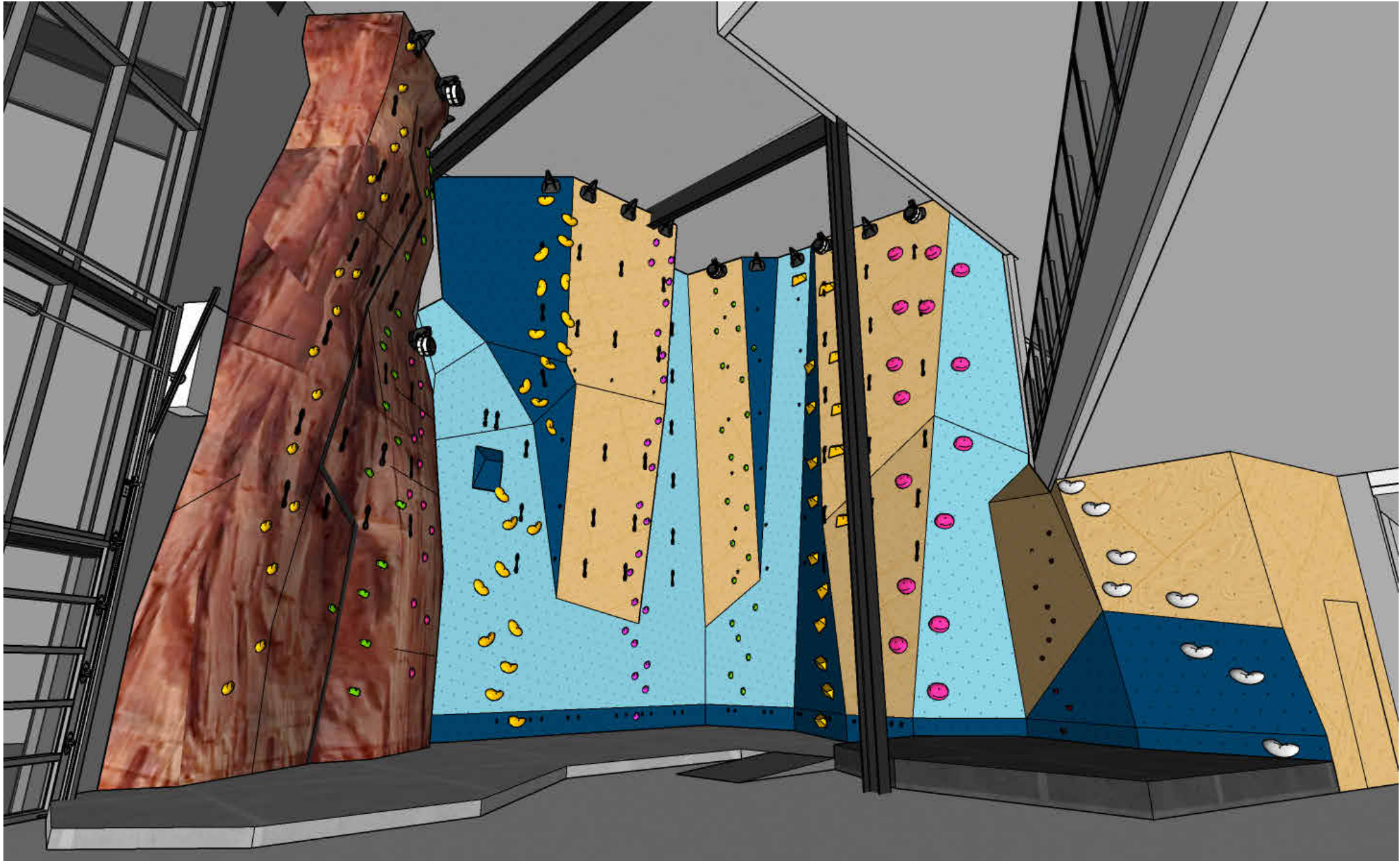




SHEET INDEX	
0.0	COVER PAGE
1.0	PROJECT OVERVIEW
2.0	BASEBOARD LAYOUT
2.1	BASEBOARD LAYOUT
2.2	PROFILE LAYOUT
3.0	STEEL OVERVIEW
3.1	STEEL PAGES
3.2	STEEL PAGES
3.3	LASERED PLATES
4.0	BRACING VIEWS
4.1	BRACING VIEWS
4.2	BRACING VIEWS
4.3	DETAILS
4.4	BRACING TABLES
4.5	BRACING TABLES
4.6	BRACING TABLES
4.7	BRACING TABLES
5.0	SHAPE LAYOUT
5.1	SHAPE LAYOUT
6.0	FLANGE LAYOUT
6.1	FLANGE LAYOUT
6.2	FLANGE SUMMARY
7.0	FLOORING
DA.1	DESIGN APPROVAL
DA.2	DESIGN APPROVAL
DR.1	DESIGN REVIEW
DR.2	DESIGN REVIEW FLOOR PLAN
P2.0	PANELIZED 2.0 TYPICALS



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2836 RECREATION WAY, GRAND JUNCTION, CO 81506

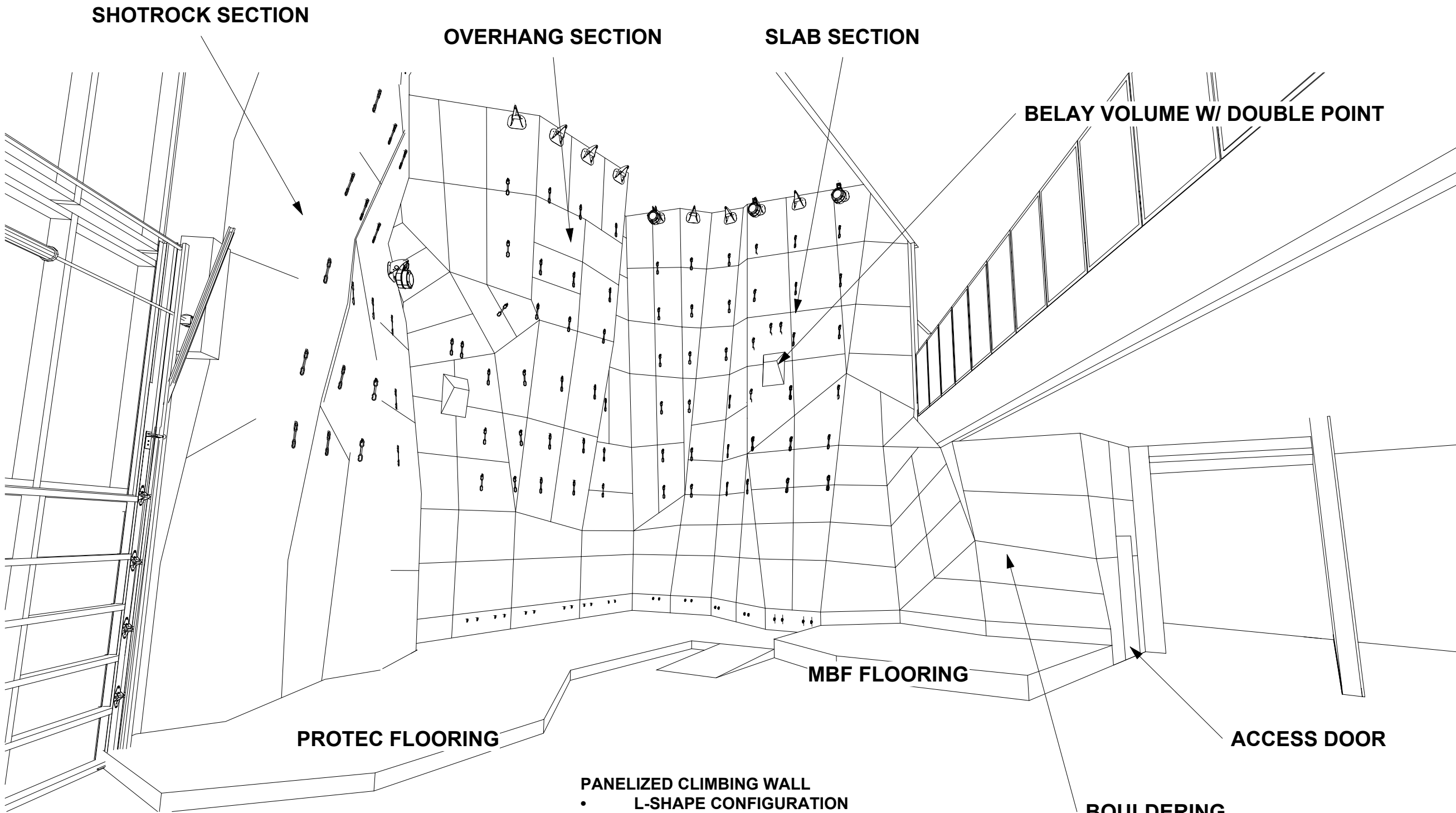
COVER PAGE



PEAK THRILLS
ENGINEERING



0.0



1
1.0 Project Overview

- PANELIZED CLIMBING WALL**
- L-SHAPE CONFIGURATION
 - 33' HIGH
 - 12 BELAY BARS
 - 12 LEAD LANES
 - 14 DOUBLE POINT ANCHORS
 1. 12 AT BASE SHAPES FOR ADAPTIVE CLIMBING
 - BOULDERING SECTION ON RIGHT SIDE
 1. MODULAR BOULDER FLOORING
 - TALL WALL BETWEEN BOULDERING AND SHOTROCK
 1. SLAB SECTION AND OVERHANG SECTION
 2. PROTEC FLOORING
 - 2 BELAY VOLUMES
 - 1 ACCESS DOOR



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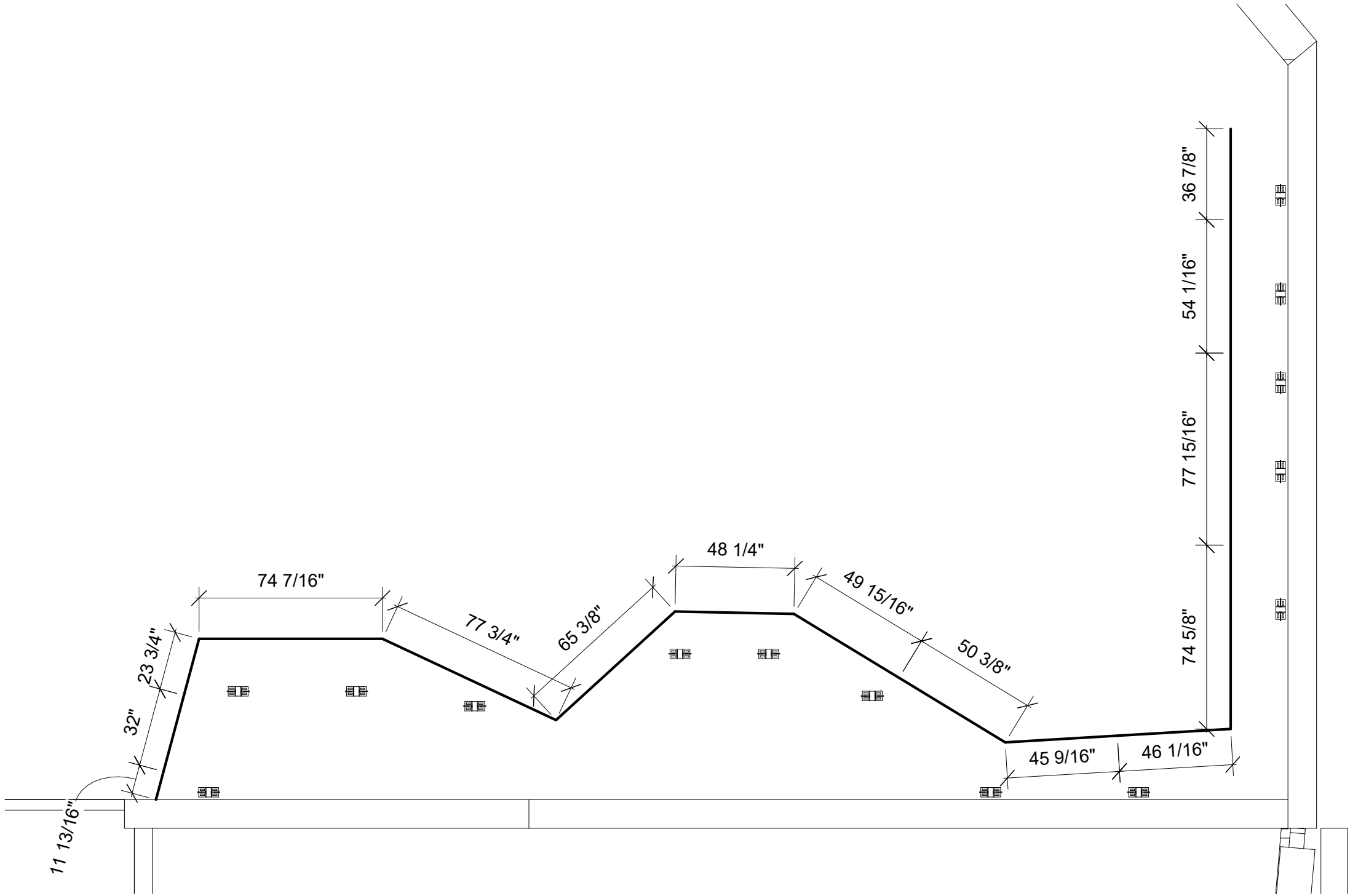
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PROJECT OVERVIEW



1.0



1
2.0

Baseboard Layout - Lengths
1/4" = 1'-0"



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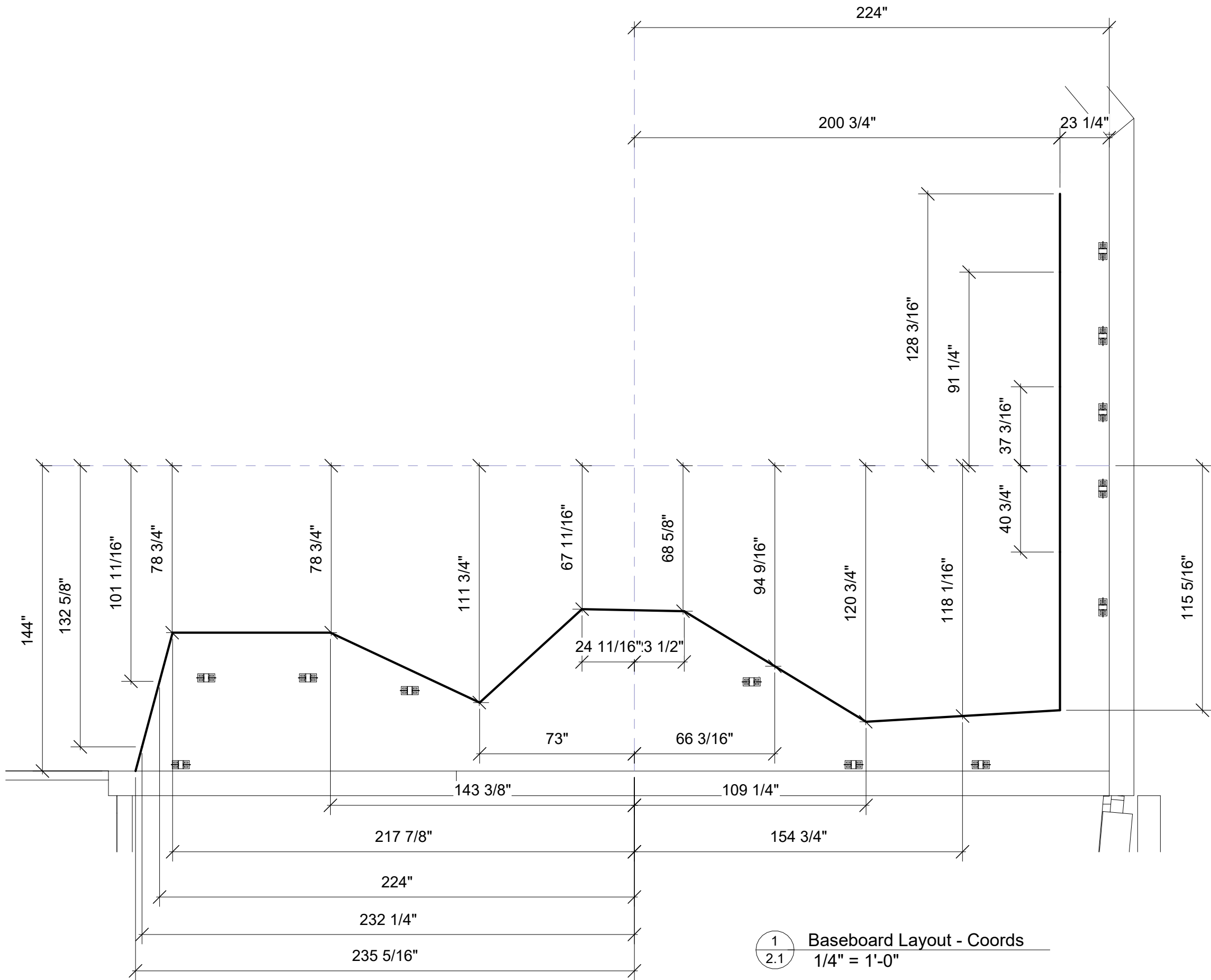
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BASEBOARD LAYOUT



2.0



1 Baseboard Layout - Coords
2.1 1/4" = 1'-0"



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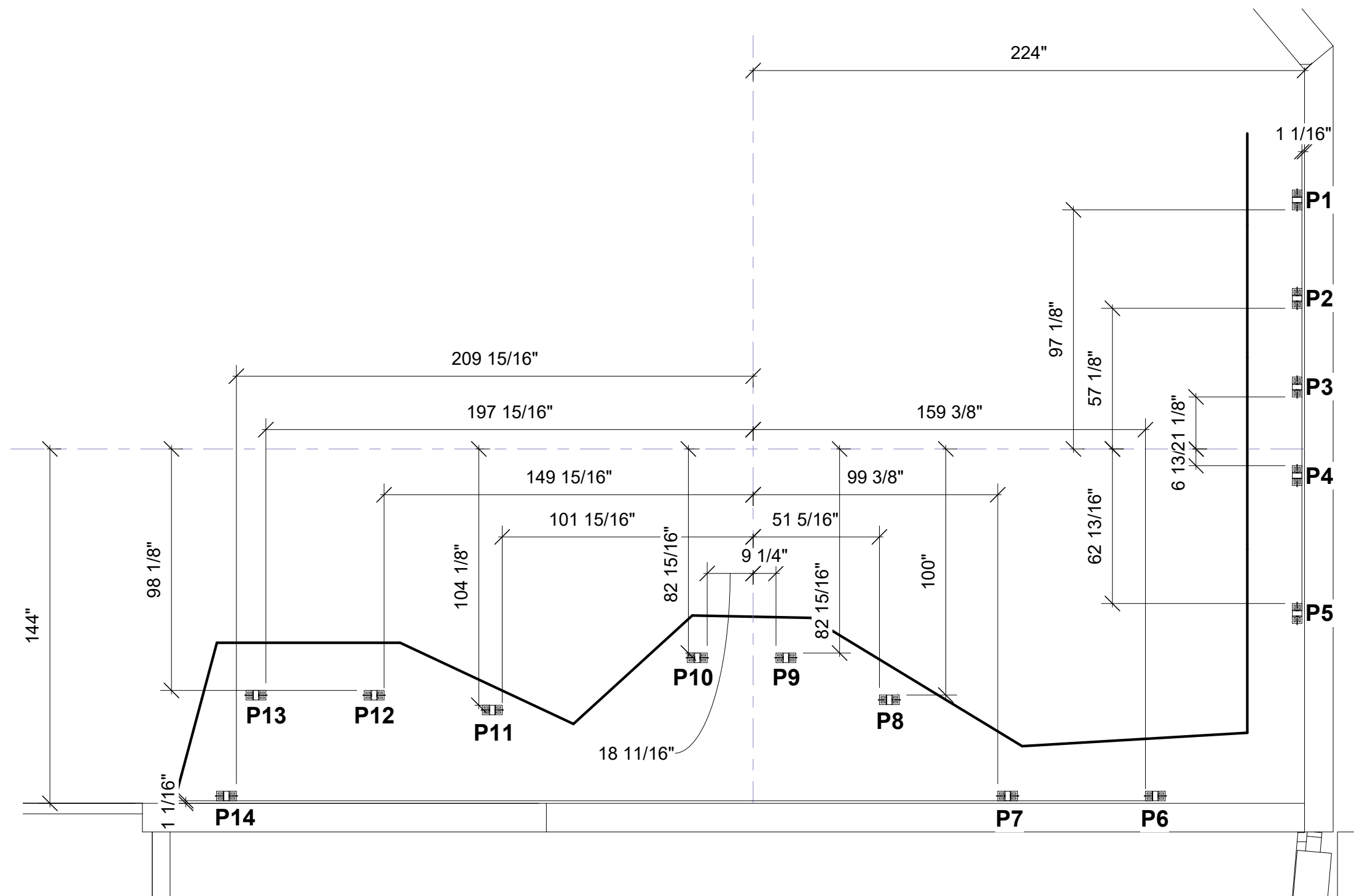
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BASEBOARD LAYOUT



2.1



1 Profile Baseplate Layout
2.2 1/4" = 1'-0"

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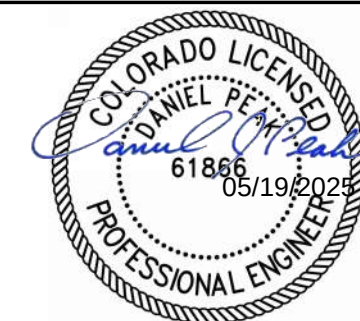
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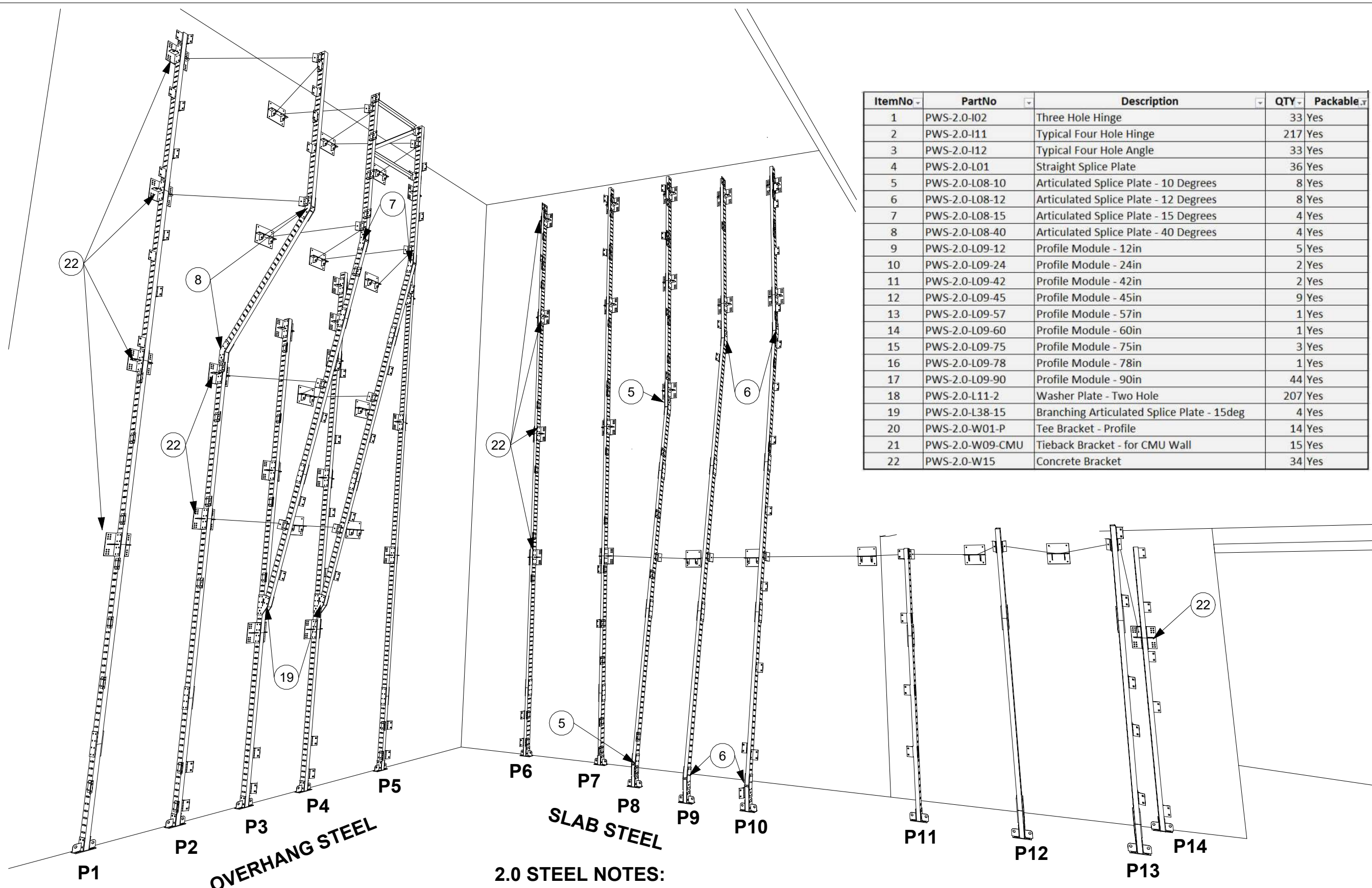
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PROFILE LAYOUT

**PEAK
THRILLS**
ENGINEERING





ItemNo	PartNo	Description	QTY	Packable
1	PWS-2.0-I02	Three Hole Hinge	33	Yes
2	PWS-2.0-I11	Typical Four Hole Hinge	217	Yes
3	PWS-2.0-I12	Typical Four Hole Angle	33	Yes
4	PWS-2.0-L01	Straight Splice Plate	36	Yes
5	PWS-2.0-L08-10	Articulated Splice Plate - 10 Degrees	8	Yes
6	PWS-2.0-L08-12	Articulated Splice Plate - 12 Degrees	8	Yes
7	PWS-2.0-L08-15	Articulated Splice Plate - 15 Degrees	4	Yes
8	PWS-2.0-L08-40	Articulated Splice Plate - 40 Degrees	4	Yes
9	PWS-2.0-L09-12	Profile Module - 12in	5	Yes
10	PWS-2.0-L09-24	Profile Module - 24in	2	Yes
11	PWS-2.0-L09-42	Profile Module - 42in	2	Yes
12	PWS-2.0-L09-45	Profile Module - 45in	9	Yes
13	PWS-2.0-L09-57	Profile Module - 57in	1	Yes
14	PWS-2.0-L09-60	Profile Module - 60in	1	Yes
15	PWS-2.0-L09-75	Profile Module - 75in	3	Yes
16	PWS-2.0-L09-78	Profile Module - 78in	1	Yes
17	PWS-2.0-L09-90	Profile Module - 90in	44	Yes
18	PWS-2.0-L11-2	Washer Plate - Two Hole	207	Yes
19	PWS-2.0-L38-15	Branching Articulated Splice Plate - 15deg	4	Yes
20	PWS-2.0-W01-P	Tee Bracket - Profile	14	Yes
21	PWS-2.0-W09-CMU	Tieback Bracket - for CMU Wall	15	Yes
22	PWS-2.0-W15	Concrete Bracket	34	Yes

- 2.0 STEEL NOTES:
- ALL STEEL TO CONNECT TO CMU WALL - FULLY GROUTED
 - P1, P5, P6, P7, P11, AND P14 ARE VERTICAL PROFILES
 - P2, P3, P4, P8, P9, P10, P12, AND P13 ARE ARTICULATED OR PARTIALLY ARTICULATED PROFILES
 - VERTICAL PROFILES CONNECT TO CMU WITH PWS-2.0-W15 WELDMENTS
 - ARTICULATED PROFILES HAVE TIEBACKS TO PWS-2.0-W09-CMU WELDMENT

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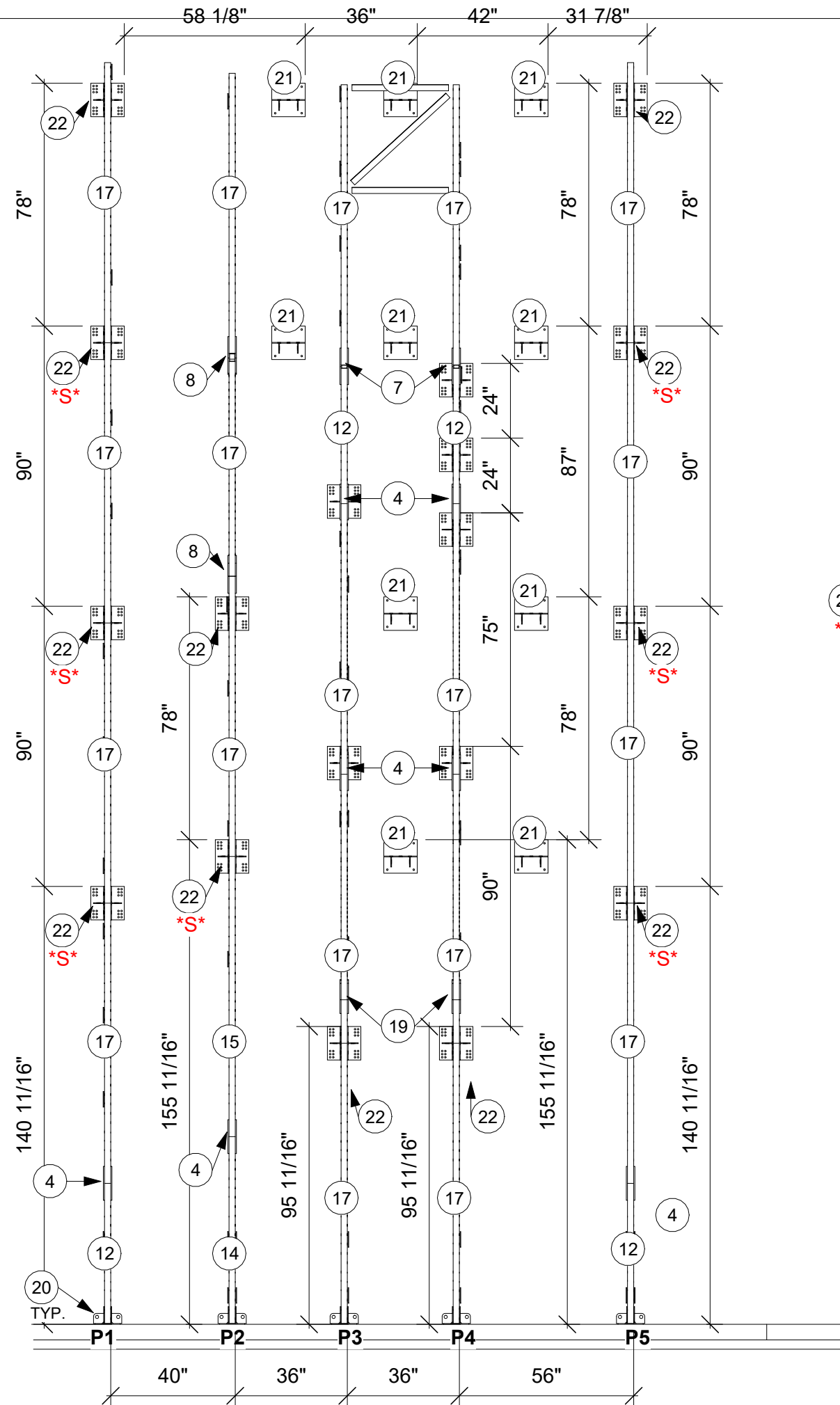
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STEEL OVERVIEW

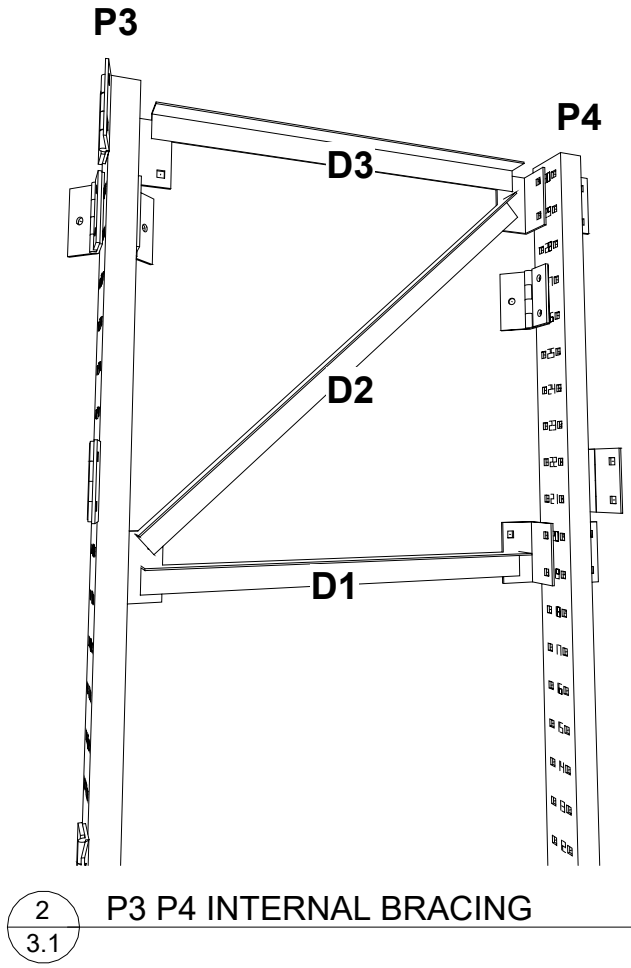




ItemNo	PartNo	Description	QTY	Packable
1	PWS-2.0-I02	Three Hole Hinge	33	Yes
2	PWS-2.0-I11	Typical Four Hole Hinge	217	Yes
3	PWS-2.0-I12	Typical Four Hole Angle	33	Yes
4	PWS-2.0-L01	Straight Splice Plate	36	Yes
5	PWS-2.0-L08-10	Articulated Splice Plate - 10 Degrees	8	Yes
6	PWS-2.0-L08-12	Articulated Splice Plate - 12 Degrees	8	Yes
7	PWS-2.0-L08-15	Articulated Splice Plate - 15 Degrees	4	Yes
8	PWS-2.0-L08-40	Articulated Splice Plate - 40 Degrees	4	Yes
9	PWS-2.0-L09-12	Profile Module - 12in	5	Yes
10	PWS-2.0-L09-24	Profile Module - 24in	2	Yes
11	PWS-2.0-L09-42	Profile Module - 42in	2	Yes
12	PWS-2.0-L09-45	Profile Module - 45in	9	Yes
13	PWS-2.0-L09-57	Profile Module - 57in	1	Yes
14	PWS-2.0-L09-60	Profile Module - 60in	1	Yes
15	PWS-2.0-L09-75	Profile Module - 75in	3	Yes
16	PWS-2.0-L09-78	Profile Module - 78in	1	Yes
17	PWS-2.0-L09-90	Profile Module - 90in	44	Yes
18	PWS-2.0-L11-2	Washer Plate - Two Hole	207	Yes
19	PWS-2.0-L38-15	Branching Articulated Splice Plate - 15deg	4	Yes
20	PWS-2.0-W01-P	Tee Bracket - Profile	14	Yes
21	PWS-2.0-W09-CMU	Tieback Bracket - for CMU Wall	15	Yes
22	PWS-2.0-W15	Concrete Bracket	34	Yes

22
S INDICATES THAT CONCRETE BRACKET ACTS AS SPLICE BETWEEN PROFILE MODULES

*SEE BRACING TABLES FOR INTERNAL BRACING LENGTHS



1 Overhang Steel
3.1 1 : 43

2 P3 P4 INTERNAL BRACING
3.1



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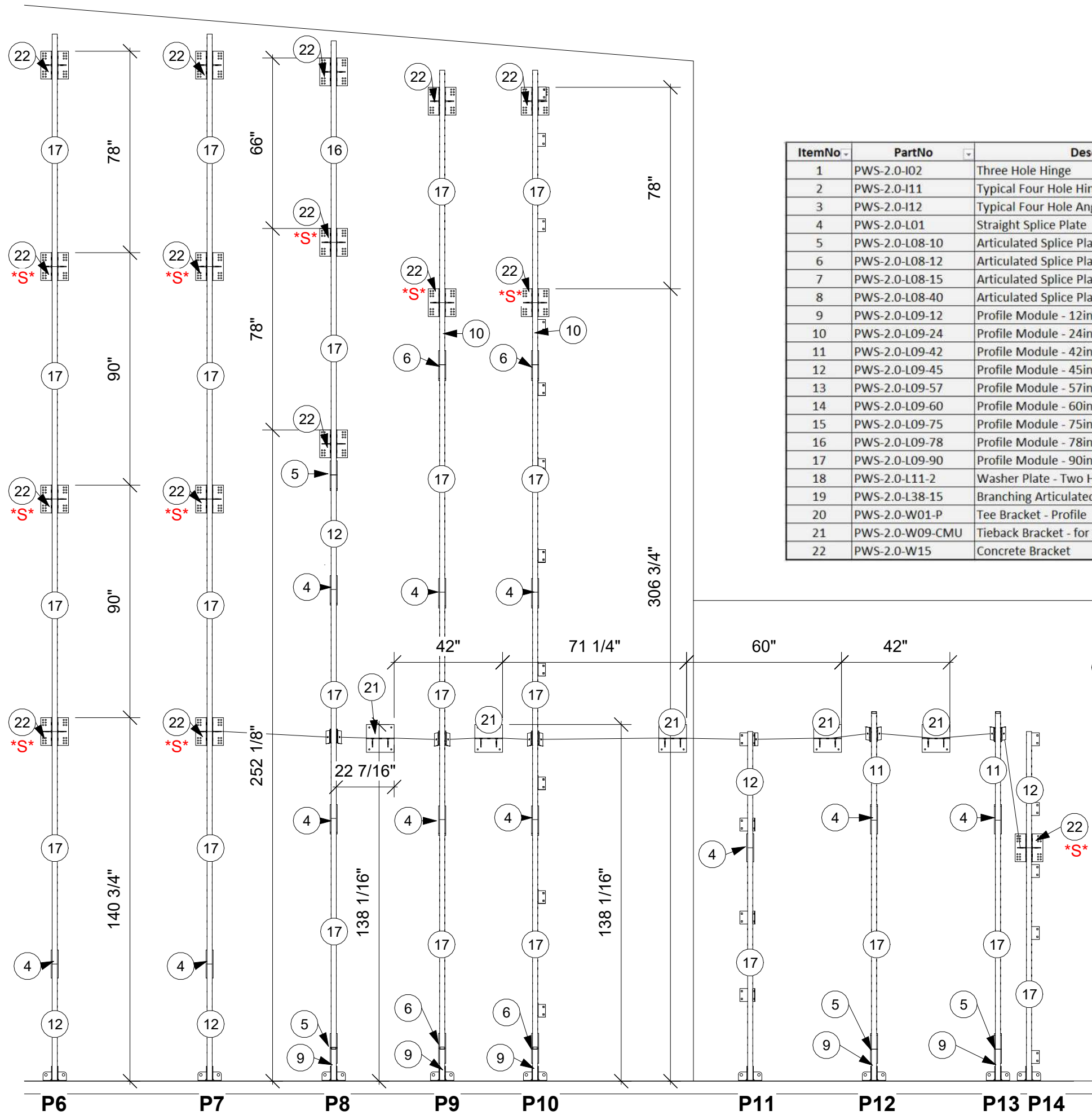
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STEEL PAGES





ItemNo	PartNo	Description	QTY	Packable
1	PWS-2.0-I02	Three Hole Hinge	33	Yes
2	PWS-2.0-I11	Typical Four Hole Hinge	217	Yes
3	PWS-2.0-I12	Typical Four Hole Angle	33	Yes
4	PWS-2.0-L01	Straight Splice Plate	36	Yes
5	PWS-2.0-L08-10	Articulated Splice Plate - 10 Degrees	8	Yes
6	PWS-2.0-L08-12	Articulated Splice Plate - 12 Degrees	8	Yes
7	PWS-2.0-L08-15	Articulated Splice Plate - 15 Degrees	4	Yes
8	PWS-2.0-L08-40	Articulated Splice Plate - 40 Degrees	4	Yes
9	PWS-2.0-L09-12	Profile Module - 12in	5	Yes
10	PWS-2.0-L09-24	Profile Module - 24in	2	Yes
11	PWS-2.0-L09-42	Profile Module - 42in	2	Yes
12	PWS-2.0-L09-45	Profile Module - 45in	9	Yes
13	PWS-2.0-L09-57	Profile Module - 57in	1	Yes
14	PWS-2.0-L09-60	Profile Module - 60in	1	Yes
15	PWS-2.0-L09-75	Profile Module - 75in	3	Yes
16	PWS-2.0-L09-78	Profile Module - 78in	1	Yes
17	PWS-2.0-L09-90	Profile Module - 90in	44	Yes
18	PWS-2.0-L11-2	Washer Plate - Two Hole	207	Yes
19	PWS-2.0-L38-15	Branching Articulated Splice Plate - 15deg	4	Yes
20	PWS-2.0-W01-P	Tee Bracket - Profile	14	Yes
21	PWS-2.0-W09-CMU	Tieback Bracket - for CMU Wall	15	Yes
22	PWS-2.0-W15	Concrete Bracket	34	Yes

22
S
**INDICATES THAT CONCRETE
BRACKET ACTS AS SPLICE
BETWEEN PROFILE MODULES**

1
3.2
Slab Steel
1 : 42



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STEEL PAGES



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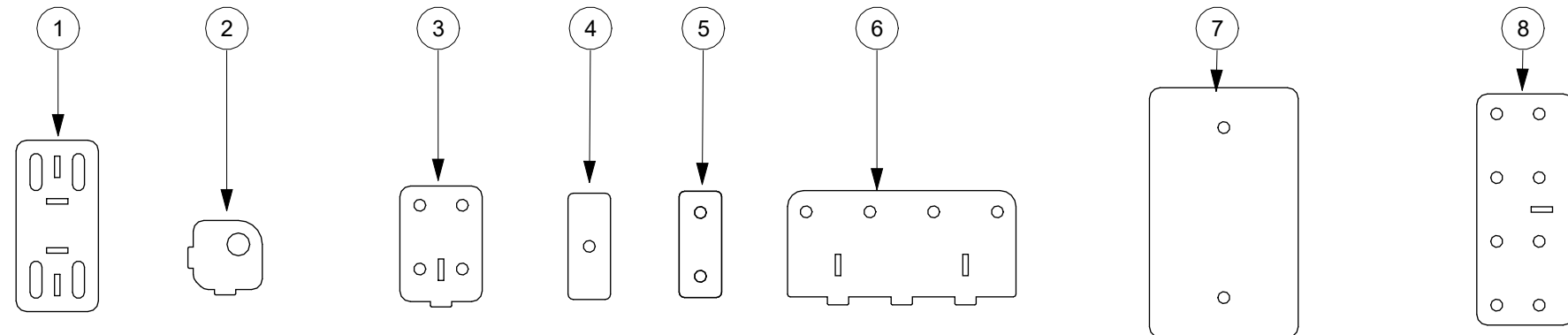
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LASERED PLATES
PEAK
THRILLS
ENGINEERING

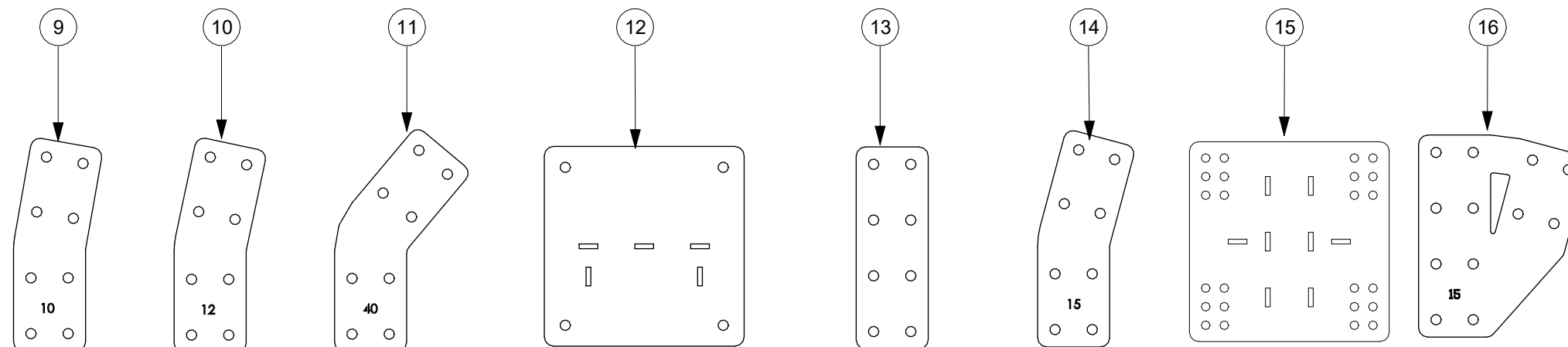


3.3



1
3.3 Plates 1/4"
1 1/2" = 1'-0"

ItemNo	PartNo	Description	Qty	Material	Thickness	Packable
1	PWS-2.0-L03-P	Base Plate - Profile	14	ASTM A36 Steel	0.25	No
2	PWS-2.0-L04	Bracket Gusset	126	ASTM A36 Steel	0.25	No
3	PWS-2.0-L05	Profile Receiver	28	ASTM A36 Steel	0.25	No
4	PWS-2.0-L11-1	Washer Plate - Single Hole	97	ASTM A36 Steel	0.25	Yes
5	PWS-2.0-L11-2	Washer Plate - Double Hole	207	ASTM A36 Steel	0.25	Yes
6	PWS-2.0-L19-CMU	Tieback Fin Plate - for CMU Wall	15	ASTM A36 Steel	0.25	No
7	PWS-2.0-L10	Double Point Anchor Plate	14	ASTM A36 Steel	0.25	No
8	PWS-2.0-L30	Concrete Bracket Splice Plate	68	ASTM A36 Steel	0.25	No
9	PWS-2.0-L08-10	Articulated Splice Plate - 10 Degrees	8	ASTM A572 Grade 50 Steel	0.375	Yes
10	PWS-2.0-L08-12	Articulated Splice Plate - 12 Degrees	8	ASTM A572 Grade 50 Steel	0.375	Yes
11	PWS-2.0-L08-40	Articulated Splice Plate - 40 Degrees	4	ASTM A572 Grade 50 Steel	0.375	Yes
12	PWS-2.0-L18	Tieback Anchor Plate	15	ASTM A572 Grade 50 Steel	0.375	No
13	PWS-2.0-L01	Straight Splice Plate	34	ASTM A572 Grade 50 Steel	0.375	Yes
14	PWS-2.0-L08-15	Articulated Splice Plate - 15 Degrees	4	ASTM A572 Grade 50 Steel	0.375	Yes
15	PWS-2.0-L31	Concrete Bracket Anchor Plate	36	ASTM A572 Grade 50 Steel	0.375	No
16	PWS-2.0-L38-15	Branching Articulated Splice Plate - 15 Degrees	4	ASTM A572 Grade 50 Steel	0.375	Yes



2
3.3 Plates 3/8"
1 1/2" = 1'-0"

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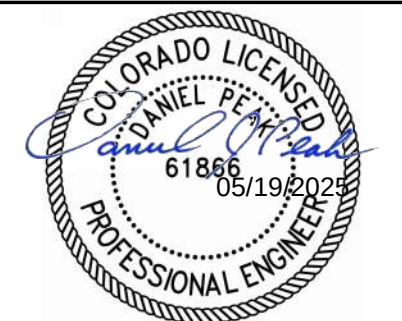
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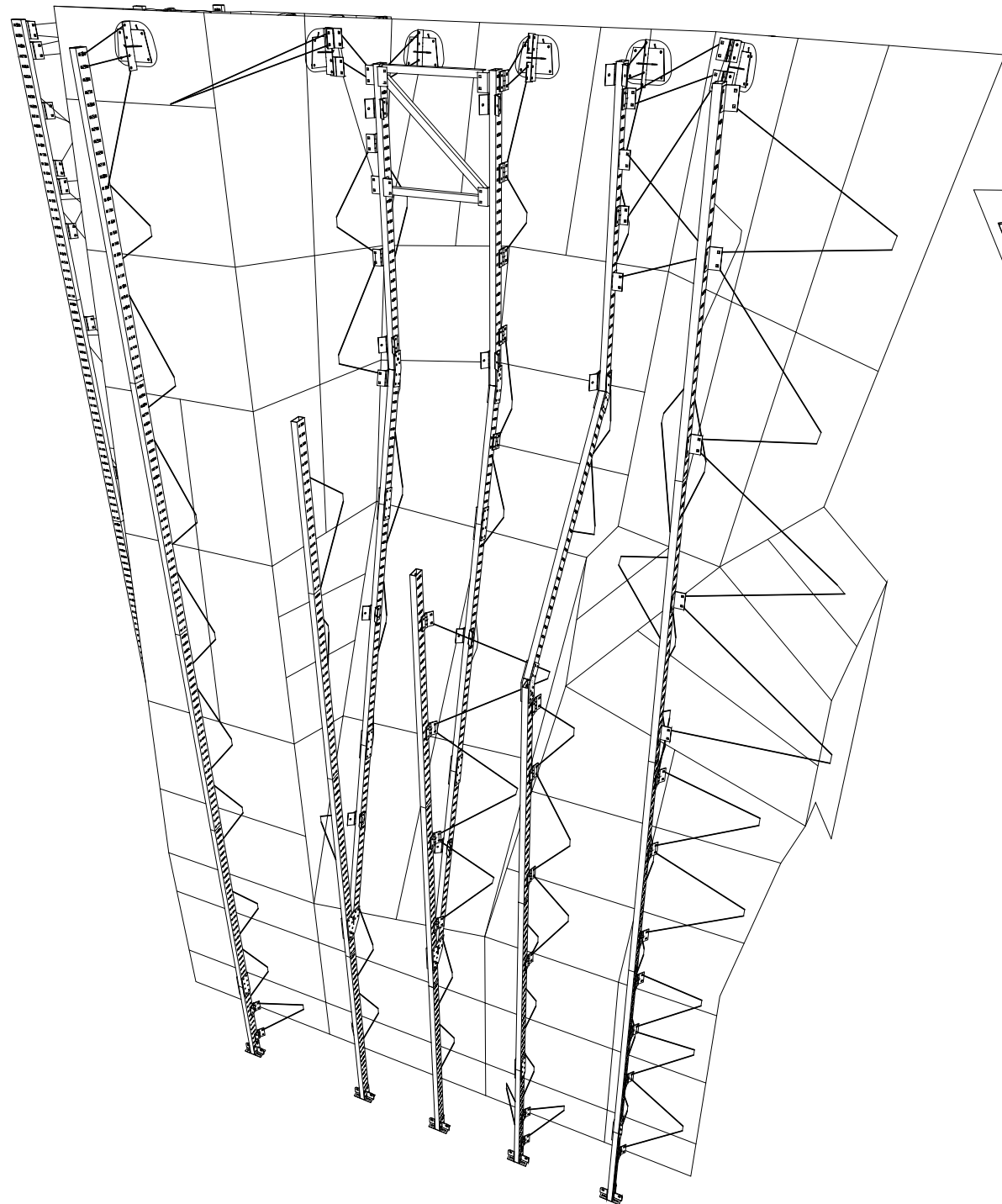
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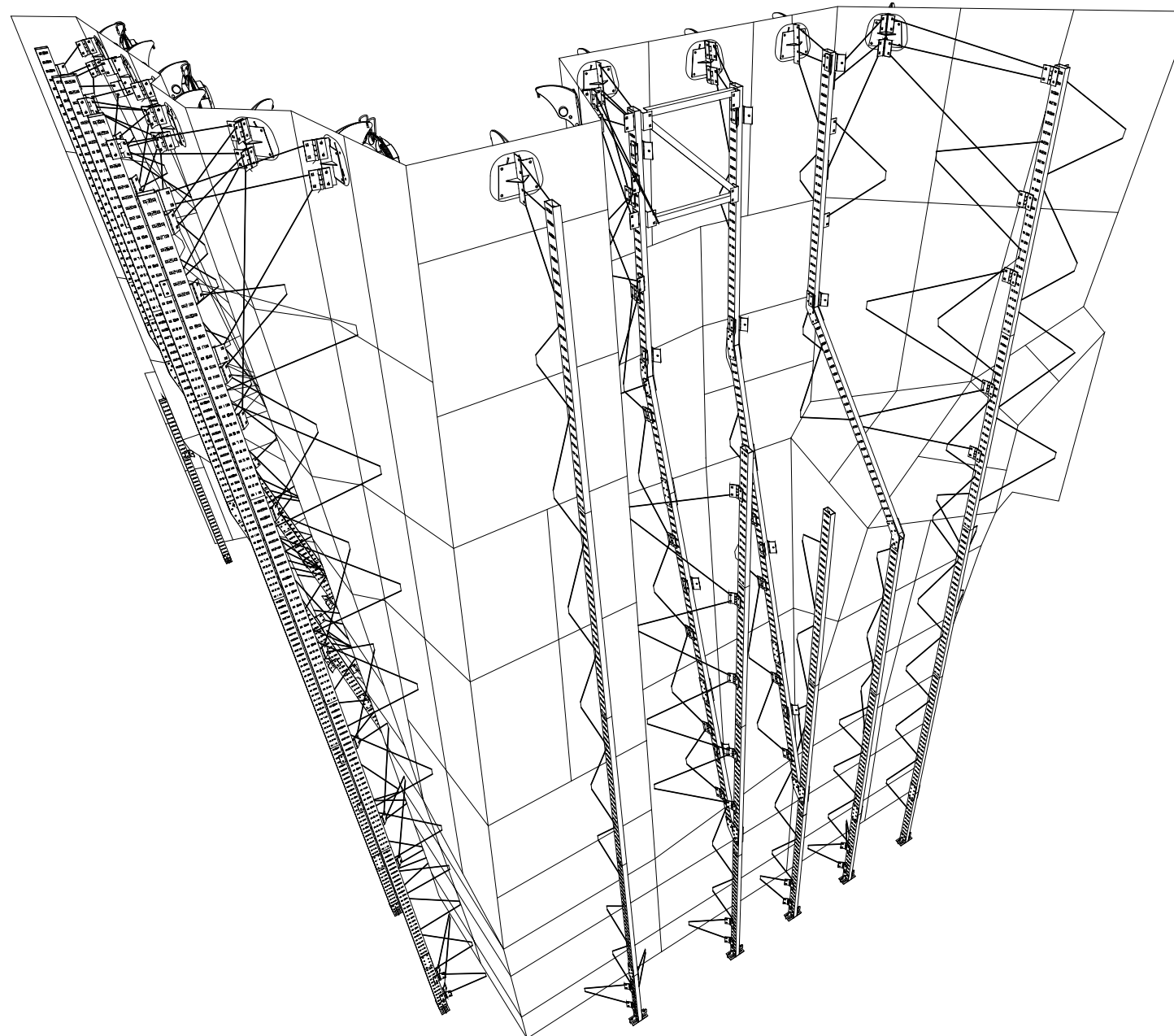
BRACING VIEWS



