

Ledex[®]

Shielding The Living World



Structural

Product Catalogue





Malaysia's Leading
**Roofing & Structure
Specialist**



LE NAM MEGASHEET (M) SDN BHD

COMPANY OVERVIEW

Established in 1993, LE NAM MEGASHEET (M) SDN BHD, the leading local metal roofing manufacturer, supplies the best international quality metal roofing throughout Malaysia and worldwide. LE NAM, equipped with state of the art machinery and a certified ISO 9001:2015 accreditation, is proud to be the one company that has roofed many buildings in Malaysia with its own range of Ledex® metal roofs.

COMPANY BRANDS



A metal roofing brand with a long history in the market. It has a wider range of products such as roofing products, ceiling products and structural products.
"Shielding The Living World"



Premium product brand started in 2016, the advanced version that focused on screw concealed system products.
"The Premium Brands, Outstanding Performance"



The latest brand started in 2019, designed with the latest Japanese technology, that is artistic and better reflects absolute uniqueness.
"Unique Choice & Stylish Taste"

Ledex, Ledex Premium and Jikowa brands are built to offer a wider range of choices to our customers, offering quality metal roofing at affordable reasonable prices. A variety of product types with countless color and pattern combinations are developed to meet diverse market preferences around the world. New designs based on the latest roofing trends are always introduced to meet market demand.

Ever since its incorporation, LE NAM remains a leading metal roofing manufacturer of international repute. Our ability to deliver the best high-quality products made from top-quality materials, complemented with our efficiency, friendly customer service culture and timely delivery will ensure our continued growth in the years to come.



Ledex[®]
Shielding The Living World



Light Weight Truss System

Light Weight Truss System Introduction



Ledex Light Weight Truss System, also known as Light Channel or C Section, is used in building construction and civil engineering. It uses high tensile steel trusses in the roofing system to enhance the strength and durability of the overall roofing system, compared to the conventional timber trusses. Our products have been tested and verified by the SIRIM QAS International.

Ledex Light Weight Truss System is specially designed from a variety of quality finishes such as zinc/aluminium to maximize the safety and durability of the roofing system. In fact, our product is customized for fast installation and cost effectiveness.

Supplied by Bluescope Steel, our materials are guaranteed to be superior in quality. There are two types of materials to be chosen from Zacs and Tinted Blue, which is suitable for hardware and economic purposes, and TrueCore®, which is mainly for projects.

Application of Ledex Light Weight Truss System includes :

- Support for roof load
- Horizontal stability enhancement

The advantages of Ledex Light Weight Truss System:

- High Tensile
- Time Saving of Installation
- Earth Friendly
- Increase in efficiency of Construction
- Termite Free
- Against Corrosion
- Design Flexibility
- Cost Effective
- Fire Resistance

DETAILS TO SPEC IN BQ

Ledex® Light Weight Truss System

Brand

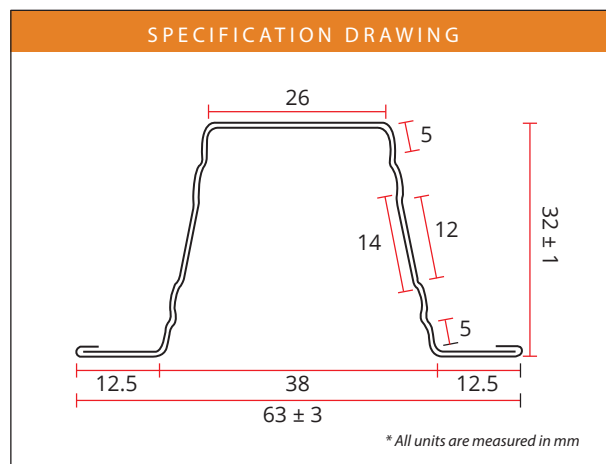
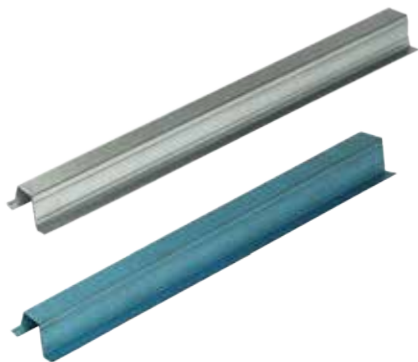
Product

Example

Design, fabricate & install Ledex® Light Weight Truss System, Ledex® Light Channel 135 0.8 mm TCT, Ledex® Batten 121 0.47 mm TCT, Ledex® Batten 172 0.5 mm TCT, with material AZ150 Truecore, reinforced with Ledex® Truss Bracket 50 x 100 with associated fitting, bolts & nuts, with engineer's approval in accordance to manufacturer specifications

LEDEX BATTEN

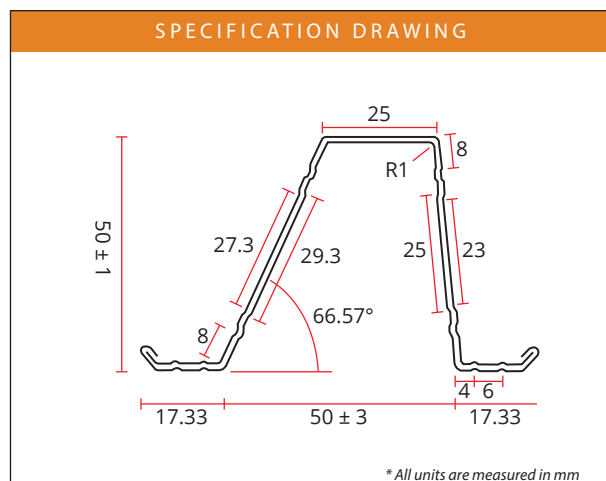
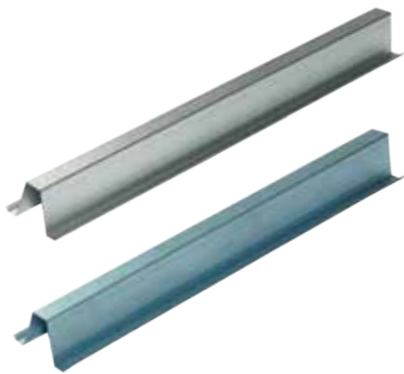
Ledex® Batten 121



PRODUCT SPECIFICATIONS

Profile	Ledex Batten 121				
Dimension	26 mm (Width) x 32 mm (Height) x 6000 mm (Length)				
Steel Grade	Zincalume G550 Steel				
Finishes	ZACS Bare, Tinted Blue			True Core	
Thickness TCT (mm)	0.45	0.47	0.50	0.47	0.50
Weight (kg/m)	0.40	0.42	0.45	0.42	0.48
Tolerance	Length + 1, - 3 mm, Thickness ± 0.03 mm				

