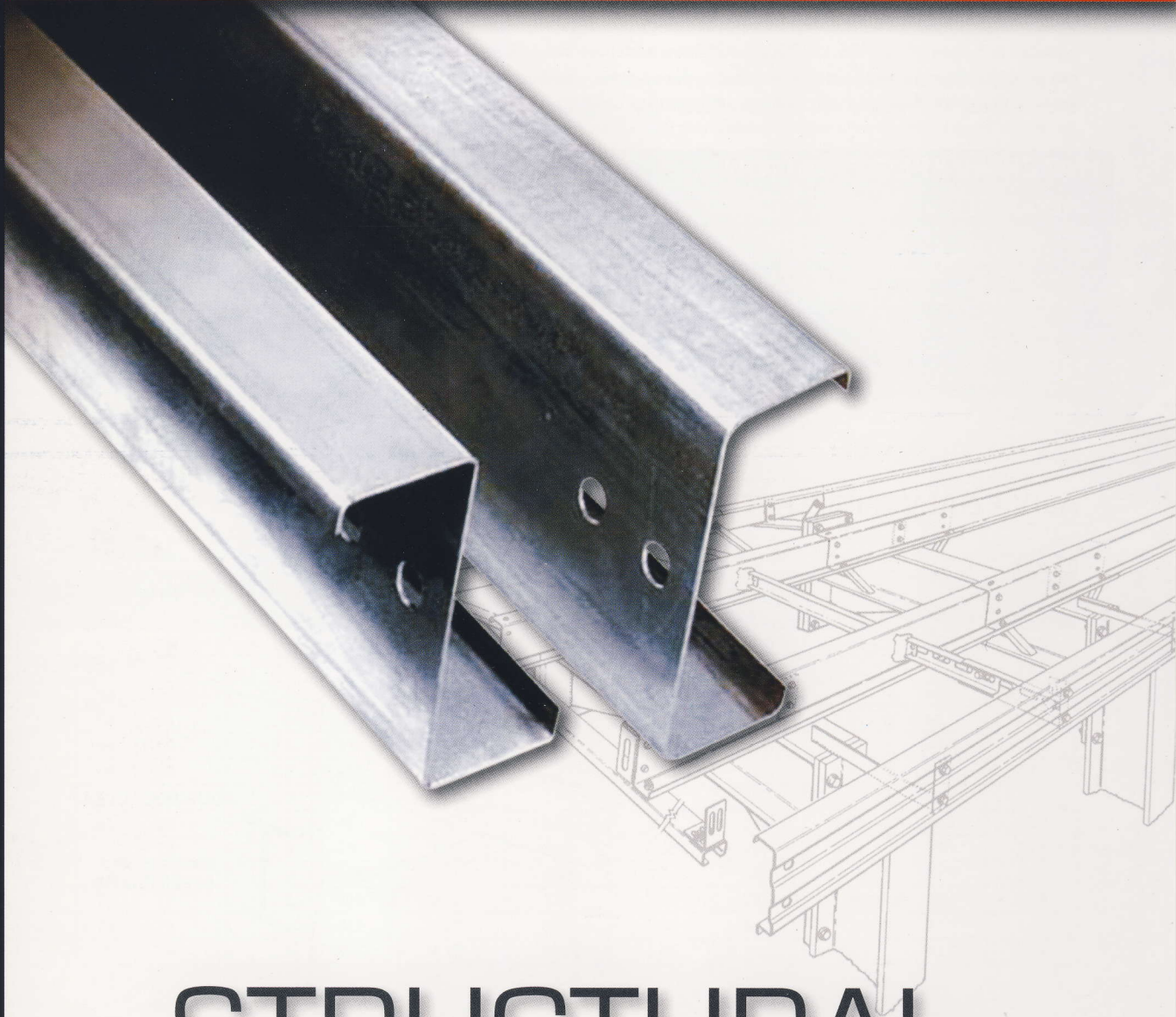




STRUCTURAL PRODUCT

Galvanised C & Z Purlins

AJIYA C & Z Purlins

AJIYA C and Zed sections are roll formed from high tensile zinc-coated steel. The cold roll forming process used in the manufacture of these sections ensures a high degree of consistency and accuracy in dimensions of the formed sections. Both the C and Zed sections are available in 5 sizes of 100, 125, 150, 200, and 250mm with base steel thickness of 1.6, 2.0 and 2.5mm. The sections are supplied cut to length and pre-punched. The zinc-coated finish eliminates the need for painting and the erected sections require minimal maintenance throughout the life of the building. The sections also provide efficient light weight, economical roofing and cladding support for framed structures.

