angle=30.000	S1=None
	Branch Rotation=0	S2=None
	Branch Allowance To Pipe=0.000	

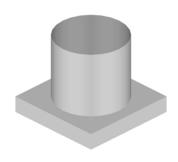
Damper: None

Rectangular



Dims	Options	Conn's
\=Width	Pipe Parts=Yes	C1=None
3=Depth	Branch Parts=Yes	C2=None
C=Length	Branch Diameter Type=Nominal	C3=None
D=Left Extension	Straight Type=1 Part Straight	C4=None
E=Right Extension	Female Allow=Shortest Side	
=Branch Width	1xU,1xl=Shortest Side	
G=Branch Depth	Connector Fold Notch=Use Default	
H=Branch Length	Vee Notch Depth=Auto	
=Angle	Vee Notch Angle=30.000	
=Inset	Connector Fold Notch=Use Default	
<=Offset	Vee Notch Depth=Auto	Seams
_=Extension	Vee Notch Angle=30.000	S1=None
M=Branch Width	Branch Rotation=0	S2=None
N=Branch Depth	Branch Rotation=90	S3=None
D=Branch Length	Branch Allowance To Pipe=0.000	
P=Angle		Damper: None
Q=Inset		None
R=Offset		NOTIC
S=Extension		

#### Pattern: 996 Rectangular/Round/Equipment



Dims	Options	Conn's
A=Width	Type=Supply	C1=None
B=Depth	Position From=Edge	C2=None
C=Height	Type=Round	C3=None
D=Diameter	Rotation=0.000	C4=None
E=Collar	Collar=No	C5=None
F=Plate Border (Width)	Arrows/Lines=None	C6=None
G=Plate Border (Depth)	Arrows/Lines Sides=0	C7=None
	Lines/Circles Spacing=1.000	C8=None
	Arrows Direction=Auto	
	Circles=No	
	Arrows Type=1	Seams
	Diffuser Type=None	
	Cost Supports=No	

Damper:

Rectangular/Round/Flat Oval/Standard/Equipment

Dims Options Conn's

Inlet=1
Outlet=1
Pipework=No
Show Boundaries=No
Faces=No

Seams

Damper:

Pattern: 1105
Rectangular/Standard

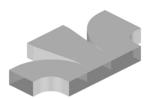
Dims Options Conn's

Show Elements=All

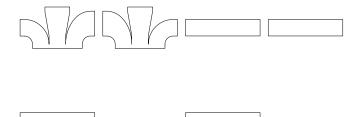
Seams

Damper:

Rectangular/Ductboard

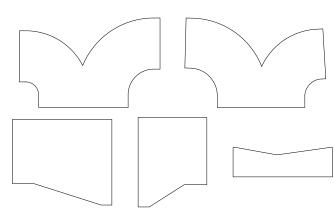


Dims	Options	Conn's
A=Btm Width	Left Throat=Radius	C1=None
B=Depth	Right Throat=Radius	C2=None
C=Left Bottom Width		C3=None
D=Right Bottom Width		C4=None
E=Left Width		
F=Top Width		
G=Right Width		
H=Top Length #1		
I=Top Length #2		
J=Bottom Extension		
K=Left Extension		Seams
L=Top Extension		S1=None
M=Right Extension		
N=Left Radius		
O=Top Radius		
P=Right Radius		Damper:



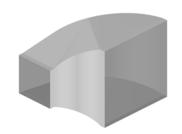
## Pattern: 1121 Rectangular/Ductboard





Dims	Options	Conn's
A=Btm Width	Right Throat Type=Radius	C1=None
B=Btm Depth	Left Throat Type=Radius	C2=None
C=Right Width	Vee Depth Male=Auto	C3=None
D=Right Depth	Vee Depth Female=Auto	
E=Left Width	Vee Angle Male=30	
F=Left Depth	Vee Angle Female=30	
G=Right Offset	Vee Notch Angle=20.000	
H=Left Offset	2 Part Wrapper=No	
I=Height	Right Folds=End Point	
J=Right Radius	Left Folds=End Point	
K=Left Radius	Inlet=1	Seams
L=Right Angle	Outlet=2	S1=None
M=Left Angle		S2=None
N=Btm Right Extension		
O=Btm Left Extension		
P=Right Extension		Damper:
Q=Left Extension		Damper.
J		

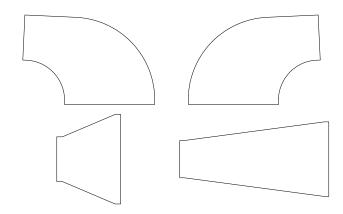
Rectangular/Ductboard



Dims	Options	Conn's
A=Btm Width	Throat Type=Radius	C1=None
B=Btm Depth	Vee Depth Male=Auto	C2=None
C=Top Width	Vee Depth Female=Auto	
D=Top Depth	Vee Angle Male=30	
E=Angle	Vee Angle Female=30	
F=Top Extension	Offset=Top Down	
G=Bottom Extension	Bending=Left	
H=Inner Radius	Allow Central Tie Rods=Yes	
I=Offset	Splitter Slit Angle=10.000	
	Intersect Splitter Holes=No	
	•	Seams

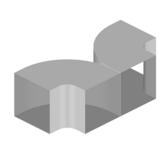
S1=None

Damper:



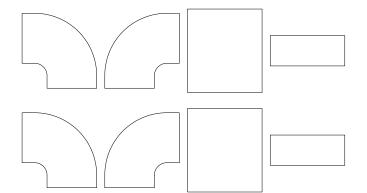
Pattern: 1124

Rectangular



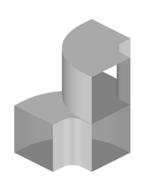
Dims	Options	Conn's
A=Btm Width	Same Widths=Yes	C1=None
B=Btm Depth	Left Rotation=Left	C2=None
C=Left Top Width	Right Rotation=Right	C3=None
D=Right Top Width	Left Throat Type=Radius	
E=Btm Left Extension	Right Throat Type=Radius	
F=Btm Right Extension	Inner Wrap Length Adjust=0.000	
G=Left Extension	Outer Wrap Length Adjust=0.000	
H=Left Inner Radius	Vee Depth Male=Auto	
I=Left Angle	Vee Depth Female=Auto	
J=Right Extension	Vee Angle Male=30	
K=Right Inner Radius	Vee Angle Female=30	Seams
L=Right Angle	Auto Oversize=Normal	S1=None
M=Gap Width	Seam Number For Throat=	S2=None
N=C2 Depth		
O=C3 Depth		

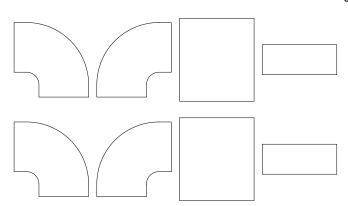
Damper:



courtesy of Applied Software 4/18/2016 101

Rectangular



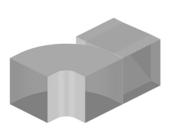


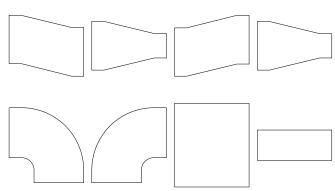
Dims	Options	Conn's
A=Btm Width	Same Depths=Yes	C1=None
B=Btm Depth	Back Rotation=Left	C2=None
C=Back Top Width	Front Rotation=Right	C3=None
•	· ·	C3-None
D=Front Top Width	Back Throat Type=Radius	
E=Btm Back Extension	Front Throat Type=Radius	
F=Btm Front Extension	Inner Wrap Length Adjust=0.000	
G=Back Extension	Outer Wrap Length Adjust=0.000	
H=Back Inner Radius	Vee Depth Male=Auto	
I=Back Angle	Vee Depth Female=Auto	
J=Front Extension	Vee Angle Male=30	
K=Front Inner Radius	Vee Angle Female=30	Seams
L=Front Angle	Auto Oversize=Normal	S1=None
M=Gap Depth	Seam Number For Throat=	S2=None
N=C2 Depth		
O=C3 Depth		

Damper:

Pattern: 1126

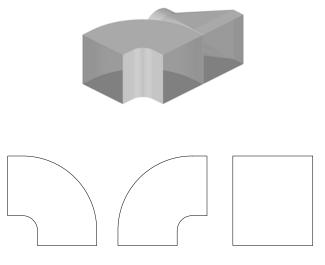
Rectangular





Dims	Opt	ions	Conn's
A=Btm Width	Same Widths=Yes	Vee Notch Angle=3	C1=None
B=Depth	= Bend Options ===	Vee Notch Depth If	C2=None
C=Bend Top Width	Bend Rotation=Left	Taper Notch If Strai	C3=None
D=Taper Width Out	Throat Type=Radius	Taper Notch If Strai	
E=Taper Depth Out	Inner Wrap Length	Use Taper Notch F	
F=Bottom Extension	Outer Wrap Length	Seam Cut Back=0.0	
G=Bend Extension	Vee Depth Male=A		
H=Bend Inner Radius	Vee Depth Female=		
I=Bend Angle	Vee Angle Male=30		
J=Taper Extension Out	Vee Angle Female=		
K=Taper Length	Auto Oversize=Nor		Seams
L=Taper Angle	Seam Number For		S1=None
M=Taper Offset Width	= Taper Options ==		S2=None
N=Taper Offset Depth	Input=Length		S3=None
O=Gap Width	2 Parts=No		
P=C2 Depth	3 Parts=No		Damper:
Q=C3 Depth	Vee Depth Male=A		Damper.
	Vee Depth Female=		
	Vee Notch Angle=20		
	Female Allow=Shor		
	2-Sided Part Allowa		
	Offset Width=Left In		
	Offset Depth=Botto		
	Connector Fold Not		
	Vee Notch Depth=		
	Vee Notch Angle=3		
I	Connector Fold Not		
	Vee Notch Depth=		

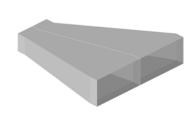
Rectangular

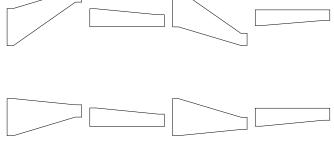


Dims	Options	Conn's
A=Btm Width	Same Widths=Yes	C1=None
B=Depth	= Bend Options === Bend Options =	C2=None
C=Bend Top Width	Bend Rotation=Left	C3=None
D=Square-To-Round Dia	Throat Type=Radius	
E=Bottom Extension	Inner Wrap Length Adjust=0.000	
F=Bend Extension	Outer Wrap Length Adjust=0.000	
G=Bend Inner Radius	Vee Depth Male=Auto	
H=Bend Angle	Vee Depth Female=Auto	
I=Square-To-Round Collar	Vee Angle Male=30	
J=Square-To-Round Length	Vee Angle Female=30	
K=Square-To-Round Slop	Auto Oversize=Normal	Seams
L=Square-To-Round Offse	Seam Number For Throat=	S1=None
M=Square-To-Round Offs	= Square To Round Options === Square To	S2=None
N=Gap Width	Cross Break=2	S3=None
O=C2 Depth	Length Break=1	S4=None
	Diameter Type=Nominal	Damper: None
	Seam Position=Width	24pc
	Marker Type=Notch	
	Input=Length	
	Offset Width=Left In	
	Offset Depth=Bottom Up	
	Inlet=1	
	Outlet=3	
	Fold Notch Depth=Full Allowance	
1	Use Join Seam=Yes	
J		

Pattern: 1128

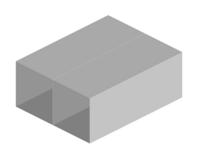
Rectangular





	Dims	Options	Conn s
	A=Btm Width	Same Widths=Yes	C1=None
	B=Btm Depth	Vertical Center=No	C2=None
	C=Top Width	Input=Length	
	D=Top Depth	2 Parts=No	
	E=Bottom Extension	3 Parts=No	
	F=Top Extension	Vee Depth Male=Auto	
	G=Length	Vee Depth Female=Auto	
	H=Taper Angle #1	Vee Notch Angle=20.000	
	I=Taper Angle #2	Female Allow=Shortest Slope	
	J=Taper Offset Width #1	2-Sided Part Allowance=Auto	
	K=Taper Offset Depth	Offset Width=Left In	Seams
	L=Gap Width	Offset Depth=Bottom Up	S1=None
		Connector Fold Notch=Use Default	S2=None
		Vee Notch Depth=Auto	S3=None
		Vee Notch Angle=30.000	
		Connector Fold Notch=Use Default	Damper:
		Vee Notch Depth=Auto	24po
		Vee Notch Angle=30.000	
		Vee Notch Depth If Straight Edge (Female)	
		Taper Notch If Straight Edge (Male)=No	
		Taper Notch If Straight Edge (Female)=No	
		Use Taper Notch For 2 Parts=Yes	
		Seam Cut Back=0.000	
		Width To Depth Ratio=Always Two Parts	
l			

Rectangular





Dims	Options	Conn's
A=Width	Same Widths=Yes	C1=None
B=Depth	Connector Fold Notch=Use Default	C2=None
C=Length	Vee Notch Depth=Auto	
D=Gap Width	Vee Notch Angle=30.000	
	Connector Fold Notch=Use Default	
	Vee Notch Depth=Auto	
	Vee Notch Angle=30.000	
	Oversize Check=Yes	
	Width To Depth Ratio=Always Two Parts	

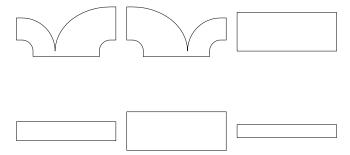
Seams S1=None S2=None S3=None

Damper:

Pattern: 1130
Rectangular/Ductboard



Dims	Options	Conn's
A=Btm Width	Left Throat=Radius	C1=None
B=Depth	Right Throat=Radius	C2=None
C=Left Bottom Width		C3=None
D=Left Width		C4=None
E=Right Width		
F=Bottom Extension		
G=Left Extension		
H=Right Extension		
I=Left Radius		
J=Right Radius		
		Seams S1=None



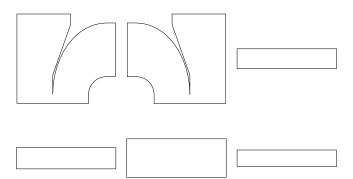
Damper:

Rectangular/Ductboard



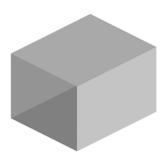
Dims	Options	Conn's
A=Btm Width	Right Throat=Radius	C1=None
B=Depth	mgne mode-nadias	C2=None
C=Right Bottom Width		C3=None
D=Top Width		C4=None
E=Right Width		C4-NOTE
o .		
F=Top Length #1		
G=Top Length #2		
H=Bottom Extension		
I=Top Extension		
J=Right Extension		
K=Top Radius		Seams
L=Right Radius		S1=None

Damper:



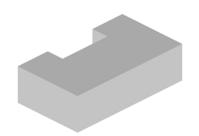
### Pattern: 1133

Rectangular



Dims	Options	Conn's
A=Width	Straight Type=1 Part Straight	C1=None
B=Depth	Female Allow=Shortest Side	C2=None
C=Length	1xU,1xI=Shortest Side	
D=Damper Thickness	Connector Fold Notch=Use Default	
E=Damper Clearance	Vee Notch Depth=Auto	
F=Damper Center Diameter	Vee Notch Angle=30.000	
G=Damper Angle	Connector Fold Notch=Use Default	
H=Damper Inset	Vee Notch Depth=Auto	
I=Handle Width	Vee Notch Angle=30.000	
J=Handle Depth	Oversize Check=Yes	
K=Handle Length	Beading=No	Seams
	Damper Type=Angled	S1=None
	Damper Direction=Vertical	
	Handle Type=Manual	
	Handle Side=Top	
		Damper:

Rectangular



Dims	Options	Conn's
A=Left Width	Wrap Parts=1	C1=None
B=Middle Width	Inner Wrap Length Adjust=0.000	C2=None
C=Right Width	Outer Wrap Length Adjust=0.000	
D=Depth	Vee Depth Male=Auto	
E=Height	Vee Depth Female=Auto	
F=Left Height	Vee Angle Male=30	
G=Right Height	Vee Angle Female=30	
- •	Combine Cheeks And Wrapper=No	

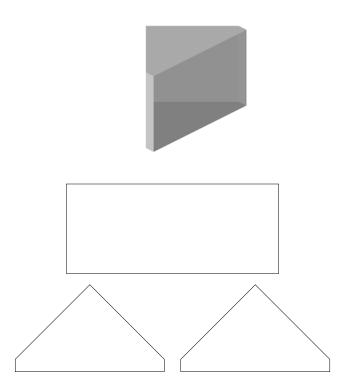
Damper:

S1=None S2=None S3=None

Seams

Pattern: 1136 Rectangular/Ductboard

Dims Options Conn's A=Width B=Depth Input=Angle C1=None C=Height D=Angle E=Extension F=Depth



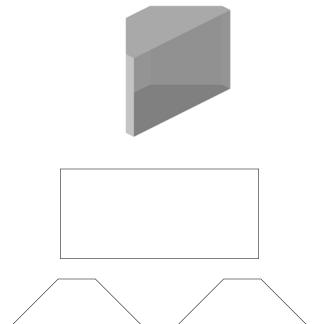
S2=None

Seams

Damper:

S1=None

Rectangular/Ductboard



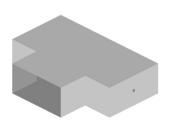
Dims	Options	Conn's
A=Btm Width	Input=Angle	C1=None
B=Depth		
C=Top Width		
D=Height		
E=Angle		
F=Extension		
G=Depth		

Seams S1=None S2=None

Damper:

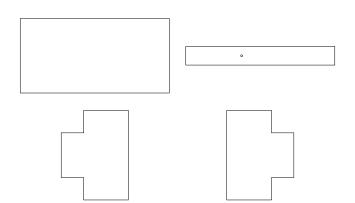
Pattern: 1139

Rectangular



Dims	Options	Conn's
A=Top Width	Vee Depth Male=Auto	C1=None
B=Depth	Vee Depth Female=Auto	C2=None
C=Left Width	Vee Angle Male=30	C3=None
D=Btm Width	Vee Angle Female=30	
E=Top Extension	· ·	
F=Left Extension		
G=Bottom Extension		
H=Hole Diameter		
I=Hole Inset		
J=Hole Offset		
		Seams
		S1=None
		S2=None

Damper:



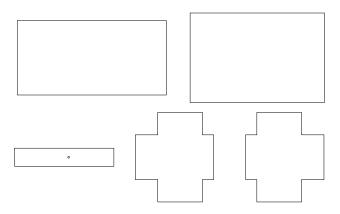
courtesy of Applied Software 4/18/2016 107

Rectangular

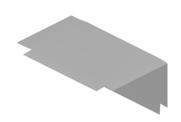


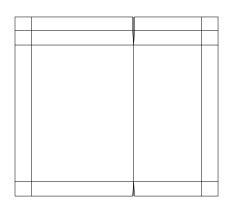
Dims	Options	Conn's
A=Top Width	Vee Depth Male=Auto	C1=None
B=Depth	Vee Depth Female=Auto	C2=None
C=Left Width	Vee Angle Male=30	C3=None
D=Right Width	Vee Angle Female=30	
E=Btm Width		
F=Top Extension		
G=Left Extension		
H=Right Extension		
I=Bottom Extension		
J=Hole Diameter		
K=Hole Inset		Seams
L=Hole Offset		S1=None
		S2=None

Damper:



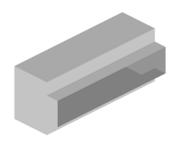
Pattern: 1143
Rectangular/Standard

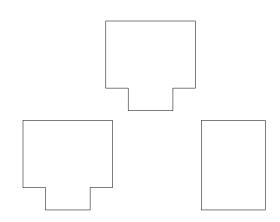




Dims	Options	Conn's
A=Left	Top Folds=2	C1=None
B=Depth	Bottom Folds=1	
C=Top Extension #1	Left Folds=1	
D=Top Fold Angle #1	Right Folds=1	
E=Top Extension #2	Attach=	
F=Top Fold Angle #2	Attacher Side=Left and Right	
G=Bottom Extension #1	Attacher Extension=Front	
H=Bottom Fold Angle #1		
I=Left Extension #1		
J=Left Fold Angle #1		
K=Right Extension #1		Seams
L=Right Fold Angle #1		
M=Attach #1		
N=Attach #2		
O=Attach #3		
P=Inset		Damper:
Q=Bend Radius		24
R=Right		
S=Angle		

Rectangular/Ductboard





Dims	Options	Conn's
A=Top Width	3 Part Wrap=No	C1=None
B=Btm Width	Connector Allowance=4 Sides	
C=Top Height		
D=Bottom Height		
E=Length		
F=Offset		

Seams S1=None S2=None

Damper:

### Pattern: 1146

Rectangular



Dims	Options	Conn's
A=Width In	Frame=Yes	C1=None
B=Depth	Vee Depth Male=0.400	C2=None
C=Width Out	Vee Angle Male=30.000	C3=None
D=Angle Out	Vee Depth Female=0.400	
E=Length #1	Vee Angle Female=30.000	
F=Length #2	Seam Angle=45.000	
G=Slope Angle		
H=Bottom Extension		
I=Extension Out		
J=Frame Width		
K=Frame Depth		Seams
L=Frame Radius		S1=None
M=Frame Mitre		

Damper:

courtesy of Applied Software 4/18/2016 109

Rectangular

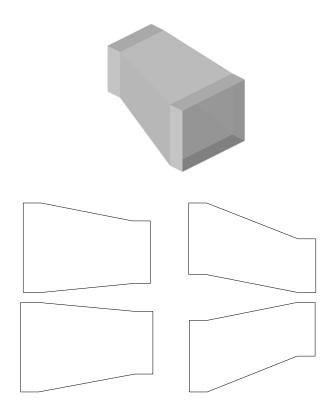


Dims	Options	Conn's
A=Width In	Frame=Yes	C1=None
B=Depth	Vee Depth Male=0.400	C2=None
C=Width Out	Vee Angle Male=30.000	C3=None
D=Angle Out	Vee Depth Female=0.400	
E=Length #1	Vee Angle Female=30.000	
F=Length #2	Seam Angle=45.000	
G=Slope Angle		
H=Bottom Extension		
I=Extension Out		
J=Frame Width		
K=Frame Depth		Seams
L=Frame Radius		S1=None
M=Frame Mitre		

Damper:

### Pattern: 1148

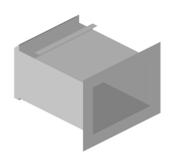
Rectangular



Dims	Opt	ions	Conn's
A=Width In	2 Parts=No	Fixing Holes on Tur	C1=None
B=Depth In	3 Parts=No	Seam Cut Back=0.0	C2=None
C=Width Out	Vee Depth Male=A		
D=Depth Out	Vee Depth Female=		
E=Length	Vee Notch Angle=2		
F=Extension In	Taper Notch If Strai		
G=Extension Out	Female Allow=Shor		
H=Offset Width	2-Sided Part Allowa		
I=Offset Depth	Offset Width=Left In		
J=Angle	Offset Depth=Botto		
K=Extension In	Taper Notch If Strai		Seams
L=Extension Out	Use Taper Notch F		S1=None
	Connector Fold Not		
	Vee Notch Depth=		
	Vee Notch Angle=3		
	Input=Length		Damper:
	Vee Notch Depth If		
	Maximum Angle=1		
	Splitter Turnover=0		
	Splitter Extension=		
	Splitter Adjust=0.000		
	Connector Fold Not		
	Vee Notch Depth=		
	Vee Notch Angle=3		
	Splitter Hole Diame		
	Number Of Holes=		
	Splitters=Half		
	Hole Inset=0.000		

courtesy of Applied Software 4/18/2016 110

Rectangular



Dims	Options	Conn's
A=Width	Vee Depth Male=0.400	C1=None
B=Depth	Vee Angle Male=30.000	C2=None
C=Height	Vee Depth Female=0.400	
D=Open Height	Vee Angle Female=30.000	
E=Flashing Width	Lid Dims=Actual	
F=Flashing Depth	Show Lid=On Top	
G=Edge Front		
H=Edge Down		
I=Lid Width		
J=Lid Top Depth		
K=Lid Bottom Depth		Seams
L=Lid Height		S1=None

Damper:

Conn's

C1=None

C2=None

C3=None

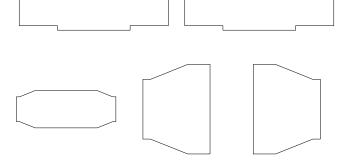
## Pattern: 1153 Rectangular/Ductboard



D=Left Depth	
E=Right Width Out	
F=Right Depth	
G=Left Height	
H=Right Height	
I=Left Straight	
J=Right Straight	
K=Left Length	Seams
L=Right Length	S1=None
M=Btm Left Extension	S2=None
N=Btm Right Extension	
O=Left Extension	
P=Right Extension	Damper:
Q=Left Offset Width	bumper.
R=Left Offset Depth	
S=Right Offset Width	
T=Right Offset Depth	

Options

2 Part Wrapper=No



4/18/2016 courtesy of software 111

Dims

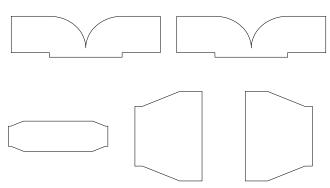
A=Btm Width

B=Btm Depth

C=Left Width Out

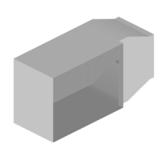
Rectangular/Ductboard



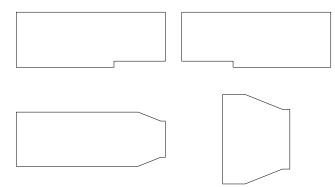


Dims	Options	Conn's
A=Btm Width	2 Part Wrapper=No	C1=None
B=Btm Depth		C2=None
C=Left Width In		C3=None
D=Left Width Out		
E=Left Depth		
F=Right Width In		
G=Right Width Out		
H=Right Depth		
I=Left Height		
J=Mid Height		
K=Right Height		Seams
L=Left Straight		S1=None
M=Right Straight		S2=None
N=Left Length		
O=Right Length		
P=Btm Left Extension		Damper:
Q=Btm Right Extension		Bumper.
R=Left Extension		
S=Right Extension		
T=Left Offset Width		
U=Left Offset Depth		
V=Right Offset Width		
W=Right Offset Depth		
X=Left Angle		
Y=Right Angle		

# Pattern: 1155 Rectangular/Ductboard



Dims	Options	Conn's
A=Btm Width	Heel=Square	C1=None
B=Btm Depth	2 Part Wrapper=No	C2=None
C=Right Width Out		C3=None
D=Right Depth		
E=Right Height		
F=Right Straight		
G=Right Length		
H=Btm Left Extension		
I=Btm Right Extension		
J=Right Extension		
K=Right Offset Width		Seams
L=Right Offset Depth		S1=None
		S2=None



4/18/2016 courtesy of Applied software 112

Damper:

Rectangular

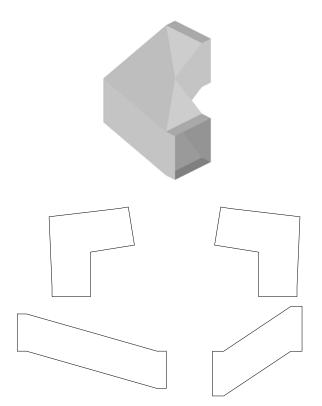
Di	ims	Options	Conn's
A=Width	B=Height	Lines Input=Spacing	C1=None
C=X Spacing	D=Y Spacing	X Visible (0.0 to 1.0)=0.250	
		Y Visible (0.0 to 1.0)=0.250	
		Internal Lines=No	

Seams

Damper:

Pattern: 1166

Rectangular



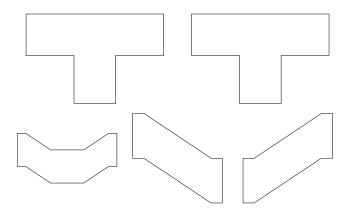
Dims	Options	Conn's
A=Btm Width	Type=Normal	C1=None
B=Btm Depth	Angled Ends=No	C2=None
C=Right Width	Wrap Parts=1	
D=Right Depth	Vee Depth Male=Auto	
E=Bottom Length	Vee Depth Female=Auto	
F=Right Length	Vee Angle Male=30	
G=Bottom Extension	Vee Angle Female=30	
H=Right Extension	Rotation=None	
I=Bottom Offset	Direction=C1 In C2 Out	
J=Right Offset		
		Seams
		S1=None

Damper:

Rectangular

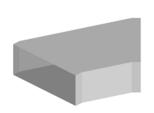


Dims	Options	Conn's
A=Btm Width	Type=Normal	C1=None
B=Btm Depth	Sides Same=Yes	C2=None
C=Left Width	Angled Ends=No	C3=None
D=Left Depth	Wrap Parts=1	
E=Right Width	Vee Depth Male=Auto	
F=Right Depth	Vee Depth Female=Auto	
G=Bottom Length	Vee Angle Male=30	
H=Right Length	Vee Angle Female=30	
=Bottom Extension	Cheeks 2 Parts=No	
I=Right Extension		
K=Bottom Offset		Seams
L=Right Offset		S1=None
M=Right Mid Angle		

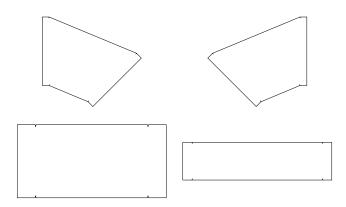


Pattern: 1171

Rectangular



Dims	Options	Conn's
A=Left Width	Input=Angle And Inner & Right Lengths	C1=None
B=Depth	Type=Straight	C2=None
C=Right Width	Vee Depth Male=0.400	
D=Inner Length	Vee Angle Male=30.000	
E=Outer Length	Vee Depth Female=0.400	
F=Left Length	Vee Angle Female=30.000	
G=Right Length		
H=Left Extension		
I=Right Extension		
J=Total Angle		
		Seams
		S1=None

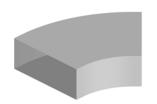


Damper:

Damper:

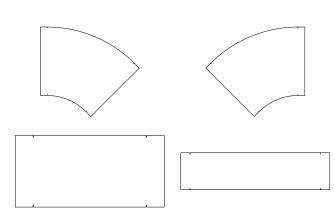
courtesy of Applied Software 4/18/2016 114

Rectangular

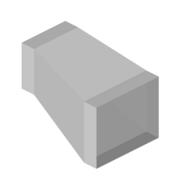


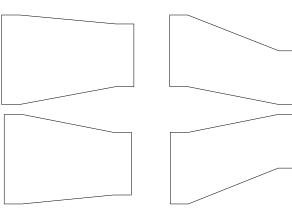
Dims	Options	Conn's
A=Left Width	Input=Angle And Inner & Right Lengths	C1=None
B=Depth	Type=Radius	C2=None
C=Right Width	Vee Depth Male=0.400	
D=Inner Length	Vee Angle Male=30.000	
E=Outer Length	Vee Depth Female=0.400	
F=Left Length	Vee Angle Female=30.000	
G=Right Length		
H=Left Extension		
I=Right Extension		
J=Total Angle		
		Seams
		S1=None

Damper:



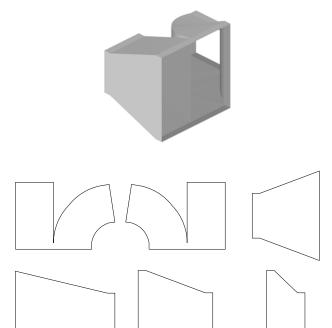
Pattern: 1178
Rectangular/Ductboard





Dims	Options	Conn's
A=Width In	2 Parts=No	C1=None
B=Depth In	3 Parts=No	C2=None
C=Width Out	Vee Depth Male=Auto	
D=Depth Out	Vee Depth Female=Auto	
E=Length	Vee Notch Angle=20.000	
F=Extension In	Taper Notch If Straight Edge (Female)=No	
G=Extension Out	Female Allow=Shortest Slope	
H=Offset Width	2-Sided Part Allowance=Auto	
I=Offset Depth	Offset Width=Left In	
J=Angle	Offset Depth=Bottom Up	
K=Extension In	Taper Notch If Straight Edge (Male)=No	Seams
L=Extension Out	Use Taper Notch For 2 Parts=Yes	S1=None
	Connector Fold Notch=Use Default	
	Vee Notch Depth=Auto	
	Vee Notch Angle=30.000	
	Input=Length	Damper:
	Vee Notch Depth If Straight Edge (Female)	
	Maximum Angle=180.000	
	Splitter Turnover=0.000	
	Splitter Extension=0.000	
	Splitter Adjust=0.000	
	Connector Fold Notch=Use Default	
	Vee Notch Depth=Auto	
	Vee Notch Angle=30.000	
	Splitter Hole Diameter=0.000	
	Number Of Holes=0.000	
	Splitters=Half	
	Hole Inset=0.000	

Rectangular



Dims	Options	Conn's
A=Btm Width	Same Widths=Yes	C1=None
B=Btm Depth	Right Throat=Radius	C2=None
C=Btm Left Width	Vee Depth Male=Auto	C3=None
D=Btm Right Width	Vee Depth Female=Auto	
E=Right Width	Vee Angle Male=30	
F=Right Depth	Vee Angle Female=30	
G=Top Width	Seam Top Arcs=No	
H=Top Depth	Cheeks Seam=Male	
=Top Length #1	Junction Seam Cutback (Up)=0.000	
I=Top Length #2		
K=Bottom Extension		Seams
L=Right Extension		S1=None
M=Top Extension		S2=None
N=Right Offset		
O=Top Offset		
P=Right Radius		Damper:
Q=Top Radius		Damper.