Ledex® Batten 172



PRODUCT SPECIFICATIONS

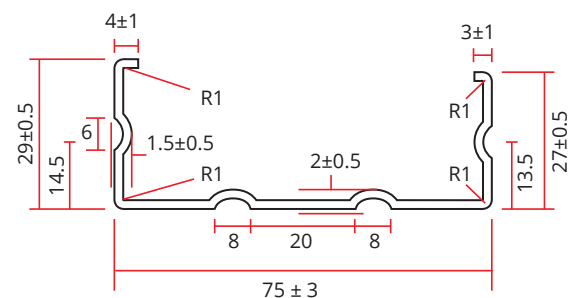
Profile	Ledex Batten 172	
Dimension	25 mm (Width) x 50 mm (Height) x 6000 mm (Length)	
Steel Grade	Zincalume G550 Steel	
Finishes	ZACS Bare, Tinted Blue	True Core
Thickness TCT (mm)	0.47	0.50
Weight (kg/m)	0.58	0.69
Tolerance	Length + 1, - 3 mm, Thickness ± 0.03 mm	

LEDEX LIGHT CHANNEL

Ledex® Light Channel 135 (LC 75)



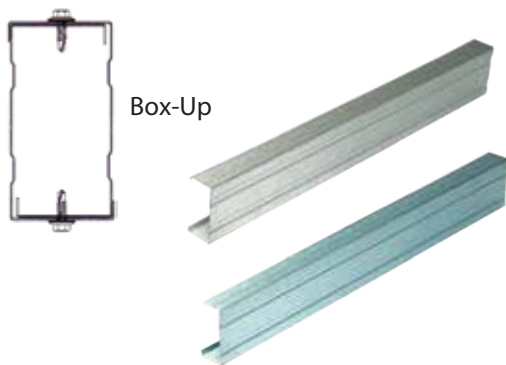
SPECIFICATION DRAWING



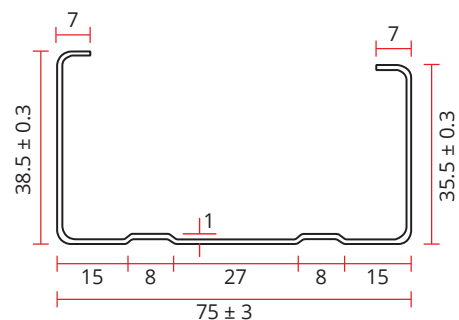
PRODUCT SPECIFICATIONS

Profile	Ledex Light Channel 135 (LC 75)				
Dimension	75 mm (Width) x 29 mm (Height) x 6000 mm (Length)				
Steel Grade	Zincalume G550 Steel				
Finishes	ZACS Bare, Tinted Blue		True Core		
Thickness TCT (mm)	0.75	1.00	0.75	0.80	1.00
Weight (kg/m)	0.75	1.07	0.76	0.82	1.08
Tolerance	Length + 1, - 3 mm, Thickness ± 0.03 mm				

Ledex® Light Channel 151 (LC 75)



SPECIFICATION DRAWING



PRODUCT SPECIFICATIONS

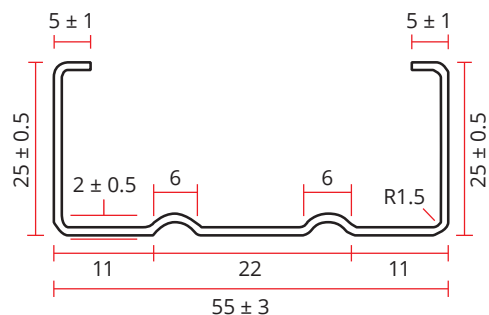
Profile	Ledex Light Channel 151 (LC75)				
Dimension	75 mm (Width) x 38 mm (Height) x 6000 mm (Length)				
Steel Grade	Zincalume G550 Steel				
Finishes	ZACS Bare, Tinted Blue		True Core		
Thickness TCT (mm)	0.75	1.00	0.75	0.80	1.00
Weight (kg/m)	0.85	1.20	0.86	0.91	1.22
Tolerance	Length + 1, - 3 mm, Thickness ± 0.03 mm				

LEDEX LIGHT CHANNEL

Ledex® Light Channel 110 (LC 55)



SPECIFICATION DRAWING



* All units are measured in mm

PRODUCT SPECIFICATIONS

Profile	Ledex Light Channel 110 (LC55)		
Dimension	55 mm (Width) x 25 mm (Height) x 6000 mm (Length)		
Steel Grade	Zincalume G550 Steel		
Finishes	ZACS Bare, Tinted Blue		True Core
Thickness TCT (mm)	0.75	1.0	0.80
Weight (kg/m)	0.62	0.88	0.67
Tolerance	Length + 1, - 3 mm, Thickness ± 0.03 mm		

ACCESSORIES

Ledex® Truss Bracket



PRODUCT SPECIFICATIONS

Profile	Ledex Truss Bracket
Dimension	50 mm (Width) x 75 mm (Height)
	50 mm (Width) x 100 mm (Height)
Steel Grade	Galvanised Iron G450
Thickness (TCT)	1.60 mm

SECTION PROPERTIES

Diagram 1

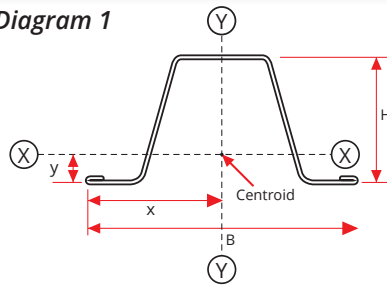
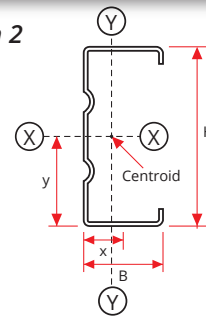
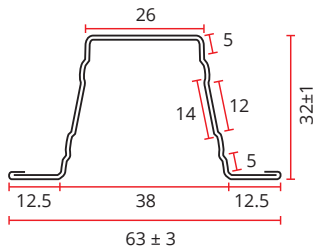


Diagram 2



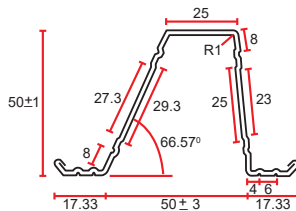
Ledex Batten 121



Thickness t (mm)	Area mm ²	Weight kg/m	I _{xx} 10 ⁴ mm ⁴	I _{yy} 10 ⁴ mm ⁴	Z _{xx} 10 ³ mm ³	Z _{yy} 10 ³ mm ³	R _{xx} mm	R _{yy} mm	x mm	y mm
0.45	57.78	0.40	1.002	2.015	0.651	0.636	13.2	18.7	31.7	15.4
0.47	61.6	0.42	1.068	2.146	0.693	0.678	13.2	18.7	31.7	15.4
0.50	64.14	0.45	1.111	2.233	0.722	0.705	13.2	18.7	31.7	15.4

