

4

3

2

1


B

B

A

A

REVISIONS			
REV.	DESCRIPTION	DATE	INITIALS
A	INITIAL RELEASE	04/22/19	RM
B	UPDATED FORMATTING	4/29/2019	CS
C	MOVE LOCATING PINS AND ADD 1.00 mm THRU FOR VENTING	5/6/2019	
D	ADDED FILLETS	5/26/2019	CS
E	CHANGED END CAP HOLE DEPTH AND ADDED SLOTS FOR VENTING	7/24/2019	CS
F	ADDED SLOPES ABOVE CARD SLOTS	9/4/2019	CS
G	ADDED STAR TRACKER AND INHIBIT CUTOUTS	7/29/2020	EG
H	CHANGED POST LOCATIONS, REMOVED EXTRA SOLAR BOARD HOLES, CHANGED PLUNGER THREAD DEPTH	9/12/2020	CS
J	CHANGED RAIL FILLETS TO MATCH CDS	9/23/2020	CS
K	Updated Rail Fillets, added new fillet running along the height of each rail	11/15/2020	HR



DRAWN	NAME RYAN MEDICK	DATE 4/22/19
CHECKED	ANDREW GREENBERG	4/22/19
ENG APPR.		
MFG APPR.		

Description:

plusX_Frame

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETER
TOLERANCES:
ONE PLACE DECIMAL 0.1
TWO PLACE DECIMAL 0.01

MATERIAL
6061-T6 (SS)

FINISH
ANODIZATION: TYPE II

WEIGHT (REF)

DO NOT SCALE DRAWING

COMMENTS:

DWG. NO.

