LDWP AL. Working Platform System
Testing Report

Testing Report Number: FT160510-RR

Report Issue Date: 05 JUL 2016

Client

ALL SAFEWORK Pty Ltd

22 CREMONRE STREET
BALWYN VIC 3103 AUSTRLIA

Joon Man Yoo

Professional Mechanical Engineer

Corporate Signatory

FABTECH:

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SCOPE

This report included following LDWP Aluminum Working Platform System of

ALL SAFEWORK Pty LTD and Independent Design Assessment and Testing Carried out.

REPORT NO. : FT160510-ASW

LOAD TESTING OF ALUMINUM WORKING PLATFORM SYSTEM

DATE OF TESTING : 10 MAY 2016

DATE OF REPORT : 05 JULY 2016

CLIENT MR PAUL CRANAGE
ALL SAFEWORK Pty Ltd
22 CREMONRE STREET, BALWYN, VIC 3103

COMPONENTS

1) Standard Dropper including Head & Inner Assy, Z-12024, Z-11000, Z-20000

2) Aluminum Platform 1.5Mtr Arm including Accessories, Z-13015, Z-41000, Z-31000

3) Corner Standard Z-51050, Z-52050,-53000,

4) Aluminum Corner Arm 2.0Mtr including Accessories, Z-13020, Z-41000,Z-31000C

5) Aluminum Planks, ZPLANK5,4,3, and 2

6) Guardrail Post, SHS33x33x2.0x1710mm, 4-Clamps, Z-30000

7) Handrail Tube, SHS30x30x2.0, 5.0Mtr,

1. INTRODUCTION

FABTECH was engaged to perform an independent Design Assessment and Testing above Systems.

1-1. Working Platform Structure System were tested to determine its compliance to the requirements of AS/NZS 1576.1(2010) Scaffolding Part 1 General Requirement and AS6001(1999) Working Platform for Housing Construction.

1-2. The Guardrail Post and Top Rail were tested to determine its compliance to the requirements of AS/NZS 4994.1(2009) Temporary Edge Protection Part 1, General Requirements, Section 4, Appendix A, B and C.

LDWP AL Working Platform Systemis designed to provide safety work area and mitigate roof workers from falling and consequently designed to withstand impact only.

The tests of the system were conducted at Factory #2, Changwon-si,Korea and the testing was witnessed by FABTECH Professional Mechanical Engineer, Joon Man Yoo on 10 May 2016.

Testing was restricted to outward and inward static loading of a Top Rail and Static Load Test of LDWP AL Working Frame.

2. CONCLUSIONS

2-1. The components of the described LDWP AL Working Platform System has been tested as required by AS/NZS 1576.1(2010) and cannot find any detached or suffering structural failure. Frame structure test for 1.5m Platform Arm and 2.2m Corner Arm, were conducted with 339 Kgf as static load.

2-2. The Guardrail Post and Top Rail also were able to sustain the following tests specified in AS/NZS 4994.1(2009) without exceeding the specified deflection limits,becoming detached or suffering structural failure.

2-2-1. Appendix A; For Frame Structure test, Static load 3390N were applied on 1.5m Platform Arm and 2.2m Corner Arm and the result was passed.

2-2-2. Appendix B; Horizontal outward static loads (600 N) applied on top rail position of a central post

2-2-3. Appendix B; Horizontal inward static loads (600 N) applied on top rail position of a central post,

2-2-4. Appendix C; Dynamic test was not applied.

3. TESTING PROCEDURE

3.1 Dimensional Check

The critical dimensions of each component of each system were measured. Measured values were then checked against those shown on the manufacturer's drawings attached in Appendix 1. This is important to ensure that the components are manufactured to the designer’s standard as variations on section thickness and weld procedures may decrease the capability of the system to perform its task.

3.2 Static Testing

The Static tests required a means of applying static test loads.
A digital weight used to test loads during the tests.
The digital weight is show on 62kgs in Figure 1.
(Specification required 60kg)

Figure 1. 60 kgf Weight for Rai l

Figure 2 339 kgf Weight for Platform Arm

3.3 Acceptance Criteria

3.3.1. Static Testing of posts (Appendix A of AS/NZS 4994.1:2009)

The standard gives the following acceptance criteria for the static testing of platform arms and Top Rail.:

a) Under the maximum test load of 3,390 N, the platform arm and any part of the supporting frame structure shall not suffer structural failure.

b) Under a proof load of 600 N, Inwards or outwards, the deflection of Top Rail shall not reach 101mm.

3.4 Specifications

3.4.1. Frame Structure Test

AS/NZS 1576.1(2010) Scaffolding Part 1: General requirement
AS 6001(1999) Working Platform for Housing Construction

3.4.2. Top Rail Test

AS 4994.1(2009) Temporary Edge Protection, Part1: General Requirements

4. RESULTS

4.1 Dimensional check

All components of fabrication and assembly systems were manufactured in "Correct" accordance with drawings and within allowance required by AS/NZS4994.1(2009) Section 2 and Section 3.

4.2 The results for the structure test for LDWP are summarized in Table I. The deflection limits applicable to each test are given in the Table I

4.3 The result of the Top Rail Test conducted on summarized in Table II.

Table I : Results for Frame Structure Test

APPEMDIX	Test Description	Deflection Limits (mm)	Frame Loading		Remark
			Deflection (mm)	Pass/Fail	
A	Platform Arm 1.5m Static; Horizontal outward 3390 N	Not Specified	40	OK	
B	Corner Arm 2.2m Static; Horizontal outward 3390 N	Not Specified	70	OK	

Note

1. ***The above values of deflection measured after 30 minutes times of interval.***

2. ***We tested 339 kgf that is 1.5 times of SWL 225kg (2.2KN) specified in AS/NZS 1576.1***

3. ***The duty classification of working platform in AS 6001(1999) is 225 kg per Bay***

Table II : Results for Top Rail Test

APPEMDIX	Test Description	Deflection Limits (mm)	Mid Span of Top Rail		Remark
			Deflection (mm)	Pass /Fail	
A	Top Rail Static; Horizontal outward 600 N	101	50	pass	
	Top Rail Static; Horizontal inward 600 N	101	65	pass	
B	Top Rail Dynamic; Horizontal outward	Not applicable			According to AS/NZS 4994.1(2009) Section 4 Top Rail Test

Note

1. The above values of deflection measured after 30 minutes times of interval. (Specification required not lees then 300 ±1 Second)

2. Rail test made independently under condition of Max. 3mtr Post interval.

The assemblies tested were able to sustain the specified test loads without exceeding the specified deflection limits, becoming detached or suffering structural failure.

Figure 3- Working Platform Testing Jig

Figure 4- Working Platform Testing Jig

Figure 5- Platform Corner 2.2 meter Arm

Figure 5-1 Upper Corner Swivel

Figure 5-2 Lower Corner Swivel

Figure 6- 1.5 meter Platform Arm Static Loading 339 KGF

Figure 7- Deflection 40mm measured at 339 KGF

Figure 8- Static Load 339 KGF at 2.2 meter Corner Arm

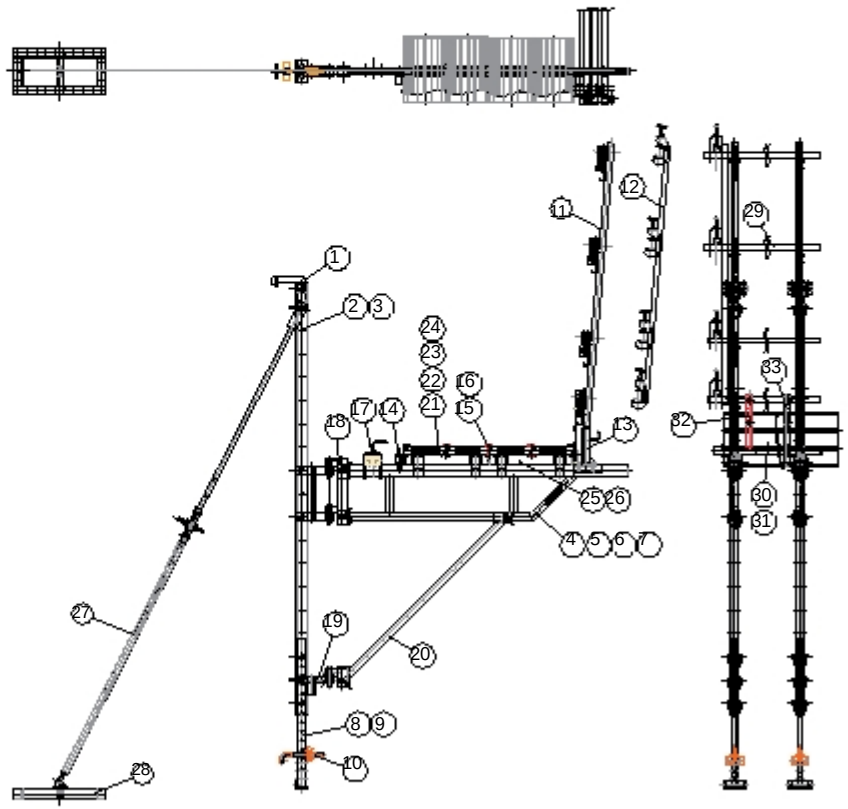
Figure 9- 70mm deflection measured at 2.2meter Corner Arm

Figure 10- Static Load 60kgf applied at center of Top Rail Span,

Figure 11 -50mm deflection measured at center of Top Rail Span

REV. NO. 0

Working Platform Assembly
(Swivel Corner Ststem)

