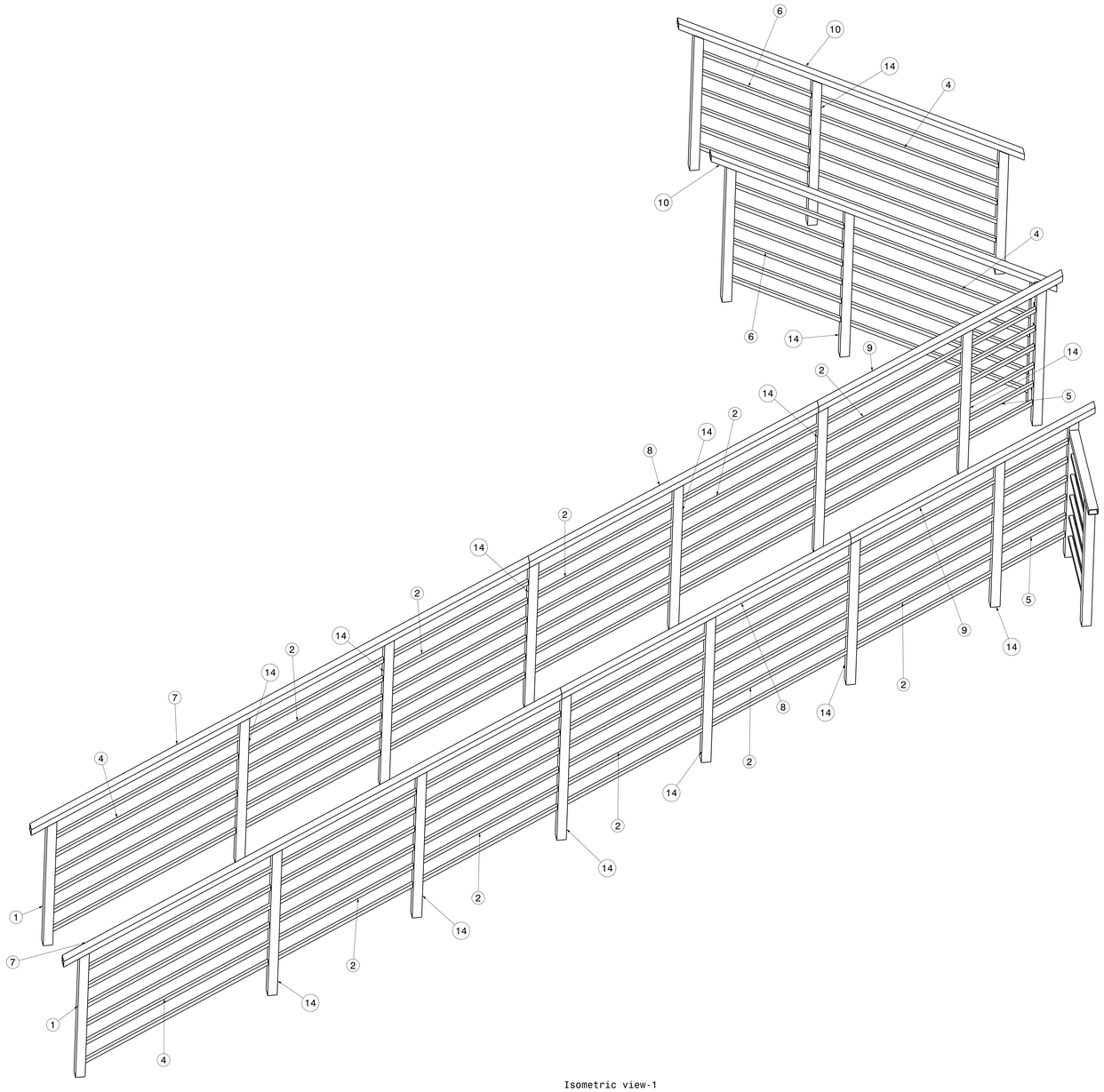
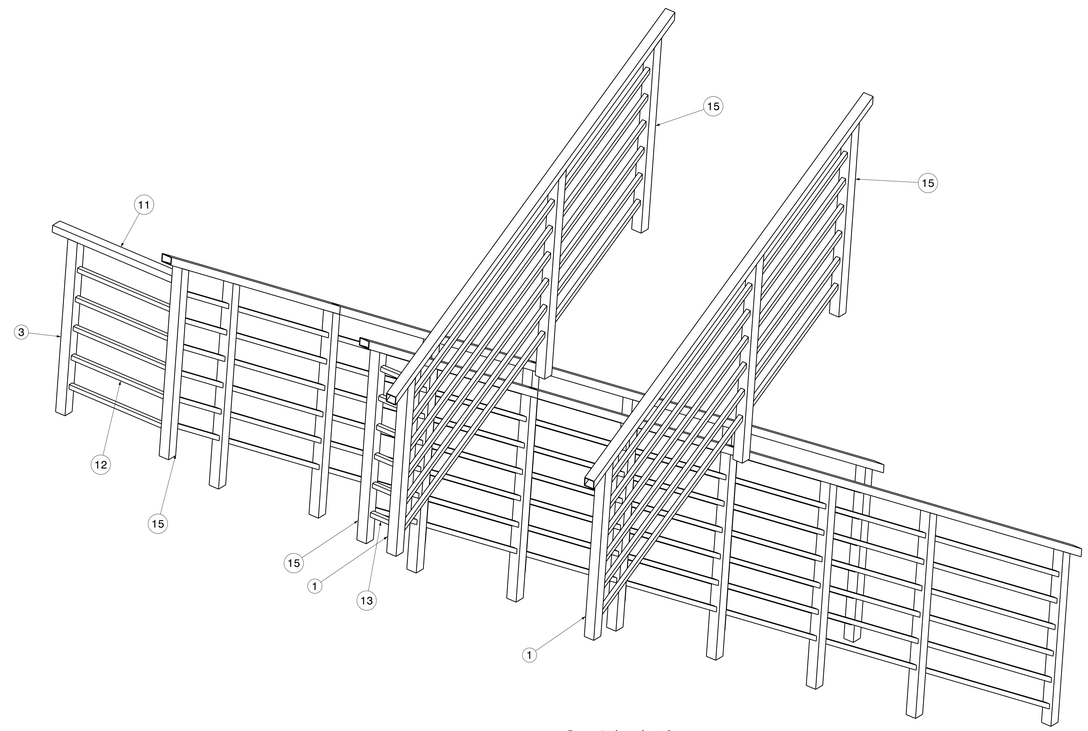
REV	DATE	DESCRIPTION
00	11/04/2020	INITIAL REVISION