REV
K

SIZE
B

SCALE: 1:2
SHEET 1 OF 4

3

2

1

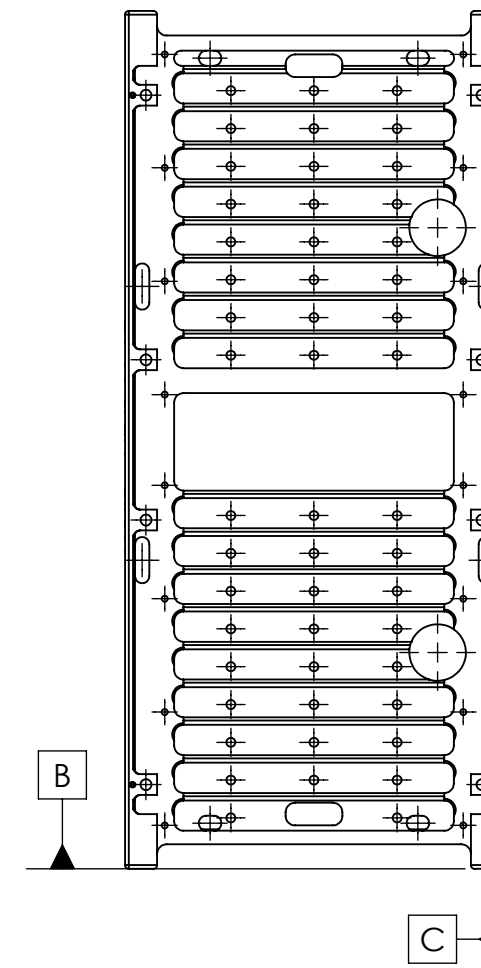
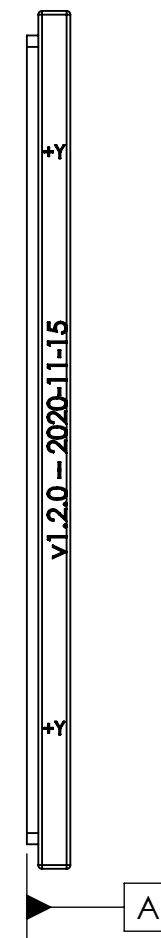
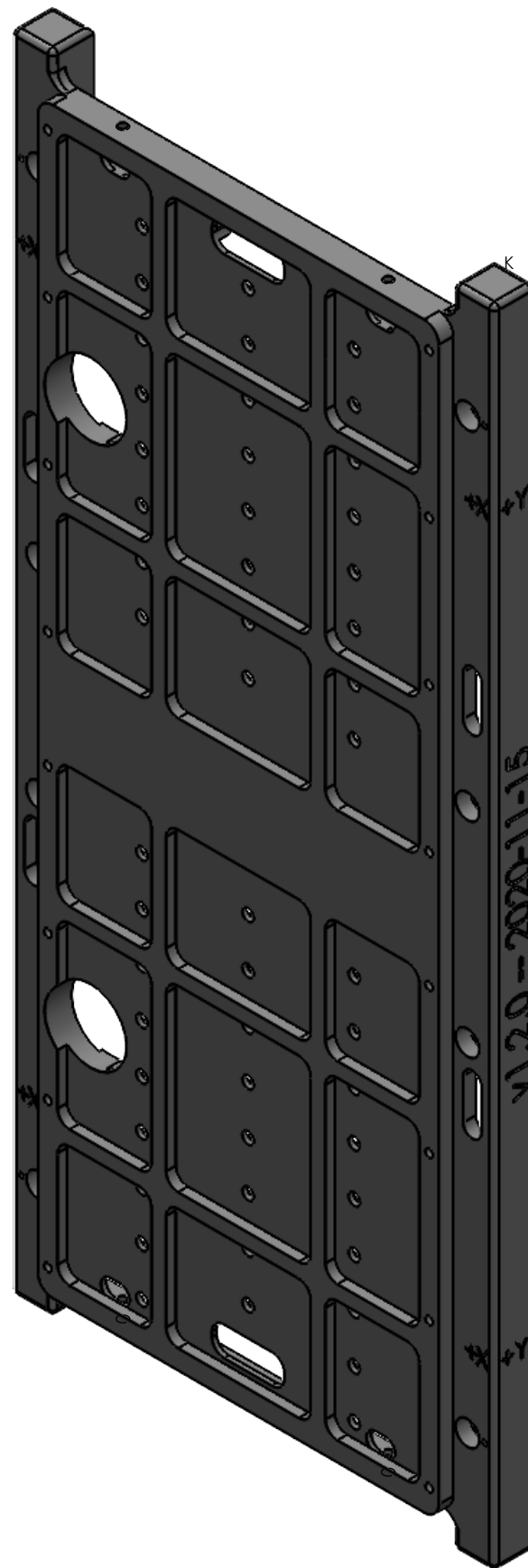
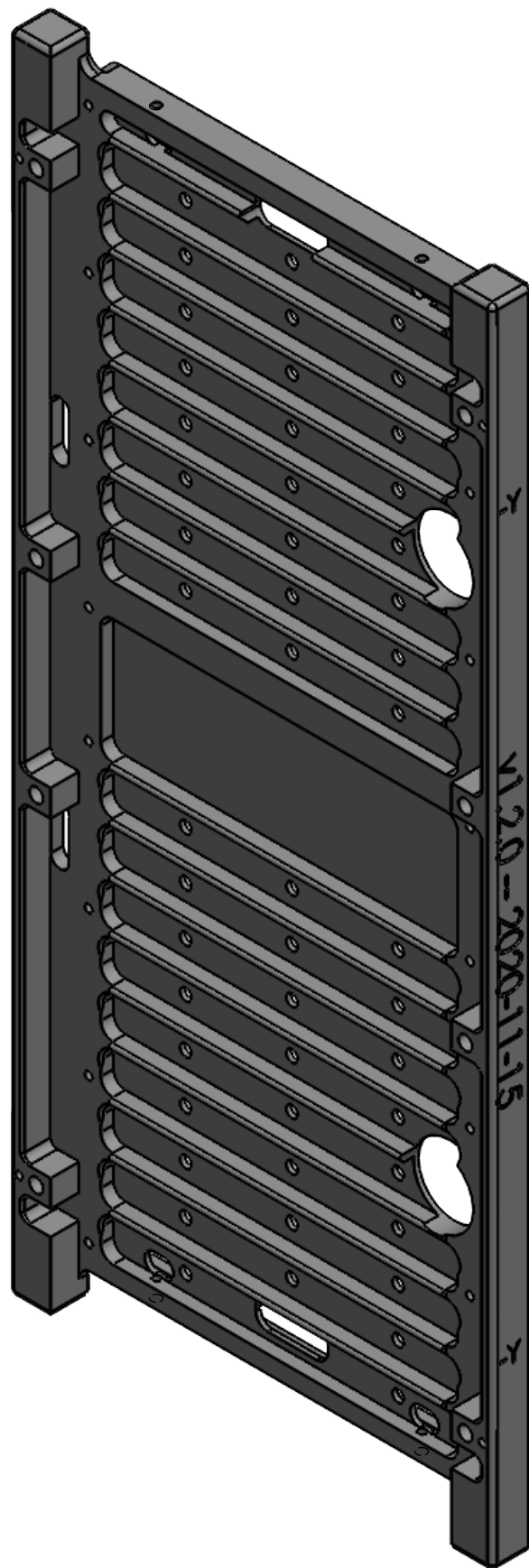
4