4.0



1
4.0
BRACING VIEW 1



2
4.0
BRACING VIEW 2

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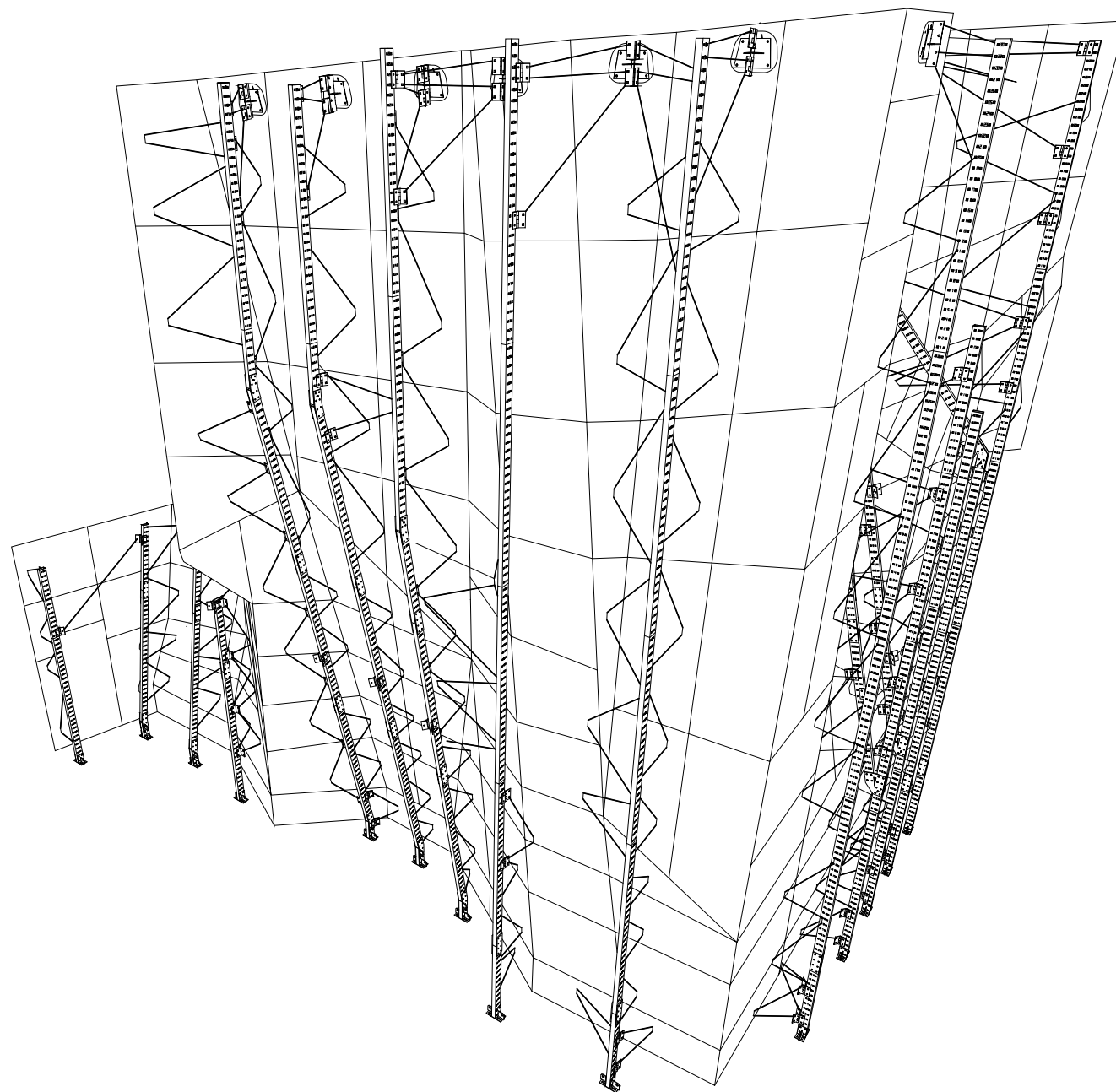
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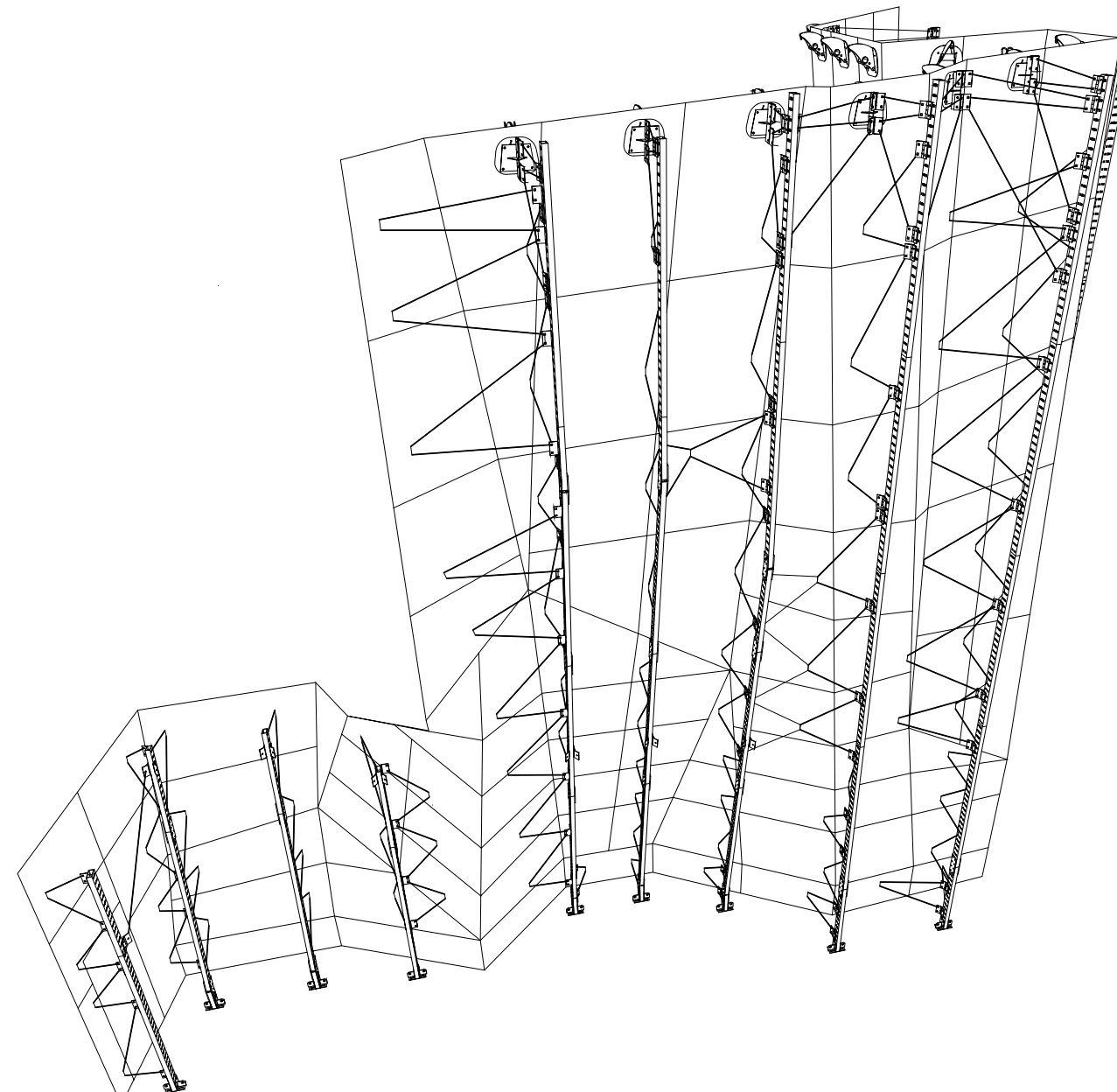
BRACING VIEWS



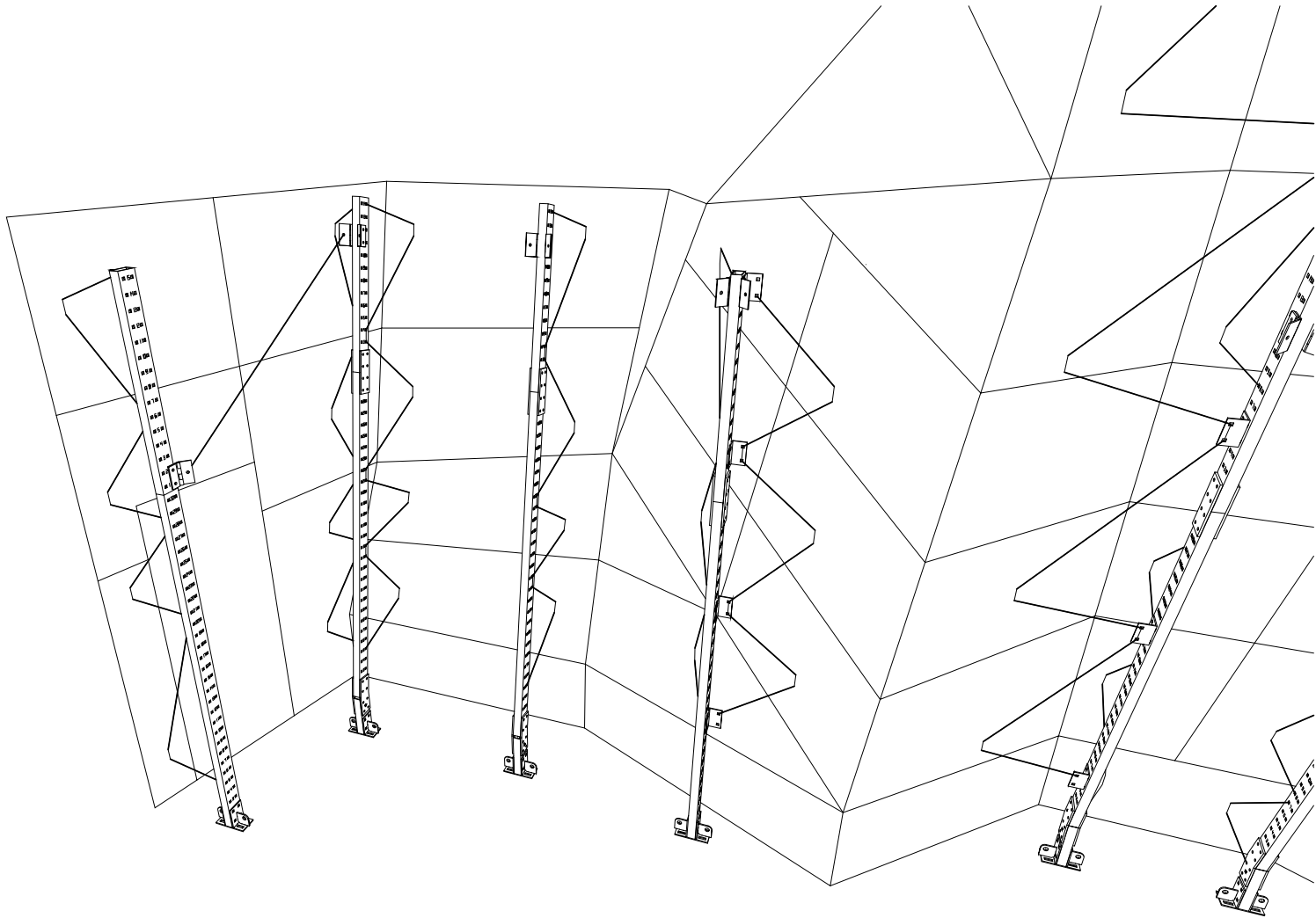
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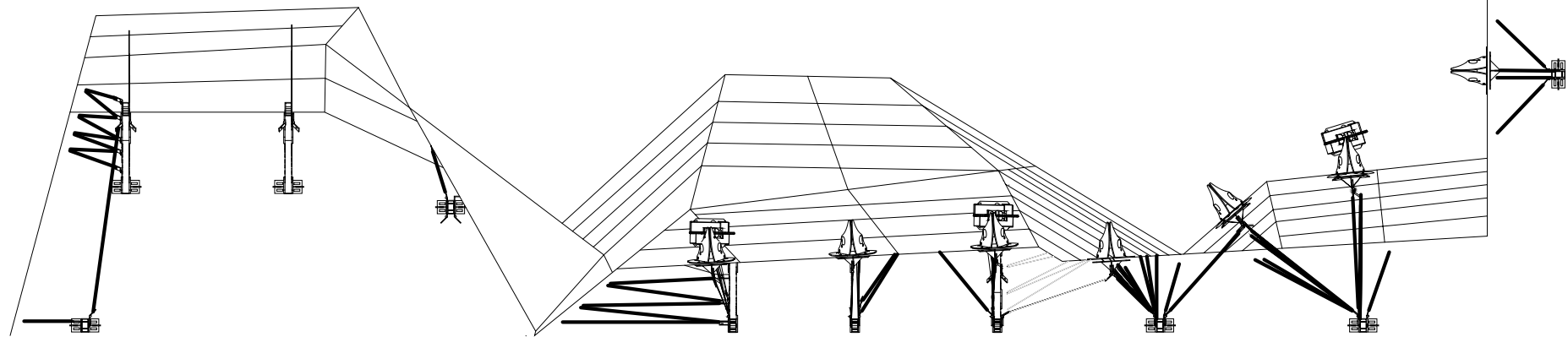
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4.1 BRACING VIEW 3



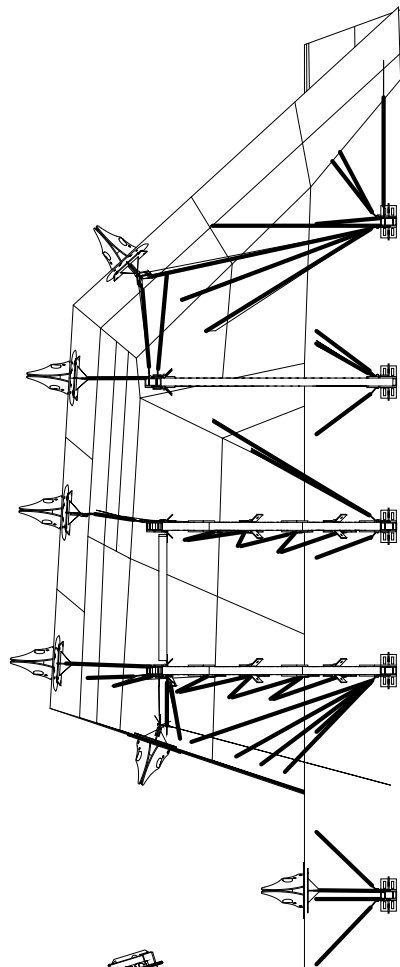
2
4.1 BRACING VIEW 4



1
4.2 BRACING VIEW 5



2
4.2 BRACING TOP



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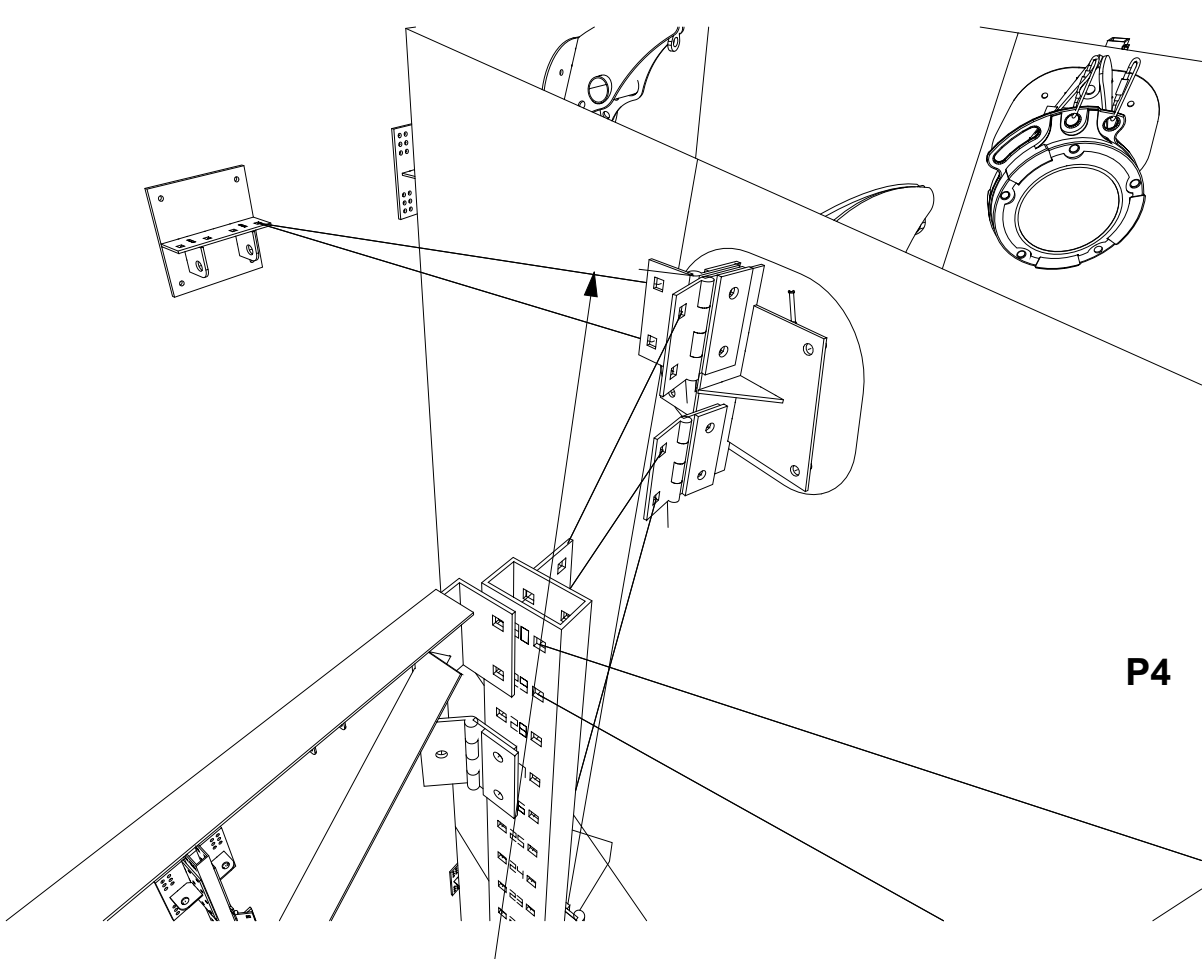
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BRACING VIEWS

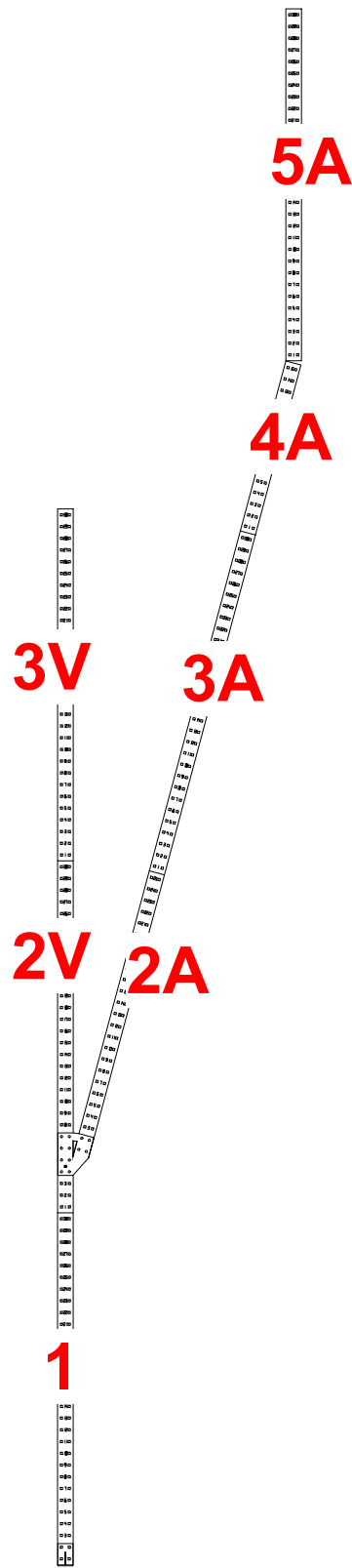




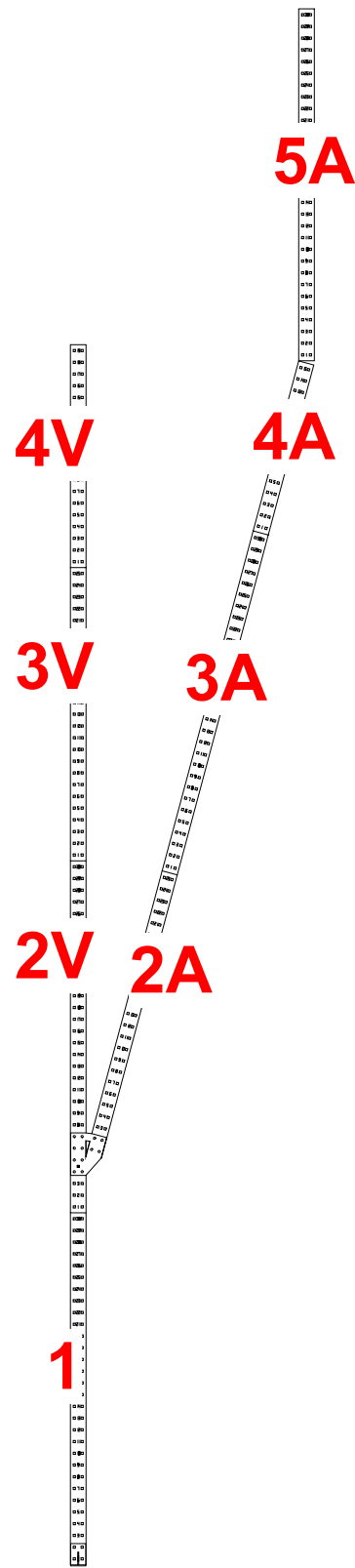
ATTACH TWO EXTRA TENSION MEMBERS TO
TIEBACK BRACKET FOR BELAY BAR ADJACENT
TO P4
- BOTH "SG" PINCHPIPES

ETXRA BELAY BAR BRACING

1
4.3



2
4.3 P3 SIDE VIEW
1/4" = 1'-0"



3
4.3 P4 SIDE VIEW
1/4" = 1'-0"

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DETAILS
 PEAK
THRILLS
ENGINEERING



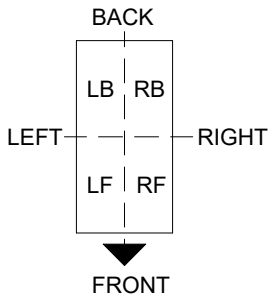
P1		VERTICAL PROFILE - 5 SECTIONS				
SECTION	X	HOLE #	CONNECTION	TYPE	ANGLE (IN)	PINCH PIPE
1 [45in]	W	10-LF	HINGE	C	25.5	
	W	10-RF	DIRECT	C	18.75	
0° SPLICE - PLATES						
2 [90in]	W	9-LF	HINGE	T	46.125	
	W	9-RF	DIRECT	T	42.125	
	W	10-LF	HINGE	C	25.625	
	W	10-RF	DIRECT	C	18.75	
	W	18-LF	HINGE	T	31.5	
	W	19-LF	HINGE	C	25.75	
	W	24-RF	DIRECT	T	41.5	
	W	25-RF	DIRECT	C	18.75	
	W	28-LF	HINGE	T	33	
0° SPLICE - CMU BRACKET						
3 [90in]	W	5-LF	HINGE	C	33.875	
	W	9-RF	DIRECT	T	41.625	
	W	10-RF	DIRECT	C	18.875	
	W	17-LF	HINGE	T	44	
	W	18-LF	HINGE	C	34	
	W	24-RF	DIRECT	T	41.375	
	W	25-RF	DIRECT	C	20	
	DP	26-LF	DIRECT	C	24.25	
	W	28-LF	HINGE	T	39.75	
0° SPLICE - CMU BRACKET						
4 [90in]	W	4-LB	ANGLE	C	46.75	
	DP	6-LF	DIRECT	T	22.25	
	W	9-RF	DIRECT	T	37.375	
	W	10-RF	DIRECT	C	17.75	
	LB	13-RF	HINGE	C	47.875	
	W	18-LB	ANGLE	T	59.375	
	W	19-LB	ANGLE	C	43.25	
	W	21-RF	DIRECT	T	35.5	
	LB	22-RF	HINGE	T	56.75	
	LB	23-RF	HINGE	C	53.75	
	W	25-RF	DIRECT	C	32.125	
0° SPLICE - CMU BRACKET						
5 [90in]	W	3-LB	ANGLE	T	49.75	
	W	4-LB	ANGLE	C	29.5	
	LB	8-RF	HINGE	T	59.125	
	W	10-RF	DIRECT	T	50.25	
	W	11-RF	DIRECT	C	47.25	
	BB	17-RF	HINGE	C	66.25	
	W	18-LB	ANGLE	T	46.875	
	W	19-LB	ANGLE	C	38.25	
	W	23-RF	DIRECT	T	48.25	
	W	29-LB	ANGLE	T	45	
	BB	29-RF	HINGE	T		SG
	BB	30-RF	HINGE	T		SG

X - CONNECT TO WHAT	
DP	DOUBLE POINT
LB	LEAD BOLT
BB	BELAY BAR
TB	TIEBACK
W	WALL CONNECTION

**** A YELLOW SHADED CELL INDICATES THE NEED FOR A WASHER PLATE INSTALLED ON A HINGE - NECESSARY FOR ALL TIEBACKS, LEADBOLTS, AND BELAY BRACES THAT USE HINGES**

P2		ARTICULATED PROFILE - 5 SECTIONS				
SECTION	X	HOLE #	CONNECTION	TYPE	ANGLE (IN)	PINCH PIPE
1 [60in]	DP	4-LF	HINGE	C	19.375	
	DP	4-RF	HINGE	C	19.625	
	DP	10-LF	HINGE	T	21.625	
	DP	10-RF	HINGE	T	21.875	
	W	11-RF	DIRECT	C	18.625	
0° SPLICE - PLATES						
2 [90in]	W	4-RF	DIRECT	T	40.125	
	W	5-RF	DIRECT	C	18.5	
	W	16-RF	DIRECT	T	36	
	W	17-RF	DIRECT	C	18.5	
	LB	20-LF	HINGE	C	19.125	
	W	27-RF	DIRECT	T	33.5	
0° SPLICE - CMU BRACKET						
3 [90in]	LB	3-LF	HINGE	T	34.625	
	LB	4-LF	HINGE	C	17.25	
	LB	18-LF	HINGE	T	41.875	
	LB	19-LF	HINGE	C	17.75	
	LB	27-LF	HINGE	T	23.75	
40° SPLICE (OVERHANG) - PLATES						
	LB	16-RF	DIRECT	C	34.5	
	LB	24-LF	DIRECT	C	19	
	LB	26-RF	DIRECT	T	38.625	
-40° SPLICE (BACK TO VERT) - PLATES						
5 [90in]	TB	1/2-LB	3H-HINGE	TB		SH
	TB	1/2-RB	3H-HINGE	TB		SG
	LB	2-LF	DIRECT	T	19.125	
	LB	12-LF	ANGLE	C	26.25	
	LB	13-LF	DIRECT	C	14	
	BB	17-LB	HINGE	C	42.375	
	LB	20-LF	DIRECT	T	18.125	
	BB	21-LF	DIRECT	C	27.5	
	LB	23-LF	ANGLE	T	33.5	
	BB	27-LB	HINGE	T		SC
	BB	28-LB	HINGE	T		SC
	BB	29-LF	DIRECT	T		SA
	BB	30-LF	DIRECT	T		SB
	TB	29/30-LB	3H-HINGE	TB		SH
	TB	29/30-RB	3H-HINGE	TB		SG

HINGE	USE WASHER PLATE
3H-HINGE	
HINGE	NO WASHER PLATE NEEDED



****REFER TO DETAIL 2/4.3 FOR P3 SIDE VIEW**

P3		BRANCHING ARTICULATED PROFILE - 7 SECTIONS				
SECTION	X	HOLE #	CONNECTION	TYPE	ANGLE (IN)	PINCH PIPE
1 [90in]	DP	4-RF	HINGE	C	17.25	
	DP	10-RF	HINGE	T	19.75	
	W	11-RF	DIRECT	C	18.625	
	W	23-RF	DIRECT	T	38.125	
	W	24-RF	DIRECT	C	18.75	
0° SPLICE - CMU BRACKET						
2V [90in]	BRANCHING SPLICE PLATE HOLES 4-7					
	LB	11-LF	HINGE	C	24.75	
	LB	24-LF	HINGE	T	40.625	
	LB	25-LF	HINGE	C	35.5	
0° SPLICE - CMU BRACKET						
3V [90in]	LB	10-LF	HINGE	T	56.125	
	LB	11-LF	HINGE	C	47.625	
	LB	24-LF	HINGE	T	61	
15° BRANCHING SPLICE (OVERHANG) - PLATES						
2A [75in]	W	4-RF	DIRECT	T	41.625	
	LB	7-RF	HINGE	C	16.375	
	TB	15/16-LB	3H-HINGE	TB		SD
	TB	15/16-RB	3H-HINGE	TB		SB
	LB	20-RF	HINGE	T	32.25	
	LB	21-RF	HINGE	C	14.5	
0° SPLICE - PLATES						
3A [90in]	LB	11-RF	HINGE	T	41.5	
	LB	12-RF	HINGE	C	15.25	
	TB	17/18-LB	3H-HINGE	TB		SF
	TB	17/18-RB	3H-HINGE	TB		SD
	LB	21-RF	HINGE	T	23.75	
	LB	28-LF	DIRECT	C	17.75	
0° SPLICE - PLATES						
4A [45in]	LB	8-LF	DIRECT	T	26.375	
	LB	10-LF	HINGE	C	11.75	
-15° SPLICE (BACK TO VERT) - PLATES						
5A [90in]	TB	3/4-LB	3H-HINGE	TB		SG
	TB	3/4-LB	3H-HINGE	TB		SG
	LB	5-LF	HINGE	T	23.375	
	LB	14-LF	HINGE	C	13.25	
	P4	19-RB	ANGLE	PS	D1 - 31[29.5 H-H]	
	P4	20-RB	ANGLE	PS	D2 - 40[38.5 H-H]	
	LB	21-LF	HINGE	T	17.25	
	BB	22-LF	HINGE	C	26	
	TB	27/28-LB	3H-HINGE	TB		SG
	TB	27/28-RB	3H-HINGE	TB		SG
	BB	29-LF	HINGE	T		SA
	BB	30-LF	HINGE	T		SA
	P4	30-RB	ANGLE	PS	D3 - 31[29.5 H-H]	



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BRACING TABLES



P4	BRANCHING ARTICULATED PROFILE - 8 SECTIONS					
SECTION	X	HOLE #	CONNECTION	TYPE	ANGLE (IN)	PINCH PIPE
1 [90in]	DP	4-RF	HINGE	C	21	
	DP	10-RF	HINGE	T	23	
	W	11-RF	DIRECT	C	18.625	
	W	23-RF	DIRECT	T	37.75	
	W	24-RF	DIRECT	C	18.625	
0° SPLICE - CMU BRACKET						
2V [90in]	BRANCHING SPLICE PLATE HOLES 4-7					
	LB	12-RF	HINGE	C	33.125	
	LB	23-RF	HINGE	T	43.375	
	LB	24-RF	HINGE	C	36.25	
0° SPLICE - CMU BRACKET						
3V [90in]	LB	8-RF	HINGE	T	52	
	LB	9-RF	HINGE	C	40.75	
	LB	22-RF	HINGE	T	51	
	LB	23-RF	HINGE	C	50.75	
0° SPLICE - CMU BRACKET						
4V [57in]	LB	13-RF	HINGE	T	57.625	
15° BRANCHING SPLICE (OVERHANG) - PLATES						
2A [75in]	W	4-RF	DIRECT	T	42	
	LB	7-RF	HINGE	C	18.375	
	TB	15/16-LB	3H-HINGE	TB		SB
	TB	15/16-RB	3H-HINGE	TB		SC
	LB	18-RF	HINGE	T	27.5	
	LB	19-RF	HINGE	C	20	
0° SPLICE - PLATES						
3A [90in]	LB	9-RF	HINGE	T	35.75	
	LB	10-RF	HINGE	C	20.5	
	TB	17/18-LB	3H-HINGE	TB		SD
	TB	17/18-RB	3H-HINGE	TB		SE
	LB	23-RF	HINGE	T	29.875	
	LB	24-RF	HINGE	C	24.875	
	LB	25-RF	HINGE	T	40.75	
	LB	26-RF	HINGE	C	19.375	
0° SPLICE - PLATES						
4A [45in]	LB	10-RF	HINGE	T	30.75	
	LB	11-RF	HINGE	C	11.75	
	LB	15-RB	HINGE	C	15.625	
-15° SPLICE (BACK TO VERT) - PLATES						
5A [90in]	TB	3/4-LB	3H-HINGE	TB		SG
	TB	3/4-RB	3H-HINGE	TB		SH
	LB	10-RF	HINGE	T	38.875	
	LB	11-RF	HINGE	C	21.25	
	LB	12-RB	HINGE	T	35.25	
	LB	13-RB	HINGE	C	16	
	BB	17-LF	DIRECT	C	42.875	
	P3	19-LB	ANGLE	PS	D1 - 31 [29.5 H-H]	
	BB	20-RB	ANGLE	C	31.375	
	LB	21-RF	HINGE	T	18.5	
	LB	23-RB	HINGE	T	25.875	
	TB	26/27-LB	3H-HINGE	TB		SG
	TB	26/27-RB	3H-HINGE	TB		SH
	BB	29-LF	DIRECT	T		SC
	BB	29-RB	ANGLE	T		SA
	P3	29-LB	ANGLE	PS	D2 - 40 [38.5 H-H]	
	BB	30-LF	DIRECT	T		SC
	BB	30-RB	ANGLE	T		SA
	P3	30-LB	ANGLE	PS	D3 - 31 [29.5 H-H]	

P5	VERTICAL PROFILE - 5 SECTIONS					
SECTION	X	HOLE #	CONNECTION	TYPE	ANGLE (IN)	PINCH PIPE
1 [45in]	DP	4-LF	HINGE	C	21.25	
	DP	4-RF	HINGE	C	22.375	
	DP	10-LF	HINGE	T	23.375	
	DP	10-RF	HINGE	T	24.375	
	W	11-RF	DIRECT	C	18.625	
0° SPLICE - PLATES						
2 [90in]	W	8-RF	DIRECT	T	38	
	W	9-RF	DIRECT	C	18.625	
	W	19-RF	DIRECT	T	32	
	LB	27-RF	DIRECT	C	18.75	
0° SPLICE - CMU BRACKET						
3 [90in]	LB	8-RF	DIRECT	T	34	
	LB	9-RF	DIRECT	C	18.625	
	LB	24-RF	DIRECT	T	45.75	
	LB	25-RF	DIRECT	C	18.625	
0° SPLICE - CMU BRACKET						
4 [90in]	LB	10-RF	DIRECT	T	44.875	
	LB	11-RF	DIRECT	C	18.625	
	LB	26-RF	DIRECT	T	45.25	
	LB	27-RF	DIRECT	C	18.75	
0° SPLICE - CMU BRACKET						
5 [90in]	LB	11-RF	DIRECT	T	41.875	
	LB	12-RF	DIRECT	C	19	
	BB	19-LF	DIRECT	C	34.25	
	LB	20-RF	DIRECT	T	25.75	
	BB	29-LF	DIRECT	T		SB
	BB	30-LF	DIRECT	T		SB

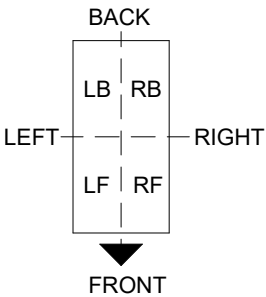
****REFER TO DETAIL 3/4.3 FOR P4
SIDE VIEW**

X - CONNECT TO WHAT	
DP	DOUBLE POINT
LB	LEAD BOLT
BB	BELAY BAR
TB	TIEBACK
W	WALL CONNECTION

**** A YELLOW SHADED CELL INDICATES
THE NEED FOR A WASHER PLATE
INSTALLED ON A HINGE - NECESSARY FOR
ALL TIEBACKS, LEADBOLTS, AND BELAY
BRACES THAT USE HINGES**

HINGE	USE WASHER
3H-HINGE	PLATE
HINGE	NO WASHER PLATE NEEDED

P6	VERTICAL PROFILE - 5 SECTIONS					
SECTION	X	HOLE #	CONNECTION	TYPE	ANGLE (IN)	PINCH PIPE
1 [45in]	DP	4-LF	HINGE	C	20.75	
	DP	4-RF	HINGE	C	33	
	DP	10-LF	HINGE	T	21.75	
	DP	10-RF	HINGE	T	33.625	
	W	11-RF	DIRECT	C	21.75	
0° SPLICE - PLATES						
2 [90in]	W	7-RF	DIRECT	T	36.75	
	W	8-RF	DIRECT	C	21.75	
	W	17-RF	DIRECT	T	31.75	
	W	18-RF	DIRECT	C	21.75	
	W	24-RF	DIRECT	T	26.375	
	LB	26-RF	HINGE	C	35.125	
	LB	27-RF	DIRECT	C	23.25	
0° SPLICE - CMU BRACKET						
3 [90in]	LB	5-RF	HINGE	T	39.75	
	LB	6-RF	HINGE	C	36.375	
	LB	8-RF	DIRECT	T	37	
	LB	9-RF	DIRECT	C	25.75	
	LB	21-RF	HINGE	T	46.875	
	LB	22-RF	HINGE	C	35.125	
	LB	24-RF	DIRECT	T	48.125	
	LB	25-RF	DIRECT	C	29.125	
0° SPLICE - CMU BRACKET						
4 [90in]	LB	7-RF	HINGE	T	46.125	
	LB	8-RF	HINGE	C	38	
	LB	10-RF	DIRECT	T	50	
	LB	11-RF	DIRECT	C	32.5	
	LB	25-RF	DIRECT	T	49.625	
	LB	26-RF	DIRECT	C	36.125	
	LB	27-RF	HINGE	T	56.625	
	LB	28-RF	HINGE	C	39.375	
0° SPLICE - CMU BRACKET						
5 [90in]	BB	9-RF	HINGE	C	67.375	
	LB	11-RF	DIRECT	T	52	
	LB	12-RF	DIRECT	C	39.375	
	LB	13-RF	HINGE	T	58.875	
	LB	14-RF	HINGE	C	42	
	BB	16-RF	HINGE	C	49.75	
	LB	21-RF	HINGE	T	46.375	
	LB	23-RF	DIRECT	T	47	
	BB	27-RF	HINGE	T		SE
	BB	28-RF	HINGE	T		SE
	BB	29-RF	HINGE	T		SD
	BB	30-RF	HINGE	T		SD



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BRACING TABLES



4.5

P7		VERTICAL PROFILE - 5 SECTIONS				
SECTION	X	HOLE #	CONNECTION	TYPE	ANGLE (IN)	PINCH PIPE
1 [45in]	DP	4-RF	HINGE	C	23.375	
	DP	10-RF	HINGE	T	26.875	
	W	11-RF	DIRECT	C	22.125	
0° SPLICE - PLATES						
2 [90in]	W	6-RF	DIRECT	T	34.375	
	W	8-RF	HINGE	C	18.625	
	W	15-RF	HINGE	T	25	
	W	16-LF	HINGE	C	15.75	
	W	27-LF	HINGE	T	33.75	
	LB	28-RF	HINGE	C	28.75	
0° SPLICE - CMU BRACKET						
3 [90in]	LB	8-RF	HINGE	T	40.625	
	LB	9-RF	HINGE	C	26.5	
	LB	24-RF	HINGE	T	48.875	
	LB	25-RF	HINGE	C	24.625	
0° SPLICE - CMU BRACKET						
4 [90in]	LB	8-RF	HINGE	T	43	
	LB	10-RF	HINGE	C	17.5	
	LB	25-RF	HINGE	T	41.375	
	LB	26-RF	HINGE	C	19.125	
0° SPLICE - CMU BRACKET						
5 [90in]	LB	12-RF	HINGE	T	45.125	
	LB	13-RF	HINGE	C	18.5	
	BB	14-LF	HINGE	C	50.75	
	BB	15-RF	HINGE	C	34.625	
	LB	23-RF	HINGE	T	31.625	
	BB	27-LF	HINGE	T		SD
	BB	27-RF	HINGE	T		SA
	BB	28-LF	HINGE	T		SD
	BB	28-RF	HINGE	T		SA

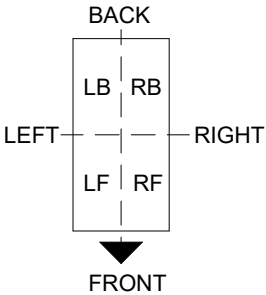
X - CONNECT TO WHAT	
DP	DOUBLE POINT
LB	LEAD BOLT
BB	BELAY BAR
TB	TIEBACK
W	WALL CONNECTION

**** A YELLOW SHADED CELL INDICATES THE NEED FOR A WASHER PLATE INSTALLED ON A HINGE - NECESSARY FOR ALL TIEBACKS, LEADBOLTS, AND BELAY BRACES THAT USE HINGES**

P8		ARTICULATED PROFILE - 6 SECTIONS				
SECTION	X	HOLE #	CONNECTION	TYPE	ANGLE (IN)	PINCH PIPE
1 [12in]	DP	4-RF	HINGE	C	14	
-10° SPLICE (SLAB) - PLATES						
2 [90in]	DP	6-RF	HINGE	T	22.25	
	W	7-RF	DIRECT	C	15.625	
	W	18-RF	DIRECT	T	35.875	
	W	19-RF	DIRECT	C	19.75	
	W	27-RF	DIRECT	T	30.625	
	W	28-RF	DIRECT	C	22.875	
0° SPLICE - PLATES						
3 [90in]	W	6-RF	DIRECT	T	32.375	
	LB	8-RF	HINGE	C	24.375	
	TB	11/12-LB	3H-HINGE	TB		SF
	TB	11/12-RB	3H-HINGE	TB		SB
	LB	20-RF	HINGE	T	43.25	
	LB	21-RF	HINGE	C	26	
0° SPLICE - PLATES						
4 [45in]	LB	4-RF	HINGE	T	46.875	
	LB	5-RF	HINGE	C	29.375	
10° SPLICE (BACK TO VERT) - PLATES						
5 [90in]	LB	7-RF	HINGE	T	54.375	
	LB	8-RF	HINGE	C	29.75	
	DP	11-RF	HINGE	C	35.625	
	DP	21-RF	HINGE	T	42.25	
	LB	22-RF	HINGE	T	48.375	
	LB	23-RF	HINGE	C	25.75	
0° SPLICE - CMU BRACKET						
6 [78in]	LB	9-RF	HINGE	T	47.875	
	LB	10-RF	HINGE	C	21	
	BB	12-LF	HINGE	C	44.625	
	BB	12-RF	HINGE	C	31.25	
	LB	19-RF	HINGE	T	31.625	
	BB	23-LF	HINGE	T		SD
	BB	23-RF	HINGE	T		SA
	BB	24-LF	HINGE	T		
	BB	24-RF	HINGE	T		SA

HINGE	USE WASHER PLATE
3H-HINGE	
HINGE	NO WASHER PLATE NEEDED

P9		ARTICULATED PROFILE - 5 SECTIONS				
SECTION	X	HOLE #	CONNECTION	TYPE	ANGLE (IN)	PINCH PIPE
1 [12in]	DP	4-RF	DIRECT	C	14.875	
-12° SPLICE (SLAB) - PLATES						
2 [90in]	DP	7-RF	DIRECT	T	25.25	
	W	8-RF	DIRECT	C	16.5	
	W	18-RF	DIRECT	T	33.625	
	W	19-RF	DIRECT	C	16.75	
	W	27-RF	DIRECT	T	28.25	
	W	28-RF	DIRECT	C	17	
0° SPLICE - PLATES						
3 [90in]	W	6-RF	DIRECT	T	28.875	
	LB	7-RF	DIRECT	C	17.125	
	TB	11/12-LB	3H-HINGE	TB		SD
	TB	11/12-RB	3H-HINGE	TB		SD
	LB	19-RF	DIRECT	T	36.25	
	LB	20-RF	DIRECT	C	17.25	
4 [90in]	LB	28-RF	DIRECT	T	27.875	
	0° SPLICE - PLATES					
	LB	5-LF	DIRECT	C	20.75	
	LB	22-LF	DIRECT	T	51.375	
5 [24in]	LB	23-LF	DIRECT	C	26.375	
	DP	26-LF	HINGE	C	30.375	
12° SPLICE (BACK TO VERT) - PLATES						
6 [90in]	DP	4-LF	HINGE	T	35.25	
	LB	6-LF	HINGE	T	45.625	
	LB	6-RF	HINGE	C	29.5	
0° SPLICE - CMU BRACKET						
6 [90in]	LB	13-RF	HINGE	T	39.75	
	LB	16-LF	HINGE	C	23	
	BB	19-RF	HINGE	C	29.125	
	LB	24-LF	DIRECT	T	26.75	
	BB	29-RF	HINGE	T		SA
	BB	30-RF	HINGE	T		SA



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BRACING TABLES



P10	ARTICULATED PROFILE - 6 SECTIONS					
SECTION	X	HOLE #	CONNECTION	TYPE	ANGLE (IN)	PINCH PIPE
1 [12in]	DP	4-LF	HINGE	C	13.75	
- 12° SPLICE (SLAB) - PLATES						
2 [90in]	W	6-RB	ANGLE	C	21.125	
	DP	7-LF	HINGE	T	24.875	
	W	8-LF	DIRECT	C	18.125	
	W	18-LF	DIRECT	T	28.25	
	W	19-LF	DIRECT	C	18.375	
	W	20-RB	ANGLE	T	43.75	
	W	21-RB	ANGLE	C	23.75	
	W	28-LF	DIRECT	T	26.875	
0° SPLICE - PLATES						
3 [90in]	W	5-RB	ANGLE	T	45.125	
	W	6-RB	ANGLE	C	27.625	
	LB	8-RF	DIRECT	C	17.875	
	TB	11/12-LB	3H-HINGE	TB		SD
	TB	11/12-RB	3H-HINGE	TB		SG
	LB	18-RF	DIRECT	T	33.625	
	LB	19-RF	DIRECT	C	18.125	
	W	20-RB	ANGLE	T	42.75	
	W	21-RB	ANGLE	C	29.25	
	LB	28-RF	DIRECT	T	29.125	
0° SPLICE - PLATES						
4 [90in]	LB	4-RF	HINGE	C	15.75	
	W	5-RB	ANGLE	T	48.25	
	W	6-RB	ANGLE	C	35.375	
	W	17-RB	ANGLE	T	41.75	
	W	18-RB	ANGLE	C	42.5	
	LB	22-RF	HINGE	T	53	
	LB	23-RF	HINGE	C	21	
	W	27-RB	ANGLE	T	48.125	
12° SPLICE (BACK TO VERT) - PLATES						
5 [24in]	LB	3-RF	HINGE	T	34.75	
	LB	4-RF	HINGE	C	28.625	
	W	6-RF	ANGLE	C	48.5	
0° SPLICE - CMU BRACKET						
6 [90in]	W	10-RF	ANGLE	T	58.25	
	W	11-RF	ANGLE	C	49.25	
	LB	14-RF	HINGE	T	39	
	LB	15-RF	HINGE	C	19.125	
	BB	17-RF	HINGE	C	31	
	W	21-RF	ANGLE	T	52.25	
	W	22-RF	ANGLE	C	48.625	
	LB	24-RF	HINGE	T	22.375	
	W	26-RF	ANGLE	T	48.75	
	BB	27-RF	HINGE	T		SA
	BB	28-RF	HINGE	T		SA

X - CONNECT TO WHAT	
DP	DOUBLE POINT
LB	LEAD BOLT
BB	BELAY BAR
TB	TIEBACK
W	WALL CONNECTION

P11	VERTICAL PROFILE - 2 SECTIONS					
SECTION	X	HOLE #	CONNECTION	TYPE	ANGLE (IN)	PINCH PIPE
1 [90in]	W	12-LF	ANGLE	C	21.25	
	W	12-RF	HINGE	C	14.625	
	W	21-LF	ANGLE	T	21.5	
	W	21-RF	HINGE	T	26.125	
	W	22-LF	ANGLE	C	24.75	
	W	22-RF	HINGE	C	22.75	
0° SPLICE - PLATES						
2 [45in]	W	3-LF	ANGLE	T	22	
	W	3-RF	HINGE	T	30.875	
	W	4-LF	ANGLE	C	14.875	
	W	4-RF	HINGE	C	39.125	
	W	14-LF	ANGLE	T	23.875	
	W	15-RF	HINGE	T	21.25	
	TB	14/15-LB	3H-HINGE	TB		SE
	TB	14/15-RB	3H-HINGE	TB		SE

P13	ARTICULATED PROFILE - 3 SECTIONS					
SECTION	X	HOLE #	CONNECTION	TYPE	ANGLE (IN)	PINCH PIPE
1 [12in]						
10° SPLICE (OVERHANG) - PLATES						
2 [90in]	W	5-LF	DIRECT	C	21.125	
	W	5-RF	HINGE	C	16.125	
	W	14-LF	DIRECT	T	25.5	
	W	14-RF	HINGE	T	30.875	
	W	15-LF	DIRECT	C	25	
	W	15-RF	HINGE	C	14.75	
	W	21-LF	DIRECT	T	27.125	
	W	21-RF	HINGE	T	22.125	
	W	22-LF	DIRECT	C	30.625	
	W	22-RF	HINGE	C	17.25	
0° SPLICE - PLATES						
3 [42in]	W	3-LF	DIRECT	T	29.5	
	W	3-RF	HINGE	T	24.125	
	W	4-LF	DIRECT	C	34.875	
	W	4-RF	HINGE	C	25.75	
	TB	11/12-LB	3H-HINGE	TB		SH
	TB	11/12-RB	3H-HINGE	TB		SI
	W	14-LF	DIRECT	T	25.25	
	W	14-RF	HINGE	T	12	