Pattern: 1180

Rectangular



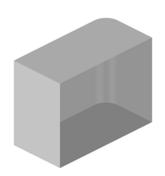
Dims	Options	Conn's
A=Width	Input=Number Of Lines	C1=None
B=Height	Lines=10.000	
C=Inner Radius		
D=Angle		
E=Flange		

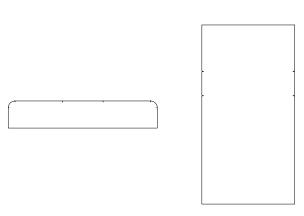
Seams

Damper:

courtesy of Applied Software 4/18/2016 116

Rectangular





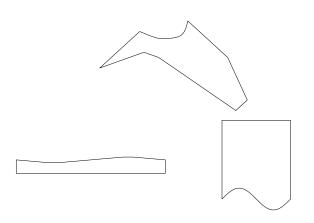
	Dims	Options	Conn's
A=Width C=Height	B=Depth D=Radius	Develop Parts=2 Vee Depth Male=0.400 Vee Depth Female=0.400 Vee Angle Male=30 Vee Angle Female=30	C1=None

Seams S1=None S2=None

Damper:

Pattern: 1190 Rectangular/Round





Dims	Options	Conn's
A=Width	Diameter Type=Nominal	C1=None
B=Depth	Round Parts=1	C2=None
C=Diameter	Rect Parts=1	
D=Btm Left Ext	Body Cross Break=1	
E=Btm Right Ext	Body Length Break=1	
F=Top Upper Extension	Seam Position=Width	
G=Top Lower Extension	Marker Type=Notch	
H=Inner Length #1	Inlet=1	
I=Inner Length #2	Outlet=2	
J=Offset Depth		
K=Angle		Seams
		S1=None
		S2=None

Damper:

Rectangular/Standard/Equipment



Options	Conn's
Symmetrical=Yes	C1=None
	C2=None

Seams

Damper:

Pattern: 1193 Rectangular/Ductboard



D	ims	Options	Conn's
A=Length	B=Width #1		C1=None
C=Depth #1	D=Width #2		C2=None
E=Depth #2	F=Width #3		
G=Depth #3	H=Width #4		
I=Depth #4	J=Width #5		
K=Depth #5			
·			

Seams S1=None

Damper:

courtesy of Applied Software 4/18/2016 118

Rectangular/Standard/Equipment



Dims	Options	Conn's
A=Width	Detail=Low	C1=None
B=Height		C2=None
C=Length		
D=Mid Width		
E=Mid Inset		
F=Mid Offset		
G=End Width		
H=End Height		
I=Thickness		
J=Radius		
K=Curve (0.0-1.0)		Seams

Damper:

Pattern: 1196

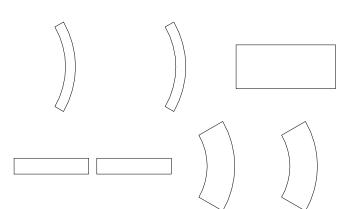
Rectangular



Dims	Options	Conn's
A=Top Width	Type=A	C1=None
B=Top Height	Draw Connectors=Yes	C2=None
C=Bottom Width	Notch Corners=Yes	C3=None
D=Bottom Height	Develop Ends=No	
E=Radius		
F=Angle		

Seams S1=None S2=None

Damper:

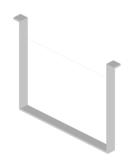


Rectangular/Standard/Equipment



Dims	Options	Conn's
A=Width	Profile=Rectangular	C1=None
B=Depth	Pipework=No	C2=None
C=Bearer Extn	Drop Rod Diameter=0.400	C3=None
D=Left Angle	Bearer Width=2.000	33 113113
E=Right Angle	Bearer Thickness=0.400	
F=Right Rod Extn Above	Oversized Item=No	
G=Left Rod Extn Above	Area of Influence=0.000	
H=Rod Extn Below	A of I: Filled Circle=No	
I=Length A	A of I: Circle Thickness=0.100	
J=Length B	Export=All	
K=Supported Width	Export Rod Size=Yes	Seams
L=Supported Depth	Front Seismic Rod=No	
M=Right Rod Offset	Back Seismic Rod=No	
N=Left Rod Offset	Left Seismic Rod=No	
	Right Seismic Rod=No	
	Front Seismic Rod=No	Damper:
	Back Seismic Rod=No	Damper.
	Left Seismic Rod=No	
	Right Seismic Rod=No	
	Use Support Settings=Yes	
	Point Load A=0.000	
	Point Load B=0.000	

Pattern: 1241 Rectangular/Standard/Equipment



Dims	Options	Conn's
A=Width	Profile=Rectangular	C1=None
B=Depth	Bearer Width=2.000	C2=None
C=Top Length	Bearer Thickness=0.400	C3=None
D=Bearer Extn	Area of Influence=0.000	
E=Length A	A of I: Filled Circle=No	
F=Length B	A of I: Circle Thickness=0.100	
G=Supported Width	Export=All	
H=Supported Depth	Export Rod Size=Yes	
	Use Support Settings=Yes	
	Point Load A=0.000	
	Point Load B=0.000	Seams

Damper:

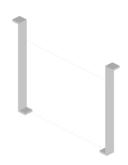
Rectangular/Standard/Equipment



Dims	Options	Conn's
A=Width	Profile=Rectangular	C1=None
B=Depth	Number Of Round Sections=Auto	C2=None
C=Bearer Extn	Drop Rod Diameter=0.400	C3=None
D=Right Rod Extn Above	Bearer Thickness=0.000	
E=Left Rod Extn Above	Hex End=Yes	
F=Rod Extn Below	Roller Rod Diameter=0.600	
G=Length A	Area of Influence=0.000	
H=Length B	A of I: Filled Circle=No	
I=Supported Width	A of I: Circle Thickness=0.100	
J=Supported Depth	Export=All	
	Export Rod Size=Yes	Seams
	Use Support Settings=Yes	
	Point Load A=0.000	
	Point Load B=0.000	

Damper:

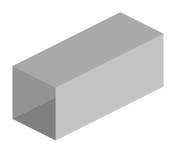
Pattern: 1250 Rectangular/Standard/Equipment

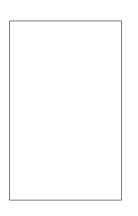


Dims	Options	Conn's
A=Width	Profile=Rectangular	C1=None
B=Depth	Bearer Width=2.000	C2=None
C=Top Length	Bearer Thickness=0.400	C3=None
D=Bearer Extn	Area of Influence=0.000	
E=Bottom Extension	A of I: Filled Circle=No	
F=Length A	A of I: Circle Thickness=0.100	
G=Length B	Straps=Both	
H=Supported Width	Export=All	
I=Supported Depth	Export Rod Size=Yes	
	Use Support Settings=Yes	
	Point Load A=0.000	Seams
	Point Load B=0.000	

Damper:

Rectangular/Standard





	Dims	Options	Conn's
A=Width	B=Depth	Straight Type=1 Part Straight	C1=None
C=Length		Female Allow=Shortest Side	C2=None
		1xU,1xI=Shortest Side	C3=None
		Connector Fold Notch=Use Default	C4=None
		Vee Notch Depth=Auto	C5=None
		Vee Notch Angle=30.000	C6=None
		Connector Fold Notch=Use Default	
		Vee Notch Depth=Auto	
		Vee Notch Angle=30.000	
		Beading=No	
		Vertical=No	Seams
		Adjust=0.000	S1=None
		Right Offset=6.000	
		Left Offset=6.000	
		Insulation UI=Shortest Side	
			Damper:

#### Pattern: 4522 Rectangular/Equipment



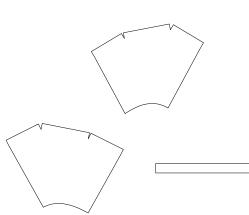
Dims	Options	Conn's
A=Width	Sex Type=Male	C1=None
B=Depth	Type=Auto	C2=None
C=Length	Open Top/Sides=No	
D=Extension	Pattern=None	
E=Right Extension		
F=Wire X Spacing		
G=Wire Y Spacing		

Seams

Damper:

#### Pattern: 8 Rectangular/Round





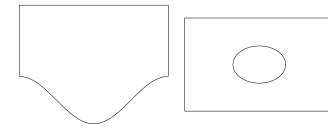
Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Length Break=1	C2=None
C=Diameter	Diameter Type=Nominal	
D=Length	Seam Position=Width	
E=Offset Width	Marker Type=Notch	
F=Offset Depth	Input=Length	
G=Extension	Offset Width=Left In	
H=Collar	Offset Depth=Bottom Up	
I=Corner Radius	Inlet=1	
J=Slope Angle	Outlet=2	
	Maximum Angle=180.000	Seams
	Fold Notch Depth=Full Allowance	S1=None
	Hide Internal Lines=No	
	Show Center Line=No	
	V Notch Rectangular Extension=No	
	Seam Cut Back=None	Damper: None
	Cut Back Allowance (%)=50.000	Damper Hone
	2 Parts 90 Degrees Seam=No	

#### Pattern: 16 Round/Fabrication

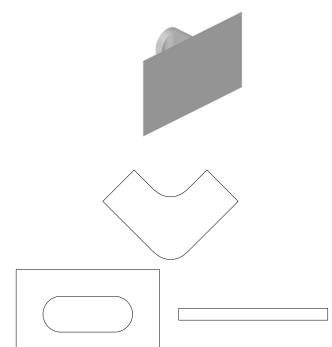


DIIIIS	Options	COIIII S
A=Branch Diameter	Branch Parts=1	C1=None
B=Length	Plate Parts=1	C2=None
C=Angle	Seam Position=0.000	
D=Plate Width	Hole Adjust=0.000	
E=Plate Depth	Diameter Type=Nominal	
F=Offset Width	Turnover=0.000	
G=Offset Depth	Item Pattern Length/Angle=Length	
H=Extension	Use Marker Notch (OM End)=Yes	
I=Bottom Width	Notch Hole Ends=No	
	Dynamic Hole Adjust=Auto	
		Seams
		S1=None
		S2=None

Damper: None



Round

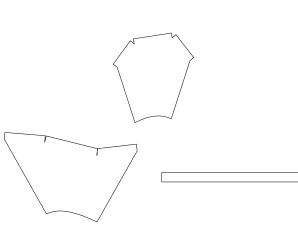


Dims	Options	Conn's
N=Branch Diameter	Branch Parts=1	C1=None
3=Length	Plate Parts=1	C2=None
E=Angle	Seam Position=0.000	
=Plate Width	Hole Adjust=0.000	
=Plate Depth	Diameter Type=Nominal	
=Offset Width	Turnover=0.000	
G=Offset Depth	Item Pattern Length/Angle=Length	
l=Collar	Use Marker Notch (OM End)=Yes	
=Bottom Width	Hide Internal Lines=No	
	Notch Hole Ends=No	
	Dynamic Hole Adjust=Auto	Seams
		S1=None
		S2=None

Damper: None

#### Pattern: 28 Rectangular/Round

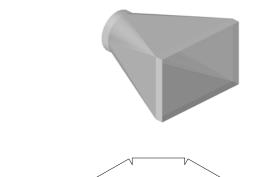




Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Length Break=1	C2=None
C=Diameter	Diameter Type=Nominal	
D=Length	Seam Position=Width	
E=Rectangular Angle	Marker Type=Notch	
F=Offset Width	Offset Width=Left In	
G=Offset Depth	Offset Depth=Bottom Up	
H=Extension	Inlet=1	
I=Collar	Outlet=2	
J=Round Angle	Fold Notch Depth=Full Allowance	
K=Corner Radius	V Notch Rectangular Extension=No	Seams
	Seam Cut Back=None	S1=None
	Cut Back Allowance (%)=50.000	
	2 Parts 90 Degrees Seam=No	

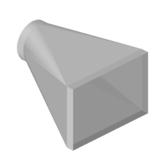
Damper: None

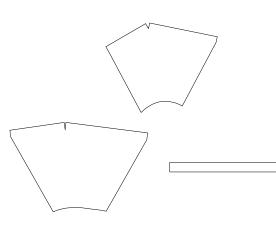
Rectangular/Round



Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Length Break=1	C2=None
C=Diameter	Diameter Type=Nominal	
D=Length	Seam Position=Width	
E=Extension	Marker Type=Notch	
F=Collar	Input=Length	
G=Corner Radius	Offset Width=Left In	
H=Slope Angle	Offset Depth=Bottom Up	
	Inlet=1	
	Outlet=2	
	Maximum Angle=180.000	Seams
	Fold Notch Depth=Full Allowance	S1=None
	V Notch Rectangular Extension=No	
	Seam Cut Back=None	
	Cut Back Allowance (%)=50.000	
	2 Parts 90 Degrees Seam=No	Dampor: Nono
	ŭ	Damper: None

# Pattern: 34 Rectangular/Round/Fabrication



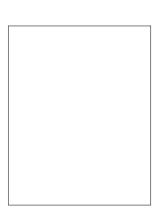


Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Length Break=1	C2=None
C=Diameter	Diameter Type=Nominal	
D=Length	Seam Position=Corner	
E=Offset Width	Marker Type=Notch	
F=Offset Depth	Input=Length	
G=Extension	Offset Width=Left In	
H=Collar	Offset Depth=Bottom Up	
I=Corner Radius	Inlet=1	
J=Slope Angle	Outlet=2	
	Maximum Angle=180.000	Seams
	Fold Notch Depth=Full Allowance	S1=None
	V Notch Rectangular Extension=No	
	Seam Cut Back=None	
	Cut Back Allowance (%)=50.000	
	2 Parts 90 Degrees Seam=No	Damper: None

4/18/2016 courtesy of software 3

Round

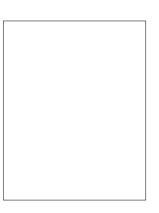




Dims	Options	Conn's
A=Diameter	Seam Position=0.000	C1=None
B=Length	Diameter Type=Nominal	C2=None
C=Left Extension	Duct Length=(inch)	
D=Right Extension	Area Adjust (%)=0.000	
	Allow Multiple Straights=Yes	
	STD Straight=No	
	Pipe Parts=1	
	First Break=0.000	
	Second Break=0.000	
	Third Break=0.000	
		Seams
		S1=None
	Third Break=0.000	

Pattern: 41
Round/Fabrication





Dims	Options	Conn's
A=Diameter	Seam Position=0.000	C1=None
B=Length	Diameter Type=Nominal	C2=None
C=Left Extension	Pipe Parts=1	
D=Right Extension	First Break=0.000	
	Second Break=0.000	
	Third Break=0.000	

Seams S1=None

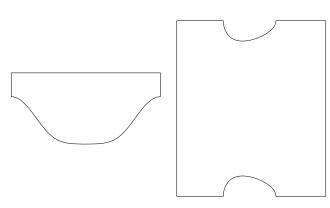
Damper: None None

Damper: None None

4/18/2016 courtesy of software 4

Round



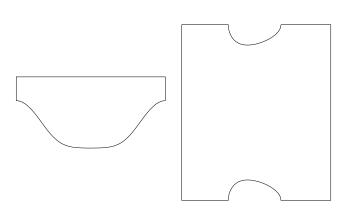


Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	First Break=0.000	C3=None
D=Right Extension	Second Break=0.000	
E=Branch Diameter #1	Third Break=0.000	
F=Branch Length #1	Pipe Diameter Type=Nominal	
G=Angle #1	Branch Diameter Type=Nominal	
H=Inset #1	Hole Adjust=0.000	
I=Extension #1	Branch Allowance To Pipe=0.000	
	Branch Seam Position=0.000	
	Throat Cut Back (Degrees)=0.000	Seams
	Plate Border (Circumference)=0.000	S1=None
	Plate Type=Rectangular	S2=None
	Cut Back Allowance (%)=0.000	
	Use Pipe Seam For Branches=No	
	Plate Border (Length)=Auto	Damper: None
	Inlet=1	None
	Outlet=2	None
	End Castle Width =0.000	None
	End Castle Angle=30.000	
	Branches=Fabricated	

Pattern: 43

Round

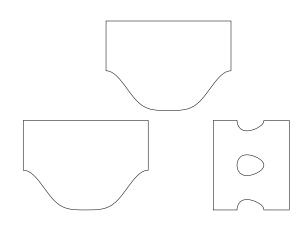




Options	Conn's
Pipe Parts=1	C1=None
Branch Parts=1	C2=None
First Break=0.000	C3=None
Second Break=0.000	
Third Break=0.000	
Pipe Diameter Type=Nominal	
Branch Diameter Type=Nominal	
Hole Adjust=0.000	
Branch Allowance To Pipe=0.000	
Branch Seam Position=0.000	
Throat Cut Back (Degrees)=0.000	Seams
Plate Border (Circumference)=0.000	S1=None
Plate Type=Rectangular	S2=None
Cut Back Allowance (%)=0.000	
Use Pipe Seam For Branches=No	
Plate Border (Length)=Auto	Damper: None
End Castle Width =0.000	None
End Castle Angle=30.000	None
	Branch Parts=1 First Break=0.000 Second Break=0.000 Third Break=0.000 Pipe Diameter Type=Nominal Branch Diameter Type=Nominal Hole Adjust=0.000 Branch Allowance To Pipe=0.000 Branch Seam Position=0.000 Throat Cut Back (Degrees)=0.000 Plate Border (Circumference)=0.000 Plate Type=Rectangular Cut Back Allowance (%)=0.000 Use Pipe Seam For Branches=No Plate Border (Length)=Auto End Castle Width =0.000

Round



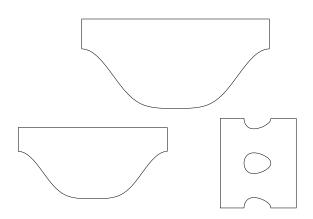


Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Length C=Left Extension D=Right Extension E=Branch Diameter #1 F=Branch Length #1 G=Angle #1 H=Inset #1 I=Extension #1	Branch Parts=1 First Break=0.000 Second Break=0.000 Third Break=0.000 Pipe Diameter Type=Nominal Branch Diameter Type=Nominal Branch Diameter Type=Nominal Hole Adjust=0.000	C2=None C3=None C4=None
J=Branch Diameter #2 K=Branch Length #2 L=Angle #2 M=Inset #2 N=Extension #2	Branch Allowance To Pipe=0.000 Branch Seam Position=0.000 Throat Cut Back (Degrees)=0.000 Plate Border (Circumference)=0.000 Plate Type=Rectangular Cut Back Allowance (%)=0.000	Seams S1=None S2=None S3=None
	Use Pipe Seam For Branches=No Plate Border (Length)=Auto End Castle Width =0.000 End Castle Angle=30.000 Branches=Fabricated	Damper: None None None None

# Pattern: 45

Round

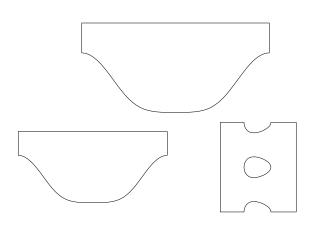




A=Pipe Diameter	Pipe Parts=1	··
		C1=None
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	First Break=0.000	C3=None
D=Right Extension	Second Break=0.000	C4=None
E=Branch Diameter #1	Third Break=0.000	
F=Branch Length #1	Pipe Diameter Type=Nominal	
G=Angle #1	Branch Diameter Type=Nominal	
H=Inset #1	Branch Diameter Type=Nominal	
I=Offset #1	Hole Adjust=0.000	
J=Extension #1	Branch Allowance To Pipe=0.000	
K=Branch Diameter #2	Branch Seam Position=0.000	Seams
L=Branch Length #2	Throat Cut Back (Degrees)=0.000	S1=None
M=Angle #2	Plate Border (Circumference)=0.000	S2=None
N=Inset #2	Plate Type=Rectangular	S3=None
O=Offset #2	Cut Back Allowance (%)=0.000	
P=Extension #2	Use Pipe Seam For Branches=No	Damper: None
	Plate Border (Length)=Auto	None
	End Castle Width =0.000	None
	End Castle Angle=30.000	None

Round

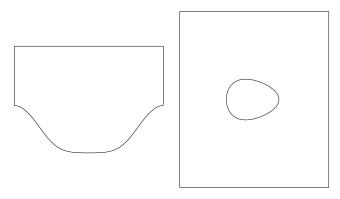




Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	First Break=0.000	C3=None
D=Right Extension	Second Break=0.000	C4=None
E=Branch Diameter #1	Third Break=0.000	
F=Branch Length #1	Pipe Diameter Type=Nominal	
G=Angle #1	Branch Diameter Type=Nominal	
H=Inset #1	Branch Diameter Type=Nominal	
I=Offset #1	Hole Adjust=0.000	
J=Extension #1	Branch Allowance To Pipe=0.000	
K=Branch Diameter #2	Branch Seam Position=0.000	Seams
L=Branch Length #2	Throat Cut Back (Degrees)=0.000	S1=None
M=Angle #2	Plate Border (Circumference)=0.000	S2=None
N=Inset #2	Plate Type=Rectangular	S3=None
O=Offset #2	Cut Back Allowance (%)=0.000	
P=Rotation #2	Use Pipe Seam For Branches=No	Damper: None
Q=Extension #2	Plate Border (Length)=Auto	None
	End Castle Width =0.000	None
	End Castle Angle=30.000	None

#### Pattern: 47 Round

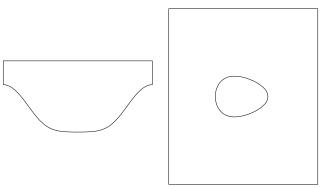




Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	First Break=0.000	C3=None
D=Right Extension	Second Break=0.000	
E=Branch Diameter #1	Third Break=0.000	
F=Branch Length #1	Pipe Diameter Type=Nominal	
G=Angle #1	Branch Diameter Type=Nominal	
H=Inset #1	Hole Adjust=0.000	
I=Extension #1	Branch Allowance To Pipe=0.000	
	Branch Seam Position=0.000	
	Throat Cut Back (Degrees)=0.000	Seams
	Plate Border (Circumference)=0.000	S1=None
	Plate Type=Rectangular	S2=None
	Cut Back Allowance (%)=0.000	
	Use Pipe Seam For Branches=No	
	Plate Border (Length)=Auto	Damper: None
	Inlet=1	None
	Outlet=2	None
	End Castle Width =0.000	None
	End Castle Angle=30.000	
	Branches=Fabricated	

Round

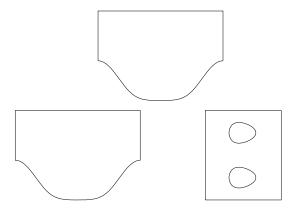




Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	First Break=0.000	C3=None
D=Right Extension	Second Break=0.000	
E=Branch Diameter #1	Third Break=0.000	
F=Branch Length #1	Pipe Diameter Type=Nominal	
G=Angle #1	Branch Diameter Type=Nominal	
H=Inset #1	Hole Adjust=0.000	
I=Offset #1	Branch Allowance To Pipe=0.000	
J=Extension #1	Branch Seam Position=0.000	
	Throat Cut Back (Degrees)=0.000	Seams
	Plate Border (Circumference)=0.000	S1=None
	Plate Type=Rectangular	S2=None
	Cut Back Allowance (%)=0.000	
	Use Pipe Seam For Branches=No	
	Plate Border (Length)=Auto	Damper: None
	End Castle Width =0.000	None
	End Castle Angle=30.000	None

#### Pattern: 49 Round



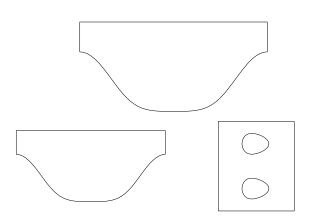


Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	First Break=0.000	C3=None
D=Right Extension	Second Break=0.000	C4=None
E=Branch Diameter #1	Third Break=0.000	
F=Branch Length #1	Pipe Diameter Type=Nominal	
G=Angle #1	Branch Diameter Type=Nominal	
H=Inset #1	Branch Diameter Type=Nominal	
I=Extension #1	Hole Adjust=0.000	
J=Branch Diameter #2	Branch Allowance To Pipe=0.000	
K=Branch Length #2	Branch Seam Position=0.000	Seams
L=Angle #2	Throat Cut Back (Degrees)=0.000	S1=None
M=Inset #2	Plate Border (Circumference)=0.000	S2=None
N=Extension #2	Plate Type=Rectangular	S3=None
	Cut Back Allowance (%)=0.000	
	Use Pipe Seam For Branches=No	Damper: None
	Plate Border (Length)=Auto	None
	End Castle Width =0.000	None
	End Castle Angle=30.000	None
	Branches=Fabricated	None

courtesy of Applied Software 4/18/2016

Round





Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	First Break=0.000	C3=None
D=Right Extension	Second Break=0.000	C4=None
E=Branch Diameter #1	Third Break=0.000	
F=Branch Length #1	Pipe Diameter Type=Nominal	
G=Angle #1	Branch Diameter Type=Nominal	
H=Inset #1	Branch Diameter Type=Nominal	
I=Offset #1	Hole Adjust=0.000	
J=Extension #1	Branch Allowance To Pipe=0.000	
K=Branch Diameter #2	Branch Seam Position=0.000	Seams
L=Branch Length #2	Throat Cut Back (Degrees)=0.000	S1=None
M=Angle #2	Plate Border (Circumference)=0.000	S2=None
N=Inset #2	Plate Type=Rectangular	S3=None
O=Offset #2	Cut Back Allowance (%)=0.000	
P=Extension #2	Use Pipe Seam For Branches=No	Damper: None
	Plate Border (Length)=Auto	None
	End Castle Width =0.000	None
	End Castle Angle=30.000	None

#### Pattern: 51 Round/Fabrication



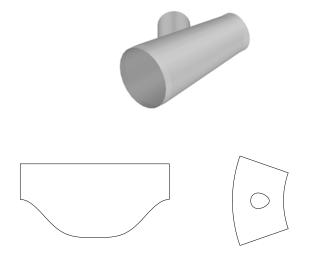


8:	2 ::	
Dims	Options	Conn's
A=Diameter In	Diameter Type BE=Nominal	C1=None
B=Diameter Out	Diameter Type SE=Nominal	C2=None
C=Length	Cross Break=1	
D=Left Extension	Length Break=1	
E=Right Extension	Seam For Weathering=No	
F=Angle	Input=Length	
	Length Includes Extensions=No	
	Auto Oversize=Normal	
	Graining Angle=90.000	
		Seams
		S1=None

Damper: None None

courtesy of Applied Software 4/18/2016

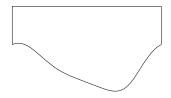
Round



Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Diameter	Branch Parts=1	C2=None
C=Pipe Length	First Break=0.000	C3=None
D=Left Extension	Second Break=0.000	
E=Right Extension	Third Break=0.000	
F=Branch Diameter #1	Seam Position=270.000	
G=Branch Length #1	Diameter Type BE=Nominal	
H=Angle #1	Diameter Type SE=Nominal	
=Inset #1	Branch Diameter Type=Nominal	
I=Extension #1	Hole Adjust=0.000	
	Branch Allowance To Pipe=0.000	Seams
	Branch Seam Position=0.000	S1=None
	Throat Cut Back (Degrees)=0.000	S2=None
	Cut Back Allowance (%)=0.000	
	End Castle Width =0.000	
	End Castle Angle=30.000	Damper: None
		None
		None

# Pattern: 53 Round/Fabrication



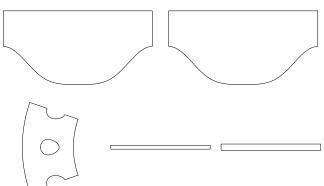




Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Diameter	Branch Parts=1	C2=None
C=Pipe Length	First Break=0.000	C3=None
D=Left Extension	Second Break=0.000	
E=Right Extension	Third Break=0.000	
F=Branch Diameter #1	Seam Position=270.000	
G=Branch Length #1	Diameter Type BE=Nominal	
H=Angle #1	Diameter Type SE=Nominal	
I=Inset #1	Branch Diameter Type=Nominal	
J=Offset #1	Hole Adjust=0.000	
K=Extension #1	Branch Allowance To Pipe=0.000	Seams
	Branch Seam Position=0.000	S1=None
	Throat Cut Back (Degrees)=0.000	S2=None
	Cut Back Allowance (%)=0.000	
	End Castle Width =0.000	
	End Castle Angle=30.000	Damper: None
		None
		None

Round/Fabrication





Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Diameter	Branch Parts=1	C2=None
C=Pipe Length	First Break=0.000	C3=None
D=Left Extension	Second Break=0.000	C4=None
E=Right Extension	Third Break=0.000	
F=Branch Diameter #1	Seam Position=270.000	
G=Branch Length #1	Diameter Type BE=Nominal	
H=Angle #1	Diameter Type SE=Nominal	
I=Inset #1	Branch Diameter Type=Nominal	
J=Extension #1	Branch Diameter Type=Nominal	
K=Branch Diameter #2	Hole Adjust=0.000	Seams
L=Branch Length #2	Branch Allowance To Pipe=0.000	S1=None
M=Angle #2	Branch Seam Position=0.000	S2=None
N=Inset #2	Throat Cut Back (Degrees)=0.000	S3=None
O=Extension #2	Cut Back Allowance (%)=0.000	
	End Castle Width =0.000	Damper: None
	End Castle Angle=30.000	None
	-	None
		None

#### Pattern: 55 Round/Fabrication



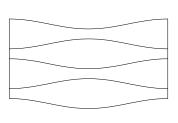
Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Pipe Length	Round Allowance To Pipe=0.000	C2=None
C=Left Extension	Flat Allowance To Pipe=0.000	C3=None
D=Right Extension	Pipe Parts=1	
E=Branch Width	Branch Parts=1	
F=Branch Depth	Pipe Seam Position=0.000	
G=Branch Length	Hole Adjust=0.000	
H=Inset	Plate Border=0.000	
I=Offset	Castle Width=0.000	
	Castle Angle=30.000	
	Plate Border (Width)=Auto	Seams
	Same Seams On Each Part=No	S1=None
	Mirror Branch Parts=No	S2=None

Damper:

None

Round





Dims	Options	Conn's
A=Diameter	Number Of Segments=4	C1=None
B=Inner Radius	Seam Position=0.000	C2=None
C=Angle	Cross Break=1	C3=None
D=Bottom Collar	Single Segments=No	
E=Right Collar	Diameter Type=Nominal	

Seams

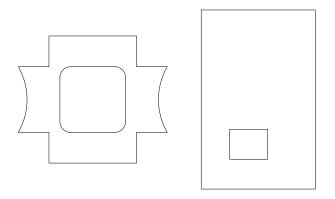
S1=None

Damper:

# Pattern: 57

Round



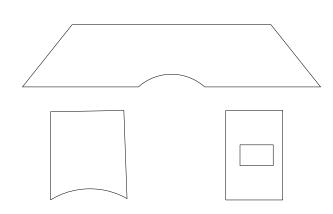


Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Pipe Length	Round Allowance To Pipe=0.000	C2=None
C=Left Extension	Flat Allowance To Pipe=0.000	C3=None
D=Right Extension	Pipe Parts=1	
E=Branch Width	Pipe Seam Position=0.000	
F=Branch Depth	Hole Adjust=0.000	
G=Branch Length	Plate Border=0.000	
H=Inset	Castle Width=0.000	
I=Hole Width	Castle Angle=30.000	
J=Hole Depth	Plate Border (Width)=Auto	
K=Hole Radius	Fold Notch Depth=0.000	Seams
L=Collar	Develop Branch Collar=No	S1=None
	·	S2=None
		S3=None

Damper:

Round





Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Pipe Length	Round Allowance To Pipe=0.000	C2=None
C=Left Extension	Flat Allowance To Pipe=0.000	C3=None
D=Right Extension	Pipe Parts=1	
E=Branch Width #1	Branch Parts=2	
F=Branch Depth #1	First Break=0.000	
G=Branch Length #1	Second Break=0.000	
H=Branch Inset #1	Third Break=0.000	
I=Branch Extension #1	Pipe Seam Position=270.000	
	Hole Adjust=0.000	
	Plate Border=0.000	Seams
	Castle Width=0.000	S1=None
	Castle Angle=30.000	S2=None
	Plate Border (Width)=Auto	
	Branch Sloping Sides=Central	
		Damper: None
		None
	branch Sloping Sides=Central	•

Pattern: 59

Round



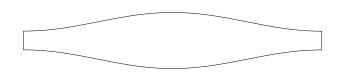
Dims	Options	Conn's
A=Diameter	Cross Break=1	C1=None
B=Centre Diameter	Seam Position=0.000	C2=None
C=Radius	Diameter Type=Nominal	
D=Angle	Diameter=End	

Seams

S1=None

None

Damper:



4/18/2016 courtesy of software 13

Round

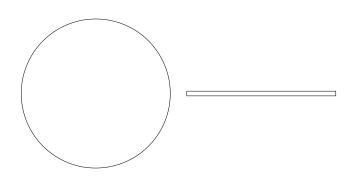
Dims Options Conn's

A=Diameter B=Collar Diameter Type=Nominal C1=None
Correct Holes Rotation=No



Seams

Damper:



## Pattern: 61

Round



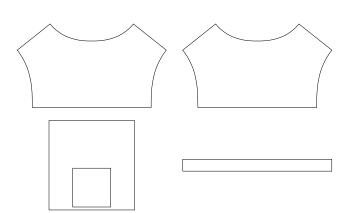
Dims	Options	Conn's
A=Diameter	Number Of Segments=4	C1=None
B=Inner Radius	Seam Position=0.000	C2=None
C=Angle	Cross Break=1	C3=None
D=Bottom Extension	Single Segments=No	
E=Top Extension	Diameter Type=Nominal	
	Automatic Nest Break If Oversize=No	
	Notch Angle For Seam=0	
	Nest Break Start Segment=0	
	Nest Break End Segment=0	
	Marker Type=Notch	
	Diameter Reduction=0.000	Seams
	Marker Depth=Default	S1=None
	Mark Sides=No	
	Leg Lengths=No	
	Fixing Holes On Extension=Yes	
	Splitters=0	Damper: None
	Splitter Adjust=0.000	None None
	Splitter Shape=Angled	None
	Item Volume=Segmented	

Round



Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Pipe Length	Branch Diameter Type=Nominal	C2=None
C=Left Extension	Branch Diameter Type=Nominal	C3=None
D=Right Extension	Hole Adjust=0.000	
E=Branch Diameter	Round Allowance To Pipe=0.000	
F=Branch Length	Flat Allowance To Pipe=0.000	
G=Angle	Seam Position=0.000	
H=Angle	Pipe Parts=1	
I=Inset	Branch Parts=2	
J=Offset	Flat Right=No	
K=Collar	Inlet=1	Seams
	Outlet=2	S1=None
		S2=None