NOTES:

1. (⊥) ALL VERTICAL SUPPORTS ARE PERPENDICULAR.
2. ▱ FLATNESS OF .5MM IS APPLIED BY DEFAULT.
3. ◺ WELD BEAD OF 2MM RADIUS IS FOLLOWED.
4. ▽▽ SURFACE FINISH MEDIUM TO SMOOTH IS USED.
5. ALL TUBES ARE AS PER APL APOLLO STANDARD. CHANGES MAY EFFECT THE LOAD CAPACITY.
6. ALL HORIZONTAL AND VERTICAL TUBES ARE PERPENDICULAR TO EACH OTHER WITH ±1 DEG.
7. FINE WELDNG IS REQUIRED AS PER MENTIONED DETAILS AND FINISHING.
8. HIGHER CURRENT WELDING MAY AFFECT THE BRITTLENESS OF MATERIAL WHICH LATER MAY RAISE TO WEAKENING OF STRUCTURE.
9. FABRICATORS ARE ALLOWED TO USE FITTINGS/FRAMES/SUPPORTS AS NEEDED AND THE SAME MUST BE COMMUNICATED BACK TO ENGINEERING TEAM.
10. LENGTH OF ALL LONGITUDINAL FRAMES ARE FOR REFERENCE ONLY AND SUBJECTED TO CHANGE PER REQUIREMENT.



