PROJECT NAME **EFPQF29**

PIPE TOLERANCES

DRAWING REF:	
HEAD CONTRACTOR:	CHECKED BY:

AREA	PIPE #	D1	D2	C1	T1	T2	T3	R1	R2	P / F

Completed
Signed:..... (Entire) Date:.....

PROJECT NAME
PIPE TOLERANCES

EFPQF29

Completed
Signed:..... (Entire) Date:.....

PROJECT NAME
PIPE TOLERANCES

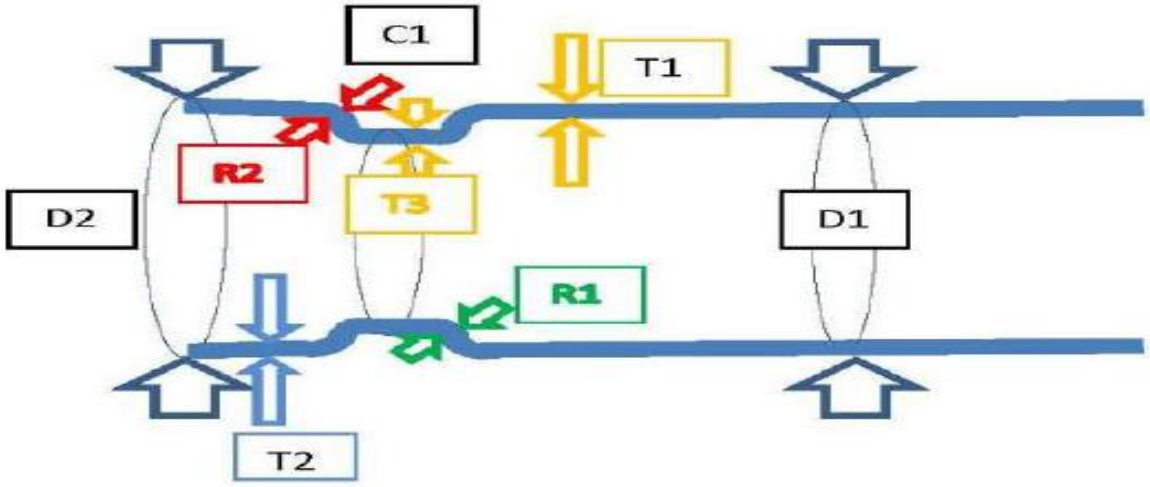
EFPQF29

PIPE SIZE	PIPE OUTSIDE DIAMETER GO NO GO TAPE			FLARE GO NO GO TAPE	PIPE WALL THICKNESS MICROMETER		PIPE WALL THICKNESS GROOVE MICROMETER	
	OPTIMAL mm	MAX mm	MIN mm	MAX mm	OPTIMAL mm	MIN mm	OPTIMAL mm (OPT – 25%)	MIN mm (MIN – 25%)
25mm	33.7	33.7	33.1	36.3	3.2	2.88	>2.4	2.16
32mm	42.4	42.6	41.8	45	3.2	2.88	>2.4	2.16
40mm	48.3	48.7	47.8	51.1	3.2	2.88	>2.4	2.16
50mm	60.3	60.9	59.7	63	3.6	3.24	>2.43	2.43
65mm	76.1	77	75.4	78.7	3.6	3.24	>2.7	2.43
80mm	88.9	89.8	88.1	91.4	4	3.6	>3	2.7
100mm	114.3	115.4	113.5	116.8	4.5	4.05	>3.375	3.04
150mm	168.3	169.9	167.5	170.9	5	4.5	>3.75	3.38
200mm	219.1	220.7	218.3	223.5	5	4.5	>3.75	3.38
250mm	273	274.7	272.3	277.4	6.35	5.72	>4.76	4.29
300mm	323.9	325.5	323.1	328.2	6.35	5.72	>4.76	4.29

Completed
Signed:..... (Entire) Date:.....

PROJECT NAME
PIPE TOLERANCES

EFPQF29



D1: Nominal pipe diameter (tape, ruler or caliper)

D2: end flare diameter (tape, ruler or caliper)

C1: groove circumference (Go-No Go Tape)

T1: pipe wall thickness (two point micrometre or modified caliper)

T2: pipe wall thickness (two point micrometre, caliper, or modified caliper)

T3: pipe wall thickness at bottom of Groove (two point micrometre or modified caliper)

R1: pipe thickness at radius 1 (two point micrometre or modified caliper)

R2: pipe thickness at radius 2 (two point micrometre or modified caliper)

Completed
Signed:..... (Entire) Date:.....

ROLL GROOVE TOOLING TO BE USED ONSITE

International Groove Spec AWWA C606 is the overaching Standard used for Roll Grooved pipe fabrication.

Below are the Rigid and Victaulic Groove Specifications noting these are in allignment with the AWWA C606 standard.

The Rigid 918 Roll Grooving tool or equivelent (compliant with AWWA C606) must be used for all roll grooving onsite.

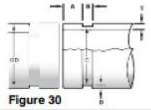


Figure 30

Table II. Standard Roll Groove Specifications[1]

NOTE: All Dimensions are in Inches.