Refer to Diagram 1

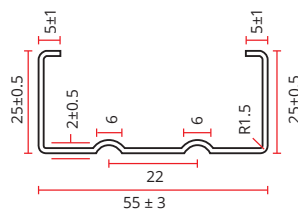
Ledex Batten 172



Thickness t (mm)	Area mm ²	Weight kg/m	I _{xx} 10 ⁴ mm ⁴	I _{yy} 10 ⁴ mm ⁴	Z _{xx} 10 ³ mm ³	Z _{yy} 10 ³ mm ³	R _{xx} mm	R _{yy} mm	x mm	y mm
0.47	88.77	0.58	3.116	5.098	1.397	1.123	18.7	24.0	45.4	22.3
0.50	92.45	0.69	3.244	5.308	1.455	1.169	18.7	24.0	45.4	22.3

Refer to Diagram 1

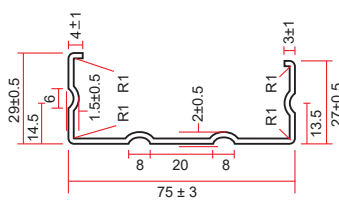
Ledex Light Channel 110 (LC55)



Thickness t (mm)	Area mm ²	Weight kg/m	I _{xx} 10 ⁴ mm ⁴	I _{yy} 10 ⁴ mm ⁴	Z _{xx} 10 ³ mm ³	Z _{yy} 10 ³ mm ³	R _{xx} mm	R _{yy} mm	x mm	y mm
0.75	84.16	0.62	4.182	0.651	1.494	0.869	22.3	8.8	7.5	28.0
0.80	89.57	0.67	4.441	0.689	1.586	0.918	22.3	8.8	7.5	28.0
1.00	110.97	0.88	5.452	0.834	1.947	1.112	22.2	8.7	7.5	28.0

Refer to Diagram 2

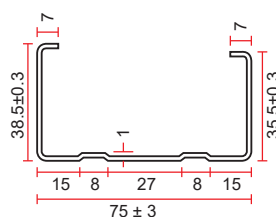
Ledex Light Channel 135 (LC75)



Thickness t (mm)	Area mm ²	Weight kg/m	I _{xx} 10 ⁴ mm ⁴	I _{yy} 10 ⁴ mm ⁴	Z _{xx} 10 ³ mm ³	Z _{yy} 10 ³ mm ³	R _{xx} mm	R _{yy} mm	x mm	y mm
0.75	104.75	0.76	8.824	1.055	2.351	1.290	29.0	10.0	8.2	37.5
0.80	111.54	0.82	9.379	1.118	2.501	1.364	29.0	10.0	8.2	37.5
1.00	138.44	1.08	11.555	1.361	3.081	1.660	28.9	9.9	8.2	37.5

Refer to Diagram 2

Ledex Light Channel 151 (LC75)



Thickness t (mm)	Area mm ²	Weight kg/m	I _{xx} 10 ⁴ mm ⁴	I _{yy} 10 ⁴ mm ⁴	Z _{xx} 10 ³ mm ³	Z _{yy} 10 ³ mm ³	R _{xx} mm	R _{yy} mm	x mm	y mm
0.75	118	0.86	10.369	2.095	2.896	1.798	29.6	13.3	11.7	35.8
0.80	125.6	0.91	11.015	2.220	3.076	1.908	29.6	13.3	11.7	35.8
1.00	155.57	1.22	13.544	2.703	3.782	2.320	29.5	13.2	11.7	35.8

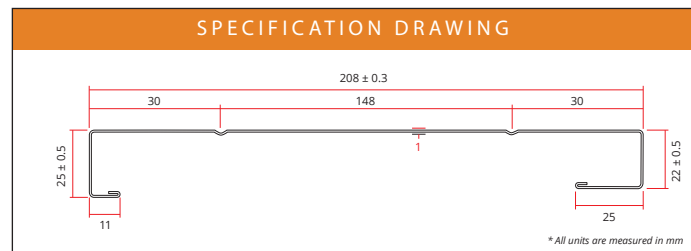
Refer to Diagram 2

BUNDLE PRODUCT

Ledex® Fascia Board



Fascia Board is the long, straight metal board that fixes along the lower edge of the roof. It is fixed directly to the roof trusses.



What is Ledex Fascia Board function?

Ledex Fascia Board is essential foundation for gutters, providing support to the bottom row of tiles, joining for conjunction with soffits, providing essential ventilation for attic and keep pests out.

PRODUCT SPECIFICATIONS

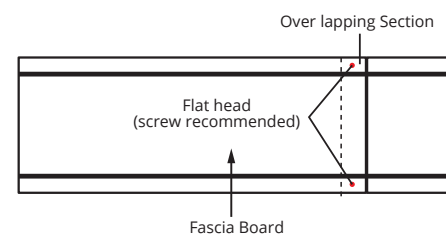
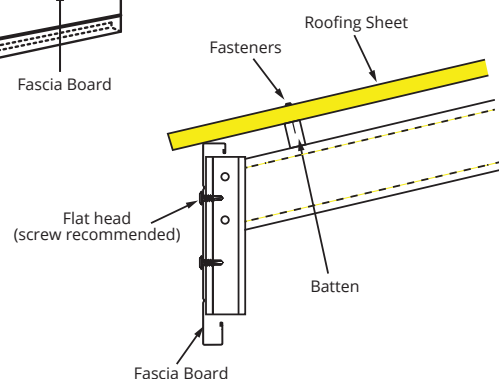
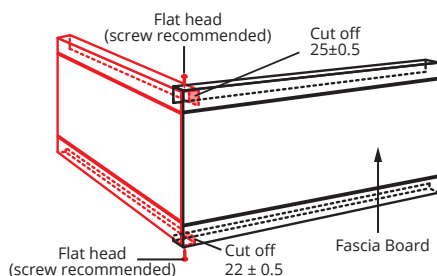
Profile	Ledex Fascia Board	
Dimension	25 mm (Width) x 208 mm (Height)	
Steel Grade	Zincalume G300 Steel	
Finishes	Zincalume, Element, Colorbond	
Thickness (TCT)	0.40 mm	0.60 mm
Weight (kg/m)	0.85	1.35
Tolerance	Length ± 3 mm, Thickness ± 0.03 mm	



INSTALLATION

The fascia on a home is the board that is nailed across the edge of the roof behind the gutters. If you notice that your fascia has sustained damage then you will need to replace the fascia.