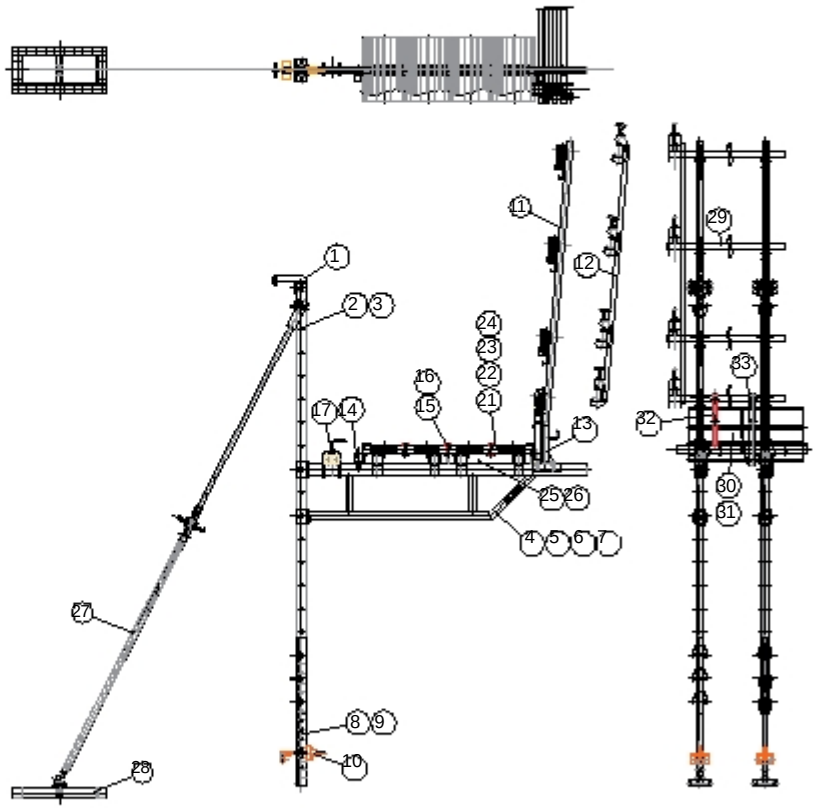


NO.	DESCRIPTION	Q'TY	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK
37							
36							
35							
34							
33							
32							
31							
30							
29	Rail	1	SPSR400	SHS30x30x2.0x4000	17.03 kg	Z-94000	
28	Brace Shoes	1	SS400	250Wx500L	4.66 kg	Z-81000	
27	Telescopic Back Brace	1	SPSR400	CHS34x25	6.84 kg	Z-80000	
26	AL-3 Plank Spacer	1	A6061-T6	US 50x50x3.5x680L	1.41 kg	Z-73000	
25	AL-2 Plank Spacer	1	A6061-T6	US 50x50x3.5x450L	1.08 kg	Z-72000	
24	AL-Plank	1	A6061-T6	225*50*5000L	17.03 kg	Z-65000	
23	AL-Plank	1	A6061-T6	225*50*4000L	13.65 kg	Z-64000	
22	AL-Plank	1	A6061-T6	225*50*3000L	10.27 kg	Z-63000	
21	AL-Plank	1	A6061-T6	225*50*2000L	6.90 kg	Z-62000	
20	Corner Arm Stay	1	A6061-T6	SHS40x40x3.5x1237GL	1.03 kg	Z-53000	
19	Corner Swivel Lower	1	A6061-T6		6.90 kg	Z-52000	
18	Corner Swivel Upper	1	A6061-T6		6.90 kg	Z-51000	
17	Internal Roll Clamp	1	SS400		1.20 kg	Z-43000	
16	3rd Single Plank Holder	1	SS400	50H	0.12 kg	Z-42050	
15	3rd Double Plank Holder	1	SS400	100H	0.18 kg	Z-42010	
14	Plank Clamp, single/double,	1	SS400	100Hx50H, Double	0.48 kg	Z-41000	
13	Corner Post Base Bracket	1	SS400		0.90 kg	Z-31000C	
12	Fixed Corner Post for 4 Rail	1	SPSR400	SHS25x25x2.0x1400L	3.47 kg	Z-34000	
11	Full Post, 4 Rails	1	SPSR400	SHS33x33x2.0x1719L	5.34 kg	Z-30000	
10	Inner Clamp	1	S20C	Z Bar*17*250L	0.96 kg	Z-21025	
09	Standard Inner, 0.8M	1	SPSR400	RHS50x30x2.3x800L	2.35 kg	Z-21080	
08	Standard Inner Assembly	1	SPSR400	RHS50x30x2.3x800L	3.31 kg	Z-20000	
07	Platform Arm 2.2M	1	A6061-T6	250Hx2200L	6.28 kg	Z-13022	
06	Platform Arm 2.0M	1	A6061-T6	250Hx2000L	5.72 kg	Z-13020	
05	Platform Arm 1.5M	1	A6061-T6	250Hx1500L	4.85 kg	Z-13015	
04	Platform Arm 0.9M	1	A6061-T6	250Hx900L	2.96 kg	Z-13090	
03	Standard 3.0M	1	A6061-T6	RHS60*40*4.25t*3000L	6.07 kg	Z-12030	
02	Standard 2.7M	1	A6061-T6	RHS60*40*4.25t*2700L	4.72 kg	Z-12027	
01	Standard Head Assembly	1	SS400		1.16 kg	Z-11000	#2

APPD BY		UNIT	mm	SUBJECT	PLATFORM SYSTEM
CHKD BY	WR JEE	SCALE	1 / 1	TITLE	Corner System, GA
DSND BY		PROJ.	3RD ANGLE		
DRWN BY	KH CHOI	DATE	07JUN07		
ALL SAFEWORK Pty Ltd				REF. NO	SHEET NO OF
				DWG NO	Z-00001-C
				FILE NAME	

REV. NO. 0

Working Platform Assembly (Fixed Type)



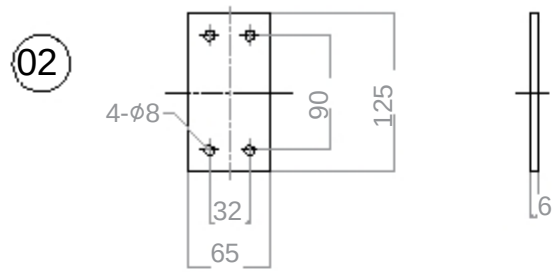
NO.	DESCRIPTION	Q'TY	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK
37							
36							
35							
34							
33							
32							
31							
30							
29	Rail	1	SPSR400	SHS30x30x2.0tx4000	17.03 kg	Z-94000	
28	Brace Shoes	1	SS400			Z-61000	
27	Telescopic Back Brace	1	STK400	CHS34x25		Z-80000	
26	AL-3 Plank Spacer	1	A6061-T6	SHS30x30x2.0tx4000		Z-73000	
25	AL-2 Plank Spacer	1	A6061-T6	SHS30x30x2.0tx4000		Z-72000	
24	AL-Plank	1	A6061-T6	225*50*5000L	17.03 kg	Z-65000	
23	AL-Plank	1	A6061-T6	225*50*4000L	13.65 kg	Z-64000	
22	AL-Plank	1	A6061-T6	225*50*3000L	10.27 kg	Z-63000	
21	AL-Plank	1	A6061-T6	225*50*2000L	6.90 kg	Z-62000	
17	Internal Rail Clamp	1	SS400		1.20 kg	Z-43000	
16	3rd Single Plank Holder	1	SS400	50H	0.12 kg	Z-42050	
15	3rd Double Plank Holder	1	SS400	100H	0.18 kg	Z-42010	
14	Plank Clamp, single/double,	1	SS400	100Hx50H, Double	0.48 kg	Z-41000	
13	Post Base Bracket C.S	1	SS400		0.90 kg	Z-31000	
12	Fixed Corner Post for 4 Rail	1	SPSR400	SHS20x20x2.0x1400L	3.47 kg	Z-34000	
11	Full Post, 4 Rails	1	SPSR400	SHS33x33x2.0x1718L	5.34 kg	Z-30000	
10	Inner Clamp	1	S20C	Z Bar*17*250L	0.96 kg	Z-21025	
09	Standard Inner, 0.8M	1	SPSR400	RHS50x30x2.3x800L	2.35 kg	Z-21080	
08	Standard Inner Assembly	1	SPSR400	RHS50x30x2.3x800L	3.31 kg	Z-20000	
07	Platform Arm 2.2M	1	A6061-T6	250Hx2200L	6.34 kg	Z-13022	
06	Platform Arm 2.0M	1	A6061-T6	250Hx2000L	5.72 kg	Z-13020	
05	Platform Arm 1.5M	1	A6061-T6	250Hx1500L	4.65 kg	Z-13015	
04	Platform Arm 0.9M	1	A6061-T6	250Hx900L	2.96 kg	Z-13090	
03	Standard 3.0M	1	A6061-T6	RHS60*40*4.5t*3000L	6.34 kg	Z-12030	
02	Standard 2.4M	1	A6061-T6	RHS60*40*4.5t*2700L	4.93 kg	Z-12024	
01	Standard Head Assembly	1				Z-11000	

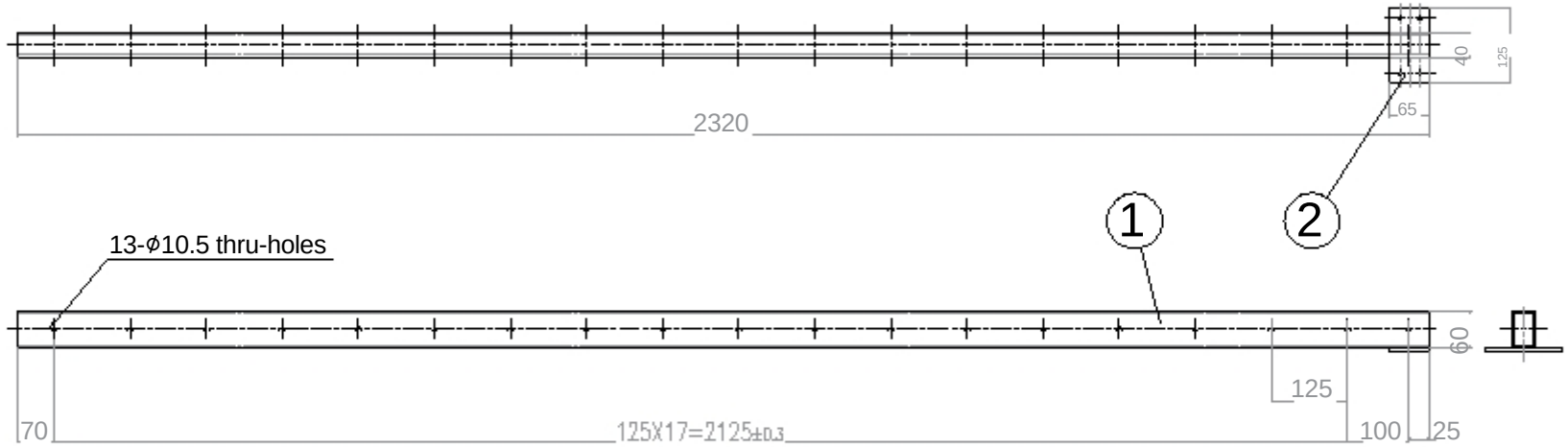
APPD BY		UNIT	mm	SUBJECT	PLATFORM SYSTEM
CHKD BY	WR JEE	SCALE	1 / 1	TITLE	Fixed System, GA
DSND BY	JM YOO	PROJ.	3RD ANGLE		
DRWN BY	KH CHOI	DATE	07JUN17		

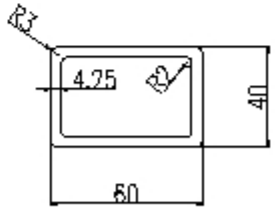
ALL SAFEWORK Pty Ltd

REF. NO		SHEET NO	OF
DWG NO	Z-00000-F	FILE NAME	

REV. NO. 0







RHS 60x40x3.5

NOTE

1. Remove all sharp edges.
2. Surface Treatment : Mill Finish
3. Allowance : ±0.5
4. Shipping Wt. : 4.72 Kg

NO.	DESCRIPTION	Q'TY	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK
02	BRACKET	1	A6061-T6	PL6x65x125	0.13 kg	Z-12024-2	
01	POST	1	A6061-T6	RHS60x40x4.25X2320L	4.59 kg	Z-12024-1	1.88 kg/m

APPD BY		UNIT	mm
CHKD BY	WR JEE	SCALE	1 / 1
DSND BY	JM YOO	PROJ.	3RD ANGLE
DRWN BY	KH CHOI	DATE	07.JUN.17.