MATERIAL SPECIFICATION			TOLERANCES
GALVANISED	ZAM	GALFAN	
Base Steel Thickness : 1.6mm, 2.0mm, 2.5mm Material Coating : Zinc 100% Steel Grade : ASTM-A446 Grade D	Base Steel Thickness : 1.6mm, 2.0mm, 2.5mm Material Coating : Zinc 91%, Aluminium 6% and Magnesium 3% Steel Grade : ASTM-A446 Grade D	Base Steel Thickness : 1.6mm, 2.0mm, 2.5mm Material Coating : Zinc 95%, Aluminium/Mischmetal 5% Steel Grade : ASTMA875M	The following tolerances apply to both AJIYA C and Zed sections. Depth : 1mm Flange Width : 2mm Length : 3mm Hole Centres : 1.5mm

AJIYA GALVANISED STEEL C SECTIONS

Dimensions and Properties

The C-sections are normally used as simply supported. Sections of sufficient length may also be used continuously over 2 or more spans to reduce deflection.

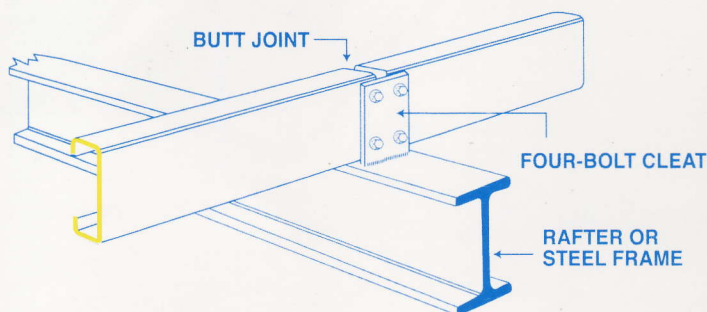
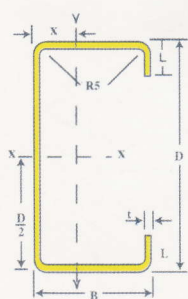


Table 1 – C SECTIONS – DIMENSIONS & PROPERTIES

Purlin type	Dimensions					Area	Mass Per Unit Length	Second Moment of Area		Section Modulus		Radius of Gyration	
	D	B	L	t	x			I _x	I _y	Z _x	Z _y	r _x	r _y
	mm	mm	mm	mm	mm			10 ⁶ mm ⁴	10 ⁶ mm ⁴	10 ³ mm ³	10 ³ mm ³	mm	mm
ASC 10016	102	51	14	1.6	17.4	361	2.82	0.61	0.13	12.0	3.89	41.1	19.0
ASC 10020	102	51	14	2.0	17.4	448	3.47	0.75	0.16	14.7	4.75	41.0	18.9
ASC 12516	127	51	15	1.6	16.0	404	3.08	1.02	0.14	16.1	4.13	50.3	18.9
ASC 12520	127	51	15	2.0	16.0	502	3.94	1.26	0.18	19.8	5.03	50.1	18.7
ASC 12525	127	51	15	2.5	16.1	623	4.89	1.55	0.21	24.4	6.12	49.9	18.5
ASC 15016	152	64	16	1.6	19.7	489	3.85	1.80	0.27	23.7	6.13	60.7	23.5
ASC 15020	152	64	16	2.0	19.8	608	4.75	2.23	0.33	29.3	7.51	60.5	23.4
ASC 15025	152	64	16	2.5	19.8	755	5.87	2.74	0.40	36.1	9.16	60.3	23.2
ASC 20016	203	74	16	1.6	20.6	603	4.70	3.85	0.42	38.0	7.90	80.0	26.5
ASC 20020	203	74	16	2.0	20.6	750	5.80	4.77	0.52	47.0	9.71	79.8	26.3
ASC 20025	203	74	16	2.5	20.6	933	7.27	5.90	0.63	58.1	11.87	79.5	26.1
ASC 25020	254	75	20	2.0	19.6	872	6.79	8.33	0.62	65.6	11.19	97.7	26.7
ASC 25025	254	75	20	2.5	19.6	1085	8.52	10.31	0.76	81.2	13.70	97.5	26.4

Note: - 2.5mm based steel thickness subject to material availability.