Isometric view-1



Isometric view-2

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	Wt(Kg)/Each
15	Sq Tube 138 Frame 15	60 X 60 X 3.2 X 1116	4	6.3
14	Sq Tube 138 Frame 14	60 X 60 X 3.2 X 1200	14	6.7
13	Sq Tube 138 Frame 13	25 X 25 X 2 X 130	6	0.2
12	Sq Tube 138 Frame 12	25 X 25 X 2 X 600	6	0.9
11	Rect Tube 138 Frame 11	60 X 40 X 2.6 X 760	1	2.9
10	Rect Tube 138 Frame 10	60 X 40 X 2.6 X 2611	2	10
9	Rect Tube 138 Frame 9	60 X 40 X 2.6 X 1795	2	6.9
8	Rect Tube 138 Frame 8	60 X 40 X 2.6 X 2121	2	8.1
7	Rect Tube 138 Frame 7	60 X 40 X 2.6 X 3636	2	14
6	Sq Tube 138 Frame 6	25 X 25 X 2 X 830	12	1.2
5	Sq Tube 138 Frame 5	25 X 25 X 2 X 481	12	0.7
4	Sq Tube 138 Frame 4	25 X 25 X 2 X 1343.5	24	1.9
3	Sq Tube 138 Frame 3	60 X 60 X 3.2 X 1010	1	5.8
2	Sq Tube 138 Frame 2	25 X 25 X 2 X 993.5	60	1.4
1	Sq Tube 138 Frame 1	60 X 60 X 3.2 X 1020	4	5.7

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DRAWING TITLE: PAGE 138

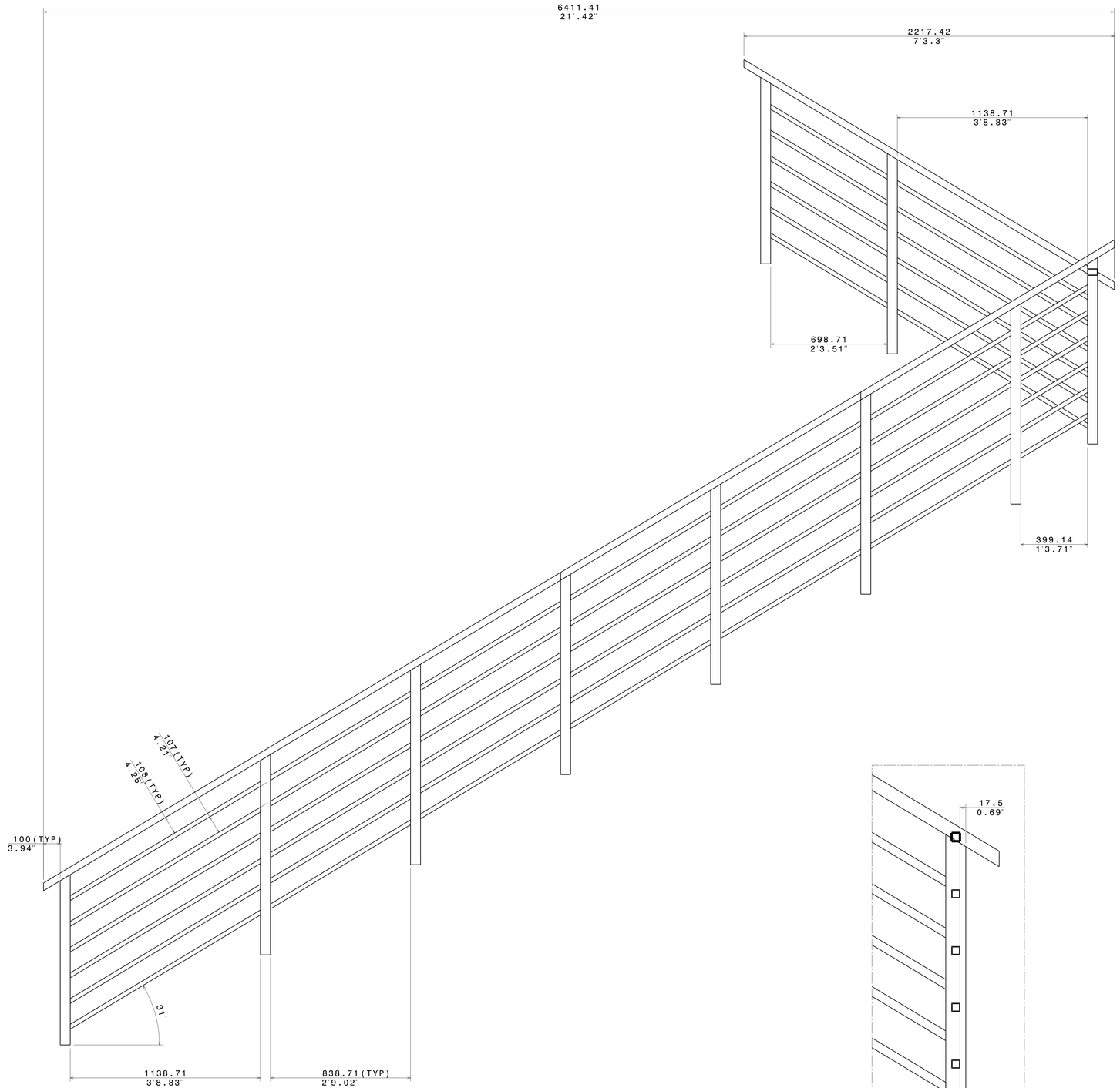
DRAWN BY: SB	DATE: 11/04/2020		
CHECKED BY: P2P Analysis & Solutions	DATE: 11/04/2020	SIZE: A0	DRAWING NUMBER: P2P_HAND RAIL_20
DESIGNED BY: P2P Analysis & Solutions	DATE: 11/04/2020	SCALE: As Indicated	WEIGHT(kg): 0kg