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NOTES:

1. REFERENCE +X_Frame.sldprt OR +X_Frame.step FOR MODEL BASE DEF.
2. BREAK ALL EDGES.
3. MATERIAL: 6061-T6 (SS).
4. ANODIZATION: TYPE II, BLACK
5. OVERALL PROFILE TOLERANCE

0.2	A	B	C
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 TO A MINIMUM GRID OF 5MM, UNLESS OTHERWISE SPECIFIED.
6. INTERNAL CORNERS RADIUS IS 0.2MM MAXIMUM

		NAME	DATE	Description: +X FRAME		
		DRAWN	RYAN MEDICK 4/22/19			
		CHECKED	ANDREW GREENBERG 4/22/19			
		ENG APPR.				
		MFG APPR.				
no: MATERIAL 6061-T6 (SS)		COMMENTS:		DWG. NO. plusX_Frame		
FINISH ANODIZATION: TYPE II				REV K	SIZE B	SCALE: 1:2 SHEET 2 OF 4
WEIGHT (REF)						
DO NOT SCALE DRAWING						

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETER
TOLERANCES:
ONE PLACE DECIMAL 0.1
TWO PLACE DECIMAL 0.01

MATERIAL
6061-T6 (SS)
FINISH
ANODIZATION: TYPE II
WEIGHT (REF)
DO NOT SCALE DRAWING

3

2

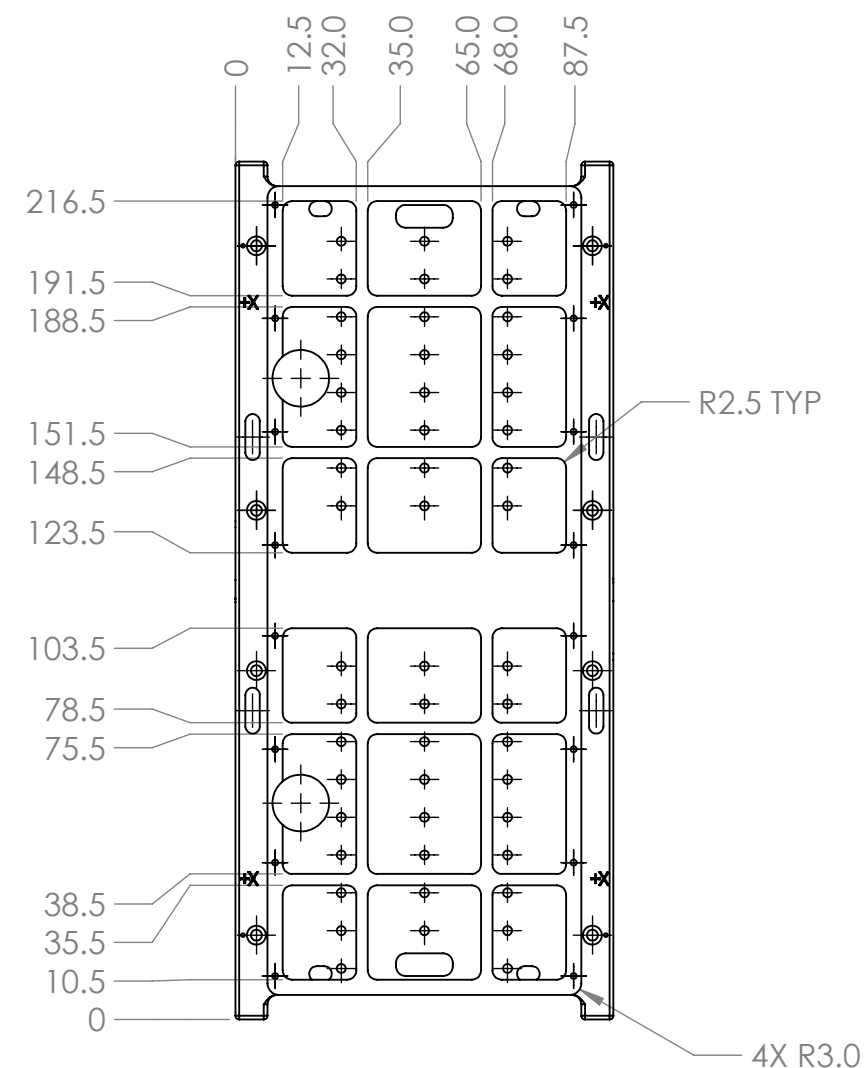
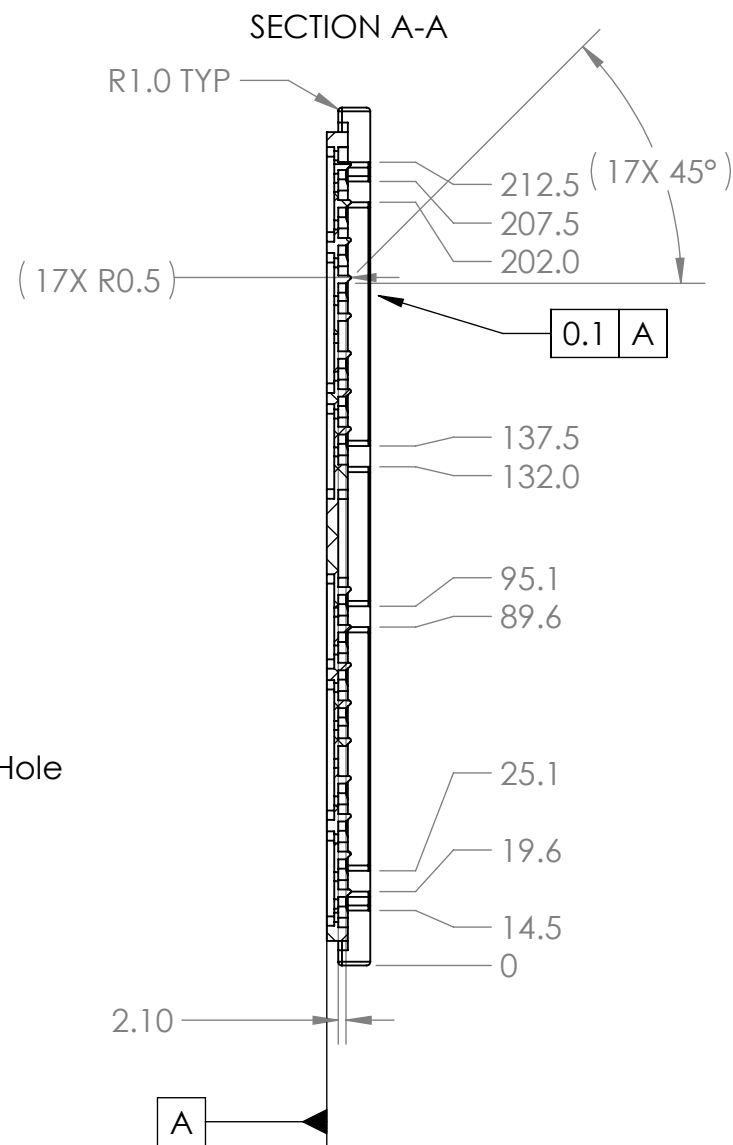
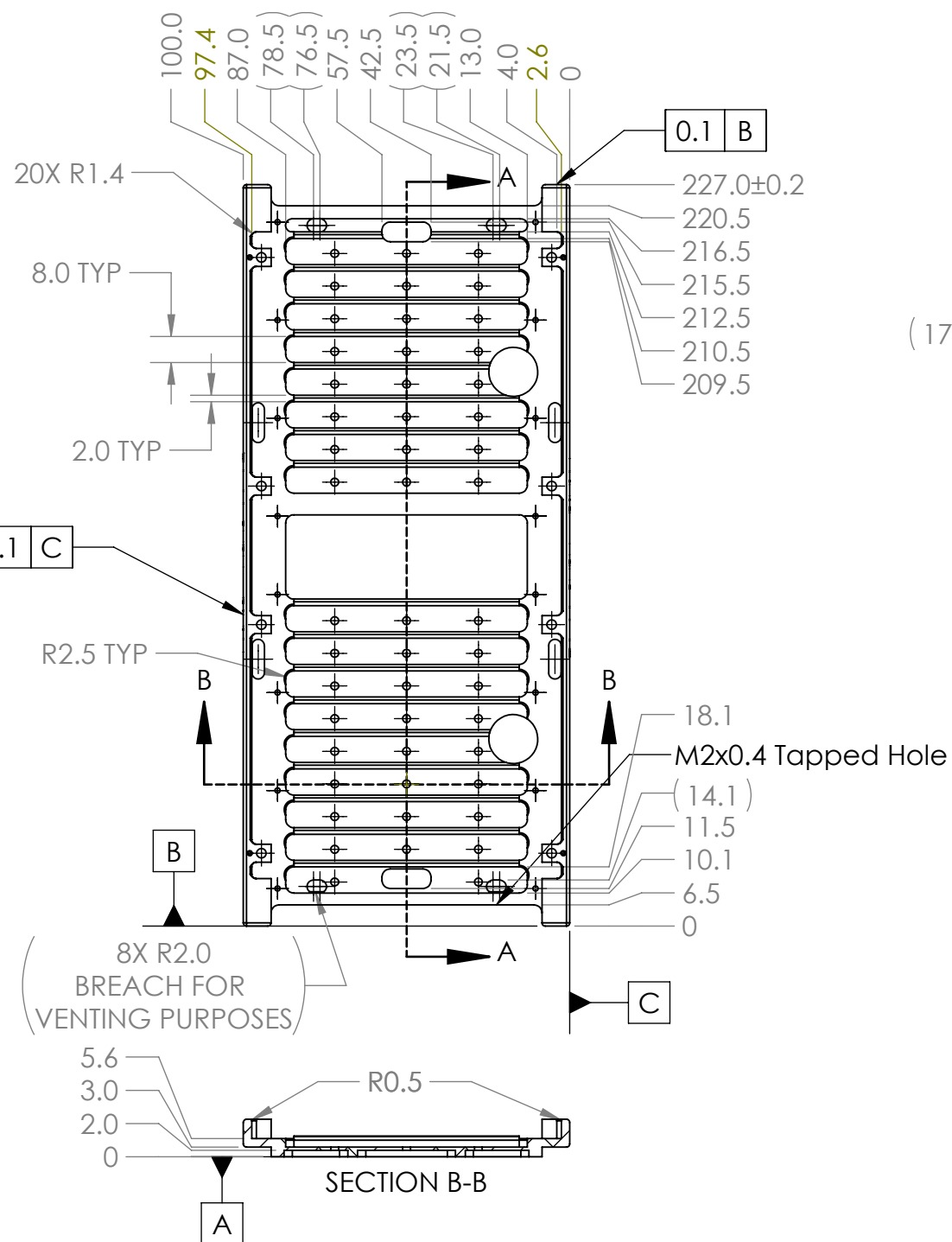