AJIYA GALVANISED STEEL Z SECTIONS

Dimensions and Properties

The Zed sections are all roll formed with one broad and one narrow flange. These flanges are proportioned so that two sections of the same size, when one is rotated 180°, can be end lapped. These lappings of the Zed sections over interior supports of multi-bay buildings produce a structurally continuous line of purlins or girts throughout the length of the building. The dual thickness of material over the interior supports increases the capacity of the sections to resist bending moments as well as improving the load capacity and stiffness of the system.

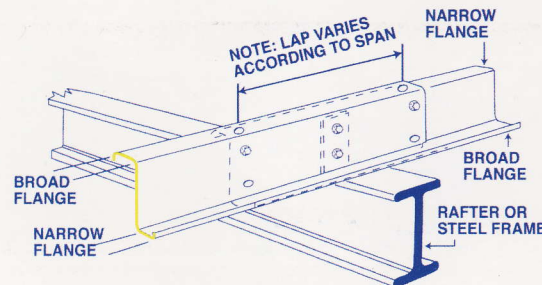
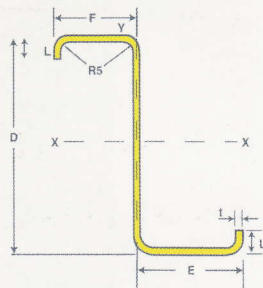


Table 2 – Z SECTIONS – DIMENSIONS & PROPERTIES

Purlin type	Dimensions					Area mm ²	Mass Per Unit Length Kg/m	Second Moment of Area		Section Modulus		Radius of Gyration	
	D	E	F	L	t			I _x	I _y	Z _x	Z _y	r _x	r _y
	mm	mm	mm	mm	mm			10 ⁶ mm ⁴	10 ⁶ mm ⁴	10 ³ mm ³	10 ³ mm ³	mm	mm
ASZ 10016	102	53	48	14	1.6	359	2.82	0.16	0.22	11.6	4.42	41.1	25.0
ASZ 10020	102	53	48	14	2.0	446	3.47	0.75	0.27	14.3	5.40	40.9	24.8
ASZ 12516	127	54	48	15	1.6	404	3.08	1.02	0.24	15.8	4.66	50.3	24.3
ASZ 12520	127	54	48	15	2.0	502	3.94	1.26	0.29	19.4	5.65	50.1	24.1
ASZ 12525	127	54	48	15	2.5	623	4.89	1.55	0.35	23.8	6.86	49.9	23.8
ASZ 15016	152	66	60	15	1.6	483	3.85	1.77	0.42	22.8	6.55	60.6	29.4
ASZ 15020	152	66	60	15	2.0	600	4.75	2.19	0.51	28.2	6.58	60.4	29.2
ASZ 15025	152	66	60	15	2.5	745	5.87	2.70	0.62	34.8	9.80	60.2	28.8
ASZ 20016	203	78	72	16	1.6	606	4.70	3.89	0.68	37.7	9.01	80.1	33.6
ASZ 20020	203	78	72	16	2.0	754	5.80	4.81	0.84	46.7	11.08	79.9	33.3
ASZ 20025	203	78	72	16	2.5	938	7.27	5.95	1.02	78.9	13.56	79.7	33.0
ASZ 25020	254	79	74	16	2.0	862	6.79	8.23	0.88	64.1	11.47	97.7	32.0
ASZ 25025	254	79	74	16	2.5	1073	8.52	10.19	1.08	79.3	14.05	97.5	31.7

QUICK SELECTION TABLES

The following purlin selection tables for roofing application provide an easy reference for selecting the appropriate purlin sizes.