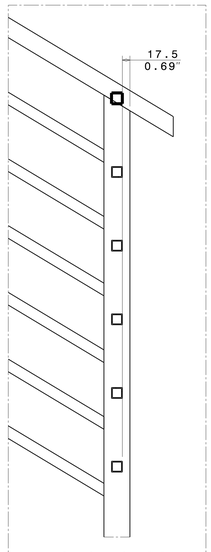
REV: 00

SHEET 1 OF 5

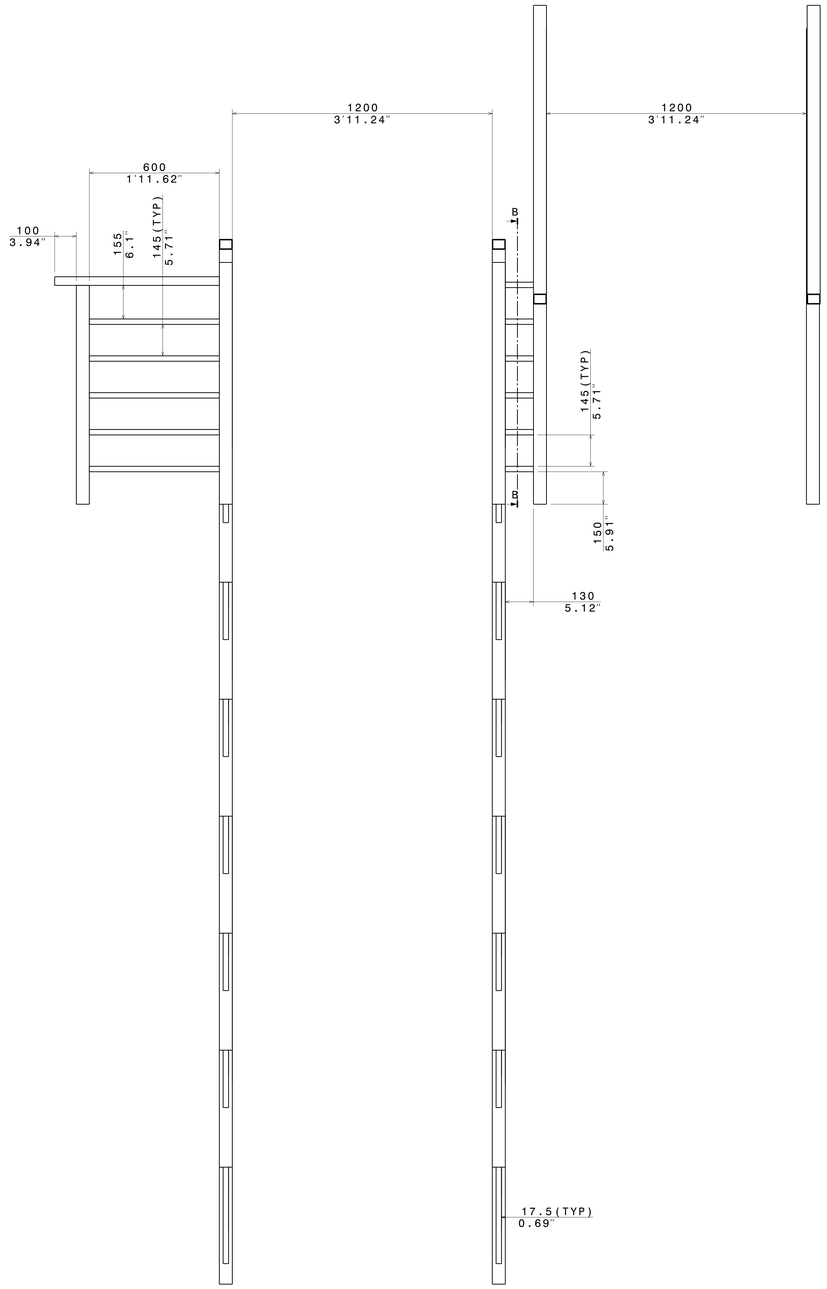
UNLESS OTHERWISE SPECIFIED
DIMENSION ARE IN MM
VIEWS: THIRD ANGLE PROJECTION

REV	DATE	DESCRIPTION
00	11/04/2020	INITIAL REVISION





Section view B-B
Scale: 1:5



UNLESS OTHERWISE SPECIFIED
DIMENSION ARE IN MM
VIEWS: THIRD ANGLE PROJECTION

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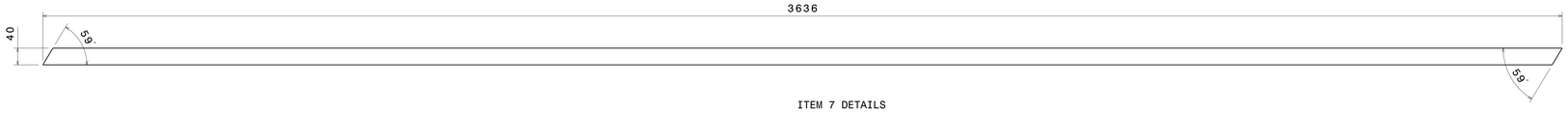
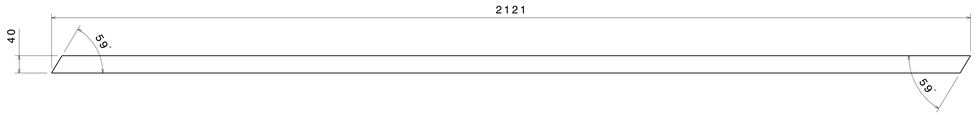
DRAWN BY SB	DATE 11/04/2020	DRAWING TITLE PAGE 138
CHECKED BY P2P Analysis & Solutions	DATE 11/04/2020	SIZE A0 / DRAWING NUMBER P2P_HAND RAIL_20 / REV 00
DESIGNED BY P2P Analysis & Solutions	DATE 11/04/2020	SCALE NONE / WEIGHT(kg) XXX / SHEET 2 OF 5

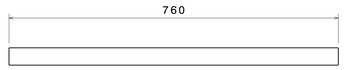
REV	DATE	DESCRIPTION
00	11/04/2020	INITIAL REVISION