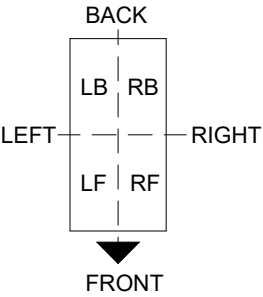
P12	ARTICULATED PROFILE - 3 SECTIONS					
SECTION	X	HOLE #	CONNECTION	TYPE	ANGLE (IN)	PINCH PIPE
1 [12in]						
10° SPLICE (OVERHANG) - PLATES						
2 [90in]	W	5-LF	DIRECT	C	24.25	
	W	14-LF	DIRECT	T	23.375	
	W	15-LF	DIRECT	C	24.625	
	W	21-LF	DIRECT	T	26.375	
	W	22-LF	DIRECT	C	29.75	
0° SPLICE - PLATES						
3 [42in]	W	3-LF	DIRECT	T	33.5	
	W	4-LF	DIRECT	C	37	
	TB	11/12-LB	3H-HINGE	TB		SH
	TB	11/12-RB	3H-HINGE	TB		SH
	W	14-LF	DIRECT	T	26.5	

P14	VERTICAL PROFILE - 2 SECTIONS					
SECTION	X	HOLE #	CONNECTION	TYPE	ANGLE (IN)	PINCH PIPE
1 [90in]	W	4-RF	ANGLE	C	16.5	
	W	19-RF	ANGLE	T	43.5	
	W	20-RF	ANGLE	C	16.25	
	W	27-RF	ANGLE	T	23.875	
	W	28-RF	ANGLE	C	16.25	
0° SPLICE - CMU BRACKET						
2 [45in]	W	5-RF	ANGLE	T	24.125	
	W	6-RF	ANGLE	C	25.125	
	W	15-RF	ANGLE	T	17.25	

ITEM	QTY
BELAY BAR	12
LEAD BOLT	97
ANGLE - 3 HOLE	160
ANGLE - 4 HOLE	38
HINGE - 3 HOLE	237
HINGE - 4 HOLE	177
L 2x2x1/8	880 ft
L 3x3x3/16	100 ft

Backups	
PIPE	QTY
SA	2
SB	9
SC	40
SD	34
SE	38
SF	25
SG	10
SH	0
SI	0
SJ	0
SK	0
SL	0

For Belays and Tiebacks	
PIPE	QTY
SA	13
SB	6
SC	5
SD	11
SE	5
SF	2
SG	11
SH	7
SI	1
SJ	0
SK	0
SL	0



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720-664-9354

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AUTHOR: CTB

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NUMBER DATE

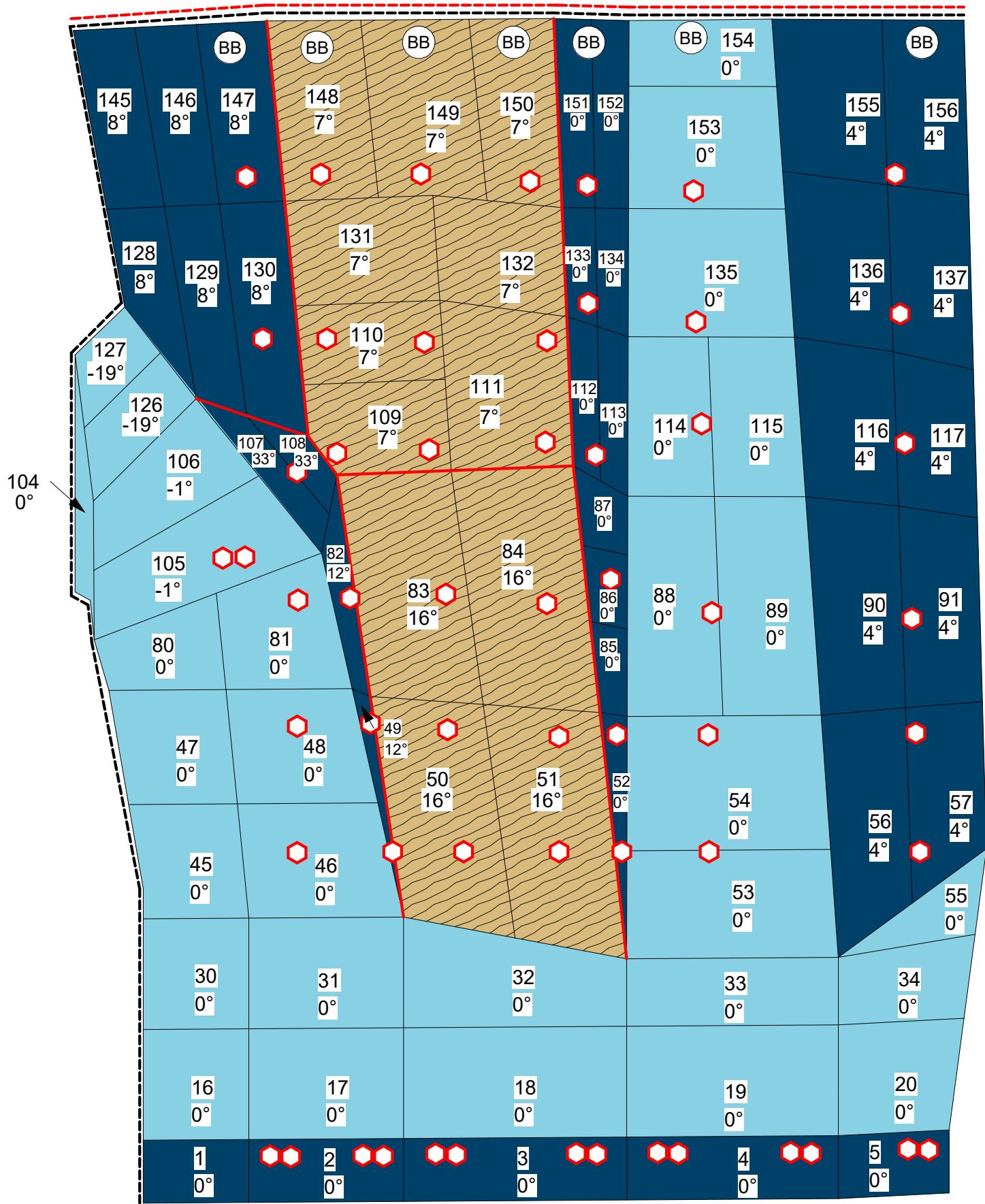
EB1416

GRAND JUNCTION REC
CENTER - PANELIZED

2836 RECREATION
WAY, GRAND
JUNCTION, CO 81506

BRACING TABLES





PartNo	Description	QTY	Units	Packable
EB1416-Shapes	# of Shapes to CNC	163	Each	Yes
WOD-PLY11-48X96-0.75	# of Plywood (11 Layer) Sheets	TBD	Sheets	No
PWS-2.0-C06	Grab Rail	66	ft	Yes
BaseShapes	# of Base Shapes	15	Each	Yes
CUS-PWS-R001	Rub Rail	151	ft	Yes
HATCH	# of Access Doors	1	Each	Yes
PWS-2.0-C07	Belay Bar Blocks	12	Each	Yes
PWS-2.0-C19	Access Hatch Flange	2	Each	No
LSL-2x4	LSL - Nominal 2x4	48	ft	Yes

- R:136,G:209,B:229
635SF
- R:0,G:65,B:106
515SF
- NATURAL
771SF
- RUB RAIL
- 3/8" ROUTED EDGES
- GRAB RAIL
- BB

BELAY BAR
- DOUBLE POINT
- LEAD BOLT



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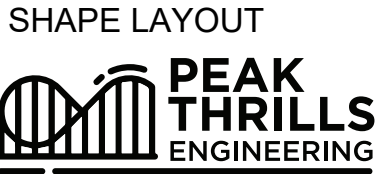
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AUTHOR: CTB

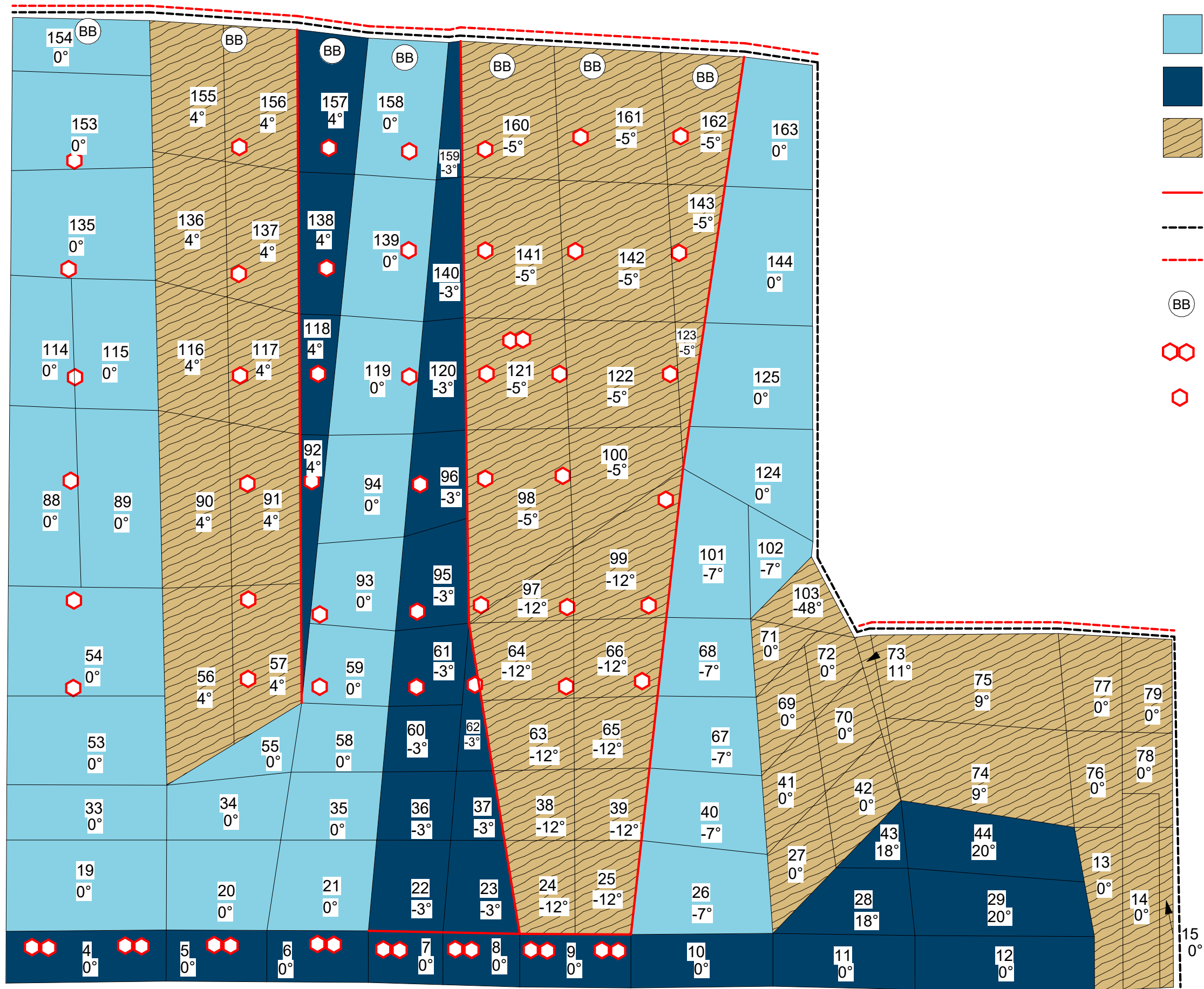
REVISIONS
NUMBER DATE

EB1416
GRAND JUNCTION REC
CENTER - PANELIZED

2836 RECREATION
WAY, GRAND
JUNCTION, CO 81506



5.0



-  R:136,G:209,B:229
635SF
-  R:0,G:65,B:106
515SF
-  NATURAL
771SF
-  RUB RAIL
-  3/8\"/>
-  GRAB RAIL
-  BELAY BAR
-  DOUBLE POINT
-  LEAD BOLT

DATE: 5/16/2025

AUTHOR: CTB

REVISIONS	
NUMBER	DATE

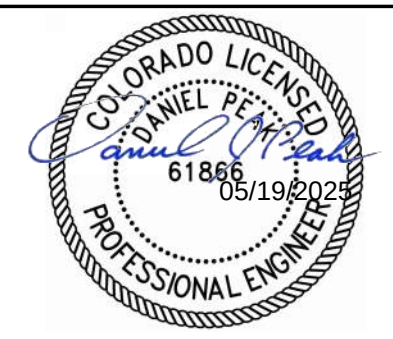
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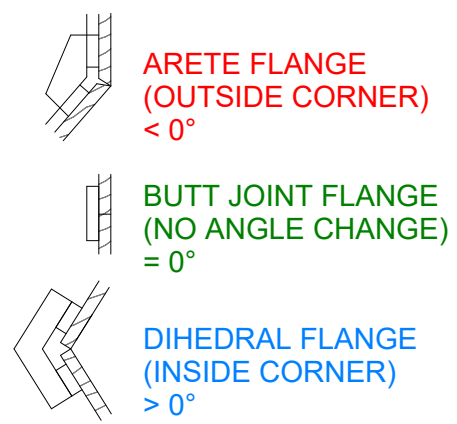
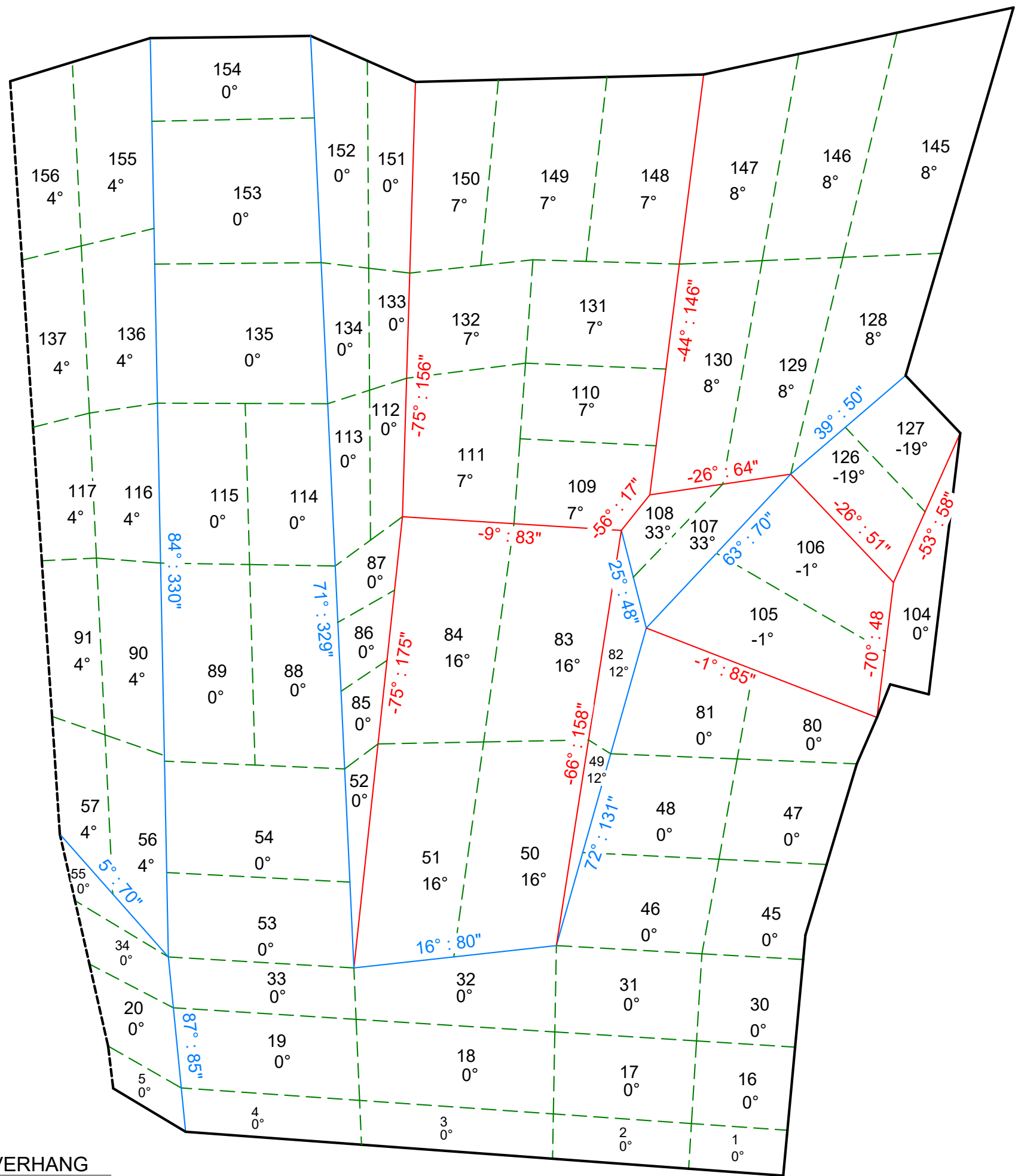
GRAND JUNCTION REC
CENTER - PANELIZED

2836 RECREATION
WAY, GRAND
JUNCTION, CO 81506

SHAPE LAYOUT

 **PEAK
THRILLS**
ENGINEERING





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AUTHOR: CTB

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NUMBER DATE

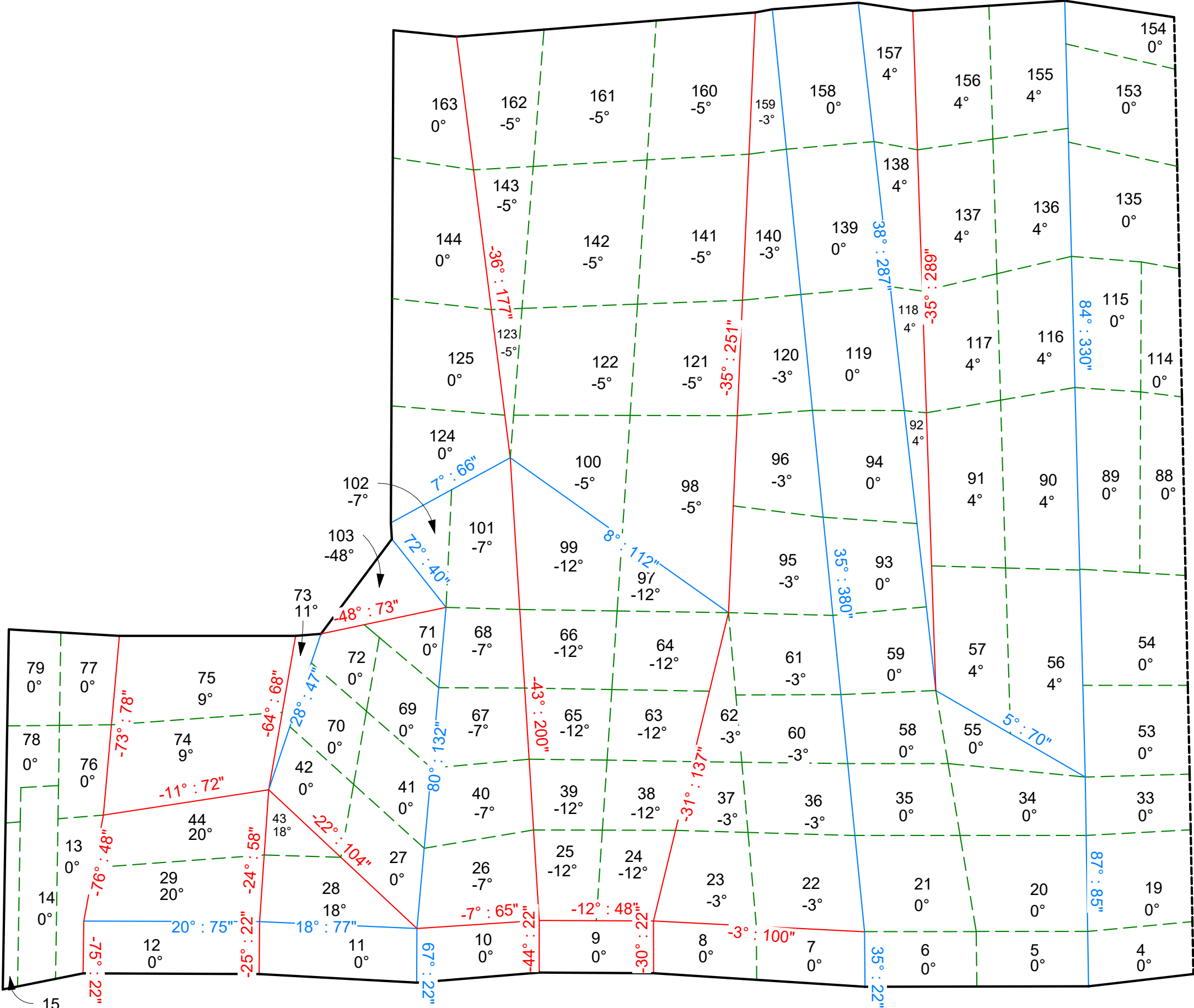
EB1416

GRAND JUNCTION REC
CENTER - PANELIZED

2836 RECREATION
WAY, GRAND
JUNCTION, CO 81506

FLANGE LAYOUT





1
6.1
FLANGE VIEW SLAB



1699 Cherry St. Unit B
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WAY, GRAND
JUNCTION, CO 81506

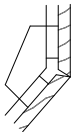
FLANGE LAYOUT



6.1

PartNo	Description	Sheets to Cut	Material ID	Material Name	Thickness	CNC Time (per Sheet)	CNC Time (Total)
PWS-2.0-CNC-ADV-01-3.5x7	Butt Joints for CNC - 3.5in Wide x 7in Long	8	WOD-ADV-48X96-0.75	AdvanTech	0.72	17	136
PWS-2.0-CNC-ADV-02	Belay Bar Blocking for CNC - Indoor	1	WOD-ADV-48X96-0.75	AdvanTech	0.72	14	14
PWS-2.0-CNC-ADV-03	Grab Rail and Trim for CNC - Indoor	7	WOD-ADV-48X96-0.75	AdvanTech	0.72	24	168
PWS-2.0-CNC-ADV-05	Access Hatch Flanges for CNC - Indoor	1	WOD-ADV-48X96-0.75	AdvanTech	0.72	28	28
PWS-2.0-CNC-PLY-02	Flange Wings for CNC - Indoor	7	WOD-PLY13-48X96-0.75	Plywood (13 Layer) - BB/CP	0.72	51	357
PWS-2.0-CNC-PLY-04	Flange Gussets for CNC - Indoor	8	WOD-PLY13-48X96-0.75	Plywood (13 Layer) - BB/CP	0.72	115	920
Totals		32 sheets					28 hours

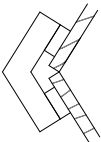
Angle Type	Angle Change	Length	Full Brackets (93in)	Partial Bracket Length	Gussets	Wings
Arete	-76	48	0	48	10	
Arete	-75	353	3	74	70	
Arete	-73	78	0	78	16	
Arete	-70	48	0	48	10	
Arete	-66	158	1	65	32	
Arete	-64	68	0	68	14	
Arete	-56	17	0	17	4	
Arete	-53	58	0	58	12	
Arete	-48	73	0	73	16	
Arete	-44	168	1	75	34	
Arete	-43	200	2	14	40	
Arete	-36	177	1	84	36	
Arete	-35	540	5	75	106	
Arete	-31	137	1	44	28	
Arete	-30	22	0	22	6	
Arete	-26	115	1	22	24	
Arete	-25	22	0	22	6	
Arete	-24	58	0	58	12	
Arete	-22	104	1	11	22	
Arete	-12	48	0	48	10	
Arete	-11	72	0	72	14	
Arete	-9	83	0	83	18	
Arete	-7	65	0	65	14	
Arete	-3	100	1	7	20	
Arete	-1	85	0	85	18	
Butt Joint	0	7651	1093 island blocks			
Dihedral	5	70	0	70	14	
Dihedral	7	66	0	66	14	
Dihedral	8	112	1	19	22	
Dihedral	16	80	0	80	16	
Dihedral	18	77	0	77	16	
Dihedral	20	75	0	75	16	
Dihedral	25	48	0	48	10	
Dihedral	28	74	0	74	16	
Dihedral	35	402	4	30	78	
Dihedral	38	287	3	8	56	
Dihedral	39	50	0	50	10	
Dihedral	63	70	0	70	14	
Dihedral	67	22	0	22	6	
Dihedral	71	329	3	50	64	
Dihedral	72	171	1	78	34	
Dihedral	80	132	1	39	26	
Dihedral	84	330	3	51	64	
Dihedral	87	85	0	85	18	
Totals		1086 ft	33 full brackets	43 partial brackets	1086 gusset: 118 wings	



ARETE FLANGE
(OUTSIDE CORNER)
< 0°



BUTT JOINT FLANGE
(NO ANGLE CHANGE)
= 0°



DIHEDRAL FLANGE
(INSIDE CORNER)
> 0°



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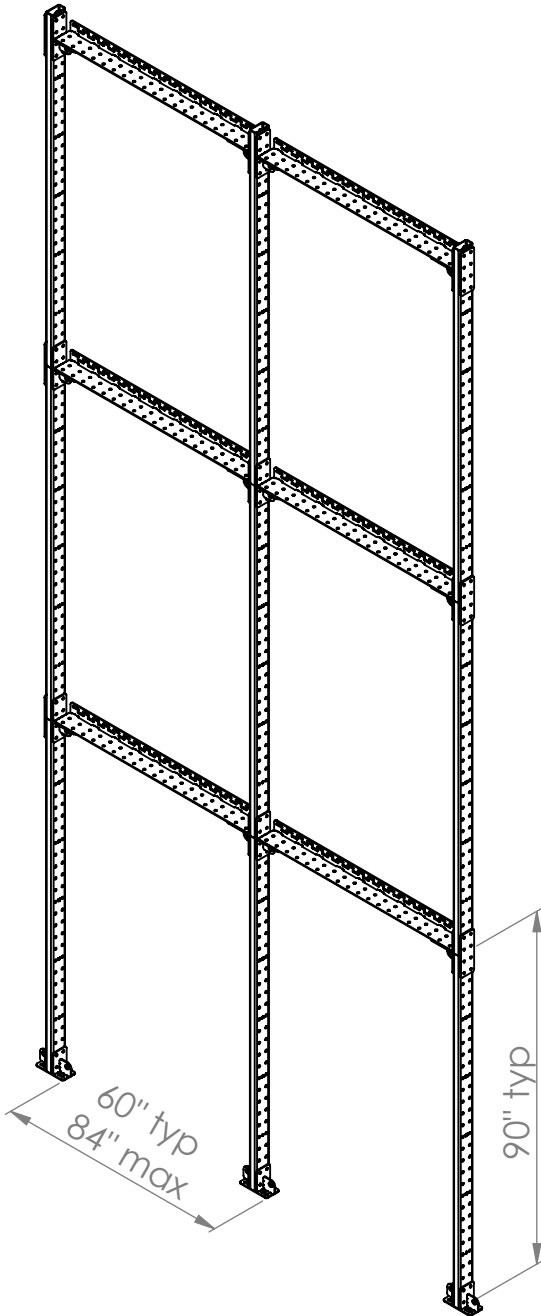
GRAND JUNCTION REC
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WAY, GRAND
JUNCTION, CO 81506

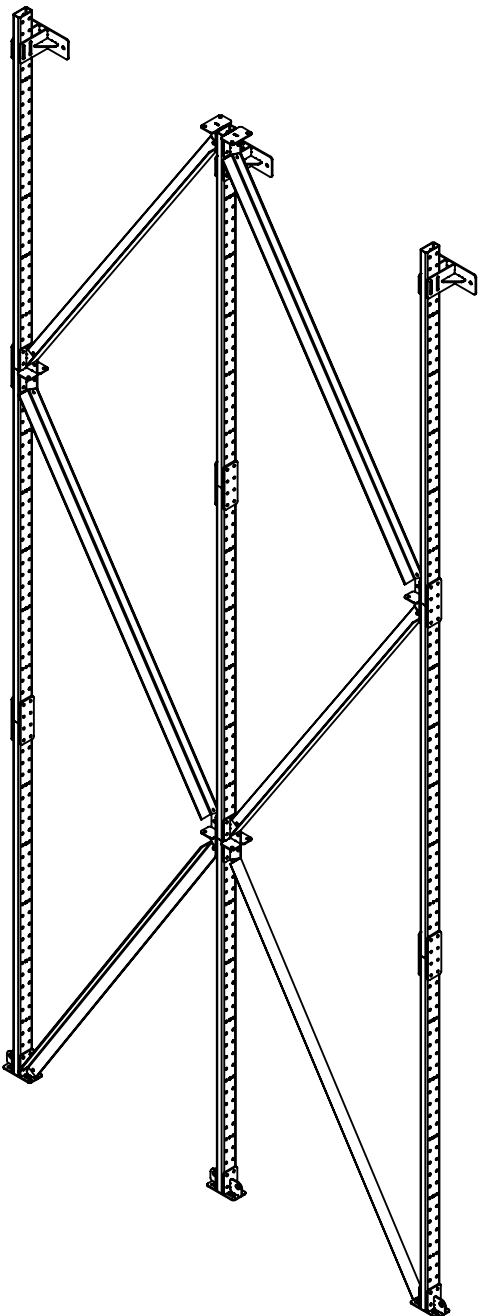
FLANGE SUMMARY



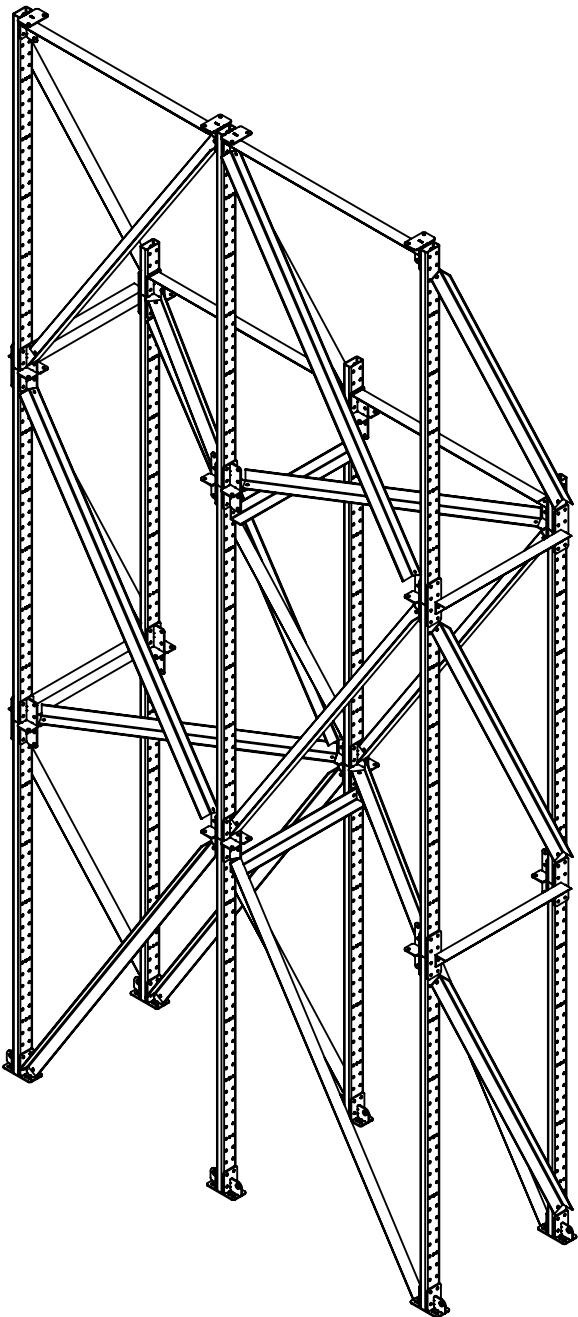
6.2



Case 1
Slab and Wall Attachments



Case 2
Slab and Ceiling (or Beam) Attachments

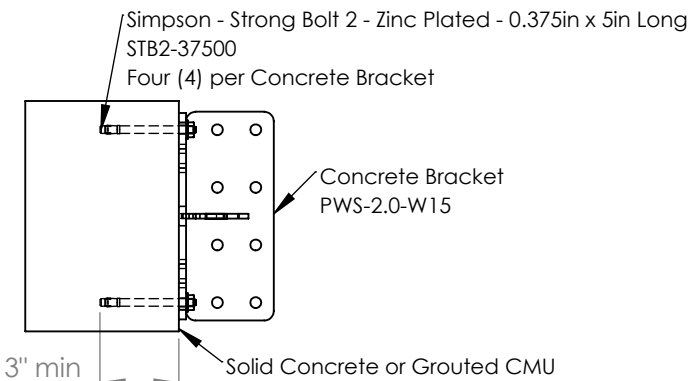
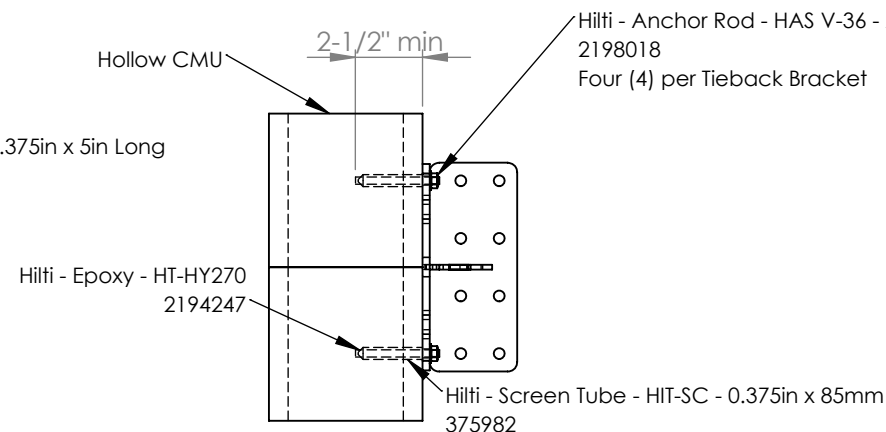
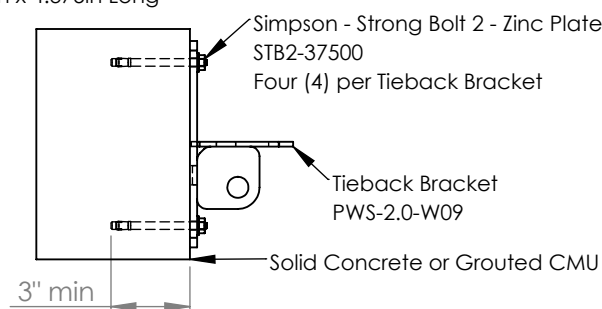
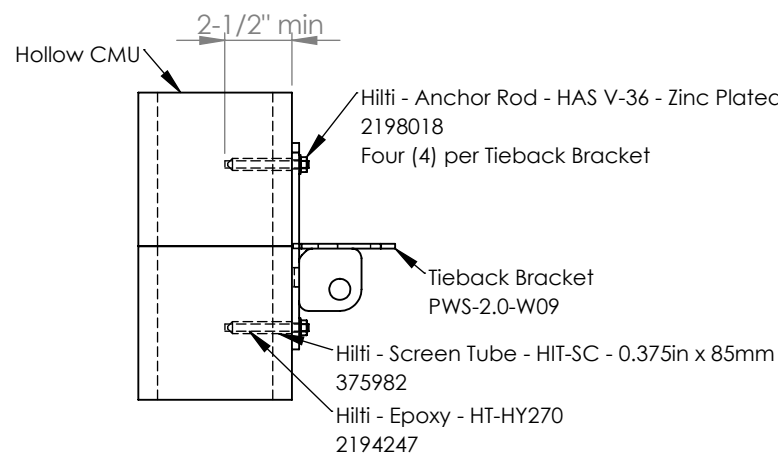
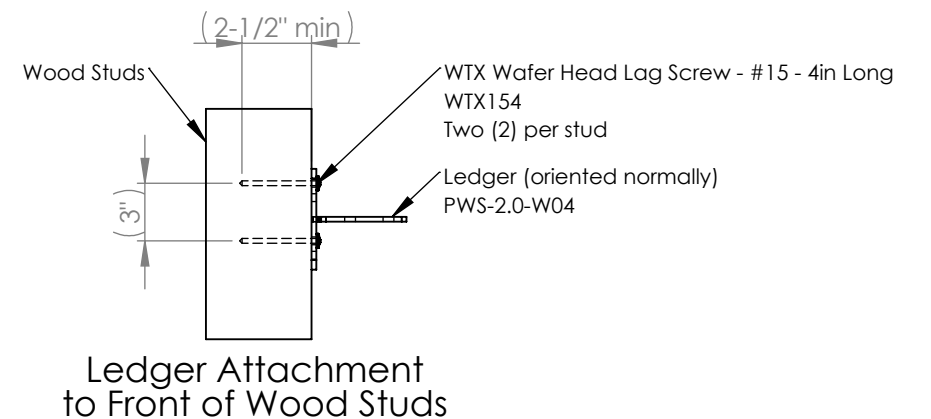
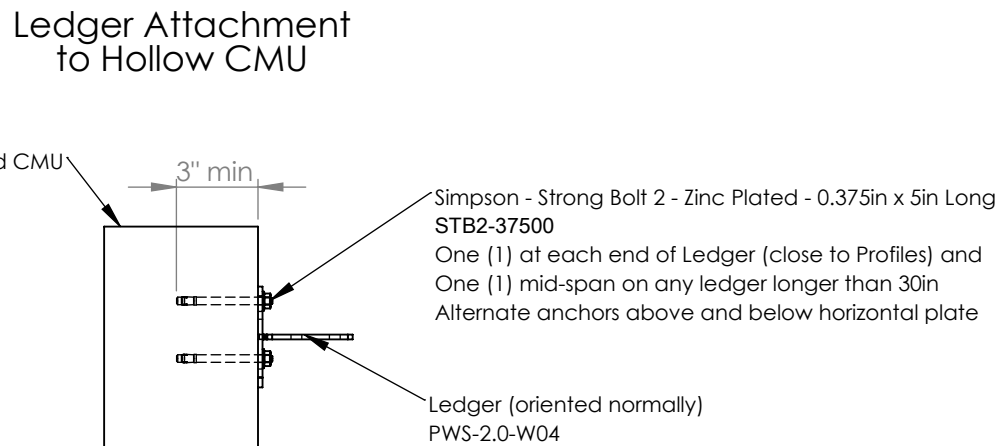
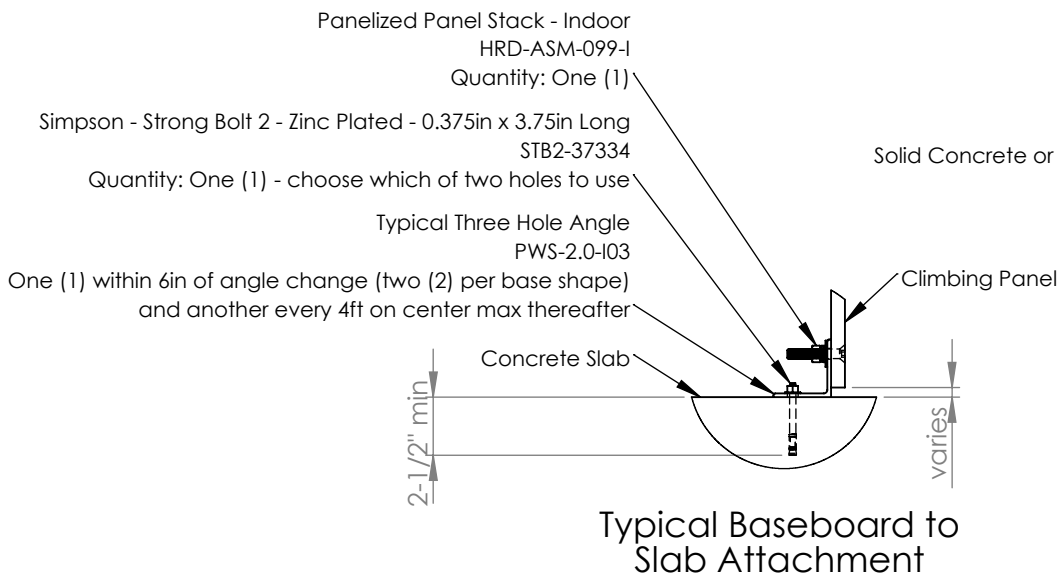
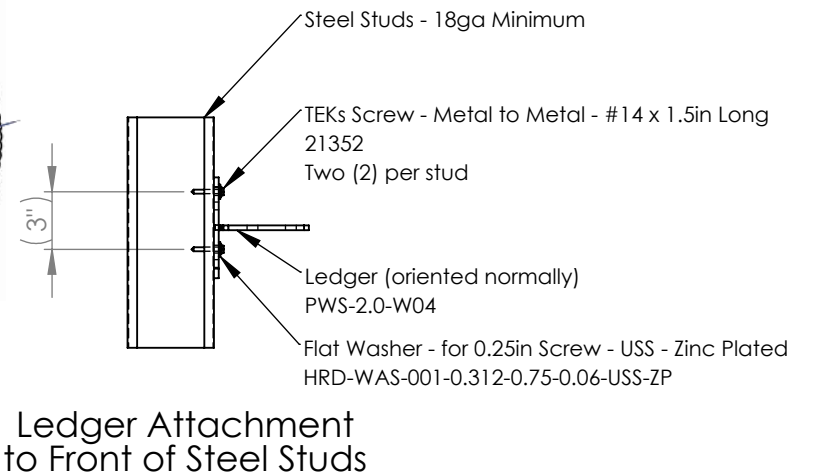
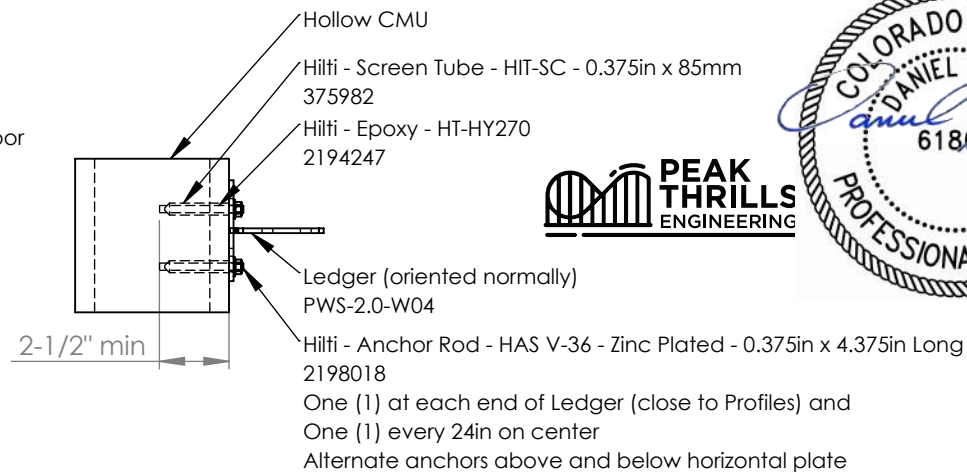
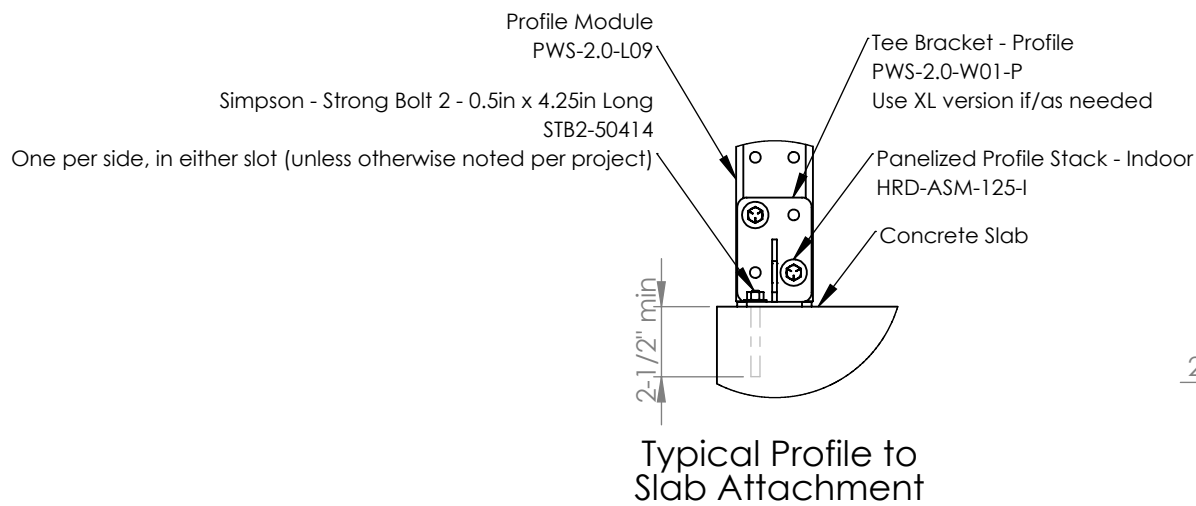


Case 3
Slab Attachments Only

Typical Details - Table of Contents	
Sheet	Description
0.01	Visual Overview
0.02	Building Connections
0.03	Steel Joints
0.04	Articulated Profiles
0.05	Climbing Wall Details
0.06	Sub Assemblies
0.07	Ironworked Parts
0.08	Weldments 1
0.09	Weldments 2
0.10	Hardware Stacks
0.11	Parts to CNC
0.12	Tie Off Points
0.13	Bracing Members 1
0.14	Bracing Members 2

Notes:
1. The three basic structure types are shown above for clarity. Actual steel configurations vary per project, and are detailed in those project-specific install sets.

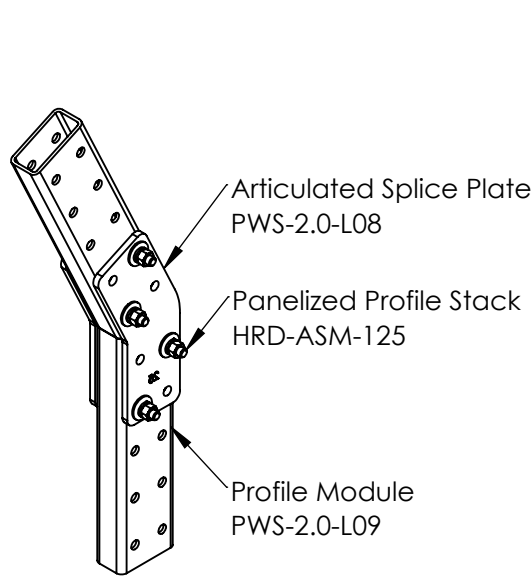
Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5		FINISH:		Deburr and break sharp edges (if applicable)		DO NOT SCALE DRAWING		REVISION 1	
NAME		SIGNATURE		DATE		TITLE:		Panelized 2.0 Typicals - Visual Overview	
DRAWN						DWG NO.		P2-0.01	
CHK'D								B	
APPV'D									
MFG									
Q.A						MATERIAL:			
						WEIGHT:		SCALE: 1:40	
								SHEET 1 OF 19	



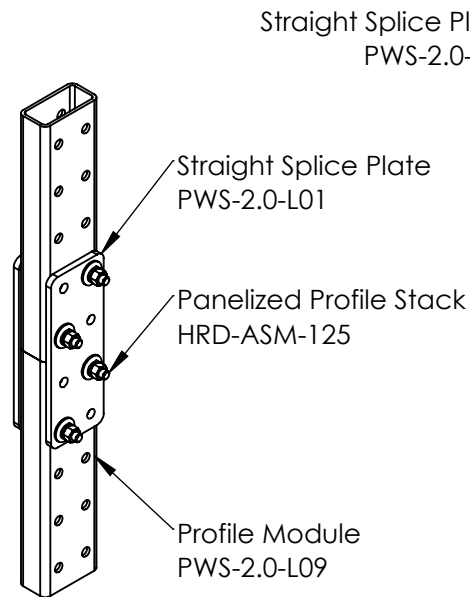
Notes:

1. It is permissible to install ledgers or brackets atop wall cladding (e.g. drywall, plywood, etc.), so long as the appropriate embedment (into whichever wall type) is maintained (as defined by the manufacturer of each fastener and the structural engineer stamping these plans).
2. Wedge anchors (or any other fastener) may change per project if/when required by engineering. For example each Strong Bolt 2 may be replaced with a KB TZ2 of equivalent diameter and length for high seismic areas. Additionally, any Zinc Plated Simpson Strong Bolt 2 may be replaced with a Zinc Plated Hilti KB1 of equivalent diameter and length.