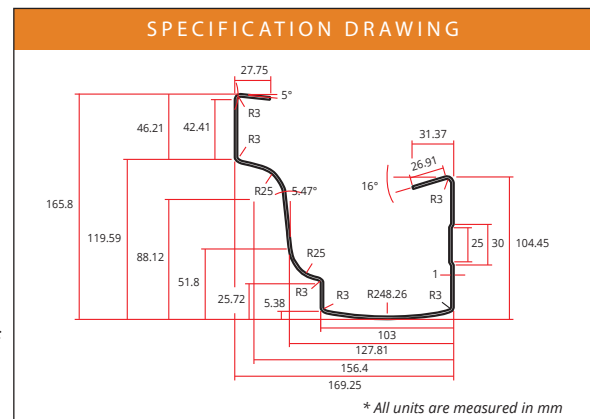
Fascia installation can be challenging to the beginner as they are unsure of how to place the fascia correctly. Follow the preparation and installation instructions below and you will surely have it done within a reasonable amount of time. Get your family members involved in order to speed up the process.



Ledex® Steel Gutter



Ledex Steel Gutter, also known as “rain catcher”, consists of a narrow channel that acts as collector and diverts rainwater away from the roof edge.

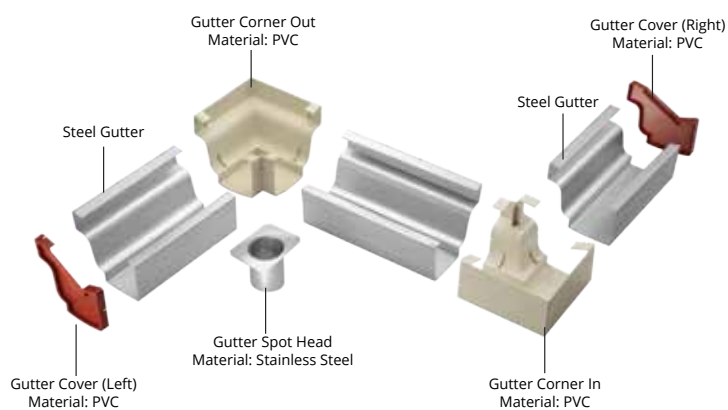


PRODUCT SPECIFICATIONS

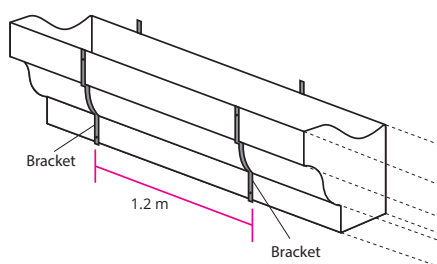
Profile	Ledex Steel Gutter	
Dimension	169 mm mm (Width) x 165 mm (Height)	
Steel Grade	Zincalume G300 Steel	
Finishes	Zacs Natural, Primamaju, Zincalume, Colorbond	
Thickness (TCT)	0.36 mm	0.47 mm
Weight (kg/m)	1.85	2.06
Tolerance	Length ± 3 mm, Thickness ± 0.03 mm	

What is Ledex Steel Gutter function?

- Keeps entrance surface dry
- Protects painted surface by reducing the exposure to water
- Reduces erosion



Steel Gutter Installation

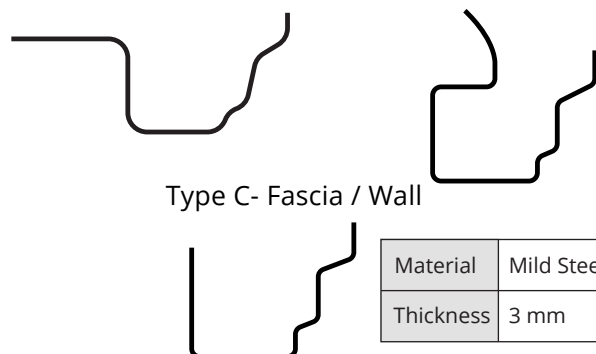


Steel Gutter Bracket

Type A - Roofing

Type B- Crimp Curve

Type C- Fascia / Wall



Material	Mild Steel
Thickness	3 mm

PROJECT REFERENCE

Our products have been tested and verified by the SIRIM QAS International for its strength.
The advantages of our products are as below:

- Quality Control
- Light Weight
- Cost Effective
- High Buildability Score
- Fast Installation
- Fire Resistant
- Design Flexibility
- Pest Resistant
- Strong
- Dimensionally Stable
- Durability



Eco Horizon Batu Kawan



Terrace House, Kota Permai



Eco Meadows Simpang Ampat

PROJECT REFERENCE



Terrace House, Seberang Perai Utara



Taman Pengkalan Harmoni, Taiping



Iconic Point, Commercial Unit



C & Z Purlin



C & Z Purlin Introduction



Durable Material



Lightweight



Mechanical Stability

Ledex manufactures a complete range of structural C & Z Purlin for industrial buildings, commercial buildings and government infrastructures, in fact anywhere that strong, reliable steel framing is required.

Made from quality zinc coating (min Z180), high tensile galvanized steel (min G450), Ledex C & Z Purlin can be supplied plain or pre-punched holes, this is a fully integrated system allowing for flexible design options.

Galvanised Ledex C & Z Purlin are manufactured from high tensile steel (min G450) and quality zinc coating (min Z180), for increased strength, reduced weight, and a long serviceable life. Ledex Purlin are developed with significant improved durability to ensure a maximum degree of precision and consistency. Ledex Purlin are cold roll-formed from high tensile zinc coated steel sheets, and are supplied in cut to length and pre-punched holes.

Due to its lightweight and the high strength of the steel and zinc coated corrosion protective surface, Ledex Purlin are ready for immediate use upon delivery to site. The products produced are all in compliance to major international standards.

Material Specifications

- Ledex Purlin thickness comes in 4 types which are **1.6mm, 2.0mm, 2.5mm and 3.0mm.**
- Zinc coating mass from min 180g/m² up to 275g/m²
- Hot dip galvanized steel to JIS G 3302 or AS1397
- Hi-Tensile Grade G450 Minimum Yield Strength

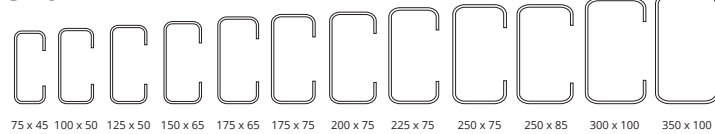
* At Le Nam, we can custom made according to customer's requirements.