Damper:



## Pattern: 63

Round



Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Pipe Length	Branch Diameter Type=Nominal	C2=None
C=Left Extension	Branch Diameter Type=Nominal	C3=None
D=Right Extension	Hole Adjust=0.000	
E=Branch Diameter	Round Allowance To Pipe=0.000	
F=Branch Length	Flat Allowance To Pipe=0.000	
G=Angle	Seam Position=0.000	
H=Angle	Pipe Parts=1	
I=Inset	Branch Parts=2	
J=Collar	Flat Right=No	
	Inlet=1	Seams
	Outlet=2	S1=None
		S2=None

Damper:

Round

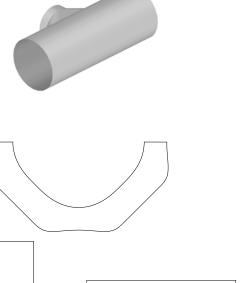


Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Pipe Length	Round Allowance To Pipe=0.000	C2=None
C=Left Extension	Flat Allowance To Pipe=0.000	C3=None
D=Right Extension	Pipe Parts=1	
E=Branch Width	Branch Parts=1	
F=Branch Depth	Pipe Seam Position=0.000	
G=Branch Length	Hole Adjust=0.000	
H=Inset	Plate Border=0.000	
I=Extension	Castle Width=0.000	
	Castle Angle=30.000	
	Plate Border (Width)=Auto	Seams
	,	S1=None
		S2=None

Damper:

# Pattern: 65

Round



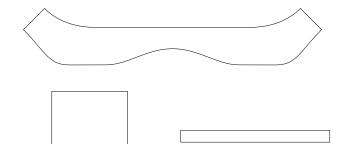
Dime	Ontions	Connis
Dims	Options Dine Parts=1	Conn's
A=Pipe Diameter	Pipe Parts=1	
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	Seam Position=0.000	C3=None
D=Right Extension	Pipe Diameter Type=Nominal	
E=Branch Diameter	Branch Diameter Type=Nominal	
F=Branch Length	Branch Diameter Type=Nominal	
G=Angle	Branch Allowance To Pipe=0.000	
H=Inset	Hole Adjust=0.000	
I=Collar	Plate Border=0.000	
	Plate Type=Rectangular	
	Plate Border (Width)=Auto	Seams
	rate border (Watti) rate	S1=None
		S2=None
		Damper: None
		None
		None

Round



Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	Pipe Seam Position=0.000	C3=None
D=Right Extension	Branch Seam Position=Throat	
E=Branch Diameter	Pipe Diameter Type=Nominal	
F=Branch Length	Branch Diameter Type=Nominal	
G=Angle	Branch Diameter Type=Nominal	
H=Inset	Branch Allowance To Pipe=0.000	
I=Collar	Hole Adjust=0.000	
	Straight Notch=No	
	Plate Border=0.000	Seams
	Plate Type=Rectangular	S1=None
	Plate Border (Width)=Auto	S2=None
	Inset=Front	

Damper: None



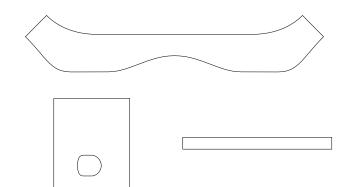
## Pattern: 67

Round



Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	Pipe Seam Position=0.000	C3=None
D=Right Extension	Branch Seam Position=Throat	
E=Branch Diameter	Pipe Diameter Type=Nominal	
F=Branch Length	Branch Diameter Type=Nominal	
G=Angle	Branch Diameter Type=Nominal	
H=Inset	Branch Allowance To Pipe=0.000	
I=Offset	Hole Adjust=0.000	
J=Collar	Straight Notch=No	
	Plate Border=0.000	Seams
	Plate Type=Rectangular	S1=None
	Plate Border (Width)=Auto	S2=None
	Inset=Front	

Damper: None



Round



Dims	Options	Conn's
A=Diameter	Seam Position=0.000	C1=None
B=Length	Single Segments=No	C2=None
C=Offset	Diameter Type=Nominal	C3=None
D=Left Extension	Cross Break=1	
E=Right Extension	Marker Type=Notch	
F=Left Collar	Seam Position=Angled	
G=Right Collar	Stitch Gap=0.000	
H=Angle	Number Of Stitches=4	
•	Seam Cuts=Straight	
	Automatic Nest Break If Oversize=No	
		Seams

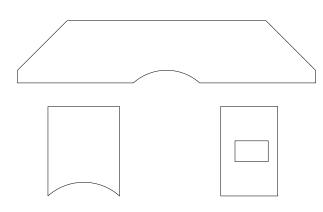
S1=None

Damper: None None

# Pattern: 69

Round





Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Pipe Length	Round Allowance To Pipe=0.000	C2=None
C=Left Extension	Flat Allowance To Pipe=0.000	C3=None
D=Right Extension	Pipe Parts=1	
E=Branch Width #1	Branch Parts=2	
F=Branch Depth #1	First Break=0.000	
G=Branch Length #1	Second Break=0.000	
H=Branch Inset #1	Third Break=0.000	
I=Branch Extension #1	Pipe Seam Position=270.000	
	Hole Adjust=0.000	
	Plate Border=0.000	Seams
	Throat Clearance=0.000	S1=None
	Castle Width=0.000	S2=None
	Castle Angle=30.000	
	Plate Border (Width)=Auto	
		Damper: None
		None
		None

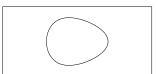
Round



Dims	Options	Conn's
A=Pipe Diameter	Branch Parts=1	C1=None
B=Pipe Length	Pipe Diameter Type=Nominal	C2=None
C=Left Extension	Branch Diameter Type=Nominal	C3=None
D=Right Extension	Hole Adjust=0.000	
E=Branch Diameter #1	Branch Allowance To Pipe=0.000	
F=Branch Length #1	Branch Seam Position=0.000	
G=Angle #1	Throat Cut Back (Degrees)=0.000	
H=Inset #1	Plate Allowance=0.000	
=Offset #1	Cut Back Allowance (%)=0.000	
=Extension #1	Use Pipe Seam For Branches=No	
K=Plate Border	End Castle Width =0.000	Seams
	End Castle Angle=30.000	S1=None
		S2=None

Damper: None None None

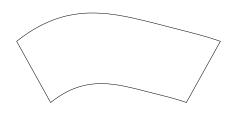




# Pattern: 71

Round





Dims	Options	Conn's
A=Diameter In	Diameter Type BE=Nominal	C1=None
B=Diameter Out	Diameter Type SE=Nominal	C2=None
C=Length	Cross Break=1	
D=Y-Offset	Seam Position=0.000	
E=Left Extension	Length Break=1	
F=Right Extension	Marker Type=Notch	
G=Round Angle	Length Includes Extensions=No	

Seams

S1=None

Damper: None None

Round/Fabrication

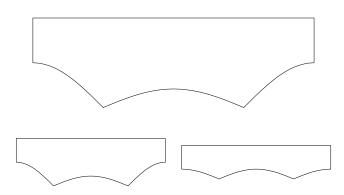


Dims	Options	Conn's
A=Diameter	Diameter Type=Nominal	C1=None
B=Length In	Seam Position=0.000	C2=None
C=Length Out		C3=None
D=Angle		C4=None
E=Bottom Extension		C5=None
F=Left Extension		
G=Right Extension		

Seams

S1=None





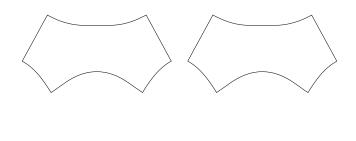
## Pattern: 73

Round



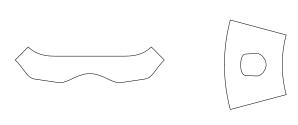
Dims	Options	Conn's
A=Bottom Diameter	Bottom Diameter Type=Nominal	C1=None
B=Left Diameter	Left Diameter Type=Nominal	C2=None
C=Right Diameter	Right Diameter Type=Nominal	C3=None
D=Left End Angle	Seam Position=Top	C4=None
E=Right End Angle	Marker Type=Notch	
F=Left Height		
G=Right Height		
H=Left Offset		
I=Right Offset		
J=Bottom Collar		
K=Left Collar		Seams
L=Right Collar		S1=None
M=Left Offset Depth		
N=Right Offset Depth		

Damper:



Round





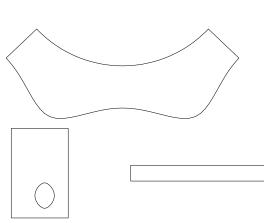
Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Diameter	Branch Parts=1	C2=None
C=Pipe Length	Pipe Seam Position=270.000	C3=None
D=Left Collar	Branch Seam Position=Throat	
E=Right Collar	Diameter Type BE=Nominal	
F=Branch Diameter	Diameter Type SE=Nominal	
G=Branch Length	Branch Diameter Type=Nominal	
H=Angle	Hole Adjust=0.000	
I=Inset	Branch Allowance To Pipe=0.000	
J=Collar	·	
		Seams

S1=None S2=None

Damper: None None None

# Pattern: 75 Round/Fabrication





Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	Seam Position=0.000	C3=None
D=Right Extension	Pipe Diameter Type=Nominal	
E=Branch Diameter	Branch Diameter Type=Nominal	
F=Branch Length	Hole Adjust=0.000	
G=Angle	Branch Allowance To Pipe=0.000	
H=Inset	Branch Seam Position=0.000	
I=Collar	Plate Border=0.000	
J=Btm Width	Plate Type=Rectangular	
	Input=Angle	Seams
	Plate Border (Width)=Auto	S1=None
	Reducer Parts=1	S2=None
		Damper: None
		None
		None

Round



Dims	Options	Conn's
A=Top Diameter	Cross Break=1	C1=None
B=Diameter	Hole Width=0.000	C2=None
C=Bottom Diameter	Hole Length=0.000	C3=None
D=Inner Diameter	Number Of Holes=0	
E=Length	Hole Inset=0.000	
F=Length	Hole Diameter=0.000	
G=Inner Length	Number Of Holes=0	
H=Hole Diameter	Hole Inset=0.000	
I=Pipe Diameter	Hole Diameter=0.000	
J=Pipe Length	Number Of Holes=0	
	Hole Inset=0.000	Seams
	Insertion Point=Default	S1=None
	Rotation=Default	

Damper:





Pattern: 78

Round



0	
0	

Dims	Options	Conn's
A=Diameter	Seam Position=0.000	C1=None
B=Length	Diameter Type=Nominal	C2=None
C=Top Hole Length	Hole=Both	
D=Top Hole Width	Pipe Parts=1	
E=Bottom Hole Length	First Break=0.000	
F=Bottom Hole Width	Second Break=0.000	
	Third Break=0.000	

Seams S1=None

Damper: None None

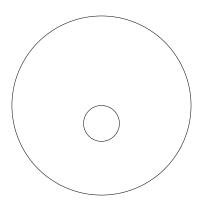
Round

Dims	Options	Conn's
A=Diameter B=Offset		C1=None
C=Diameter D=Collar		C2=None



Seams

Damper:



Pattern: 80

Round



|--|

<b>D</b> '	0.1	6
Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	First Break=0.000	C3=None
D=Right Extension	Second Break=0.000	
E=Branch Diameter #1	Third Break=0.000	
F=Branch Length #1	Seam Position=0.000	
G=Angle #1	Pipe Diameter Type=Nominal	
H=Inset #1	Branch Diameter Type=Nominal	
I=Offset #1	Hole Adjust=0.000	
J=Extension #1	Branch Allowance To Pipe=0.000	
	Branch Seam Position=0.000	Seams
	Throat Cut Back (Degrees)=0.000	S1=None
	Plate Border (Circumference)=0.000	S2=None
	Plate Type=Rectangular	
	Cut Back Allowance (%)=0.000	
	Use Pipe Seam For Branches=No	D N
	Plate Border (Length)=Auto	Damper: None
	Hole Width Adjust=0.000	None
	Hole Depth Adjust=0.000	None
	End Castle Width =0.000	
	End Castle Angle=30.000	

Round



Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Left Extension	Branch Diameter Type=Nominal	C2=None
C=Right Extension	Branch Diameter Type=Nominal	C3=None
D=Branch Diameter	Hole Adjust=0.000	
E=Branch Length	Round Allowance To Pipe=0.000	
F=Angle	Flat Allowance To Pipe=0.000	
G=Angle	Seam Position=0.000	
H=Collar	Pipe Parts=1	
	Branch Parts=2	
	Connector Fold Notch=Full Allowance	
	Inlet=1	Seams
	Outlet=2	S1=None
		S2=None

Damper:

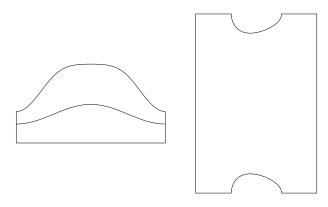
Pattern: 82

Round



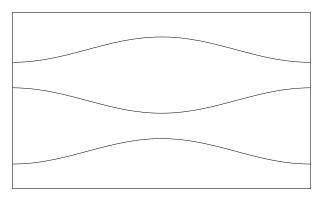
Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	First Break=0.000	C3=None
D=Right Extension	Second Break=0.000	C4=None
E=Branch Diameter	Third Break=0.000	
F=Branch Length	Pipe Diameter Type=Nominal	
G=Angle	Branch Diameter Type=Nominal	
H=Inset	Hole Adjust=0.000	
I=Offset	Branch Allowance To Pipe=0.000	
J=Extension	Throat Cut Back (Degrees)=0.000	
K=Collar	Reducer Parts=1	Seams
	Branch Inset=Front	S1=None
		S2=None





Round/Fabrication





Dims	Options	Conn's
A=Diameter	Number Of Segments=4	C1=None
B=Inner Radius	Seam Position=0.000	C2=None
C=Angle	Cross Break=1	C3=None
D=Bottom Extension	Diameter Type=Nominal	
E=Top Extension	Automatic Nest Break If Oversize=No	
	Notch Angle For Seam=0	
	Stitch Gap=0.000	
	Number Of Stitches=4	
	Quantity=1	
	Nest Break Start Segment=0	
	Nest Break End Segment=0	Seams
	Marker Type=Notch	S1=None
	Diameter Reduction=0.000	
	Marker Depth=Default	
	Mark Sides=No	
	Leg Lengths=No Fixing Holes On Extension=Yes	Damper: None None
	Item Volume=Segmented	

#### Pattern: 85 Rectangular/Round



D	ims	Options	Conn's
A=Width	B=Depth	Diameter Type=Nominal	C1=None
C=Diameter	D=Extension	Top Offset=0.000	C2=None
E=Collar			

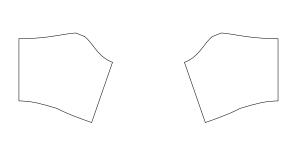
Seams S1=None

Damper:



Round





Dims	Options	Conn's
A=Bottom Diameter	Add Collars To Body=No	C1=None
B=Left Diameter	Flat Left=No	C2=None
C=Right Diameter	Notch Angle For Seam=0.000	C3=None
D=Height	Slope Angle=0.000	
E=Length		
F=Left Angle		
G=Right Angle		
H=Bottom Collar		
I=Left Collar		
J=Right Collar		
-		Seams
		S1=None

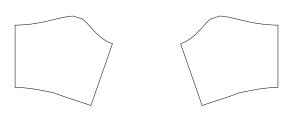
S2=None

Damper:

# Pattern: 87

Round



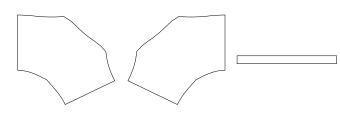


Dims	Options	Conn's
A=Bottom Diameter	Add Collars To Body=No	C1=None
B=Left Diameter	Flat Left=No	C2=None
C=Right Diameter	Notch Angle For Seam=0.000	C3=None
D=Height	Slope Angle=0.000	
E=Length		
F=Left Angle		
G=Right Angle		
H=Bottom Collar		
I=Left Collar		
J=Right Collar		
· ·		Seams
		S1=None
		S2=None
		Damnari
		Damper:

Round



Dims	Options	Conn's
A=Bottom Diameter	Add Collars To Body=No	C1=None
B=Left Diameter	Flat Left=No	C2=None
C=Right Diameter	Notch Angle For Seam=0.000	C3=None
D=Diameter	Slope Angle=0.000	C4=None
E=Height		
F=Length		
G=Left Angle		
H=Right Angle		
I=Bottom Collar		
J=Left Collar		
K=Right Collar		Seams
L=Collar		S1=None
		S2=None



# Pattern: 89

Round



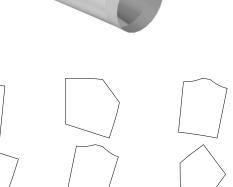
Dims	Options	Conn's
A=Bottom Diameter	Add Collars To Body=No	C1=None
B=Left Diameter	Flat Left=No	C2=None
C=Right Diameter	Notch Angle For Seam=0.000	C3=None
D=Diameter	Slope Angle=0.000	C4=None
E=Diameter		C5=None
F=Height		
G=Length		
H=Left Angle		
I=Right Angle		
J=Bottom Collar		
K=Left Collar		Seams
L=Right Collar		S1=None
M=Collar		S2=None
N=Collar		

Damper:

Damper:

Round





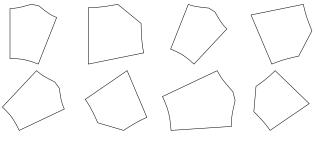
Dims	Options	Conn's
A=Bottom Diameter		C1=None
B=Top Diameter #2		C2=None
C=Top Diameter #3		C3=None
D=Top Diameter #4		C4=None
E=Height		
F=Length		
G=Angle #2		
H=Angle #3		
I=Angle #4		
J=Bottom Collar		
K=Collar #2		Seams
L=Collar #3		S1=None
M=Collar #4		S2=None
		S3=None

Damper:

# Pattern: 91

Round

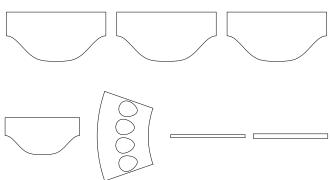




Dims	Options	Conn's
A=Bottom Diameter	- 1	C1=None
B=Top Diameter #2		C2=None
C=Top Diameter #3		C3=None
D=Top Diameter #4		C4=None
E=Top Diameter #5		C5=None
F=Height		
G=Length		
H=Angle #2		
I=Angle #3		
J=Angle #4		
K=Angle #5		Seams
L=Bottom Collar		S1=None
M=Collar #2		S2=None
N=Collar #3		S3=None
O=Collar #4		
P=Collar #5		Damper:

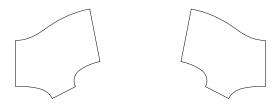
Round





Pattern:	93
Round	





	Dims	Options	Conn's
	A=Pipe Diameter	Pipe Parts=1	C1=None
	B=Pipe Diameter	Branch Parts=1	C2=None
	C=Pipe Length	First Break=0.000	C3=None
	D=Left Extension	Second Break=0.000	C4=None
	E=Right Extension	Third Break=0.000	C5=None
	F=Branch Diameter #1	Seam Position=45.000	C6=None
	G=Branch Length #1	Diameter Type BE=Nominal	
	H=Angle #1	Diameter Type SE=Nominal	
	I=Inset #1	Branch Diameter Type=Nominal	
	J=Rotation #1	Branch Diameter Type=Nominal	
	K=Extension #1	Branch Diameter Type=Nominal	Seams
	L=Branch Diameter #2	Branch Diameter Type=Nominal	S1=None
	M=Branch Length #2	Hole Adjust=0.000	S2=None
	N=Angle #2	Branch Allowance To Pipe=0.000	S3=None
	O=Inset #2	Branch Seam Position=0.000	S4=None
	P=Rotation #2	Throat Cut Back (Degrees)=0.000	S5=None Damper: None
	Q=Extension #2	Cut Back Allowance (%)=0.000	None
	R=Branch Diameter #3	End Castle Width =0.000	None
J	S=Branch Length #3	End Castle Angle=30.000	None
	T=Angle #3		None
	U=Inset #3		None
	V=Rotation #3		
	W=Extension #3		
	X=Branch Diameter #4		
	Y=Branch Length #4		
_	Z=Angle #4		
	a=Inset #4		
	b=Rotation #4		

_		
	Dims	Options
1	A=Bottom Diameter	Bottom Diameter Type=Nomina
١	B=Top Diameter	Left Diameter Type=Nominal
(	C=Branch Diameter	Right Diameter Type=Nominal
١	D=Angle	2 Parts=Yes
ı	E=Right Offset	
ı	F=Height	

COIIII 3
C1=None
C2=None
C3=None

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S1=None

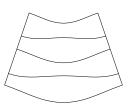
Damper:

4/18/2016 29

G=Bottom Collar H=Top Collar I=Branch Collar

Round





Dims	Options	Conn's
A=Bottom Diameter	Number Of Segments=4	C1=None
B=Top Diameter	Seam Position=0.000	C2=None
C=Centre Radius	Cross Break=1	C3=None
D=Angle	Single Segments=No	
E=Bottom Collar F=Right Collar	Diameter Type=Nominal	

Seams

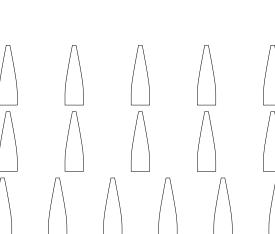
S1=None

Damper:

Pattern: 96

Round





Dims	Options	Conn's
A=Bottom Diameter	Number Of Segments=16	C1=None
B=Top Diameter	Parts To Cut=16	
C=Height	Input=Height	
D=Top Radius	Bottom Diameter Type=Nominal	
E=Bottom Radius	Top Diameter Type=Nominal	
F=Bottom Extension	Top Diameter=Slice	
G=Collar	Fixing Holes=2	
H=Branch Diameter	Fixing Hole Diameter=None	
I=Branch Length	Hole Inset=25.000	
J=Offset	Branch Parts=1	
	Branch Seam Position=0.000	Seams
	Turnover Allowance=0.000	S1=None
	Template=No	
	Hole Spacing=0.000	
	Hole Spacing (Shoulder)=0.000	
	Bottom Extension Parts=0	Damper:

Round



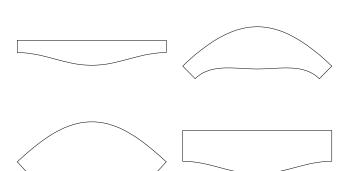
Dims	Options	Conn's
A=Bottom Diameter	Number Of Segments=4	C1=None
B=Top Diameter	Seam Position=0.000	C2=None
C=Centre Radius	Cross Break=1	C3=None
D=Angle	Bottom Diameter Type=Nominal	
E=Bottom Extension	Marker Type=Notch	
F=Top Extension	Top Diameter Type=Nominal	
	Marker Depth=Default	
	Mark Sides=No	
	Leg Lengths=No	

Seams

S1=None

Damper: None

None



Pattern: 98

Round



Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Pipe Length	Branch Diameter Type=Nominal	C2=None
C=Left Extension	Branch Diameter Type=Nominal	C3=None
D=Right Extension	Hole Adjust=0.000	
E=Branch Diameter	Round Allowance To Pipe=0.000	
F=Branch Length	Flat Allowance To Pipe=0.000	
G=Angle	Seam Position=0.000	
H=Angle	Pipe Parts=1	
I=Inset	Branch Parts=2	
J=Collar	Flat Right=No	
	Inlet=1	Seams
	Outlet=2	S1=None
		S2=None

Damper:

Round



Dims	Options	Conn's
A=Bottom Diameter	Bottom Diameter Type=Nominal	C1=None
B=Left Diameter	Left Diameter Type=Nominal	C2=None
C=Right Diameter	Right Diameter Type=Nominal	C3=None
D=Left Angle	Seam Position=Top	C4=None
E=Right Angle	Marker Type=Notch	
F=Bottom Collar		
G=Left Collar		
H=Right Collar		

Seams

S1=None





Damper:

# Pattern: 100

Round



Dims	Options	Conn's
A=Bottom Diameter	Bottom Diameter Type=Nominal	C1=None
B=Left Diameter	Left Diameter Type=Nominal	C2=None
C=Right Diameter	Right Diameter Type=Nominal	C3=None
D=Left Angle	Seam Position=Top	C4=None
E=Right Angle	Marker Type=Notch	
F=Left Length		
G=Right Length		
H=Height		
I=Bottom Collar		
J=Left Collar		
K=Right Collar		Seams
		S1=None





Damper:

Round/Flat Oval



Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Diameter Type BE=Nominal	C2=None
C=Diameter	Diameter Type SE=Nominal	
D=Length	Seam Position=Corner	
E=Offset Width	Inlet=1	
F=Offset Depth	Outlet=2	
G=Oval Collar	Same Seams On Each Part=No	
H=Round Collar		
H=Round Collar		

S1=None

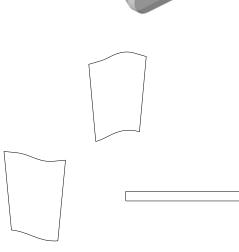
Seams

Damper:



Pattern: 123 Round/Flat Oval





Dims	Options	Conn's
A=Width	Diameter Type BE=Nominal	C1=None
B=Depth	Diameter Type SE=Nominal	C2=None
C=Diameter	Seam Position=Major Axis	
D=Length	Inlet=1	
E=Offset Width	Outlet=2	
F=Offset Depth	Same Seams On Each Part=No	
G=Oval Collar		
H=Round Collar		

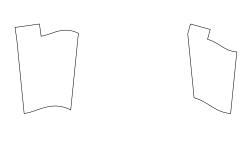
Seams S1=None

Damper:

courtesy of Applied Software 4/18/2016 33

Round/Flat Oval





Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Diameter Type BE=Nominal	C2=None
C=Diameter	Diameter Type SE=Nominal	
D=Length	Collar Arcs - Lap=0.000	
E=Offset Width	Collar Arcs - Allowance=0.000	
F=Offset Depth	Seam Position=Corner	
G=Oval Extension	Inlet=1	
H=Oval Collar	Outlet=2	
I=Round Collar	Same Seams On Each Part=No	
	Oval Half Collar=Yes	

Seams S1=None

Damper:

# Pattern: 142

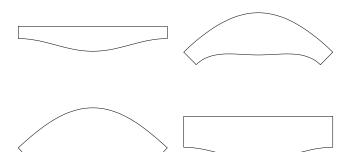
Round



Dims	Options	Conn's
A=Bottom Diameter	Number Of Segments=4	C1=None
B=Top Diameter	Seam Position=0.000	C2=None
C=Centre Radius	Cross Break=1	C3=None
D=Angle	Bottom Diameter Type=Nominal	
E=Offset	Marker Type=Notch	
F=Bottom Extension	Top Diameter Type=Nominal	
G=Top Extension	Marker Depth=Default	
	Mark Sides=No	
	Leg Lengths=No	

Seams S1=None

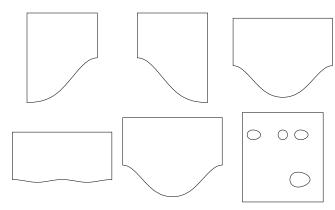
Damper: None None



courtesy of Applied Software 4/18/2016 34

Round





	Dims	Opt	ions	Conn's
	A=Pipe Diameter	Pipe Parts=1	Hole Adjust=0.000	C1=None
	B=Pipe Length	First Break=0.000	Castle Width=0.000	C2=None
	C=Left Extension	Second Break=0.000	Castle Angle=30.000	C3=None
	D=Right Extension	Third Break=0.000	Round Allowance T	C4=None
	E=Branch Diameter #1	Seam Position=0.000	Flat Allowance To P	C5=None
	F=Branch Length #1	Pipe Diameter Typ	Hole Adjust=0.000	C6=None
	G=Angle #1	Branch Type=Straig	Castle Width=0.000	
	H=Inset #1	Branch Diameter T	Castle Angle=30.000	
	I=Offset #1	Branch Parts=2	Round Allowance T	
	J=Rotation #1	Branch Type=Straig	Flat Allowance To P	
	K=Extension #1	Branch Diameter T	Hole Adjust=0.000	Seams
	L=Branch Diameter #2	Branch Parts=1	Castle Width=0.000	S1=None
	M=Branch Length #2	Branch Type=Straig	Castle Angle=30.000	S2=None
	N=Angle #2	Branch Diameter T		S3=None
	O=Inset #2	Branch Parts=1		S4=None
,	P=Offset #2	Branch Type=Straig		S5=None Damper:
	Q=Rotation #2	Branch Diameter T		
	R=Extension #2	Branch Parts=1		
	S=Branch Diameter #3	Diameter Reductio		
	T=Branch Length #3	Shoe Seam Position		
	U=Angle #3	Handle Inline with		
	V=Inset #3	Round Allowance T		
	W=Offset #3	Flat Allowance To P		
	X=Rotation #3	Hole Adjust=0.000		
	Y=Extension #3	Castle Width=0.000		
	Z=Branch Diameter #4	Castle Angle=30.000		
	a=Branch Length #4	Round Allowance T		
	b=Angle #4	Flat Allowance To P		

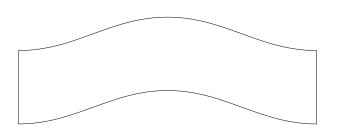
Pattern: 149

Round



Dims	Options	Conn's
A=Diameter	Cross Break=1	C1=None
B=Length	Seam Position=0.000	C2=None
C=Angle	Vertical=No	C3=None
D=Body Diameter	Pipework=No	
	Adjust=0.000	
	Include=Yes	
	Right Offset=6.000	
	Left Offset=6.000	
	Develop X Size For Diameter=No	
	Inlet=1	
	Outlet=2	Seams
		S1=None

Damper:



Round

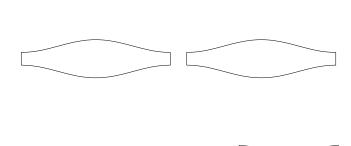


Dims	Options	Conn's
A=Diameter	Seam Position=0.000	C1=None
B=Height	Top Number Of Segments=2	C2=None
C=Top Radius	Bottom Number Of Segments=2	C3=None
D=Top Angle	Single Segments=Yes	
E=Top Extension	Diameter Type=Nominal	
F=Bottom Radius	Marker Type=Notch	
G=Bottom Angle	Item Pattern Length/Angle=Length	
H=Bottom Extension		
I=Twist Angle		

Seams

S1=None

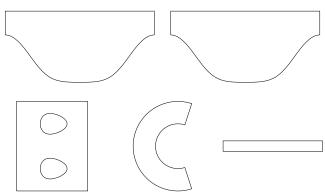
Damper:



Pattern: 160

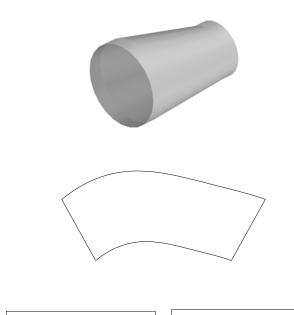
Round





	Dims	Options	Conn's
	A=Pipe Diameter	Pipe Parts=1	C1=None
	B=Right Diameter	Branch Parts=1	C2=None
	C=Pipe Length	First Break=0.000	C3=None
	D=Right Length	Second Break=0.000	C4=None
	E=Left Extension	Third Break=0.000	C5=None
	F=Right Extension	Seam Position=0.000	
	G=Branch Diameter #1	Pipe Diameter Type=Nominal	
	H=Branch Length #1	Branch Diameter Type=Nominal	
	I=Angle #1	Branch Diameter Type=Nominal	
	J=Inset #1	Hole Adjust=0.000	
	K=Offset #1	Branch Allowance To Pipe=0.000	Seams
	L=Extension #1	Branch Seam Position=0.000	S1=None
	M=Branch Diameter #2	Throat Cut Back (Degrees)=0.000	S2=None
	N=Branch Length #2	Right Diameter Type=Nominal	S3=None
	O=Angle #2	Plate Border (Circumference)=0.000	
	P=Inset #2	Plate Type=Rectangular	Damper: None
	Q=Offset #2	Cut Back Allowance (%)=0.000	None
	R=Rotation #2	Use Pipe Seam For Branches=No	None
	S=Extension #2	Plate Border (Length)=Auto	None
		End Castle Width =0.000	None
		End Castle Angle=30.000	None
		Reducer Parts=1	
		Seam Position=0.000	
		First Break=0.000	
1		Second Break=0.000	
J		Third Break=0.000	

Round/Fabrication



Dims	Options	Conn's
A=Diameter In	Diameter Type BE=Nominal	C1=None
B=Diameter Out	Diameter Type SE=Nominal	C2=None
C=Length	Cross Break=1	
D=Y-Offset	Seam Position=0.000	
E=X-Offset	Length Break=1	
F=Left Extension	Marker Type=Notch	
G=Right Extension	Length Includes Extensions=No	
H=Round Angle	Offset Width=Left In	
•	Offset Depth=Bottom Up	

#### Seams

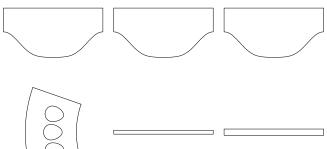
S1=None

Damper: None None

# Pattern: 169

Round

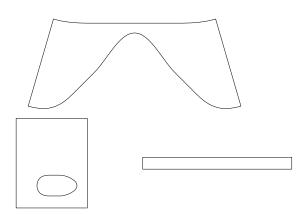




Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Diameter	Branch Parts=1	C2=None
C=Pipe Length	First Break=0.000	C3=None
D=Left Extension	Second Break=0.000	C4=None
E=Right Extension	Third Break=0.000	C5=None
F=Branch Diameter #1	Seam Position=0.000	
G=Branch Length #1	Diameter Type BE=Nominal	
H=Angle #1	Diameter Type SE=Nominal	
I=Inset #1	Branch Diameter Type=Nominal	
J=Offset #1	Branch Diameter Type=Nominal	
K=Rotation #1	Branch Diameter Type=Nominal	Seams
L=Extension #1	Hole Adjust=0.000	S1=None
M=Branch Diameter #2	Branch Allowance To Pipe=0.000	S2=None
N=Branch Length #2	Branch Seam Position=0.000	S3=None
O=Angle #2	Throat Cut Back (Degrees)=0.000	S4=None
P=Inset #2	Cut Back Allowance (%)=0.000	Damper: None
Q=Offset #2	End Castle Width =0.000	None
R=Rotation #2	End Castle Angle=30.000	None
S=Extension #2		None
T=Branch Diameter #3		None
U=Branch Length #3		
V=Angle #3		
W=Inset #3		
X=Offset #3		
Y=Rotation #3		
Z=Extension #3		