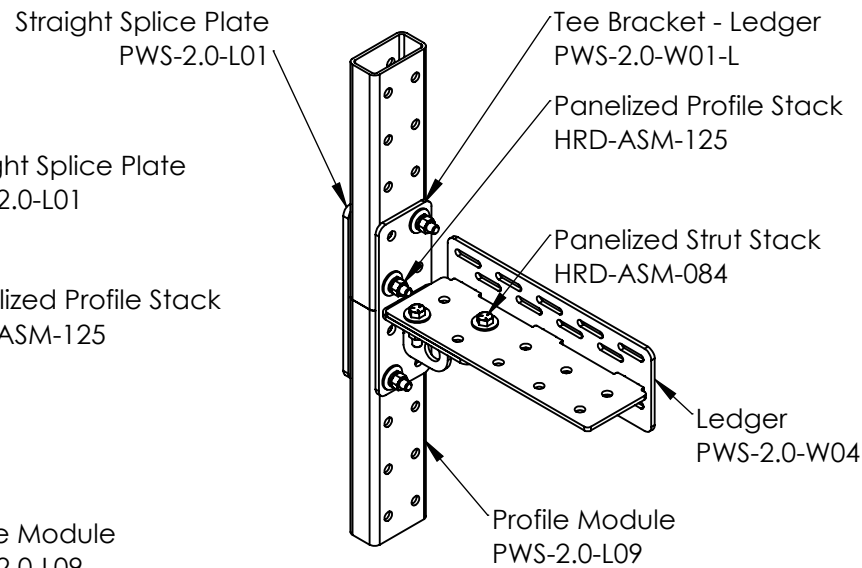
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DRAWN	Mark Hemphill		4/12/2023								
CHK'D											
APPV'D											
MFG											
Q.A				MATERIAL:			DWG NO.		P2-0.02-I		B
				WEIGHT: 221.632622			SCALE: 1:5		SHEET 2 OF 19		



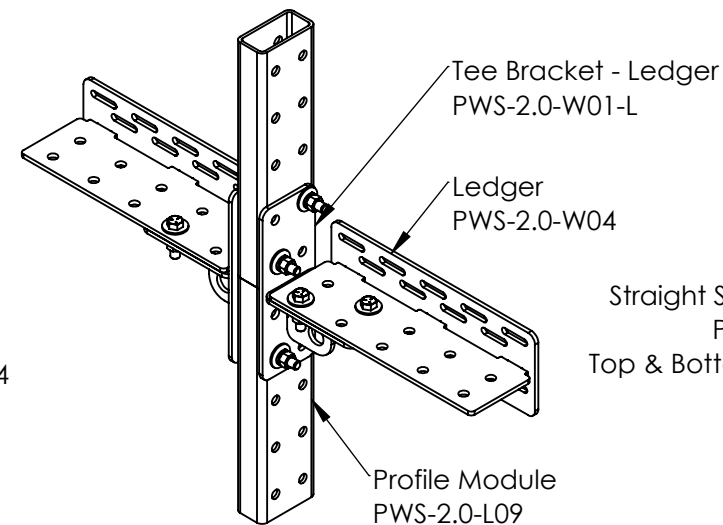
Articulated Profile Splice



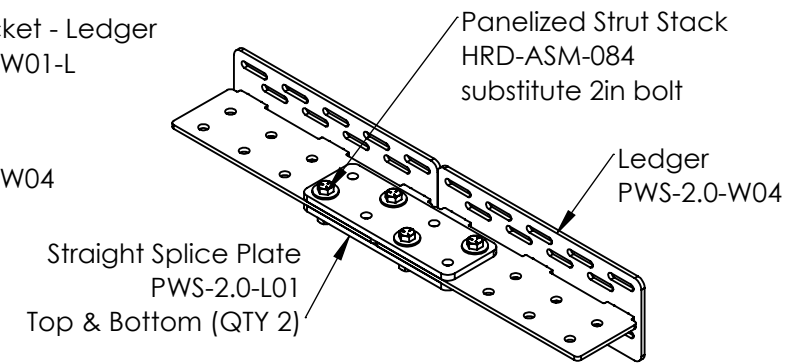
Straight Profile Splice



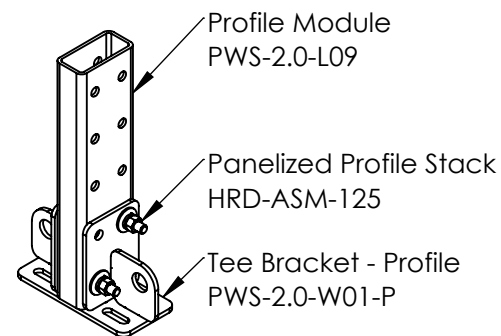
Tee Connection
(Profiles & Ledgers)



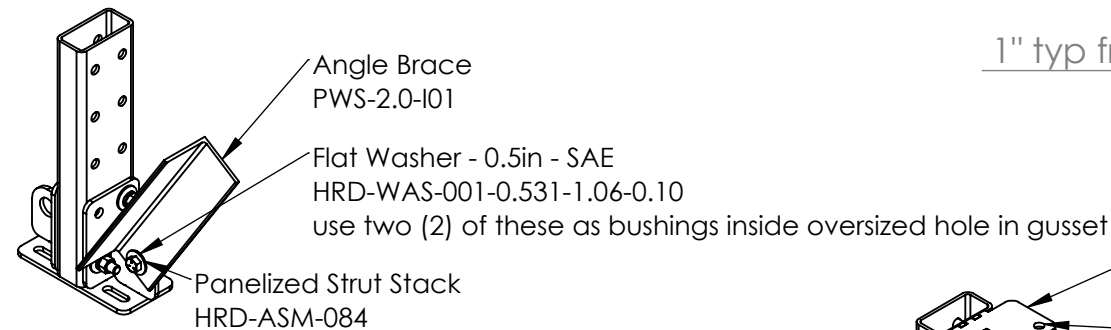
Cross Connection
(Profiles & Ledgers)



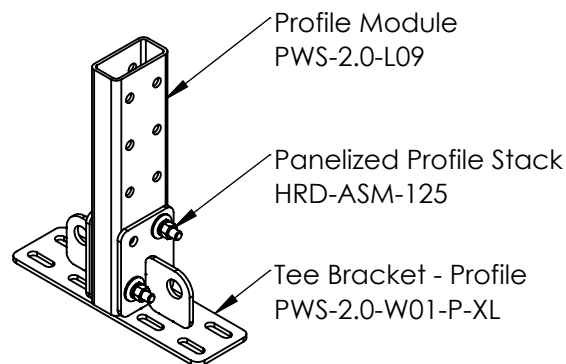
Straight Ledger Splice



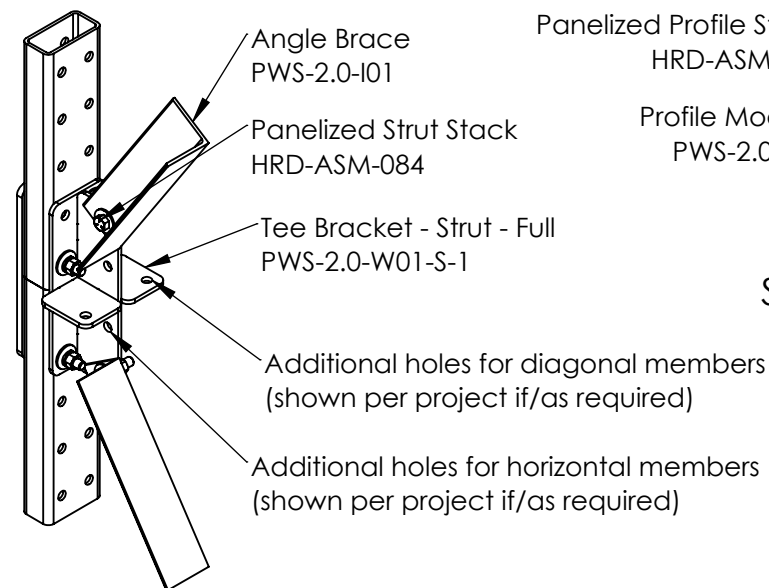
Profile to Tee Bracket



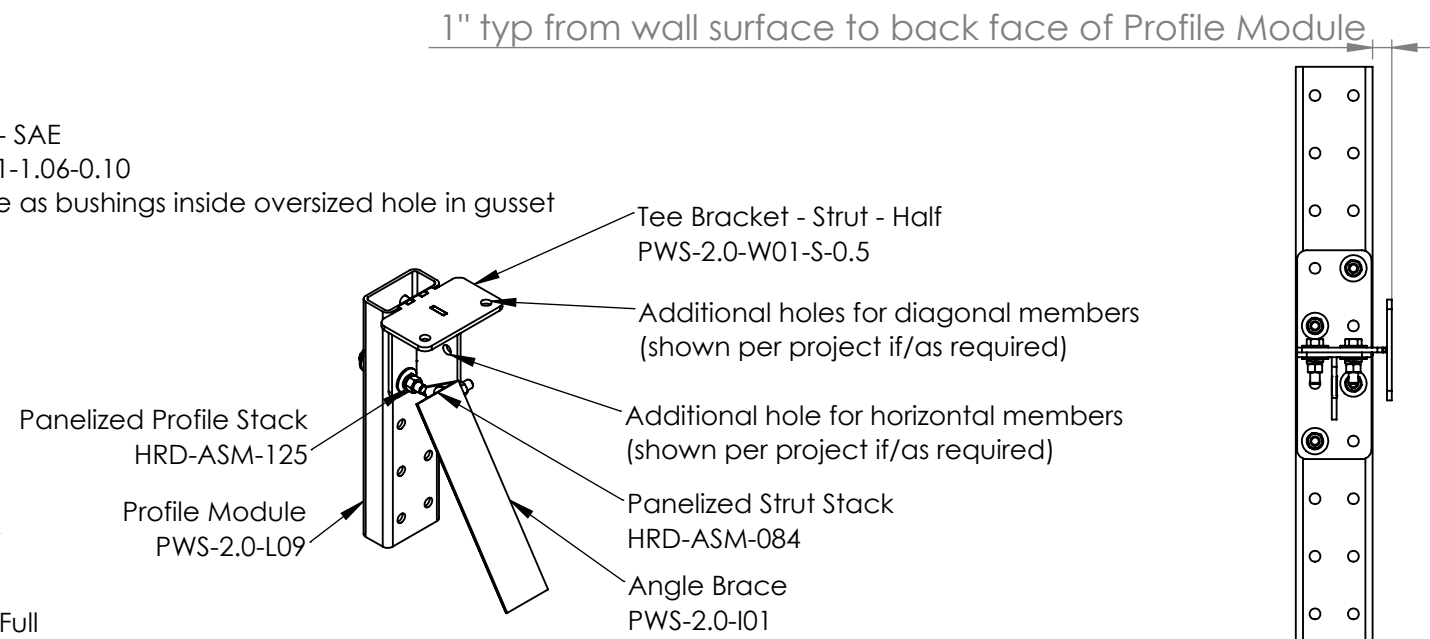
Strut Connection - Base



Profile to Tee Bracket - XL
(use if/when necessary to
avoid rebar or cable(s) in slab)



Strut Connection - Mid Height



Strut Connection - Top



Tee or Cross Connection
(Profiles & Ledgers)
Side View

Notes:
1. All joints above are shown with two (2) bolts per inbound member. This is typical. However, certain joints or joint types (e.g. articulated profile splices) may need four (4) bolts per member, if/as specified in the project-specific engineering. Also, bolts are shown intentionally staggered - install as shown above.

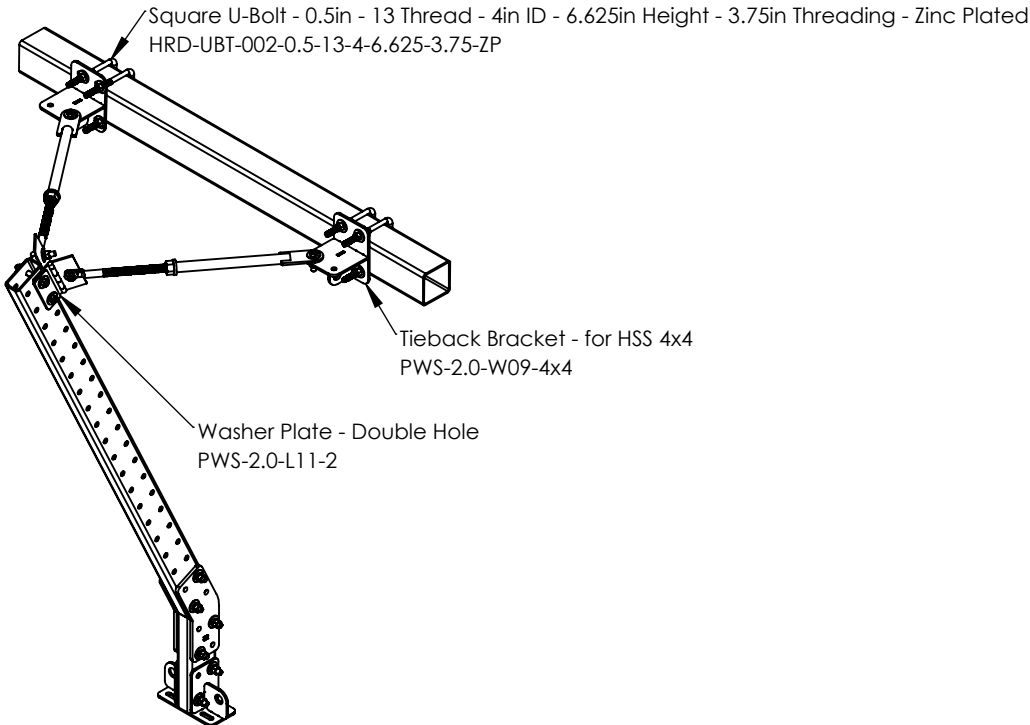
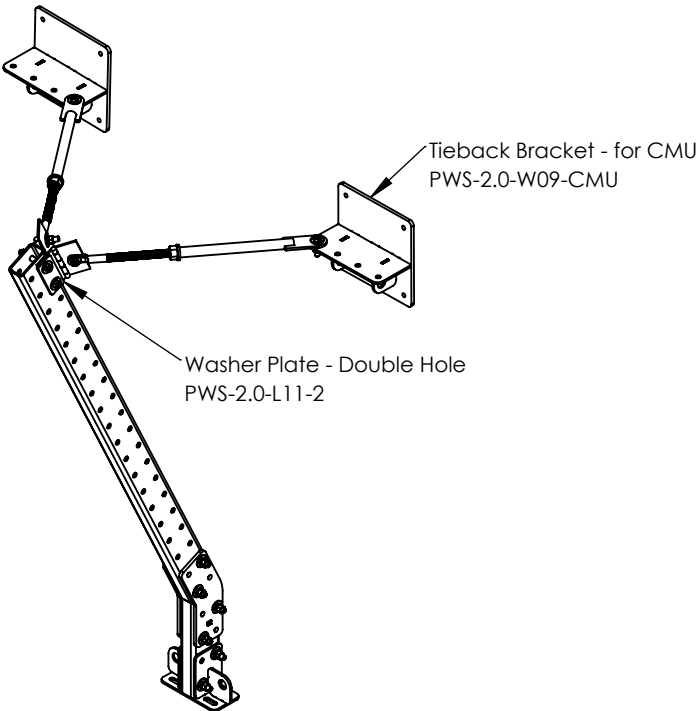
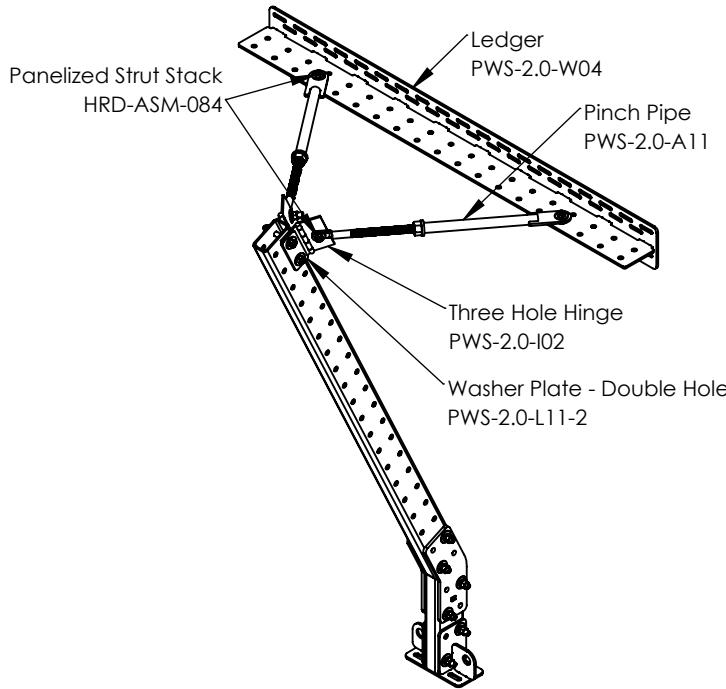
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DRAWN		CHK'D		APPV'D		MFG	
Q.A		MATERIAL:		WEIGHT:		SCALE: 1:10	
TITLE: Panelized 2.0 Typical - Steel Joints		DWG NO. P2-0.03		SHEET 4 OF 19		B	

to Ledger (PWS-2.0-W04)

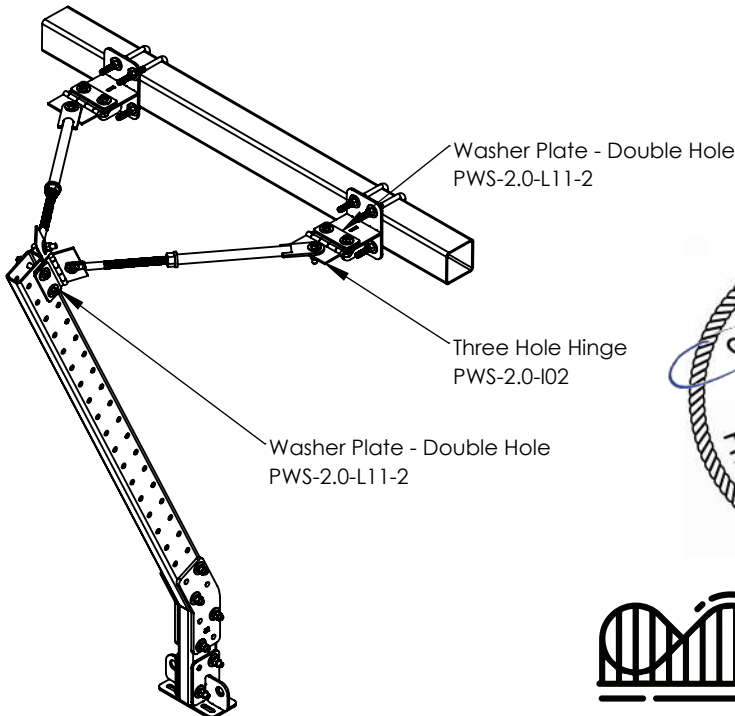
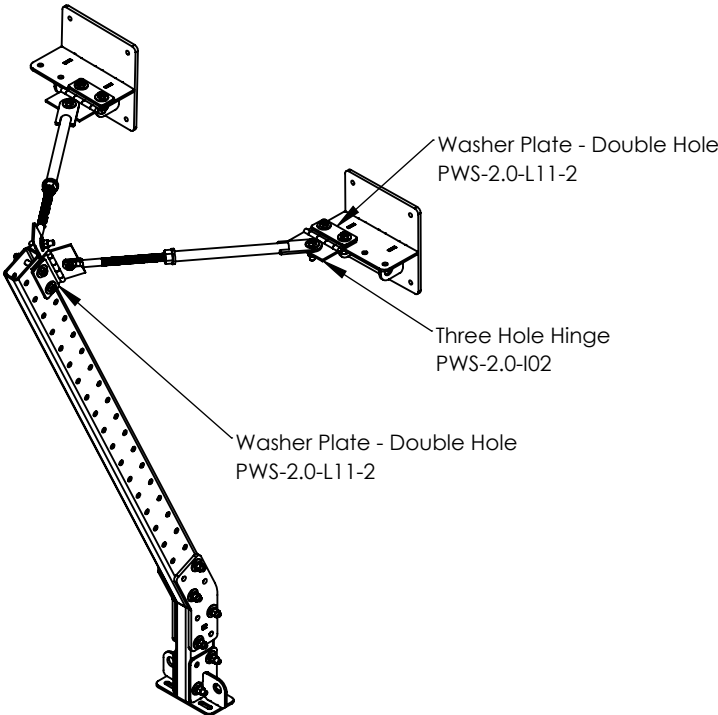
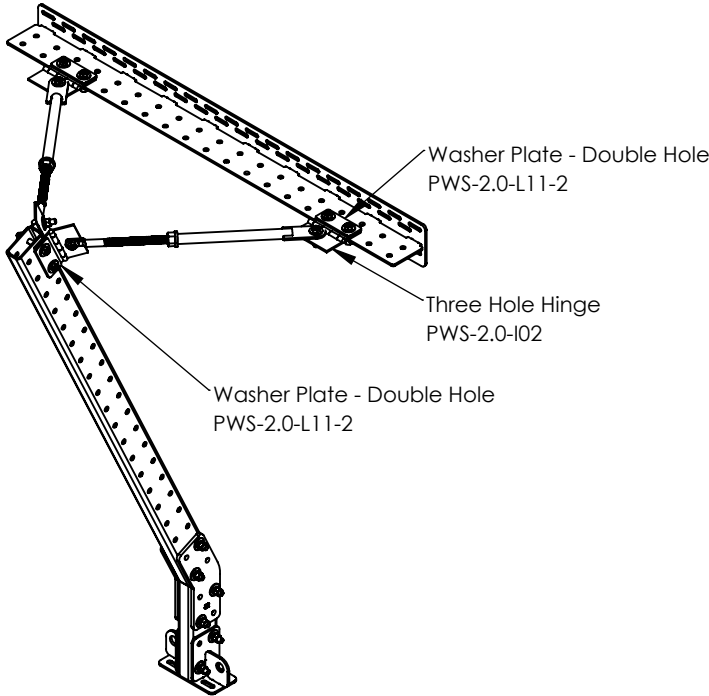
to Tie Back Bracket - for CMU (PWS-2.0-W09-CMU)

to Tie Back Bracket - for HSS 4x4 (PWS-2.0-W09-4x4)

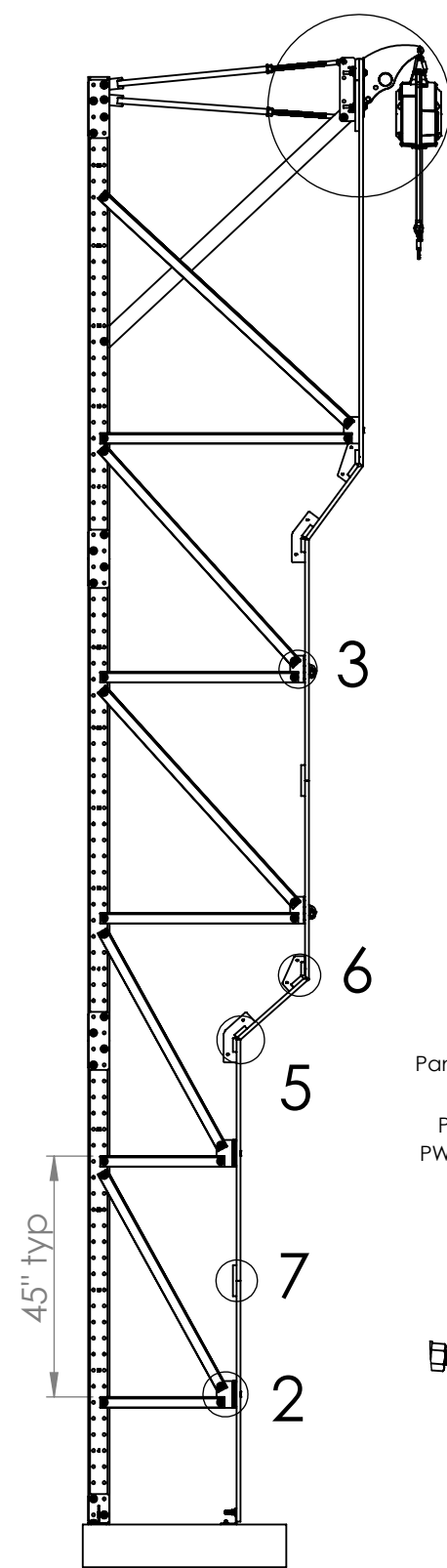
Direct



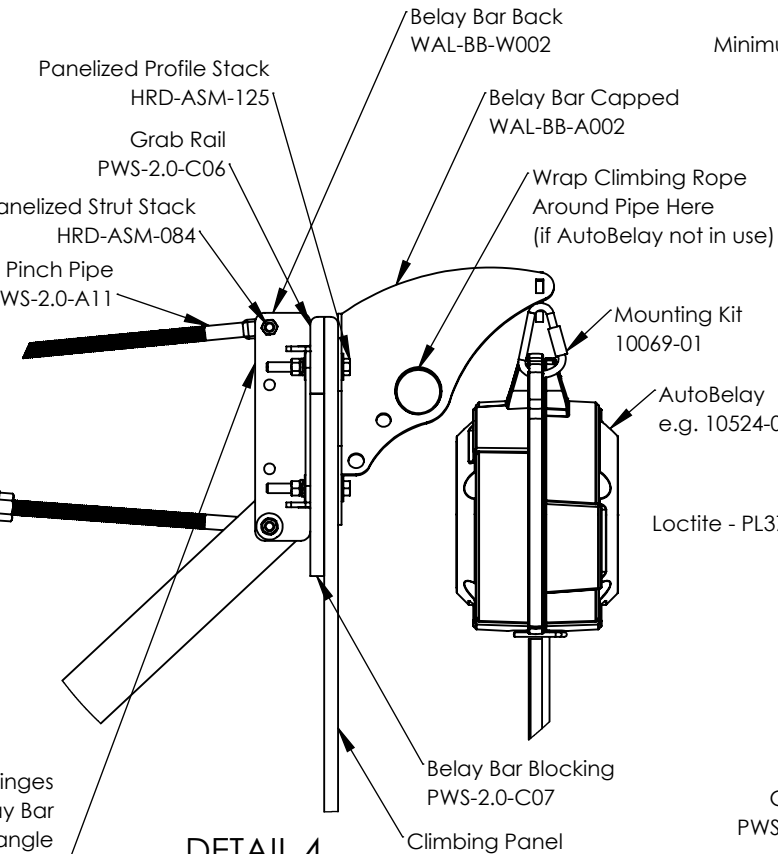
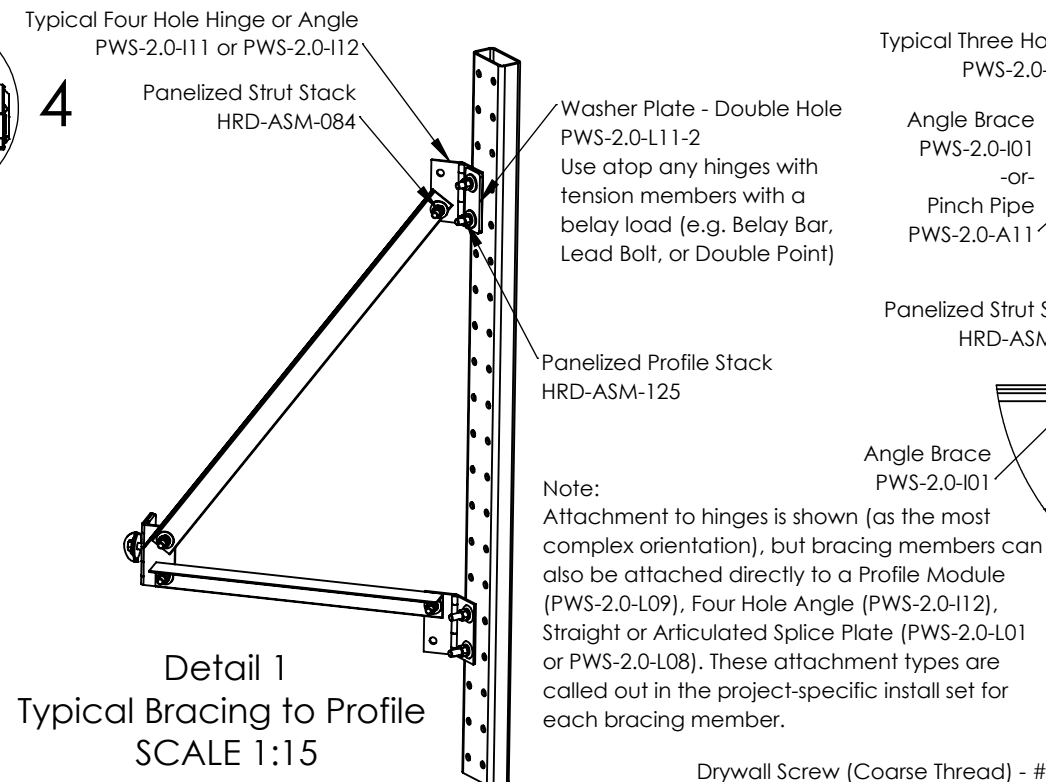
Hinged



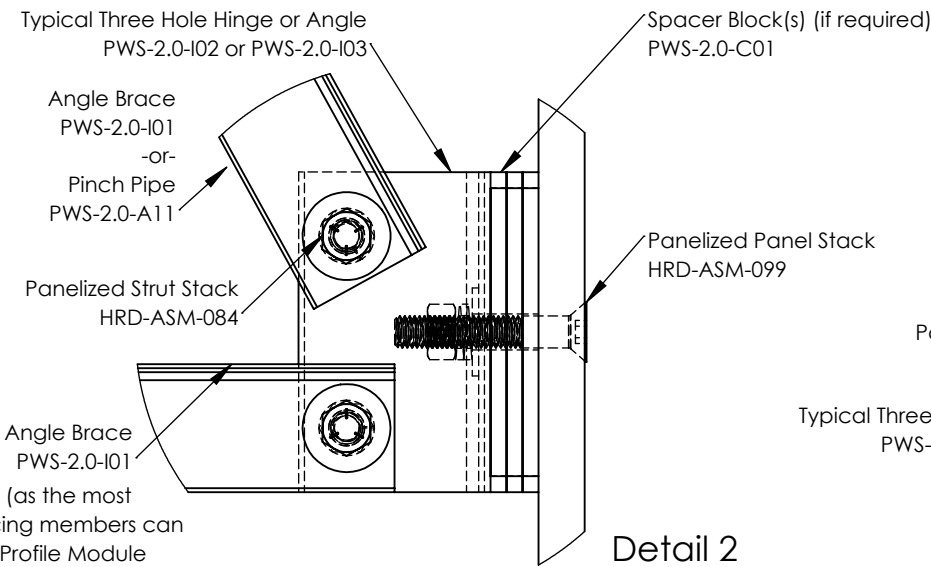
Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5				FINISH:		Deburr and break sharp edges (if applicable)		DO NOT SCALE DRAWING		REVISION	
		NAME		SIGNATURE		DATE				TITLE: Panelized 2.0 Typicals - Articulated Profiles	
DRAWN											
CHK'D											
APPV'D											
MFG											
Q.A											
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										B	
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										SHEET 5 OF 19	



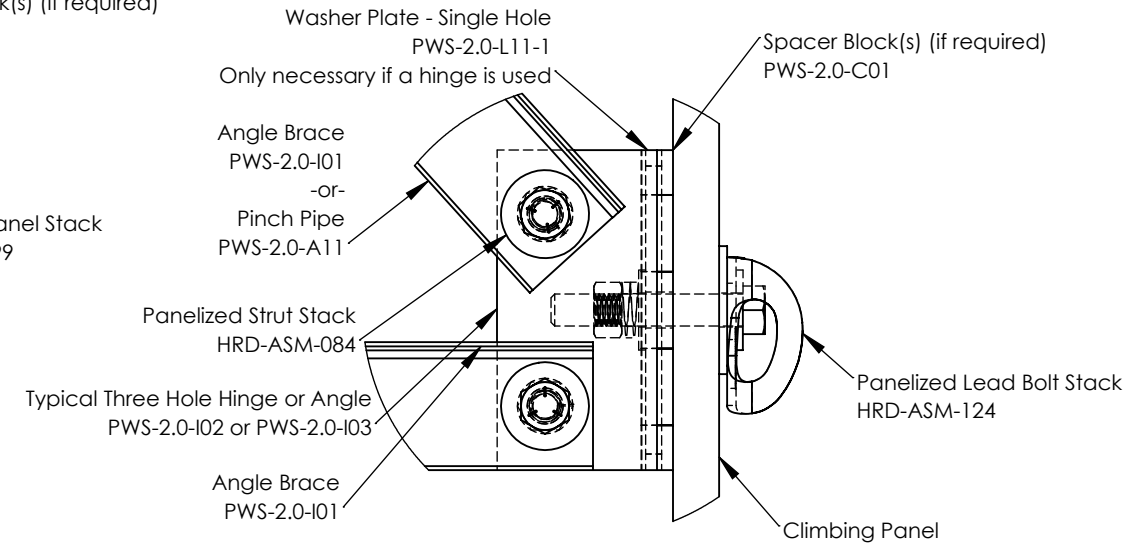
Two (2) or Four (4) Typical Four Hole Hinges (PWS-2.0-I11) may be bolted onto the Belay Bar Back (PWS-.20-W04) if/as needed to angle bracing in one or two directions to the nearest Profile(s).



DETAIL 4
Typical Belay Bar Attachment Detail
SCALE 1 : 10



DETAIL 2
Typical Hinge to Panel Connection (non-Lead Climbing)
SCALE 1 : 3

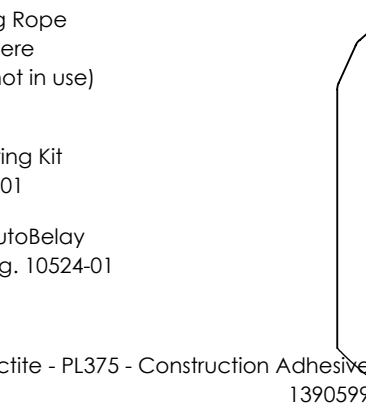


DETAIL 3
Typical Hinge to Panel Connection (Lead Climbing)
SCALE 1 : 3

Drywall Screw (Coarse Thread) - #8 - 0.75in Long - Bugle Head - Phillips Drive - Heat Treated Steel - Black Phosphate
HRD-SCR-002-8-0.75-BU-P-HTS-BP

GRK Screw - R4 - #9 x 1.25in Long
GRK00091
Minimum spacing: 9in on center

Flange Bracket - Dihedral
PWS-2.0-A21-D

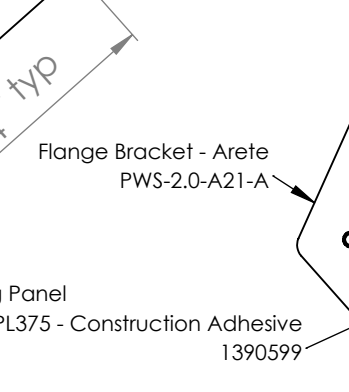


DETAIL 5
Typical Panel to Panel Connection - Less Than 180 Degrees (aka Dihedral)
SCALE 1 : 3

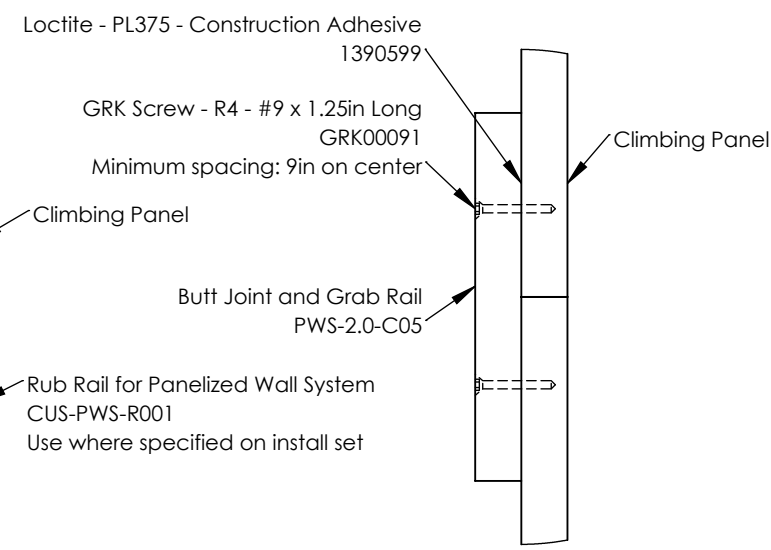
Each end of each Rub Rail piece, or omitted if PL375 is sufficient

GRK Screw - R4 - #9 x 1.25in Long
GRK00091
Minimum spacing: 9in on center

Flange Bracket - Arete
PWS-2.0-A21-A

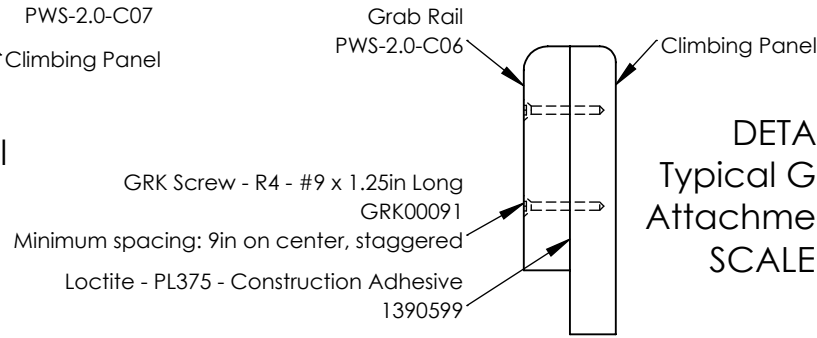


DETAIL 6
Typical Panel to Panel Connection - Greater than 180 Degrees (aka Arete)
SCALE 1 : 3



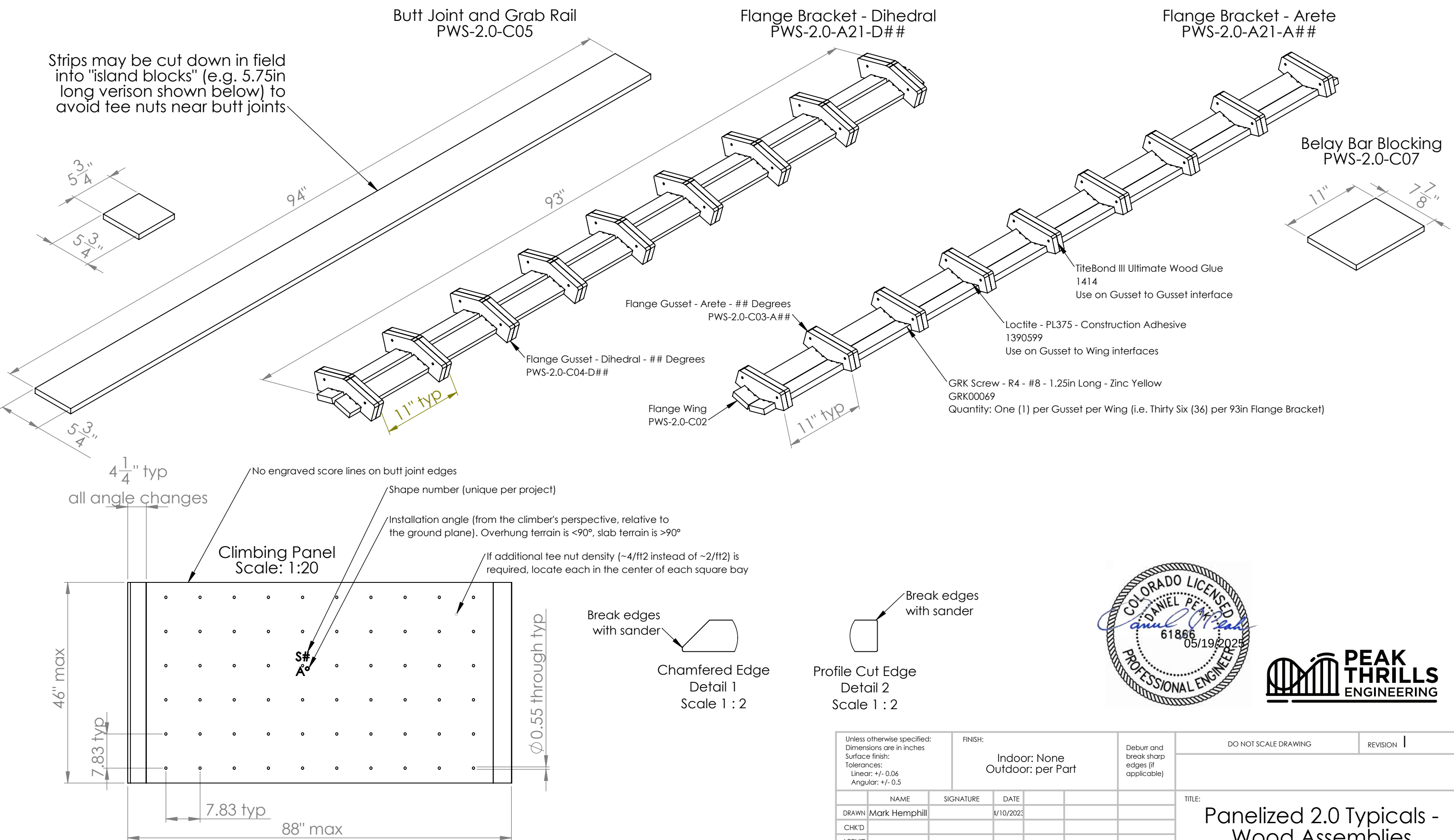
DETAIL 7
Typical Panel to Panel Connection - 180 Degrees (aka Butt Joint)
SCALE 1 : 3

GRK Screw - R4 - #9 x 1.25in Long
GRK00091
Minimum spacing: 9in on center, staggered
Loctite - PL375 - Construction Adhesive 1390599



DETAIL 8
Typical Grab Rail Attachment Detail
SCALE 1 : 3

Unless otherwise specified: Dimensions are in inches		FINISH: None		Deburr and break sharp edges (if applicable)		DO NOT SCALE DRAWING		REVISION 1	
DRAWN:		DATE: 05/19/2023		MATERIAL: As Noted		TITLE: Panelized 2.0 Typicals - Climbing Wall Details - Indoor		DWG NO. P2-0.05-I	
CHK'D:		MFG: Q.A.		WEIGHT: 710.358460		SCALE: 1:35		SHEET 6 OF 19	



Notes:

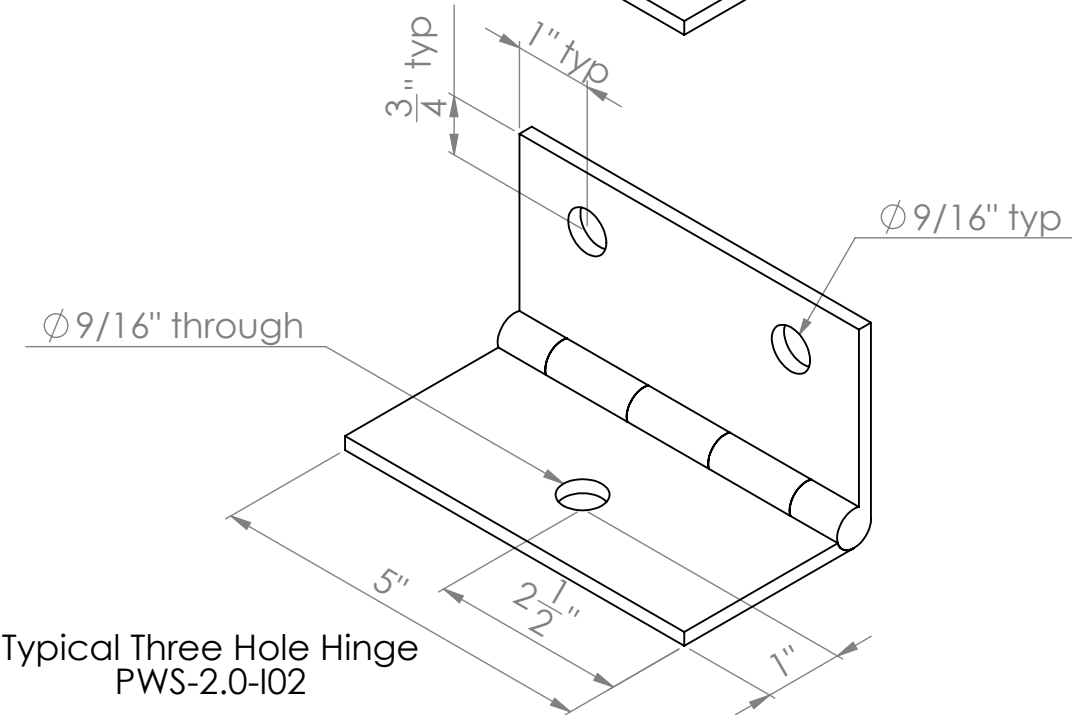
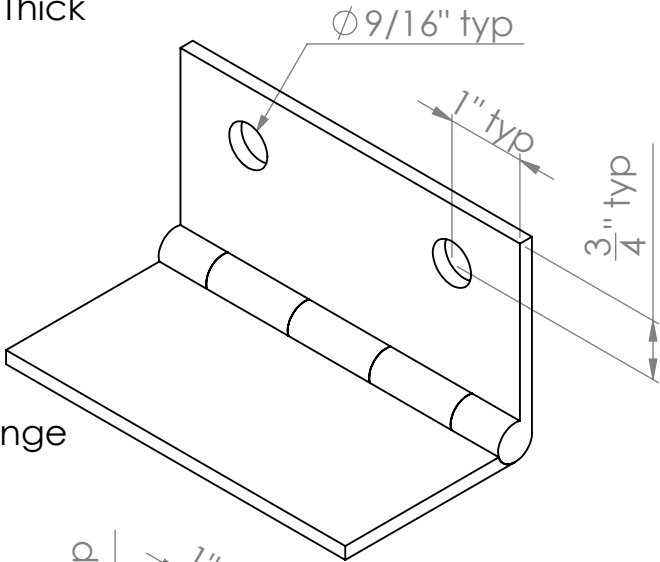
1. The longest possible flanges (93in and 94in long for angle changes and butt joints, respectively) are shown above. Actual flange bracket lengths and angles (and thus gussets used) will vary from joint to joint. Similarly, the Climbing Panel is shown for reference only. Actual shapes will have unique polygonal outlines.

Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5			FINISH: Indoor: None Outdoor: per Part			Deburr and break sharp edges (if applicable)			DO NOT SCALE DRAWING			REVISION	
TITLE:													
Panelized 2.0 Typicals - Wood Assemblies													
NAME			SIGNATURE			DATE							
DRAWN Mark Hemphill						4/10/2023							
CHK'D													
APPV'D													
MFG													
Q.A						MATERIAL: As Noted			DWG NO.				
									P2-0.06				
									B				
WEIGHT: 13.186720						SCALE: 1:10							
						SHEET 8 OF 19							

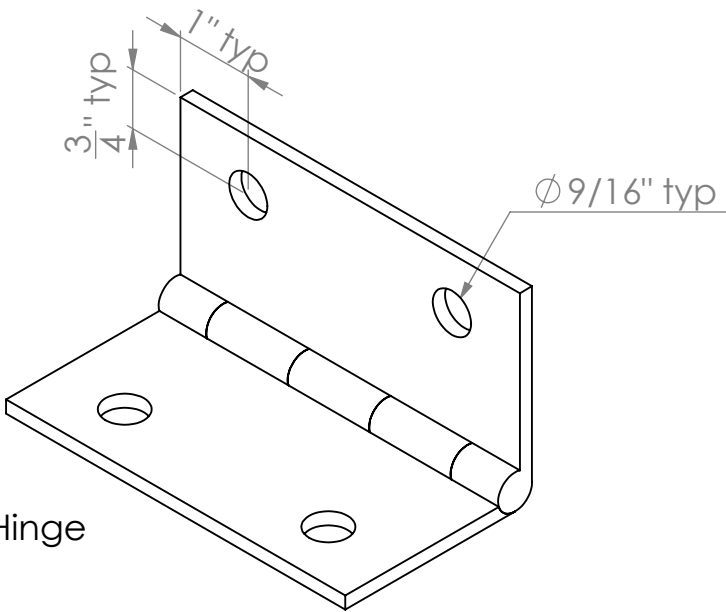
Butt Hinge - 0.375in OD Pin - 5in Long - 5in Wide - 0.18in Thick
BTS18505037

Finish (for hinge parts):
- Indoor: None
- Outdoor: Zinc Yellow

Typical Two Hole Hinge
PWS-2.0-I08



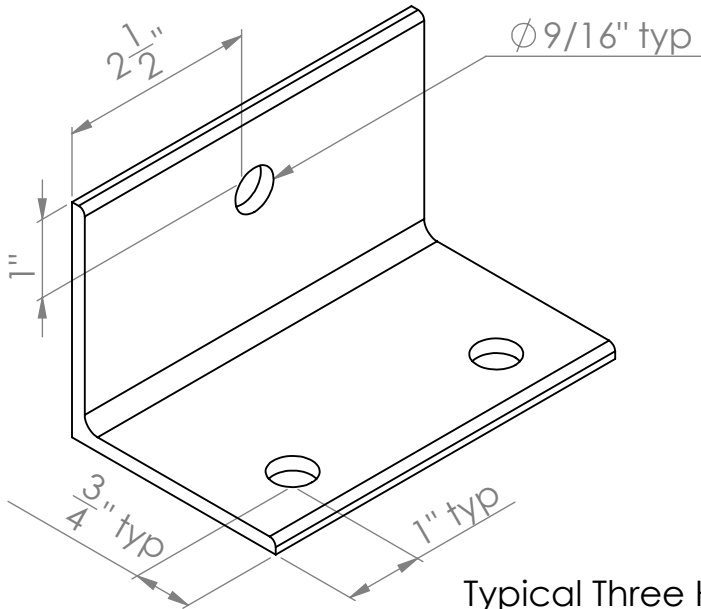
Typical Three Hole Hinge
PWS-2.0-I02



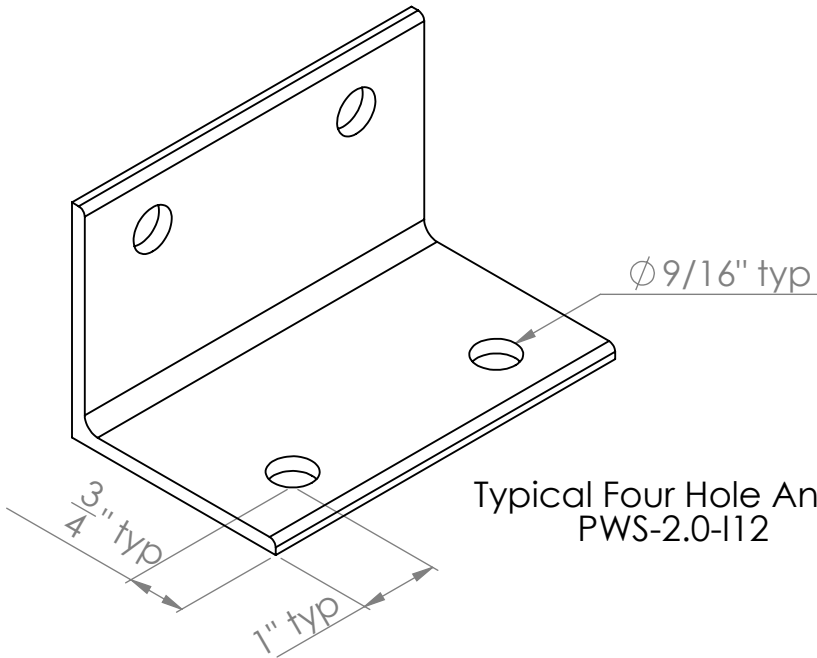
Typical Four Hole Hinge
PWS-2.0-I11

Steel Angle - 3in x 3in x 0.1875in - A36 - 5in Long
MAT-STL-001-3-3-0.1875-A36-5

Finish (for angle iron parts):
- Indoor: None
- Outdoor: Hot Dip Galvnize



Typical Three Hole Angle
PWS-2.0-I03

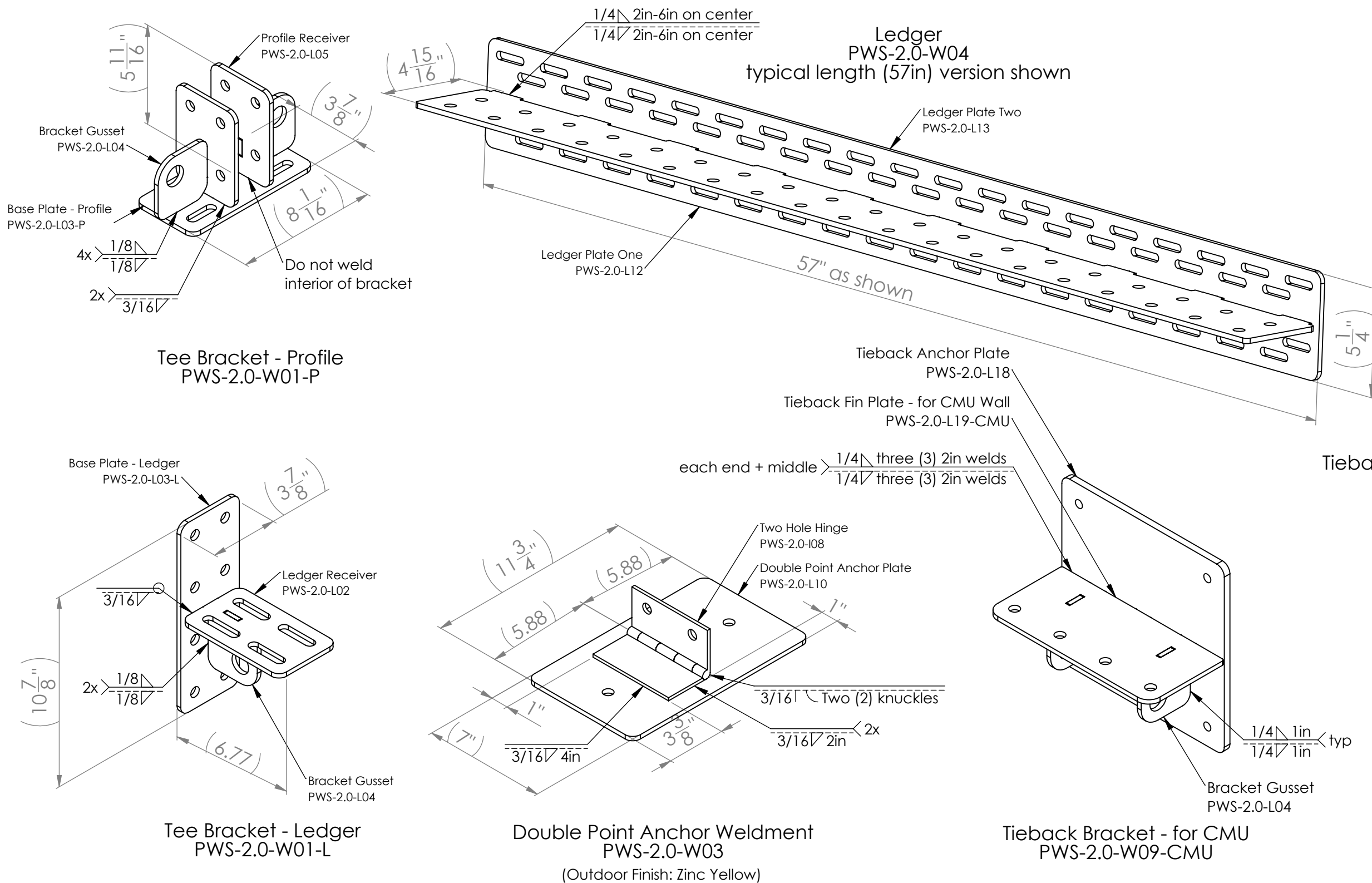


Typical Four Hole Angle
PWS-2.0-I12



Notes:
1. Angle Braces (PWS-2.0-I01) can be found on the Bracing Members sheet (P2-0.8).

Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5				FINISH: None		Deburr and break sharp edges (if applicable)		DO NOT SCALE DRAWING		REVISION			
		NAME		SIGNATURE		DATE				TITLE: Panelized 2.0 Typicals - Ironworked Parts			
DRAWN		Mark Hemphill				4/8/2020							
CHK'D													
APPV'D													
MFG													
Q.A													
								MATERIAL: As Noted		DWG NO. P2-0.07		B	
								WEIGHT: 1.426324		SCALE: 1:2		SHEET 10 OF 19	



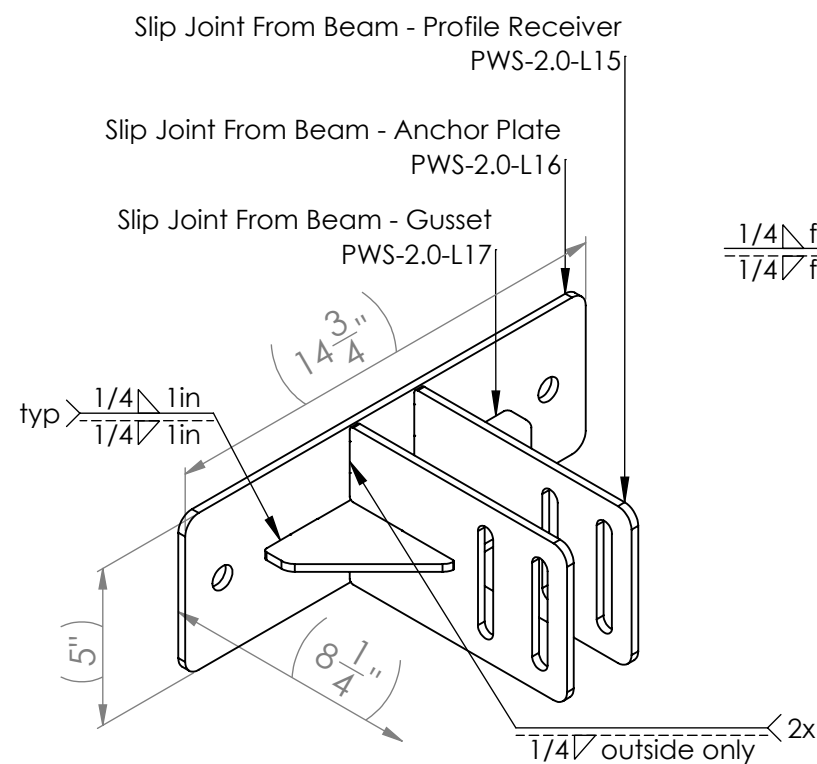
Profile Spacing	Ledger Length
4ft	45in
5ft	57in
6ft	69in
7ft	81in

Note: Ledger Weldments (PWS-2.0-W04) may be cut in the shop or field if/as needed, ideally only every 3in (in order to maintain anticipated hole spacing from each end).

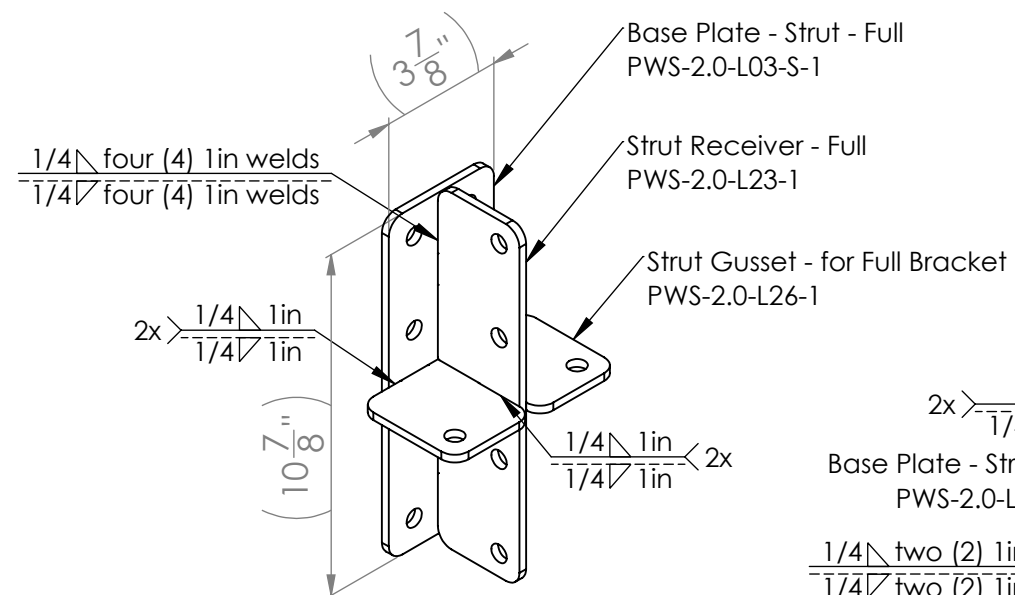


- Notes:
- The following weldments can be found on their own drawings (and also require a different finish if used outdoors).
 - Pinch Pipe Fixed End (PWS-2.0-W02)
 - Frankenbrace Fixed End (PWS-2.0-W14)
 - Mounting Bracket (WAL-BB-W004)
 - Mega Bump Off (WAL-BB-W005)
 - Plates without relational dimensions shown are all self-fixturing (with tabs controlling locations and orientations).
 - As shown, all plates should be welded perpendicular to each other.

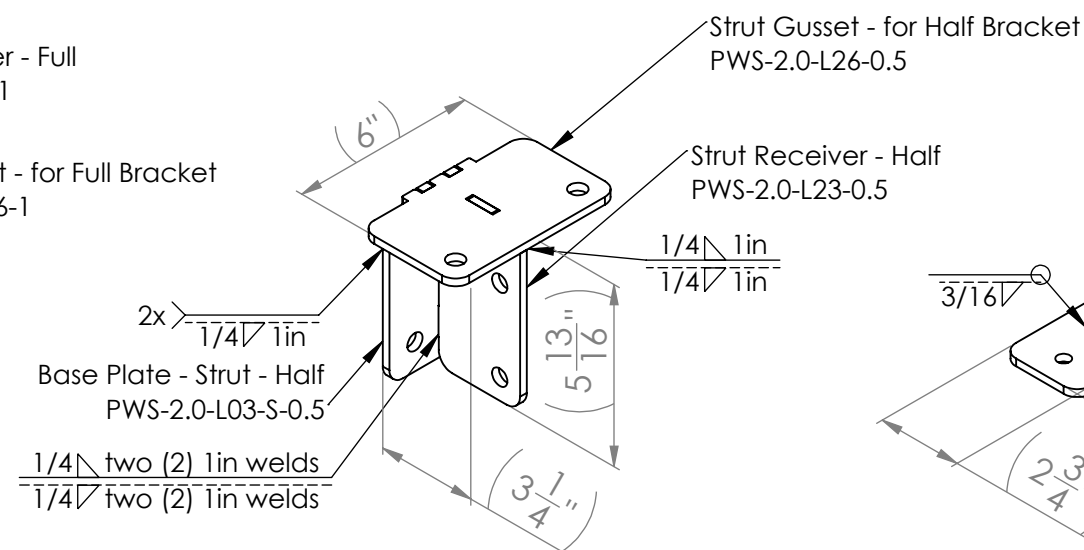
Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5			FINISH: Indoor: None Outdoor: Hot Dip Galvanized			Deburr and break sharp edges (if applicable)			DO NOT SCALE DRAWING			REVISION											
									TITLE: Panelized 2.0 Typicals - Weldments 1														
NAME			SIGNATURE			DATE																	
DRAWN			Mark Hemphill			5/15/2023																	
CHK'D																							
APPV'D																							
MFG																							
Q.A									MATERIAL: As Noted			DWG NO.			P2-0.08			B					
									WEIGHT: 6.04			SCALE: 1:5			SHEET 11 OF 19								



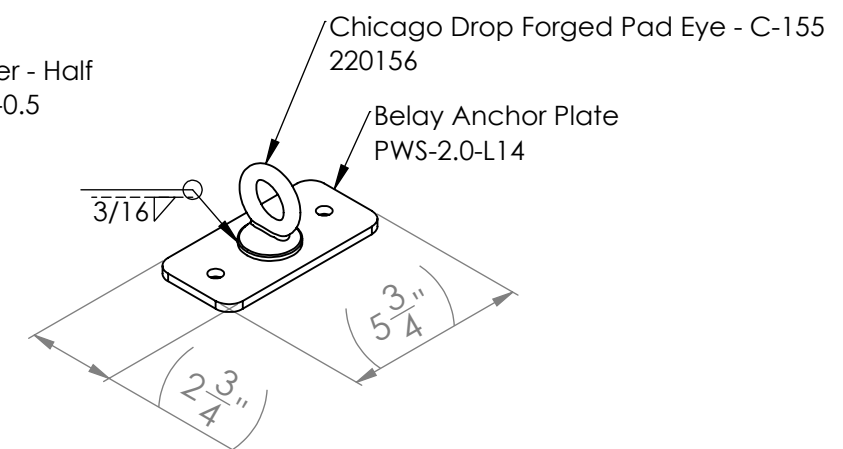
Slip Joint Bracket For Beam
(from Behind)
PWS-2.0-W08



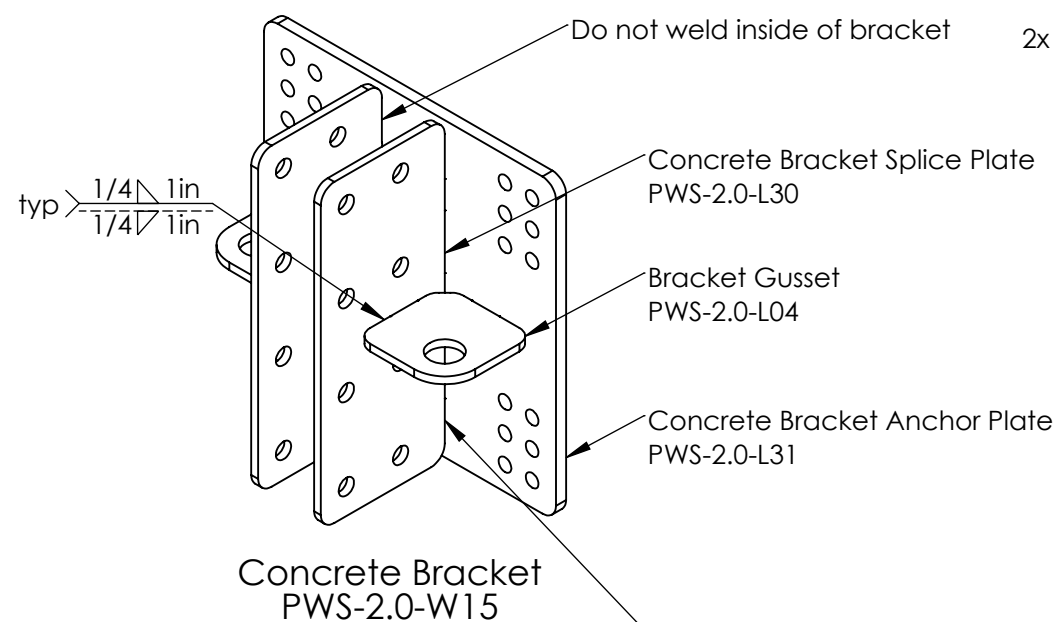
Tee Bracket - Strut - Full
PWS-2.0-W01-S-1



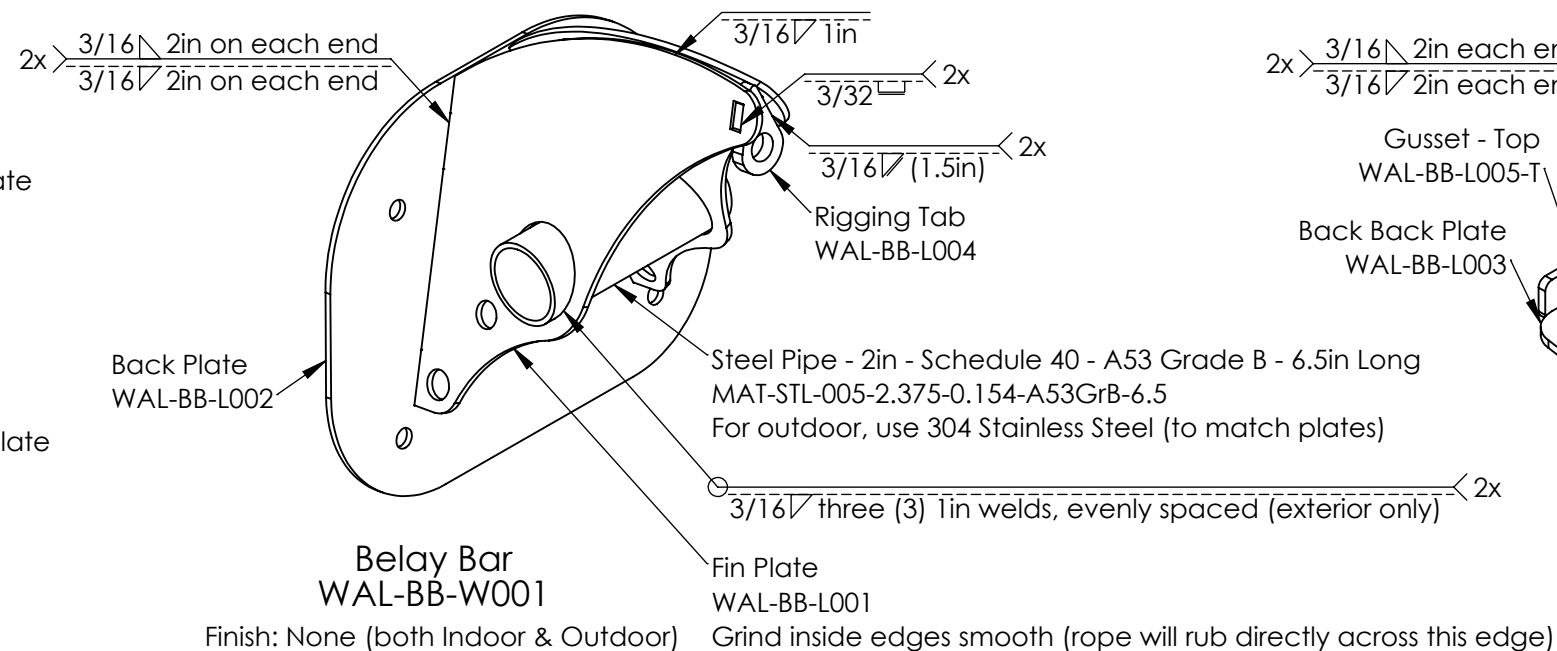
Tee Bracket - Strut - Half
PWS-2.0-W01-S-0.5



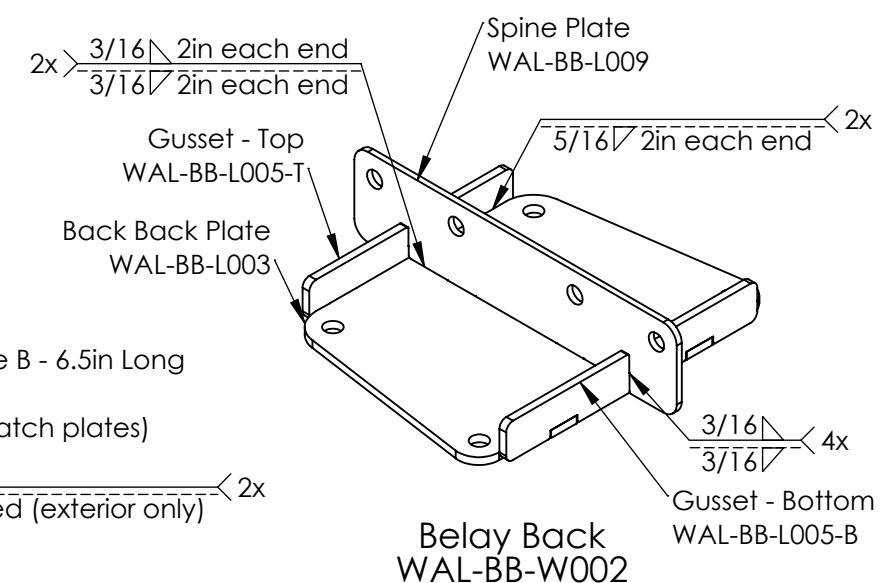
Belay Anchor
PWS-2.0-W07



Concrete Bracket
PWS-2.0-W15



Belay Bar
WAL-BB-W001



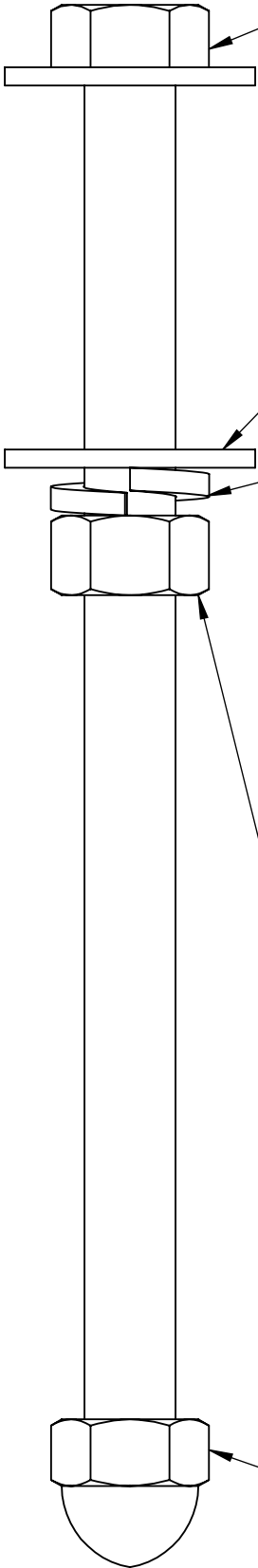
Belay Back
WAL-BB-W002

- Notes:
- The following weldments can be found on their own drawings (and also require a different finish if used outdoors).
 - Pinch Pipe Fixed End (PWS-2.0-W02)
 - Frankenbrace Fixed End (PWS-2.0-W14)
 - Mounting Bracket (WAL-BB-W004)
 - Mega Bump Off (WAL-BB-W005)
 - Plates without relational dimensions shown are all self-fixturing (with tabs controlling locations and orientations).
 - As shown, all plates should be welded perpendicular to each other.



Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances:	FINISH: Indoor: None Outdoor: Hot Dip Galvanize	Deburr and break sharp edges (if applicable)	DO NOT SCALE DRAWING		REVISION 1
			TITLE: Panelized 2.0 Typicals - Weldments 2		
DATE 5/15/2023	MATERIAL: As Noted	WEIGHT: 11.95	DWG NO. P2-0.09		B
			SCALE: 1:5		SHEET 12 OF 19

Panelized Safety Stack - Rung - Indoor
HRD-ASM-126-R-I



Screw - 0.5in - 13 Thread - 8in Long - Hex Head - External Hex - Grade 5 - Zinc Plated - Full Thread
PartNo: HRD-SCR-001-0.5-13-8-HH-EH-5-ZP-FT
VendorNo: HTB5Z-50C-800

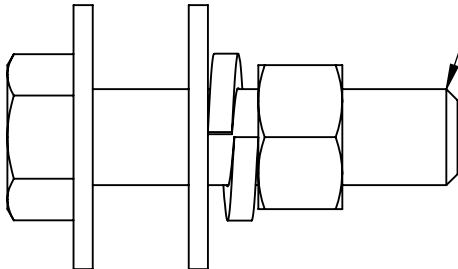
Flat Washer - 0.5in - USS - Zinc Plated
PartNo: HRD-WAS-001-0.562-1.375-0.132-2-ZP
VendorNo: FWUZ-50

Split Lock Washer - 0.5in - Grade 5 - Zinc Plated
PartNo: HRD-WAS-002-0.512-0.869-5-ZP
VendorNo: SLW5Z-50

Nut - 0.5in - 13 Thread - External Hex - Grade 5 - Zinc Plated
PartNo: HRD-NUT-001-0.5-13-EH-5-ZP
VendorNo: FHN5Z-50C

Acorn Nut - 0.5in - 13 Thread - Nickel Plated
PartNo: HRD-NUT-006-0.5-13-NI
VendorNo: ACNNI-50C

Panelized Strut Stack - Indoor
HRD-ASM-084-I



Screw - 0.5in - 13 Thread - 3in Long - Hex Head - External Hex - Grade 5 - Zinc Plated - Full Thread
PartNo: HRD-SCR-001-0.5-13-3-HH-EH-5-ZP-FT
VendorNo: HC5Z-50C-300

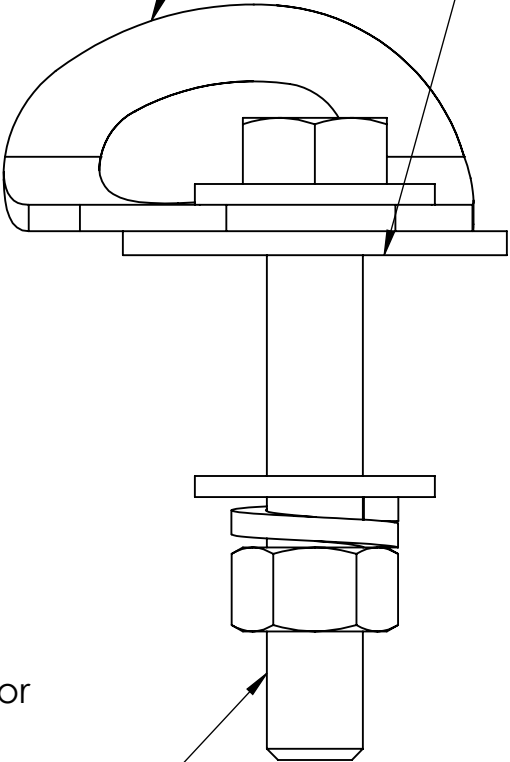
Panelized Panel Stack - Indoor
HRD-ASM-099-I

Screw - 0.5in - 13 Thread - 2in Long - Hex Head - External Hex - Grade 5 - Zinc Plated - Full Thread
PartNo: HRD-SCR-001-0.5-13-2-HH-EH-5-ZP-FT
VendorNo: HTB5Z-50C-200

Screw - 0.5in - 13 Thread - 3in Long - Flat Head - Internal Hex Drive - F825 - Zinc Plated - Partial Thread
PartNo: HRD-SCR-001-0.5-13-3-FH-IH-F835-ZP-PT
VendorNo: 2.07

Fixe Hardware - Zinc Plated Steel - 0.5in Bolt Hanger
PartNo: 013-1/2
VendorNo: 013-1/2

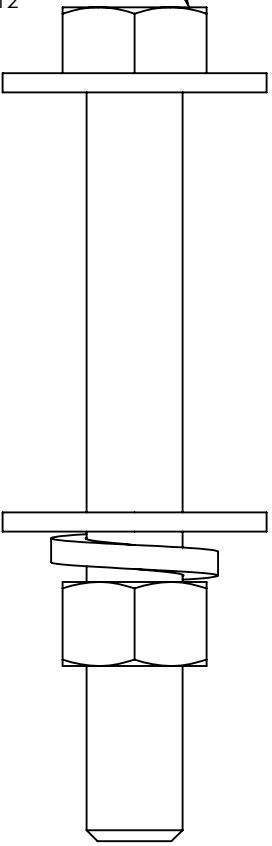
Fender Washer - for 0.5in Screw - 2in OD - 0.125in Thick - Zinc Plated
PartNo: HRD-WAS-001-0.531-2-0.125
VendorNo: FEWZ-50-200-12



Panelized Lead Bolt Stack - Indoor
HRD-ASM-124-I

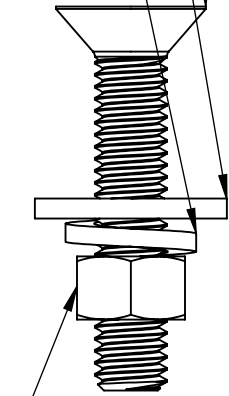
Nut - 0.375in - 16 Thread - External Hex - Grade 5 - Zinc Plated
PartNo: HRD-NUT-001-0.375-16-EH-5-ZP
VendorNo: FHN5Z-37C

Panelized Profile Stack - Indoor
HRD-ASM-125-I



Flat Washer - 0.375in - USS - Zinc Plated
PartNo: HRD-WAS-001-0.438-1-0.104-USS-ZP
VendorNo: FWUZ-37

Split Lock Washer - 0.375in - Zinc Plated
PartNo: HRD-WAS-002-0.385-0.68-5-ZP
VendorNo: SLW5Z-37



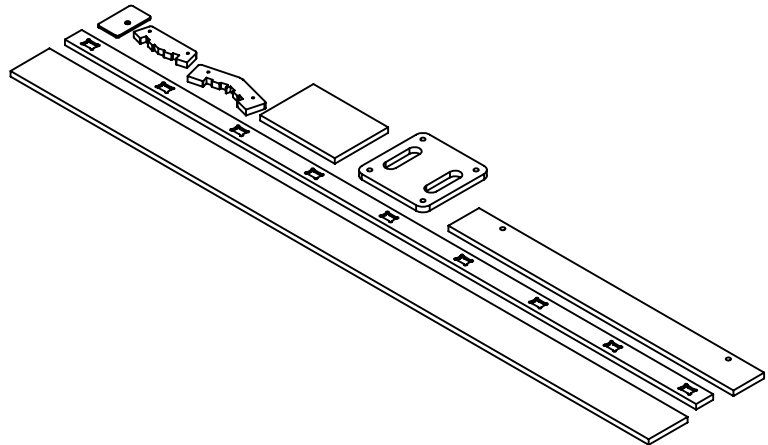
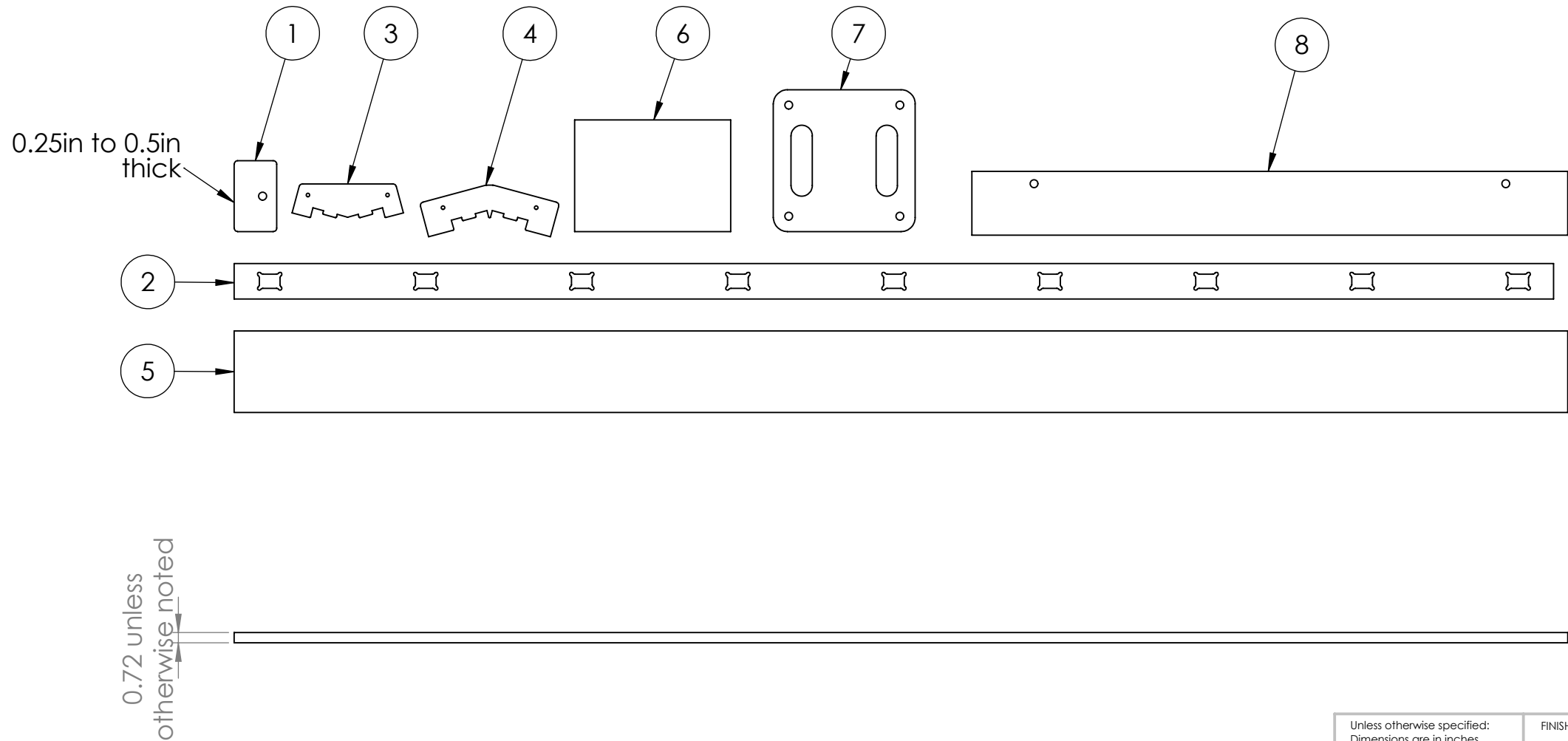
Eldo Plaque Stack
HRD-ASM-139

Notes:
1. Any part not explicitly labeled is assumed to be the same as another instance of the part within another hardware assembly. For example, flar washers, lock washer, hex nuts, and bolt hangers.
2. Longer or shorter bolts of the same diameter, threading, and equivalent or better grade may be substituted in any hardware stack (e.g. using 4in or 5in bolts instead of 3.5in ones for HRD-ASM-125 where necessary).



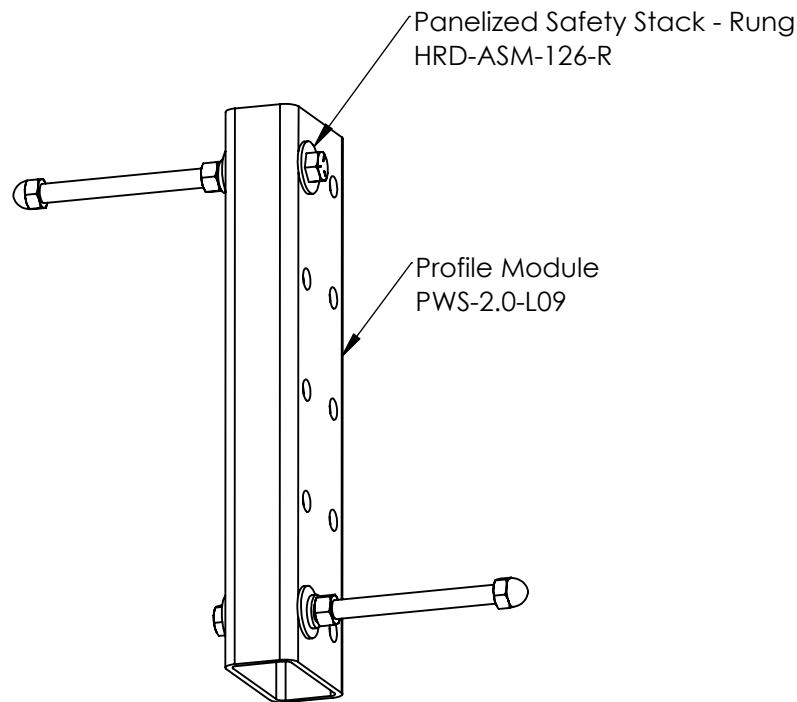
Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5				FINISH: None		Deburr and break sharp edges (if applicable)		DO NOT SCALE DRAWING		REVISION	
		NAME		SIGNATURE		DATE				TITLE: Panelized 2.0 Typicals - Hardware Stacks - Indoor	
DRAWN		Mark Hemphill				5/15/2023					
CHK'D											
APPV'D											
MFG											
Q.A											
								MATERIAL:		DWG NO. P2-0.10-I	
								As Noted			
										B	
								WEIGHT: 0.276302		SCALE: 1:1	
										SHEET 13 OF 19	

ITEM NO.	PartNo	DESCRIPTION	Material	Thickness	QTY Shown	Cut File(s)
1	PWS-2.0-C01	Spacer Block	Plywood	0.25	1	PWS-2.0-CNC-PLY-03
2	PWS-2.0-C02	Flange Wing	Plywood (7 Layer)	0.72	1	PWS-2.0-CNC-PLY-02
3	PWS-2.0-C03-A##	Flange Gusset - Arete - ## Degrees	Plywood (7 Layer)	0.72	1	PWS-2.0-CNC-PLY-04
4	PWS-2.0-C04-D##	Flange Gusset - Dihedral - ## Degrees	Plywood (7 Layer)	0.72	1	PWS-2.0-CNC-BIR-04
5	PWS-2.0-C05-5.75x94	Butt Joint - 5.75in Wide x 94in Long	AdvanTech	0.72	1	PWS-2.0-CNC-ADV-01
6	PWS-2.0-C07	Belay Bar Blocking	AdvanTech	0.72	1	PWS-2.0-CNC-ADV-02
7	PWS-2.0-C18-2x2	Butt Joint Alignment Block - 2x2	AdvanTech	0.72	1	PWS-2.0-CNC-ADV-04
8	PWS-2.0-C19	Access Hatch Flange	AdvanTech	0.72	1	PWS-2.0-CNC-PLY-06



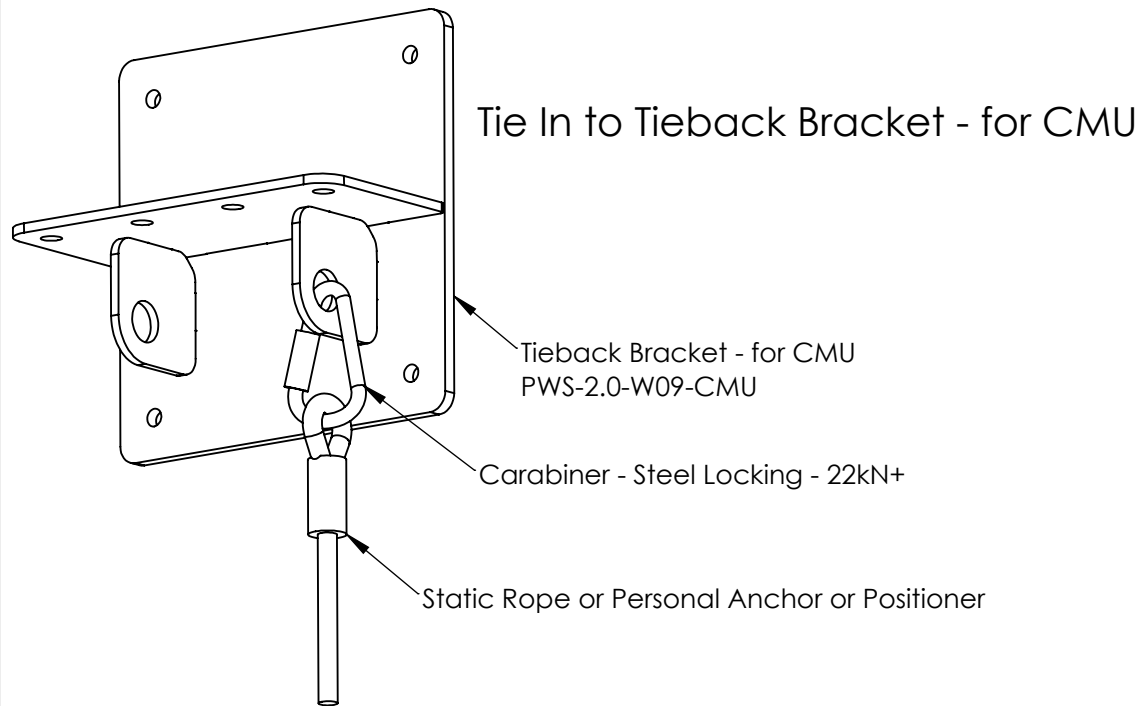
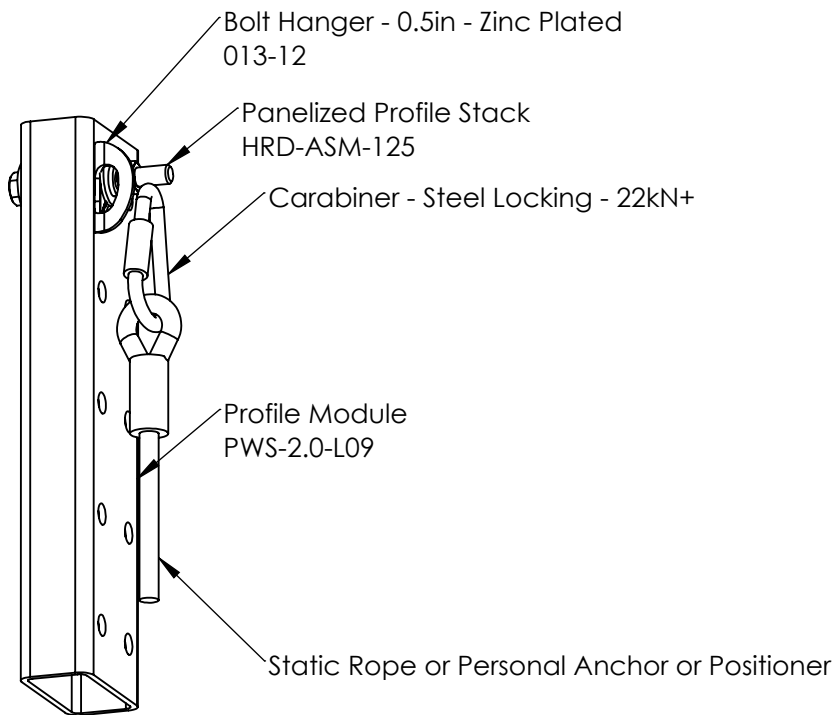
Notes:
1. Example instances of the Flange Gusset - Arete and Dihedral (items 3 and 4, respectively) are shown above. In reality, many different angles of each will be present on any given project.
2. Other configurations of item 8 are available (e.g. 2x4, 2x6) if/as desired by installers.

Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5				FINISH: Indoor: None Outdoor: CTG-OUT-SM		Deburr and break sharp edges (if applicable)		DO NOT SCALE DRAWING		REVISION	
		NAME	SIGNATURE	DATE				TITLE: Panelized 2.0 Typicals - Wood to CNC			
DRAWN	Mark Hemphill		4/25/2023								
CHK'D											
APPV'D											
MFG											
Q.A											
					MATERIAL: As Noted		DWG NO.		P2-0.11-I		B
					WEIGHT:		SCALE: 1:10			SHEET 15 OF 19	

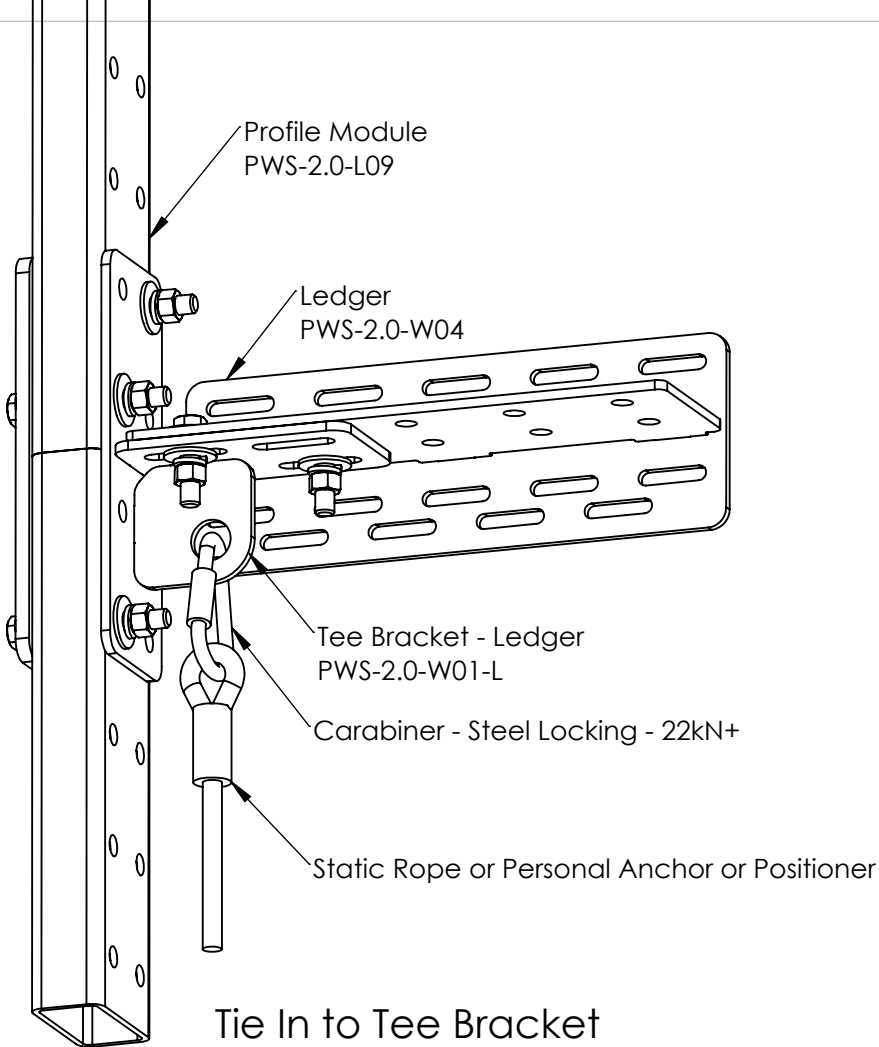
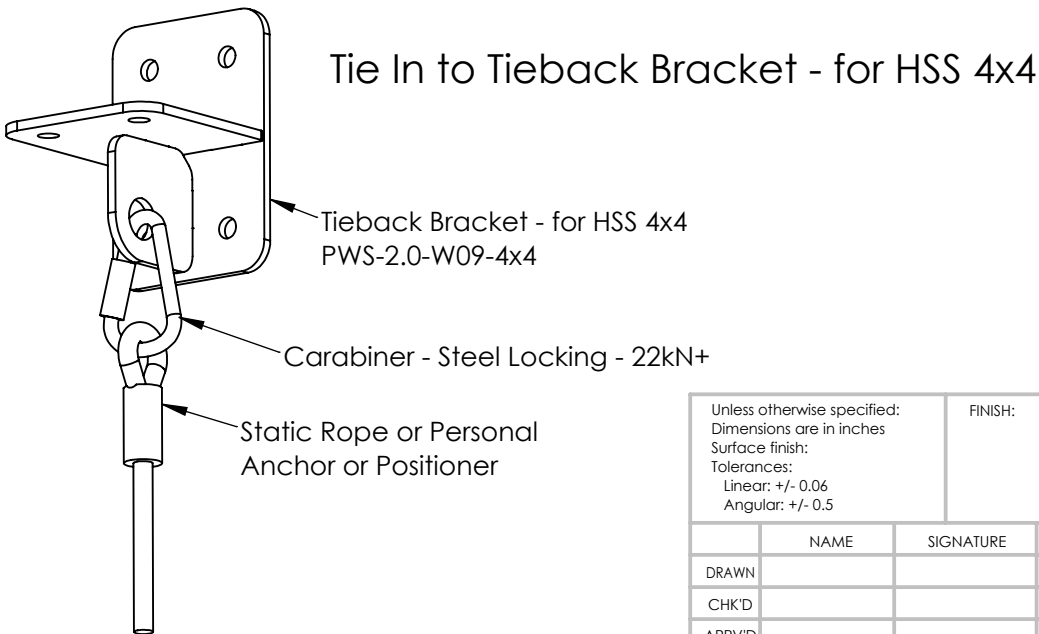


Rungs on Profile

Tie In to Profile



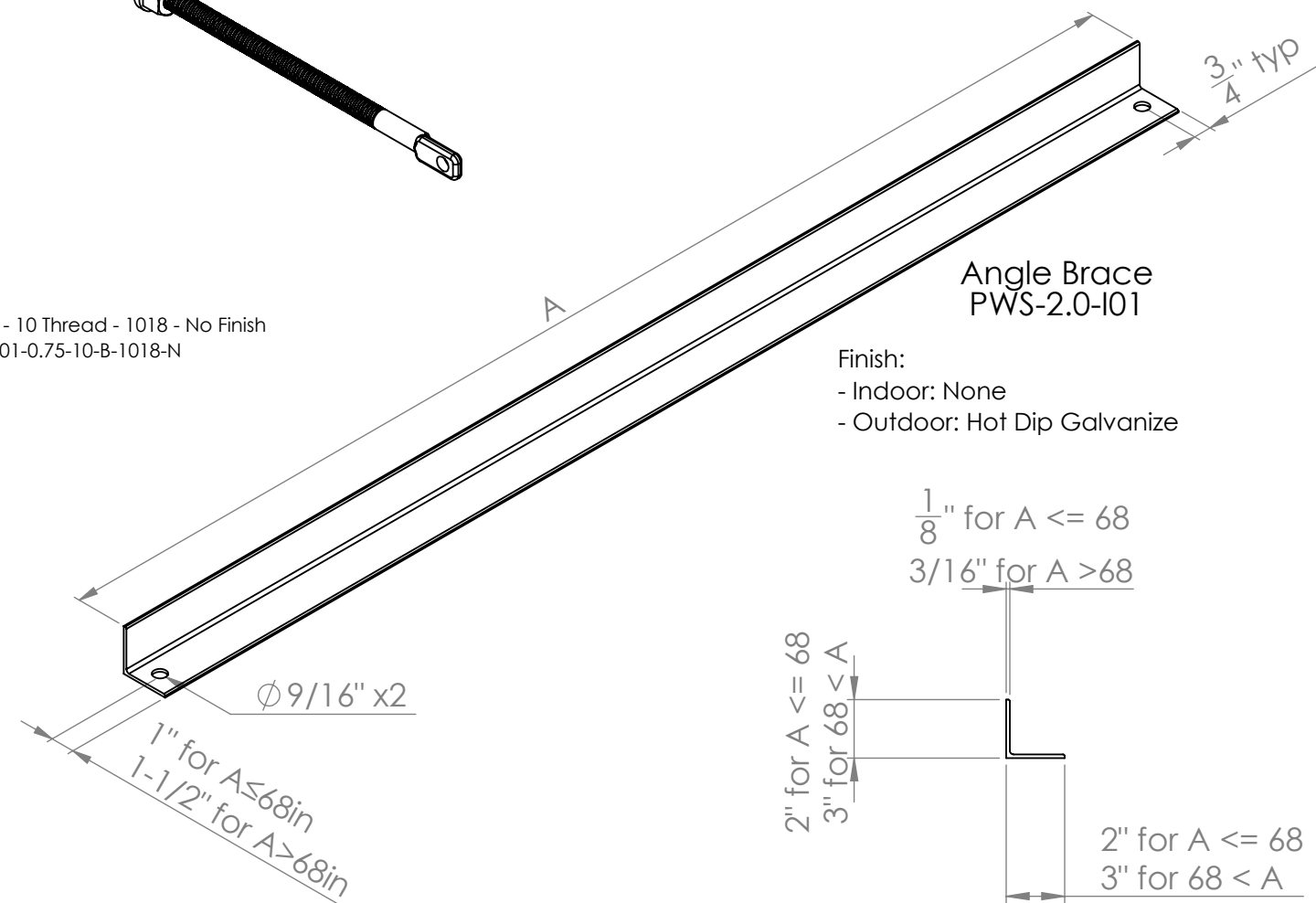
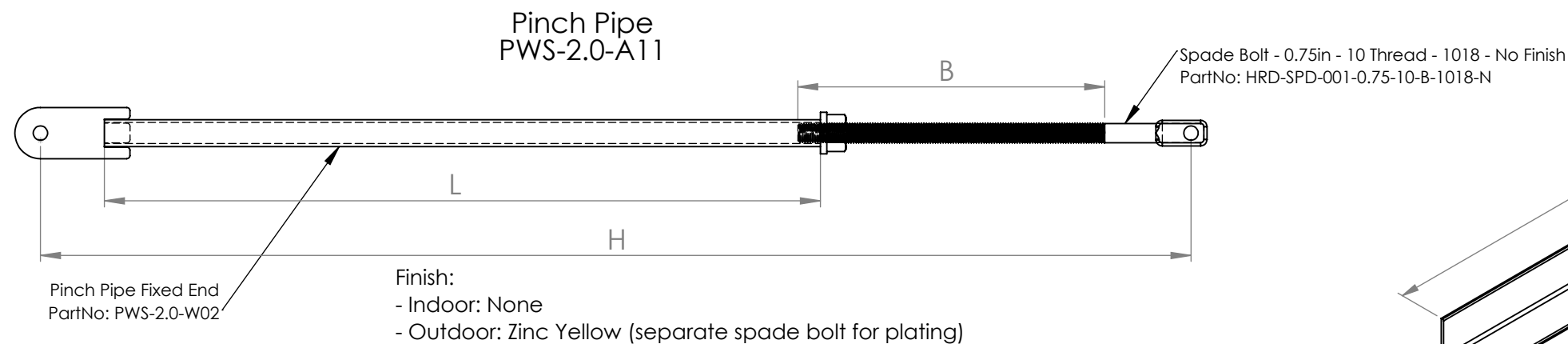
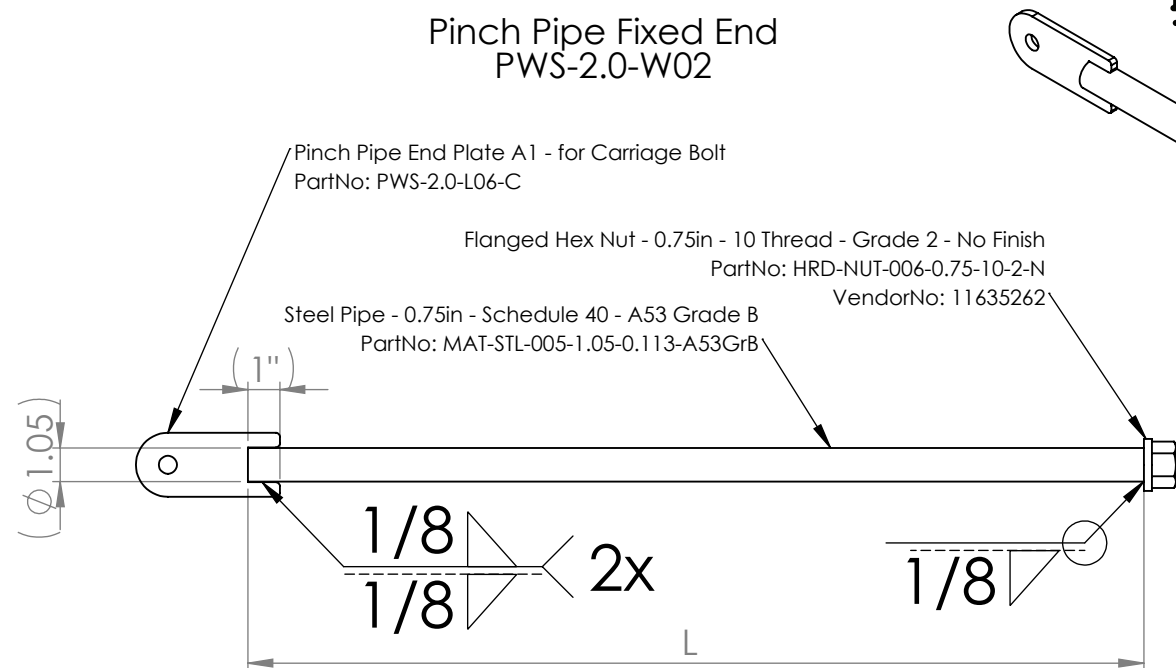
Notes:
1. For rungs and tie in to profiles, use any hole on any Profile Module.



Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5				FINISH:		Deburr and break sharp edges (if applicable)		DO NOT SCALE DRAWING		REVISION	
NAME		SIGNATURE		DATE				TITLE:		Panelized 2.0 Typical - Tie Off Points	
DRAWN											
CHK'D											
APPV'D											
MFG											
Q.A						MATERIAL:		DWG NO.		B	
								P2-0.12			
						WEIGHT:		SCALE: 1:5		SHEET 17 OF 19	



Max Length	Angle Size
67.5in (66in hole to hole)	L2x2x1/8
109.5in (108in hole to hole)	L3x3x3/16
* Pinch pipes up to 36in hole to hole may be used as compression members	
* Angles may be substituted for pinch pipes in any locations with max lengths noted above	

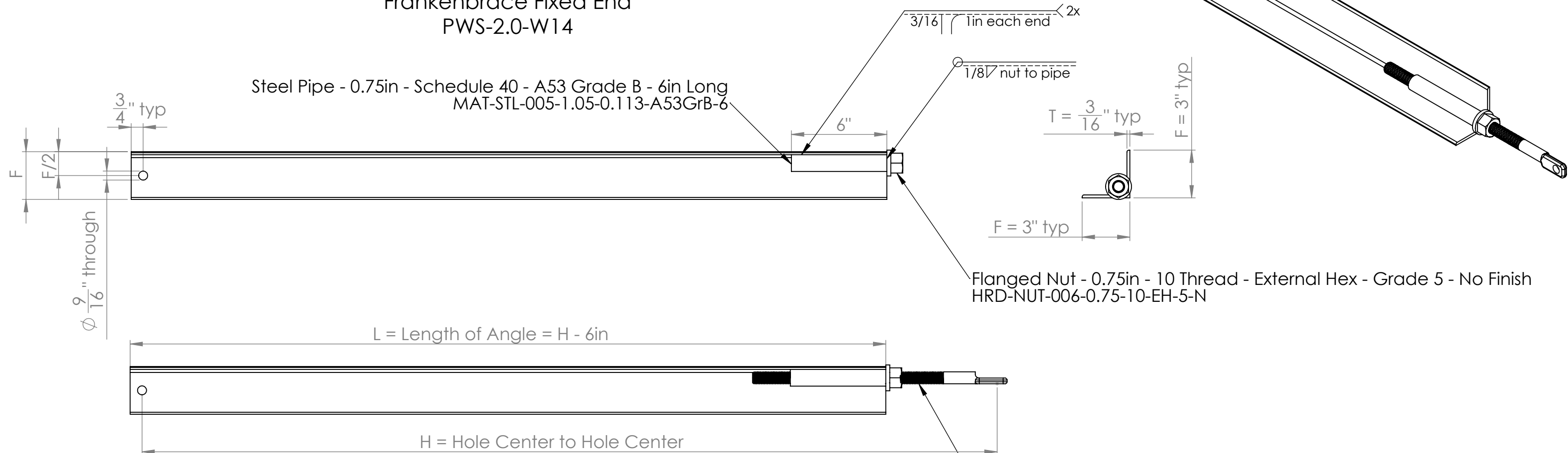


S = Pinch Pipe Size	H = Hole to Hole (in)		L = Length of Pipe (in)	B = Bolt Thread Length (in)
	Min	Max		
SA	13	17	6	6
SB	15	22	8	
SC	19	29	12	
SD	27	37	20	12
SE	35	45	28	
SF	43	53	36	
SG	51	61	44	
SH	59	69	52	
SI	67	77	60	
SJ	75	85	68	
SK	83	93	76	
SL	91	101	84	

Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5				FINISH:				Deburr and break sharp edges (if applicable)				DO NOT SCALE DRAWING				REVISION									
		NAME		SIGNATURE		DATE								TITLE:											
DRAWN														Panelized 2.0 Typicals - Bracing Members 1											
CHK'D																									
APPV'D																									
MFG																									
Q.A																									
								MATERIAL:								DWG NO.				P2-0.13				B	
														WEIGHT: 5.209772				SCALE: 1:6				SHEET 18 OF 19			

Frankenbrace Fixed End PWS-2.0-W14

Steel Pipe - 0.75in - Schedule 40 - A53 Grade B - 6in Long
MAT-STL-005-1.05-0.113-A53GrB-6



Frankenbrace PWS-2.0-A50

Spade Bolt - 0.75in - 10 Thread - 12in Threading - 1018 - No Finish
HRD-SPD-001-0.75-10-12-1018-N
Substitute for longer or shorter threading if/as desired (e.g. 6in or 18in)

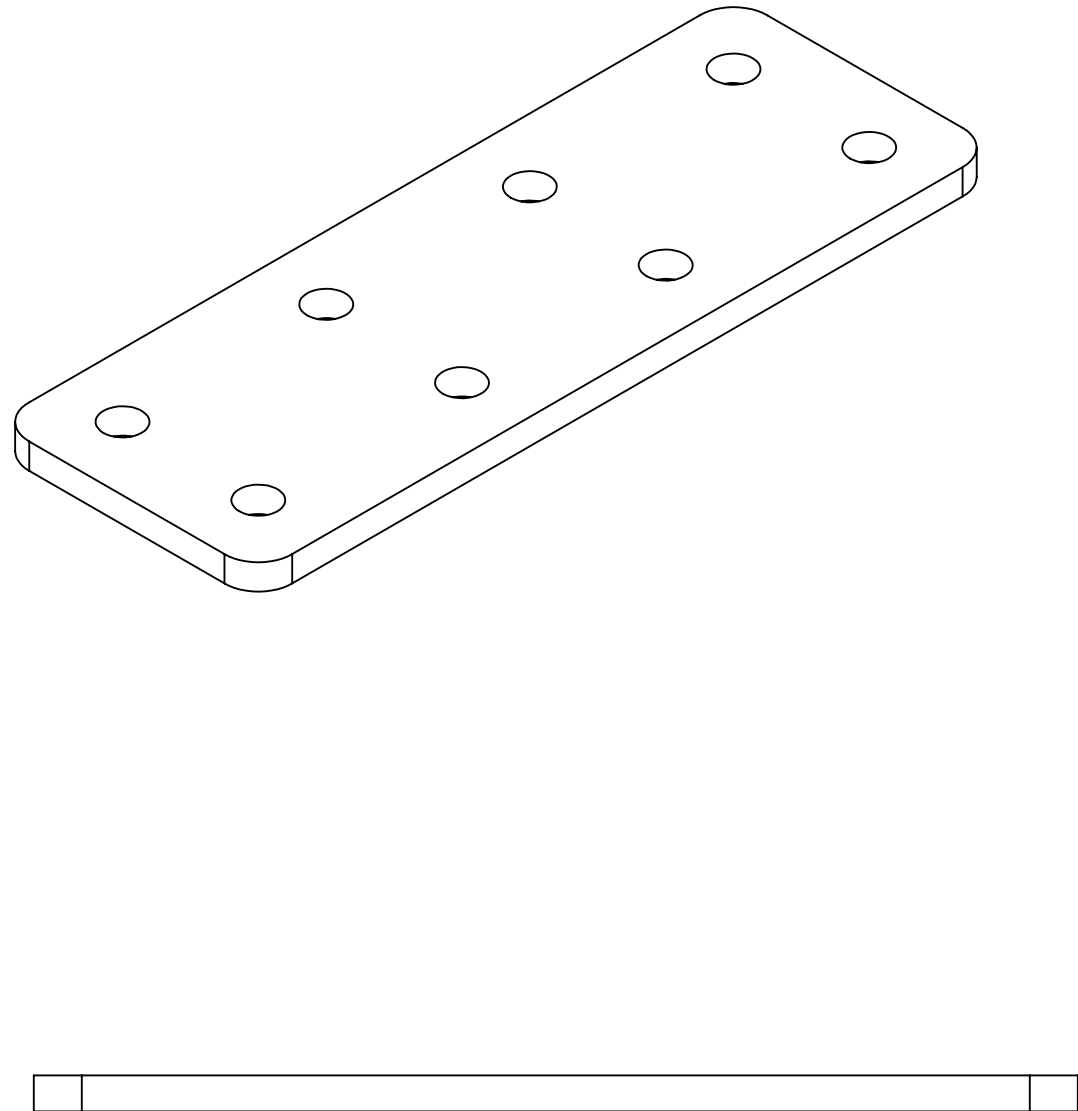
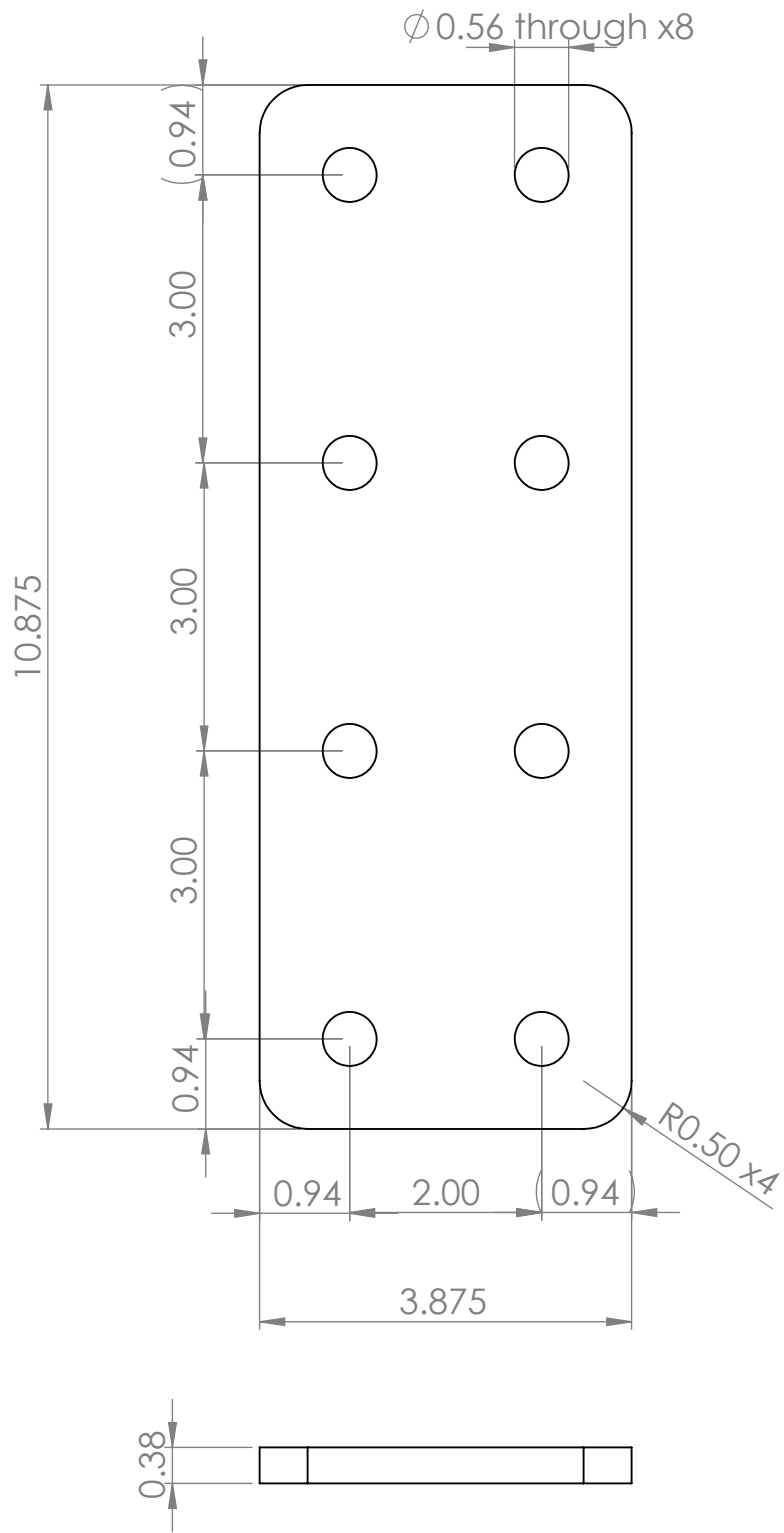
Notes:

- Use this member type if/when Bar Belays require double bracing, articulated profiles require out-of-plane connections, and anywhere else where a larger (yet still adjustable) member is needed.
- The steel angle forming the main body of this member is shown as L3x3x0.1875in by default. If/when required by engineering for specific members on a given project, that may be upsized (for exmample, to L4x4x0.25in).

Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5			FINISH: Indoor: None Outdoor: Zinc Yellow			Deburr and break sharp edges (if applicable)			DO NOT SCALE DRAWING			REVISION		
	NAME		SIGNATURE		DATE				TITLE: Panelized 2.0 Typicals - Bracing Members 2					
DRAWN														
CHK'D														
APPV'D														
MFG														
Q.A						MATERIAL: As Noted			DWG NO.			P2-0.14		B
						WEIGHT:			SCALE: 1:6			SHEET 19 OF 19		

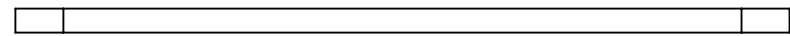
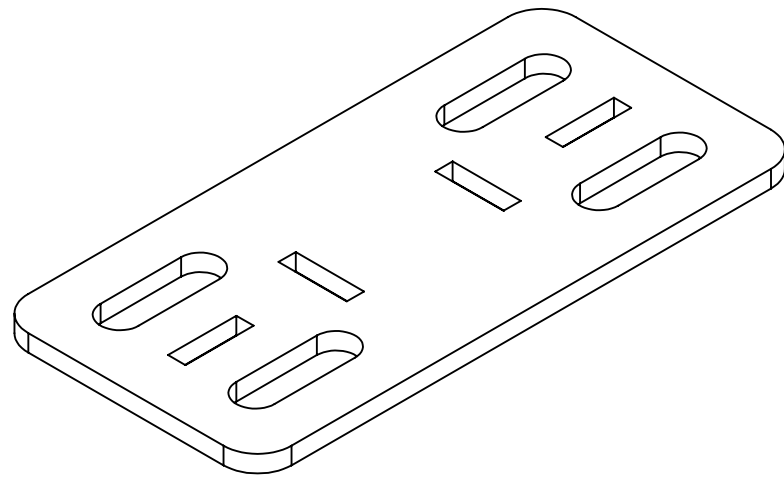
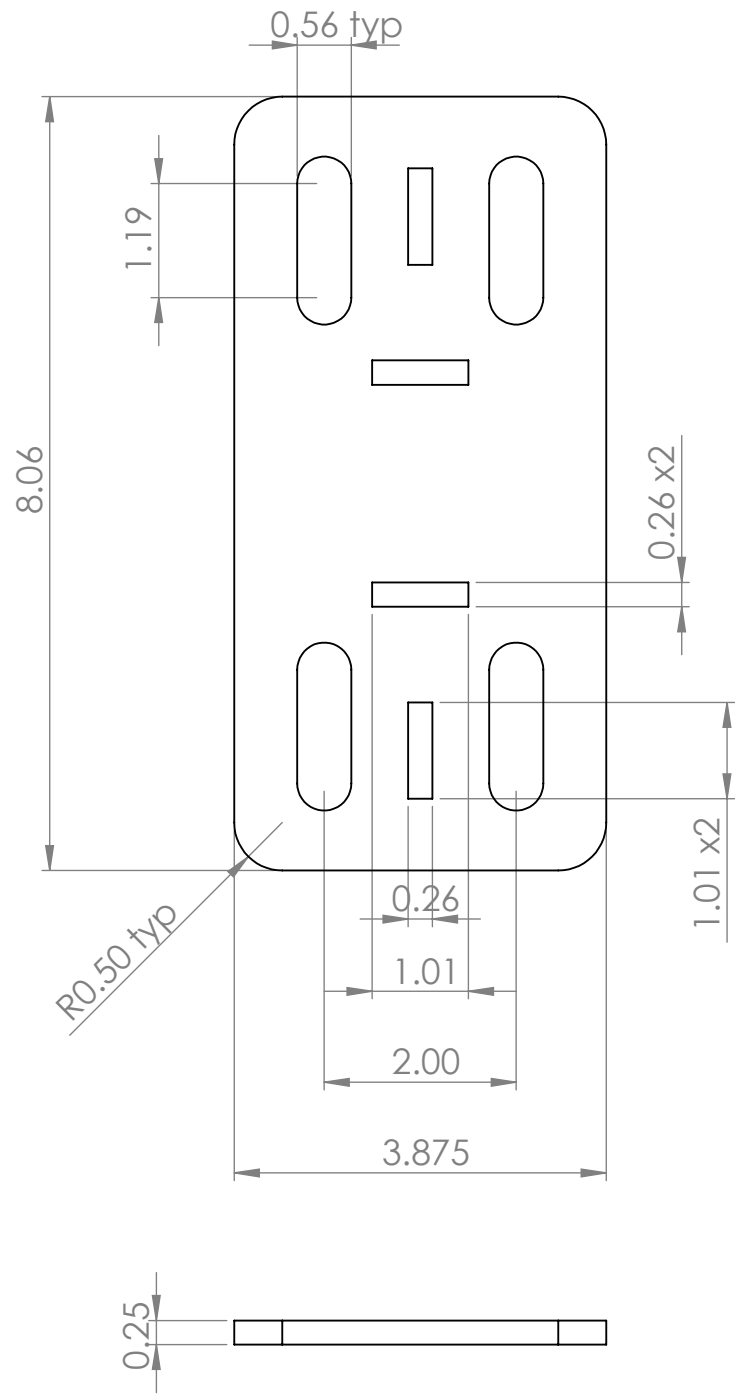
Panelized 2.0

Lasered Parts



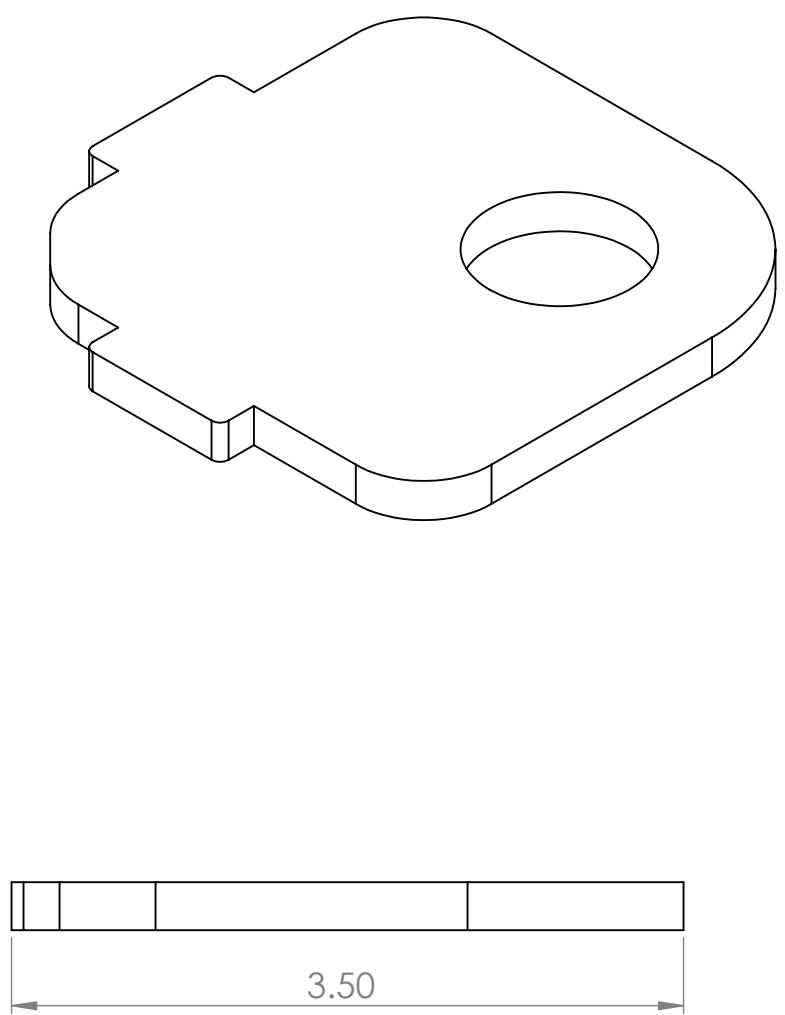
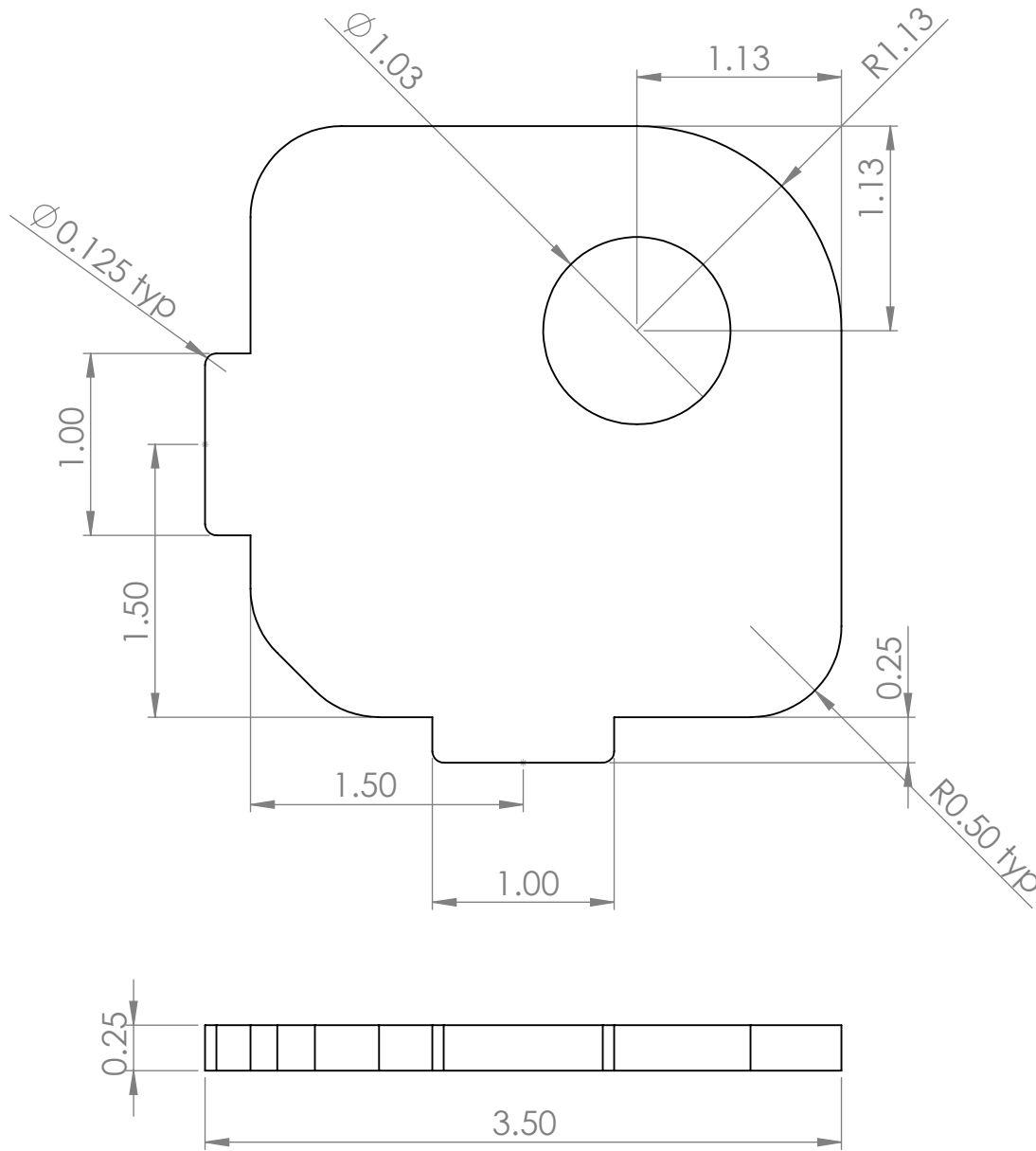
- Notes:
1. Manufacture from customer-supplied data (e.g. laser-cut from dxf file).
 2. Deburr and break all sharp edges.

Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5			FINISH: None			Deburr and break sharp edges (if applicable)	DO NOT SCALE DRAWING	REVISION E
	NAME	SIGNATURE	DATE				TITLE: Straight Splice Plate	
DRAWN	Mark Hemphil		11/9/2022					
CHK'D								
APPV'D								
MFG								
Q.A						MATERIAL: ASTM A572 Grade 50 Steel	DWG NO. PWS-2.0-L01	B
						WEIGHT: 4.247392	SCALE: 1:2	SHEET 1 OF 1



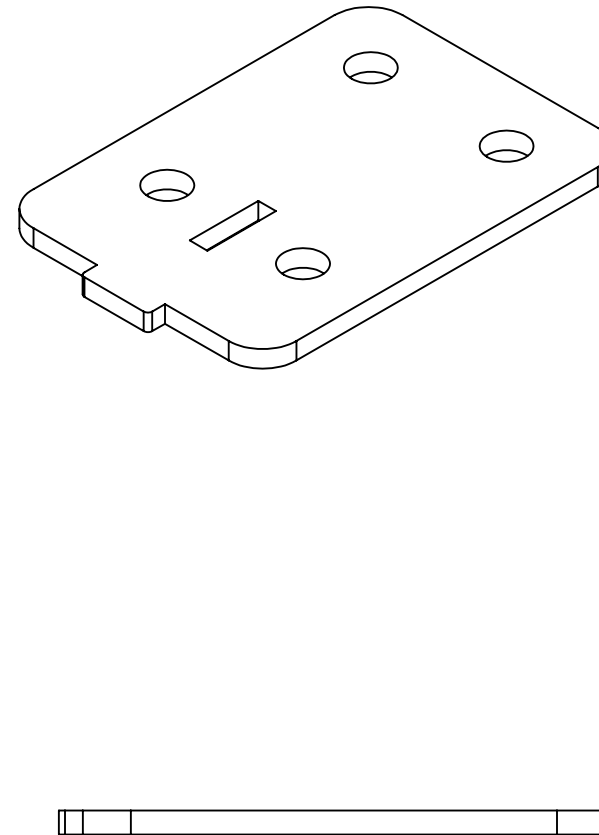
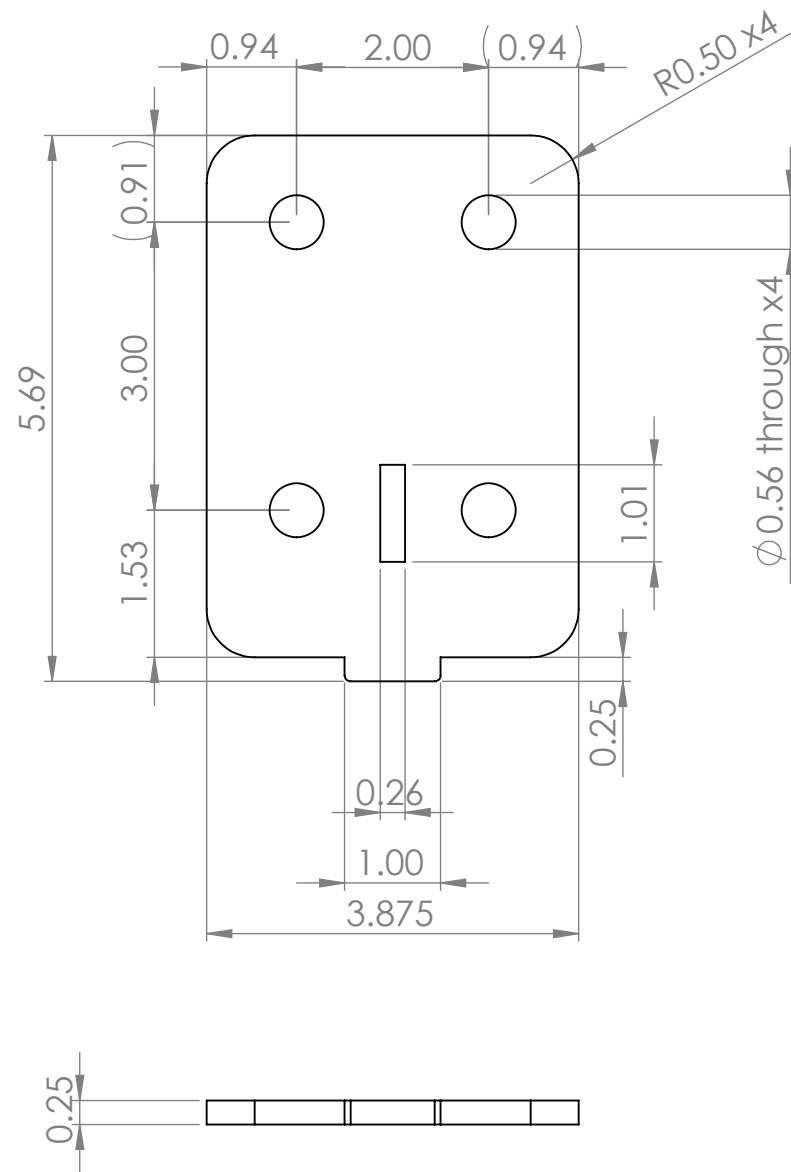
- Notes:
1. Manufacture from customer-supplied data (e.g. laser-cut from dxf file).
 2. Deburr and break all sharp edges.

Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5			FINISH: None			Deburr and break sharp edges (if applicable)	DO NOT SCALE DRAWING	REVISION C
	NAME	SIGNATURE	DATE				TITLE: Base Plate - Profile	
DRAWN	Mark Hemphil		11/9/2022					
CHK'D								
APPV'D								
MFG								
Q.A						MATERIAL: ASTM A36 Steel	DWG NO. PWS-2.0-L03-P	B
						WEIGHT: 1.867259	SCALE: 1:2	SHEET 1 OF 6



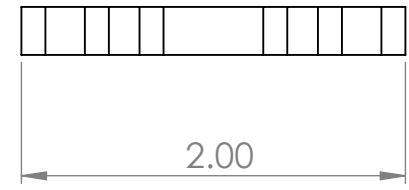
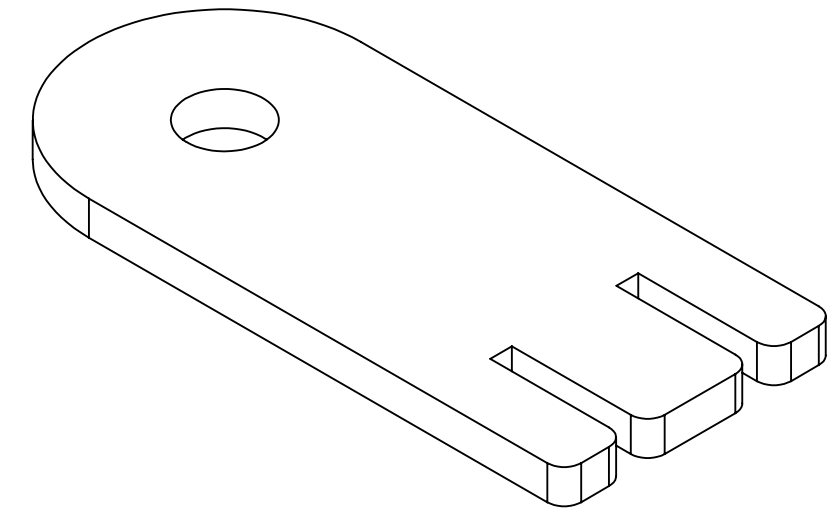
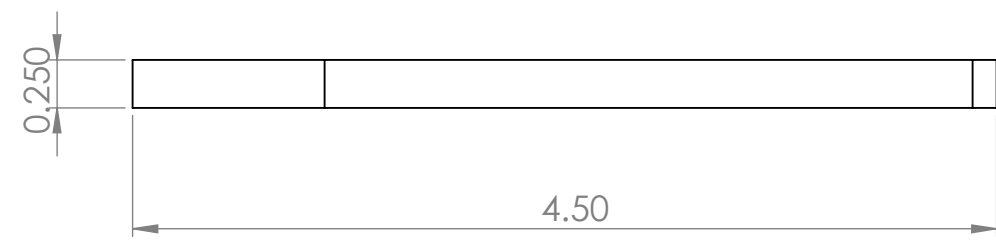
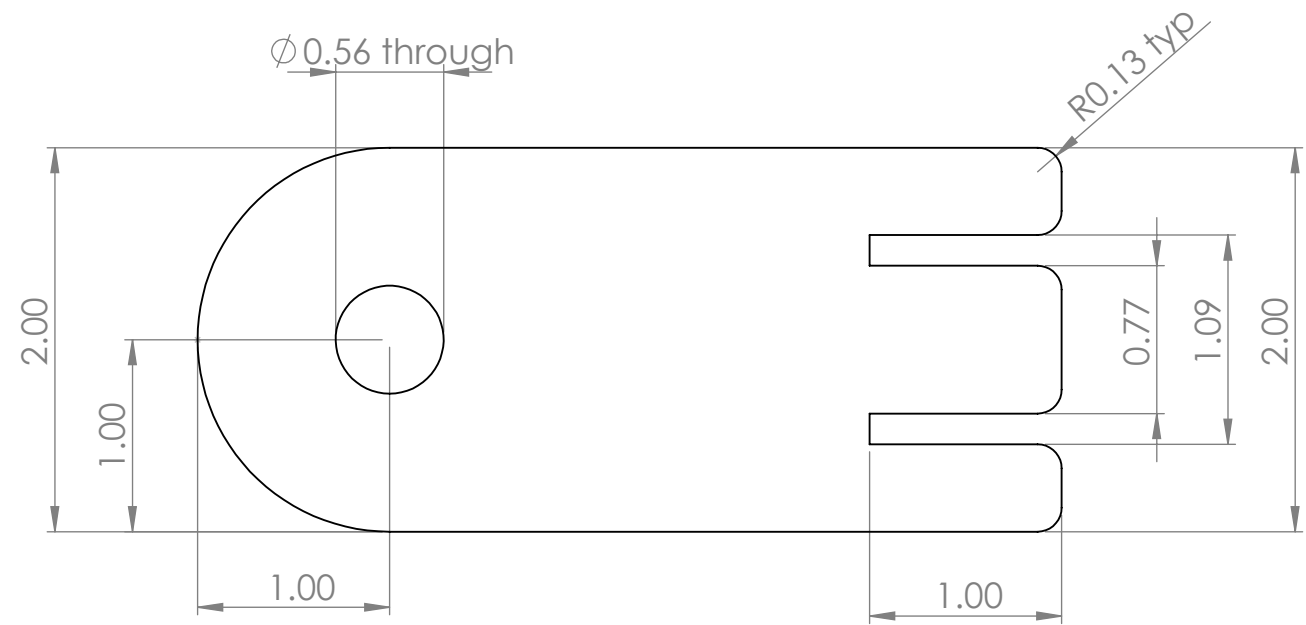
- Notes:
1. Manufacture from customer-supplied data (e.g. laser-cut from dxf file).
 2. Deburr and break all sharp edges.

Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5			FINISH: None			Deburr and break sharp edges (if applicable)	DO NOT SCALE DRAWING	REVISION D
	NAME	SIGNATURE	DATE				TITLE: Bracket Gusset	
DRAWN	Mark Hemphil		2/9/2023					
CHK'D								
APPV'D								
MFG								
Q.A						MATERIAL: ASTM A36 Steel	DWG NO. PWS-2.0-L04	B
						WEIGHT: 0.688526	SCALE: 1:1	SHEET 1 OF 1



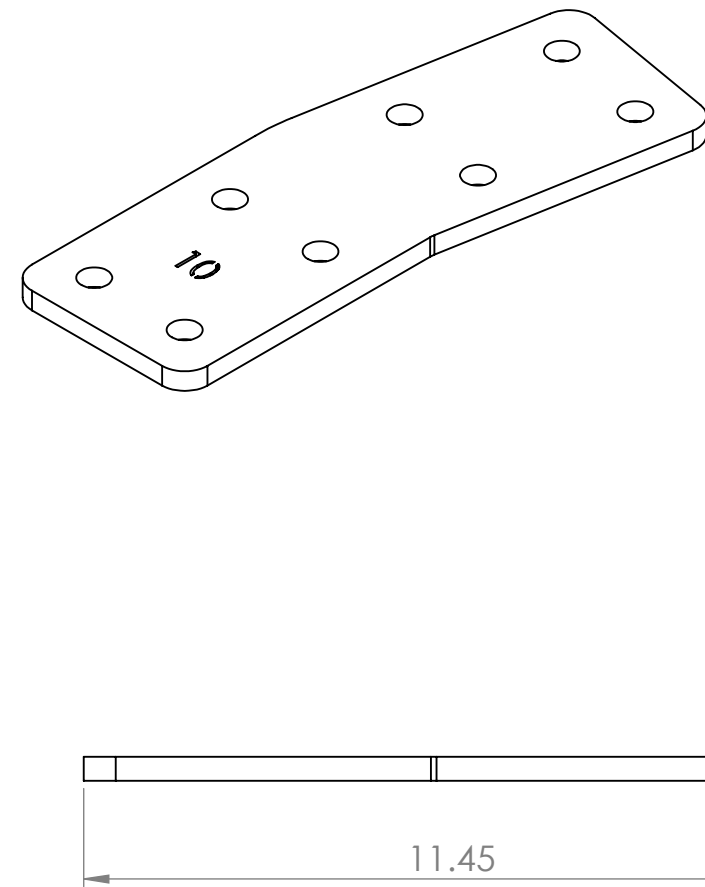
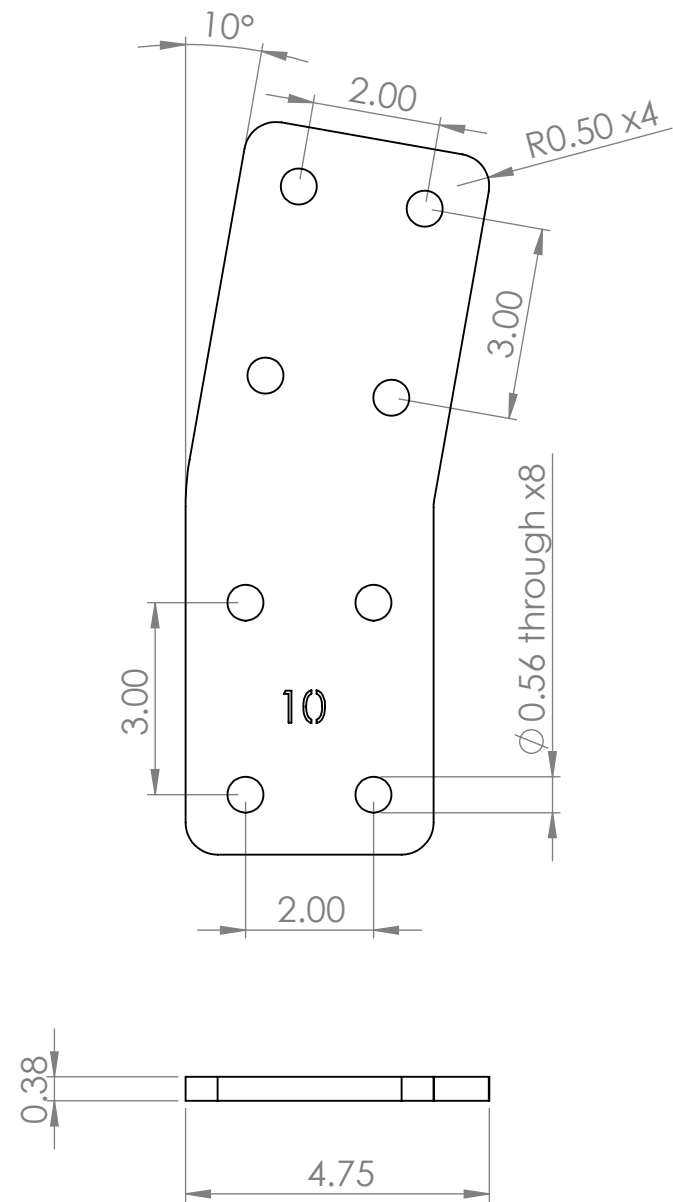
- Notes:
1. Manufacture from customer-supplied data (e.g. laser-cut from dxf file).
 2. Deburr and break all sharp edges.

Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5			FINISH: None			Deburr and break sharp edges (if applicable)	DO NOT SCALE DRAWING	REVISION C
	NAME	SIGNATURE	DATE				TITLE: Profile Receiver	
DRAWN	Mark Hemphil		1/24/2023					
CHK'D								
APPV'D								
MFG								
Q.A						MATERIAL: ASTM A36 Steel	DWG NO. PWS-2.0-L05	B
						WEIGHT: 1.407178	SCALE: 1:2	SHEET 1 OF 1



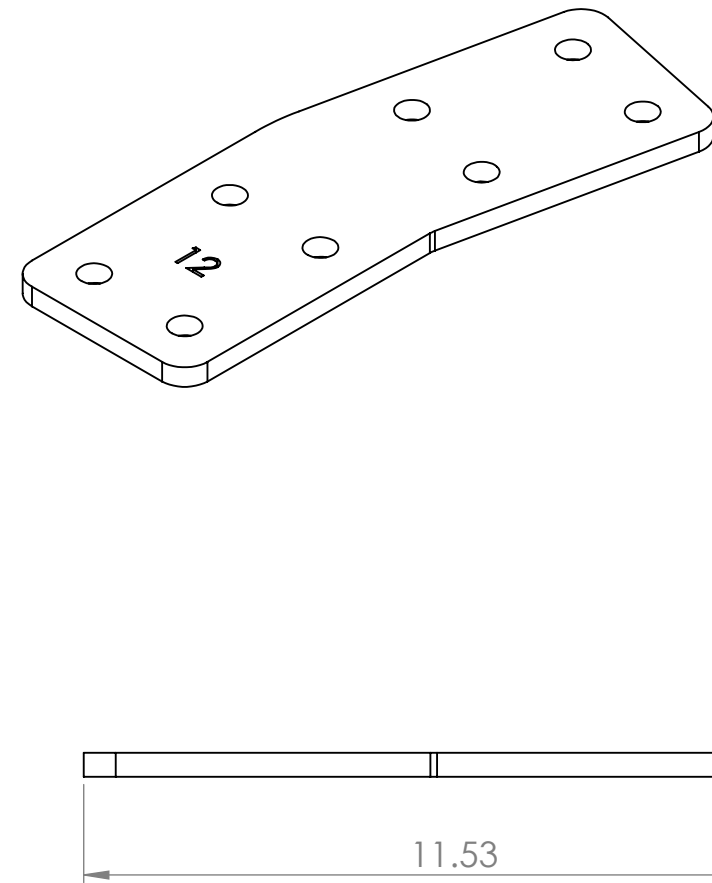
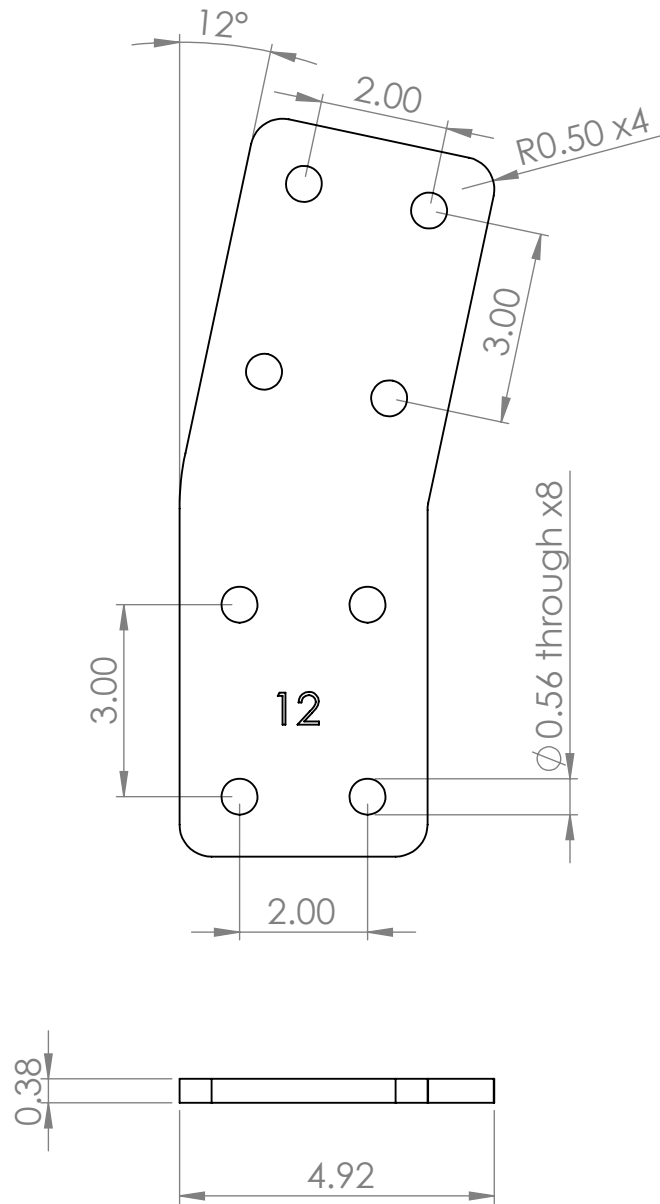
- Notes:
1. Manufacture from customer-supplied data (e.g. laser-cut from dxf file).
 2. Deburr and break all sharp edges.

Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5			FINISH: None			Deburr and break sharp edges (if applicable)			DO NOT SCALE DRAWING			REVISION G									
												TITLE: Pinch Pipe End Plate A1									
	NAME		SIGNATURE		DATE																
DRAWN	Mark Hemphil																				
CHK'D																					
APPV'D																					
MFG																					
Q.A							MATERIAL: ASTM A36 Steel					DWG NO. PWS-2.0-L06					B				
							WEIGHT: 0.57					SCALE: 1:1					SHEET 1 OF 1				



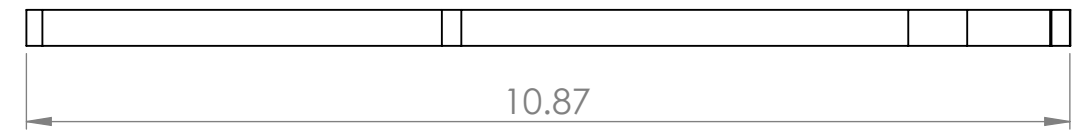
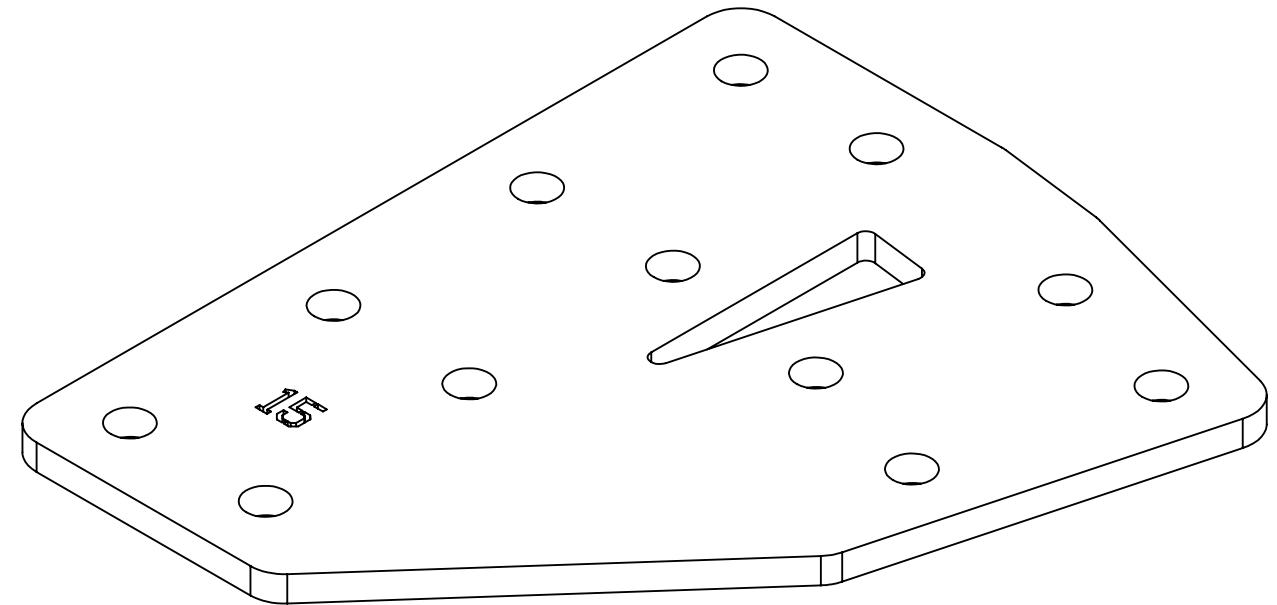
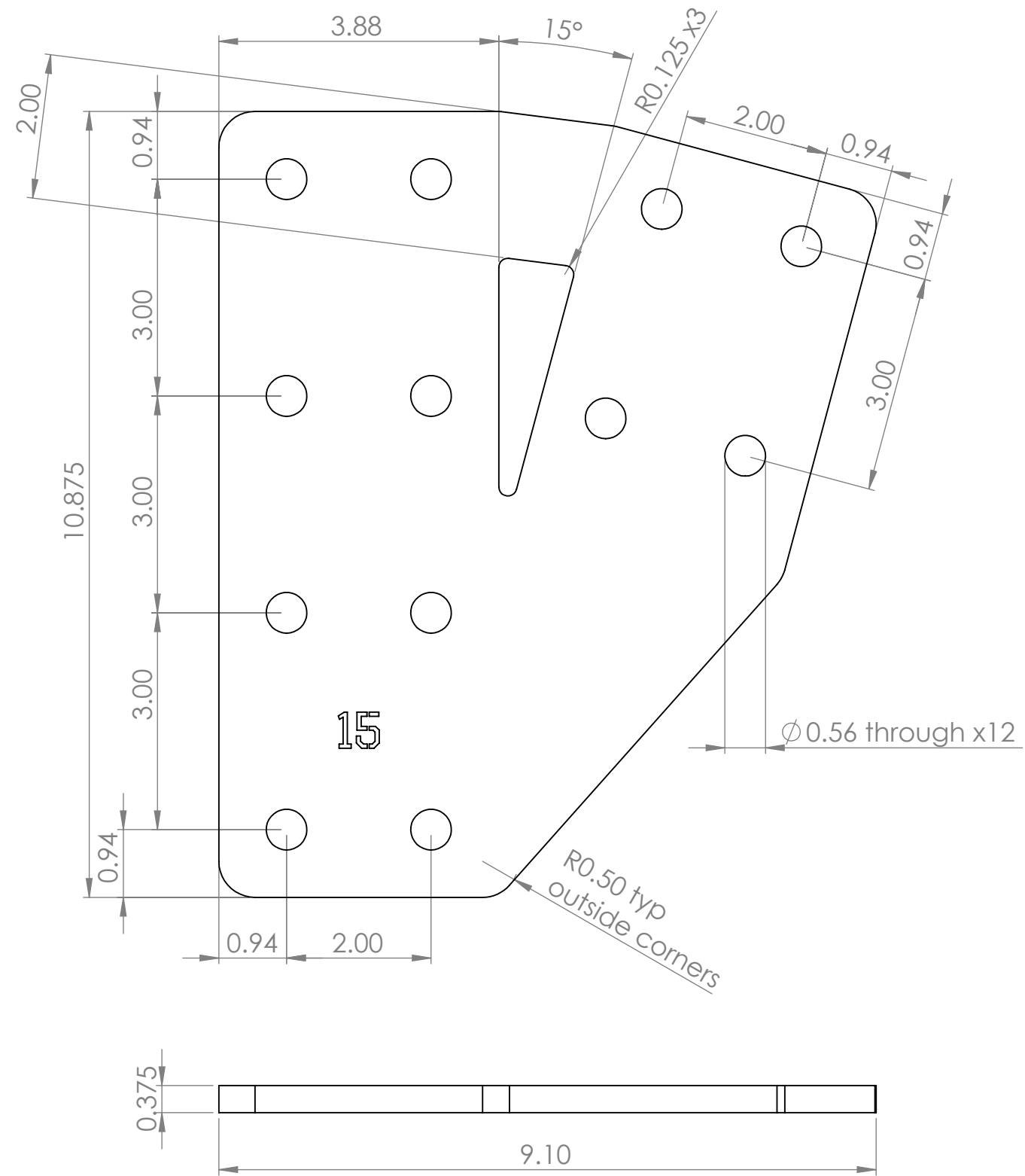
- Notes:
- 1. Manufacture from customer-supplied data (e.g. laser-cut from dxf file).
 - 2. Deburr and break all sharp edges.

Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5			FINISH: None			Deburr and break sharp edges (if applicable)			DO NOT SCALE DRAWING			REVISION D								
			NAME			SIGNATURE			DATE						TITLE: Articulated Splice Plate - 10 Degrees					
DRAWN			Mark Hemphil						11/9/2022											
CHK'D																				
APPV'D																				
MFG																				
Q.A																				
									MATERIAL:			DWG NO.			B					
									ASTM A572 Grade 50 Steel			PWS-2.0-L08-10								
												WEIGHT: 4.404211			SCALE: 1:3			SHEET 4 OF 12		



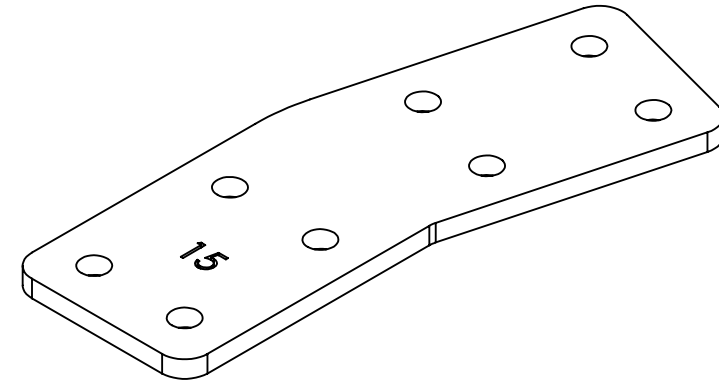
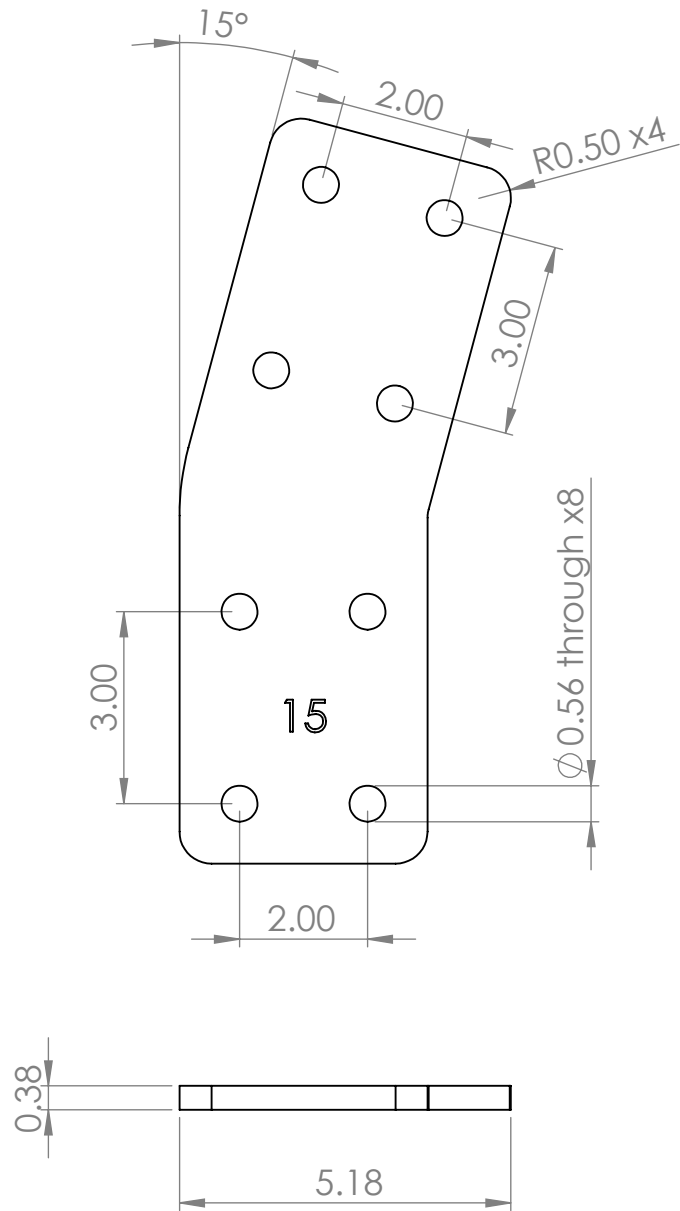
- Notes:
1. Manufacture from customer-supplied data (e.g. laser-cut from dxf file).
 2. Deburr and break all sharp edges.

Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5			FINISH: None			Deburr and break sharp edges (if applicable)	DO NOT SCALE DRAWING		REVISION D			
							TITLE: Articulated Splice Plate - 12 Degrees					
	NAME	SIGNATURE		DATE								
DRAWN	Mark Hemphil			11/9/2022								
CHK'D												
APPV'D												
MFG												
Q.A					MATERIAL:		DWG NO.			B		
					ASTM A572 Grade 50 Steel		PWS-2.0-L08-12					
					WEIGHT: 4.431842		SCALE: 1:3		SHEET 5 OF 12			



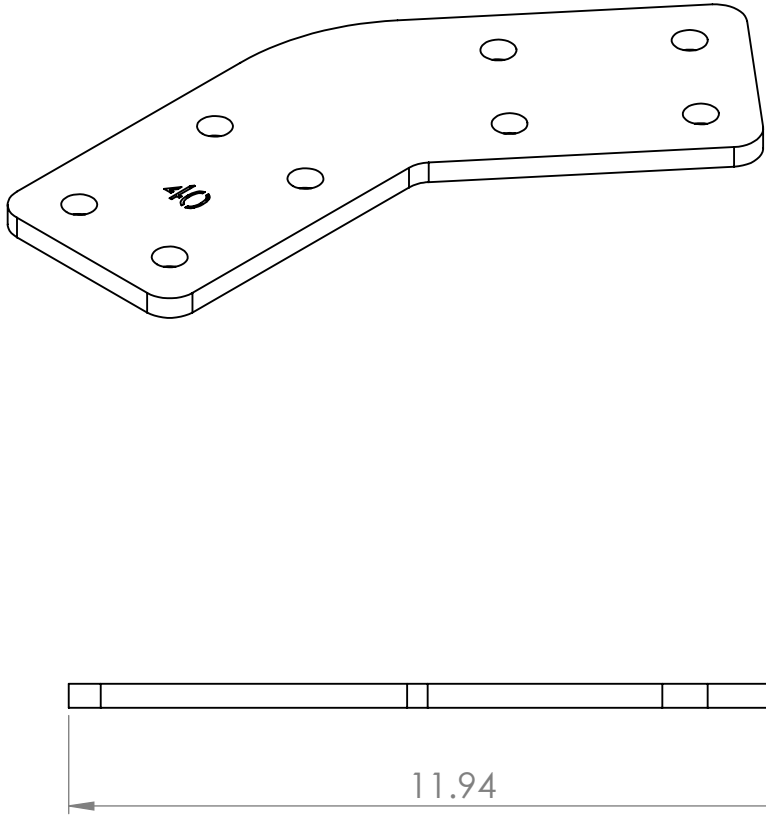
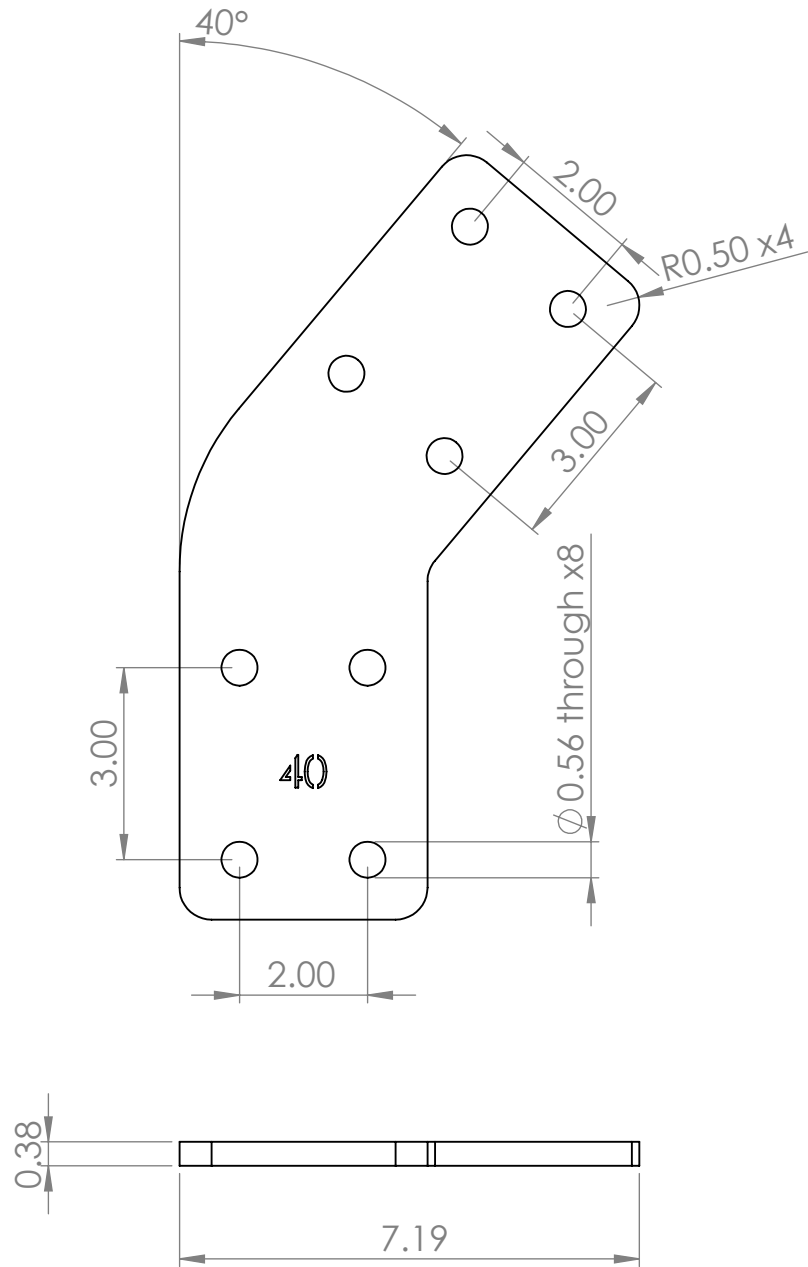
- Notes:
1. Manufacture from customer-supplied data (e.g. laser-cut from DXF file).
 2. Deburr and break all sharp edges.

Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5			FINISH: None			Deburr and break sharp edges (if applicable)	DO NOT SCALE DRAWING		REVISION B		
	NAME	SIGNATURE	DATE				TITLE: Branching Articulated Splice Plate - 15 Degrees				
DRAWN	Mark Hemphill		3/28/2025								
CHK'D											
APPV'D											
MFG											
Q.A											
				MATERIAL:			DWG NO.		PWS-2.0-L38-15		
				ASTM A572 Grade 50 Steel							
				WEIGHT: 7.808103			SCALE: 1:2		SHEET 1 OF 1		



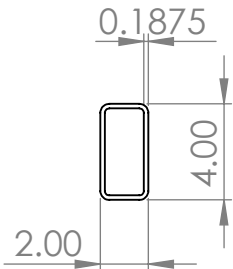
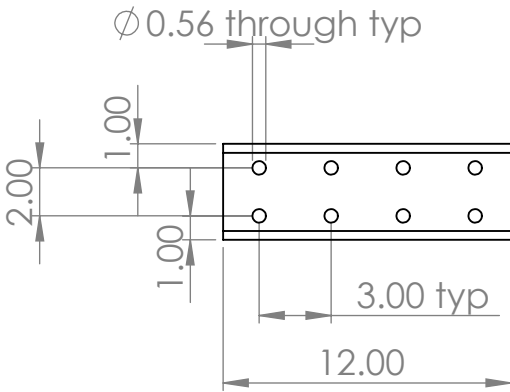
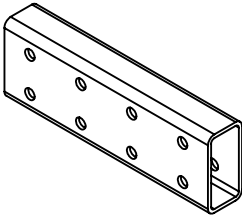
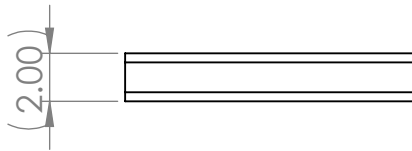
- Notes:
1. Manufacture from customer-supplied data (e.g. laser-cut from dxf file).
 2. Deburr and break all sharp edges.

Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5			FINISH: None			Deburr and break sharp edges (if applicable)	DO NOT SCALE DRAWING		REVISION D		
	NAME	SIGNATURE	DATE				TITLE: Articulated Splice Plate - 15 Degrees				
DRAWN	Mark Hemphil		11/9/2022								
CHK'D											
APPV'D											
MFG											
Q.A					MATERIAL: ASTM A572 Grade 50 Steel		DWG NO. PWS-2.0-L08-15		B		
						WEIGHT: 4.473550		SCALE: 1:3		SHEET 6 OF 12	



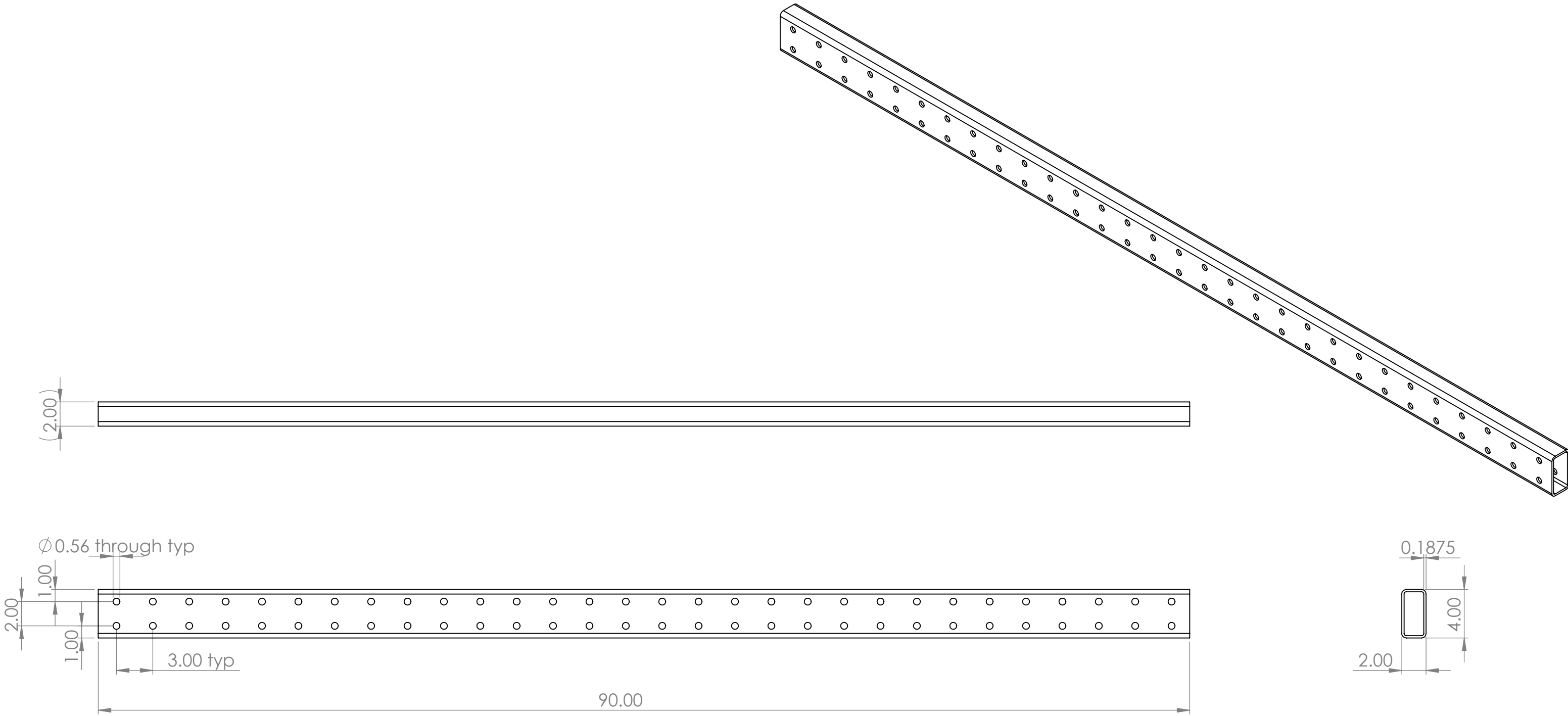
- Notes:
1. Manufacture from customer-supplied data (e.g. laser-cut from dxf file).
 2. Deburr and break all sharp edges.

Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5			FINISH: None			Deburr and break sharp edges (if applicable)			DO NOT SCALE DRAWING			REVISION D											
			NAME			SIGNATURE			DATE						TITLE: Articulated Splice Plate - 40 Degrees								
DRAWN			Mark Hemphil						11/9/2022														
CHK'D																							
APPV'D																							
MFG																							
Q.A																							
												MATERIAL:			DWG NO.			B					
												ASTM A572 Grade 50 Steel			PWS-2.0-L08-40								
															WEIGHT: 4.820195			SCALE: 1:3			SHEET 11 OF 12		



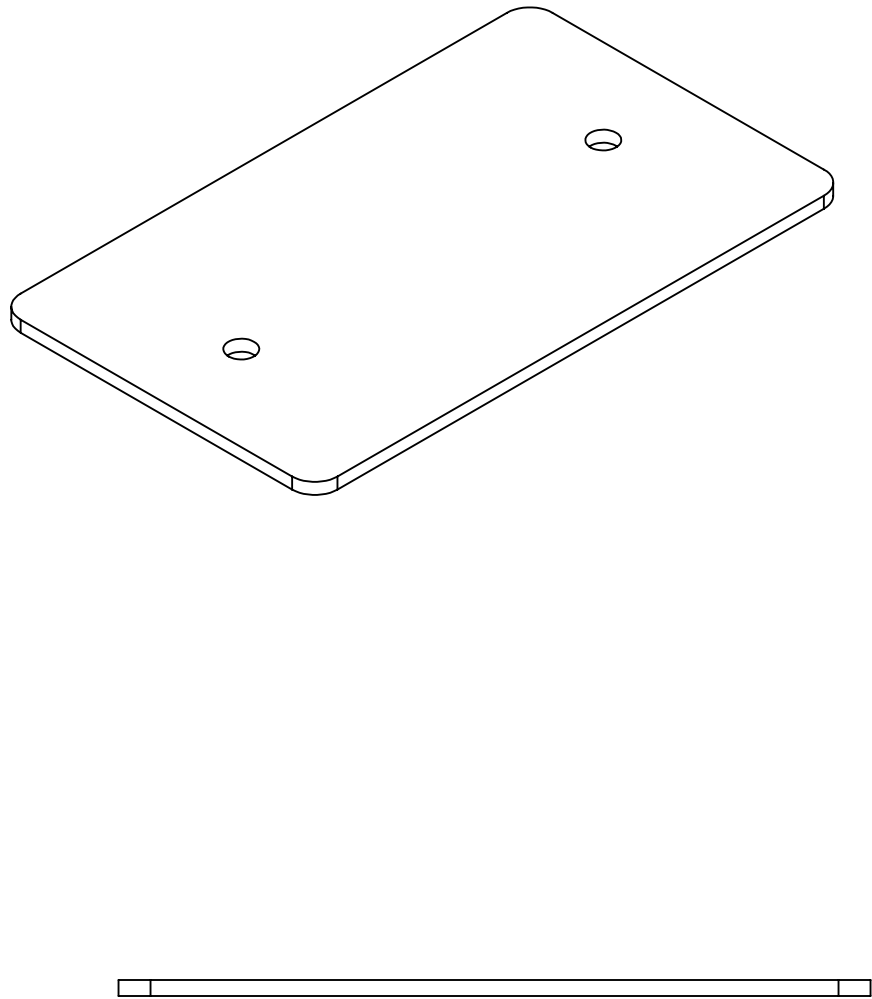
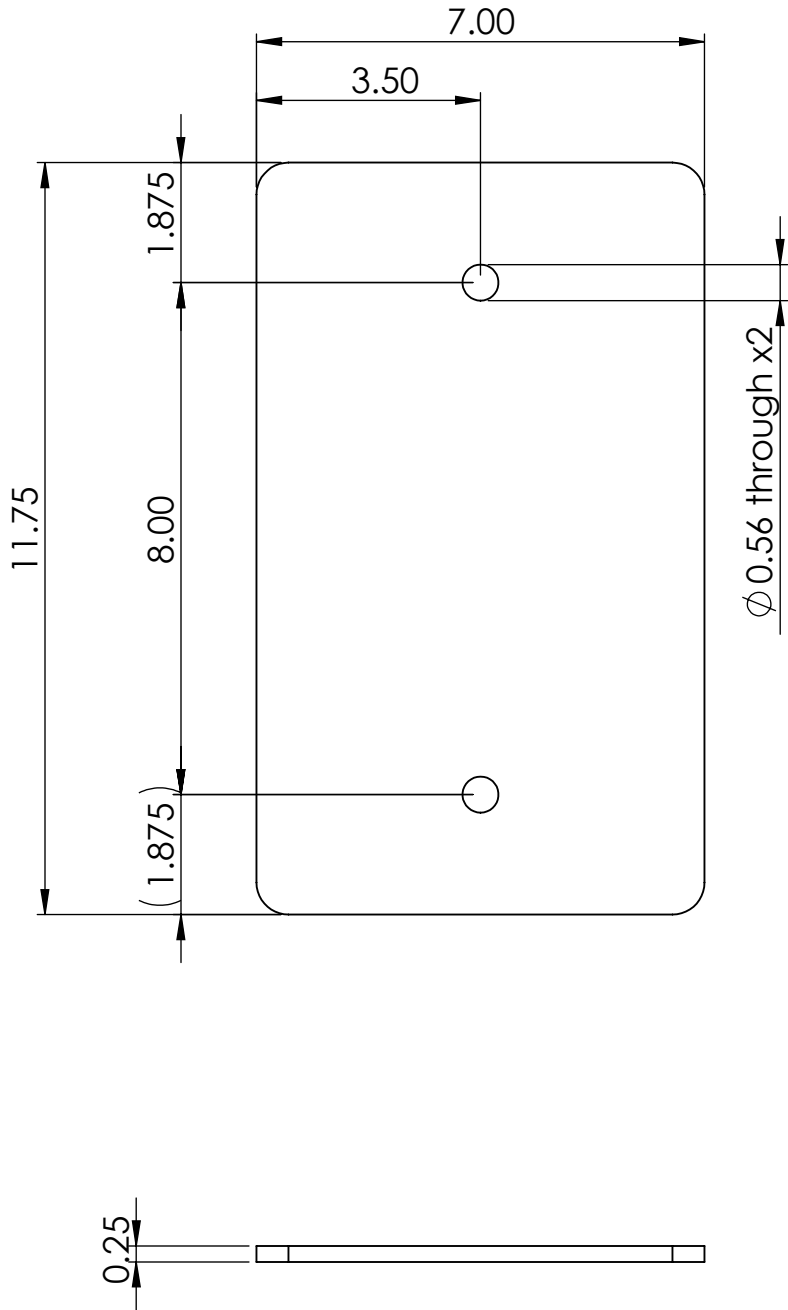
Notes:
1. Manufacture from customer supplied data (e.g. tube laser from Solidworks part file).

Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5			FINISH: Indoor: None Outdoor: Hot Dip Galvanize			DO NOT SCALE DRAWING			REVISION		
						TITLE: Profile Module - 12in Long					
DRAWN	Mark Hemphil		SIGNATURE		DATE		1/27/2023				
CHK'D											
APPV'D											
MFG											
Q.A											
						MATERIAL:			DWG NO.		
						ASTM A500 Grade B Steel			PWS-2.0-L09-12		
									B		
						WEIGHT: 6.659068			SCALE: 1:8		
									SHEET 2 OF 2		



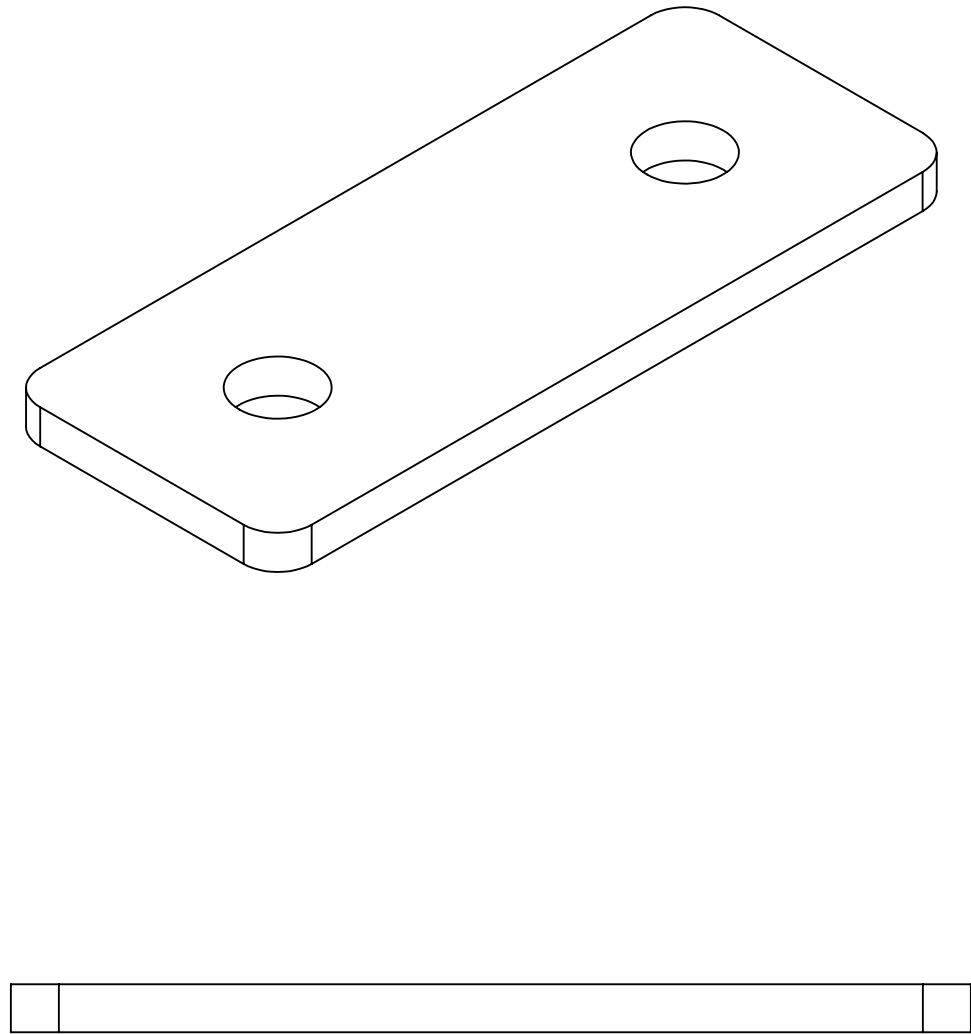
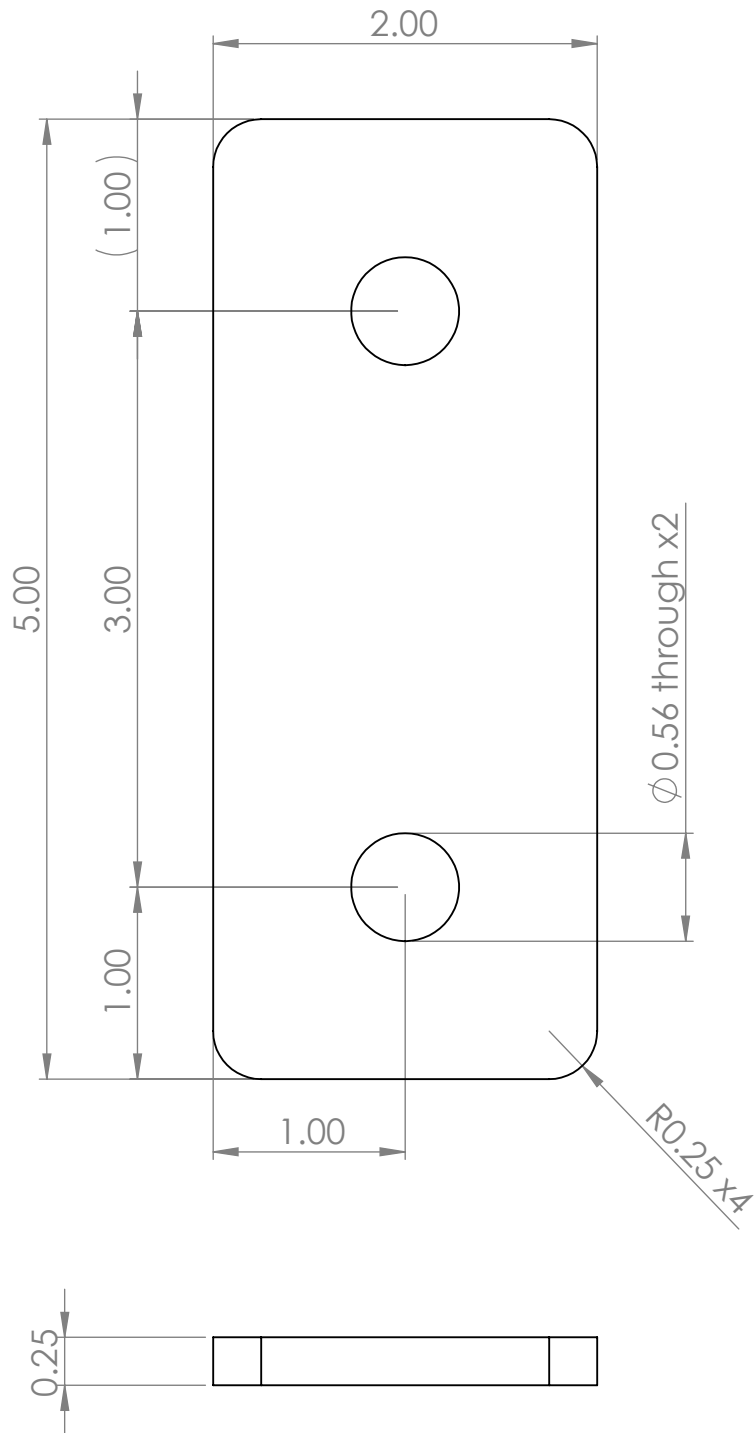
Notes:
1. Manufacture from customer supplied data (e.g. tube laser from Solidworks part file).

Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5			FINISH: Indoor: None Outdoor: Hot Dip Galvanize			Debur and break sharp edges (if applicable)	DO NOT SCALE DRAWING	REVISION	I
							TITLE: Profile Module - 90in Long		
DRAWN	Mark Hemphil		1/27/2023				DWG NO.	PWS-2.0-L09-90	B
CHK'D							SCALE: 1:8		
APPV'D									
MFG							SHEET 1 OF 2		
Q.A									
						MATERIAL: ASTM A500 Grade B Steel			
						WEIGHT: 49.943011			



- Notes:
1. Manufacture from customer-supplied data (e.g. laser-cut from dxf file).
 2. Deburr and break all sharp edges.

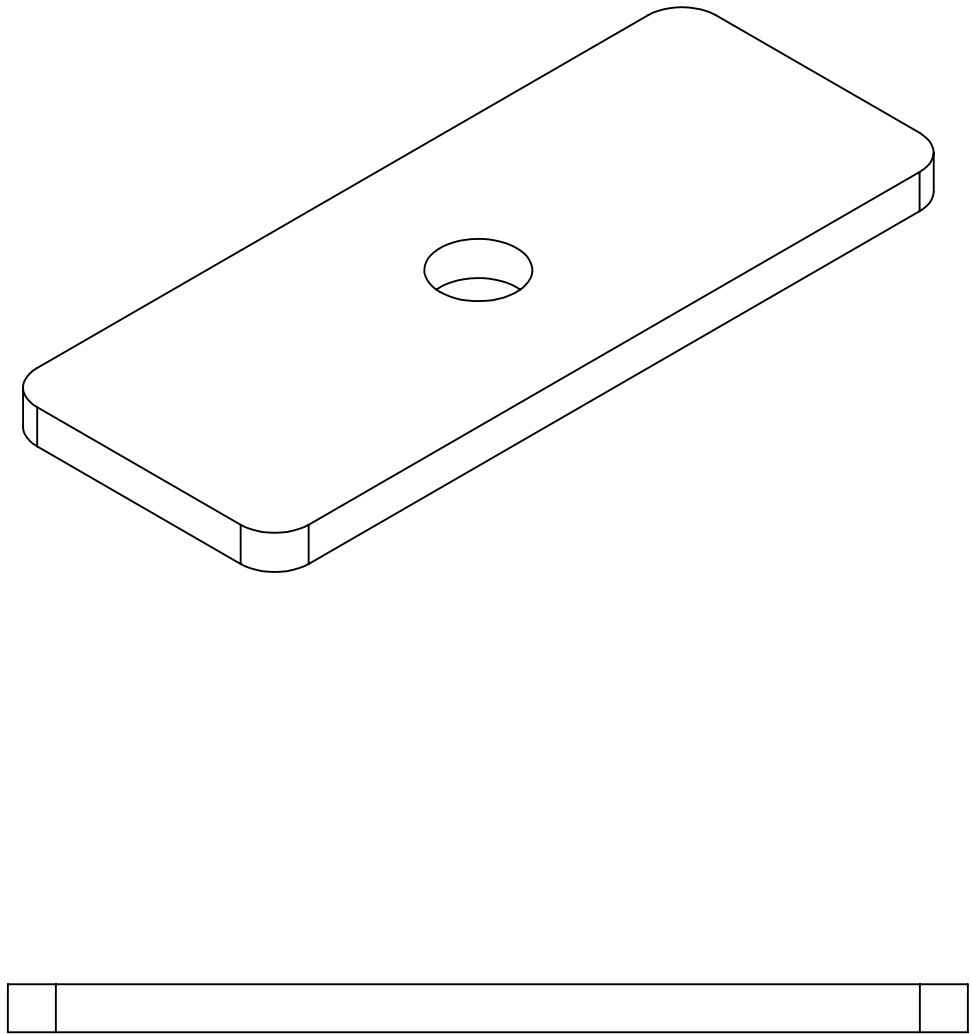
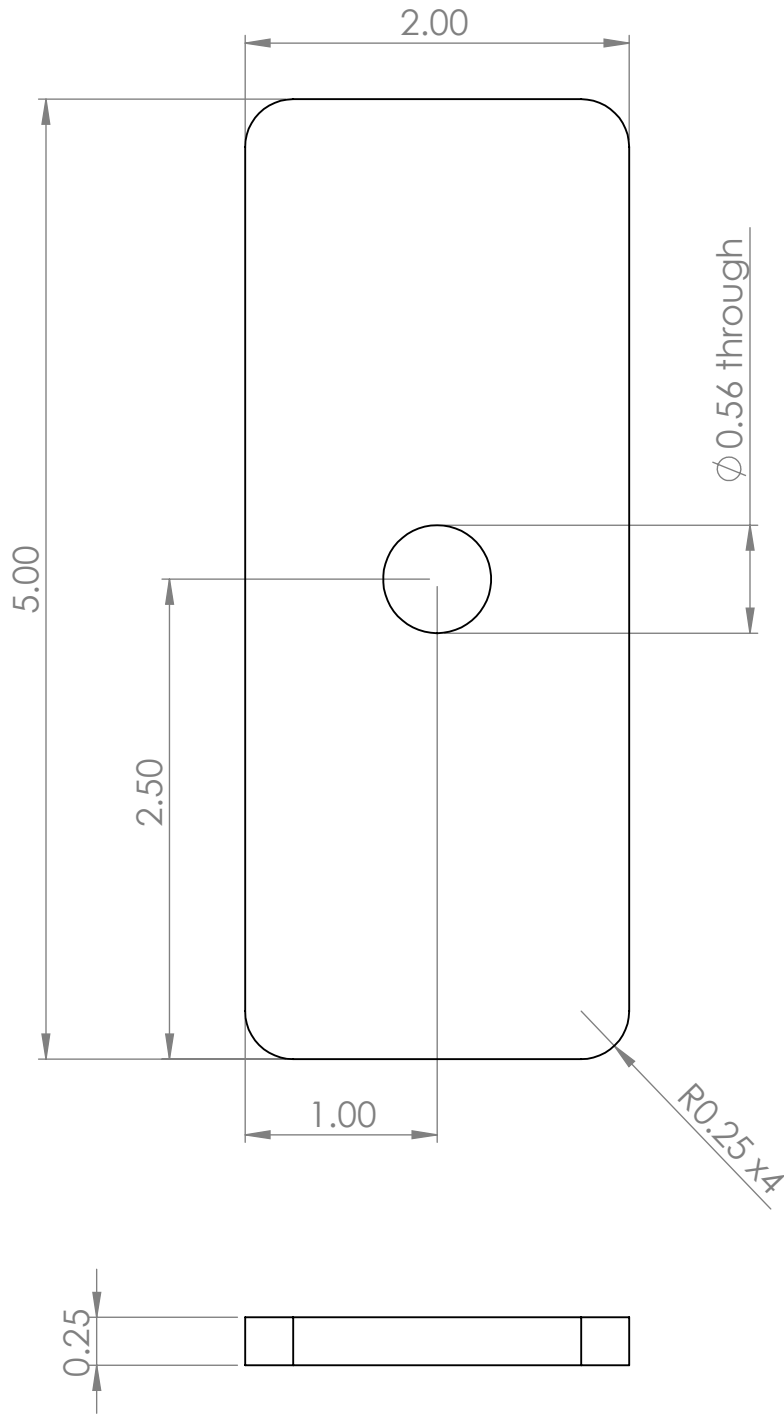
Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5			FINISH: None			Deburr and break sharp edges (if applicable)			DO NOT SCALE DRAWING			REVISION A							
												TITLE: Double Point Anchor Plate							
NAME		SIGNATURE		DATE															
DRAWN		Mark Hemphil				12/28/2022													
CHK'D																			
APPV'D																			
MFG																			
Q.A								MATERIAL: ASTM A36 Steel				DWG NO. PWS-2.0-L10				B			
								WEIGHT: 5.781055				SCALE: 1:3				SHEET 1 OF 1			



Notes:

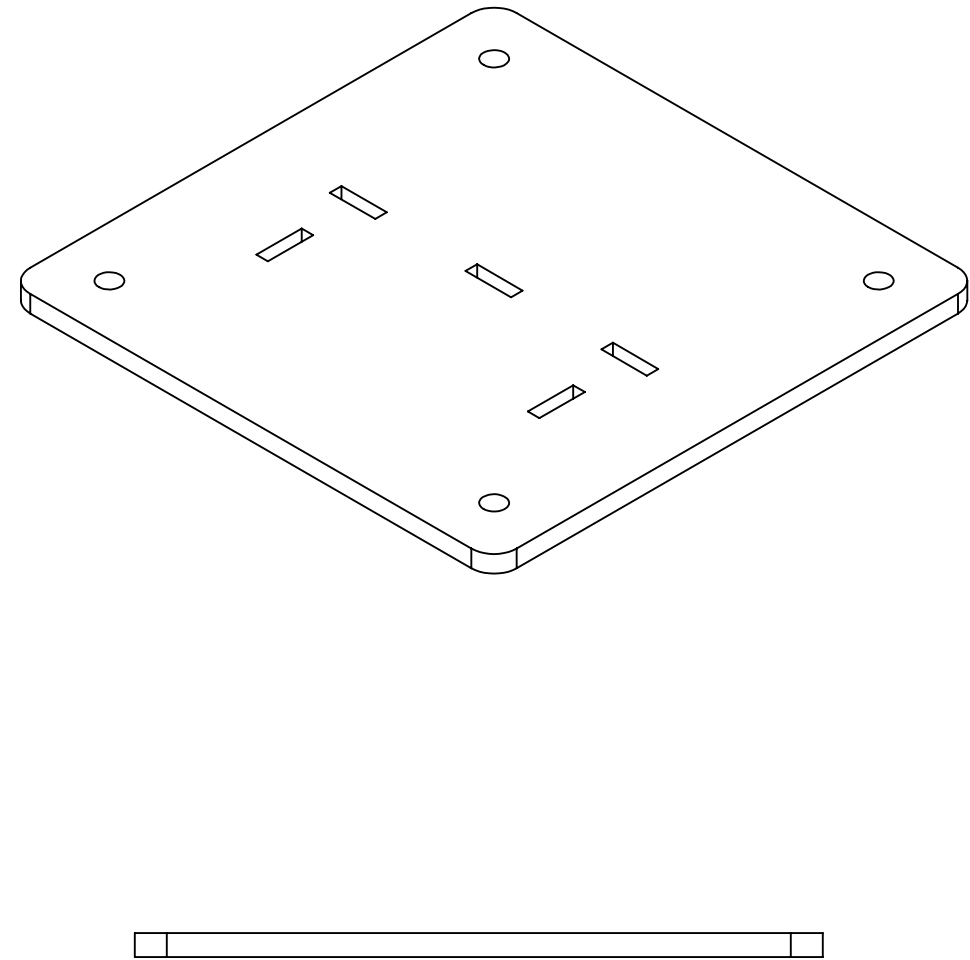
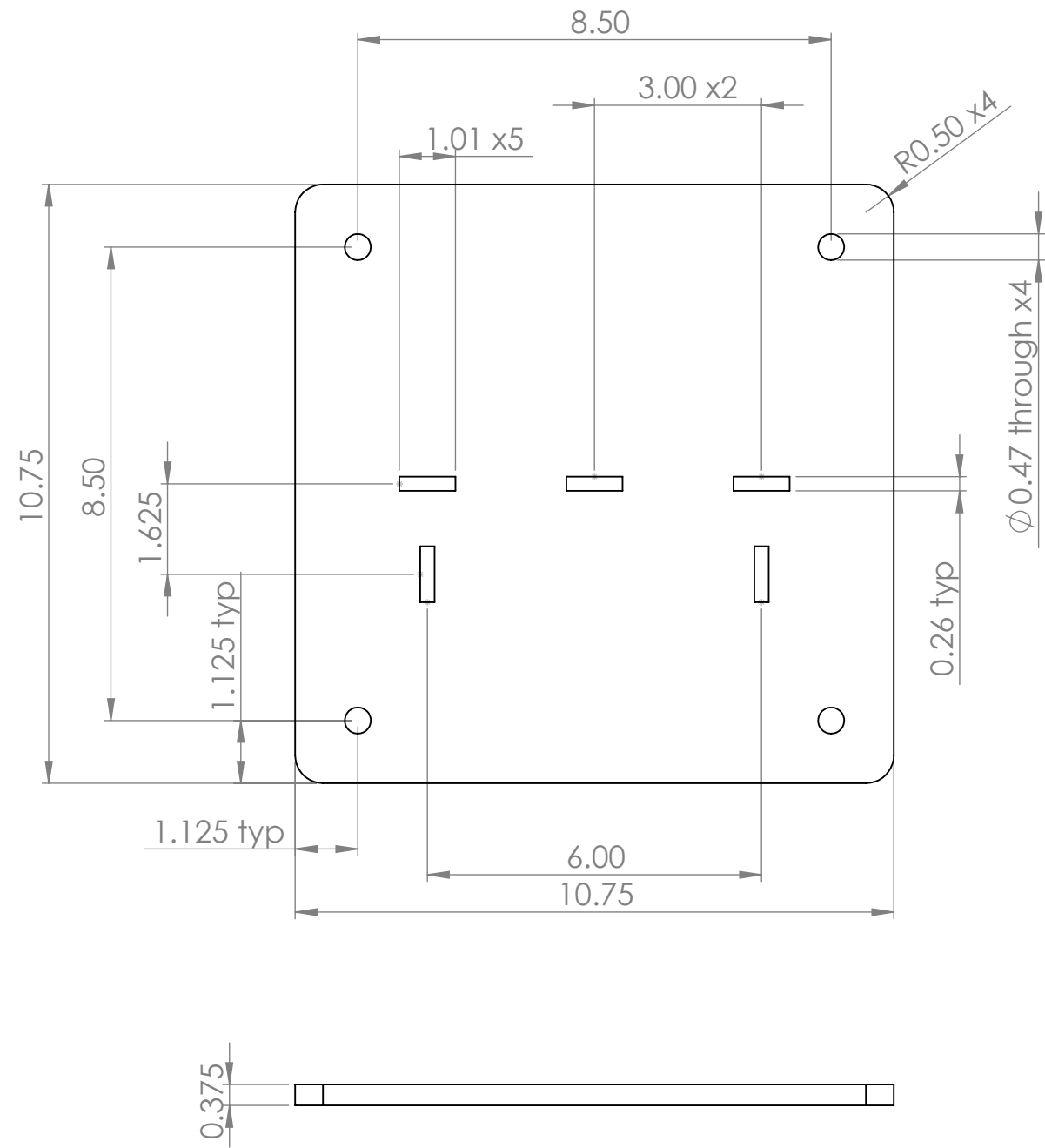
1. Manufacture from customer-supplied data (e.g. laser-cut from dxf file).
2. Deburr and break all sharp edges.

Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5			FINISH: Indoor: None Outdoor: Hot Dip Galvanize			Deburr and break sharp edges (if applicable)	DO NOT SCALE DRAWING		REVISION C		
	NAME	SIGNATURE	DATE				TITLE: Washer Plate - Double Hole				
DRAWN	Mark Hemphill		4/10/2023								
CHK'D											
APPV'D											
MFG											
Q.A											
					MATERIAL: ASTM A36 Steel		DWG NO. PWS-2.0-L11-2		B		
							SCALE: 1:1		SHEET 1 OF 2		
						WEIGHT: 0.669956					



- Notes:
1. Manufacture from customer-supplied data (e.g. laser-cut from dxf file).
 2. Deburr and break all sharp edges.