NOM. PIPE SIZE	PIPE DIAMETER O.D.	PIPE DIAMETER TOL.	T MIN. WALL THK.	A GASKET SEAT +.015/-.030	B GROOVE WIDTH +.030/-.015	C GROOVE DIAMETER O.D.	C GROOVE DIAMETER TOL.	D NOM. GROOVE DEPTH [2]
1	1.315	+.013 -.013	0.065	0.625	0.281	1.190	+.000 -.015	0.063
1¼	1.660	+.016 -.016	0.065	0.625	0.281	1.535	+.000 -.015	0.063
1½	1.900	+.019 -.019	0.065	0.625	0.281	1.535	+.000 -.015	0.063
2	2.375	+.024 -.016	0.065	0.625	0.344	2.250	+.000 -.015	0.063
2½	2.875	+.029 -.016	0.083	0.625	0.344	2.720	+.000 -.015	0.078
3	3.50	+.035 -.031	0.083	0.625	0.344	3.344	+.000 -.015	0.078
3½	4.00	+.040 -.031	0.083	0.625	0.344	3.834	+.000 -.020	0.083
4	4.50	+.045 .031	0.083	0.625	0.344	4.334	+.000 -.015	0.083
5	5.563	+.056 .031	0.109	0.625	0.344	5.395	+.000 -.015	0.084
6	6.625	+.063 -.031	0.109	0.625	0.344	6.455	+.000 -.015	0.085
8	8.625	+.063 -.031	0.109	0.750	0.469	8.441	+.000 -.020	0.092
10	10.75	+.063 -.031	0.134	0.750	0.469	10.562	+.000 -.025	0.094
12	12.75	+.063 -.031	0.156	0.750	0.469	12.531	+.000 -.025	0.110

(1) As per AWWA C606-15
(2) Nominal Groove Depth is provided as a reference dimension only. Do not use groove depth to determine acceptability of a groove.
NOTE: Follow fitting manufacturer's recommendations regarding maximum allowable flare dimension.

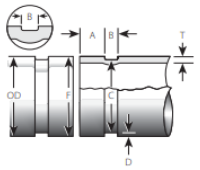
Victaulic

Original Groove System (OGS) Groove Specifications

25.01

1.0 DIMENSIONS

STANDARD ROLL GROOVE SPECIFICATIONS FOR STEEL AND OTHER IPS PIPE



Exaggerated for Clarity

Nominal Size inches DN	Pipe Outside Diameter[1] Actual inches mm	Tolerance + inches mm	Tolerance - inches mm	Gasket Seat "A"[2] ±0.03 inches ±0.76 mm	Groove Width "B"[3] ±0.03 inches ±0.76 mm	Groove Diameter "C"[4] Actual inches mm	Groove Diameter "C"[4] Tol. +0.000 (+0.00) inches mm	Groove Depth "D"[5] inches mm	Min Allow. Wall Thk. "T"[6] inches mm	Max Allow. Flare Dia. "F"[7] inches mm
¾ DN20	1.050 26.9	0.010 0.25	0.010 0.25	0.625 15.88	0.281 7.14	0.938 23.83	−0.015 −0.38	0.056 1.42	0.065 1.65	1.15 29.2
1 DN25	1.315 33.7	0.013 0.33	0.013 0.33	0.625 15.88	0.281 7.14	1.190 30.23	−0.015 −0.38	0.063 1.60	0.065 1.65	1.43 36.3
1¼ DN32	1.660 42.4	0.016 0.41	0.016 0.41	0.625 15.88	0.281 7.14	1.535 38.99	−0.015 −0.38	0.063 1.60	0.065 1.65	1.77 45.0
1½ DN40	1.900 48.3	0.019 0.48	0.019 0.48	0.625 15.88	0.281 7.14	1.775 45.09	−0.015 −0.38	0.063 1.60	0.065 1.65	2.01 51.1
2 DN50	2.375 60.3	0.024 0.61	0.024 0.61	0.625 15.88	0.344 8.74	2.250 57.15	−0.015 −0.38	0.063 1.60	0.065 1.65	2.48 63.0
2½	2.875 73.0	0.029 0.74	0.029 0.74	0.625 15.88	0.344 8.74	2.720 69.09	−0.018 −0.46	0.078 1.98	0.083 2.11	2.98 75.7
DN65	3.000 76.1	0.030 0.76	0.030 0.76	0.625 15.88	0.344 8.74	2.845 72.26	−0.018 −0.46	0.078 1.98	0.083 2.11	3.10 78.7
3 DN80	3.500 88.9	0.035 0.89	0.031 0.79	0.625 15.88	0.344 8.74	3.344 84.94	−0.018 −0.46	0.078 1.98	0.083 2.11	3.60 91.4
3½ DN90	4.000 101.6	0.040 1.02	0.031 0.79	0.625 15.88	0.344 8.74	3.834 97.38	−0.020 −0.51	0.083 2.11	0.083 2.11	4.10 104.1

Completed
Signed:..... (Entire) Date:.....