SUBJECT: PLATFORM SYSTEM

TITLE: STANDARD 2.4M

ALL SAFEWORK Pty Ltd

REF. NO | SHEET NO OF

DWG NO: Z-12024 | FILE NAME

REVISIONS

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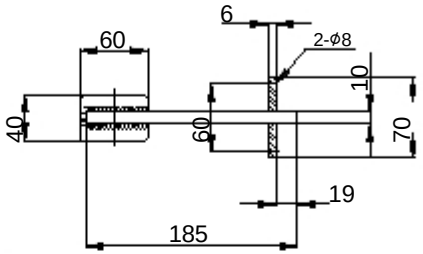

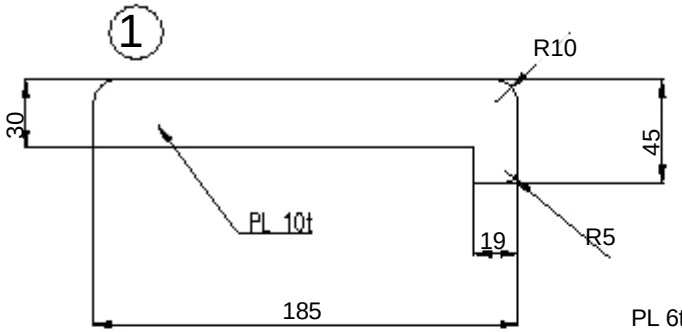

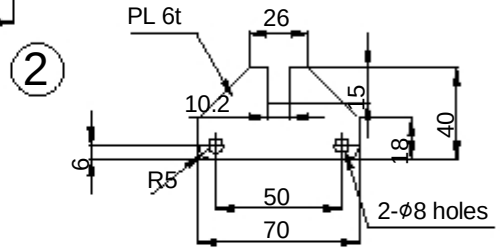

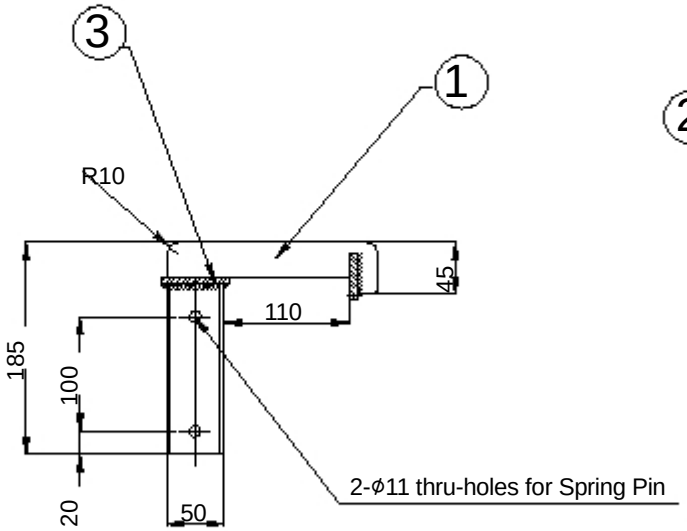

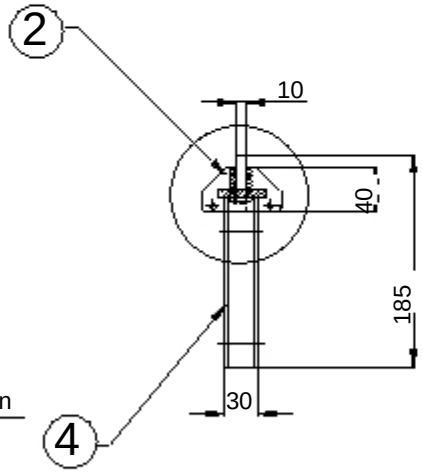

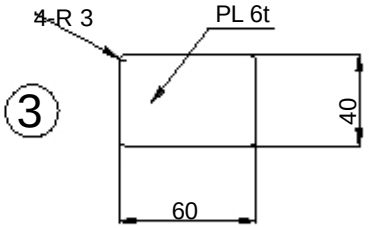

NOTE
1.Surface Treatment : Electro-Zinc Plating
2.Allowance : ±0.5
3.All Fillet Welding 5mm , unless noted otherwise.
4.Shipping Wt. : 1.16 kg

NO.	DESCRIPTION	Q'TY	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK
D4	Standard Spigot	1	STK400	RHS 50x30x3.0x149L	0.49 kg	Z-11000-4	
D3	Connection Plate	1	SS400	PL 6x40x60	0.11 kg	Z-11000-3	
D2	Head Fixing Plate	1	SS400	PL 6x40x70	0.11 kg	Z-11000-2	
D1	Head Top Plate	1	SS400	PL10x45x185	0.45 kg	Z-11000-1	

APPD BY		UNIT	mm
CHKD BY	WR JEE	SCALE	1 / 1
DSND BY	JM YOO	PROJ.	3RD ANGLE
DRWN BY	KH CHOI	DATE	07.JUN.17.

SUBJECT: PLATFORM SYSTEM
TITLE: STANDARD HEAD ASS'Y

ALL SAFEWORK Pty Ltd

REF. NO	SHEET NO OF
DWG NO	Z-11000
FILE NAME	Z-11000-A

REVISIONS

REV	DATE	CONTENTS	REVD BY	CHKD BY	APPD BY
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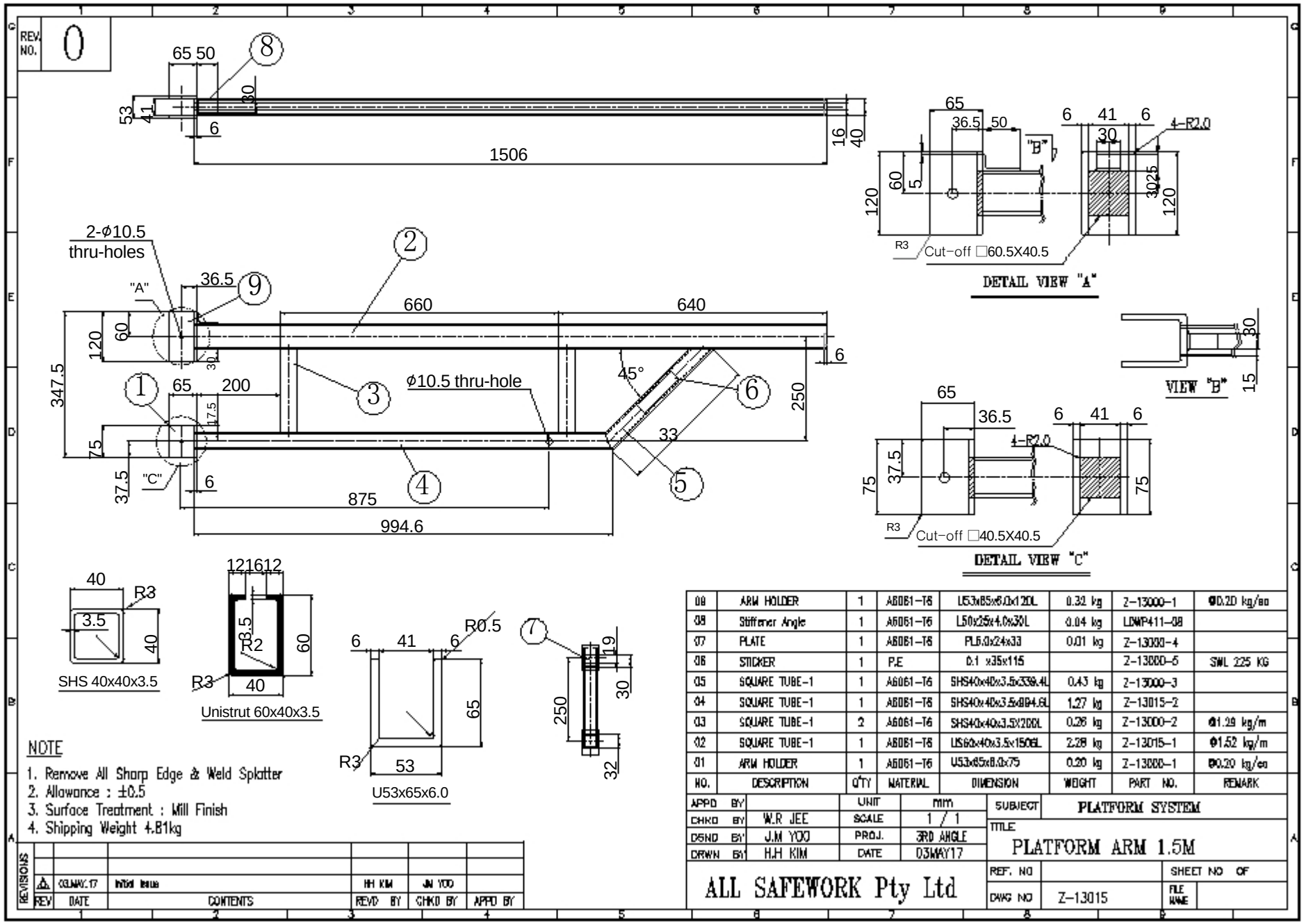


NO.	DESCRIPTION	QTY	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK
09	ARM HOLDER	1	A6061-T6	U53x85x6.0x120L	0.32 kg	Z-13000-1	⊕0.20 kg/ea
08	Stiffener Angle	1	A6061-T6	L50x25x4.0x30L	0.04 kg	LDMP411-08	
07	PLATE	1	A6061-T6	PL6.0x24x33	0.01 kg	Z-13000-4	
06	STICKER	1	P.E	0.1 x35x115		Z-13000-5	SWL 225 KG
05	SQUARE TUBE-1	1	A6061-T6	SHS40x40x3.5x338.4L	0.43 kg	Z-13000-3	
04	SQUARE TUBE-1	1	A6061-T6	SHS40x40x3.5x894.6L	1.27 kg	Z-13015-2	
03	SQUARE TUBE-1	2	A6061-T6	SHS40x40x3.5X200L	0.28 kg	Z-13000-2	⊕1.29 kg/m
02	SQUARE TUBE-1	1	A6061-T6	US60x40x3.5x150L	2.28 kg	Z-13015-1	⊕1.52 kg/m
01	ARM HOLDER	1	A6061-T6	U53x85x8.0x75	0.20 kg	Z-13000-1	⊕0.20 kg/ea