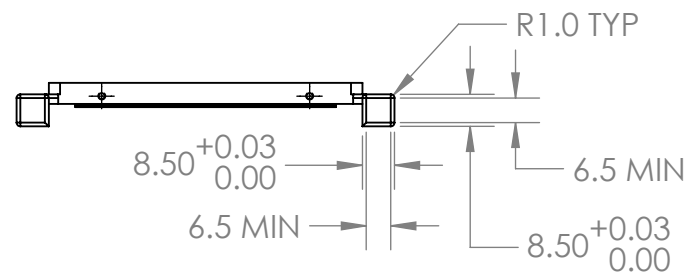
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	DRAWN	NAME RYAN MEDICK ANDREW GREENBERG	DATE 4/22/19	Description: +X FRAME
	CHECKED		4/22/19	
	ENG APPR.			
	MFG APPR.			
COMMENTS:				DWG. NO. plusX_Frame
UNLESS OTHERWISE SPECIFIED: MATERIAL 6061-T6 (SS) FINISH ANODIZATION: TYPE II WEIGHT (REF) DO NOT SCALE DRAWING				REV K
				SIZE B
DIMENSIONS ARE IN MILLIMETER TOLERANCES: ONE PLACE DECIMAL 0.1 TWO PLACE DECIMAL 0.01				SCALE: 1:2 SHEET 3 OF 4