Round





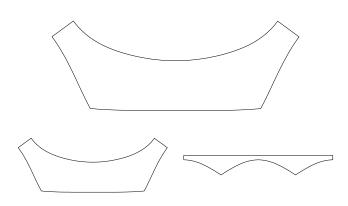
Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Left Extension	Branch Parts=1	C2=None
C=Right Extension	Seam Position=0.000	C3=None
D=Branch Diameter	Seam Position=Throat	
E=Branch Length	Pipe Diameter Type=Nominal	
F=Inset	Branch Diameter Type=Nominal	
G=Length In	Branch Allowance To Pipe=0.000	
H=Length Out	Hole Adjust=0.000	
I=Angle	Diameter Reduction=0.000	
J=Collar	Plate Border (Width)=0.000	
	Plate Border (Depth)=Equal	Seams
	Plate Type=Rectangular	S1=None
		S2=None

Damper:

# Pattern: 171

Round





Dims	Options	Conn's
A=Bottom Diameter	Bottom Diameter Type=Nominal	C1=None
B=Btm Length	Left Diameter Type=Nominal	C2=None
C=Left Diameter	Right Diameter Type=Nominal	C3=None
D=Left Length	Seam Position=Top	C4=None
E=Left Angle		
F=Right Diameter		
G=Right Length		
H=Right Angle		
I=Height		
J=Base Height		
K=Bottom Extension		Seams
L=Left Collar		S1=None
M=Right Collar		

Damper:

Round

Dims	Options	Conn's
A=Diameter	Cross Break=1	C1=None
B=Top Diameter	Seam Position=0.000	C2=None
C=Radius	Diameter Type=Nominal	
D=Angle		



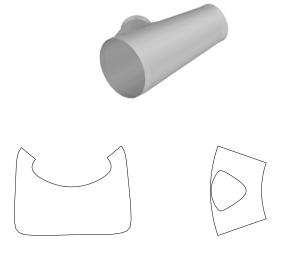
Seams S1=None

Damper:



Pattern: 173

Round



Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Diameter	Branch Parts=1	C2=None
C=Pipe Length	First Break=0.000	C3=None
D=Left Extension	Second Break=0.000	
E=Right Extension	Third Break=0.000	
F=Branch Diameter #1	Seam Position=270.000	
G=Branch Length #1	Diameter Type BE=Nominal	
H=Angle #1	Diameter Type SE=Nominal	
I=Inset #1	Branch Diameter Type=Nominal	
J=Extension #1	Hole Adjust=0.000	
	Branch Allowance To Pipe=0.000	Seams
	Branch Seam Position=0.000	S1=None
	Throat Cut Back (Degrees)=0.000	S2=None
	Cut Back Allowance (%)=0.000	
	End Castle Width =0.000	
	End Castle Angle=30.000	Damper: None
	· ·	•
		None

Round/Flat Oval

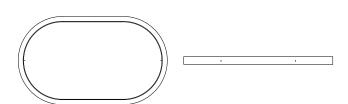


Di	ms	Options	Conn's
A=Diameter	B=Depth	Diameter Type=Nominal	
C=Flange	D=Collar	Adjustment=0.200	
E=Gaps	F=Hole #1	Vee Notch Depth=0.120	
G=Hole #2	H=Hole Inset	Vee Notch Angle=10.000	
		Collar Marker Notches=No	
		Collar Seam Position=Major Axis	

Seams

S1=None

Damper:



Pattern: 183

Round



|--|--|

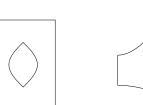
Dims	Options	Conn's
A=Diameter	Seam Position=0.000	C1=None
B=Length	Pipe Parts=1	C2=None
C=Left Extension	Pipe Diameter Type=Nominal	
D=Right Extension	Lap=0.000	
E=Centre Length	Vee Notch Angle=20.000	
F=Centre Depth	Vee Notch Depth=0.000	
G=Inset	Use Vee Notch=Yes	
H=Angle	Separate Cut Out=Yes	
	Cut Out=1	

Seams S1=None S2=None S3=None

Damper:

Round





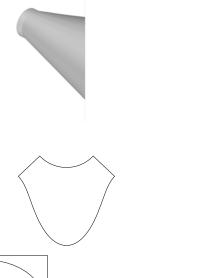


Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Pipe Length	Pipe Seam Position=270.000	C2=None
C=Left Extension	Pipe Parts=1	C3=None
D=Right Extension	First Break=0.000	C4=None
E=Diameter	Second Break=0.000	
F=Centre Radius	Third Break=0.000	
G=Angle	Branch Diameter Type=Nominal	
H=Inset #1	Branch Seam Position=0.000	
I=Height	Cross Break=1	
J=Twist Angle	Number Of Segments=4	
K=Top Extension	Single Segments=Yes	Seams
	Nest Break Start Segment=0	S1=None
	Nest Break End Segment=0	S2=None
	Marker Type=Notch	
	Hole Adjust=0.000	
	Notch Angle For Seam=0	Damper:
	Stitch Gap=0.000	Damper.

Number Of Stitches=4 Branch Allowance To Pipe=0.000

Pattern: 186

Round

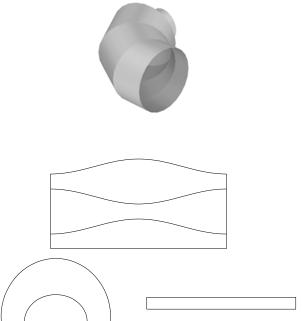


Dims	Options	Conn's
A=Bottom Diameter	Diameter Type=Nominal	C1=None
B=Top Diameter	Cross Break=1	C2=None
C=Length	Seam Position=0.000	
D=Collar	Hole Adjust=0.000	
E=Slope Angle	Turnover=0.000	
F=Border	Type=None	
G=Cone Angle		

Seams S1=None

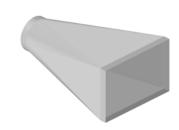
Damper: None

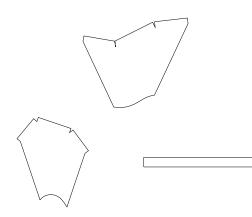
Round



Dims	Options	Conn's
A=Bottom Diameter	Number Of Segments=4	C1=None
B=Top Diameter	Seam Position=0.000	C2=None
C=Inner Radius	Cross Break=1	C3=None
D=Angle	Single Segments=No	
E=Bottom Extension	Bottom Diameter Type=Nominal	
F=Top Extension	Automatic Nest Break If Oversize=No	
G=Extension	Notch Angle For Seam=0	
	Nest Break Start Segment=0	
	Nest Break End Segment=0	
	Marker Type=Notch	
	Top Diameter Type=Nominal	Seams
	Marker Depth=Default	S1=None
	Mark Sides=No	
	Leg Lengths=No	
	Fixing Holes On Extension=Yes	
		Damper: None
		None

# Pattern: 254 Rectangular/Round





Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Length Break=1	C2=None
C=Diameter	Diameter Type=Nominal	
D=Length	Seam Position=Width	
E=Offset Width	Marker Type=Notch	
F=Offset Depth	Input=Length	
G=Extension	Offset Width=Left In	
H=Collar	Offset Depth=Bottom Up	
I=Corner Radius	Inlet=1	
J=Slope Angle	Outlet=2	
	Maximum Angle=180.000	Seams
	Fold Notch Depth=Full Allowance	S1=None
	V Notch Rectangular Extension=No	
	Seam Cut Back=None	
	Cut Back Allowance (%)=50.000	
	2 Parts 90 Degrees Seam=No	Damper: None

Round



Dims	Options	Conn's
A=Radius	Six Parts Left Lap=None	C1=None
B=Angle	Six Parts Right Lap=None	C2=None
C=Length	Seam Position=Left	C3=None
D=Front Hole Diameter		
E=Six Parts Left Height		
F=Six Parts Right Height		
G=Pipe Diameter		
H=Turnover Allowance		

Seams

S1=None

Damper:







Pattern: 311

Round



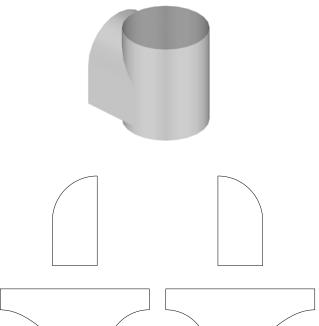
		7
		]

Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Pipe Length	Branch Diameter Type=Nominal	C2=None
C=Left Extension	Branch Diameter Type=Nominal	C3=None
D=Right Extension	Hole Adjust=0.000	
E=Branch Diameter	Round Allowance To Pipe=0.000	
F=Branch Length	Flat Allowance To Pipe=0.000	
G=Branch Width	Seam Position=0.000	
H=Distance	Pipe Parts=1	
I=Distance	Branch Parts=2	
J=Offset	Branch Seam Position=Sides	
K=Collar	Flat Right=No	Seams
	Inlet=1	S1=None
	Outlet=2	S2=None

Damper:

courtesy of 4/18/2016 43

Round



Dims	Options	Conn's
A=Radius	Six Parts Left Lap=None	C1=None
B=Depth	Six Parts Right Lap=None	C2=None
C=Angle	Vee Depth Female=0.000	C3=None
D=Length	Vee Angle Female=30.000	
E=Front Hole Diameter F=Six Parts Left Height G=Six Parts Right Height H=Pipe Diameter I=Turnover Allowance	Allowance=Left	

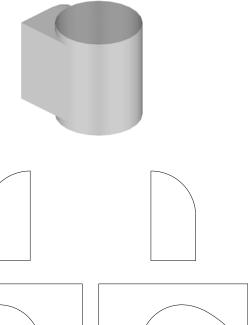
Seams

S1=None

Damper:

Pattern: 316

Round



Dims	Options	Conn's
A=Radius	Six Parts Left Lap=None	C1=None
B=Depth	Six Parts Right Lap=None	C2=None
C=Angle	Vee Depth Female=0.000	C3=None
D=Length	Vee Angle Female=30.000	
E=Front Hole Diameter	Allowance=Left	
F=Six Parts Left Height		
G=Six Parts Right Height		
H=Pipe Diameter		
I=Turnover Allowance		
		Seams

S1=None

Damper:

courtesy of Applied Software 4/18/2016 44

Round

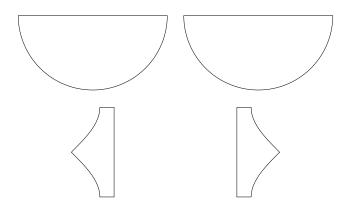


Dims	Options	Conn's
A=Radius	Six Parts Left Lap=None	C1=None
B=Length	Six Parts Right Lap=None	C2=None
C=Front Hole Diameter D=Six Parts Left Height E=Six Parts Right Height F=Pipe Diameter G=Turnover Allowance	Seam Position=Left	C3=None

Seams

S1=None

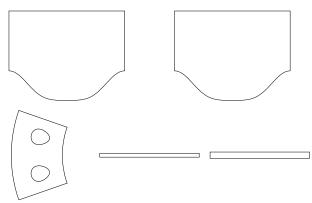
Damper:



Pattern: 323

Round

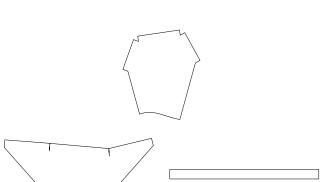




Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Diameter	Branch Parts=1	C2=None
C=Pipe Length	First Break=0.000	C3=None
D=Left Extension	Second Break=0.000	C4=None
E=Right Extension	Third Break=0.000	
F=Branch Diameter #1	Seam Position=180.000	
G=Angle #1	Diameter Type BE=Nominal	
H=Inset #1	Diameter Type SE=Nominal	
I=Extension #1	Branch Diameter Type=Nominal	
J=Branch Diameter #2	Branch Diameter Type=Nominal	
K=Angle #2	Hole Adjust=0.000	Seams
L=Inset #2	Branch Allowance To Pipe=0.000	S1=None
M=Extension #2	Branch Seam Position=0.000	S2=None
	Throat Cut Back (Degrees)=0.000	S3=None
	Cut Back Allowance (%)=0.000	
	End Castle Width =0.000	Damper: None
	End Castle Angle=30.000	None
		None
		None
		Hone

Rectangular/Round





Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Length Break=1	C2=None
C=Diameter	Diameter Type=Nominal	
D=Offset Width	Seam Position=Width	
E=Offset Depth	Marker Type=Notch	
F=Extension	Offset Width=Left In	
G=Collar	Offset Depth=Bottom Up	
H=Round Angle	Inlet=1	
I=Twist Angle	Outlet=2	
J=Inner Radius	Fold Notch Depth=Full Allowance	
K=Corner Radius	V Notch Rectangular Extension=No	Seams
	Seam Cut Back=None	S1=None
	Cut Back Allowance (%)=50.000	
	2 Parts 90 Degrees Seam=No	

Damper: None

# Pattern: 325

Round



Dims	Options	Conn's
A=Bottom Diameter	Bottom Diameter Type=Nominal	C1=None
B=Left Diameter	Left Diameter Type=Nominal	C2=None
C=Right Diameter	Right Diameter Type=Nominal	C3=None
D=Left Angle	2 Parts=Yes	
E=Right Angle		
F=Left Length		
G=Right Length		
H=Bottom Collar		
I=Left Collar		
J=Right Collar		
		Seams
		S1=None

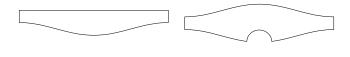
Damper:

Round



Dims	Options	Conn's
A=Diameter	Number Of Segments=4	C1=None
B=Inner Radius	Seam Position=0.000	C2=None
C=Angle	Pipe Diameter Type=Nominal	C3=None
D=Bottom Extension	Branch Diameter Type=Nominal	C4=None
E=Top Extension	Marker Type=Notch	
F=Branch Diameter	Tap Segment=2	
G=Branch Length	Branch Allowance To Pipe=0.000	
H=Branch Angle	Full Intersections=No	
I=Branch Extension		
J=X-Offset		
K=Y-Offset		Seams
L=Branch Inset		S1=None
		S2=None

Damper:





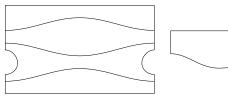
Pattern: 327

Round



Dims	Options	Conn's
A=Diameter	Number Of Segments=4	C1=None
B=Inner Radius	Seam Position=0.000	C2=None
C=Angle	Single Segments=No	C3=None
D=Bottom Extension	Pipe Diameter Type=Nominal	C4=None
E=Top Extension	Branch Diameter Type=Nominal	
F=Branch Diameter	Marker Type=Notch	
G=Branch Length	Tap Segment=2	
H=Branch Angle	Branch Allowance To Pipe=0.000	
I=Branch Extension	Full Intersections=No	
J=X-Offset		
K=Y-Offset		Seams
L=Branch Inset		S1=None
		S2=None

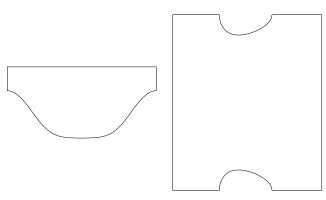
Damper:





Round





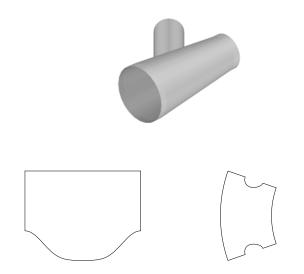
Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	First Break=0.000	C3=None
D=Right Extension	Second Break=0.000	
E=Branch Diameter #1	Third Break=0.000	
F=Branch Length #1	Pipe Diameter Type=Nominal	
G=Angle #1	Branch Diameter Type=Nominal	
H=Inset #1	Hole Adjust=0.000	
I=Extension #1	Branch Allowance To Pipe=0.000	
	Branch Seam Position=0.000	
	Throat Cut Back (Degrees)=0.000	Seams
	Plate Border (Circumference)=0.000	S1=None
	Plate Type=Rectangular	S2=None
	Cut Back Allowance (%)=0.000	
	Use Pipe Seam For Branches=No	
	Plate Border (Length)=Auto	Damper: None
	End Castle Width =0.000	None
	End Castle Angle=30.000	None

Pattern: 338
Rectangular/Round

Dillis	Options	COIIII 3
A=Width	Diameter Type=Nominal	C1=None
B=Depth	Marker Type=Notch	C2=None
C=Diameter		
D=Length		
E=Extension		
F=End Height		
G=Offset		
H=Collar		
I=Bottom Chamfer		
J=Back Chamfer		
		Seams
		S1=None
		S2=None

Damper:

Round



Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Diameter	Branch Parts=1	C2=None
C=Pipe Length	First Break=0.000	C3=None
D=Left Extension	Second Break=0.000	
E=Right Extension	Third Break=0.000	
F=Branch Diameter #1	Seam Position=90.000	
G=Angle #1	Diameter Type BE=Nominal	
H=Inset #1	Diameter Type SE=Nominal	
I=Extension #1	Branch Diameter Type=Nominal	
	Hole Adjust=0.000	
	Branch Allowance To Pipe=0.000	Seams
	Branch Seam Position=0.000	S1=None
	Throat Cut Back (Degrees)=0.000	S2=None
	Cut Back Allowance (%)=0.000	
	End Castle Width =0.000	
	End Castle Angle=30.000	Damper: None
		None
		None

## Pattern: 344

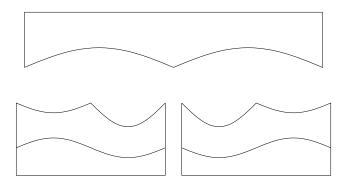
Round



Dims	Options	Conn's
A=Diameter	Diameter Type=Nominal	C1=None
B=Length In	Single Segments=No	C2=None
C=Length Out	Marker Type=Notch	C3=None
D=X-Offset		C4=None
E=Y-Offset		C5=None
F=Extension In		
G=Extension Out		

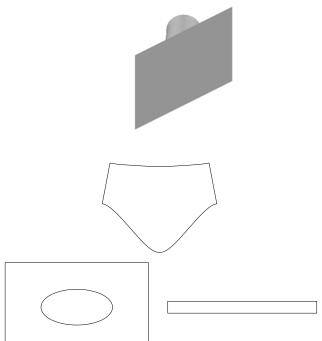
Seams S1=None

Damper:



courtesy of Applied Software 4/18/2016 49

Round



Dims	Options	Conn's
A=Hole Diameter	Branch Parts=1	C1=None
B=Branch Diameter	Plate Parts=1	C2=None
C=Length	Seam Position=0.000	
D=Angle	Hole Type=Oval	
E=Plate Width	Hole Adjust=0.000	
F=Plate Depth	Diameter Type=Nominal	
G=Offset Width	Turnover=0.000	
H=Offset Depth	Item Pattern Length/Angle=Length	
I=Collar	Use Marker Notch (OM End)=Yes	
J=Hole Depth	Notch Hole Ends=No	
K=Bottom Width	Dynamic Hole Adjust=Auto	Seams
		S1=None
		S2=None

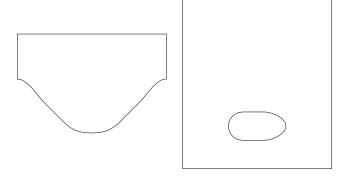
Damper: None

Pattern: 355

Round



Dims	Options	Conn's
A=Width	Pipe Parts=1	C1=None
B=Length	Branch Parts=1	C2=None
C=Left Extension	Pipe Diameter Type=Nominal	C3=None
D=Right Extension	Branch Diameter Type=Nominal	
E=Branch Width #1	Seam Position=0.000	
F=Branch Depth #1	Branch Allowance To Pipe=0.000	
G=Branch Length #1	True Oval Straight=No	
H=Angle #1		
I=Inset #1		
J=Extension #1		
		Seams
		S1=None
		S2=None



Damper:

Round



Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Pipe Length	Branch Diameter Type=Nominal	C2=None
C=Left Extension	Branch Diameter Type=Nominal	C3=None
D=Branch Diameter	Hole Adjust=0.000	
E=Branch Length	Round Allowance To Pipe=0.000	
F=Angle	Flat Allowance To Pipe=0.000	
G=Collar	Seam Position=0.000	
	Pipe Parts=1	
	Branch Parts=2	
	Connector Fold Notch=Full Allowance	
	Inlet=1	Seams
	Outlet=2	S1=None
		S2=None



Pattern: 380

Round

4/18/2016

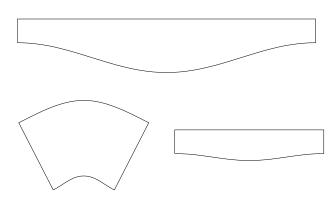


Dims	Options	Conn's
A=Left Diameter	Seam Position=0.000	C1=None
B=Right Diameter	Left Diameter Type=Nominal	C2=None
C=Length	Right Diameter Type=Nominal	C3=None
D=Offset	Cross Break=1	
E=Left Extension	Marker Type=Notch	
F=Right Extension	Seam Position=Angled	
G=Left Collar		
H=Right Collar		

Seams S1=None

Damper:

Damper: None None



51

Round

Dims Options Conn's

A=Diameter B=Length Diameter Type=Nominal Stitch Gap=0.000
Number Of Stitches=4



Seams

S1=None

Damper:

Pattern: 383

Round



Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Pipe Length	Branch Diameter Type=Nominal	C2=None
C=Left Extension	Branch Diameter Type=Nominal	C3=None
D=Branch Diameter	Hole Adjust=0.000	
E=Branch Length	Round Allowance To Pipe=0.000	
F=Angle	Flat Allowance To Pipe=0.000	
G=Collar	Seam Position=0.000	
	Pipe Parts=1	
	Branch Parts=2	
	Connector Fold Notch=Full Allowance	
	Inlet=1	Seams
	Outlet=2	S1=None
		S2=None



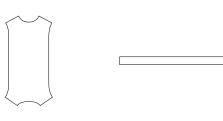


Damper:

4/18/2016 courtesy of software 52

Round





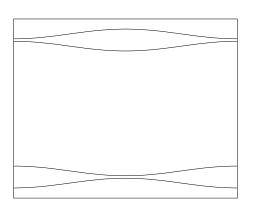
Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Pipe Length	Branch Diameter Type=Nominal	C2=None
C=Left Extension	Branch Diameter Type=Nominal	C3=None
D=Branch Diameter	Hole Adjust=0.000	
E=Branch Length	Round Allowance To Pipe=0.000	
F=Angle	Flat Allowance To Pipe=0.000	
G=Collar	Seam Position=0.000	
	Pipe Parts=1	
	Branch Parts=2	
	Connector Fold Notch=Full Allowance	
	Inlet=1	Seams
	Outlet=2	S1=None
		S2=None

Damper:

Pattern: 386

Round





Dims	Options	Conn's
A=Diameter	Seam Position=0.000	C1=None
B=Length	Single Segments=No	C2=None
C=Offset	Diameter Type=Nominal	C3=None
D=Left Collar	Cross Break=1	
E=Right Collar	Marker Type=Notch	
F=Inner Radius	Seam Position=Angled	
	Stitch Gap=0.000	
	Number Of Stitches=4	
	Seam Cuts=Straight	

Damper: None None

S1=None

courtesy of Applied Software

Round



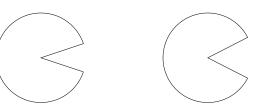
Dims	Options	Conn's
Left Diameter	Left Diameter Type=Nominal	C1=None
Right Diameter	Right Diameter Type=Nominal	C2=None
Pipe Length	Branch Diameter Type=Nominal	C3=None
=Y-Offset	Marker Notches=No	
:X-Offset		
Left Collar		
Right Collar		
Branch Diameter		
Branch Length		
Offset		
-Collar		Seams
		S1=None
		S1=Nor

Damper:

Pattern: 388

Round





Dims	Options	Conn's
A=Outer Diameter	Number Of Struts=3	C1=None
B=Length	Allowance To Pipe=25.000	
C=Height	Allowance To Hood=25.000	
D=Pipe Diameter	Hole Diameter=0.000	
E=Pipe Length	Number Of Holes=0	
F=Inner Diameter	Hole Inset=0.000	
G=Inner Length	Strut Hole Width=0.000	
H=Hole Diameter	Strut Hole Length Adjust=0.000	
I=Angle	Insertion Point=Default	
J=Strut Width	Rotation=Default	
		Seams
		S1=None

Damper:

Round





Dims	Options	Conn's
A=Diameter	2 Parts=No	C1=None
B=Length	Vee Notch Angle=20.000	C2=None
C=Slice Depth	Vee Notch Depth (C1)=0.000	C3=None
D=Left Collar	Vee Notch Depth (C2)=0.000	
E=Right Collar	Seam For Weathering=No	
-	Slice Full Length=No	
	Seam Position=Top	
	Notch Corners=No	
	Notch Connectors=No	
	Draw C1=No	
	Draw C2=No	Seams
		S1=None

Damper:

Pattern: 392

Round

4/18/2016



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A=Pipe Diameter	Branch Parts=1	C1=None
B=Branch Diameter #1	First Break=0.000	
C=Branch Length #1	Second Break=0.000	
D=Angle #1	Third Break=0.000	
E=Offset #1	Seam Position=0.000	
F=Extension #1	Pipe Diameter Type=Nominal	
	Branch Diameter Type=Nominal	
	Hole Adjust=0.000	
	Branch Allowance To Pipe=0.000	
	Cut Back Allowance (%)=0.000	
	Use Pipe Seam For Branches=No	Seams
	Plate Border (Length)=Auto	S1=None

Damper: None



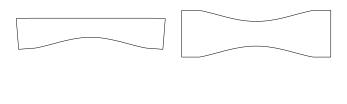
55

Round



Dims	Options	Conn's
A=Diameter	Number Of Segments=4	C1=None
B=Inner Radius	Start Segment=2	C2=None
C=Angle	End Segment=3	C3=None
D=Bottom Extension	Leg Lengths=No	
E=Top Extension	Length Includes Extensions=No	
F=Slice Depth	Seam Position=Top	
G=Slice Angle	2 Parts=No	
	Notch Corners=No	
	Notch Connectors=No	
	Draw C2=No	
	Draw C3=No	Seams
		S1=None

Damper:



Pattern: 394

Round



Options	Conn's
Seam Position=0.000	C1=None
Bottom Diameter Type=Nominal	C2=None
Top Diameter Type=Nominal	
Turnover=0.000	
Splitters=No	
Splitter Adjust=0.000	
2 Parts=No	
Splitters=4	
	Seam Position=0.000 Bottom Diameter Type=Nominal Top Diameter Type=Nominal Turnover=0.000 Splitters=No Splitter Adjust=0.000 2 Parts=No

Seams S1=None

Damper:

Round



Dims	Options	Conn's
A=Left Diameter	Pipe Parts=1	C1=None
B=Right Diameter	Branch Parts=1	C2=None
C=Pipe Length	Seam Position=On Hole	C3=None
D=Y-Offset	Diameter Type BE=Nominal	C4=None
E=Left Collar	Diameter Type SE=Nominal	
F=Right Collar	Branch Diameter Type=Nominal	
G=Branch Diameter	Hole Adjust=0.000	
H=Branch Length	Branch Allowance To Pipe=0.000	
I=Angle	Throat Cut Back (Degrees)=0.000	
J=Inset	Branch Inset=Front	
K=Extension		Seams
L=Collar		S1=None
		S2=None

Damper:

Pattern: 398

Round

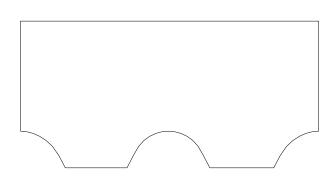


Dims	Options	Conn's
A=Branch Diameter	Seam Position=Right	C1=None
B=Pipe Diameter	Pipe Diameter Type=Nominal	
C=Branch Length	Branch Diameter Type=Nominal	
D=Offset Depth	Flat Allowance To Pipe=0.000	
E=Offset Width	Round Allowance To Pipe=0.000	
	Branch Parts=1	

Seams

S1=None

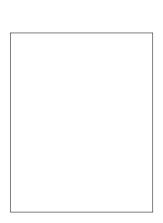
Damper:



courtesy of 4/18/2016 57

Round





Dims	Options	Conn's
A=d	Seam Position=0.000	C1=None
B=l	Diameter Type=Nominal	C2=None
C=Left Extension	Pipe Parts=1	
D=Right Extension	First Break=0.000	
	Second Break=0.000	
	Third Break=0.000	

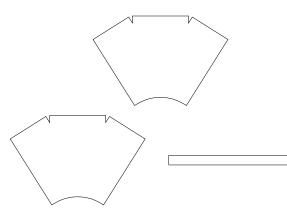
Seams

S1=None

Damper: None None

#### Pattern: 450 Rectangular/Round

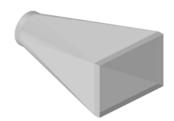


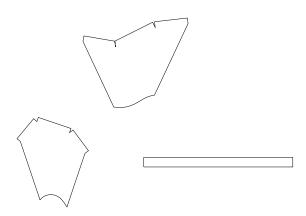


Dims	Options	Conn's
A=a	Cross Break=2	C1=None
B=b	Length Break=1	C2=None
C=d	Diameter Type=Nominal	
D=h	Seam Position=Width	
E=m	Marker Type=Notch	
F=l	Offset Width=Left In	
G=Corner Radius	Offset Depth=Bottom Up	
	Inlet=1	
	Outlet=2	
	Fold Notch Depth=Full Allowance	
	V Notch Rectangular Extension=No	Seams
	Seam Cut Back=None	S1=None
	Cut Back Allowance (%)=50.000	
	2 Parts 90 Degrees Seam=No	

Damper: None

Rectangular/Round





Dims	Options	Conn's
A=a	Cross Break=2	C1=None
B=b	Length Break=1	C2=None
C=d	Diameter Type=Nominal	
D=e	Seam Position=Width	
E=f	Marker Type=Notch	
F=h	Offset Width=Left In	
G=m	Offset Depth=Bottom Up	
H=l	Inlet=1	
I=Corner Radius	Outlet=2	
	Fold Notch Depth=Full Allowance	
	V Notch Rectangular Extension=No	Seams
	Seam Cut Back=None	S1=None
	Cut Back Allowance (%)=50.000	
	2 Parts 90 Degrees Seam=No	

Damper: None

#### Pattern: 509 Round/Flat Oval/Equipment



Dims	Options	Conn's
A=Diameter	Install Type=Plain	C1=None
B=Length	Sex Type=Male	C2=None
C=Inset	Control Type=None	
D=Sides	Type=Single	
E=Top	Draw Type=None	
F=Bottom	Temperature Type=None	
G=Oval Depth	Draw Type=None	
	Lines=No	
	Cost Supports=No	
	Lines Type=Quantity	
	Lines=3.000	Seams

Damper:

# Pattern: 522 Round/Flat Oval/Equipment



Dims	Options	Conn's
A=Diameter	Sex Type=Male	C1=None
B=Collar		C2=None
C=Length		
D=Offset		
E=Oval Depth		

Seams

S1=None

Damper:

# Pattern: 523 Round/Equipment



Dims	Options	Conn's
A=Diameter	Number Of Segments=4	C1=None
B=Inner Radius	Diameter Type=Nominal	C2=None
C=Angle	Angle Tolerance=0.000	C3=None
D=Bottom Extension	Mark Sides=No	
E=Top Extension	Leg Lengths=No	
	Fixing Holes On Extension=Yes	
	Square Outer Insulation=No	
	Outer Insulation Extensions=No	
	Develop=No	

Damper: None

S1=None

None

4/18/2016 courtesy of software 60

Round



Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Diameter	Branch Parts=1	C2=None
C=Pipe Length	Seam Position=On Hole	C3=None
D=Y-Offset	Diameter Type BE=Nominal	
E=Left Extension	Diameter Type SE=Nominal	
F=Right Extension	Branch Diameter Type=Nominal	
G=Branch Diameter	Hole Adjust=0.000	
H=Branch Length	Branch Allowance To Pipe=0.000	
I=Angle	Throat Cut Back (Degrees)=0.000	
J=Inset		
K=Extension		Seams
		S1=None
		S2=None

Damper:

Pattern: 530 Round/Flat Oval/Equipment



Dims	Options	Conn's
A=Diameter	Sex Type=Male	C1=None
B=Collar	Extension includes Diameter=No	C2=None
C=Length	Type=None	
D=Offset	Circles=0	
E=Oval Depth	Cost Supports=No	

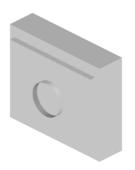
Seams

S1=None

Damper:

courtesy of Applied Software 4/18/2016 61

Pattern: 533 Round/Flat Oval/Equipment



Dims	Options	Conn's
A=Diameter	Install Type=Plain	C1=None
B=Width	Sex Type=Male	C2=None
C=Depth	Control Type=None	
D=Length	Type=Single	
E=Inset	Draw Type=None	
F=Inset	Temperature Type=None	
G=Sides	Draw Type=None	
H=Top	Lines=No	
I=Bottom	Cost Supports=No	
J=Collar	Lines Type=Quantity	
K=Right Collar	Lines=3.000	Seams
L=Oval Depth		

Damper:

Pattern: 555 Round/Flat Oval/Equipment



Dims	Options	Conn's
A=Diameter	Type=Plain	C1=None
B=Collar	Sex Type=Male	C2=None
C=Length	Pattern=Single	
D=Oval Depth	Mirror=No	
	Mirror View=No	
	X-Offset=0.000	
	Y-Offset=0.000	
	Cost Supports=No	