C Purlin

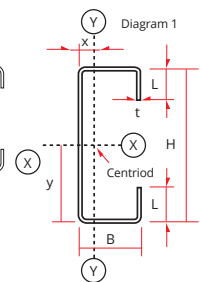
SPECIFICATION DRAWING

C Purlin



1.6 mm	1.6 mm	1.6 mm	1.6 mm	1.6 mm	1.6 mm	1.6 mm	1.6 mm	1.6 mm	1.6 mm	1.6 mm	1.6 mm	1.6 mm
2.0 mm	2.0 mm	2.0 mm	2.0 mm	2.0 mm	2.0 mm	2.0 mm	2.0 mm	2.0 mm	2.0 mm	2.0 mm	2.0 mm	2.0 mm
2.5 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm
3.0 mm	3.0 mm	2.5 mm	3.0 mm	3.0 mm	3.0 mm	3.0 mm	3.0 mm	3.0 mm	3.0 mm	3.0 mm	3.0 mm	3.0 mm

* All units are measured in mm



Z Purlin

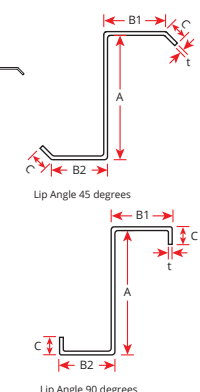
SPECIFICATION DRAWING

Z Purlin



1.6 mm	1.6 mm	1.6 mm	1.6 mm	1.6 mm	1.6 mm	1.6 mm	1.6 mm (75)	1.6 mm	1.6 mm
2.0 mm	2.0 mm	2.0 mm	2.0 mm	2.0 mm	2.0 mm	2.0 mm	2.0 mm (75)	2.0 mm	2.0 mm
2.5 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm (75)	2.5 mm	2.5 mm
3.0 mm	3.0 mm	3.0 mm	3.0 mm	3.0 mm	3.0 mm	3.0 mm	3.0 mm (75)	3.0 mm	3.0 mm

* All units are measured in mm



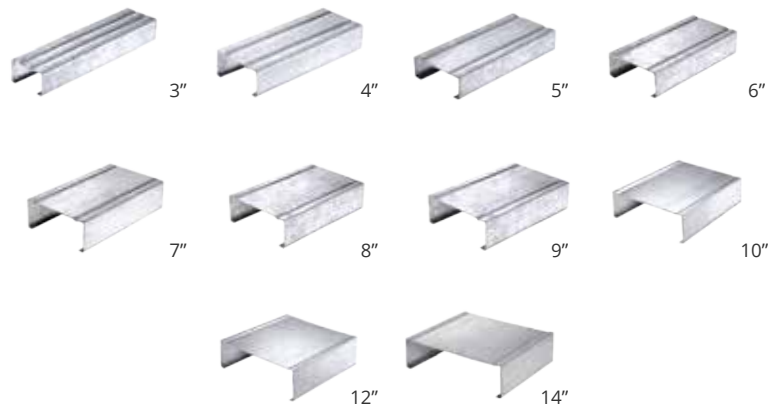
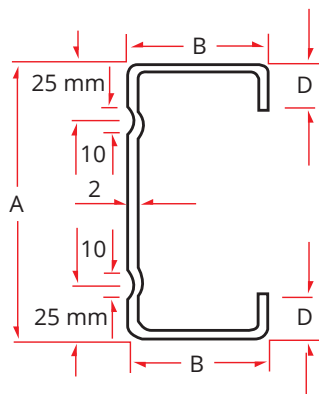
DETAILS TO SPEC IN BQ



Example

Design, fabricate and install "Ledex C Purlin LCP20030-75-Z275 reinforced with Ledex Bridging 25 X 55 to required bracket with associated fittings, bolts & nuts, with engineer's approval in accordance to manufacturer specifications.

Ledex® C Purlin



Application of Ledex C Purlin includes:

- Vertical Sheeting Rails
- Brickwork Restraints
- Mezzanine Floors
- Suspended Ceiling System

Technical Specification

Inch	Codes				A (Depth)	B	D
3"	LCP 75 16	LCP 75 20	LCP 75 25	LCP 75 30	75	45	10
4"	LCP 100 16	LCP 100 20	LCP 100 25	LCP 100 30	100	50	12
5"	LCP 125 16	LCP 125 20	LCP 125 25	LCP 125 30	125	50	16
6"	LCP 150 16	LCP 150 20	LCP 150 25	LCP 150 30	150	65	16
7"	LCP 175 16	LCP 175 20	LCP 175 25	LCP 175 30	175	65/75	16
8"	LCP 200 16	LCP 200 20	LCP 200 25	LCP 200 30	200	75	18
9"	LCP 225 16	LCP 225 20	LCP 225 25	LCP 225 30	225	75	18
10"	LCP 250 16	LCP 250 20	LCP 250 25	LCP 250 30	250	75/85	18
12"	LCP 300 16	LCP 300 20	LCP 300 25	LCP 300 30	300	100	18
14"	LCP 350 16	LCP 350 20	LCP 350 25	LCP 350 30	350	100	20
TOLERANCE (mm)					± 1	± 1	± 2

Size	Thickness			
	1.6 mm	2.0 mm	2.5 mm	3.0 mm
1.5" x 3.0" (75 mm)	2.21 kg/m	2.75 kg/m	3.22 kg/m	3.82 kg/m
2.0" x 4.0" (100 mm)	2.80 kg/m	3.41 kg/m	4.24 kg/m	5.16 kg/m
2.0" x 5.0" (125 mm)	3.10 kg/m	3.82 kg/m	4.72 kg/m	5.69 kg/m
2.5" x 6.0" (150 mm)	3.85 kg/m	4.75 kg/m	5.94 kg/m	7.40 kg/m
2.5" x 7.0" (175 mm)	4.15 kg/m	5.10 kg/m	6.35 kg/m	7.75 kg/m
3.0" x 7.0" (175 mm)	4.43 kg/m	5.50 kg/m	6.84 kg/m	8.30 kg/m
3.0" x 8.0" (200 mm)	4.76 kg/m	5.90 kg/m	7.34 kg/m	9.09 kg/m
3.0" x 9.0" (225 mm)	5.18 kg/m	6.45 kg/m	8.02 kg/m	9.58kg/m
3.0" x 10.0" (250 mm)	5.38 kg/m	6.59 kg/m	8.35 kg/m	10.13kg/m
3.3" x 10.0" (250 mm)	5.67 kg/m	7.04 kg/m	8.76 kg/m	10.82 kg/m
4.0" x 12.0" (300 mm)	6.70 kg/m	8.33 kg/m	10.36 kg/m	12.80 kg/m
4.0" x 14.0" (350 mm)	7.47 kg/m	9.48 kg/m	11.85 kg/m	14.17 kg/m
TOLERANCE (mm)	± 0.10	± 0.10	± 0.10	± 0.10