Table 3 – PURLIN SELECTION TABLE

Span (mm)	Purlin Spacing 1200 mm	Purlin Spacing 1500 mm	Purlin Spacing 1800 mm	Purlin Spacing 2100 mm
5000	10020	12516	12516	12520
6000	12520	12525	15016	15020
7000	15020	15025	20016	20016
7500	15025	20016	20016	20016
8000	20016	20016	20020	20025
9000	20020	20025	25020	25020
10000	25020	25020	25025	25025
11000	25020	25025	-	-
11500	25025	-	-	-

ROOF DECKING AJIYA CL660 – CLIP 'n' LOCKING SYSTEM
(0.55mm TCT) at 5.6kg/m²
50mm the insulation wool (40kg/m³)
One layer aluminium foil
One layer chicken wire mesh.
Live Load = 0.25 kN/m²
Deflection of L/200 is allowed

Table 4 – PURLIN SELECTION TABLE

(M&E Service Load = 0.25 kN/m²)

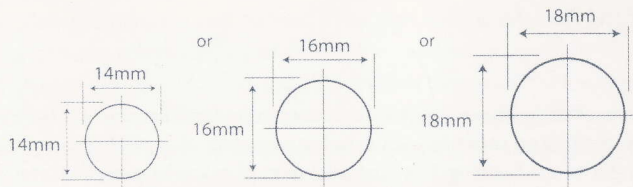
Span (mm)	Purlin Spacing 1200 mm	Purlin Spacing 1500 mm	Purlin Spacing 1800 mm	Purlin Spacing 2100 mm
5000	12520	12525	15016	15020
6000	15020	15025	20016	20016
7000	20016	20020	20025	20025
7500	20020	20025	25020	25020
8000	20025	25020	25020	-
9000	25020	25025	-	-
10000	25025	-	-	-

ROOF DECKING AJIYA CL660 – CLIP 'n' LOCKING SYSTEM
(0.55mm TCT) at 5.6kg/m²
50mm the insulation wool (40kg/m³)
One layer aluminium foil
One layer chicken wire mesh.
Live Load = 0.25 kN/m²
Deflection of L/200 is allowed

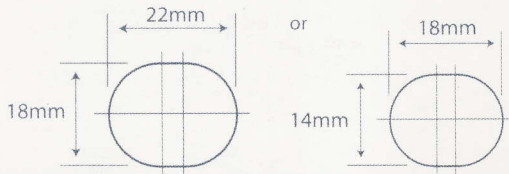
Note: - All purlins shall have one bridging at midspan except for those in the shaded area where two bridging are provided at 1/3 and 2/3 spans between supports.

Ajiya Galvanised Steel C and Z sections are normally supplied with standard pre-punched elongated or round holes.

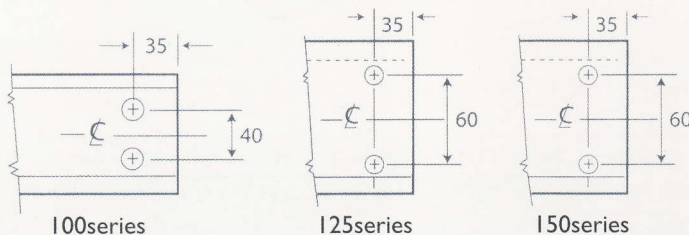
HOLE DETAILS & GAUGE LINES – C & Z SECTIONS



Standard round punched hole



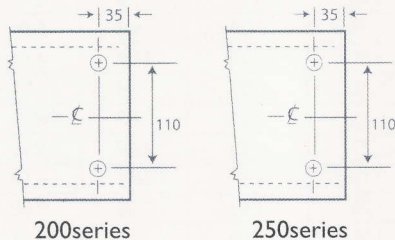
Standard elongated punched hole (Holes equally spaced above and below centre line.)