S1=None

Seams

Damper:

Pattern: 556 Round/Flat Oval/Equipment



Dims	Options	Conn's
A=Diameter	Sex Type=Male	C1=None
B=Collar	Draw Type=Plain	C2=None
C=Length	Lines Type=Quantity	
D=Offset	Lines=3.000	
E=Oval Depth		

Seams

S1=None

Damper:

Pattern: 557 Round/Flat Oval/Equipment



Dims	Options	Conn's
A=Diameter	Type=Plain	C1=None
B=Collar	Sex Type=Male	
C=Length	Pattern=Single	
D=Oval Depth	Mirror=No	
	Mirror View=No	
	X-Offset=0.000	
	Y-Offset=0.000	
	Cost Supports=No	

Seams

Damper:

Round



Dims	Options	Conn's
A=Width	Pipe Diameter Type=Nominal	C1=None
B=Branch Width #1	Branch Diameter Type=Nominal	C2=None
C=Branch Depth #1	Outline Only=Yes	C3=None
D=Panel Depth	Show Duct=No	
E=Handle Top Diameter	Handle Points=6	
F=Handle Bottom Diamet	er	
G=Handle Top Length		
H=Handle Bottom Length		
I=Handle Inset		
		Seams
		S1=None
		S2=None

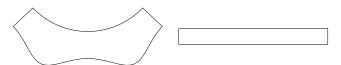
Damper:

Pattern: 751

Round



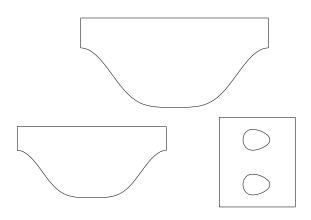
Dims	Options	Conn's
A=Pipe Diameter	Branch Parts=1	C1=None
B=Branch Diameter	Seam Position=0.000	C2=None
C=Branch Length	Pipe Diameter Type=Nominal	C3=None
D=Angle	Branch Diameter Type=Nominal	
E=Collar	Hole Adjust=0.000	
F=Btm Width	Branch Allowance To Pipe=0.000	
	Branch Seam Position=0.000	
	Plate Border=0.000	
	Plate Type=Rectangular	
	Input=Angle	
	Plate Border (Width)=Auto	Seams
	Reducer Parts=1	S1=None
		S2=None
		Damper: None
		None
		None



4/18/2016 courtesy of software 64

Round/Fabrication





Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	First Break=0.000	C3=None
D=Right Extension	Second Break=0.000	C4=None
E=Branch Diameter #1	Third Break=0.000	
F=Branch Length #1	Seam Position=0.000	
G=Angle #1	Pipe Diameter Type=Nominal	
H=Inset #1	Branch Diameter Type=Nominal	
I=Offset #1	Branch Diameter Type=Nominal	
J=Rotation #1	Hole Adjust=0.000	
K=Extension #1	Branch Allowance To Pipe=0.000	Seams
L=Branch Diameter #2	Branch Seam Position=0.000	S1=None
M=Branch Length #2	Throat Cut Back (Degrees)=0.000	S2=None
N=Angle #2	Plate Border (Circumference)=0.000	S3=None
O=Inset #2	Plate Type=Rectangular	
P=Offset #2	Cut Back Allowance (%)=0.000	Damper: None
Q=Rotation #2	Use Pipe Seam For Branches=No	None
R=Extension #2	Plate Border (Length)=Auto	None
	End Castle Width =0.000	None
	End Castle Angle=30.000	INUIT

# Pattern: 808

Round



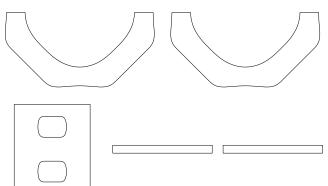
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Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	Pipe Seam Position=0.000	C3=None
D=Right Extension	Branch Seam Position=Throat	C4=None
E=Branch Diameter	Pipe Diameter Type=Nominal	
F=Branch Length	Branch Diameter Type=Nominal	
G=Angle	Branch Diameter Type=Nominal	
H=Inset	Branch Allowance To Pipe=0.000	
I=Offset	Hole Adjust=0.000	
J=Rotation	Straight Notch=No	
K=Collar	Plate Border=0.000	Seams
L=Branch Diameter	Plate Type=Rectangular	S1=None
M=Branch Length	Plate Border (Width)=Auto	S2=None
N=Angle	Inset=Front	S3=None
O=Inset		
P=Offset		Damper: None
Q=Rotation		None None
R=Collar		HOLL

Round



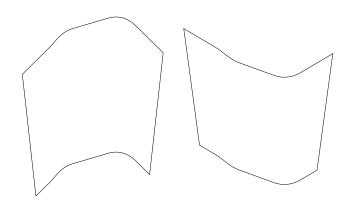


Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	Seam Position=0.000	C3=None
D=Right Extension	Pipe Diameter Type=Nominal	C4=None
E=Branch Diameter	Branch Diameter Type=Nominal	
F=Branch Length	Branch Diameter Type=Nominal	
G=Angle	Branch Allowance To Pipe=0.000	
H=Inset	Hole Adjust=0.000	
I=Offset	Plate Border=0.000	
J=Rotation	Plate Type=Rectangular	
K=Collar	Plate Border (Width)=Auto	Seams
L=Branch Diameter		S1=None
M=Branch Length		S2=None
N=Angle		S3=None
O=Inset		
P=Offset		Damper: None
Q=Rotation		None
R=Collar		None
		None
		None

#### Pattern: 810 Rectangular/Round



Dims	Options	Conn's
A=Width In	Cross Break=2	C1=None
B=Depth In		C2=None
C=Radius In		
D=Width Out		
E=Depth Out		
F=Radius Out		
G=Length		
H=Angle In		
I=Angle Out		
J=Offset Width		
K=Offset Depth		Seams
L=Extension In		S1=None
M=Extension Out		

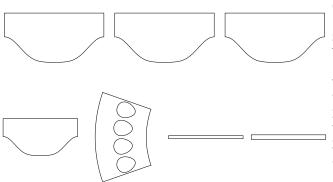


Damper:

courtesy of Applied Software 4/18/2016 66

Round

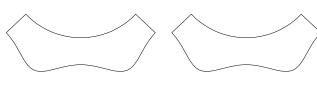




Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Diameter	Branch Parts=1	C2=None
C=Pipe Length	First Break=0.000	C3=None
D=Left Extension	Second Break=0.000	C4=None
E=Right Extension	Third Break=0.000	C5=None
F=Branch Diameter #1	Seam Position=45.000	C6=None
G=Branch Length #1	Diameter Type BE=Nominal	
H=Angle #1	Diameter Type SE=Nominal	
I=Inset #1	Branch Diameter Type=Nominal	
J=Offset #1	Branch Diameter Type=Nominal	
K=Rotation #1	Branch Diameter Type=Nominal	Seams
L=Extension #1	Branch Diameter Type=Nominal	S1=None
M=Branch Diameter #2	Hole Adjust=0.000	S2=None
N=Branch Length #2	Branch Allowance To Pipe=0.000	S3=None
O=Angle #2	Branch Seam Position=0.000	S4=None
P=Inset #2	Throat Cut Back (Degrees)=0.000	S5=None Damper: None
Q=Offset #2	Cut Back Allowance (%)=0.000	None
R=Rotation #2	End Castle Width =0.000	None
S=Extension #2	End Castle Angle=30.000	None
T=Branch Diameter #3		None
U=Branch Length #3		None
V=Angle #3		None
W=Inset #3		
X=Offset #3		
Y=Rotation #3		
Z=Extension #3		
a=Branch Diameter #4		
b=Branch Length #4		

Pattern: 81	2
Round/Fabrication	



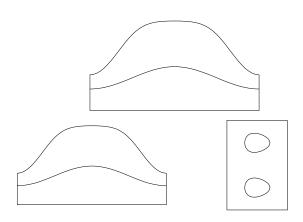




Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	Seam Position=0.000	C3=None
D=Right Extension	Pipe Diameter Type=Nominal	C4=None
E=Branch Diameter	Branch Diameter Type=Nominal	
F=Branch Length	Branch Diameter Type=Nominal	
G=Angle	Hole Adjust=0.000	
H=Inset	Branch Allowance To Pipe=0.000	
I=Rotation	Branch Seam Position=0.000	
J=Collar	Plate Border=0.000	
K=Branch Diameter	Plate Type=Rectangular	Seams
L=Branch Length	Input=Angle	S1=None
M=Angle	Plate Border (Width)=Auto	S2=None
N=Inset	Reducer Parts=1	S3=None
O=Rotation		
P=Collar		Damper: None
Q=Btm Width		None
R=Btm Width		None
		None

Round





Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	First Break=0.000	C3=None
D=Right Extension	Second Break=0.000	C4=None
E=Branch Diameter	Third Break=0.000	C5=None
F=Branch Length	Seam Position=0.000	C6=None
G=Angle	Pipe Diameter Type=Nominal	
H=Inset	Branch Diameter Type=Nominal	
I=Offset	Branch Diameter Type=Nominal	
J=Rotation	Hole Adjust=0.000	
K=Extension	Branch Allowance To Pipe=0.000	Seams
L=Collar	Throat Cut Back (Degrees)=0.000	S1=None
M=Branch Diameter	Reducer Parts=1	S2=None
N=Branch Length	Branch Inset=Front	S3=None
O=Angle		
P=Inset		Damper:
Q=Offset		24
R=Rotation		
S=Extension		
T=Collar		

# Pattern: 815

Round





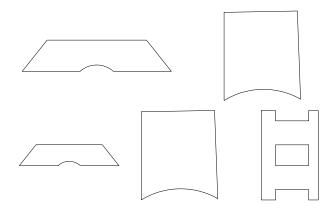


Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Diameter	Branch Parts=1	C2=None
C=Pipe Length	Pipe Seam Position=270.000	C3=None
D=Left Collar	Branch Seam Position=Throat	C4=None
E=Right Collar	Diameter Type BE=Nominal	
F=Branch Diameter	Diameter Type SE=Nominal	
G=Branch Length	Branch Diameter Type=Nominal	
H=Angle	Branch Diameter Type=Nominal	
I=Inset	Hole Adjust=0.000	
J=Offset	Branch Allowance To Pipe=0.000	
K=Rotation		Seams
L=Collar		S1=None
M=Branch Diameter		S2=None
N=Branch Length		S3=None
O=Angle		
P=Inset		Damper: None
Q=Offset		None
R=Rotation		None
S=Collar		None
		Hone

4/18/2016 courtesy of software 68

Round



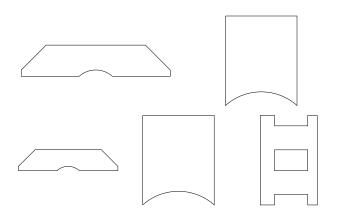


Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Pipe Length	Round Allowance To Pipe=0.000	C2=None
C=Left Extension	Flat Allowance To Pipe=0.000	C3=None
D=Right Extension	Pipe Parts=1	C4=None
E=Branch Width #1	Branch Parts=2	
F=Branch Depth #1	First Break=0.000	
G=Branch Length #1	Second Break=0.000	
H=Branch Angle #1	Third Break=0.000	
I=Branch Inset #1	Pipe Seam Position=270.000	
J=Branch Offset #1	Hole Adjust=0.000	
K=Branch Rotation #1	Plate Border=0.000	Seams
L=Branch Extension #1	Castle Width=0.000	S1=None
M=Branch Width #2	Castle Angle=30.000	S2=None
N=Branch Depth #2	Plate Border (Width)=Auto	S3=None
O=Branch Length #2		
P=Branch Angle #2		Damper: None
Q=Branch Inset #2		None
R=Branch Offset #2		None
S=Branch Rotation #2		None
T=Branch Extension #2		INUITE

# Pattern: 818

Round





Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Pipe Length	Round Allowance To Pipe=0.000	C2=None
C=Left Extension	Flat Allowance To Pipe=0.000	C3=None
D=Right Extension	Pipe Parts=1	C4=None
E=Branch Width #1	Branch Parts=2	C5=None
F=Branch Depth #1	First Break=0.000	
G=Branch Length #1	Second Break=0.000	
H=Branch Angle #1	Third Break=0.000	
I=Branch Inset #1	Pipe Seam Position=270.000	
J=Branch Offset #1	Hole Adjust=0.000	
K=Branch Rotation #1	Plate Border=0.000	Seams
L=Branch Extension #1	Throat Clearance=0.000	S1=None
M=Branch Width #2	Castle Width=0.000	S2=None
N=Branch Depth #2	Castle Angle=30.000	S3=None
O=Branch Length #2	Plate Border (Width)=Auto	
P=Branch Angle #2	Length Includes Throat Clearance=No	Damper: None
Q=Branch Inset #2		None
R=Branch Offset #2		None
S=Branch Rotation #2		None
T=Branch Extension #2		Home
U=Reducer Diameter		
V=Reducer Length		

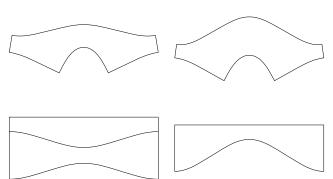
4/18/2016 courtesy of software 69

Round/Flat Oval



Dims	Options	Conn's
A=Btm Width	Bottom Diameter Type=Nominal	C1=None
B=Btm Depth	Top Diameter Type=Nominal	C2=None
C=Right Width	Right Diameter Type=Nominal	C3=None
D=Right Depth	Left Diameter Type=Nominal	C4=None
E=Left Width	Number Of Segments=2	C5=None
F=Left Depth	Number Of Segments=1	C6=None
G=Right Height	Single Segments=No	
H=Left Height	Marker Type=Notch	
I=Right Radius		
J=Left Radius		
K=Right Angle		Seams
L=Left Angle		S1=None
M=Bottom Extension		
N=Right Extension		
O=Left Extension		





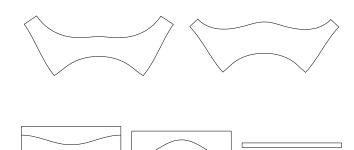
Pattern: 821

Round



Dims	Options	Conn's
A=Bottom Diameter	Bottom Diameter Type=Nominal	C1=None
B=Right Diameter	Right Diameter Type=Nominal	C2=None
C=Left Diameter	Left Diameter Type=Nominal	C3=None
D=Right Radius	Number Of Segments=2	C4=None
E=Left Radius	Number Of Segments=1	C5=None
F=Right Angle	Single Segments=No	C6=None
G=Left Angle	Marker Type=Notch	
H=Bottom Extension		
I=Right Extension		
J=Left Extension		
		Seams
		S1=None





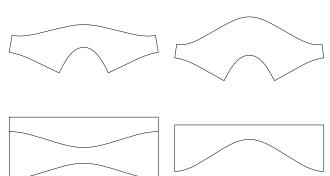
courtesy of Applied Software 4/18/2016 70

Round/Flat Oval



Dims	Options	Conn's
A=Btm Width	Bottom Diameter Type=Nominal	C1=None
B=Btm Depth	Top Diameter Type=Nominal	C2=None
C=Right Width	Right Diameter Type=Nominal	C3=None
D=Right Depth	Left Diameter Type=Nominal	C4=None
E=Left Width	Number Of Segments=2	C5=None
F=Left Depth	Number Of Segments=1	C6=None
G=Right Height	Single Segments=No	
H=Left Height	Marker Type=Notch	
I=Right Radius		
J=Left Radius		
K=Right Angle		Seams
L=Left Angle		S1=None
M=Bottom Extension		
N=Right Extension		
O=Left Extension		





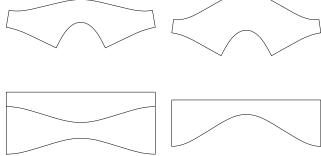
Pattern: 823
Round/Flat Oval



K=Right Angle L=Left Angle M=Bottom Exton N=Right Extension

Dims	Options	Conn's
A=Btm Width	Bottom Diameter Type=Nominal	C1=None
B=Btm Depth	Top Diameter Type=Nominal	C2=None
C=Right Width	Right Diameter Type=Nominal	C3=None
D=Right Depth	Left Diameter Type=Nominal	C4=None
E=Left Width	Number Of Segments=2	C5=None
F=Left Depth	Number Of Segments=1	C6=None
G=Right Height	Single Segments=No	
H=Left Height	Marker Type=Notch	
I=Right Radius		
J=Left Radius		
K=Right Angle		Seams
L=Left Angle		S1=None
M=Bottom Extension		
N=Right Extension		
O=Left Extension		

Damper:

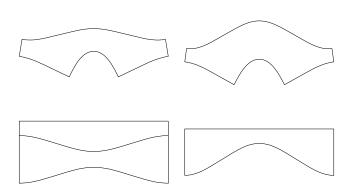


Round/Flat Oval



Dims	Options	Conn's
A=Btm Width	Bottom Diameter Type=Nominal	C1=None
B=Btm Depth	Top Diameter Type=Nominal	C2=None
C=Right Width	Right Diameter Type=Nominal	C3=None
D=Right Depth	Left Diameter Type=Nominal	C4=None
E=Left Width	Number Of Segments=2	C5=None
F=Left Depth	Number Of Segments=1	C6=None
G=Right Radius	Single Segments=No	
H=Left Radius	Marker Type=Notch	
I=Right Angle		
J=Left Angle		
K=Bottom Extension		Seams
L=Right Extension		S1=None
M=Left Extension		



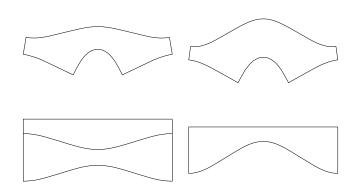


#### Pattern: 825 Round/Flat Oval



Dims	Options	Conn's
A=Btm Width	Bottom Diameter Type=Nominal	C1=None
B=Btm Depth	Right Diameter Type=Nominal	C2=None
C=Right Width	Left Diameter Type=Nominal	C3=None
D=Right Depth	Number Of Segments=2	C4=None
E=Left Width	Number Of Segments=1	C5=None
F=Left Depth	Single Segments=No	C6=None
G=Right Radius	Marker Type=Notch	
H=Left Radius		
I=Right Angle		
J=Left Angle		
K=Bottom Extension		Seams
L=Right Extension		S1=None
M=Left Extension		

Damper:



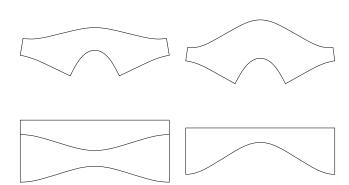
courtesy of Applied Software 4/18/2016 72

Round/Flat Oval



Dims	Options	Conn's
A=Btm Width	Bottom Diameter Type=Nominal	C1=None
B=Btm Depth	Top Diameter Type=Nominal	C2=None
C=Right Width	Right Diameter Type=Nominal	C3=None
D=Right Depth	Left Diameter Type=Nominal	C4=None
E=Left Width	Number Of Segments=2	C5=None
F=Left Depth	Number Of Segments=1	C6=None
G=Right Height	Single Segments=No	
H=Right Radius	Marker Type=Notch	
I=Left Radius		
J=Right Angle		
K=Left Angle		Seams
L=Bottom Extension		S1=None
M=Right Extension		
N=Left Extension		





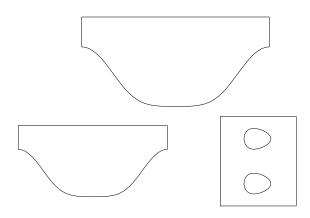
Pattern: 827
Round/Flat Oval



Dims	Options	Conn's
A=Btm Width	Bottom Diameter Type=Nominal	C1=None
B=Btm Depth	Top Diameter Type=Nominal	C2=None
C=Right Width	Right Diameter Type=Nominal	C3=None
D=Right Depth	Left Diameter Type=Nominal	C4=None
E=Left Width	Number Of Segments=2	C5=None
F=Left Depth	Number Of Segments=1	C6=None
G=Right Height	Single Segments=No	
H=Left Height	Marker Type=Notch	
I=Right Radius		
J=Left Radius		
K=Right Angle		Seams
L=Left Angle		S1=None
M=Bottom Extension		
N=Right Extension		
O=Left Extension		
		Damper:

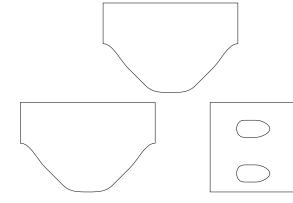
Round





Pattern: 831
Round/Flat Oval



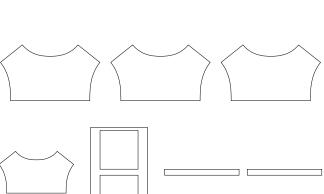


Dims	Options Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	First Break=0.000	C3=None
D=Right Extension	Second Break=0.000	
E=Branch Diameter #1	Third Break=0.000	
F=Branch Length #1	Seam Position=0.000	
G=Angle #1	Pipe Diameter Type=Nominal	
H=Inset #1	Branch Diameter Type=Nominal	
I=Offset #1	Hole Adjust=0.000	
J=Rotation #1	Branch Allowance To Pipe=0.000	
K=Extension #1	Branch Seam Position=0.000	Seams
L=Branch Diameter #2	Throat Cut Back (Degrees)=0.000	S1=None
M=Branch Length #2	Plate Border (Circumference)=0.000	S2=None
N=Angle #2	Plate Type=Rectangular	
O=Inset #2	Cut Back Allowance (%)=0.000	
P=Offset #2	Use Pipe Seam For Branches=No	Damper: None
Q=Rotation #2	Plate Border (Length)=Auto	None
R=Extension #2	End Castle Width =0.000	None
S=Branch Diameter #3	End Castle Angle=30.000	None
T=Branch Length #3		
U=Angle #3		
V=Inset #3		
W=Offset #3		
X=Rotation #3		
Y=Extension #3		
Z=Branch Diameter #4		
a=Branch Length #4		
b=Angle #4		
•		

Dims	Options	Conn's
A=Width	Pipe Parts=1	C1=None
B=Depth	Branch Parts=1	C2=None
C=Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Branch Diameter Type=Nominal	C4=None
E=Right Extension	Seam Position=0.000	
F=Branch Width #1	Branch Allowance To Pipe=0.000	
G=Branch Depth #1	True Oval Straight=No	
H=Branch Length #1		
I=Angle #1		
J=Inset #1		_
K=Offset #1		Seams
L=(Hole) Rotation #1		S1=None
M=Extension #1		S2=None
N=Branch Width #2		S3=None
O=Branch Depth #2		
P=Branch Length #2		Damper:
Q=Angle #2		'
R=Inset #2		
S=Offset #2		
T=Rotation #2		
U=Extension #2		

Round



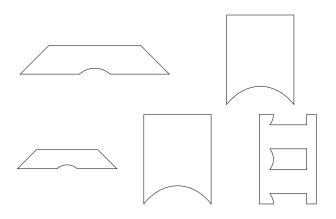


Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Pipe Length	Branch Diameter Type=Nominal	C2=None
C=Left Extension	Branch Diameter Type=Nominal	C3=None
D=Right Extension	Hole Adjust=0.000	
E=Branch Diameter	Round Allowance To Pipe=0.000	
F=Branch Length	Flat Allowance To Pipe=0.000	
G=Angle	Seam Position=0.000	
H=Angle	Pipe Parts=1	
I=Inset	Branch Parts=2	
J=Offset	Branch Seam Position=Sides	
K=Collar	Flat Right=No	Seams
L=Branch Diameter	Inlet=1	S1=None
M=Branch Length	Outlet=2	S2=None
N=Angle		
O=Angle		
P=Inset		_
Q=Offset		Damper:
R=Collar		
ii Collul		

Pattern: 837

Round





Dims A=Pipe Diameter	Options Pipe Diameter Type=Nominal	Conn's
B=Pipe Length	Round Allowance To Pipe=0.000	C2=None
C=Left Extension	Flat Allowance To Pipe=0.000	C3=None
D=Right Extension	Pipe Parts=1	C4=None
F=Branch Width #1	Branch Parts=2	<b>0</b>
F=Branch Depth #1	First Break=0.000	
G=Branch Length #1	Second Break=0.000	
H=Branch Angle #1	Third Break=0.000	
I=Branch Inset #1	Pipe Seam Position=270.000	
J=Branch Offset #1	Hole Adjust=0.000	
K=Branch Rotation #1	Plate Border=0.000	Seams
L=Branch Extension #1	Castle Width=0.000	S1=None
M=Branch Width #2	Castle Angle=30.000	S2=None
N=Branch Depth #2	Plate Border (Width)=Auto	S3=None
O=Branch Length #2		
P=Branch Angle #2		Damper: None
Q=Branch Inset #2		None
R=Branch Offset #2		None
S=Branch Rotation #2		None
T=Branch Extension #2		None

Round/Standard/Equipment



Dims	Ontions	Conn's
	Options Type-Prefiled Pears	C1=None
A=Diameter	Type=Profiled Bearer	
B=Bearer Extn	Profile=Round	C2=None
C=Left Angle	Pipework=No	C3=None
D=Right Angle	Number Of Round Sections=Auto	
E=Rod Extn Above	Drop Rod Diameter=0.400	
F=Rod Extn Below	Bearer Width=2.000	
G=Length A	Bearer Thickness=0.400	
H=Length B	Oversized Item=No	
I=Supported Width	Area of Influence=0.000	
J=Supported Depth	Export=All	
K=Right Rod Offset	Front Seismic Rod=No	Seams
L=Left Rod Offset	Back Seismic Rod=No	
M=Centre Offset	Left Seismic Rod=No	
	Right Seismic Rod=No	
	Front Seismic Rod=No	
	Back Seismic Rod=No	Dampore
	Left Seismic Rod=No	Damper:
	Right Seismic Rod=No	
	Add Rod Size=No	
	A of I: Filled Circle=No	
	A of I: Circle Thickness=0.100	
	Use Support Settings=No	
	Point Load A=0.000	
	Point Load B=0.000	
	Stretch Rods Separately=No	
	oti ctori modo ocparatery-mo	

Pattern: 839

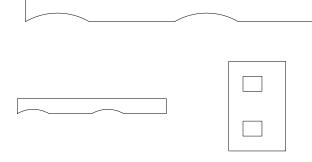
Round



A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Pipe Length	Round Allowance To Pipe=0.000	C2=None
C=Left Extension	Flat Allowance To Pipe=0.000	C3=None
D=Right Extension	Pipe Parts=1	C4=None
E=Branch Width	Branch Parts=1	C5=None
F=Branch Depth	Pipe Seam Position=0.000	
G=Branch Length	Hole Adjust=0.000	
H=Inset	Plate Border=0.000	
I=Offset	Castle Width=0.000	
J=Rotation	Castle Angle=30.000	
K=Branch Width	Plate Border (Width)=Auto	Seams
L=Branch Depth		S1=None
M=Branch Length		S2=None
N=Inset		
O=Offset		
P=Rotation		Damper:
Q=Reducer Diameter		2 apo
R=Reducer Length		

Options

Conn's

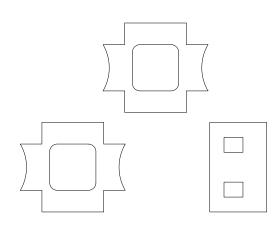


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Dims

Round

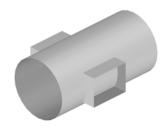




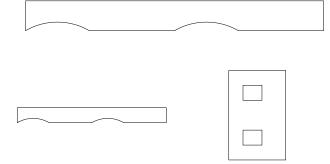
C=Left Extension Flat Allowance To Pipe=0.000 D=Right Extension Pipe Parts=1 E=Branch Width Pipe Seam Position=0.000 F=Branch Depth Hole Adjust=0.000 G=Branch Length Plate Border=0.000 H=Inset Castle Width=0.000 I=Rotation Castle Angle=30.000 J=Hole Width Plate Border (Width)=Auto K=Hole Depth Fold Notch Depth=0.000 L=Hole Radius Develop Branch Collar=No M=Collar N=Branch Width O=Branch Depth	C1=None C2=None C3=None C4=None  Seams S1=None S2=None S3=None
C=Left Extension Flat Allowance To Pipe=0.000 D=Right Extension Pipe Parts=1 E=Branch Width Pipe Seam Position=0.000 F=Branch Depth Hole Adjust=0.000 G=Branch Length Plate Border=0.000 H=Inset Castle Width=0.000 I=Rotation Castle Angle=30.000 J=Hole Width Plate Border (Width)=Auto K=Hole Depth Fold Notch Depth=0.000 L=Hole Radius Develop Branch Collar=No M=Collar N=Branch Width O=Branch Depth	C3=None C4=None Seams S1=None S2=None
D=Right Extension Pipe Parts=1 E=Branch Width Pipe Seam Position=0.000 F=Branch Depth Hole Adjust=0.000 G=Branch Length Plate Border=0.000 H=Inset Castle Width=0.000 I=Rotation Castle Angle=30.000 J=Hole Width Plate Border (Width)=Auto K=Hole Depth Fold Notch Depth=0.000 L=Hole Radius Develop Branch Collar=No M=Collar N=Branch Width O=Branch Depth	Seams S1=None S2=None
E=Branch Width Pipe Seam Position=0.000 F=Branch Depth Hole Adjust=0.000 G=Branch Length Plate Border=0.000 H=Inset Castle Width=0.000 I=Rotation Castle Angle=30.000 J=Hole Width Plate Border (Width)=Auto K=Hole Depth Fold Notch Depth=0.000 L=Hole Radius Develop Branch Collar=No M=Collar N=Branch Width O=Branch Depth	Seams S1=None S2=None
F=Branch Depth Hole Adjust=0.000 G=Branch Length Plate Border=0.000 H=Inset Castle Width=0.000 I=Rotation Castle Angle=30.000 J=Hole Width Plate Border (Width)=Auto K=Hole Depth Fold Notch Depth=0.000 L=Hole Radius Develop Branch Collar=No M=Collar N=Branch Width O=Branch Depth	S1=None S2=None
G=Branch Length Plate Border=0.000 H=Inset Castle Width=0.000 I=Rotation Castle Angle=30.000 J=Hole Width Plate Border (Width)=Auto K=Hole Depth Fold Notch Depth=0.000 L=Hole Radius Develop Branch Collar=No M=Collar N=Branch Width O=Branch Depth	S1=None S2=None
H=Inset Castle Width=0.000 I=Rotation Castle Angle=30.000 J=Hole Width Plate Border (Width)=Auto K=Hole Depth Fold Notch Depth=0.000 L=Hole Radius Develop Branch Collar=No M=Collar N=Branch Width O=Branch Depth	S1=None S2=None
I=Rotation Castle Angle=30.000  J=Hole Width Plate Border (Width)=Auto K=Hole Depth Fold Notch Depth=0.000 L=Hole Radius Develop Branch Collar=No M=Collar N=Branch Width O=Branch Depth	S1=None S2=None
J=Hole Width Plate Border (Width)=Auto K=Hole Depth Fold Notch Depth=0.000 L=Hole Radius Develop Branch Collar=No M=Collar N=Branch Width O=Branch Depth	S1=None S2=None
K=Hole Depth Fold Notch Depth=0.000	S1=None S2=None
L=Hole Radius Develop Branch Collar=No M=Collar N=Branch Width O=Branch Depth	S1=None S2=None
M=Collar N=Branch Width O=Branch Depth	S2=None
N=Branch Width O=Branch Depth	
O=Branch Depth	S3=None
•	22
P=Rranch Length	
i -bianch tengan	Damper:
Q=Inset	Damper.
R=Rotation	
S=Hole Width	
T=Hole Depth	
U=Hole Radius	
V=Collar	

Pattern: 841

Round



Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Pipe Length	Round Allowance To Pipe=0.000	C2=None
C=Left Extension	Flat Allowance To Pipe=0.000	C3=None
D=Right Extension	Pipe Parts=1	C4=None
E=Branch Width	Branch Parts=1	
F=Branch Depth	Pipe Seam Position=0.000	
G=Branch Length	Hole Adjust=0.000	
H=Inset	Plate Border=0.000	
I=Rotation	Castle Width=0.000	
J=Extension	Castle Angle=30.000	
K=Branch Width	Plate Border (Width)=Auto	Seams
L=Branch Depth		S1=None
M=Branch Length		S2=None
N=Inset		
O=Rotation		
P=Extension		Damper:



courtesy of Applied Software 77 4/18/2016

Round

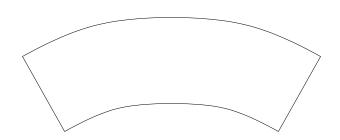


Dims	Options	Conn's
A=Left Width	Cross Break=1	
B=Left Depth	Seam Position=0.000	
C=Right Width		
D=Right Depth		
E=Length		
F=Offset		

Seams

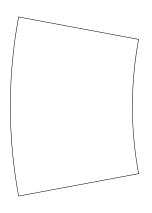
S1=None

Damper:



Pattern: 850 Round/Fabrication





Dims	Options	Conn's
A=Left Diameter	Diameter Type BE=Nominal	C1=None
B=Right Diameter	Diameter Type SE=Nominal	C2=None
C=Pipe Length	Cross Break=1	
D=Left Extension	Seam Position=0.000	
E=Right Extension	Shoe Branch Lengths CLine=Yes	
F=Offset Width	Length Break=1	
G=Offset Depth		

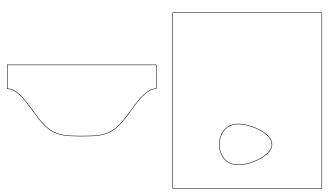
Seams S1=None S2=None

Damper:

4/18/2016 78

Round

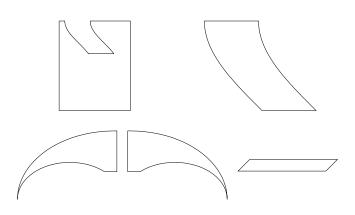




Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	First Break=0.000	C3=None
D=Right Extension	Second Break=0.000	
E=Branch Diameter #1	Third Break=0.000	
F=Branch Length #1	Seam Position=0.000	
G=Angle #1	Pipe Diameter Type=Nominal	
H=Inset #1	Branch Diameter Type=Nominal	
I=Offset #1	Hole Adjust=0.000	
J=Rotation #1	Branch Allowance To Pipe=0.000	
K=Extension #1	Branch Seam Position=0.000	Seams
	Throat Cut Back (Degrees)=0.000	S1=None
	Plate Border (Circumference)=0.000	S2=None
	Plate Type=Rectangular	
	Cut Back Allowance (%)=0.000	
	Use Pipe Seam For Branches=No	Damper: None
	Plate Border (Length)=Auto	None
	End Castle Width =0.000	None
	End Castle Angle=30.000	