Inch	Identification	Wed H (mm)	Flange B (mm)	Thickness t (mm)	Lip Size L (mm)	Area mm ²	Weight kg/m	x mm	y mm	I _{xx} 106 mm ⁴	I _{yy} 106 mm ⁴	Z _{xx} 103 mm ³	Z _{yy} 103 mm ³	R _{xx} mm	R _{yy} mm
3"	LCP07516	75	45	1.6	10	286	2.21	15.82	37.5	0.271	0.078	7.213	2.684	30.77	16.56
	LCP07520	75	45	2.0	10	354	2.75	15.82	37.5	0.331	0.095	8.838	3.258	30.60	16.39
	LCP07525	75	45	2.5	10	438	3.22	15.82	37.5	0.404	0.115	10.774	3.925	30.39	16.18
	LCP07530	75	45	3.0	10	519	3.82	15.82	37.5	0.473	0.132	12.608	4.538	30.18	15.97
4"	LCP10016	100	50	1.6	12	348	2.80	16.55	50.0	0.571	0.119	11.414	3.548	40.49	18.46
	LCP10020	100	50	2.0	12	432	3.41	16.56	50.0	0.702	0.145	14.040	4.323	40.31	18.29
	LCP10025	100	50	2.5	12	535	4.24	16.57	50.0	0.860	0.175	17.201	5.233	40.09	18.08
	LCP10030	100	50	3.0	12	636	5.16	16.58	50.0	1.011	0.203	20.229	6.079	39.88	17.87
5"	LCP12516	125	50	1.6	12	388	3.10	14.93	62.5	0.954	0.128	15.258	3.638	49.57	18.13
	LCP12520	125	50	2.0	12	482	3.82	14.94	62.5	1.175	0.155	18.805	4.433	49.38	17.96
	LCP12525	125	50	2.5	12	598	4.72	14.96	62.5	1.443	0.188	23.094	5.368	49.15	17.74
	LCP12530	125	50	3.0	12	711	5.69	14.99	62.5	1.702	0.218	27.224	6.240	48.92	17.53
6"	LCP15016	150	65	1.6	16	489	3.85	20.26	75.0	1.770	0.282	23.597	6.311	60.16	24.03
	LCP15020	150	65	2.0	16	608	4.75	20.27	75.0	2.187	0.346	29.165	7.737	59.98	23.86
	LCP15025	150	65	2.5	16	755	5.94	20.29	75.0	2.696	0.422	35.944	9.439	59.75	23.64
	LCP15030	150	65	3.0	16	900	7.40	20.31	75.0	3.189	0.494	42.525	11.054	59.53	23.43
7"	LCP17516-65	175	65	1.6	15	526	4.15	18.5	87.5	2.509	0.290	28.68	15.66	69.08	23.48
	LCP17520-65	175	65	2.0	15	654	5.10	18.5	87.5	3.104	0.355	35.48	19.16	68.89	23.30
	LCP17525-65	175	65	2.5	15	813	6.35	18.6	87.5	3.830	0.433	43.77	23.32	68.66	23.08
	LCP17530-65	175	65	3.0	15	969	7.75	18.6	87.5	4.536	0.507	51.84	27.26	68.42	22.86
7"	LCP17516-75	175	75	1.6	16	561	4.43	22.53	87.5	2.766	0.419	31.616	7.989	70.22	27.34
	LCP17520-75	175	75	2.0	16	698	5.50	22.54	87.5	3.424	0.515	39.133	9.815	70.04	27.16
	LCP17525-75	175	75	2.5	16	868	6.84	22.56	87.5	4.228	0.630	48.317	12.006	69.81	26.94
	LCP17530-75	175	75	3.0	16	1035	8.30	22.58	87.5	5.011	0.739	57.267	14.099	69.58	26.72
8"	LCP20016	200	75	1.6	18	607	4.76	21.64	100.0	3.806	0.455	38.062	8.521	79.16	27.36
	LCP20020	200	75	2.0	18	756	5.90	21.66	100.0	4.715	0.559	47.151	10.474	78.97	27.18
	LCP20025	200	75	2.5	18	940	7.34	21.69	100.0	5.828	0.684	58.276	12.822	78.74	26.97
	LCP20030	200	75	3.0	18	1122	9.09	21.71	100.0	6.914	0.803	69.143	15.064	78.50	26.75
9"	LCP22516	225	75	1.6	18	647	5.18	20.36	112.5	5.004	0.471	44.481	8.620	87.92	26.97
	LCP22520	225	75	2.0	18	806	6.45	20.38	112.5	6.203	0.579	55.133	10.596	87.72	26.80
	LCP22525	225	75	2.5	18	1003	8.02	20.41	112.5	7.672	0.708	68.192	12.97	87.48	26.58
	LCP22530	225	75	3.0	18	1197	9.58	20.45	112.5	9.109	0.832	80.966	15.243	87.23	26.36
10"	LCP25016-75	250	75	1.6	17	684	5.38	19.0	125.0	6.367	0.476	50.94	25.09	96.47	26.37
	LCP25020-75	250	75	2.0	17	852	6.59	19.0	125.0	7.896	0.584	63.16	30.77	96.27	26.19
	LCP25025-75	250	75	2.5	17	1060	8.35	19.0	125.0	9.771	0.715	78.17	37.56	96.01	25.97
	LCP25030-75	250	75	3.0	17	1266	10.13	19.1	125.0	11.608	0.839	92.86	44.01	95.75	25.75
10"	LCP25016-85	250	85	1.6	18	719	5.67	22.65	125.0	6.898	0.658	55.183	10.559	97.92	30.25
	LCP25020-85	250	85	2.0	18	896	7.04	22.68	125.0	8.557	0.810	68.455	13.003	97.72	30.07
	LCP25025-85	250	85	2.5	18	1115	8.76	22.71	125.0	10.595	0.994	84.756	15.950	97.48	29.85
	LCP25030-85	250	85	3.0	18	1332	10.82	22.74	125.0	12.592	1.169	100.739	18.781	97.23	29.63
12"	LCP30016	300	100	1.6	18	847	6.70	25.47	150.0	11.642	1.034	77.615	13.869	117.22	34.93
	LCP30020	300	100	2.0	18	1056	8.33	25.50	150.0	14.459	1.275	96.391	17.111	117.01	34.74
	LCP30025	300	100	2.5	18	1315	10.36	25.53	150.0	17.927	1.567	119.514	21.039	116.76	34.52
	LCP30030	300	100	3.0	18	1575	12.80	25.56	150.0	21.338	1.849	142.253	24.832	116.40	34.26
14"	LCP35016	350	100	1.6	20	934	7.47	23.87	175.0	16.861	1.115	96.349	14.642	134.38	34.55
	LCP35020	350	100	2.0	20	1164	9.48	23.90	175.0	20.953	1.375	119.729	18.069	134.17	34.37
	LCP35025	350	100	2.5	20	1450	11.85	23.94	175.0	25.998	1.690	148.561	22.225	133.90	34.14
	LCP35030	350	100	3.0	20	1734	14.17	23.99	175.0	30.968	1.995	176.959	26.247	133.64	33.92

C PURLIN MAXIMUM ALLOWABLE SPAN (M)

The purlin load table is derived in accordance to BS5950 : Part 5 : 1987 "Code of practice for Design of Cold Formed Section" with maximum roof pitch 30° and roofing sheet distributed load 6.55 kg/m².