100series

125series

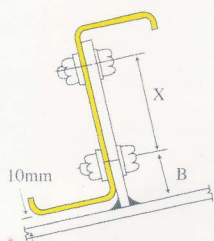
150series



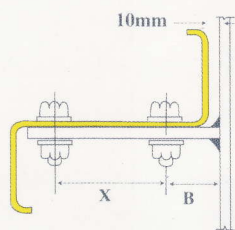
200series

250series

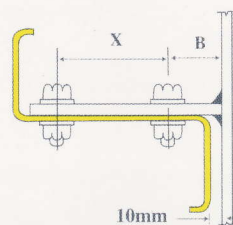
HOLDING, CLEATS, FASTENING



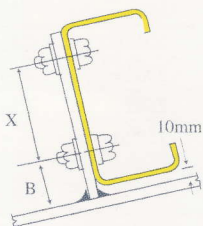
Z Purlins
Lapped



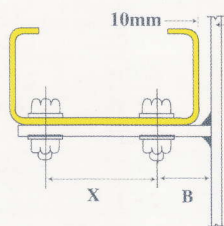
Z Girts
Standard Mode



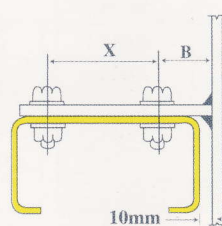
Z Girts
Optional Mode



C Girts
Standard Mode



C Purlins



C Girts
Optional Mode

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* Colours printed in this brochure are as close as normal printing process would allow and customers are advised to check and verify your chosen colour against an actual sample of the product before purchasing.

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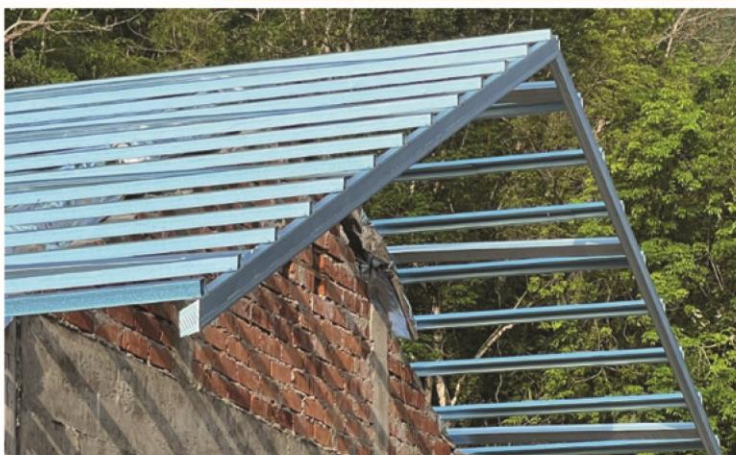
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Fax : +609-774 6946

**TO BUILD
TRUST
&
COMMITMENT
TOGETHER**

ASIA ROOFING INDUSTRIES SDN BHD

LIGHTWEIGHT TRUSS SYSTEM



ASIA ROOFING INDUSTRIES SDN BHD LIGHTWEIGHT TRUSS SYSTEM

Asia Roofing Industries Sdn Bhd Truss System is made of light-weight high-tensile galvanised or zinc/aluminium alloy coated steel. It is designed for optimum strength at minimum cost to meet building industrial demand and also to complement any roofing systems. With its many advantages over timber or mild steel trusses, Asia Roofing Industries Sdn Bhd high-tensile steel truss system, which is more stable, durable and environmental-friendly, will certainly be the preferred choice of truss systems. A reliable and latest engineering software complying to various design standards is used in Asia Roofing Industries Sdn Bhd Truss System.

ADVANTAGES



• Certified by IBS (Industrial Building System)



• Homogeneous material - consistent quality



• Light-weight and durable



• Practical installation



• Termite-proof and rust-resistant



• Environmental-friendly



• Non-combustible material - fire resistant



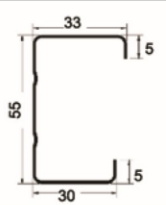
• Certified by JKR

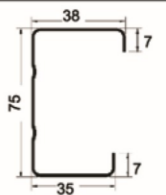
WARRANTY

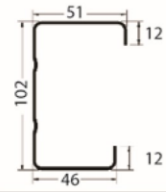
Asia Roofing Industries Sdn Bhd Truss System fulfils International Standards in terms of material specification and engineering design. A performance warranty of 10 years* will be issued upon client request and installation verified in compliance with the Quality Control plan.