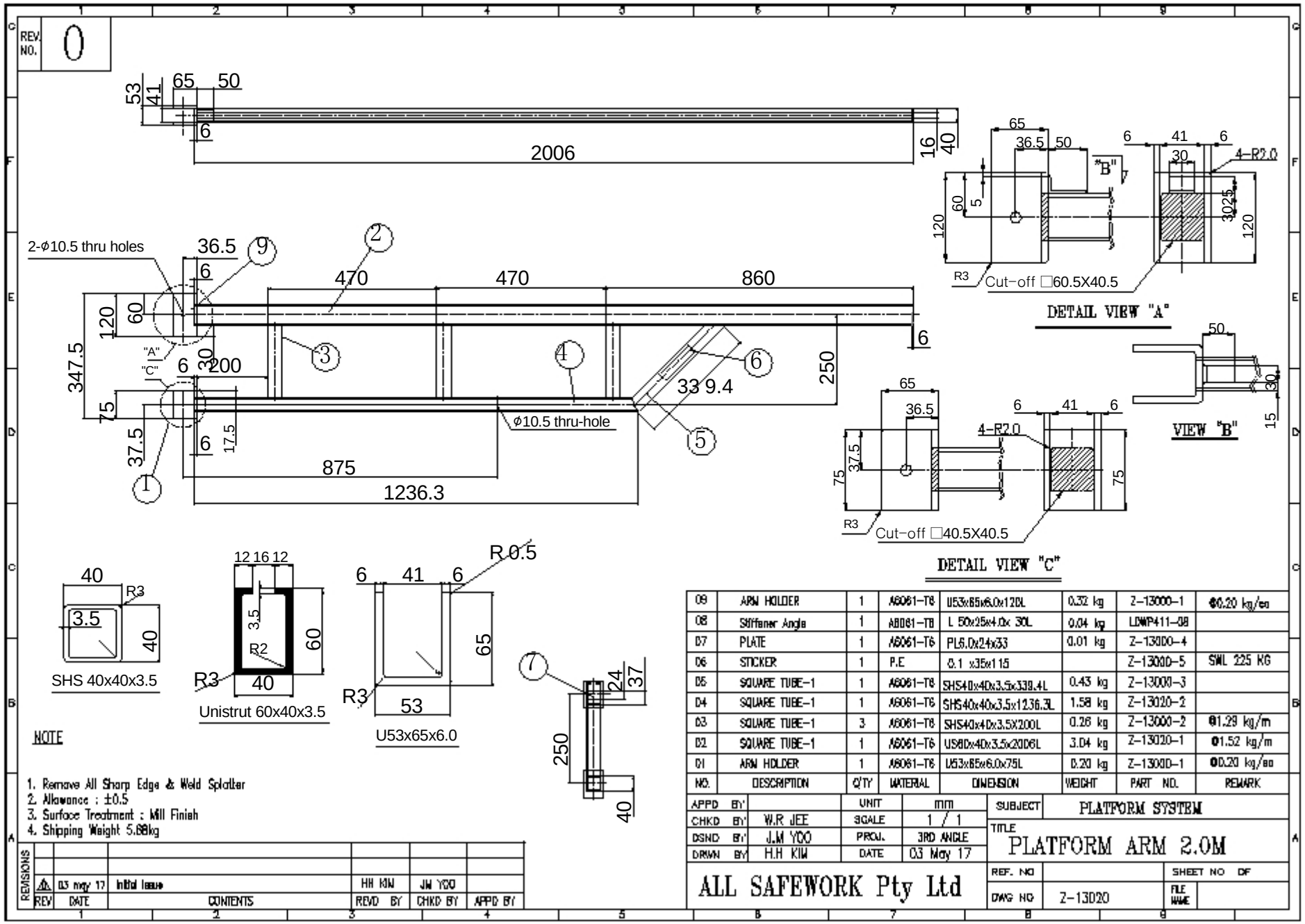
NOTE
1. Remove All Sharp Edge & Weld Spkatter
2. Allowance : ±0.5
3. Surface Treatment : Mill Finish
4. Shipping Weight 4.81kg

REVISIONS					
REV	DATE	CONTENTS	REVD BY	CHKD BY	APPD BY
⚠	03.MAY.17	Initial Issue	HH KIM	JM YOO	

APPD BY		UNIT	mm
CHKD BY	W.R JEE	SCALE	1 / 1
DSND BY	J.M YOO	PROJ.	3RD ANGLE
DRWN BY	H.H KIM	DATE	03MAY17

ALL SAFEWORK Pty Ltd

SUBJECT: PLATFORM SYSTEM
TITLE: PLATFORM ARM 1.5M
REF. NO
DWG NO: Z-13015
SHEET NO OF
FILE NAME



NO.	DESCRIPTION	Q'TY	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK
09	ARM HOLDER	1	A6061-T6	U53x65x6.0x128L	0.32 kg	Z-13000-1	₩6.20 kg/ea
08	Stiffener Angle	1	A6061-T6	L 50x25x4.0x 30L	0.04 kg	LDWP411-08	
07	PLATE	1	A6061-T6	PL6.0x24x33	0.01 kg	Z-13000-4	
06	STICKER	1	P.E	0.1 x35x115		Z-13000-5	SWL 225 KG
05	SQUARE TUBE-1	1	A6061-T6	SHS40x40x3.5x339.4L	0.43 kg	Z-13000-3	
04	SQUARE TUBE-1	1	A6061-T6	SHS40x40x3.5x1236.3L	1.58 kg	Z-13020-2	
03	SQUARE TUBE-1	3	A6061-T6	SHS40x40x3.5X200L	0.26 kg	Z-13000-2	₩1.29 kg/m
02	SQUARE TUBE-1	1	A6061-T6	US80x40x3.5x2006L	3.04 kg	Z-13020-1	₩1.52 kg/m
01	ARM HOLDER	1	A6061-T6	U53x65x6.0x75L	0.20 kg	Z-13000-1	₩0.20 kg/ea

APPD BY		UNIT	mm
CHKD BY	W.R JEE	SCALE	1 / 1
DSND BY	J.M YOO	PROJ.	3RD ANGLE
DRWN BY	H.H KIM	DATE	03 May 17

SUBJECT: PLATFORM SYSTEM

TITLE: PLATFORM ARM 2.0M

ALL SAFEWORK Pty Ltd

REF. NO | SHEET NO OF

DWG NO: Z-13020 | FILE NAME

REV	DATE	CONTENTS	REVD BY	CHKD BY	APPD BY
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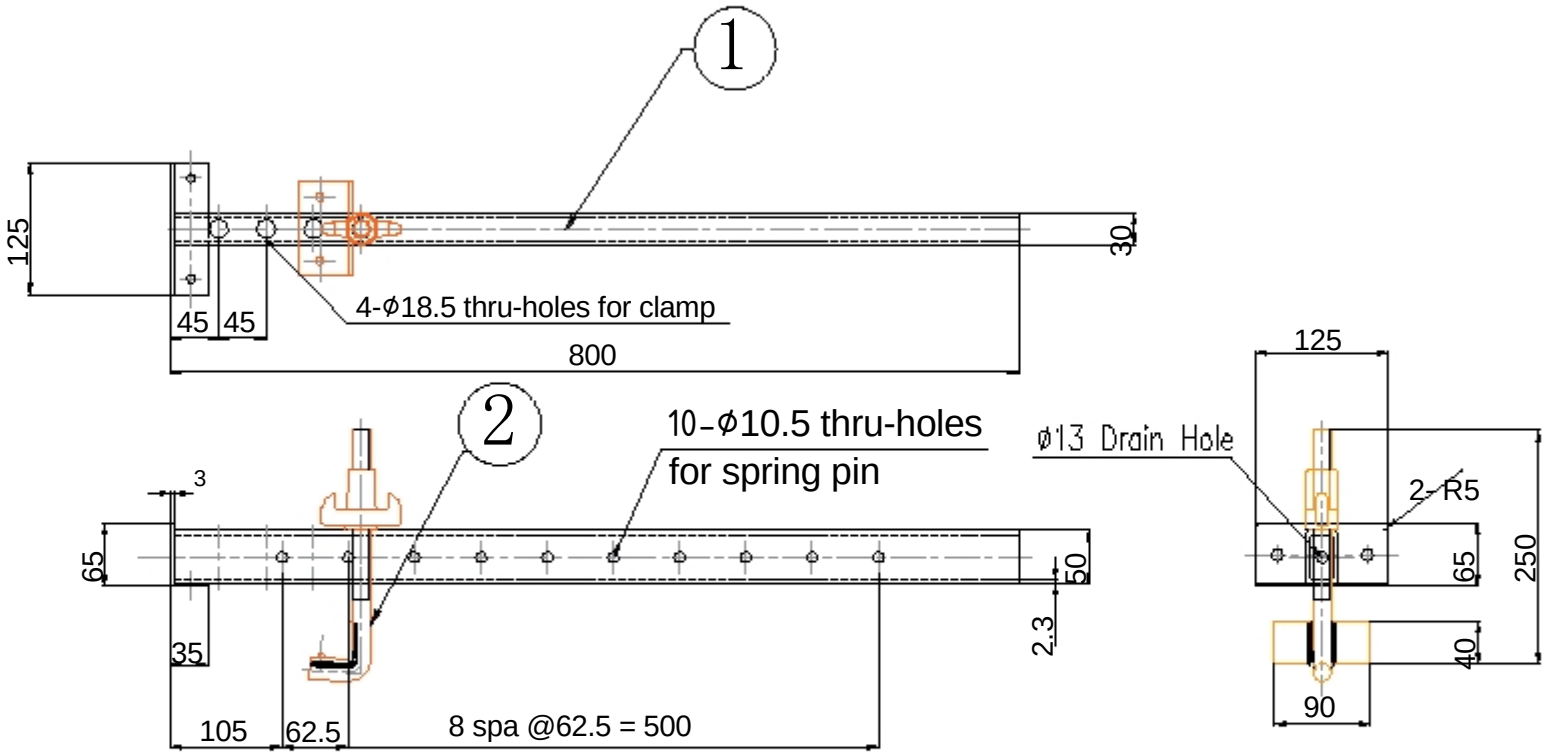
REV. NO. 0



NOTE
1.SURFACE TREATMENT : HOT DIPPING GALVANIZED(400g/M^2)
2.ALLOWANCE : ±0.5
3.TOTAL WEIGHT PER PIECE : 3.31 kg

NO.	DESCRIPTION	Q'TY	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK
03							
02	STD Clamp,250mm	1	SS400	17x250L	0.96 kg	Z-21025	
01	Standard Inner, 0.8m	1	SPSR400	RH550x30x2.3x800L	2.35 kg	Z-21080	