Size	C Purlin Spacing					
	0.9	1.2	1.5	1.8	2.1	2.4
75 x 45 x 1.6	3.8	3.5	3.2	3.0	2.9	2.7
75 x 45 x 2.0	4.1	3.7	3.4	3.2	3.1	2.9
75 x 45 x 2.5	4.4	4.0	3.7	3.5	3.3	3.1
75 x 45 x 3.0	4.6	4.2	3.9	3.6	3.5	3.3
100 x 50 x 1.6	5.1	4.6	4.3	4.0	3.8	3.7
100 x 50 x 2.0	5.5	5.0	4.6	4.3	4.1	3.9
100 x 50 x 2.5	5.9	5.3	4.9	4.6	4.4	4.2
100 x 50 x 3.0	6.2	5.6	5.2	4.9	4.7	4.5
125 x 50 x 1.6	6.1	5.5	5.1	4.8	4.6	4.4
125 x 50 x 2.0	6.5	5.9	5.5	5.2	4.9	4.7
125 x 50 x 2.5	7.0	6.3	5.9	5.5	5.3	5.0
125 x 50 x 3.0	7.4	6.7	6.2	5.8	5.6	5.3
150 x 65 x 1.6	7.5	6.8	6.3	5.9	5.6	5.4
150 x 65 x 2.0	8.0	7.3	6.8	6.4	6.0	5.8
150 x 65 x 2.5	8.5	7.8	7.3	6.8	6.5	6.2
150 x 65 x 3.0	9.1	8.3	7.7	7.2	6.9	6.6
175 x 65 x 1.6	8.4	7.6	7.1	6.7	6.3	6.1
175 x 65 x 2.0	9.0	8.2	7.6	7.2	6.8	6.5
175 x 65 x 2.5	9.7	8.8	8.2	7.7	7.3	7.0
175 x 65 x 3.0	10.3	9.3	8.6	8.1	7.7	7.4
175 x 75 x 1.6	8.7	7.9	7.3	6.9	6.5	6.3
175 x 75 x 2.0	9.3	8.5	7.9	7.4	7.0	6.7
175 x 75 x 2.5	10.0	9.1	8.4	7.9	7.5	7.2
175 x 75 x 3.0	10.6	9.6	8.9	8.4	8.0	7.6
200 x 75 x 1.6	9.7	8.8	8.1	7.7	7.3	7.0
200 x 75 x 2.0	10.4	9.4	8.8	8.2	7.8	7.5
200 x 75 x 2.5	11.2	10.1	9.4	8.8	8.4	8.0
200 x 75 x 3.0	11.8	10.7	10.0	9.4	8.9	8.5
225 x 75 x 1.6	10.6	9.6	8.9	8.4	8.0	7.6
225 x 75 x 2.0	11.4	10.3	9.6	9.0	8.6	8.2
225 x 75 x 2.5	12.2	11.1	10.3	9.7	9.2	8.8
225 x 75 x 3.0	13.0	11.8	10.9	10.3	9.8	9.3
250 x 75 x 1.6	11.5	10.4	9.7	9.1	8.6	8.3
250 x 75 x 2.0	12.3	11.2	10.4	9.8	9.3	8.9
250 x 75 x 2.5	13.2	12.0	11.2	10.5	10.0	9.5
250 x 75 x 3.0	13.9	12.8	11.8	11.1	10.6	10.1
250 x 85 x 1.6	11.8	10.7	9.9	9.4	8.9	8.5
250 x 85 x 2.0	12.7	11.5	10.7	10.1	9.6	9.1
250 x 85 x 2.5	13.6	12.4	11.5	10.8	10.3	9.8
250 x 85 x 3.0	14.4	13.1	12.2	11.4	10.9	10.4
300 x 100 x 1.6	14.1	12.8	11.9	11.1	10.6	10.1
300 x 100 x 2.0	15.1	13.7	12.7	12.0	11.4	10.9
300 x 100 x 2.5	16.2	14.8	13.7	12.9	12.2	11.7
300 x 100 x 3.0	17.2	15.6	14.5	13.7	13.0	12.4
350 x 100 x 1.6	15.9	14.5	13.4	12.6	12.0	11.5
350 x 100 x 2.0	17.1	15.5	14.4	13.6	12.9	12.3
350 x 100 x 2.5	18.4	16.7	15.5	14.6	13.9	13.2
350 x 100 x 3.0	19.5	17.7	16.4	15.5	14.7	14.0

(A) Design Loading

- (i) Dead Load: 0.06kN/m² (metal roofing) + purlin self weight
(ii) Live Load: 0.25kN/m²

(C) Support Condition

- Simply supported with pinned joints over supports

(B) Roof Pitch

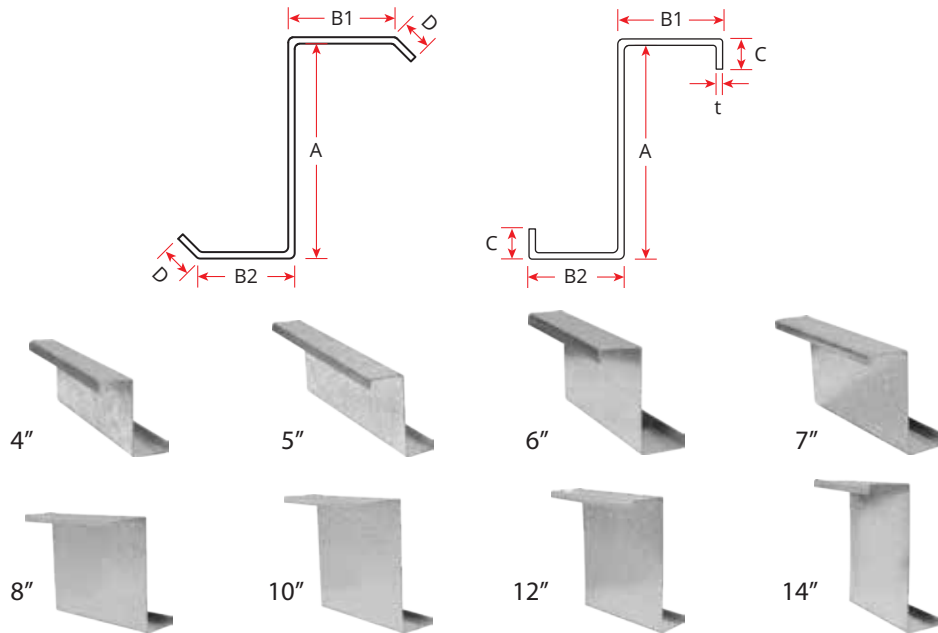
- Application for maximum roof pitch 30°

(D) Deflection Limits

- Span/150 under load case 1.0 DL + 1.0 LL
- Span/180 under load case 1.0 LL

Disclaimer: The information on the materials presented herein is provided for informational purposes only. Le Nam Megashet (M) Sdn. Bhd. shall not liable for any loss or damage whatsoever arising from, but not limited to the usage of information provided. Any omission, errors, typographic errors and technical inaccuracies relating to the information may be changed or updated without notice.