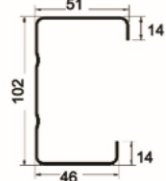
*Warranty Terms & Conditions apply.

PROFILE SECTIONS

	Profile	C05575	C05508	C05510
	Thickness (BMT)	0.75mm	0.80mm	1.0mm
	Material : High-Tensile Steel			
	Yield Strength : 550 MPa			

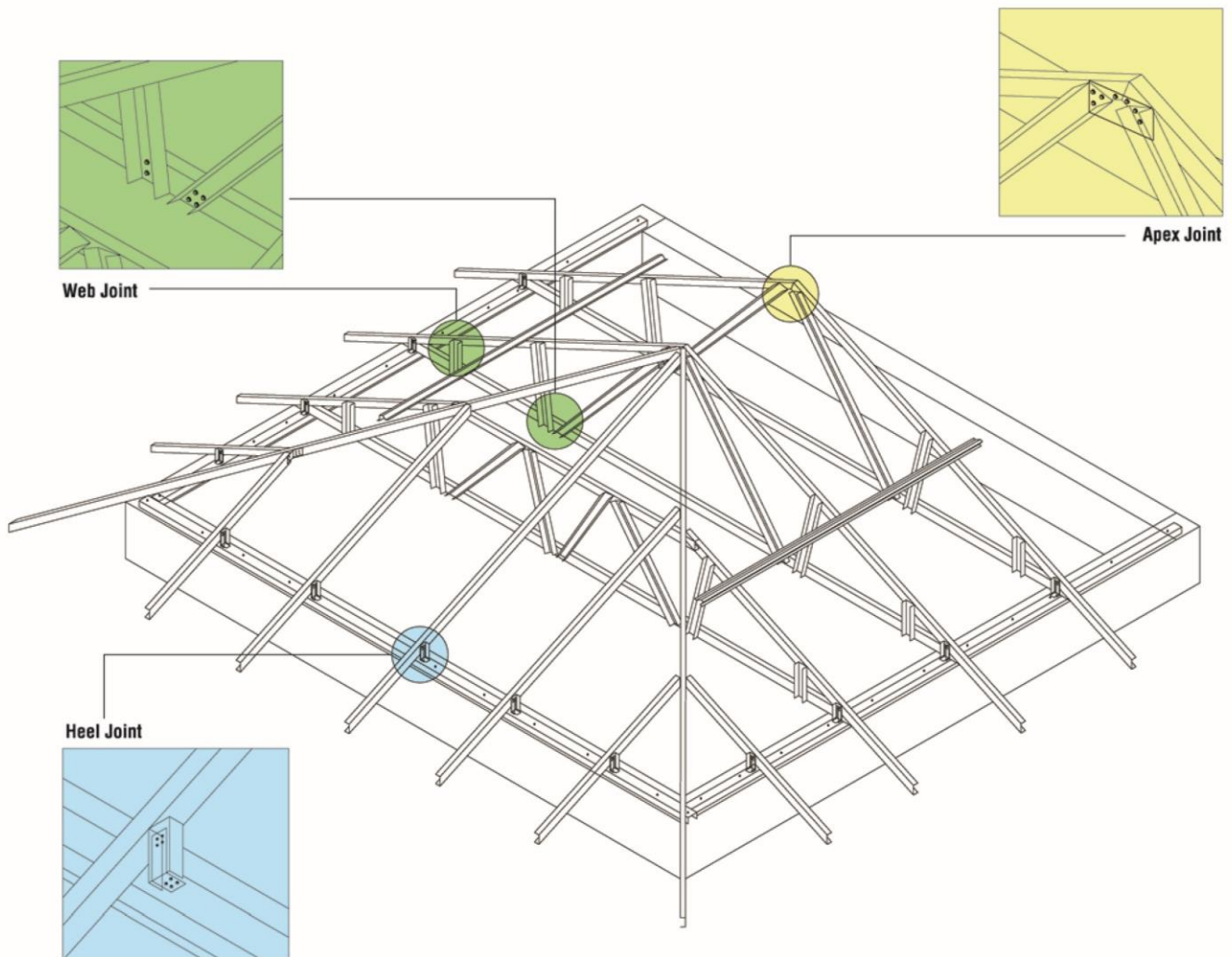
	Profile	C7575	C7508	C7510	C7512
	Thickness (BMT)	0.75mm	0.80mm	1.0mm	1.2mm
	Material : High-Tensile Steel				
	Yield Strength : 550 MPa				