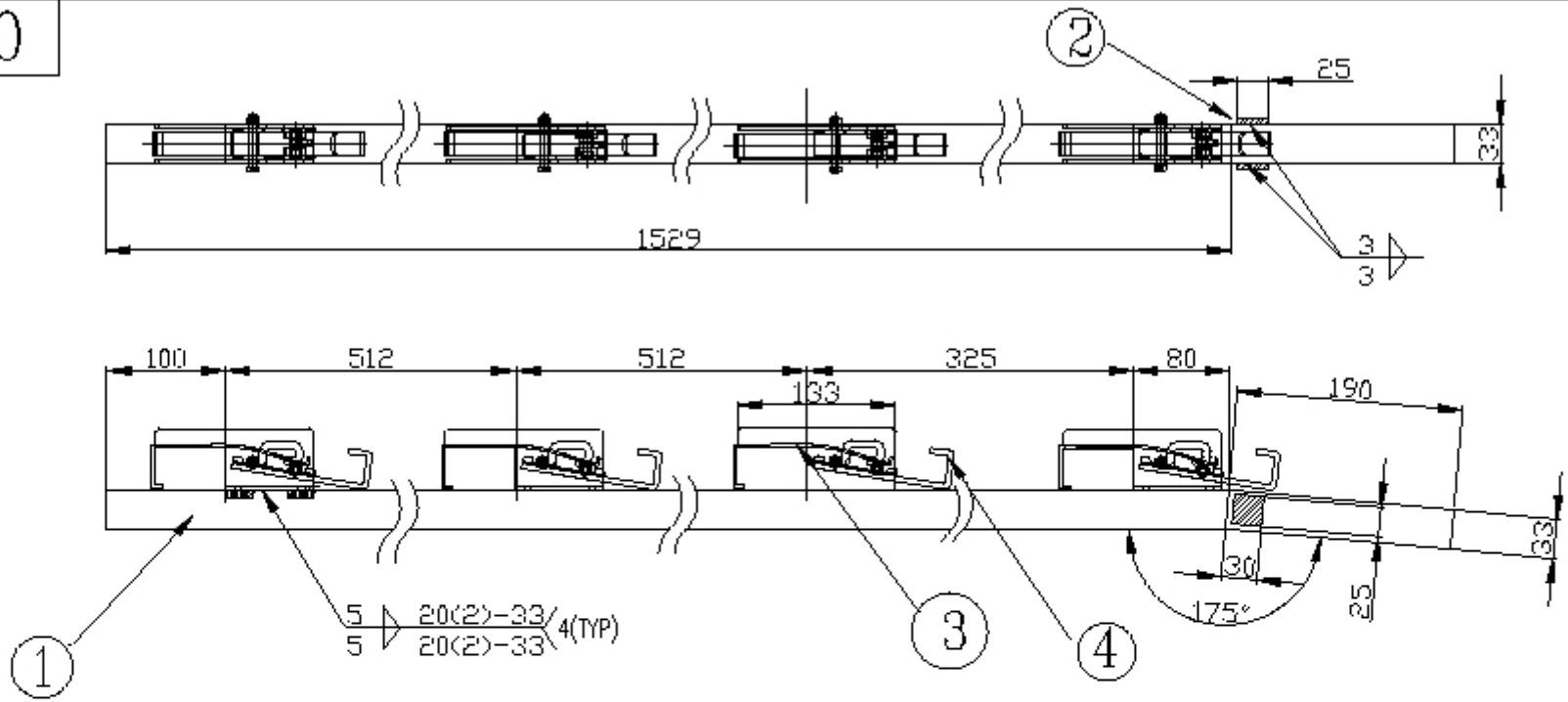
APPD BY		UNIT	mm
CHKD BY	WR JEE	SCALE	1 / 1
DSND BY	JM YOO	PROJ.	3RD ANGLE
DRWN BY	HH KIM	DATE	01JUN17

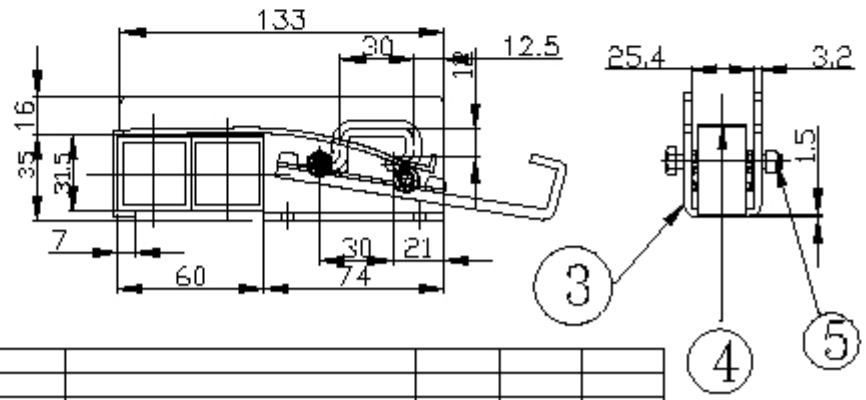
SUBJECT: PLATFORM SYSTEM
TITLE: STANDARD INNER ASSEMBLY
REF. NO:
SHEET NO OF
DWG NO: Z-20000
FILE NAME: Z-20000

ALL SAFEWORK Pty Ltd

REV.	DATE	CONTENTS	REVD BY	CHKD BY	APPD BY
0	01JUN17	Initial Issue			

REV. NO. 0





NOTE

1.Surface Treatment: Powder Coating after Electro-Plating
2.Color : RED
3.Shipping Weight : 4.93 kg

NO.	DESCRIPTION	QTY	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK
5	Special Bolt & Nylok Nut	4	S20C	M6x45L	0.08 kg	ZW-C3100-30C	
4	Rail Clamp Hook	4	SK5		0.64 Kg	ZW-C3100-30B	
3	Rail Clamp Base	4	SS400		0.96 Kg	ZW-C3100-30A	
2	Stopper	2	SS400	PL 4.5x25x25	0.04 kg		
1	Post Frame	1	SPSR400	SHS 33x33x2.0X1,719L	3.21 Kg	Z-30000-01	

APPD BY		UNIT	mm
CHKD BY	WR JEE	SCALE	1 / 4
DSND BY	JW YOO	PROJ.	3RD ANGLE
DRWN BY	JW YOO	DATE	07JUN17

SUBJECT: PLATFORM SYSTEM

TITLE: Full Post, 1710mm, 4 Clamps

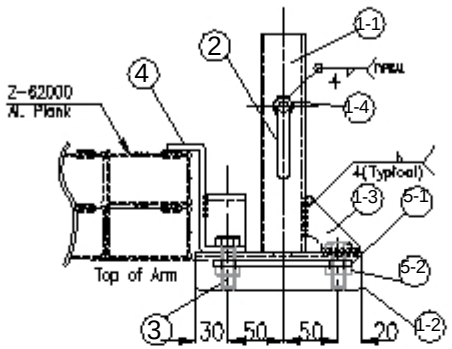
ALL SAFEWORK Pty Ltd

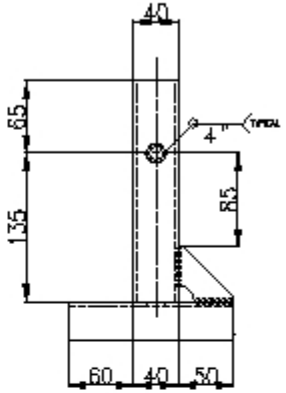
WORKING PLATFORM | SHEET NO OF

DWG NO: Z-30000 | FILE NAME: Z-30000

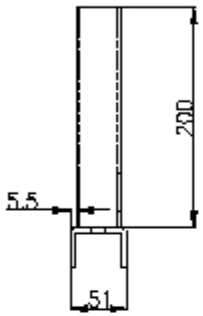
REV.	DATE	CONTENTS	REVD BY	CHKD BY	APPD BY
0	07JUN17	Initial Issue	JW YOO	WR JEE	

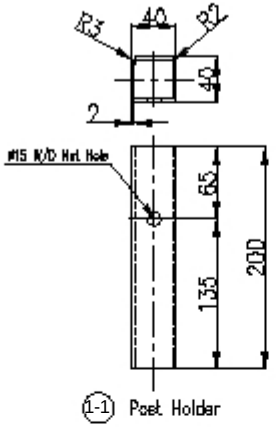
REV. NO. 0



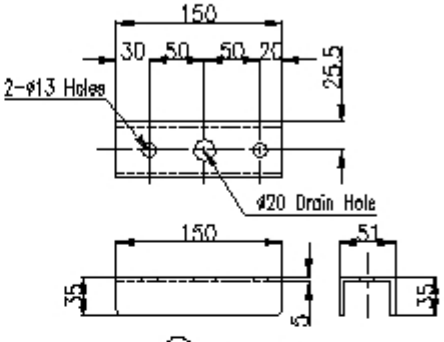


① Post Base Bracket

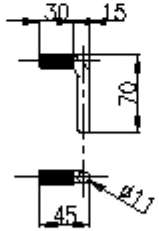




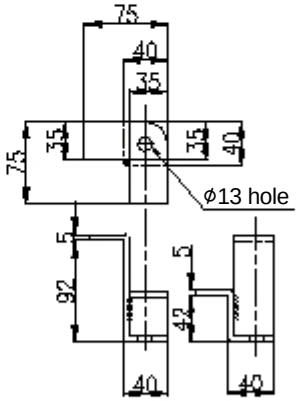
①-1 Post Holder



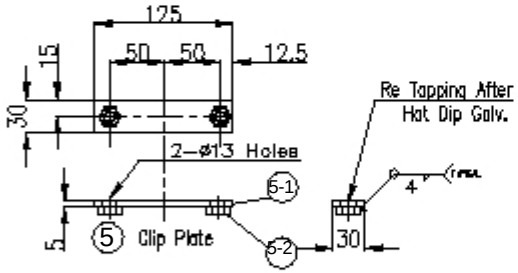
①-2 Arm Bracket



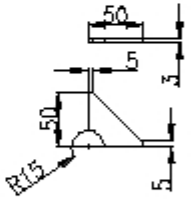
② "L" Bolt



④ Plank Clamp



⑤ Clip Plate



①-3 Rib-plate

NOTE
1.SURFACE TREATMENT : HOT DIPPING GALVANIZED(400g/M)
2.Clip Plate Re-Tapping After Hot Dip Galvanized
3.TOTAL WEIGHT PER PIECE : 1.80Kg

5	Clip Plate	5-2	Hex Nut	2	S20C	M12	0.03 kg	WN12	
		5-1	Clip Plate	1	SS400	FB 5.0tx125x30	0.15 kg	Z-31000-5	
		04	PLANK Clamp	1	SS400	PL Bent 75x75x97Hx5.0t	0.30 kg	Z-31000-4	
		03	Hex Bolt	2	S20C	M12x40	0.08 kg	CB-12040	
		02	"L" Bolt	1	S20C	M12x30x45x70L	0.07 Kg	LB-124570	
1	Post Base Bracket	1-4	Welding Nut	1	S20C	M12	0.015 kg	WN12	
		1-3	Rib Plate	2	SS400	PL 3.0tx50x50	0.07 kg	Z-31000-3	
		1-2	Arm Bracket	1	SS400	PL Bent 35x51Wx5.0tx150L	0.64 kg	Z-31000-2	
		1-1	Post Holder	1	SPSR400	SHS 40x40x2x200L	0.48 kg	Z-31000-1	62.31 kg/m
		NO.	DESCRIPTION	Q'TY	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK

REVISIONS					
REV.	DATE	CONTENTS	REVD BY	CHKD BY	APPD BY
⚠	30.JUN.17	New Drawing	HH KIM	JW YOO	WR JEE

APPD BY		UNIT	mm
CHKD BY	WR JEE	SCALE	1 / 1
DSND BY	JW YOO	PROJ.	3RD ANGLE
DRWN BY	HH KIM	DATE	30 JUN 17

SUBJECT: PLATFORM SYSTEM

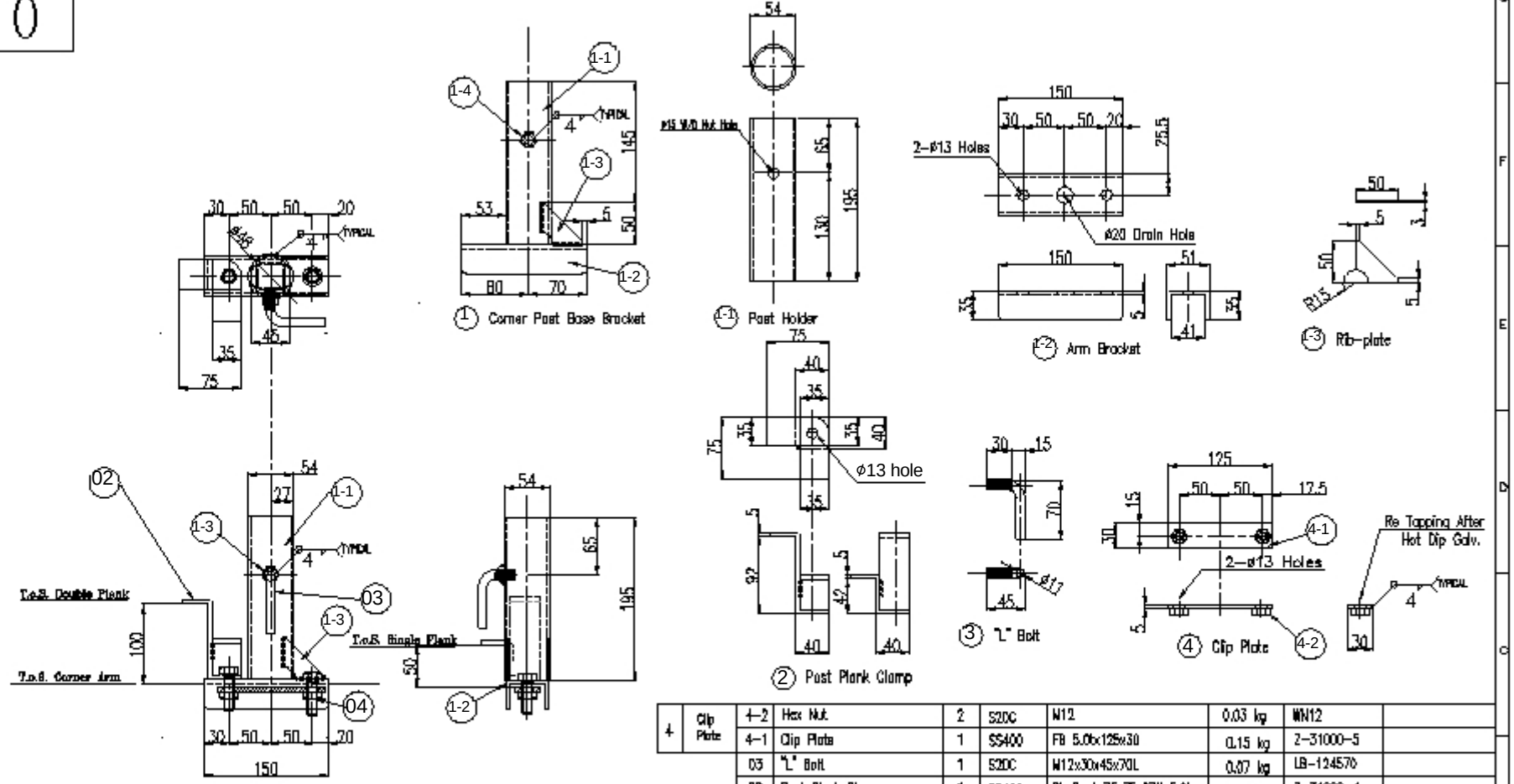
TITLE: POST BASE BRACKET

ALL SAFEWORK Pty Ltd

REF. NO | SHEET NO OF

DWG NO: Z-31000 | FILE NAME: Z-31000

REV. NO. 0



1-4 Corner Post Base Bracket
1-1 Post Holder
1-2 Arm Bracket
1-3 Rib-plate
2 Post Plank Clamp
3 "L" Bolt
4 Clip Plate

NO.		DESCRIPTION	Q'TY	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK
4	Clip Plate	4-2	Hex Nut	2	S20C	M12	0.03 kg	WN12	
		4-1	Clip Plate	1	SS400	FB 5.0tx125wx30	0.15 kg	Z-31000-5	
		03	"L" Bolt	1	S20C	M12x30x45x70L	0.07 kg	LB-124570	
		02	Post Plank Clamp	1	SS400	PL Bent 75x75x97Hx5.0t	0.30 kg	Z-31000-4	
1	Corner Post Base Bracket	1-4	Welding Nut	1	S20C	M12	0.015 kg	WN-12	
		1-3	Rib plate	2	SS400	PL 3.0tx50x50	0.07 kg	Z-31000-3	
		1-2	Arm Bracket	1	SS400	PL Bent 35x51Wx5.0tx150L	0.64 kg	Z-31000-2	
		1-1	Post Holder	1	STK400	CHS ø54x3.0tx195L	0.74 kg	Z-31000C-1	ø3.80 kg/m

NOTE

1. Surface Treatment : Hot Dip Galvanised (400g/M)
2. Clip Plate Re-Tapping After Hot Dip Galvanized
3. Shipping weight per set : 2.01 kg

REVISIONS					
REV.	DATE	CONTENTS	REVD BY	CHKD BY	APPD BY
0	30.JUN.17	Initial Issue	HH KIM	JM YOO	WR JEE

APPD BY		UNIT	mm
CHKD BY	WR JEE	SCALE	1 / 1
DSND BY	JM YOO	PROJ.	3RD ANGLE
DRWN BY	HH KIM	DATE	30 JUN 17

ALL SAFEWORK Pty Ltd

SUBJECT: PLATFORM SYSTEM

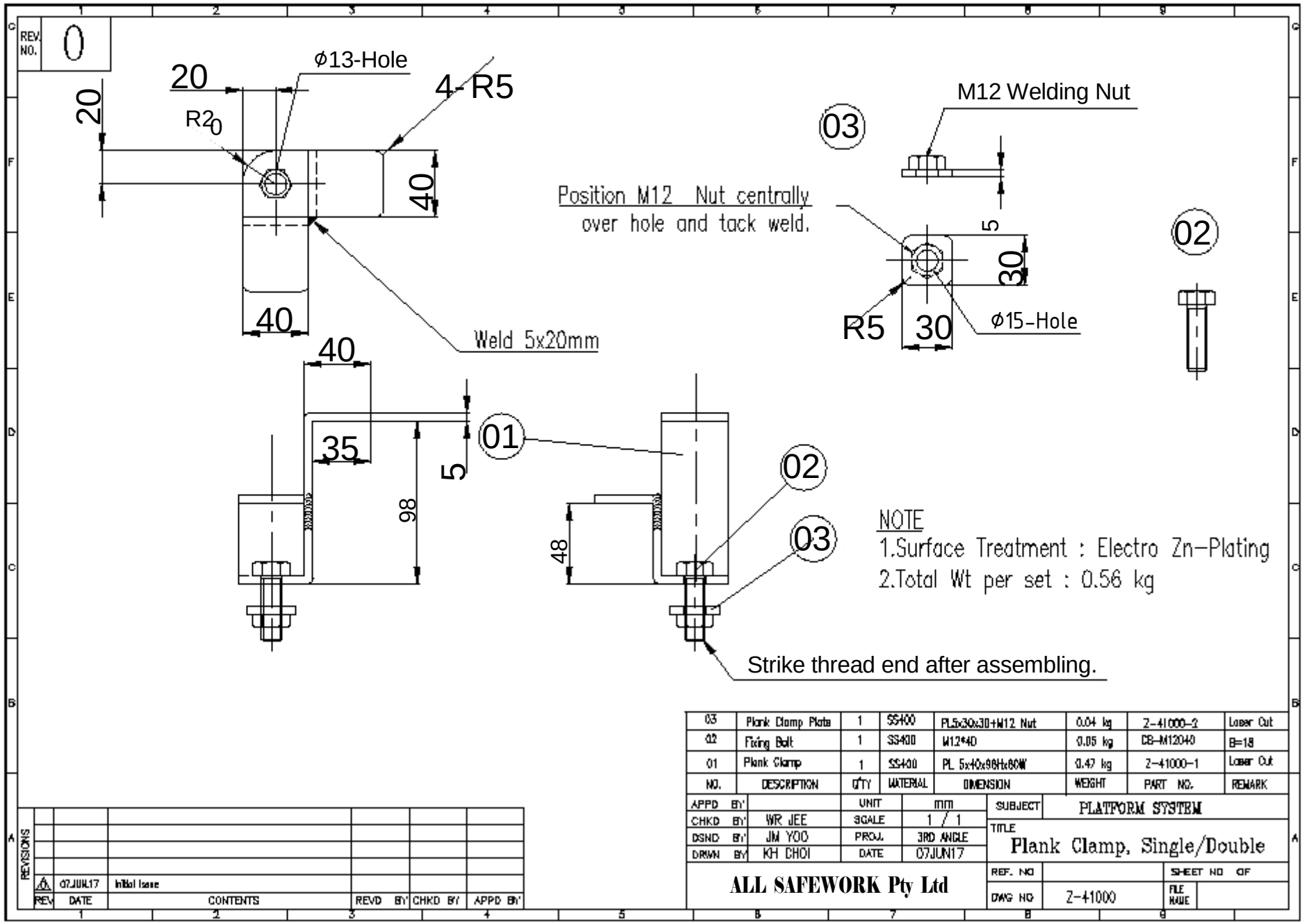
TITLE: CORNER POST BASE BKT ASSY

REF. NO:

SHEET NO OF

DWG NO: Z-31000C

FILE NAME: Z-31000C

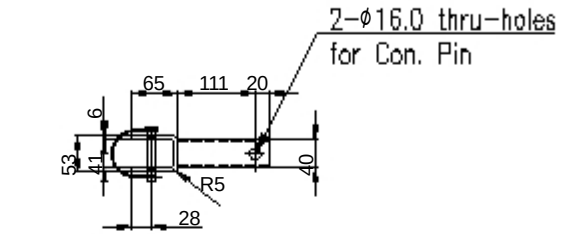


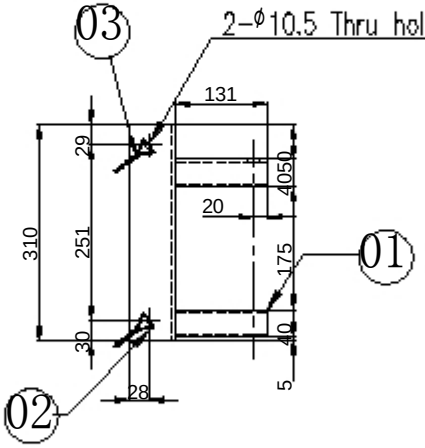
NO.	DESCRIPTION	Q'TY	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK
03	Plank Clamp Plate	1	SS400	PL5x30x30+M12 Nut	0.04 kg	Z-41000-2	Laser Cut
02	Fixing Bolt	1	SS400	M12*40	0.05 kg	CB-M12040	B=18
01	Plank Clamp	1	SS400	PL 5x40x98Hx80W	0.47 kg	Z-41000-1	Laser Cut