4

3

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2X <MOD-DIAM> 1.6[0.1] <HOLE-DEPTH> (4.0)[0.1]
M2X0.4 - 6H <HOLE-DEPTH> (4.0)[0.1]
BREACH FOR VENTING PURPOSES

98.0
4X 2.0

10.0 TYP

30.0 TYP

4X <MOD-DIAM> 1.5^{0.000}_{-0.013} <HOLE-DEPTH> 3.0

4X <MOD-DIAM> 1.0 THRU

B

C

215.5

204.7

169.7

158.3

149.9

135.9

134.7

125.5

101.5

92.3

85.9

77.5

57.3

22.3

13.5

11.5

0

2X <MOD-DIAM> 1.6[0.1] <HOLE-DEPTH> (4.0)[0.1]
M2X0.4 - 6H <HOLE-DEPTH> (3.6)[0.1]
BREACH FOR VENTING PURPOSES

7.25

3.5

0

A

95.75

77.5

22.5

4.25

0

2X <MOD-DIAM> 3.5 <HOLE-DEPTH> 12.4
8-36 UNF <HOLE-DEPTH> 10.3

0 4.6 5.6 10.5 17.3 28.0 50.0 72.0 89.5 94.5 95.5

8X <MOD-DIAM> 2.9 THRU ALL

8X R1.9^{0.0}_{-0.2} THRU ALL

8X <MOD-DIAM> 2.9 THRU

<HOLE-SPOT> <MOD-DIAM> 5.0 <HOLE-DEPTH> 3.0

16X <MOD-DIAM> 1.6 THRU ALL
M2X0.4 - 6H THRU ALL

24X <MOD-DIAM> 2.4 THRU ALL

26X <MOD-DIAM> 2.4 THRU ALL

2X R7.5 THRU ALL



	NAME	DATE
DRAWN	RYAN MEDICK	4/22/19
CHECKED	ANDREW GREENBERG	4/22/19
ENG APPR.		
MFG APPR.		

Description:

+X FRAME

UNLESS OTHERWISE SPECIFIED:
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TOLERANCES:
ONE PLACE DECIMAL 0.1
TWO PLACE DECIMAL 0.01

MATERIAL
6061-T6 (SS)
FINISH
ANODIZATION: TYPE II
WEIGHT (REF)
DO NOT SCALE DRAWING

COMMENTS:

DWG. NO.

plusX_Frame

REV	SIZE	SCALE: 1:2
K	B	SHEET 4 OF 4

3

2

1