	Profile	C10010			
	Thickness (BMT)	1.0mm			
	Material : High-Tensile Steel				
	Yield Strength : 550 MPa				

	Profile	C10016			
	Thickness (BMT)	1.6mm			
	Material : Hot-dipped high Tensile Steel				
	Yield Strength : 450 MPa				

	Batten MB30K	
	Thickness (BMT)	0.40/0.42mm
	Material : High-Tensile Steel	
	Yield Strength : 550 MPa	
	Batten MB35	
	Thickness (BMT)	0.42/0.50mm
	Material : High-Tensile Steel	
	Yield Strength : 550 MPa	
	Batten MB35K	
	Thickness (BMT)	0.42/0.50mm
	Material : High-Tensile Steel	
	Yield Strength : 550 MPa	
	Batten MB41	
	Thickness (BMT)	0.42/0.50mm
	Material : High-Tensile Steel	
	Yield Strength : 550 MPa	
	Batten MB60	
	Thickness (BMT)	0.42/0.50mm
	Material : High-Tensile Steel	
	Yield Strength : 550 MPa	

TYPICAL TRUSS JOINT CONNECTION



L-Bracket

L-Angle

Creeper plate



Bottom chord splice joint



Hip rafter

Heel soilder



Apex plate



Batten MB60

Batten MB35



Wedge anchor

L-Bracket

SAMPLE OF SPECIFICATION

Asia Roofing Industries Sdn Bhd Truss System in light-weight high-tensile galvanised or zinc/ aluminium alloy-coated steel. Truss details in accordance to manufacturer's drawing and instructions.



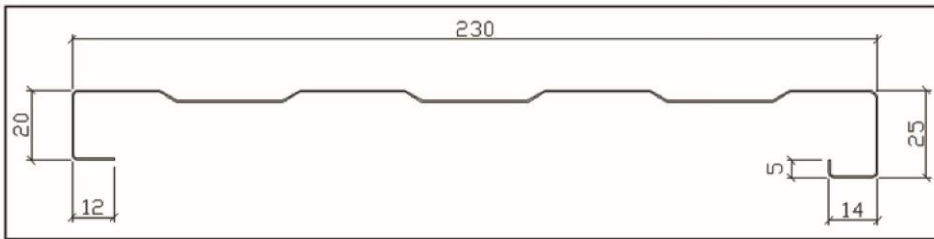
LIGHTWEIGHT TRUSS SYSTEM

ASIA ROOFING INDUSTRIES SDN BHD METAL FASCIA BOARD

Asia Roofing Industries Sdn Bhd Metal Fascia Board can be incorporated with Asia Roofing Industries Sdn Bhd Truss System and Metal Roofing System. It has innovative advantages over conventional timber fascia board. Apart from being environment friendly, steel available and is much more stable in cost as compared to other materials.



SPECIFICATION



Material :

PPGL
Aluzinc/ Zincalume
Zincalume

Thickness :

0.47 TCT
0.47 TCT
0.53 TCT

Colours Available :

-Light Beige

PROJECT PHOTOS



TABIKA KEMAS RAUDHATUL AZEEZA, HULU SELANGOR



SEMI D FACTORY, ECO PARK MELAKA



SK TENGGU BENDAHARA AZMAN, PELABUHAN KLANG

CERTIFICATE



SAMPLE OF SPECIFICATION

AJIYA® Metal Fascia Board 230mm in pre-painted hot-dipped zinc-coated steel or pre-painted hot-dipped zinc/aluminium alloy-coated steel, come complete with necessary fittings and accessories. Details in accordance with manufacturer's instructions.

All the information contained herein is factual and numerical values are accurate at the time of publication and subject to actual site conditions.

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