#### Pattern: 852 Rectangular/Round





Dims		Options	Conn's
A=Pipe Diameter	Inlet=1		C1=None
B=Angle	Outlet=2		C2=None
C=Pipe Length			C3=None
D=Inset			
E=Branch Height			
F=Branch Depth			
G=Branch Width			
H=Branch Gauge			
I=Extension			
			Coame

56
S1=None
S2=None
S3=None
S4=None
S5=None Damper:

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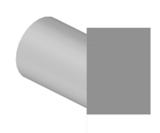
Rectangular/Round/Flat Oval

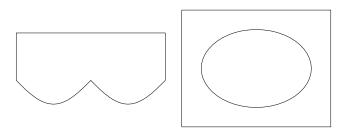


	Dims	Options	Conn's
	A=Btm Width	Bottom Diameter Type=Nominal	C1=None
	B=Btm Depth	Left Diameter Type=Nominal	C2=None
	C=Bottom Radius	Right Diameter Type=Nominal	C3=None
	D=Left Width	Seam Position=Top	C4=None
	E=Left Depth		
	F=Left Radius		
	G=Right Width		
	H=Right Depth		
	I=Right Radius		
	J=Left Angle		
	K=Right Angle		Seams
	L=Height		S1=None
	M=Left Offset		
	N=Right Offset		
	O=Bottom Collar		
	P=Left Collar		Damper:
	Q=Right Collar		24po
	R=Left Offset Depth		
	S=Right Offset Depth		
7			

Pattern: 855

Round





Dims	Options	Conn's
A=Branch Diameter	Seam Position=0.000	
B=Length	Hole Adjust=0.000	
C=Angle	Diameter Type=Nominal	
D=Plate Border	Turnover=0.000	

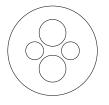
Seams

S1=None

Damper:

Round





Dims	Options	Conn's
A=Diameter	Diameter Type=Nominal	C1=None
B=Collar	Hole Type=Nominal	C2=None
C=Hole Diameter		C3=None
D=Hole Angle		C4=None
E=Fixing Radius		C5=None
F=Collar		
G=Hole Diameter		
H=Hole Angle		
I=Fixing Radius		
J=Collar		
K=Hole Diameter		Seams
L=Hole Angle		
M=Fixing Radius		
N=Collar		
O=Hole Diameter		
P=Hole Angle		Damper:
Q=Fixing Radius		Damper.
R=Collar		

Pattern: 857

Round



Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Centre Radius	Branch Diameter Type=Nominal	
C=Branch Diameter	Branch Parts=2	
D=Branch Length	Branch Allowance To Pipe=0.000	
E=Angle	Branch Seam Position=0.000	
F=Rotation	Rotation=Top	
G=Bend Angle	Branch Type=Round	
H=Inner Radius		

Damper: None

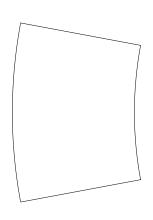
Seams S1=None



4/18/2016 courtesy of software 81

Round





Dims	Options	Conn's
A=Pipe Diameter	Diameter Type BE=Nominal	C1=None
B=Pipe Diameter	Diameter Type SE=Nominal	C2=None
C=Pipe Length	Cross Break=1	
D=Left Extension	Seam Position=0.000	
E=Right Extension	Hole Inset=Along Slope	
	Hole Inset=Hole Centre	

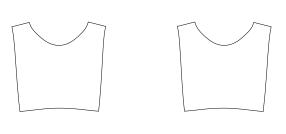
Seams

S1=None

Damper:

Pattern: 863 Round/Fabrication





Dims	Options	Conn's
A=Bottom Diameter	Bottom Diameter Type=Nominal	C1=None
B=Top Diameter	Left Diameter Type=Nominal	C2=None
C=Angle	Right Diameter Type=Nominal	C3=None
D=Centre Length	Seam Position=Top	C4=None
E=Btm Length	Marker Type=Notch	
F=Bottom Collar		
G=Left Collar		
H=Right Collar		

Seams S1=None

Damper:

4/18/2016 82

Round



Dims	Options	Conn's
A=Diameter	Number Of Segments=4	C1=None
B=Inner Radius	Diameter Type=Nominal	C2=None
C=Angle	Type=Normal	C3=None
D=Bottom Extension	Pipe Length=500.000	
E=Top Extension	Cut Length=0.000	
	Cut Length=0.000	
	Cut Length=0.000	

Seams

S1=None

Damper:

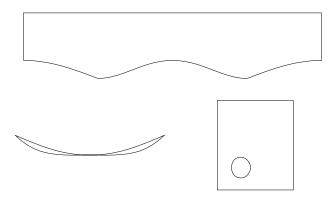
Damper:

Pattern: 867

Round



Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Pipe Length	Branch Diameter Type=Nominal	C2=None
C=Left Extension	Pipe Parts=1	C3=None
D=Right Extension	Seam Position=0.000	
E=Branch Diameter	First Break=180.000	
F=Branch Length	Second Break=270.000	
G=Angle	Third Break=90.000	
H=Inset	Branch Parts=1	
I=Extension	Branch Seam Position=180.000	
J=Collar	Hole Adjust=0.000	
	Branch Allowance To Pipe=0.000	Seams
		S1=None
		S2=None
		S3=None

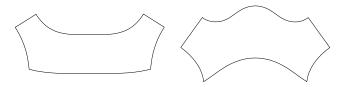


4/18/2016 courtesy of software 83

Round



Dims	Options	Conn's
x=Bottom Diameter	Bottom Diameter Type=Nominal	C1=None
3=Left Diameter	Left Diameter Type=Nominal	C2=None
C=Right Diameter	Right Diameter Type=Nominal	C3=None
)=Height	Seam Position=Top	C4=None
=Left Offset	Marker Type=Notch	
=Bottom Collar		
G=Left Collar		
H=Right Collar		
=Distance		
=Left Offset Depth		
(=Right Offset Depth		Seams
		S1=None



Damper:

Pattern: 871

Round



Dims	Options	Conn's
A=Pipe Diameter	Branch Parts=1	C1=None
B=Branch Diameter	Branch Seam Position=Throat	C2=None
C=Branch Length	Branch Diameter Type=Nominal	C3=None
D=Angle	Branch Allowance To Pipe=0.000	
E=Offset	Plate Border=0.000	
F=Collar	Plate Type=Rectangular	
	Plate Border (Width)=Auto	
	Inset=Front	

Seams S1=None S2=None

Damper: None



Round/Equipment



Dims	Options	Conn's
A=Diameter	Spacing=50.000	C1=None
B=Length	Diameter Ratio=1.100	C2=None
C=Item Centre Line Length	Max Length=0.000	
	Draw as Single Line=No	
	Number Of Round Sections=12	

Seams

Damper:

# Pattern: 874

Round



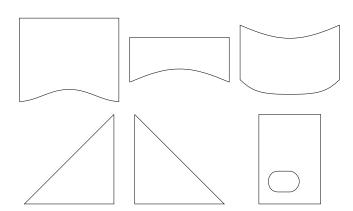
Dims	Options
A=Pipe Diameter	Pipe Diameter Type=Nominal
B=Pipe Length	Branch Diameter Type=Nominal
C=Left Extension	Pipe Parts=1
D=Right Extension	Seam Position=0.000
E=Branch Diameter	First Break=180.000
F=Branch Length	Second Break=270.000
G=Angle	Third Break=90.000
H=Inset	Branch Parts=Yes
I=Extension	Hole Adjust=0.000
J=Collar	Branch Allowance To Pipe=0.000
D=Right Extension E=Branch Diameter F=Branch Length G=Angle H=Inset I=Extension	Seam Position=0.000 First Break=180.000 Second Break=270.000 Third Break=90.000 Branch Parts=Yes Hole Adjust=0.000

Seams
S1=None
S2=None
S3=None
S4=None
Damper:

Conn's

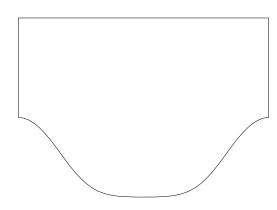
C1=None

C2=None C3=None



Round





Dime	Outions	Camula
Dims	Options	Conn's
A=Pipe Diameter	Branch Parts=1	C1=None
B=Branch Diameter #1	First Break=0.000	C2=None
C=Branch Length #1	Second Break=0.000	C3=None
D=Angle #1	Third Break=0.000	
E=Offset #1	Branch Diameter Type=Nominal	
F=Extension #1	Hole Adjust=0.000	
	Branch Allowance To Pipe=0.000	
	Branch Seam Position=0.000	
	Throat Cut Back (Degrees)=0.000	
	Plate Border (Circumference)=0.000	
	Plate Type=Rectangular	Seams
	Cut Back Allowance (%)=0.000	S1=None
	Use Pipe Seam For Branches=No	S2=None
	Plate Border (Length)=Auto	
	End Castle Width =0.000	
	End Castle Angle=30.000	Dampari Nana
	Draw Plate=No	Damper: None
	Align Damper Holes=No	None
		None

Pattern: 881
Round/Equipment



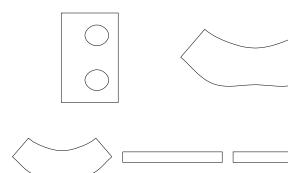
Dims	Options	Conn's
A=Pipe Diameter	Type=Supply	C1=None
B=Branch Diameter	Angle Tolerance=0.000	C2=None
C=Branch Length	Inlet=2	
D=Angle	Outlet=1	
E=Collar	Number Of Segments=12	

Seams

Damper:

Round



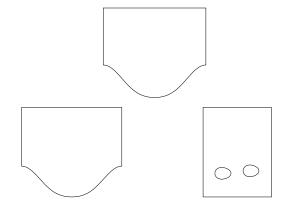


	Dims	Options	Conn's
	A=Pipe Diameter	Pipe Parts=1	C1= C11 C21
	B=Pipe Length	Branch Parts=1	C2= C12 C22
	C=Left Extension	Pipe Seam Position=0.000	C3= C13
	D=Right Extension	First Break=0.000	C4= C14
	E=Branch Diameter #1	Second Break=0.000	C5= C15
	F=Hole Width #1	Third Break=0.000	C6= C16
	G=Hole Depth #1	Pipe Diameter Type=Nominal	C7= C17
	H=Branch Length #1	Branch Diameter Type=Nominal	C8= C18
	I=Angle #1	Hole Adjust=0.000	C9= C19
	J=Inset #1	Branch Allowance To Pipe=0.000	C10 C20
	K=Offset #1	Branch Seam Position=0.000	Seams
	L=Rotation #1	Plate Border=0.000	S1=None
	M=Collar #1	Plate Border (Width)=Equal	S2=None
	N=Hole Offset #1	Plate Type=Rectangular	
	O=Branch Diameter #2	Inlet=1	
	P=Hole Width #2	Outlet=2	Damper:
	Q=Hole Depth #2		Damper.
	R=Branch Length #2		
>	S=Angle #2		
	T=Inset #2		
	U=Offset #2		
	V=Rotation #2		
	W=Collar #2		
	X=Hole Offset #2		
_	Y=Branch Diameter #3		
	Z=Hole Width #3		
	a=Hole Depth #3		
	b=Branch Length #3		

Pattern: 885

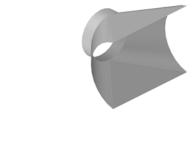
Round

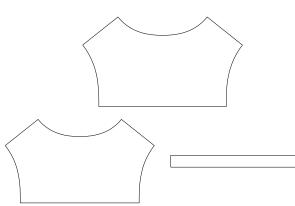




Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	First Break=0.000	C3=None
D=Right Extension	Second Break=0.000	C4=None
E=Branch Diameter	Third Break=0.000	
F=Branch Length	Seam Position=0.000	
G=Angle	Pipe Diameter Type=Nominal	
H=Twist Angle	Branch Diameter Type=Nominal	
I=Inset	Branch Diameter Type=Nominal	
J=Rotation	Hole Adjust=0.000	
K=Extension	Branch Allowance To Pipe=0.000	Seams
L=Branch Diameter	Branch Seam Position=0.000	S1=None
M=Branch Length	Throat Cut Back (Degrees)=0.000	S2=None
N=Angle	Cut Back Allowance (%)=0.000	S3=None
O=Twist Angle	Plate Border=0.000	
P=Inset	Plate Type=Rectangular	Damper: None
Q=Rotation	Plate Border (Width)=Auto	None
R=Extension	Use Pipe Seam For Branches=No	None
		None
		None

Round





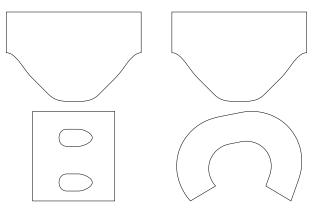
Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Branch Diameter	Branch Diameter Type=Nominal	C2=None
C=Branch Length	Branch Diameter Type=Nominal	C3=None
D=Angle	Hole Adjust=0.000	
E=Angle	Round Allowance To Pipe=0.000	
F=Collar	Flat Allowance To Pipe=0.000	
G=Offset	Seam Position=0.000	
	Branch Parts=2	
	Flat Right=No	

Seams S1=None S2=None

Damper:

Pattern: 889
Round/Flat Oval

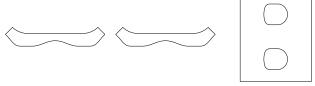


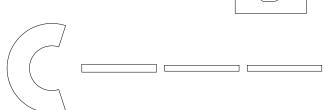


Dims	Options	Conn's
A=Width	Pipe Parts=1	C1=None
B=Depth	Branch Parts=1	C2=None
C=Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Branch Diameter Type=Nominal	C4=None
E=Right Extension	Seam Position=0.000	C5=None
F=Branch Width #1	Right Diameter Type=Nominal	
G=Branch Depth #1	Branch Allowance To Pipe=0.000	
H=Branch Length #1	Reducer Parts=1	
I=Angle #1	True Oval Straight=No	
J=Inset #1		
K=Offset #1		Seams
L=(Hole) Rotation #1		S1=None
M=Extension #1		S2=None
N=Branch Width #2		S3=None
O=Branch Depth #2		
P=Branch Length #2		Damper:
Q=Angle #2		bumper.
R=Inset #2		
S=Offset #2		
T=Rotation #2		
U=Extension #2		
V=Right Width		
W=Right Depth		
X=Right Length		
Y=Offset Width		
Z=Offset Depth		

Round





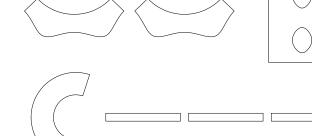


Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Right Diameter	Branch Parts=1	C2=None
C=Pipe Length	Pipe Seam Position=0.000	C3=None
D=Right Length	Branch Seam Position=Throat	C4=None
E=Left Extension	Pipe Diameter Type=Nominal	C5=None
F=Right Extension	Branch Diameter Type=Nominal	
G=Branch Diameter	Branch Diameter Type=Nominal	
H=Branch Length	Branch Allowance To Pipe=0.000	
I=Angle	Hole Adjust=0.000	
J=Inset	Straight Notch=No	
K=Offset	Plate Border=0.000	Seams
L=Rotation	Plate Type=Rectangular	S1=None
M=Collar	Plate Border (Width)=Auto	S2=None
N=Branch Diameter	Right Diameter Type=Nominal	S3=None
O=Branch Length	Inset=Front	
P=Angle	Reducer Parts=1	Damper: None
Q=Inset		None
R=Offset		NOTIC
S=Rotation		
T=Collar		

# Pattern: 891

Round

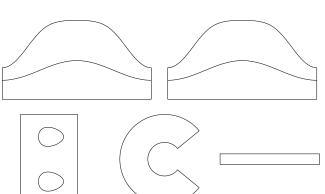




Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Right Diameter	Branch Parts=1	C2=None
C=Pipe Length	Seam Position=0.000	C3=None
D=Right Length	Pipe Diameter Type=Nominal	C4=None
E=Left Extension	Branch Diameter Type=Nominal	C5=None
F=Right Extension	Branch Diameter Type=Nominal	
G=Branch Diameter	Hole Adjust=0.000	
H=Branch Length	Branch Allowance To Pipe=0.000	
I=Angle	Branch Seam Position=0.000	
J=Inset	Plate Border=0.000	
K=Rotation	Plate Type=Rectangular	Seams
L=Collar	Input=Angle	S1=None
M=Branch Diameter	Plate Border (Width)=Auto	S2=None
N=Branch Length	Right Diameter Type=Nominal	S3=None
O=Angle	Reducer Parts=1	S4=None
P=Inset		Damper: None
Q=Rotation		None
R=Collar		None
S=Btm Width		None
T=Btm Width		

Round



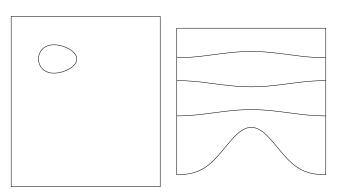


Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Right Diameter	Branch Parts=1	C2=None
C=Pipe Length	First Break=0.000	C3=None
D=Right Length	Second Break=0.000	C4=None
E=Left Extension	Third Break=0.000	C5=None
F=Right Extension	Seam Position=0.000	C6=None
G=Branch Diameter	Pipe Diameter Type=Nominal	C7=None
H=Branch Length	Branch Diameter Type=Nominal	
I=Angle	Branch Diameter Type=Nominal	
J=Inset	Hole Adjust=0.000	
K=Offset	Branch Allowance To Pipe=0.000	Seams
L=Rotation	Throat Cut Back (Degrees)=0.000	S1=None
M=Extension	Right Diameter Type=Nominal	S2=None
N=Collar	Reducer Parts=1	S3=None
O=Branch Diameter	Branch Inset=Front	
P=Branch Length		Damper:
Q=Angle		bamper.
R=Inset		
S=Offset		
T=Rotation		
U=Extension		
V=Collar		

Pattern: 899

Round





Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Pipe Length	Pipe Seam Position=180.000	C2=None
C=Left Extension	Pipe Parts=1	C3=None
D=Right Extension	First Break=0.000	C4=None
F=Diameter	Second Break=0.000	C4-NOTIE
	Third Break=0.000	
F=Angle		
G=Inset #1	Branch Diameter Type=Nominal	
H=Height	Branch Seam Position=0.000	
I=Top Extension	Cross Break=1	
	Number Of Segments=4	
	Nest Break Start Segment=0	Seams
	Nest Break End Segment=0	S1=None
	Marker Type=Notch	S2=None
	Hole Adjust=0.000	
	Notch Angle For Seam=0	
	Stitch Gap=0.000	_
	Number Of Stitches=4	Damper:
	Branch Allowance To Pipe=0.000	
	branch Allowance to Pipe-0.000	

4/18/2016 courtesy of Applied 90

Rectangular/Round/Flat Oval/Standard/Equipment

Dims	Options	Conn's
	Inlet=1	
	Outlet=1	
	Pipework=No	
	Show Boundaries=No	

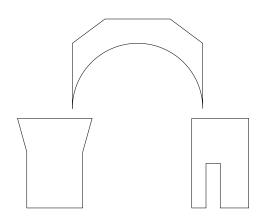
Seams

Damper:

Pattern: 904

Round





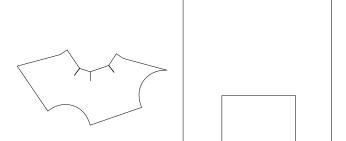
Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Pipe Length	Round Allowance To Pipe=0.000	C2=None
C=Left Extension	Flat Allowance To Pipe=0.000	C3=None
D=Right Extension	Pipe Parts=1	
E=Branch Width	Pipe Seam Position=0.000	
F=Branch Depth	Hole Adjust=0.000	
G=Branch Length	Plate Border=0.000	
H=Inset	Castle Width=0.000	
I=Offset	Castle Angle=30.000	
J=Extension	Plate Border (Width)=Auto	
K=Hole Width	Throat Clearance=0.000	Seams
		S1=None
		S2=None

Damper:

Round



Dims	Options	Conn's
A=Diameter	Pipe Parts=1	C1=None
B=Pipe Length	Branch Parts=1	C2=None
C=Left Extension	Pipe Seam Position=0.000	C3=None
D=Right Extension	Pipe Diameter Type=Nominal	
E=Branch Width	Round Allowance To Pipe=0.000	
F=Branch Depth	Flat Allowance To Pipe=0.000	
G=Branch Length	Hole Adjust=0.000	
H=Angle		
I=Angle		
J=Inset		
K=Offset		Seams
L=Rotation		S1=None
M=Extension		S2=None
		S3=None

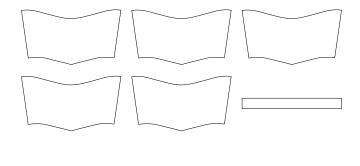


Pattern: 907

Round



Dims	Options	Conn's
A=Bottom Diameter	Bottom Diameter Type=Nominal	C1=None
B=Top Diameter #1	Top Diameter Type=Nominal	C2=None
C=Top Diameter #2	Seam Position=Front	C3=None
D=Top Diameter #3	Cross Break=1	C4=None
E=Top Diameter #4		C5=None
F=Top Diameter #5		C6=None
G=Height		C7=None
H=Length #1		
I=Bottom Collar		
J=Collar		
K=Length #2		Seams
L=Length #3		S1=None
M=Length #4		
N=Length #5		



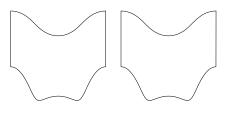
4/18/2016 courtesy of Applied software 92

Damper:

Damper:

Round



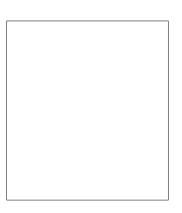




Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Diameter	Branch Parts=1	C2=None
C=Pipe Length	Pipe Seam Position=270.000	C3=None
D=Left Collar	Branch Seam Position=Throat	C4=None
E=Right Collar	Diameter Type BE=Nominal	
F=Branch Diameter	Diameter Type SE=Nominal	
G=Branch Length	Branch Diameter Type=Nominal	
H=Angle	Branch Diameter Type=Nominal	
=Inset	Hole Adjust=0.000	
=Offset	Branch Allowance To Pipe=0.000	
K=Rotation		Seams
_=Collar		S1=None
M=Branch Diameter		S2=None
N=Branch Length		S3=None
D=Angle		
P=Inset		Damper: None
Q=Offset		None
R=Rotation		None
S=Collar		None
		TTOTIC

Pattern: 911 Round/Flat Oval





Dims	Options	Conn's
A=Pipe Width	Pipe Diameter Type=Nominal	C1=None
B=Pipe Depth	Reducer Diameter Type=Nominal	C2=None
C=Pipe Length	Pipe Parts=1	C3=None
D=Reducer Width	Pipe Seam Position=0.000	
E=Reducer Depth	Offset Width=Left In	
F=Reducer Length	Offset Depth=Bottom Up	
G=Offset Width	Diameter Reduction=0.000	
H=Offset Depth		
I=Left Extension		
J=Right Extension		
_		Seams
		S1=None

Damper:

4/18/2016 93

Round/Equipment



Dims	Options	Conn's
A=Diameter	Inlet=1	
B=Height	Outlet=1	
C=Top Length	Library=Round	
D=Btm Length	Fix Double Wall=No	
	Branches Inset Centrally=No	

Seams

Damper:

#### Pattern: 913 Rectangular/Round/Equipment



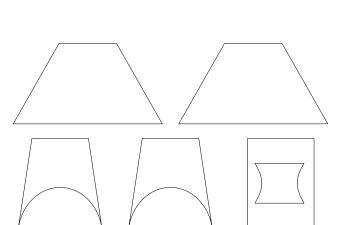
Dims	Options	Conn's
A=Width	Mirror=No	C1=None
B=Depth	Base Depth=Yes	C2=None
C=Length	Cost Supports=No	
D=Height		
E=X Distance		
F=Y Distance		
G=Diameter		
H=Rotation		
I=Base Height		
J=Base Width		
K=Base Depth		Seams
L=Extension		

Damper:

4/18/2016 94

Round





Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Pipe Length	Round Allowance To Pipe=0.000	C2=None
C=Left Extension	Flat Allowance To Pipe=0.000	C3=None
D=Right Extension	Hole Adjust=0.000	
E=Branch Width	Pipe Parts=1	
F=Branch Depth	First Break=0.000	
G=Branch Length	Second Break=0.000	
H=Side Angle	Third Break=0.000	
I=Front Angle	Pipe Seam Position=270.000	
J=Inset	Castle Width=0.000	
K=Offset	Castle Angle=30.000	Seams
L=Rotation		S1=None
M=Extension		S2=None

Damper:

Pattern: 922

Round



Dims	Options	Conn's
A=Diameter	Parts To Cut=All	C1=None
B=Inner Diameter		C2=None
C=Y Pitch		C3=None
D=Number Of Segments		
E=Quantity		

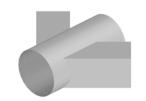
Seams

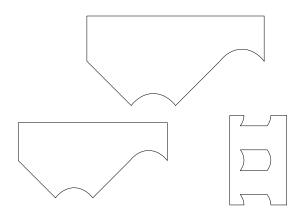
S1=None

Damper:

4/18/2016 courtesy of Applied 95

Round





Pattern: 928
Round/Standard/Equipment

Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
3=Pipe Length	Round Allowance To Pipe=0.000	C2=None
C=Left Extension	Flat Allowance To Pipe=0.000	C3=None
D=Right Extension	Pipe Parts=1	C4=None
=Branch Width #1	Branch Parts=1	
=Branch Depth #1	First Break=0.000	
G=Branch Length #1	Second Break=0.000	
H=Branch Angle #1	Third Break=0.000	
=Branch Inset #1	Pipe Seam Position=270.000	
=Branch Offset #1	Hole Adjust=0.000	
(=Branch Rotation #1	Plate Border=0.000	Seams
=Branch Extension #1	Castle Width=0.000	S1=None
M=Branch Width #2	Castle Angle=30.000	S2=None
N=Branch Depth #2	Plate Border (Width)=Auto	S3=None
D=Branch Length #2		
P=Branch Angle #2		Damper: None
Q=Branch Inset #2		None
R=Branch Offset #2		None
=Branch Rotation #2		None
=Branch Extension #2		None

Dims	Options	Conn's
	Inlet=1	
	Outlet=1	
	Library=Duct	
	Faces=No	

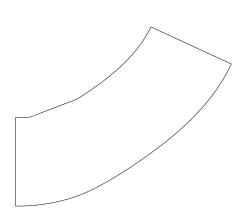
Seams

Damper:

4/18/2016 courtesy of software 96

Round





Dims	Options	Conn's
A=Diameter	Seam Position=0.000	C1=None
B=Diameter	2 Parts=No	C2=None
C=Length	Vee Notch Angle=20.000	
D=Y-Offset	Vee Notch Depth (C1)=0.000	
E=X-Offset	Vee Notch Depth (C2)=0.000	
F=Slice Depth	Seam For Weathering=No	
G=Slice Angle	Slice Left=No	
H=Left Collar	Slice Right=Yes	
I=Right Collar		

Seams S1=None

Damper:

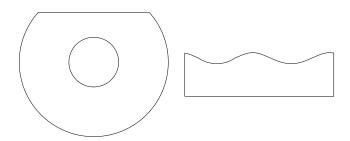
Pattern: 931

Round



Options	Conn's
Branch Seam Position=0.000	C1=None
Branch Parts=1	C2=None
Branch Allowance To Pipe=0.000	
Pipe Seam Position=0.000	
Pipe Parts=None	
Hole Adjust=20.000	
Vee Notch Angle=20.000	
Vee Notch Depth=0.000	
Lid Parts=1	
	Seams
	S1=None
	S2=None
	S3=None
	Branch Seam Position=0.000 Branch Parts=1 Branch Allowance To Pipe=0.000 Pipe Seam Position=0.000 Pipe Parts=None Hole Adjust=20.000 Vee Notch Angle=20.000 Vee Notch Depth=0.000

Damper:



courtesy of 4/18/2016 97

Round







Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
3=Pipe Diameter	Seam Position=0.000	C2=None
C=Pipe Length	Hole Adjust=0.000	C3=None
D=Left Extension	Branch Type=Round	C4=None
=Right Extension	Branch Parts=1	
=Offset Width	Branch Seam Position=0.000	
G=Offset Depth	Branch Allowance To Pipe=0.000	
H=Branch Diameter #1	Branch Type=Round	
=Branch Length #1	Branch Parts=1	
=Angle #1	Branch Seam Position=0.000	
(=Inset #1	Branch Allowance To Pipe=0.000	Seams
=Offset #1	Develop Collars=No	S1=None
√=Extension #1	Develop Branch Collars=No	S2=None
N=Branch Diameter #2		
D=Branch Length #2		
P=Angle #2		Damper: None
Q=Inset #2		None
R=Offset #2		None
S=Extension #2		None
		NOTIE

# Pattern: 934

Round



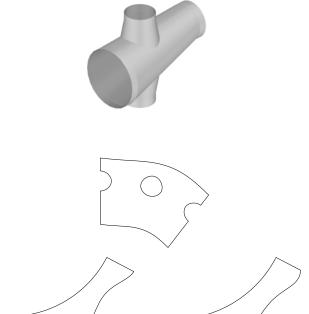




Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Diameter	Seam Position=0.000	C2=None
C=Pipe Length	Hole Adjust=0.000	C3=None
D=Left Extension	Branch Parts=1	C4=None
E=Right Extension	Branch Seam Position=0.000	
F=Offset Width	Branch Allowance To Pipe=0.000	
G=Offset Depth	Branch Parts=1	
H=Branch Diameter #1	Branch Seam Position=0.000	
I=Branch Length #1	Branch Allowance To Pipe=0.000	
J=Angle #1	Develop Branch Collars=No	
K=Inset #1		Seams
L=Offset #1		S1=None
M=Extension #1		S2=None
N=Branch Diameter #2		
O=Branch Length #2		
P=Angle #2		Damper: None
Q=Inset #2		None None
R=Offset #2		None
S=Extension #2		None
		None

4/18/2016 courtesy of software 98

Round

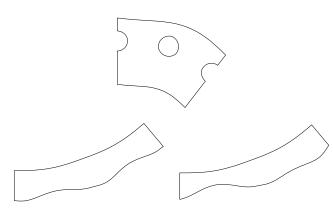


Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Diameter	Seam Position=0.000	C2=None
C=Pipe Length	Hole Adjust=0.000	C3=None
D=Left Extension	Branch Parts=1	C4=None
E=Right Extension	Branch Seam Position=0.000	
F=Offset Width	Branch Allowance To Pipe=0.000	
G=Offset Depth	Branch Parts=1	
H=Branch Diameter #1	Branch Seam Position=0.000	
I=Branch Length #1	Branch Allowance To Pipe=0.000	
J=Angle #1	Develop Collars=No	
K=Slope Angle #1	Develop Branch Collars=No	Seams
L=Inset #1		S1=None
M=Offset #1		S2=None
N=Extension #1		
O=Branch Rotation #1		
P=Branch Diameter #2		Damper: None
Q=Branch Length #2		None None
R=Angle #2		None
S=Slope Angle #2		None
T=Inset #2		None
U=Offset #2		
V=Extension #2		

# Pattern: 936

Round



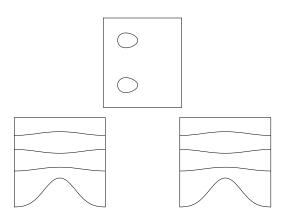


Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Diameter	Seam Position=0.000	C2=None
C=Pipe Length	Hole Adjust=0.000	C3=None
D=Left Extension	Branch Parts=1	C4=None
E=Right Extension	Branch Seam Position=0.000	
F=Offset Width	Branch Allowance To Pipe=0.000	
G=Offset Depth	Branch Parts=1	
H=Branch Diameter #1	Branch Seam Position=0.000	
I=Branch Length #1	Branch Allowance To Pipe=0.000	
J=Angle #1	Develop Collars=No	
K=Slope Angle #1	Develop Branch Collars=No	Seams
L=Inset #1		S1=None
M=Offset #1		S2=None
N=Extension #1		
O=Branch Diameter #2		
P=Branch Length #2		Damper: None
Q=Angle #2		None
R=Slope Angle #2		None
S=Inset #2		None
T=Offset #2		
U=Extension #2		

4/18/2016 courtesy of software 99

Round





Dims	Options	Conn's
A=Pipe Diameter	Pipe Diameter Type=Nominal	C1=None
B=Pipe Length	Pipe Seam Position=180.000	C2=None
C=Left Extension	Pipe Parts=1	C3=None
D=Right Extension	First Break=0.000	C4=None
E=Branch Diameter #1	Second Break=0.000	C5=None
F=Angle #1	Third Break=0.000	
G=Inset #1	Branch Diameter Type=Nominal	
H=Height #1	Branch Seam Position=0.000	
I=Extension #1	Cross Break=1	
J=Branch Diameter #2	Number Of Segments=4	
K=Angle #2	Nest Break Start Segment=0	Seams
L=Inset #2	Nest Break End Segment=0	S1=None
M=Height #2	Marker Type=Notch	S2=None
N=Extension #2	Hole Adjust=0.000	
	Notch Angle For Seam=0	
	Stitch Gap=0.000	Damper:
	Number Of Stitches=4	20
	Branch Allowance To Pipe=0.000	

Pattern: 940
Round/Ductboard



Dims	Options	Conn's
A=Diameter	Diameter Type=Nominal	C1=None
B=Length	Number Of Segments=12	C2=None
C=Left Extension	Diameter Adjust=3.000	
D=Right Extension	Half End=No	