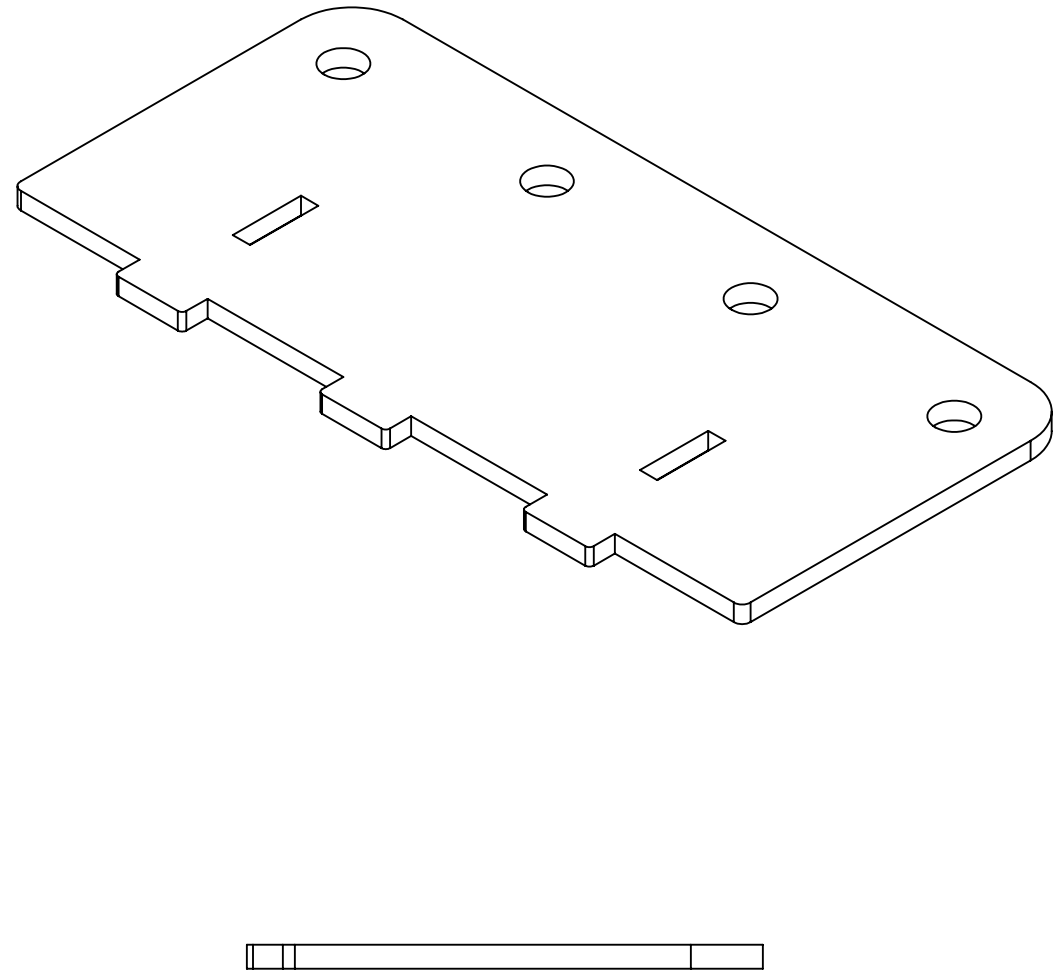
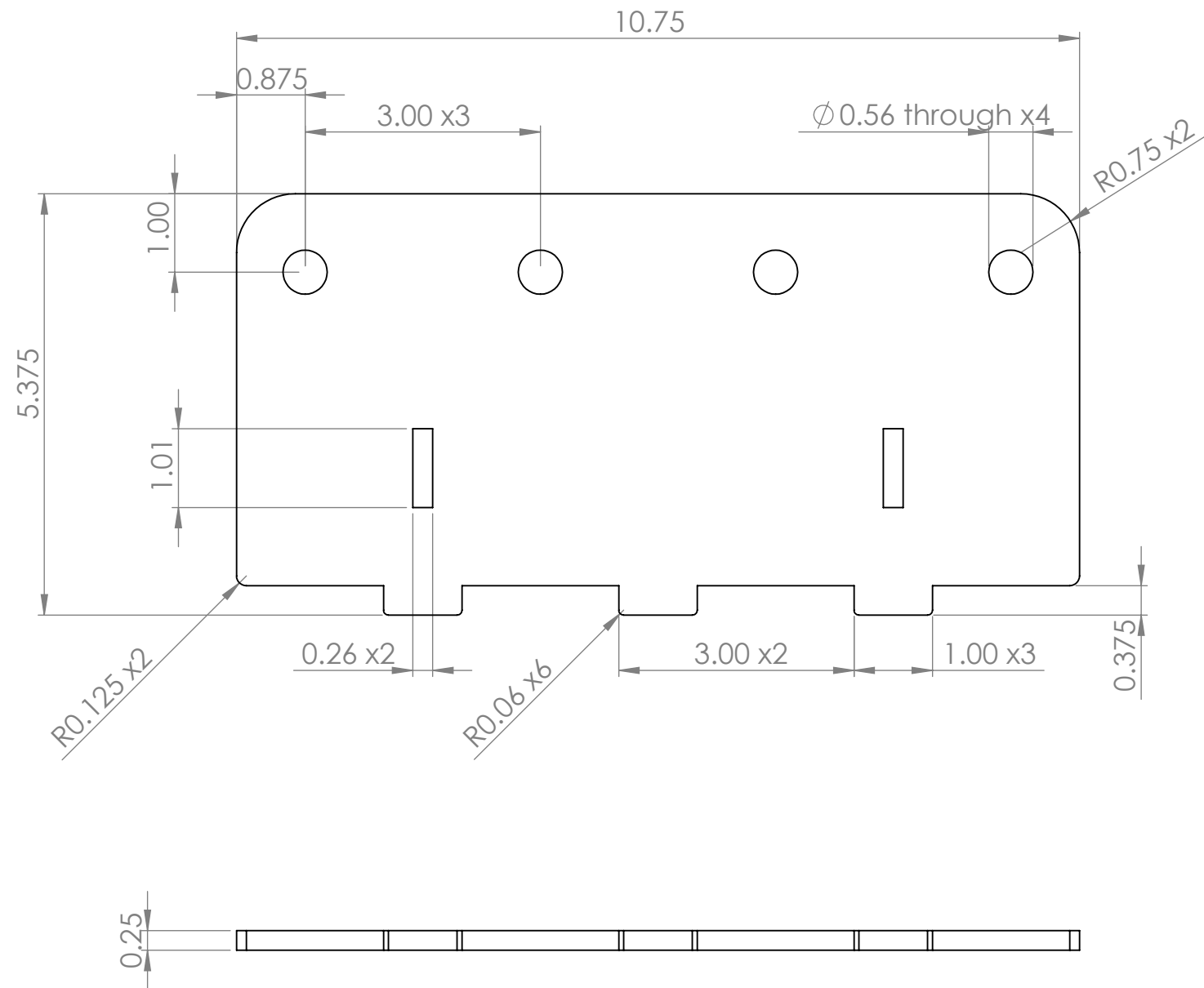
Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5			FINISH: Indoor: None Outdoor: Hot Dip Galvanize			Deburr and break sharp edges (if applicable)			DO NOT SCALE DRAWING			REVISION C					
TITLE:												Washer Plate - Single Hole					
	NAME		SIGNATURE		DATE												
DRAWN	Mark Hemphill				4/10/2023												
CHK'D																	
APPV'D																	
MFG																	
Q.A																	



Notes:

1. Manufacture from customer-supplied data (e.g. laser-cut from dxf file).
2. Deburr and break all sharp edges.

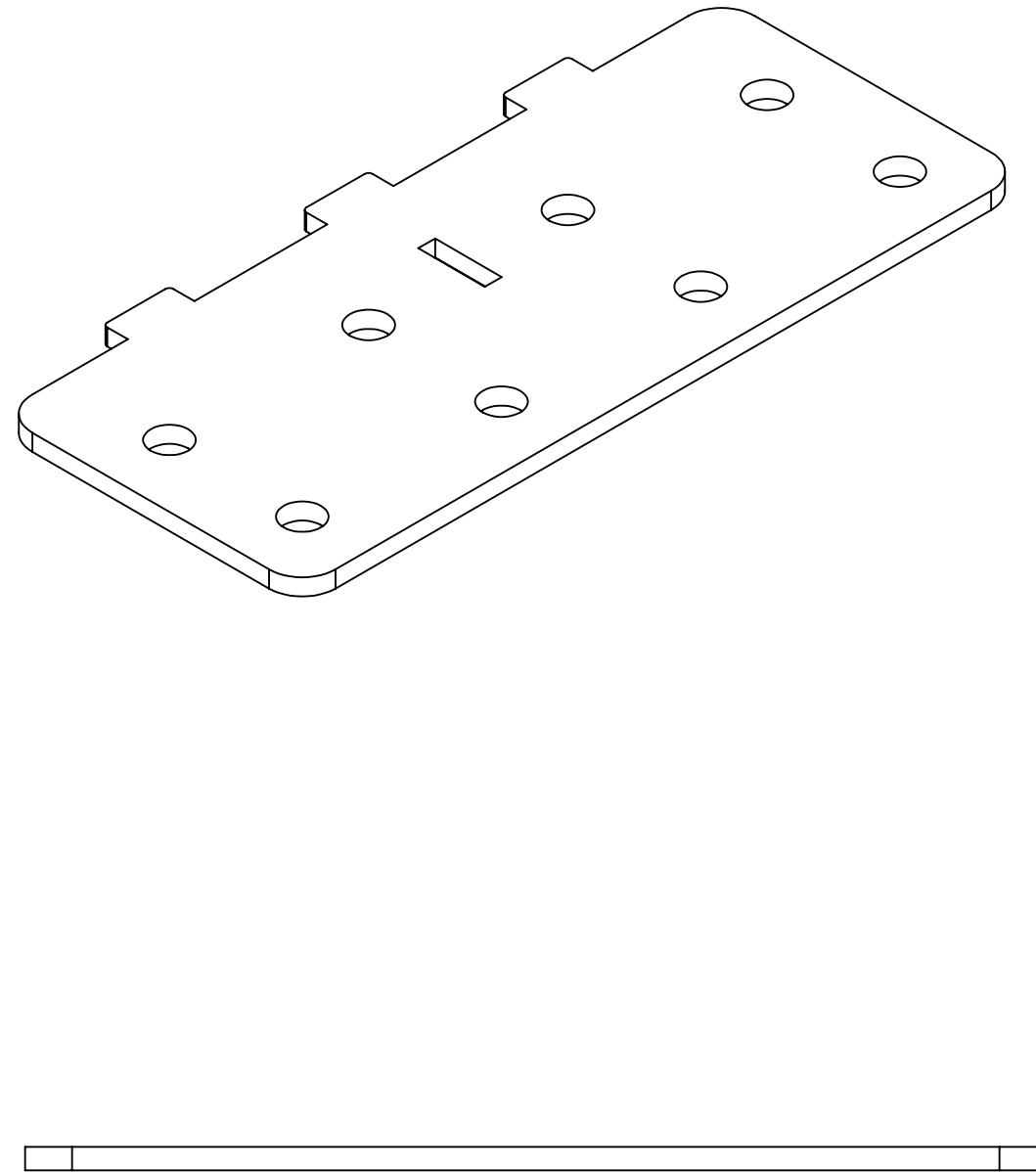
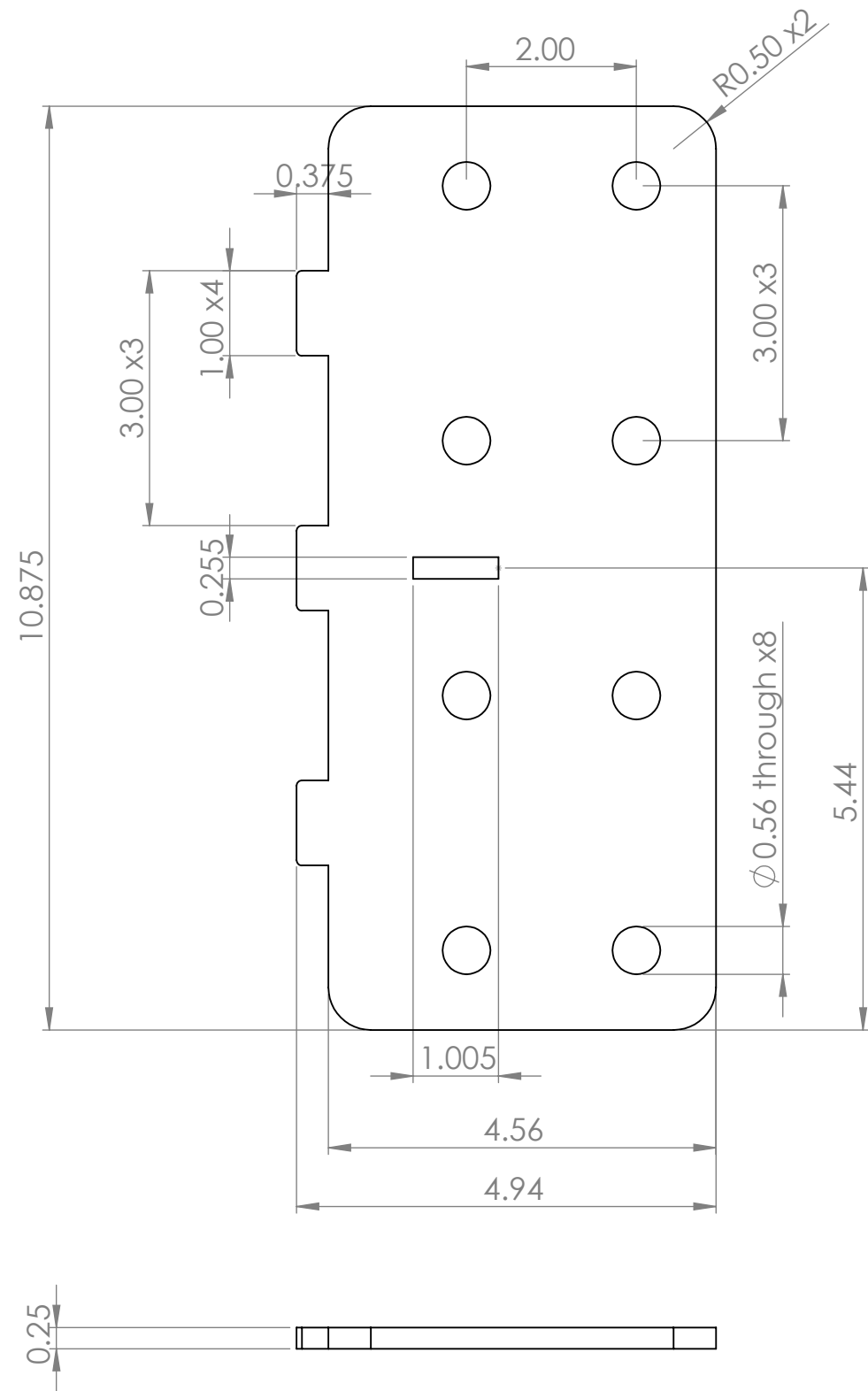
Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5			FINISH: None			Deburr and break sharp edges (if applicable)	DO NOT SCALE DRAWING		REVISION B		
							TITLE: Tieback Anchor Plate				
	NAME	SIGNATURE	DATE								
DRAWN	Mark Hemphil		7/12/2023								
CHK'D											
APPV'D											
MFG											
Q.A				MATERIAL:			DWG NO.		B		
				ASTM A572 Grade 50 Steel			PWS-2.0-L18				
				WEIGHT: 12.057527			SCALE: 1:3		SHEET 1 OF 1		



Notes:

1. Manufacture from customer-supplied data (e.g. laser-cut from dxf file).
2. Deburr and break all sharp edges.

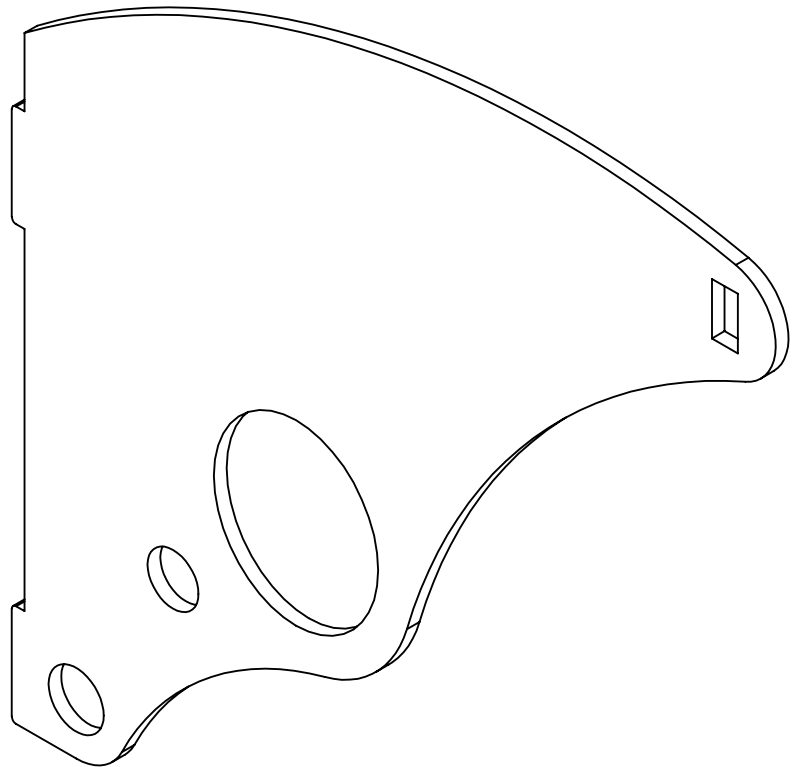
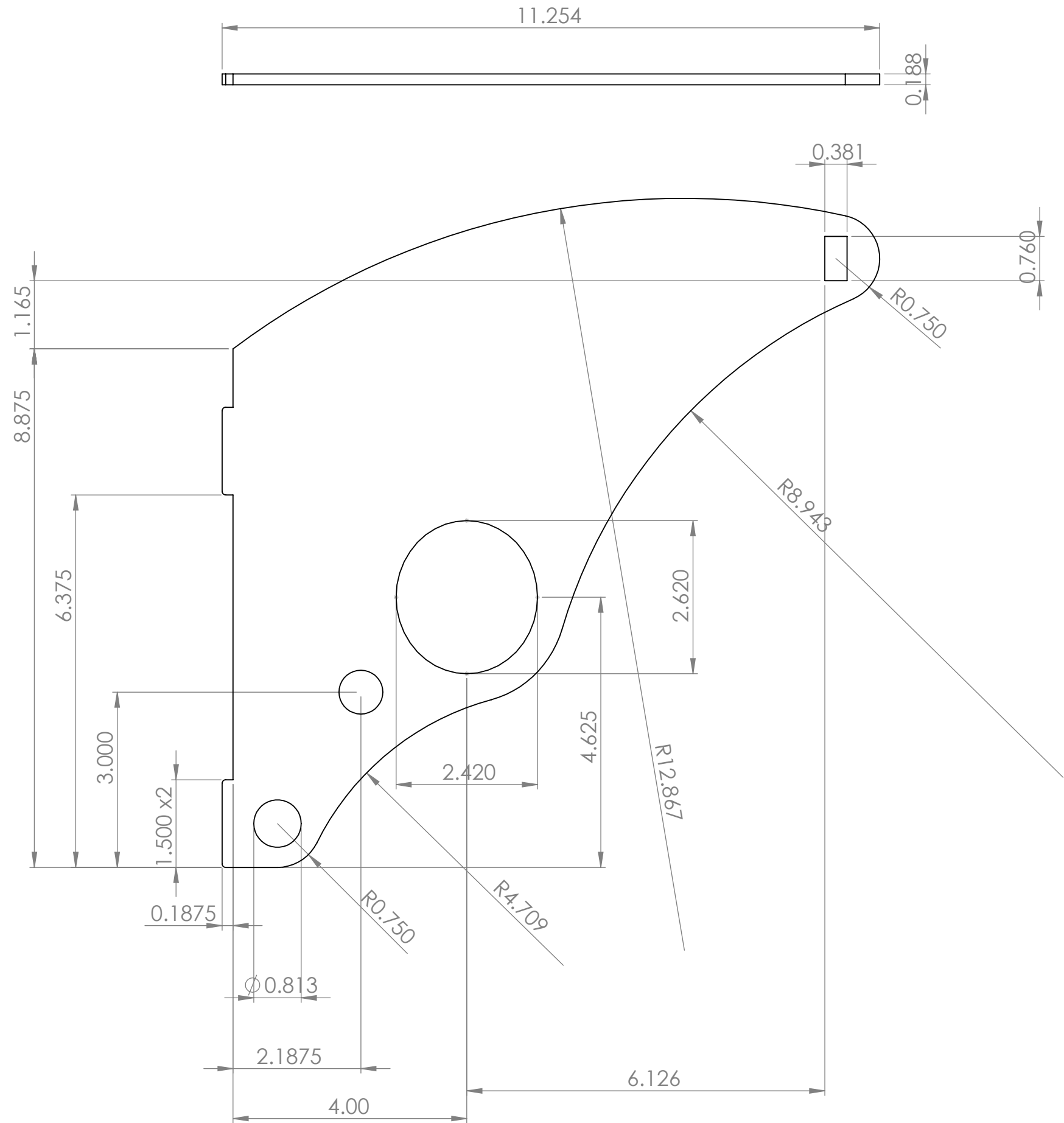
Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5			FINISH: None			Deburr and break sharp edges (if applicable)	DO NOT SCALE DRAWING	REVISION	A
	NAME	SIGNATURE	DATE				TITLE: Tieback Fin Plate - for CMU Wall		
DRAWN	Mark Hemphil		7/12/2023						
CHK'D									
APPV'D									
MFG									
Q.A						MATERIAL: ASTM A36 Steel	DWG NO.	PWS-2.0-L19-CMU	B
						WEIGHT: 3.765861	SCALE: 1:2	SHEET 1 OF 2	



Notes:

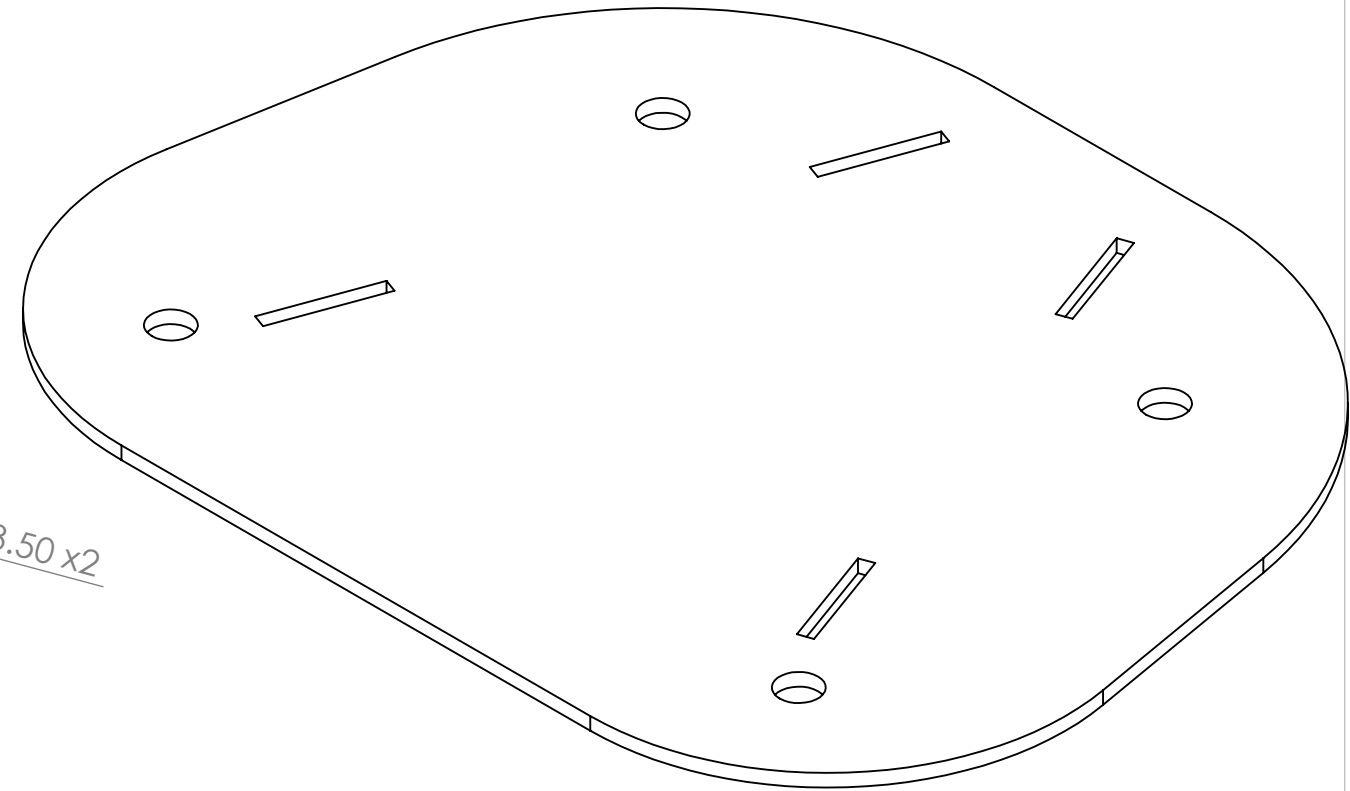
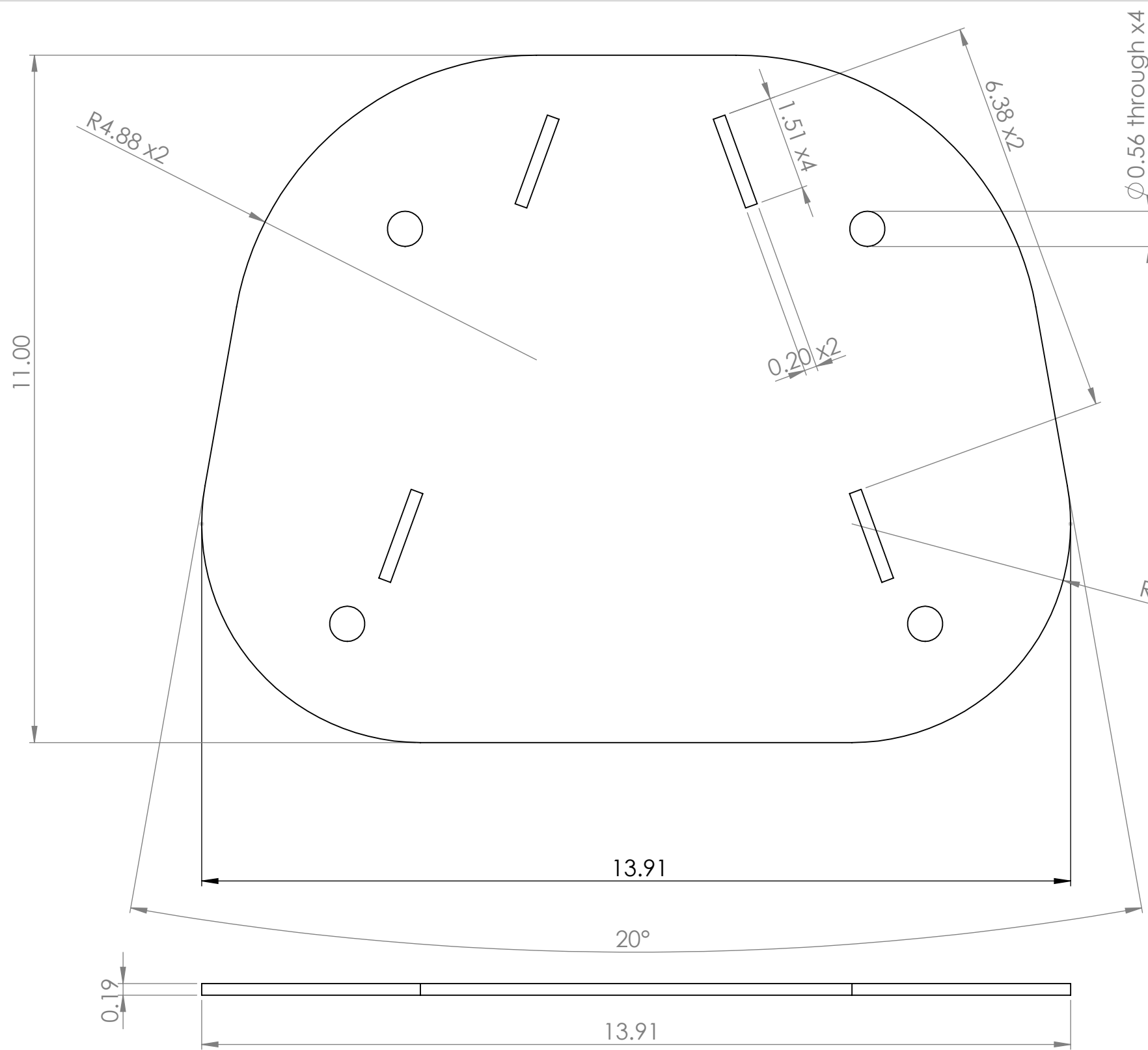
1. Manufacture from customer-supplied data (e.g. laser-cut from dxf file).
2. Deburr and break all sharp edges.

Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5			FINISH: None			Deburr and break sharp edges (if applicable)	DO NOT SCALE DRAWING	REVISION	B
	NAME	SIGNATURE	DATE				TITLE: Concrete Bracket Splice Plate		
DRAWN	Mark Hemphil		2/14/2024						
CHK'D									
APPV'D									
MFG									
Q.A						MATERIAL: ASTM A36 Steel	DWG NO.	PWS-2.0-L30	B
						WEIGHT: 3.422917	SCALE: 1:2	SHEET 1 OF 1	



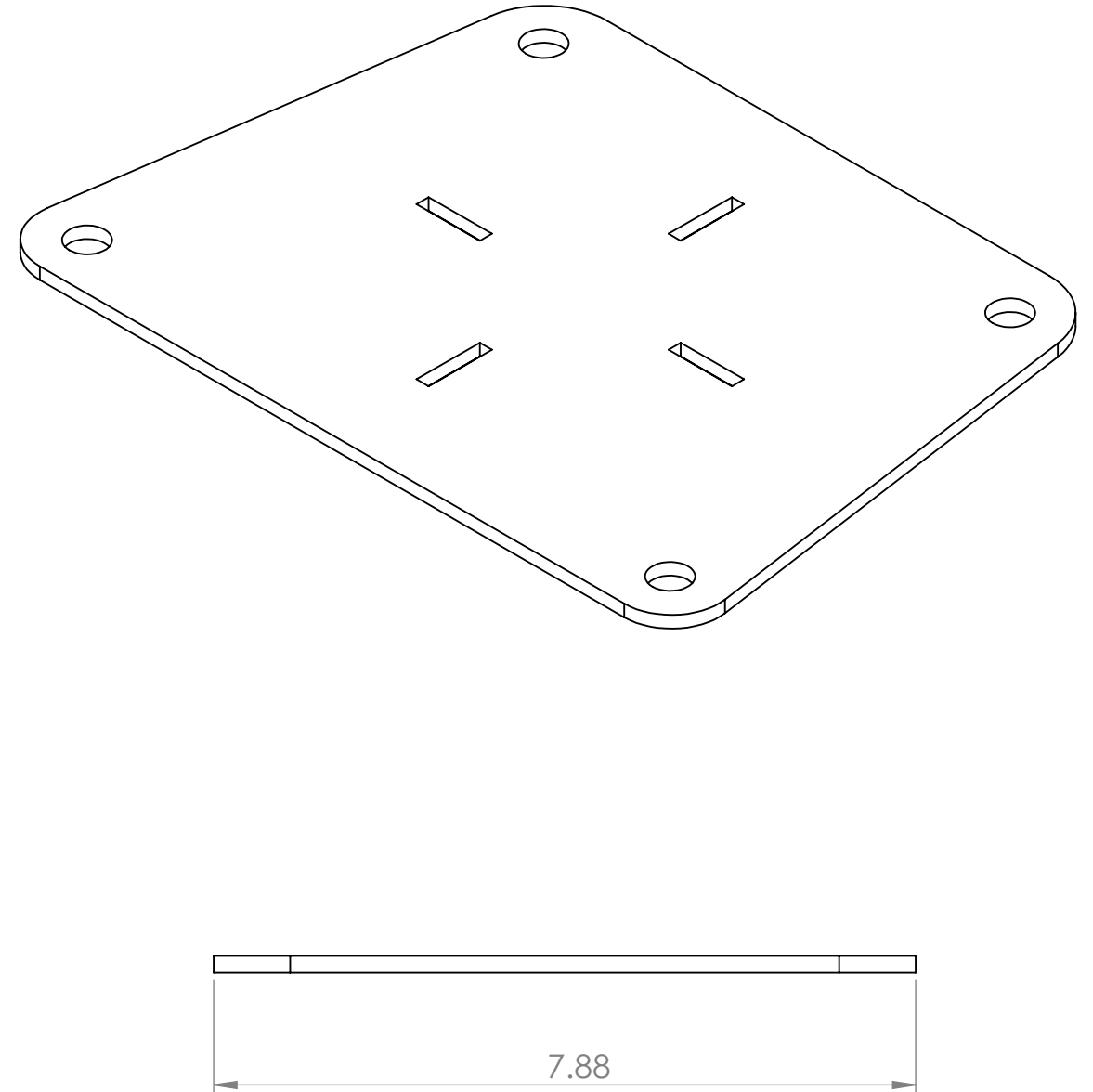
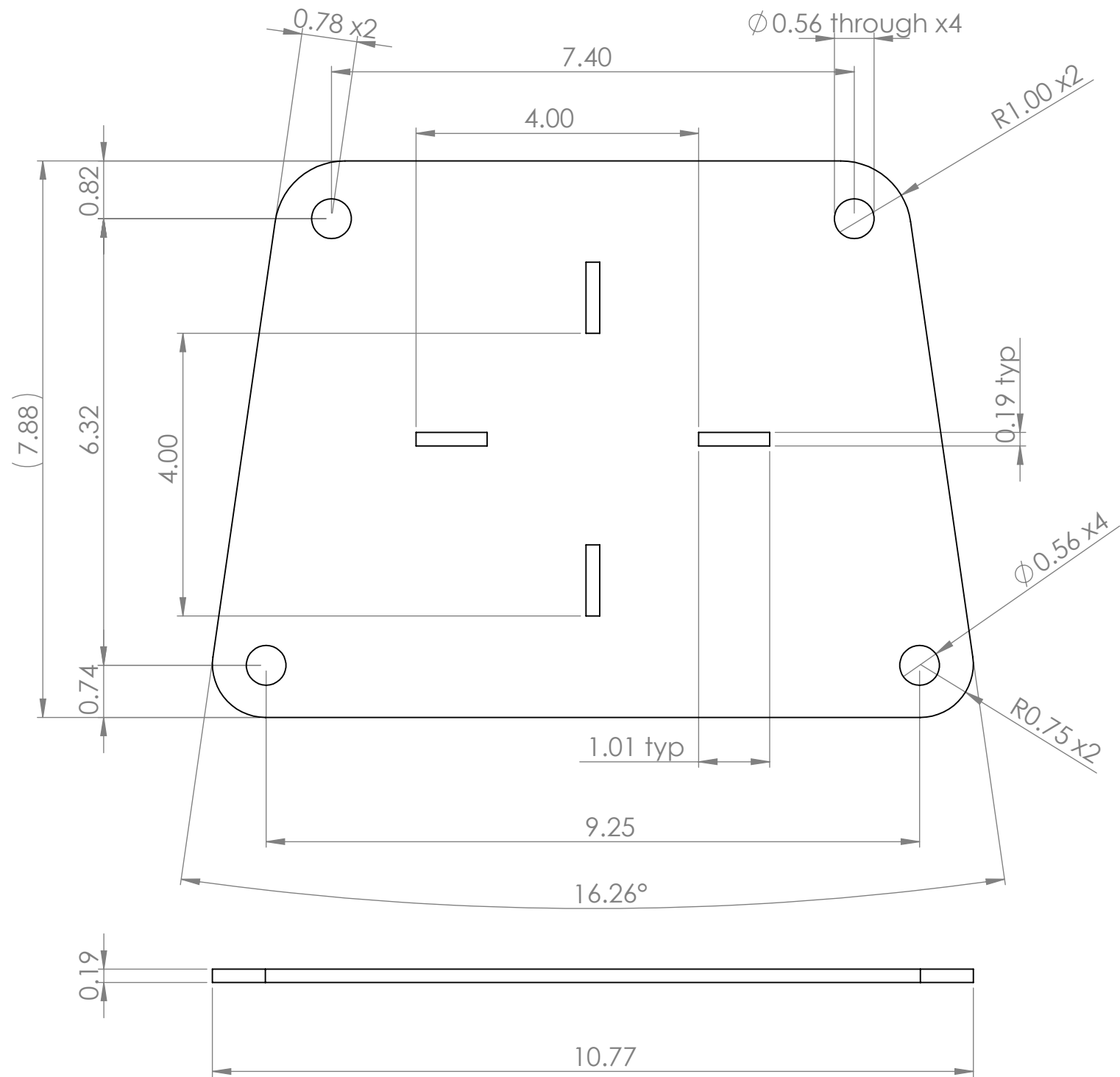
- Notes:
- 1. Manufacture from customer-supplied data (e.g. laser-cut from dxf file).
 - 2. Deburr and break all sharp edges.

Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.02 Angular: +/- 0.5			FINISH: None			Deburr and break sharp edges (if applicable)	DO NOT SCALE DRAWING			REVISION E	
							TITLE: Fin Plate - Indoor				
	NAME	SIGNATURE	DATE								
DRAWN	Mark Hemphil		4/8/2020								
CHK'D											
APPV'D											
MFG											
Q.A											
						MATERIAL:			DWG NO.		
						ASTM A572 Grade 50 Steel			WAL-BB-L001-I		
									B		
						WEIGHT: 3.244003			SCALE: 1:2		
									SHEET 1 OF 2		



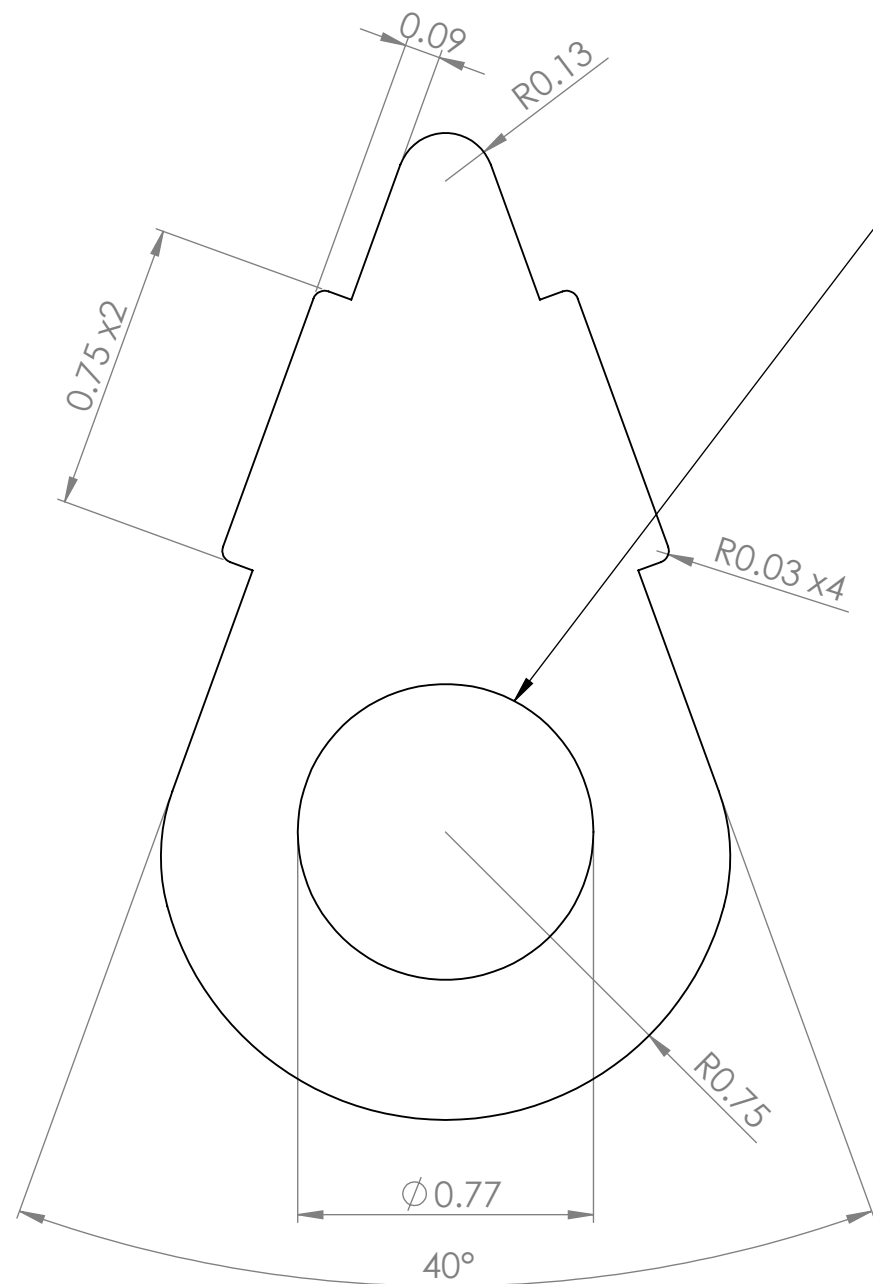
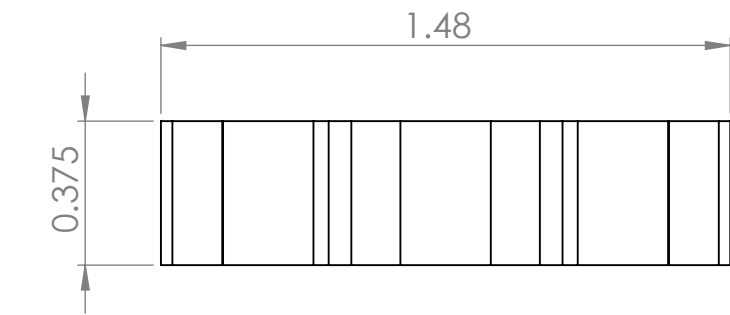
- Notes:
1. Manufacture from customer-supplied data (e.g. laser-cut from dxf file).
 2. Deburr and break all sharp edges.

Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.02 Angular: +/- 0.5			FINISH: None		Deburr and break sharp edges (if applicable)	DO NOT SCALE DRAWING		REVISION E	
	NAME	SIGNATURE	DATE			TITLE: Back Plate - Indoor			
DRAWN	Mark Hemphil		4/8/2020						
CHK'D									
APPV'D									
MFG									
Q.A									
				MATERIAL:		DWG NO.		B	
				ASTM A572 Grade 50 Steel		WAL-BB-L002-I			
				WEIGHT: 6.897280		SCALE: 1:2		SHEET 1 OF 4	

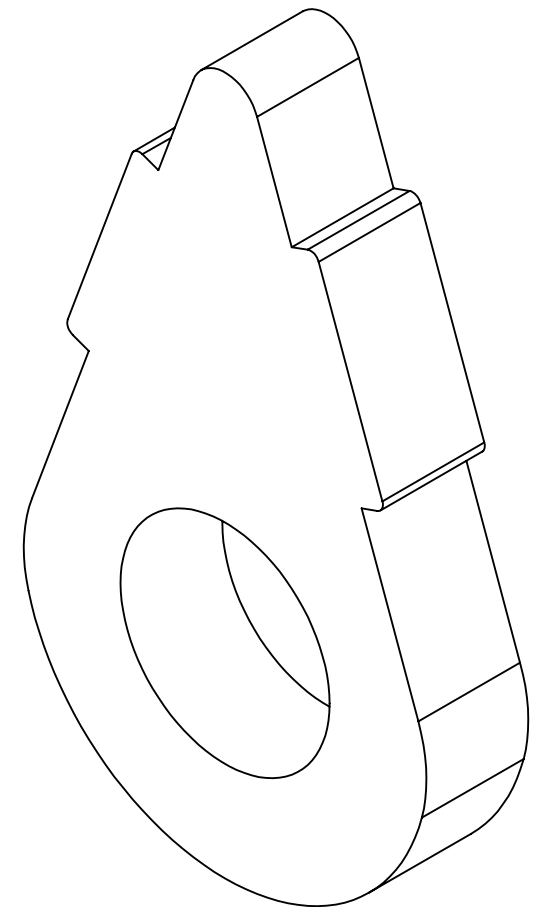
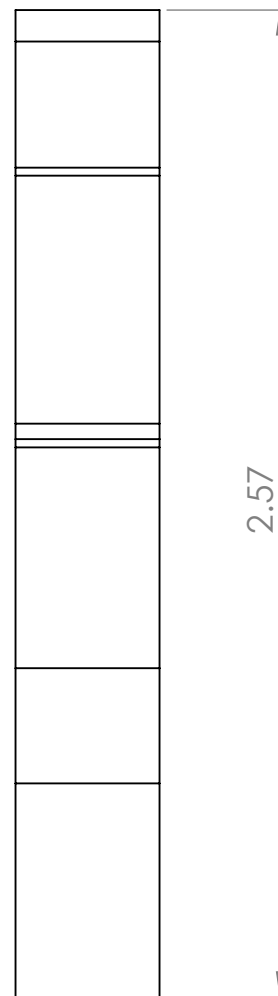


- Notes:
1. Manufacture from customer-supplied data (e.g. laser-cut from dxf file).
 2. Deburr and break all sharp edges.

Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5			FINISH: None			Deburr and break sharp edges (if applicable)			DO NOT SCALE DRAWING			REVISION		G	
	NAME		SIGNATURE		DATE					TITLE: Back Back Plate					
DRAWN	Mark Hemphil				4/8/2020										
CHK'D															
APPV'D															
MFG															
Q.A															
															DWG NO. WAL-BB-L003
										SCALE: 1:2			SHEET 1 OF 1		

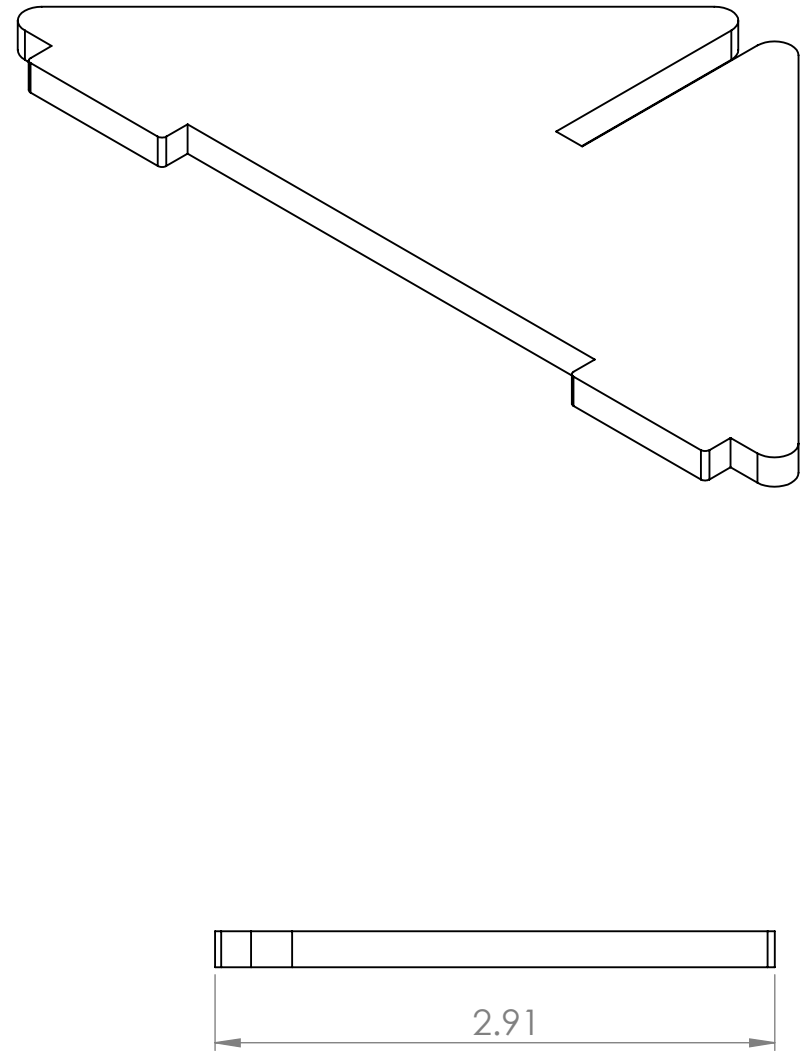
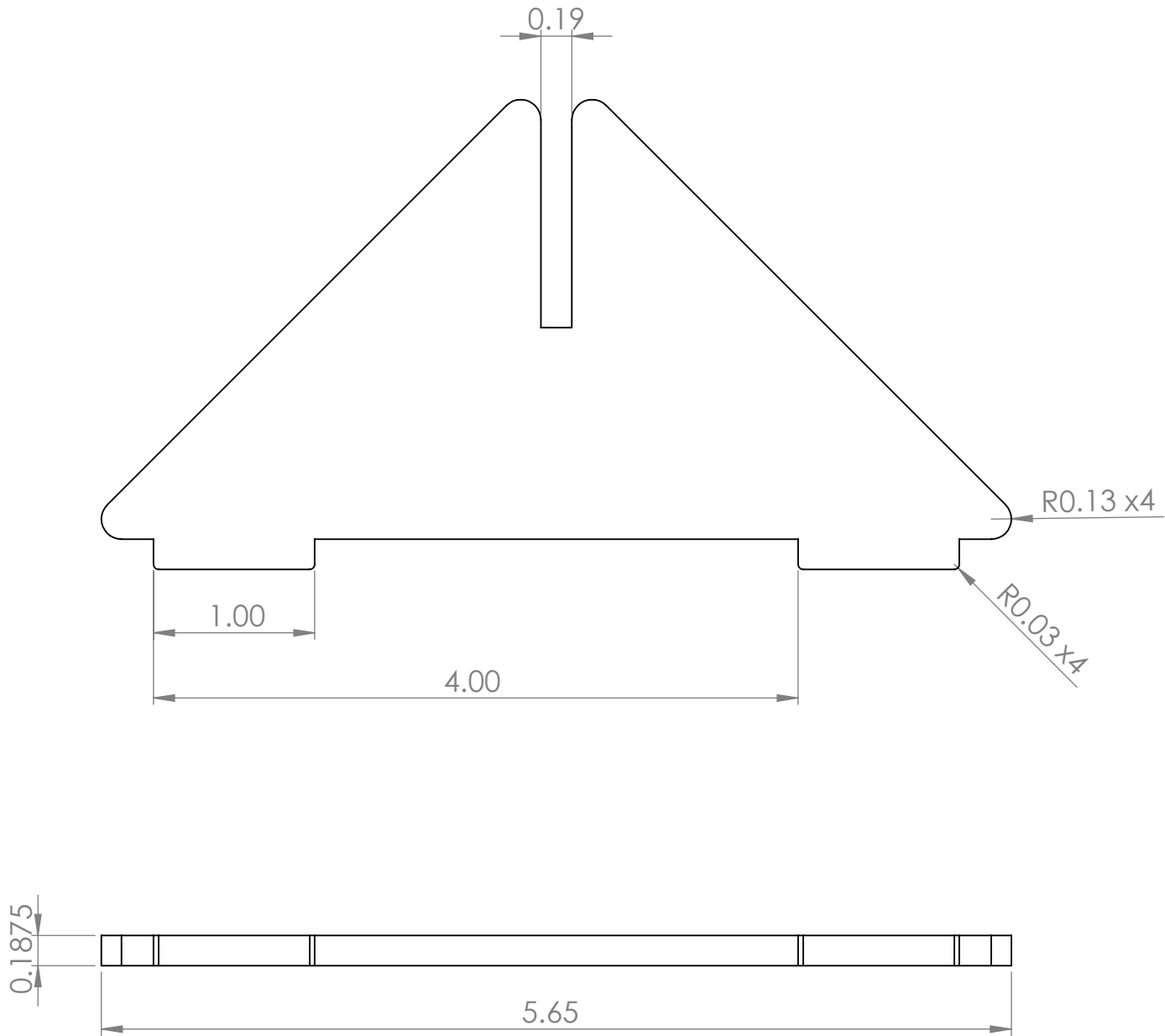


break edge of through hole both front and back
(carabiner will be rubbing against these edges)



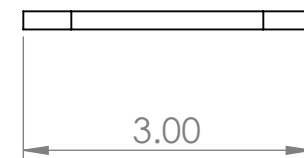
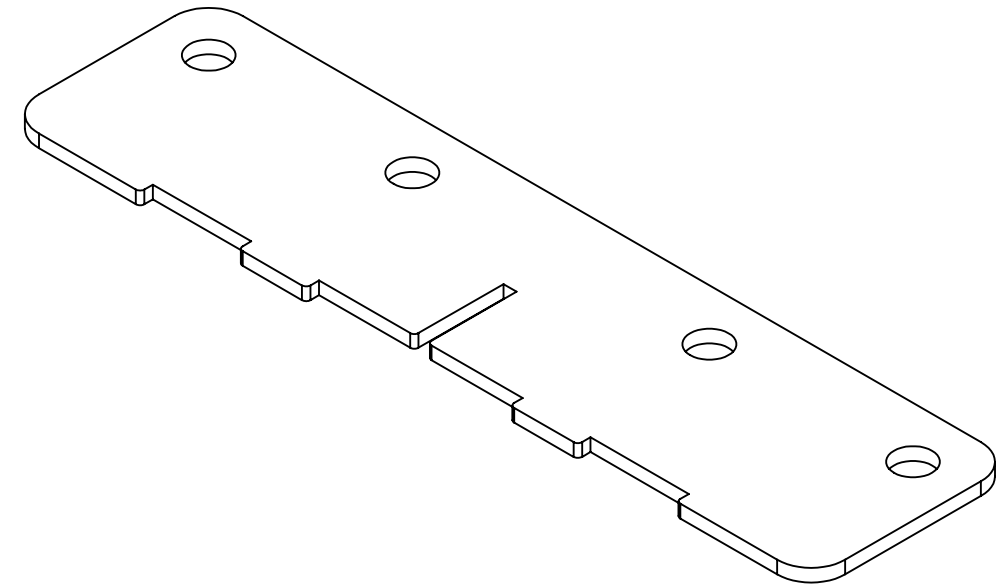
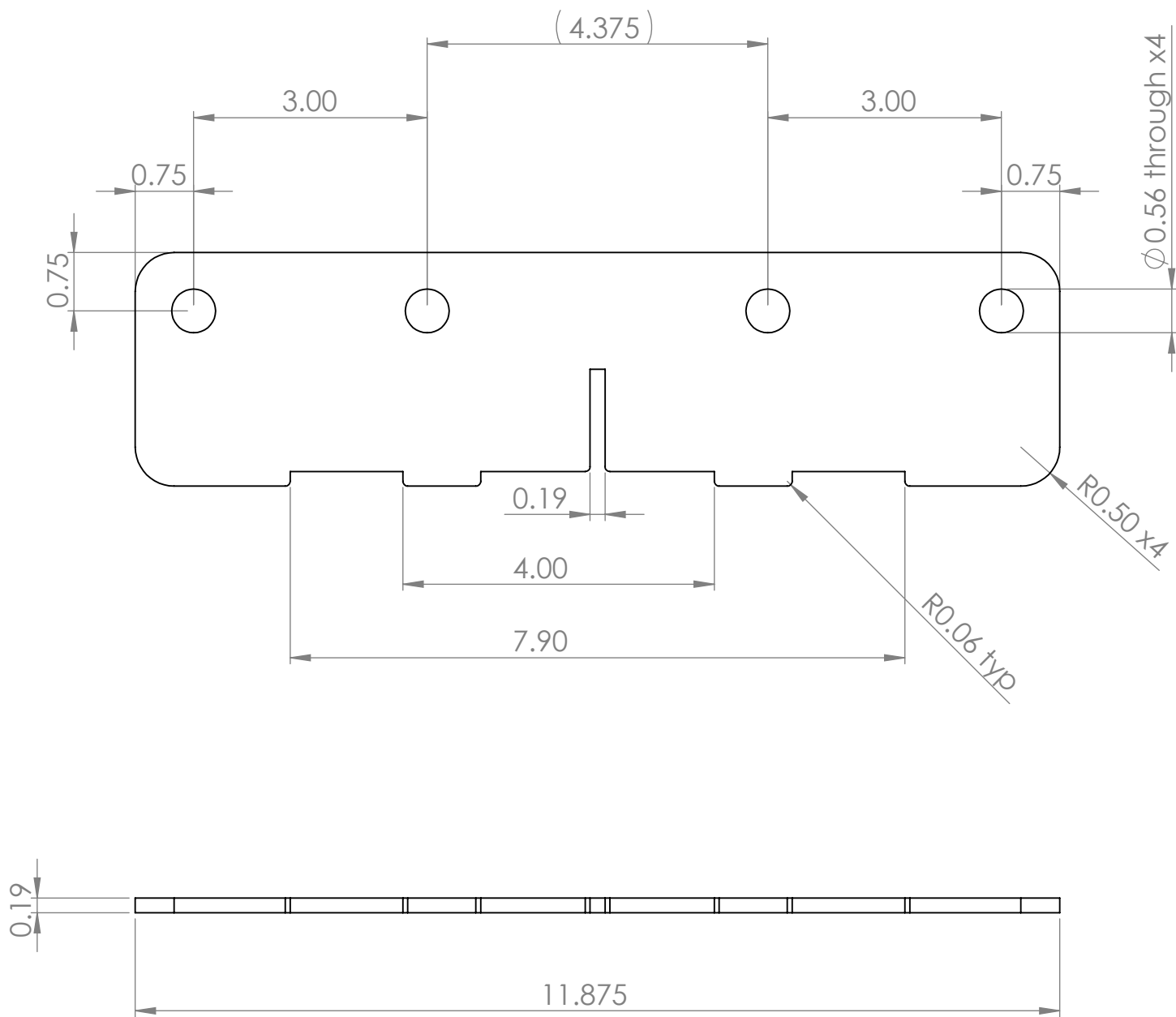
- Notes:
1. Manufacture from customer-supplied data (e.g. laser-cut from dxf file).
 2. Deburr and break all sharp edges.

Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5			FINISH: None			Deburr and break sharp edges (if applicable)	DO NOT SCALE DRAWING	REVISION F
	NAME	SIGNATURE	DATE				TITLE: Rigging Tab - Indoor	
DRAWN	Mark Hemphil		11/5/2020					
CHK'D								
APPV'D								
MFG								
Q.A							DWG NO.	B
						MATERIAL: ASTM A572 Grade 50 Steel	WAL-BB-L004-I	
						WEIGHT: 0.220860	SCALE: 2:1	SHEET 1 OF 2



- Notes:
1. Manufacture from customer-supplied data (e.g. laser-cut from dxf file).
 2. Deburr and break all sharp edges.

Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5			FINISH: None			Deburr and break sharp edges (if applicable)	DO NOT SCALE DRAWING		REVISION D			
							TITLE: Gusset					
DRAWN	Mark Hemphil	SIGNATURE	DATE	6/3/202								
CHK'D												
APPV'D												
MFG												
Q.A												
							MATERIAL: ASTM A572 Grade 50 Steel			DWG NO. WAL-BB-L005		B
							WEIGHT: 0.477581			SCALE: 1:1		SHEET 1 OF 1



Notes:

1. Manufacture from customer-supplied data (e.g. laser-cut from dxf file).
2. Deburr and break all sharp edges.

Unless otherwise specified: Dimensions are in inches Surface finish: Tolerances: Linear: +/- 0.06 Angular: +/- 0.5			FINISH: None			Deburr and break sharp edges (if applicable)	DO NOT SCALE DRAWING	REVISION	A
	NAME	SIGNATURE	DATE				TITLE: Spine Plate		
DRAWN	Mark Hemphil		4/23/2024						
CHK'D									
APPV'D									
MFG									
Q.A						MATERIAL: ASTM A572 Grade 50 Steel	DWG NO.	WAL-BB-L009	
									B
						WEIGHT:	SCALE: 1:2	SHEET 1 OF 1	