APPD BY		UNIT	mm	SUBJECT	PLATFORM SYSTEM
CHKD BY	WR JEE	SCALE	1 / 1	TITLE	Plank Clamp, Single/Double
DSND BY	JM YOO	PROJ.	3RD ANGLE		
DRWN BY	KH CHOI	DATE	07JUN17		
ALL SAFEWORK Pty Ltd				REF. NO	SHEET NO OF
				DWG NO Z-41000	FILE NAME

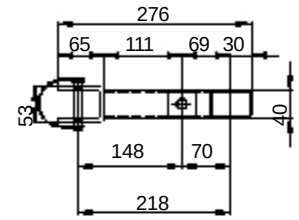
REV	DATE	CONTENTS	REVD BY	CHKD BY	APPD BY
0	07JUN17	Initial Issue			

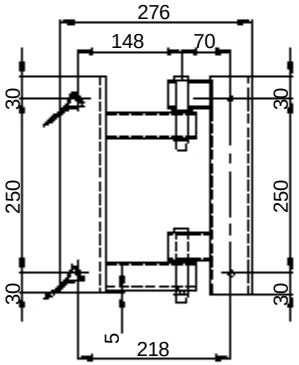
REV. NO. 0



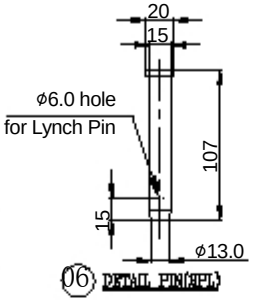


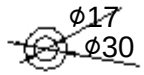
Fixed End to Standard

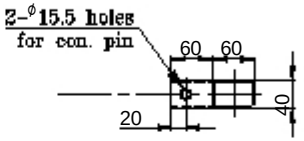


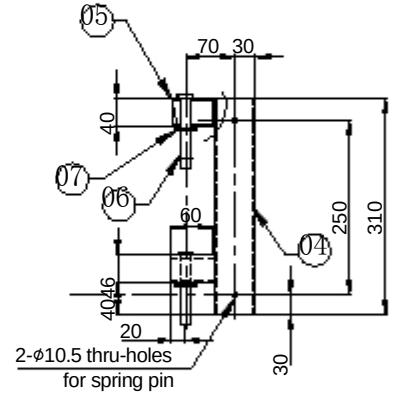


Assembly









Movable End to Platform Arm

NOTE

1.All Fillet Weld shall be min. 4 mm, UNO.
2.Surface Treatment : Mill Finish
3.Allowance : ±0.5
4.Shipping weight : Fixed End 1.04 kg, Movable End 1.27 kg,
Total Set 2.31 kg

	NO.	DESCRIPTION	Q'TY	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK
ARM End 1.04 kg	07	Plain Washer	2	SS 400	φ17x30x2.5	0.03 kg	Z-51000-07	
	06	Con. Pin w/Lynch Pin	2	S20C	RB 15.0x107L	0.30 kg	Z-51050-06	
	05	Square Tube-2	2	A6061-T6	SHS40x40x3.0x60L	0.13 kg	Z-51050-05	1.13 kg/m
	04	Square Tube-1	1	A6061-T6	RHS60x40x4.0x310L	0.56 kg	Z-51050-04	1.87 kg/m
STD End 1.27 kg	03	Spring Pin Ass'y	2	S20C	φ9.3x70.0	0.12 Kg	ZX-0000	
	02	STD Bracket	1	A6061-T6	Bent PL 53x85Wx6.0Hx310H	0.86 Kg	Z-51050-03	2.75 kg/m
	01	Square Tube-2	2	A6061-T6	SHS40x40x3.0x131L	0.28 Kg	Z-51050-02	1.13 kg/m
2.31 kg								

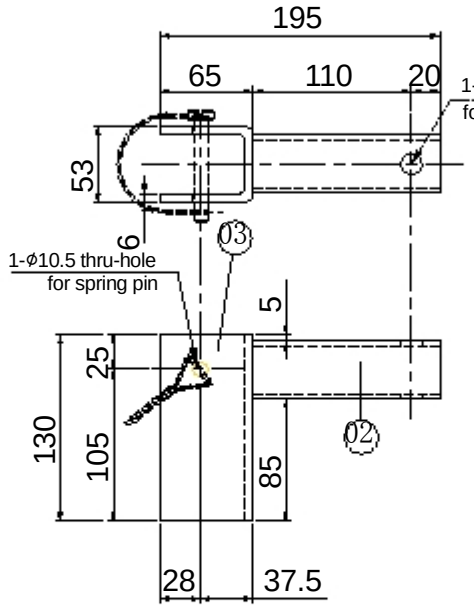
REVISIONS					
REV	DATE	CONTENTS	REVD BY	CHKD BY	APPD BY
⚠	02.JUN17	Initial Issue			

APPD BY		UNIT	mm
CHKD BY	WR JEE	SCALE	1 / 1
DSND BY	JM YOO	PROJ.	3RD ANGLE
DRWN BY		DATE	02JUN17

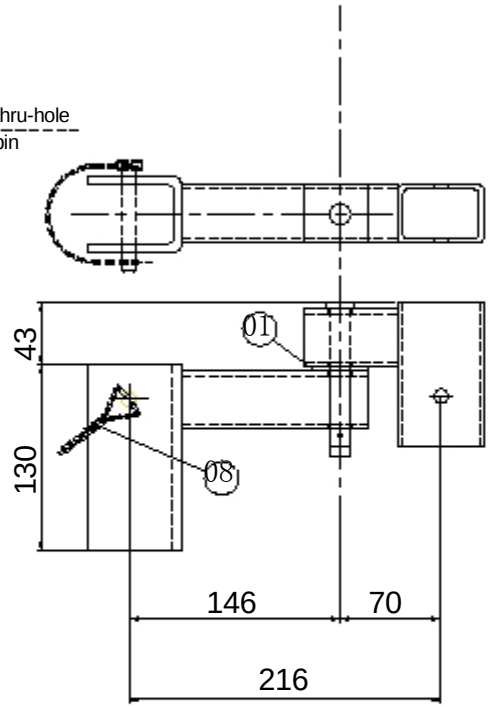
ALL SAFEWORK Pty Ltd

SUBJECT	PLATFORM SYSTEM
TITLE	CORNER SWIVEL UPPER
REF. NO	
SHEET NO	OF
DWG NO	Z-51050
FILE NAME	

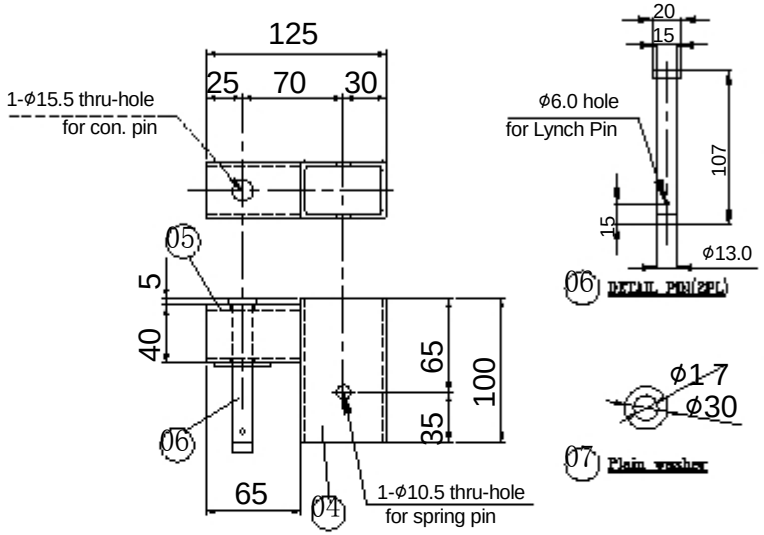
REV. NO. 0



Fixed End to Standard



Assembly



Movable End to Platform Arm

NOTE

1.All Fillet Weld shall be min. 4 mm, UNO.
2.Surface Treatment : Mill Finish
3.Allowance : ±0.5
4.Shipping weight : STD End 0.45 kg, ARM End 0.56 kg,
Total Set 1.01 kg

	NO.	DESCRIPTION	Q'TY	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK
ARM End 0.45 kg	07	Plain Washer	1	SS400	φ17x30x2.5	0.03 kg	Z-52000-07	
	06	Con. Pin w/Lynch Pin	1	S20C	RB 15.0x107L	0.15 kg	Z-52000-06	
	05	Square Tube-2	1	A6061-T6	SHS40x40x3.0x85L	0.06 kg	Z-52000-05	1.13 kg/m
	04	Square Tube-1	1	A6061-T6	RHS60x40x4.0x100L	0.19 kg	Z-52000-04	1.87 kg/m
STD End 0.56 kg	08	Spring Pin Ass'y	1	S20C	φ8.3x70.0	0.06 Kg	ZX-8000	
	03	STD Bracket	1	A6061-T6	Bent PL 53x85Wx8.0tx130H	0.35 kg	Z-52050-03	2.75 kg/m
	02	Square Tube-2	1	A6061-T6	SHS40x40x3.0x130L	0.15 kg	Z-52050-02	1.13 kg/m
SET 1.01 kg								