Seams

S1=None

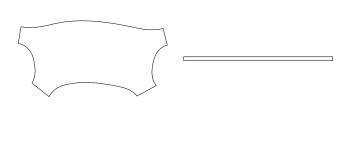
Damper: None None

Round

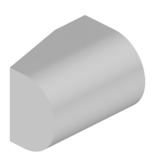


Dims	Options	Conn's
A=Left Diameter	Left Diameter Type=Nominal	C1=None
B=Right Diameter	Right Diameter Type=Nominal	C2=None
C=Pipe Length	Branch Diameter Type=Nominal	C3=None
D=Y-Offset	Marker Notches=No	
E=X-Offset		
F=Left Collar		
G=Right Collar		
H=Branch Diameter		
I=Branch Length		
J=Offset		
K=Collar		Seams
L=Angle		S1=None

Damper:



Pattern: 962
Rectangular/Round

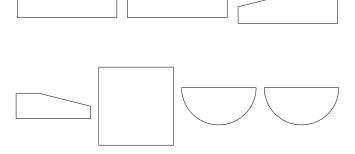


Dims	Options	Conn's
A=Diameter	Vee Depth Male=0.000	C1=None
B=Left Height	Vee Angle Male=30.000	
C=Right Height	Vee Depth Female=0.000	
D=Length	Vee Angle Female=30.000	
E=Right Length	Notch Out=No	
	Use Ends Seam 3=No	
	Split Radius=No	
	Close Middle=No	

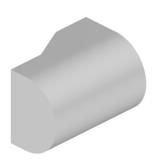
S1=None S2=None S3=None

Seams

Damper:



Rectangular/Round

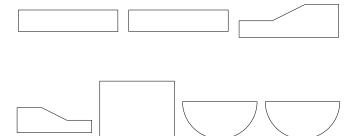


Dims	Options	Conn's
A=Diameter	Vee Depth Male=0.000	C1=None
B=Left Height	Vee Angle Male=30.000	
C=Right Height	Vee Depth Female=0.000	
D=Length	Vee Angle Female=30.000	
E=Left Length	Notch Out=No	
F=Right Length	Use Ends Seam 3=No	
	Split Radius=No	
	Close Middle=No	

Seams

S1=None S2=None S3=None

Damper:



Pattern: 964
Rectangular/Round

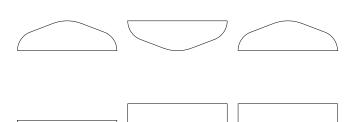


Dims	Options	Conn's
A=Width	Vee Depth Male=0.000	C1=None
B=Depth	Vee Angle Male=30.000	
C=Length	Vee Depth Female=0.000	
D=Left Radius	Vee Angle Female=30.000	
E=Top Radius	Notch Out=No	

Seams

S1=None S2=None

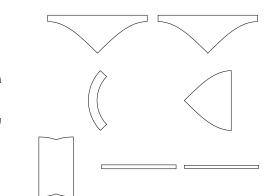
Damper:



courtesy of Applied Software

Round



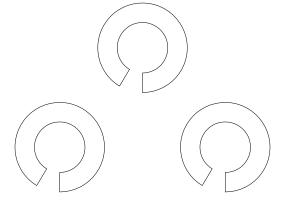


Dims	Options	Conn's
A=Top Diameter	Pipe Parts=2	C1=None
B=Top Extension	Branch Parts=2	C2=None
C=Left Diameter	First Break=0.000	C3=None
D=Left Length	Second Break=0.000	C4=None
E=Left Offset	Third Break=0.000	C5=None
F=Left Inset	Top Diameter Type=Nominal	
G=Left Extension	Left Diameter Type=Nominal	
H=Right Diameter	Right Diameter Type=Nominal	
I=Right Length	Hole Adjust=0.000	
J=Right Offset	Branch Allowance To Pipe=0.000	
K=Right Inset	Branch Seam Position=0.000	Seams
L=Right Extension	Throat Cut Back (Degrees)=0.000	S1=None
M=Left Collar	Cut Back Allowance (%)=0.000	S2=None
N=Right Collar	Inlet=1	S3=None
	Outlet=2	
	End Castle Width =0.000	Damper:
]	End Castle Angle=30.000	Bampen.
	Reducer Parts=2	
	Splitter Adjust=0.000	
	Splitters=Auto	
	Lengths Include Extensions=No	
	Splitters=4	
	Splitter Radius=Auto	

Pattern: 968

Round





Dims	Options	Conn's
A=Diameter	Clockwise=Yes	C1=None
B=Inner Diameter		C2=None
C=Y Pitch		C3=None
D=Height		

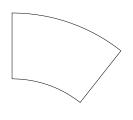
Seams

S1=None

Damper:

Round





Dims	Options	Conn's
A=Pipe Diameter	Pipe Parts=1	C1=None
B=Pipe Diameter	Seam Position=0.000	C2=None
C=Pipe Length	Hole Adjust=0.000	
D=Left Extension	Diameter Type=Nominal	
E=Right Extension	Length Includes Extensions=No	
F=Offset Width	Correct Branch Inset/Length For Angle=No	
G=Offset Depth		

Seams

S1=None

Damper:

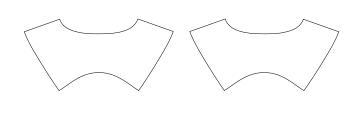
Pattern: 989

Round



Dims	Options	Conn's
A=Bottom Diameter	Bottom Diameter Type=Nominal	C1=None
B=Left Diameter	Left Diameter Type=Nominal	C2=None
C=Right Diameter	Right Diameter Type=Nominal	C3=None
D=Left Angle	Seam Position=Top	C4=None
E=Right Angle	Marker Type=Notch	
F=Left Height		
G=Right Height		
H=Left Offset		
I=Right Offset		
J=Height		
K=Bottom Collar		Seams
L=Left Collar		S1=None
M=Right Collar		

Damper:



### Pattern: 995 Round/Flat Oval/Equipment



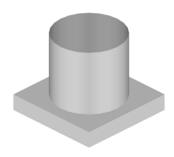
Dims	Options	Conn's
A=Diameter	Sex Type=Male	C1=None
B=Collar		C2=None
C=Length		
D=Offset		
E=Oval Depth		

Seams

S1=None

Damper:

### Pattern: 996 Rectangular/Round/Equipment



Dims	Options	Conn's
A=Width	Type=Supply	C1=None
B=Depth	Position From=Edge	C2=None
C=Height	Type=Round	C3=None
D=Diameter	Rotation=0.000	C4=None
E=Collar	Collar=No	C5=None
F=Plate Border (Width)	Arrows/Lines=None	C6=None
G=Plate Border (Depth)	Arrows/Lines Sides=0	C7=None
	Lines/Circles Spacing=1.000 Arrows Direction=Auto Circles=No	C8=None
	Arrows Type=1	Seams
	Diffuser Type=None Cost Supports=No	

Damper:

Round

Dims	Options	Conn's
A=Diameter		C1=None
B=Inner Diameter		C2=None
C=Y Pitch		
D=Number Of Segments		
E=Quantity		

Seams

Damper:

Pattern: 1049

Round



Options	Conn's	
Cross Break=1	C1=None	
Seam Position=0.000	C2=None	
Vertical=No	C3=None	
Pipework=No		
Adjust=0.000		
Include=Yes		
Develop X Size For Diameter=No		
Inlet=1		
Outlet=2		
	Cross Break=1 Seam Position=0.000 Vertical=No Pipework=No Adjust=0.000 Include=Yes Develop X Size For Diameter=No Inlet=1	

Seams S1=None

Damper:

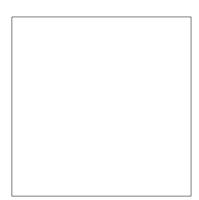


Rectangular/Round/Flat Oval/Standard/Equipment

Dims	Options	Conn's
	Inlet=1	
	Outlet=1	
	Pipework=No	
	Show Boundaries=No	
	Faces=No	

Seams

Damper:



Pattern: 1108 Round/Equipment

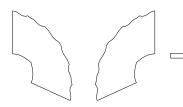


Dims	Options	Conn's
A=Diameter	Bend Radius=4.000	C1=None
B=Length	Factor Type=Multiples Of Diameter	C2=None
C=Lead Length	Max Length=0.000	
	Number Of Round Sections=12	
	Length=Auto	
	Length Adjust=0.000	
	Number Of Segments=Auto	
	Straight Annotation=Up	
	Bend Annotation=Front	
	Allowance=Default	Seams

Damper:

Round





Dims	Options	Conn's
A=Bottom Diameter	Add Collars To Body=No	C1=None
B=Left Diameter	Flat Left=No	C2=None
C=Right Diameter	Notch Angle For Seam=0.000	C3=None
D=Top Diameter #1	Slope Angle=0.000	C4=None
E=Top Diameter #2	Number Of Branches=6	C5=None
F=Top Diameter #3		C6=None
G=Top Diameter #4		C7=None
H=Height		
I=Spacing		
J=Left Angle #1		
K=Right Angle #6		Seams
L=Bottom Collar		S1=None
M=Left Collar		S2=None
N=Right Collar		
O=Top Collar #1		
P=Top Collar #2		Damper:
Q=Top Collar #3		bamper.
R=Top Collar #4		

Pattern: 1112

Round

Di	ims	C	ptions	Conn's
A=Diameter	B=Collar	Sex Type=Male		C1=None
C=Length	D=Offset			C2=None



Seams S1=None

Damper:

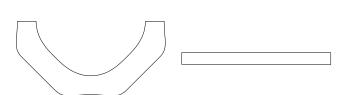
4/18/2016 courtesy of software 108

Round



Dims	Options	Conn's
A=Pipe Diameter	Branch Parts=1	C1=None
B=Branch Diameter	Seam Position=0.000	C2=None
C=Branch Length	Pipe Diameter Type=Nominal	C3=None
D=Angle	Branch Diameter Type=Nominal	
E=Offset	Branch Diameter Type=Nominal	
F=Collar	Branch Allowance To Pipe=0.000	
	Hole Adjust=0.000	
	Plate Border=0.000	
	Plate Type=Rectangular	
	Plate Border (Width)=Auto	
		Seams
		S1=None
		S2=None

Damper: None None None



Pattern: 1141

Round



Dims	Options	Conn's
A=Diameter	Number Of Segments=4	C1=None
B=Inner Radius	Seam Position=0.000	C2=None
C=Angle	Cross Break=1	C3=None
D=Bottom Extension	Diameter Type=Nominal	
E=Top Extension	Notch Angle For Seam=0	
	Marker Type=Notch	
	Diameter Reduction=0.000	
	Marker Depth=Default	
	Mark Sides=No	
	Leg Lengths=No	
	Fixing Holes On Extension=Yes	Seams
	Castle Height=3.000	S1=None
	Castle Width=5.000	
	Castle Quantity=7	
	Castle Angle=75.000	
	Castle Inset=15.000	Damper: None
	Castle Height=3.000	None
	Castle Width=5.000	None
	Castle Quantity=2	
	Castle Angle=75.000	
	Castle Inset=15.000	

4/18/2016 courtesy of Applied software 109

Round/Equipment



Dims	Options	Conn's
A=Diameter	Type=Manual	C1=None
B=Length	Position=0.000	C2=None
C=Left Collar	Plate=No	
D=Right Collar		
E=Total Length		
F=Handle Length #1		
G=Handle Length #2		
H=Handle Inset		

Damper:

Seams

# Pattern: 1163

Round



Dims	Options	Conn's
A=Diameter	Number Of Segments=3	C1=None
B=Inner Radius	Seam Position=0.000	C2=None
C=Angle	Cross Break=1	C3=None
D=Bottom Extension	Single Segments=No	
E=Top Extension Angle	Diameter Type=Nominal	
F=Top Extension Length	Automatic Nest Break If Oversize=No	
	Notch Angle For Seam=0	
	Nest Break Start Segment=0	
	Nest Break End Segment=0	
	Marker Type=Notch	
	Diameter Reduction=0.000	Seams
	Marker Depth=Default	S1=None
	Mark Sides=No	S2=None
	Leg Lengths=No	
	Fixing Holes On Extension=Yes	
	Input Top Extension=Top Length	Damper: None
		None



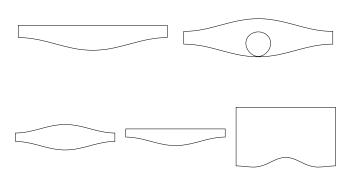


Round



Dims	Options	Conn's
A=Diameter	Number Of Segments=4	C1=None
B=Inner Radius	Seam Position=0.000	C2=None
C=Angle	Pipe Diameter Type=Nominal	C3=None
D=Bottom Extension	Branch Diameter Type=Nominal	C4=None
E=Top Extension	Marker Type=Notch	
F=Branch Diameter	Branch Allowance To Pipe=0.000	
G=Branch Length		
H=Branch Angle		
I=Branch Extension		
J=Branch Inset		
K=Branch Offset		Seams
		S1=None
		S2=None

Damper:



Pattern: 1175 Round/Standard/Equipment

Dims	Options	Conn's
	Inlet=1	
	Outlet=1	
	Library=Duct	
	Faces=No	

Seams

Damper:

Round



Dims	Options	Conn's
A=Pipe Diameter	Branch Parts=1	C1=None
B=Branch Diameter	Pipe Diameter Type=Nominal	C2=None
C=Btm Width	Branch Diameter Type=Nominal	C3=None
D=Btm Depth	Hole Adjust=0.000	
E=Branch Length	Branch Allowance To Pipe=0.000	
F=Collar	Branch Seam Position=0.000	
	Plate Border=0.000	
	Plate Border (Width)=Equal	
	Plate Type=Rectangular	

Seams

S1=None S2=None

Damper: None



Pattern: 1184

Round

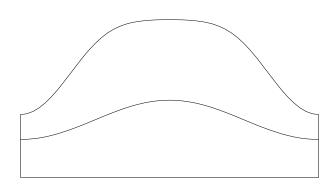


Dims	Options	Conn's
A=Pipe Diameter	Branch Parts=1	C1=None
B=Branch Diameter	Pipe Diameter Type=Nominal	C2=None
C=Branch Length	Branch Diameter Type=Nominal	C3=None
D=Angle	Branch Allowance To Pipe=0.000	C4=None
E=Offset	Throat Cut Back (Degrees)=0.000	
F=Extension		
G=Collar		

Seams

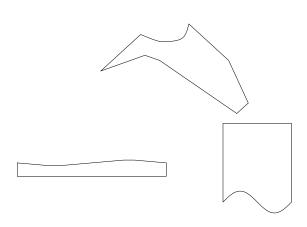
S1=None S2=None

Damper: None



Rectangular/Round



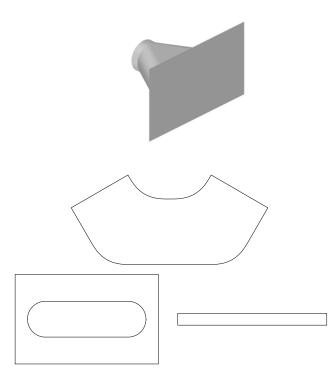


Dims	Options	Conn's
A=Width	Diameter Type=Nominal	C1=None
B=Depth	Round Parts=1	C2=None
C=Diameter	Rect Parts=1	
D=Btm Left Ext	Body Cross Break=1	
E=Btm Right Ext	Body Length Break=1	
F=Top Upper Extension	Seam Position=Width	
G=Top Lower Extension	Marker Type=Notch	
H=Inner Length #1	Inlet=1	
I=Inner Length #2	Outlet=2	
J=Offset Depth		
K=Angle		Seams
		S1=None
		S2=None

Damper:

Pattern: 1199

Round



Dims	Options	Conn's
A=Diameter	Branch Parts=1	C1=None
B=Length	Plate Parts=1	C2=None
C=Extension	Seam Position=0.000	
D=Angle	Hole Adjust=0.000	
E=Plate Width	Diameter Type=Nominal	
F=Plate Depth	Turnover=0.000	
G=Offset Width	Notch Hole Ends=No	
H=Offset Depth		
I=Bottom Width		

Seams S1=None S2=None

Damper: None

Round/Equipment



Dims	Options	Conn's
A=Pipe Diameter	Lines Input=Quantity	C1=None
B=Width	Horizontal Lines=10	
C=Length	Vertical Lines=10	
D=Thickness	Depth Input=Inside	
E=Frame Width		
F=Frame Length		
G=Depth		

Seams

Damper:

# Pattern: 1239 Round/Standard/Equipment



Dims	Options	Conn's
A=Diameter	Profile=Round	C1=None
B=Bearer Extn	Block Thickness=0.000	C2=None
C=Right Rod Extn Above	Block Length=0.000	C3=None
D=Left Rod Extn Above	Number Of Round Sections=Auto	
E=Rod Extn Below	Drop Rod Diameter=0.400	
F=Length A	Bearer Width=2.000	
G=Length B	Bearer Thickness=0.400	
H=Supported Width	Area of Influence=0.000	
I=Supported Depth	A of I: Filled Circle=No	
J=Right Rod Offset	A of I: Circle Thickness=0.100	
K=Left Rod Offset	Export=All	Seams
L=Centre Offset	Export Rod Size=Yes	
	Use Support Settings=Yes	
	Point Load A=0.000	
	Point Load B=0.000	
	Insulation Shield=No	Damper:

4/18/2016 courtesy of Applied software 114

Pattern: 1240
Round/Standard/Equipment



Dims	Options	Conn's
A=Diameter	Block Thickness=0.000	C1=None
B=Rod Extn Above	Block Length=0.000	C2=None
C=Width	Number Of Round Sections=Auto	C3=None
D=Depth	Drop Rod Diameter=0.400	
E=Length	Bearer Width=2.000	
F=Arrow Length	Bearer Thickness=0.400	
G=Arrow Width	Area of Influence=0.000	
H=Arrow Offset	A of I: Filled Circle=No	
I=Arrow Rotation	A of I: Circle Thickness=0.100	
J=Length A	Export=All	
K=Length B	Export Rod Size=Yes	Seams
L=Supported Width	Use Support Settings=Yes	
M=Supported Depth	Point Load A=0.000	
N=Centre Offset	Point Load B=0.000	
	Insulation Shield=No	
		Damper:

Pattern: 1242
Round/Standard/Equipment



Dims	Options	Conn's
A=Diameter	Block Thickness=0.000	C1=None
B=Bearer Extn	Block Length=0.000	C2=None
C=Rod Extn Above	Number Of Round Sections=Auto	C3=None
D=Arrow Length	Drop Rod Diameter=0.400	
E=Arrow Width	Bearer Width=2.000	
F=Arrow Offset	Bearer Thickness=0.400	
G=Arrow Rotation	Area of Influence=0.000	
H=Length A	A of I: Filled Circle=No	
I=Length B	A of I: Circle Thickness=0.100	
J=Supported Width	Export=All	
K=Supported Depth	Export Rod Size=Yes	Seams
L=Centre Offset	Use Support Settings=Yes	
	Point Load A=0.000	
	Point Load B=0.000	
	Insulation Shield=No	
		Dampor:

4/18/2016 courtesy of Applied software 115

Damper:

Round/Standard/Equipment



Dims	Options	Conn's
A=Diameter	Block Thickness=0.000	C1=None
B=Height	Block Length=0.000	C2=None
C=Offset	Number Of Round Sections=Auto	C3=None
D=Top Length	Drop Rod Diameter=0.400	
E=Lap	Bearer Width=2.000	
F=Rod Extn Below	Bearer Thickness=0.400	
G=Rod Extn Above	Hex End=Yes	
H=Length A	Roller Rod Diameter=0.600	
I=Length B	Area of Influence=0.000	
J=Supported Width	A of I: Filled Circle=No	
K=Supported Depth	A of I: Circle Thickness=0.100	Seams
L=Centre Offset	Export=All	
	Export Rod Size=Yes	
	Front Seismic Rod=No	
	Back Seismic Rod=No	
	Left Seismic Rod=No	Damner:
	Right Seismic Rod=No	Damper:
	Use Support Settings=Yes	
	Point Load A=0.000	
	Point Load B=0.000	
	Insulation Shield=No	

### Pattern: 1244 Round/Standard/Equipment



Dims	Options	Conn's
A=Diameter	Block Thickness=0.000	C1=None
B=Height	Block Length=0.000	C2=None
C=Offset	Number Of Round Sections=Auto	C3=None
D=Top Length	Drop Rod Diameter=0.400	
E=Lap	Bearer Width=2.000	
F=Rod Extn Below	Bearer Thickness=0.400	
G=Rod Extn Above	Hex End=Yes	
H=Length A	Roller Rod Diameter=0.600	
I=Length B	Area of Influence=0.000	
J=Supported Width	A of I: Filled Circle=No	
K=Supported Depth	A of I: Circle Thickness=0.100	Seams
L=Centre Offset	Export=All	
	Export Rod Size=Yes	
	Front Seismic Rod=No	
	Back Seismic Rod=No	
	Left Seismic Rod=No	Damper:
	Right Seismic Rod=No	
	Use Support Settings=Yes	
	Point Load A=0.000	
	Point Load B=0.000	
	High Detail Roller=No	
	Insulation Shield=No	

### Pattern: 1245 Round/Standard/Equipment



Dims	Options	Conn's
A=Diameter	Block Thickness=0.000	C1=None
B=Base Width	Block Length=0.000	C2=None
C=Base Depth	Number Of Round Sections=Auto	C3=None
D=Thickness	Drop Rod Diameter=2.000	
E=Pipe Length	Bearer Width=2.000	
F=Centreline Length	Bearer Thickness=0.400	
G=Gusset Length	Roller Rod Diameter=1.000	
H=Gusset Height	Turnover=0.000	
I=Length A	Export=All	
J=Length B	Export Rod Size=Yes	
K=Supported Width	Use Support Settings=Yes	Seams
L=Supported Depth	Point Load A=0.000	
M=Centre Offset	Point Load B=0.000	
	Insulation Shield=No	

Damper:

### Pattern: 1246 Round/Standard/Equipment



Dims	Options	Conn's
A=Diameter	Block Thickness=0.000	C1=None
B=Base Width	Block Length=0.000	C2=None
C=Base Depth	Number Of Round Sections=Auto	C3=None
D=Thickness	Drop Rod Diameter=2.000	
E=Pipe Length	Bearer Width=2.000	
F=Centreline Length	Bearer Thickness=0.400	
G=Gusset Length	Roller Rod Diameter=1.000	
H=Gusset Height	Turnover=0.000	
I=Offset	Export=All	
J=Length A	Export Rod Size=Yes	
K=Length B	Use Support Settings=Yes	Seams
L=Supported Width	Point Load A=0.000	
M=Supported Depth	Point Load B=0.000	
N=Centre Offset	Insulation Shield=No	

Damper:

Round/Standard/Equipment



Dims	Options	Conn's
A=Diameter	Profile=Round	C1=None
B=Bearer Extn	Block Thickness=0.000	C2=None
C=Right Rod Extn Above	Block Length=0.000	C3=None
D=Left Rod Extn Above	Number Of Round Sections=Auto	
E=Rod Extn Below	Drop Rod Diameter=0.400	
F=Length A	Bearer Width=2.000	
G=Length B	Bearer Thickness=0.400	
H=Supported Width	Area of Influence=0.000	
I=Supported Depth	A of I: Filled Circle=No	
J=Right Rod Offset	A of I: Circle Thickness=0.100	
K=Left Rod Offset	Export=All	Seams
L=Centre Offset	Export Rod Size=Yes	
	Use Support Settings=Yes	
	Point Load A=0.000	
	Point Load B=0.000	
	Insulation Shield=No	Damper:

Pattern: 1249 Round/Standard/Equipment



Dims	Options	Conn's
A=Diameter	Block Thickness=0.000	C1=None
B=Height	Block Length=0.000	C2=None
C=Offset	Number Of Round Sections=Auto	C3=None
D=Top Length	Drop Rod Diameter=0.400	
E=Rod Extn Below	Bearer Width=2.000	
F=Rod Extn Above	Bearer Thickness=0.400	
G=Length A	Hex End=Yes	
H=Length B	Area of Influence=0.000	
I=Supported Width	A of I: Filled Circle=No	
J=Supported Depth	A of I: Circle Thickness=0.100	
K=Centre Offset	Export=All	Seams
	Export Rod Size=Yes	
	Front Seismic Rod=No	
	Back Seismic Rod=No	
	Left Seismic Rod=No	
	Right Seismic Rod=No	Damper:
	Use Support Settings=Yes	
	Point Load A=0.000	
	Point Load B=0.000	
	Insulation Shield=No	

Pattern: 1522 Round/Flat Oval/Equipment



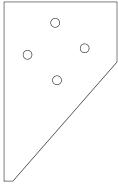
Dims	Options	Conn's
A=Diameter	Sex Type=Male	C1=None
B=Collar		C2=None
C=Length		
D=Offset		
E=Oval Depth		

Seams S1=None

Damper:

Standard



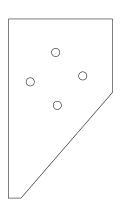


0	0	J
		,

Pattern: 126

Standard





Dims	Options	Conn's
A=X-Offset	Holes On Length=2	
B=Y-Offset		
C=X Pitch		
D=Y Pitch		
E=Hole Inset		
F=Hole Spacing		
G=Hole Spacing		
H=Top Width		
I=Right Height		
J=Right Offset		
K=Btm Width		Seams
L=Hole Diameter		
M=Inset		
N=X Distance		
O=Y Distance		
		Damper:

Dims Options Conn's A=X-Offset Holes On Length=2 B=Y-Offset C=X Pitch D=Y Pitch E=Hole Inset F=Hole Spacing G=Hole Spacing H=Top Width I=Left Height J=Inset Seams K=Hole Diameter L=Inset M=X Distance N=Y Distance

Damper:

Standard



Dims	Options	Conn's
A=Width	Vee Notch Angle=90	
B=Depth	Duct Adjust=0.000	
C=X-Offset		
D=Y-Offset		
E=X Distance		
F=Y Distance		
G=Holes On Length		
H=Holes On Height		
I=Hole Diameter		

Seams

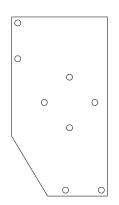
Damper:

0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0

Pattern: 128

Standard



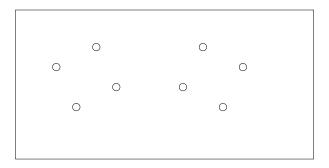


Dims	Options	Conn's
A=X-Offset	Holes On Length=2	
B=Y-Offset	Corner Style=Mitred	
C=X Pitch	Hole Diameter=0.500	
D=Y Pitch	Holes On Width=2	
E=Hole Inset	Hole Spacing=3.000	
F=Hole Spacing	Hole Inset=0.500	
G=Hole Spacing	Hole Offset=0.500	
H=Top Width	Holes On Height=2	
I=Right Height	Hole Spacing=3.000	
J=Left Height	Hole Inset=0.500	
K=Btm Width	Hole Offset=0.500	Seams
L=Hole Diameter		
M=Inset		
N=X Distance		
O=Y Distance		
		_

Damper:

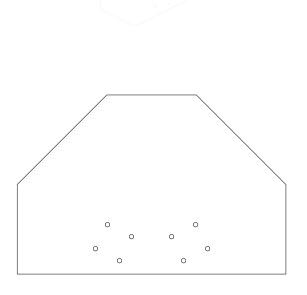
Standard





Dims	Options	Conn's
A=X-Offset	Holes On Length=2	COIIII 3
B=Y-Offset	Holes On Length=2	
C=Width	Hole Diameter=0.500	
D=Height	Tiole Blameter 0.300	
E=X Pitch		
F=Y Pitch		
G=Hole Inset		
H=Hole Spacing		
I=Hole Spacing		
J=Inset		
K=X Distance		Seams
L=Y Distance		
M=X Pitch		
N=Y Pitch		
O=Hole Inset		
P=Hole Spacing		Damper:
Q=Hole Spacing		bamper.
R=Inset		
S=X Distance		
T=Y Distance		

Pattern: 130 Standard

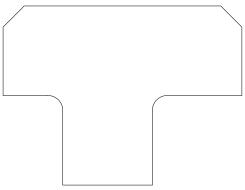


Dims	Options	Conn's
A=X-Offset	Holes On Length=2	
B=Y-Offset	Holes On Length=2	
C=Width	Hole Diameter=0.500	
D=Top Width		
E=Left Height		
F=Right Height		
G=X Distance		
H=Y Distance		
I=X Pitch		
J=Y Pitch		
K=Hole Inset		Seams
L=Hole Spacing		
M=Hole Spacing		
N=X Distance		
O=Y Distance		
P=X Pitch		Damper:
Q=Y Pitch		24
R=Hole Inset		
S=Hole Spacing		
T=Hole Spacing		
U=X Distance		
V=Y Distance		

4/18/2016 courtesy of Applied Software 3

Standard

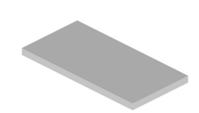


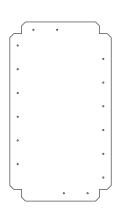


Dims	Options	Conn's
A=Left Width		
B=Btm Width		
C=Right Width		
D=Base Height		
E=Right Height		
F=Hole Inset		
G=Hole Offset		
H=Hole Spacing		
I=Hole Spacing		
J=Hole Diameter		
K=Holes On Length		Seams
L=Holes On Height		
M=Inner Radius		
N=Corner		

Pattern: 158

Standard





Dims	Uptions	Conn s
A=Height	Notch 1=Yes	
B=Width	Notch 2=Yes	
C=Depth	Marker=No	
D=Top	Top Holes=2	
E=Right	Bottom Holes=2	
F=Bottom	Right Holes=2	
G=Left	Left Holes=2	
H=Hole Inset	Hole Edge=100.000	
I=Hole Offset		
J=Hole Inset		
K=Hole Offset		Seams
L=Hole Diameter		
M=Hole Spacing		

Damper:

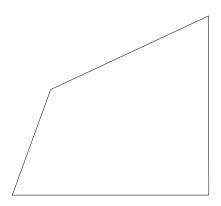
Damper:

Standard

A=Length A B=Length B
C=Length C D=Angle A-B
E=Angle B-C



Damper:



Pattern: 203

Standard

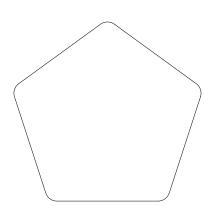
Dims		Options	Conn's
A=Length	B=Radius		

C=Sides



Seams

Damper:

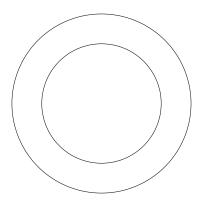


Standard

Dims	Options	Conn's
A=Outer Diameter	Number Of Parts=1	
B=Inner Diameter	Parts To Cut=All	
	Seam For Weathering=No	
	Fixing Holes On Extension=0.000	
	Notch Angle For Seam=Arc	

Seams S1=None

Damper:



Pattern: 205

Standard

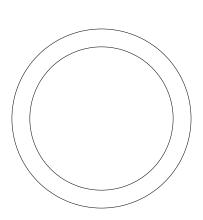
Dims	Options	Conn's
A=Outside Diameter	Parts=1	
B=Inside Diameter		



Seams

S1=None

Damper:



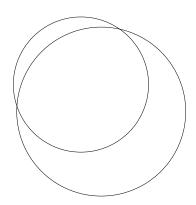
Standard



|--|

Pattern: 207 Standard





A=Outside Diameter B=Hole Diameter C=Angle D=Inside Diameter E=Outside Diameter

F=Hole Diameter G=Angle H=Inside Diameter I=Outside Diameter

J=Hole Diameter

K=Angle

L=Inside Diameter

Seams

Damper:

Dims Options Conn's

A=Outside Diameter B=Inside Diameter C=X-Offset D=Y-Offset

Seams

S1=None

Damper:

Standard

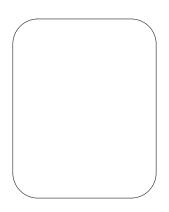
Options B=Width

A=Height C=Radius



Seams

Damper:



Pattern: 209

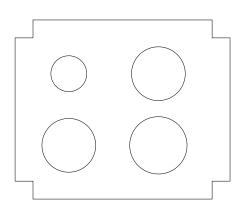
Standard



Di	ms	Options	Conn's
A=Height	B=Width		
C=Turnover	D=Diameter		
E=X-Offset	F=Y-Offset		
G=Diameter	H=X-Offset		
I=Y-Offset	J=Diameter		
K=X-Offset	L=Y-Offset		
M=Diameter	N=X-Offset		
O=Y-Offset			

Seams

Damper:



Standard

Dims Options

A=Top Diameter B=Bottom Diameter

C=Hole Diameter

D=Hole Diameter

E=Y Distance

Seams

Damper:

Pattern: 211

Standard

Dims Options Conn's
A=Height

B=Width

D-VVIGU

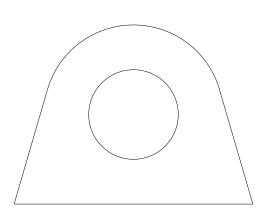
C=Radius

D=Hole Radius



Seams

Damper:

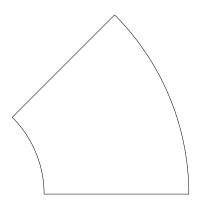


Standard



Pattern: 213 Standard





Dims	Options	Conn's
A=Height	Wrapper Length Adjust=0.000	
B=Throat Radius	Mirror=No	
C=Length Out		
D=Width Out		
E=Centre Radius		
F=Fixing Radius		
G=Radius Decrement		
H=Fixing Hole Diameter		
I=Number Of Holes		
J=Wrapper Depth		
		Seams

Damper:

Dims Options Conn's

A=Inner Radius B=Angle C=Length

Seams

Damper:

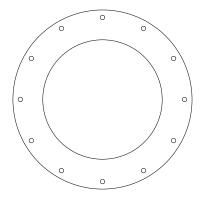
4/18/2016 courtesy of software 10

Standard

A=Outer Diameter Number Of Parts=1 B=Inner Diameter C=Fixing Diameter D=Hole Diameter E=Number Of Holes F=Hole Length