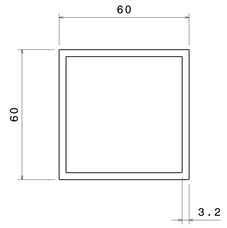
ITEM 7 DETAILS
Rect Tube 138 Frame 7



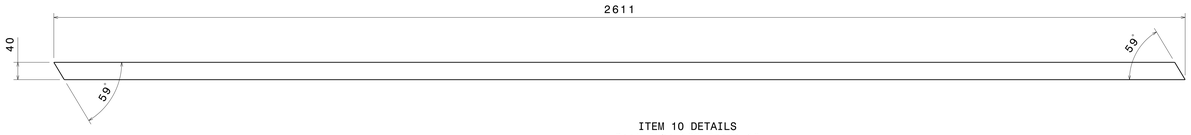
ITEM 8 DETAILS
Rect Tube 138 Frame 8



ITEM 11 DETAILS
Rect Tube 138 Frame 11

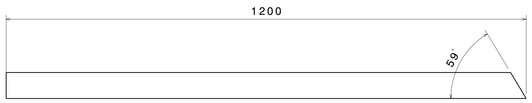


Section Detail of ITEM 1,3,14 & 15
Scale: 1:1

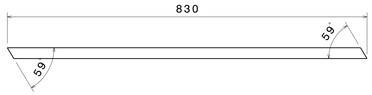


ITEM 10 DETAILS
Rect Tube 138 Frame 10

ITEM 13 DETAILS
Sq Tube 138 Frame 13

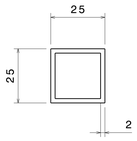


ITEM 14 DETAILS
Sq Tube 138 Frame 14

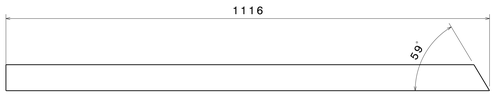


ITEM 6 DETAILS
Sq Tube 138 Frame 6

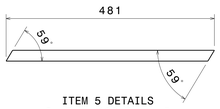
ITEM 12 DETAILS
Sq Tube 138 Frame 12



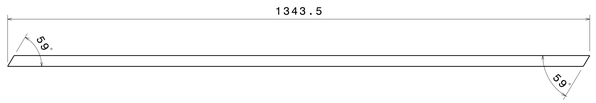
Section Detail of ITEM 2,4,5,,6,12 & 13
Scale: 1:1



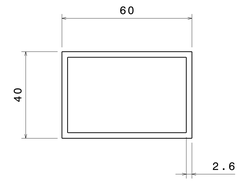
ITEM 15 DETAILS
Sq Tube 138 Frame 15



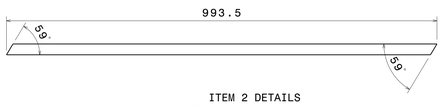
ITEM 5 DETAILS
Sq Tube 138 Frame 5



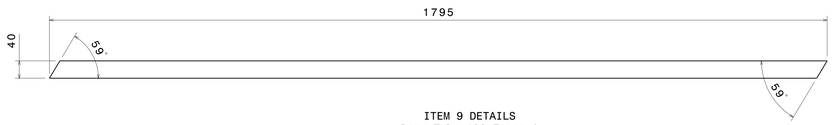
ITEM 4 DETAILS
Sq Tube 138 Frame 4



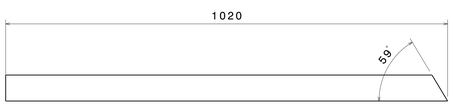
Section Detail of ITEM 7,8,9,10 & 11
Scale: 1:1



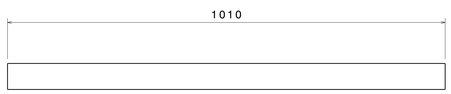
ITEM 2 DETAILS
Sq Tube 138 Frame 2



ITEM 9 DETAILS
Rect Tube 138 Frame 9



ITEM 1 DETAILS
Sq Tube 138 Frame 1



ITEM 3 DETAILS
Sq Tube 138 Frame 3

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CHECKED BY P2P Analysis & Solutions	DATE 11/04/2020	DRAWING TITLE PAGE 138
DESIGNED BY P2P Analysis & Solutions	DATE 11/04/2020	SIZE A0 · DRAWING NUMBER P2P_HAND RAIL_20 · REV 00
		SCALE NONE · WEIGHT(kg) XXX · SHEET 3 OF 5