REV.	DATE	CONTENTS	REVD BY	CHKD BY	APPD BY
			HH KIM	JW YOO	
⚠	02JUN17	Initial Issue		JW YOO	

APPD BY		UNIT	mm
CHKD BY	WR JEE	SCALE	1 / 1
DSND BY	JW YOO	PROJ.	3RD ANGLE
DRWN BY	HH KIM	DATE	02JUN17

SUBJECT PLATFORM SYSTEM

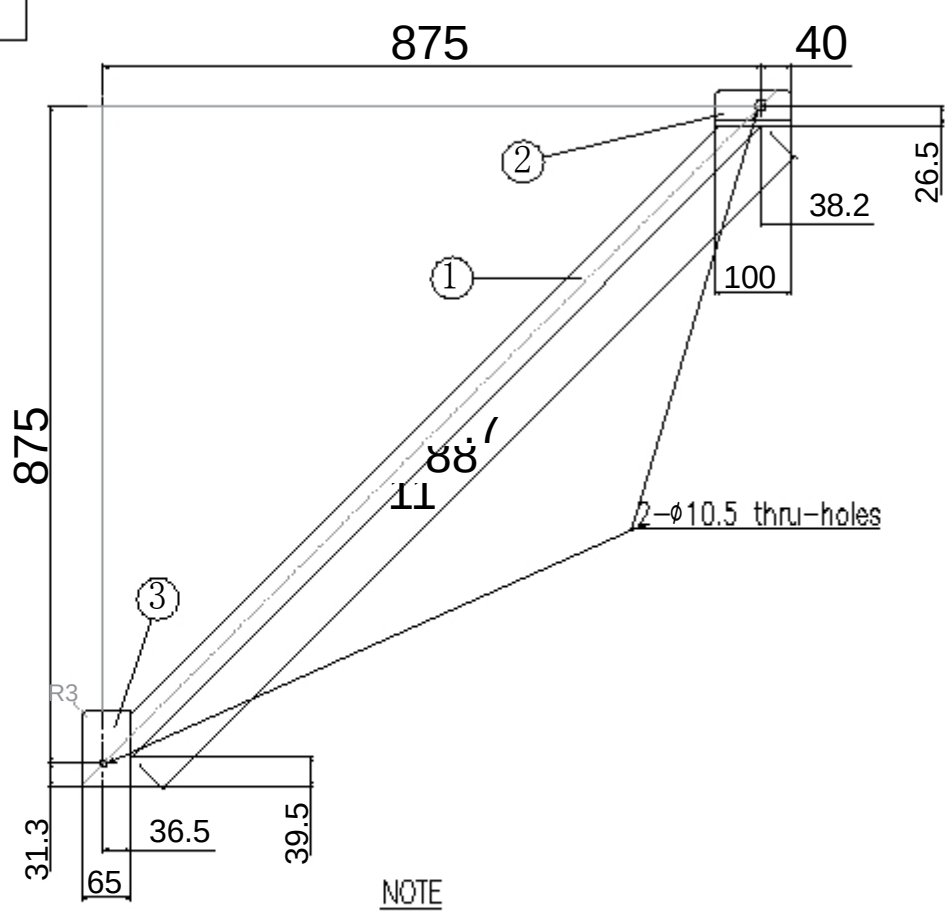
TITLE CORNER SWIVEL LOWER

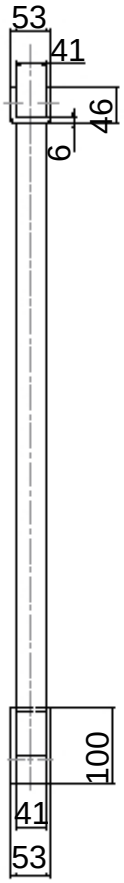
ALL SAFEWORK Pty Ltd

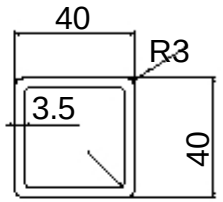
REF. NO | SHT NO 1 OF 1

DWG NO Z-52050 | FILE NAME Z-52050

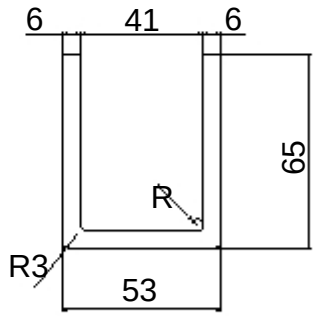
REV. NO. 0







SHS 40x40x3.5



U53x65x6.0

NOTE

1. Remove all sharp edges.
2. Surface Treatment : Mill Finish
3. Allowance : ±0.5
4. Shipping Wt. : 1.03 Kg

NO.	DESCRIPTION	Q'TY	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK
03	HOLDER	1	A6061-T6	U53x65x6.0x130L	0.27 kg	Z-53000-3	
02	HOLDER	1	A6061-T6	U53x46x6.0x130L	0.23 kg	Z-53000-2	
01	SQUARE TUBE	1	A6061-T6	SHS40x40x3.5x1188.7L	1.53 kg	Z-53000-1	

APPD BY		UNIT	mm
CHKD BY	WR JEE	SCALE	1 / 1
DSND BY	JM YOO	PROJ.	3RD ANGLE
DRWN BY	KH CHOI	DATE	07JUN17

SUBJECT: PLATFORM SYSTEM

TITLE: CORNER ARM STAY

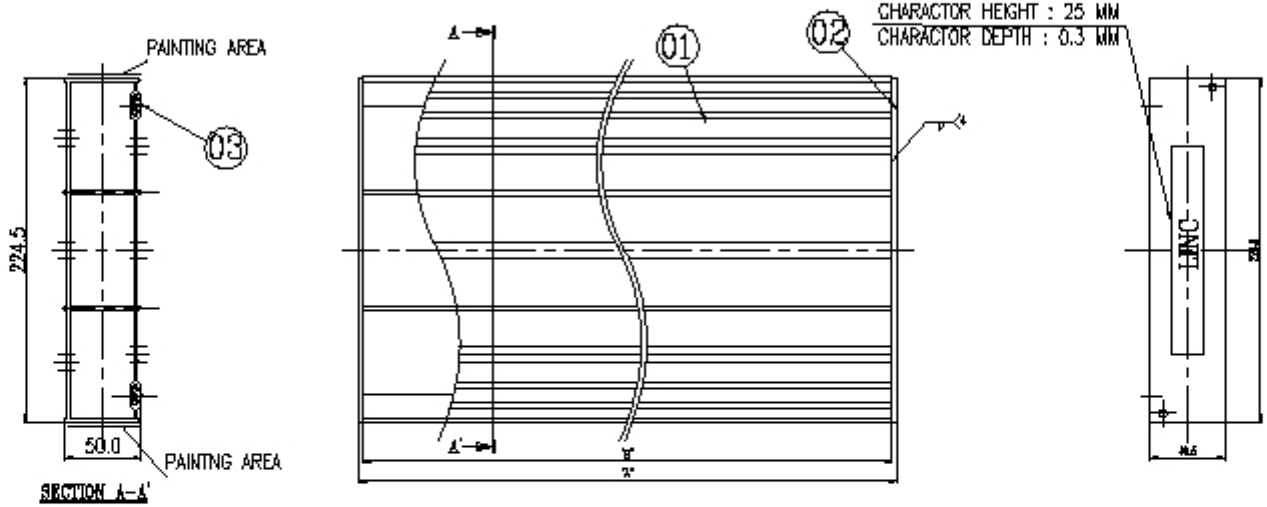
ALL SAFEWORK Pty Ltd

REF. NO | SHEET NO OF

DWG NO: Z-53000 | FILE NAME

REV.	DATE	CONTENTS	REVD BY	CHKD BY	APPD BY
0	07JUN17	Initial issue			

REV. NO. 0



NOTE : PAINTING AREA

1. Etching Primer : VP-134 one Coat, 20um
2. Top Coat : Urethane Coat two coat 60um,
3. Color : RED(Same as Rail Color)

PART CODE	"A"	"B"	UNIT WEIGHT	REMARKS
Z-62000	2000	1994	6.901 kg	ZPLANK2
Z-63000	3000	2994	10.277 kg	ZPLANK3
Z-64000	4000	3994	13.654 kg	ZPLANK4
Z-65000	5000	4994	17.030 kg	ZPLANK5

NO.	DESCRIPTION	Q'TY	MATERIAL	DIMENSION	UNIT WEIGHT	PART NO.	REMARK
03	PROFILE RUBBER	2	EPDM(BLACK)		45.72 g/M	Z-62000-3	
02	END PLATE	2	A6061-T6	224.0X48.5xt3.0	0.09 kg	Z-62000-2	
01	PROFILE(PLANK)	1	A6N01-T5		3.285 Kg/M		

APPD BY'		UNIT	mm
CHKD BY'	WR JEE	SCALE	1 / 1
DSND BY'	JM YOO	PROJ.	3RD ANGLE
DRWN BY'	KH CHOI	DATE	02JUN17

SUBJECT: PLATFORM SYSTEM

TITLE: Aluminum Plank

ALL SAFEWORK Pty Ltd

REF. NO | SHEET NO OF

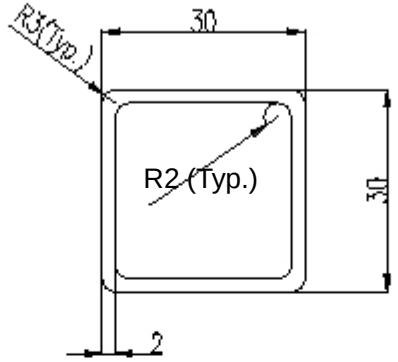
DWG NO: Z-62000 | FILE NAME

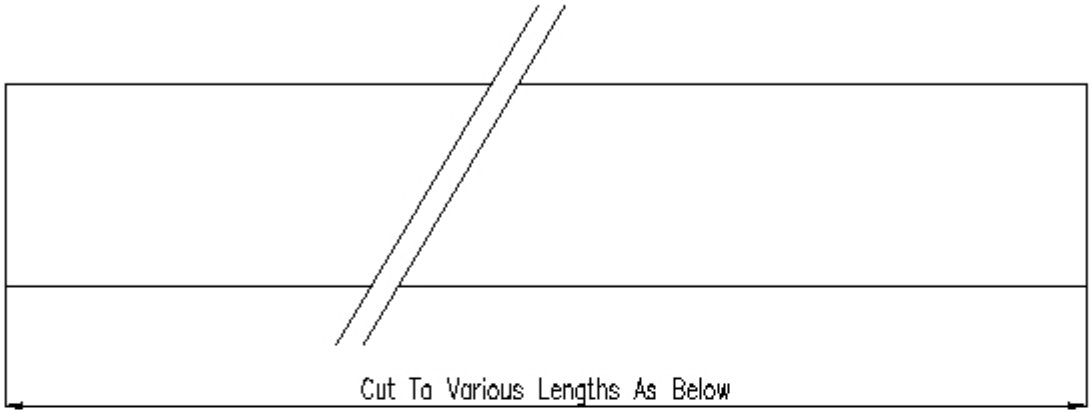
REV.	DATE	CONTENTS	REVD BY'	CHKD BY'	APPD BY'
1	02JUN17	Initial Issue	HH KIM	JM YOO	

REVISIONS

REV. NO. 0

Remove All Burrs And Sharp Edges





Item No.	Length
Z-95000	5.0 mtr.
Z-94000	4.0 mtr.
Z-93000	3.0 mtr.
Z-92400	2.4 mtr.
Z-92000	2.0 mtr.

NOTE
1. Surface Treatment
   Coating : RED color
   on Hot Galvanised Iron Tube

NO.	DESCRIPTION	QTY	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK
5	Hand Rail		SPSR400	SHS 30x30x2.0x2000L	3.36 kg	Z-92000	@ 1.68kg/m
4	Hand Rail		SPSR400	SHS 30x30x2.0x2400L	4.03 kg	Z-92400	@ 1.68kg/m
3	Hand Rail		SPSR400	SHS 30x30x2.0x3000L	5.04 kg	Z-93000	@ 1.68kg/m
2	Hand Rail		SPSR400	SHS 30x30x2.0x4000L	6.72 kg	Z-94000	@ 1.68kg/m
1	Hand Rail		SPSR400	SHS 30x30x2.0x5000L	8.40 kg	Z-95000	@ 1.68kg/m

APPD BY		UNIT	mm
CHKD BY	WR JEE	SCALE	1 / 1
DSND BY	JM YOO	PROJECTION	3RD ANGLE
DRWN BY	JM YOO	DATE	07JUN17

SUBJECT: PLATFORM SYSTEM

TITLE: Handrail-Various lengths

ALL SAFEWORK Pty Ltd

Working Platform

DWG NO: Z-90000

SHEET NO OF

FILE NAME: Z-90000

REVISIONS

REV	DATE	CONTENTS	REVD BY	CHKD BY	APPD BY
0	07.JUN.17	Initial Issue			