Seams

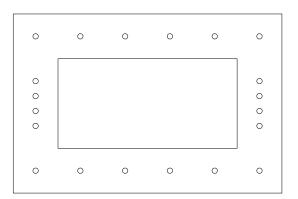


Damper:

Pattern: 216 Standard



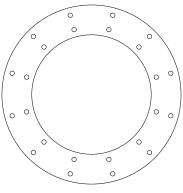
Dims	Options	Conn's
A=Length	Holes On Length=6	
B=Height	Holes On Height=6	
C=Length	Hole Diameter=0.480	
D=Height	Cut Corner Holes ?=Yes	
E=X-Offset	2 Parts=No	
F=Y-Offset		
G=X Distance		
H=Y Distance		
I=X-Offset		
J=Y-Offset		
K=Outside Corner Radius		Seams



Damper:

Standard

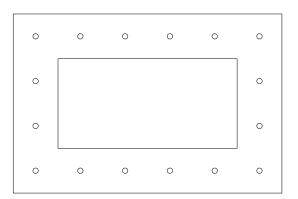




Pattern: 220

Standard





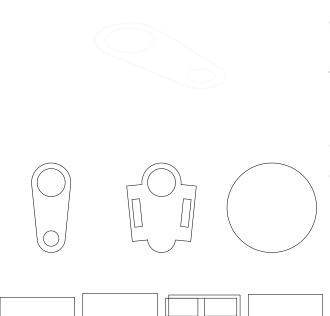
Dims	Options	Conn's
A=Outer Diameter		
B=Inner Diameter		
C=Fixing Diameter		
D=Hole Diameter		
E=Number Of Holes		
F=Hole Angle		
G=Fixing Diameter		
H=Hole Diameter		
I=Number Of Holes		
J=Hole Angle		
K=Hole Length		Seams
L=Hole Length		

Damper:

Dims	Options	Conn's
A=Length	Hole Diameter=0.480	
B=Height	Cut Corner Holes ?=Yes	
C=Length	2 Parts=No	
D=Height		
E=X-Offset		
F=Y-Offset		
G=X Distance		
H=Y Distance		
I=X-Offset		
J=Y-Offset		
K=Outside Corner Radius		Seams

Damper:

Standard



Dims	Options	Conn's
A=Height	Slotted Hole=Yes	
B=Y-Offset	Hole Diameter=0.000	
C=Top Radius	Slotted Hole=0	
D=Top Hole Diameter	Hole Spacing=0.000	
E=Bottom Radius	Adjust=0.000	
F=Bottom Hole Diameter		
G=Depth		
H=Plate Diameter #1		
I=P.C.D. #1		
J=Hole Diameter #1		
K=Number Of Holes #1		Seams
L=Turnover		
M=Number Of Bolts #2		
N=Bolt Diameter #2		
O=Body Inset #2		
P=Hole Inset #2		Damper:
Q=Plate Border		24

Pattern: 228

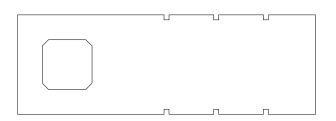
Standard



Dims	Options	Conn's
A=Width	Notch=	
B=Length #1	Notch=	
C=Length #2	Notch=	
D=Length #3	Notch=	
E=Length #4	Use First For All=No	
F=Hole Inset	Width=0.800	
G=Hole Offset	Depth=0.800	
H=Hole Width	Vee Notch Angle=45.000	
I=Hole Length	Cut Corner Holes ?=1.000	

Seams

Damper:



4/18/2016 courtesy of software 13

Standard

A=Width B=Height C=End Height D=Centre Radius E=Hole Diameter #1 F=X-Offset #1 G=Y-Offset #1 H=Fixing Radius #2 I=Number Of Holes #2 J=Hole Diameter #2 Seams K=Hole Angle #2

0 0

Damper:

Pattern: 301 Standard



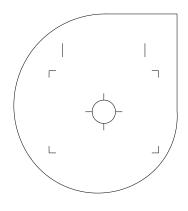
0 0	
0 0	r

Dims	Options	Conn's
A=X Centre	Mirror=No	
B=B	Scribe Centres=Yes	
C=Y Centre	Scribe Stiffeners=Yes	
D=D	Scribe Lugs=Yes	
E=Diameter	Number Of Holes=8	
F=Y Stiffener	Hole Diameter=0.400	
G=X Stiffener		
H=J		
I=K		
J=L		
K=M		Seams
L=N		
M=P		
N=P.C.D.		
O=Rotation		

Damper:

Standard



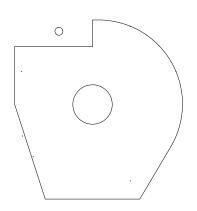


Dims	Options	Conn's
A=X Centre	Mirror=No	
B=B	Scribe Centres=Yes	
C=Y Centre	Scribe Stiffeners=Yes	
D=D	Scribe Lugs=Yes	
E=Diameter	Lugs X Centre=-6.000	
F=X Stiffener	Lugs Y Centre=10.000	
G=Y Stiffener	Lugs X Centre=6.000	
H=J	Lugs Y Centre=10.000	
I=K	Lugs Length=2.000	
J=L	Stiffeners X Size =16.000	
K=M	Stiffeners X Size =12.000	Seams
L=N		
M=P		
N=Rotation		

Damper:

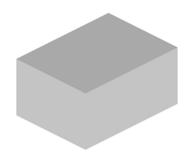
Pattern: 308 Standard





Dims	Options	Conn's
A=Width	Bolts=0	
B=Depth	Hole Angle=0.000	
C=X Distance	Fixing Hole Diameter=Marked	
D=Y Distance	Hole Spacing=50	
E=Length #1	Hole Inset=100	
F=Angle #1	Cut Side=No	
G=Length #2		
H=Angle #2		
I=Length #3		
J=Angle #3		
K=Length #4		Seams
L=Angle #4		
M=Hole Angle		
N=Hole Diameter		
O=Inner Diameter		
P=P.C.D.		Damper:
Q=Bolt Diameter		
R=Base Height		
S=Right Length		
T=Left Length		
U=Rotation		

Rectangular/Standard/Equipment



	Dims	Options	Conn's
A=Width	B=Depth	Inlet=1	
C=Length		Outlet=1	
		Library=Duct	
		Type=None	
		Cost Supports=No	

Seams

Damper:

Pattern: 803

Standard







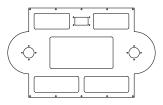


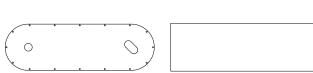
Dims	Options	Conn's
A=Length	Wrapper Width Adjust=0.080	
B=Radius	Side Holes=Single	
C=Depth	Hole Length=4.000	
D=Turnover	Hole Width=0.800	
E=Border	X Distance=0.800	
F=Corner Radius	Y Distance=0.800	
G=Hole Diameter		
H=Slot Width		
I=Slot Length		
J=Slot Angle		
		Seams

Damper:

Standard







Dims	Options	Conn's
A=Length	Wrapper Width Adjust=0.080	
B=Radius	Centre Hole=Yes	
C=Depth	Side Holes=Yes	
D=Turnover	Centre Hole=Yes	
E=Border		
F=Corner Radius		
G=Hole Diameter		
H=Slot Width		
I=Slot Length		
J=Slot Angle		
K=Fixing Hole Diameter		Seams
L=Edge Hole Diameter		
M=Hole Spacing		
N=Border		
O=Hole Diameter		
P=P.C.D.		Damper:
Q=Hole Length		·
R=Hole Width		
S=Corner Radius		
T=Hole Spacing		

Pattern: 805

Standard



		1
0	0	
0	0	

Dims	Options	Conn's
A=Width		
B=Length		
C=Height		
D=Turnover		
E=Y Distance		
F=X Distance		
G=Inset		
H=Hole Length		
I=Hole Width		

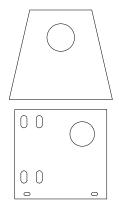
Damper:

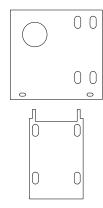
Seams

4/18/2016 courtesy of Applied software 17

Standard



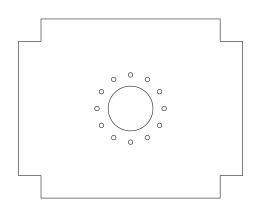




Pattern: 833

Standard





Dims	Options	Conn's
A=Top Width	Width Adjust=0.000	
B=Btm Width	Side Holes=Yes	
C=Height	3 Parts=Yes	
D=Length	Allowance=Thickness	
E=Hole Inset		
F=Hole Diameter		
G=Turnover		
H=Hole Spacing		
I=Hole Inset		
J=Hole Offset		
K=Hole Length		Seams
L=Hole Width		
M=Hole Spacing		
N=Hole Spacing		
O=Hole Inset		
P=Hole Length		Damper:
Q=Hole Width		•
R=Length		
S=Distance		
T=Distance		
U=Length		
V=Hole Inset		
W=Hole Offset		
X=Hole Spacing		
Y=Hole Spacing		
Z=Hole Length		
a=Hole Width		
b=Outside Corner Radius		

Dims	Options	Conn's
A=Height	Length Includes Turnover=Yes	
B=Width		
C=Diameter		
D=Turnover		
E=Turnover		
F=Fixing Diameter		
G=Hole Diameter		
H=Number Of Holes		

Seams

Damper:

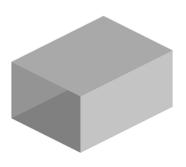
4/18/2016 courtesy of software 18

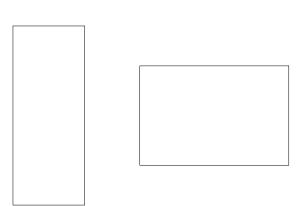
Round/Standard/Equipment



D:	Orkions	Canala
Dims	Options	Conn's
A=Diameter	Type=Profiled Bearer	C1=None
B=Bearer Extn	Profile=Round	C2=None
C=Left Angle	Pipework=No	C3=None
D=Right Angle	Number Of Round Sections=Auto	
E=Rod Extn Above	Drop Rod Diameter=0.400	
F=Rod Extn Below	Bearer Width=2.000	
G=Length A	Bearer Thickness=0.400	
H=Length B	Oversized Item=No	
I=Supported Width	Area of Influence=0.000	
J=Supported Depth	Export=All	
K=Right Rod Offset	Front Seismic Rod=No	Seams
L=Left Rod Offset	Back Seismic Rod=No	
M=Centre Offset	Left Seismic Rod=No	
	Right Seismic Rod=No	
	Front Seismic Rod=No	
	Back Seismic Rod=No	Damper:
	Left Seismic Rod=No	Damper.
	Right Seismic Rod=No	
	Add Rod Size=No	
	A of I: Filled Circle=No	
	A of I: Circle Thickness=0.100	
	Use Support Settings=No	
	Point Load A=0.000	
	Point Load B=0.000	
	Stretch Rods Separately=No	
	Stretch hous separately-No	

Pattern: 861 Rectangular/Standard



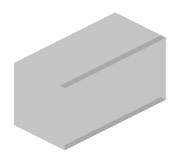


	Dims	Options	Conn's
A=Width C=Length	B=Depth	Type=1 Part Straight Notch Angle For Lid=45.000 Lid Adjust=0.000 Cost Supports=No	C1=None

Seams S1=None S2=None

Damper:

Rectangular/Standard



Dims	Options	Conn's
A=Width	Vertical=1	
B=Height	Horizontal=1	
C=Depth	Shelf Recess=0.000	
D=Kick Height	Kick Recess=0.000	
E=Centre Stile Width	Doors=None	

Seams

Damper:

Pattern: 902 Rectangular/Round/Flat Oval/Standard/Equipment

Dims	Options	Conn's
	Inlet=1	
	Outlet=1	
	Pipework=No	
	Show Boundaries=No	

Seams

Damper:

Rectangular/Standard/Structure/Equipment



Dims	Options	Conn's
A=Depth	Type=Full	C1=None
B=Width	Rotation=Vertical	C2=None
C=Height	Closed=Yes	
D=Flange	Hole Type=Circle/Ellipse	
E=Flange	Draw as Single Line=No	
F=Radius	Full=No	
G=Radius	Connectors=Yes	
H=Web	Hole Rotation=0	
I=Left Horizontal Angle	Export=No	
J=Right Horizontal Angle		
K=Left Vertical Angle		Seams
L=Right Vertical Angle		
M=Turnover #1		
N=Turnover #2		
O=Hole Inset		
P=Hole Offset		Damper:
Q=Hole Width		
R=Hole Depth		
S=Hole Spacing		
T=Number Of Holes		
U=Plate Width #1		
V=Plate Depth #1		
W=Plate Thickness #1		
X=Plate Inset #1		
Y=Plate Offset #1		
Z=Plate Width #2		
a=Plate Depth #2		
b=Plate Thickness #2		

Pattern: 921 Rectangular/Standard



Dims	Options	Conn's
A=Width	Type=Rectangular	C1=None
B=Depth	Vee Notch Depth=0.000	
C=Insulation	Vee Notch Angle=0.000	
D=Duct Adjust		
E=Maximum Width		
F=Corner		
G=Centre		

Seams

Damper:



courtesy of 4/18/2016 21

Round/Standard/Equipment

Dims	Options	Conn's
	Inlet=1	
	Outlet=1	
	Library=Duct	
	Faces=No	

Seams

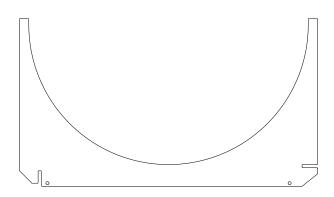
Damper:

Pattern: 960

Standard



Dims	Options	Conn's
A=R	Number Of Holes=2	_
B=R1		
C=D		
D=X1		
E=X2		
F=X3		
G=X4		
H=X5		
I=Y1		
J=Y2		
K=Y3		Seams
L=Y4		
M=Slot Length		
N=Slot Width		



Standard



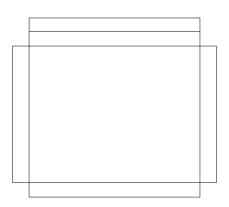
Dims	Options	Conn's
A=A	Chamfer=No	
B=B	Number Of Holes=2	
C=R		
D=X1		
E=X2		
F=X4		
G=Y1		
H=Y3		
I=Y4		
J=D		
K=R2		Seams
L=R3		
M=Hole Offset		
N=Hole Inset		

Damper:



# Pattern: 966 Rectangular/Standard

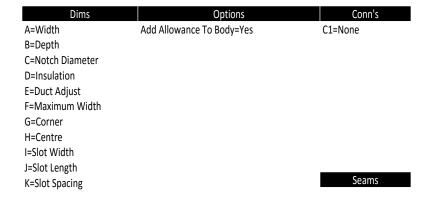




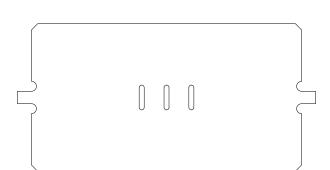
Dims	Options	Conn's
A=Width	Top Folds=2	C1=None
B=Depth	Bottom Folds=1	
C=Top Extension #1	Left Folds=1	
D=Top Fold Angle #1	Right Folds=1	
E=Top Extension #2	Attach=	
F=Top Fold Angle #2	Attacher Side=Top	
G=Bottom Extension #1	Attacher Extension=1	
H=Bottom Fold Angle #1	Mirror Left/Top=Auto	
I=Left Extension #1	Rotate Left/Top=Auto	
J=Left Fold Angle #1	Mirror Right/Bottom=Auto	
K=Right Extension #1	Rotate Right/Bottom=Auto	Seams
L=Right Fold Angle #1	Notch Corners=No	
M=Attach #1		
N=Attach #2		
O=Attach #3		
P=Top Inset		Damper:
Q=Bend Radius		bumper.

4/18/2016 courtesy of software 23

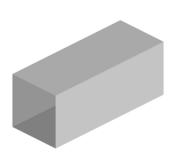
Standard

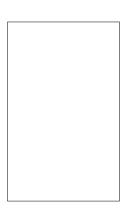






Pattern: 972
Rectangular/Standard





	Dims	Options	Conn's
A=Width	B=Depth	Straight Type=1 Part Straight	C1=None
C=Length		Female Allow=Shortest Side	C2=None
		1xU,1xI=Shortest Side	C3=None
		Connector Fold Notch=Use Default	C4=None
		Vee Notch Depth=Auto	C5=None
		Vee Notch Angle=30.000	C6=None
		Connector Fold Notch=Use Default	
		Vee Notch Depth=Auto	
		Vee Notch Angle=30.000	
		Beading=No	
		Vertical=No	Seams
		Adjust=0.000	S1=None
		Right Offset=6.000	
		Left Offset=6.000	
		Insulation UI=Shortest Side	
			Damper:

4/18/2016 courtesy of software 24

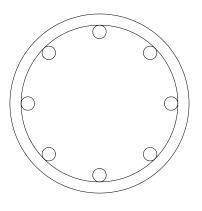
Standard

Dims	Options	Conn's
A=Outside Diameter	Parts=1	
B=Inside Diameter		
C=Hole Diameter		
D=Number Of Holes		
E=Stitch Gap		



Seams S1=None

Damper:



Pattern: 985
Standard/Structure



Dims	Options	Conn's
A=Total Length	Strut Shape=Rectangular	C1=None
B=Beam Length #1	Number Of V-Sections=2	C2=None
C=Beam Length #2	Up Struts=No	C3=None
D=Beam Width	Down Struts=No	C4=None
E=Upper Inset	Joint Position=Centre	
F=Lower Inset	Input=Beam Lengths	
G=Beam Height		
H=Strut Height		
I=Strut Width		
J=Strut Depth		
K=Strut Space		Seams
L=Joint Width		
M=Joint Height		
N=Joint Depth		
O=Joint Corner		
		Damper:

4/18/2016 courtesy of Applied software 25

Standard/Equipment

Dims	Options	Conn's
A=Length	Length=Central	C1=None
B=Front Angle	Width Scale=1.000	C2=None
C=Back Angle	Height Scale=1.000	
D=Width	Back Angle Axis=Horizontal	
E=Height	Front Angle Axis=Horizontal	
F=Node X Offset	Edges Angle=30	
G=Node Y Offset	Mirror Shape=No	
H=Number Of Points	Reverse External Faces=No	
	Reverse Internal Faces=No	
	Open Front=No	
	Open Back=No	Seams
	Cut Type=Equipment	S1=None
	Reverse Front Faces=No	S2=None
	Reverse Back Faces=No	
	Develop=Both Cheeks	
	Vee Depth Male=Auto	Damper:
	Vee Angle Male=0	
	Develop Ends=Seam 1	
	CAD Nodes=Straight	
	Notches In Arcs=No	
	Open Islands=Leave Open	
	Wrap Parts=1	
	Seam Position=0	
	Vee Depth Female=Auto	
	Vee Angle Female=0	

Pattern: 1101

Rectangular/Round/Flat Oval/Standard/Equipment

Dims	Options	Conn's
	Inlet=1	
	Outlet=1	
	Pipework=No	
	Show Boundaries=No	
	Faces=No	

Seams



Pattern: 1105
Rectangular/Standard

Dims Options Conn's

Show Elements=All

Seams

Damper:

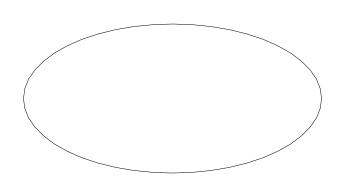
Pattern: 1142

Standard

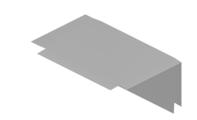
Dims	Options	Conn's
A=Major Axis	View Number Of Segments=Default	
B=Minor Axis	Develop Number Of Segments=Default	

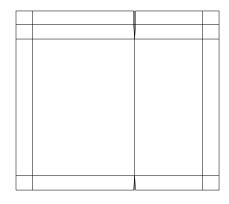


Seams



Rectangular/Standard





Dims	Options	Conn's
A=Left	Top Folds=2	C1=None
B=Depth	Bottom Folds=1	
C=Top Extension #1	Left Folds=1	
D=Top Fold Angle #1	Right Folds=1	
E=Top Extension #2	Attach=	
F=Top Fold Angle #2	Attacher Side=Left and Right	
G=Bottom Extension #1	Attacher Extension=Front	
H=Bottom Fold Angle #1		
I=Left Extension #1		
J=Left Fold Angle #1		
K=Right Extension #1		Seams
L=Right Fold Angle #1		
M=Attach #1		
N=Attach #2		
O=Attach #3		
P=Inset		Damper:
Q=Bend Radius		•
R=Right		
S=Angle		

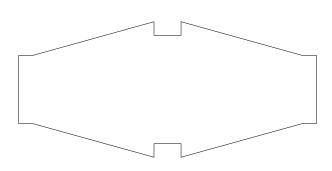
Pattern: 1150

Standard

Di	ms	Options	Conn's
A=Length #1	B=Length #2		C1=None
C=Length #3	D=Height #1		
E=Height #2	F=Height #3		



Seams S1=None



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Pattern: 1175
Round/Standard/Equipment

Dims Options Conn's

Inlet=1
Outlet=1
Library=Duct
Faces=No

Seams

Damper:

Pattern: 1181

Standard

Dims Options Conn's

Seams

Rectangular/Standard/Equipment



Dims	Options	Conn's
A=Height	Symmetrical=Yes	C1=None
B=Length		C2=None
C=Thickness		
D=Left Width		
E=Left Height		
F=Width		
		Seams

Damper:

#### Pattern: 1194 Rectangular/Standard/Equipment



Dims	Options	Conn's
A=Width	Detail=Low	C1=None
B=Height		C2=None
C=Length		
D=Mid Width		
E=Mid Inset		
F=Mid Offset		
G=End Width		
H=End Height		
I=Thickness		
J=Radius		
K=Curve (0.0-1.0)		Seams

Damper:

Rectangular/Standard/Equipment



Dims	Options	Conn's
A=Width	Profile=Rectangular	C1=None
B=Depth	Pipework=No	C2=None
C=Bearer Extn	Drop Rod Diameter=0.400	C3=None
	Bearer Width=2.000	C3-None
D=Left Angle		
E=Right Angle	Bearer Thickness=0.400	
F=Right Rod Extn Above	Oversized Item=No	
G=Left Rod Extn Above	Area of Influence=0.000	
H=Rod Extn Below	A of I: Filled Circle=No	
I=Length A	A of I: Circle Thickness=0.100	
J=Length B	Export=All	
K=Supported Width	Export Rod Size=Yes	Seams
L=Supported Depth	Front Seismic Rod=No	
M=Right Rod Offset	Back Seismic Rod=No	
N=Left Rod Offset	Left Seismic Rod=No	
	Right Seismic Rod=No	
	Front Seismic Rod=No	Damner
	Back Seismic Rod=No	Damper:
	Left Seismic Rod=No	
	Right Seismic Rod=No	
	Use Support Settings=Yes	
	Point Load A=0.000	
	Point Load B=0.000	
	FUIII LUAU D-0.000	

Pattern: 1239 Round/Standard/Equipment



Dims	Options	Conn's
A=Diameter	Profile=Round	C1=None
B=Bearer Extn	Block Thickness=0.000	C2=None
C=Right Rod Extn Above	Block Length=0.000	C3=None
D=Left Rod Extn Above	Number Of Round Sections=Auto	
E=Rod Extn Below	Drop Rod Diameter=0.400	
F=Length A	Bearer Width=2.000	
G=Length B	Bearer Thickness=0.400	
H=Supported Width	Area of Influence=0.000	
I=Supported Depth	A of I: Filled Circle=No	
J=Right Rod Offset	A of I: Circle Thickness=0.100	
K=Left Rod Offset	Export=All	Seams
L=Centre Offset	Export Rod Size=Yes	
	Use Support Settings=Yes	
	Point Load A=0.000	
	Point Load B=0.000	
	Insulation Shield=No	Damper:

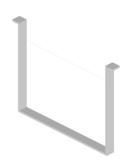
Pattern: 1240 Round/Standard/Equipment



Dims	Options	Conn's
A=Diameter	Block Thickness=0.000	C1=None
B=Rod Extn Above	Block Length=0.000	C2=None
C=Width	Number Of Round Sections=Auto	C3=None
D=Depth	Drop Rod Diameter=0.400	
E=Length	Bearer Width=2.000	
F=Arrow Length	Bearer Thickness=0.400	
G=Arrow Width	Area of Influence=0.000	
H=Arrow Offset	A of I: Filled Circle=No	
I=Arrow Rotation	A of I: Circle Thickness=0.100	
J=Length A	Export=All	
K=Length B	Export Rod Size=Yes	Seams
L=Supported Width	Use Support Settings=Yes	
M=Supported Depth	Point Load A=0.000	
N=Centre Offset	Point Load B=0.000	
	Insulation Shield=No	

Damper:

Pattern: 1241 Rectangular/Standard/Equipment



Dims	Options	Conn's
A=Width	Profile=Rectangular	C1=None
B=Depth	Bearer Width=2.000	C2=None
C=Top Length	Bearer Thickness=0.400	C3=None
D=Bearer Extn	Area of Influence=0.000	
E=Length A	A of I: Filled Circle=No	
F=Length B	A of I: Circle Thickness=0.100	
G=Supported Width	Export=All	
H=Supported Depth	Export Rod Size=Yes	
	Use Support Settings=Yes	
	Point Load A=0.000	
	Point Load B=0.000	Seams

Damper:

Pattern: 1242
Round/Standard/Equipment



Dims	Options	Conn's
A=Diameter	Block Thickness=0.000	C1=None
B=Bearer Extn	Block Length=0.000	C2=None
C=Rod Extn Above	Number Of Round Sections=Auto	C3=None
D=Arrow Length	Drop Rod Diameter=0.400	
E=Arrow Width	Bearer Width=2.000	
F=Arrow Offset	Bearer Thickness=0.400	
G=Arrow Rotation	Area of Influence=0.000	
H=Length A	A of I: Filled Circle=No	
I=Length B	A of I: Circle Thickness=0.100	
J=Supported Width	Export=All	
K=Supported Depth	Export Rod Size=Yes	Seams
L=Centre Offset	Use Support Settings=Yes	
	Point Load A=0.000	
	Point Load B=0.000	
	Insulation Shield=No	
		Damper:

Pattern: 1243
Round/Standard/Equipment



Dims	Options	Conn's
A=Diameter	Block Thickness=0.000	C1=None
B=Height	Block Length=0.000	C2=None
C=Offset	Number Of Round Sections=Auto	C3=None
D=Top Length	Drop Rod Diameter=0.400	
E=Lap	Bearer Width=2.000	
F=Rod Extn Below	Bearer Thickness=0.400	
G=Rod Extn Above	Hex End=Yes	
H=Length A	Roller Rod Diameter=0.600	
I=Length B	Area of Influence=0.000	
J=Supported Width	A of I: Filled Circle=No	
K=Supported Depth	A of I: Circle Thickness=0.100	Seams
L=Centre Offset	Export=All	
	Export Rod Size=Yes	
	Front Seismic Rod=No	
	Back Seismic Rod=No	
	Left Seismic Rod=No	Damper:
	Right Seismic Rod=No	'
	Use Support Settings=Yes	
	Point Load A=0.000	
	Point Load B=0.000	
	Insulation Shield=No	

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Round/Standard/Equipment



A=Diameter Block Thickness=0.000 C1=None	
B=Height Block Length=0.000 C2=None	
C=Offset Number Of Round Sections=Auto C3=None	
D=Top Length Drop Rod Diameter=0.400	
E=Lap Bearer Width=2.000	
F=Rod Extn Below Bearer Thickness=0.400	
G=Rod Extn Above Hex End=Yes	
H=Length A Roller Rod Diameter=0.600	
I=Length B Area of Influence=0.000	
J=Supported Width A of I: Filled Circle=No	_
K=Supported Depth A of I: Circle Thickness=0.100 Seams	
L=Centre Offset Export=All	
Export Rod Size=Yes	
Front Seismic Rod=No	
Back Seismic Rod=No	
Left Seismic Rod=No Damper:	
Right Seismic Rod=No	
Use Support Settings=Yes	
Point Load A=0.000	
Point Load B=0.000	
High Detail Roller=No	
Insulation Shield=No	

#### Pattern: 1245 Round/Standard/Equipment



Dims	Options	Conn's
A=Diameter	Block Thickness=0.000	C1=None
B=Base Width	Block Length=0.000	C2=None
C=Base Depth	Number Of Round Sections=Auto	C3=None
D=Thickness	Drop Rod Diameter=2.000	
E=Pipe Length	Bearer Width=2.000	
F=Centreline Length	Bearer Thickness=0.400	
G=Gusset Length	Roller Rod Diameter=1.000	
H=Gusset Height	Turnover=0.000	
I=Length A	Export=All	
J=Length B	Export Rod Size=Yes	
K=Supported Width	Use Support Settings=Yes	Seams
L=Supported Depth	Point Load A=0.000	
M=Centre Offset	Point Load B=0.000	
	Insulation Shield=No	

Damper:

Round/Standard/Equipment



Dims	Options	Conn's
A=Diameter	Block Thickness=0.000	C1=None
B=Base Width	Block Length=0.000	C2=None
C=Base Depth	Number Of Round Sections=Auto	C3=None
D=Thickness	Drop Rod Diameter=2.000	
E=Pipe Length	Bearer Width=2.000	
F=Centreline Length	Bearer Thickness=0.400	
G=Gusset Length	Roller Rod Diameter=1.000	
H=Gusset Height	Turnover=0.000	
I=Offset	Export=All	
J=Length A	Export Rod Size=Yes	
K=Length B	Use Support Settings=Yes	Seams
L=Supported Width	Point Load A=0.000	
M=Supported Depth	Point Load B=0.000	
N=Centre Offset	Insulation Shield=No	

Damper:

#### Pattern: 1247 Round/Standard/Equipment



Dims	Options	Conn's
A=Diameter	Profile=Round	C1=None
B=Bearer Extn	Block Thickness=0.000	C2=None
C=Right Rod Extn Above	Block Length=0.000	C3=None
D=Left Rod Extn Above	Number Of Round Sections=Auto	
E=Rod Extn Below	Drop Rod Diameter=0.400	
F=Length A	Bearer Width=2.000	
G=Length B	Bearer Thickness=0.400	
H=Supported Width	Area of Influence=0.000	
I=Supported Depth	A of I: Filled Circle=No	
J=Right Rod Offset	A of I: Circle Thickness=0.100	
K=Left Rod Offset	Export=All	Seams
L=Centre Offset	Export Rod Size=Yes	
	Use Support Settings=Yes	
	Point Load A=0.000	
	Point Load B=0.000	
	Insulation Shield=No	Damper:

Rectangular/Standard/Equipment



Dims	Options	Conn's
A=Width	Profile=Rectangular	C1=None
B=Depth	Number Of Round Sections=Auto	C2=None
C=Bearer Extn	Drop Rod Diameter=0.400	C3=None
D=Right Rod Extn Above	Bearer Thickness=0.000	
E=Left Rod Extn Above	Hex End=Yes	
F=Rod Extn Below	Roller Rod Diameter=0.600	
G=Length A	Area of Influence=0.000	
H=Length B	A of I: Filled Circle=No	
I=Supported Width	A of I: Circle Thickness=0.100	
J=Supported Depth	Export=All	
	Export Rod Size=Yes	Seams
	Use Support Settings=Yes	
	Point Load A=0.000	
	Point Load B=0.000	

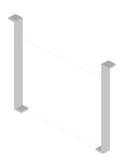
Damper:

Pattern: 1249 Round/Standard/Equipment



Dims	Options	Conn's
A=Diameter	Block Thickness=0.000	C1=None
B=Height	Block Length=0.000	C2=None
C=Offset	Number Of Round Sections=Auto	C3=None
D=Top Length	Drop Rod Diameter=0.400	
E=Rod Extn Below	Bearer Width=2.000	
F=Rod Extn Above	Bearer Thickness=0.400	
G=Length A	Hex End=Yes	
H=Length B	Area of Influence=0.000	
I=Supported Width	A of I: Filled Circle=No	
J=Supported Depth	A of I: Circle Thickness=0.100	
K=Centre Offset	Export=All	Seams
	Export Rod Size=Yes	
	Front Seismic Rod=No	
	Back Seismic Rod=No	
	Left Seismic Rod=No	
	Right Seismic Rod=No	Damper:
	Use Support Settings=Yes	Damper.
	Point Load A=0.000	
	Point Load B=0.000	
	Insulation Shield=No	

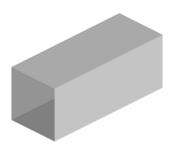
Rectangular/Standard/Equipment

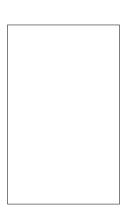


Dims	Options	Conn's
A=Width	Profile=Rectangular	C1=None
B=Depth	Bearer Width=2.000	C2=None
C=Top Length	Bearer Thickness=0.400	C3=None
D=Bearer Extn	Area of Influence=0.000	
E=Bottom Extension	A of I: Filled Circle=No	
F=Length A	A of I: Circle Thickness=0.100	
G=Length B	Straps=Both	
H=Supported Width	Export=All	
I=Supported Depth	Export Rod Size=Yes	
	Use Support Settings=Yes	
	Point Load A=0.000	Seams
	Point Load B=0.000	

Damper:

Pattern: 1972
Rectangular/Standard





	Dims	Options	Conn's
A=Width	B=Depth	Straight Type=1 Part Straight	C1=None
C=Length		Female Allow=Shortest Side	C2=None
		1xU,1xI=Shortest Side	C3=None
		Connector Fold Notch=Use Default	C4=None
		Vee Notch Depth=Auto	C5=None
		Vee Notch Angle=30.000	C6=None
		Connector Fold Notch=Use Default	
		Vee Notch Depth=Auto	
		Vee Notch Angle=30.000	
		Beading=No	
		Vertical=No	Seams
		Adjust=0.000	S1=None
		Right Offset=6.000	
		Left Offset=6.000	
		Insulation UI=Shortest Side	
			_

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