Ledex Z Purlin



Application of Ledex Z Purlin includes:

- Vertical Sheeting Rails
- Brickwork Restraints
- Mezzanine Floors
- Suspended Ceiling System

Technical Specification

Inch	Codes				A (Depth)	B1	B2	D
4"	LZP 100 16	LZP 100 20	LZP 100 25	LZP 100 30	100	50	45	13
5"	LZP 125 16	LZP 125 20	LZP 125 25	LZP 125 30	125	50	45	14
6"	LZP 150 16	LZP 150 20	LZP 150 25	LZP 150 30	150	65	60	16
7"	LZP 175 16	LZP 175 20	LZP 175 25	LZP 175 30	175	75	70	15
8"	LZP 200 16	LZP 200 20	LZP 200 25	LZP 200 30	200	75	70	16
10"	LZP 250 16 (75)	LZP 250 20 (75)	LZP 250 25 (75)	LZP 250 30 (75)	250	75	70	16
10"	LZP 250 16 (85)	LZP 250 20 (85)	LZP 250 25 (85)	LZP 250 30 (85)	250	85	80	16
12"	LZP 300 16	LZP 300 20	LZP 300 25	LZP 300 30	300	100	95	16
14"	LZP 350 16	LZP 350 20	LZP 350 25	LZP 350 30	350	100	95	16
TOLERANCE (mm)					± 1	± 1	± 1	± 2

Size	Thickness			
	1.6 mm	2.0 mm	2.5 mm	3.0 mm
2.0" x 4.0" (100 mm)	2.80 kg/m	3.41 kg/m	4.24 kg/m	5.16 kg/m
2.0" x 5.0" (125 mm)	3.10 kg/m	3.82 kg/m	4.72 kg/m	5.69 kg/m
2.5" x 6.0" (150 mm)	3.85 kg/m	4.75 kg/m	5.94 kg/m	7.40 kg/m
3.0" x 7.0" (175 mm)	4.43 kg/m	5.50 kg/m	6.84 kg/m	8.30 kg/m
3.0" x 8.0" (200 mm)	4.76 kg/m	5.90 kg/m	7.34 kg/m	10.13kg/m
3.0" x 10.0"(250 mm)	5.38 kg/m	6.59 kg/m	8.35 kg/m	10.13kg/m
3.3" x 10.0"(250 mm)	5.67 kg/m	7.04 kg/m	8.76 kg/m	10.82 kg/m
4.0" x 12.0"(300 mm)	6.70 kg/m	8.33 kg/m	10.36 kg/m	12.80 kg/m
4.0" x 14.0"(350mm)	7.47 kg/m	9.48 kg/m	11.85 kg/m	14.17 kg/m
TOLERANCE (mm)	± 0.10	± 0.10	± 0.10	± 0.10

Inch	Identification	Area, A (mm ²)	Weight, W (kg/m)	Web, D (mm)	Flange, B1 (mm)	Flange, B2 (mm)	Lip Size L (mm)	Thickness, t (mm)	Second Moment of Area		Section Modulus		Radius of Gyration	
									I_{xx} (10 ⁶ mm ⁴)	I_{yy} (10 ⁶ mm ⁴)	Z_{xx} (10 ³ mm ³)	Z_{yy} (10 ³ mm ³)	R_{xx} (mm)	R_{yy} (mm)
4"	LZP10016	346	2.80	100	50	45	13	1.6	0.567	0.212	11.27	4.08	40.47	24.74
	LZP10020	431	3.41	100	50	45	13	2.0	0.700	0.260	13.95	5.04	40.30	24.58
	LZP10025	535	4.24	100	50	45	13	2.5	0.860	0.318	17.23	6.20	40.09	24.38
	LZP10030	638	5.16	100	50	45	13	3.0	1.014	0.373	20.43	7.32	39.88	24.17
5"	LZP12516	390	3.10	125	50	45	14	1.6	0.957	0.222	15.19	4.23	49.56	23.87
	LZP12520	485	3.82	125	50	45	14	2.0	1.182	0.273	18.83	5.23	49.39	23.71
	LZP12525	602	4.72	125	50	45	14	2.5	1.456	0.333	23.29	6.44	49.17	23.51
	LZP12530	719	5.69	125	50	45	14	3.0	1.722	0.391	27.66	7.60	48.96	23.32
6"	LZP15016	484	3.85	150	65	60	16	1.6	1.753	0.472	23.25	6.93	60.19	31.24
	LZP15020	603	4.75	150	65	60	16	2.0	2.171	0.582	28.86	8.58	60.02	31.08
	LZP15025	750	5.94	150	65	60	16	2.5	2.682	0.715	35.77	10.60	59.80	30.88
	LZP15030	896	7.40	150	65	60	16	3.0	3.180	0.843	42.55	12.57	59.59	30.68
7"	LZP17516	553	4.43	175	75	70	15	1.6	2.724	0.664	30.97	8.54	70.19	34.66
	LZP17520	689	5.50	175	75	70	15	2.0	3.377	0.820	38.48	10.58	70.02	34.50
	LZP17525	857	6.84	175	75	70	15	2.5	4.177	1.009	47.74	13.08	69.80	34.30
	LZP17530	1025	8.30	175	75	70	15	3.0	4.961	1.191	56.86	15.53	69.59	34.10
8"	LZP20016	596	4.76	200	75	70	16	1.6	3.728	0.686	37.09	8.77	79.09	33.92
	LZP20020	743	5.90	200	75	70	16	2.0	4.625	0.847	46.10	10.86	78.92	33.76
	LZP20025	925	7.34	200	75	70	16	2.5	5.728	1.042	57.23	13.44	78.70	33.57
	LZP20030	1106	9.09	200	75	70	16	3.0	6.809	1.231	68.20	15.95	78.48	33.37
10"	LZP25016	676	5.38	250	75	70	16	1.6	6.272	0.686	49.91	8.64	96.33	31.86
	LZP25020	843	6.59	250	75	70	16	2.0	7.789	0.847	62.08	10.85	96.14	31.70
	LZP25025	1050	8.35	250	75	70	16	2.5	9.658	1.042	77.13	13.42	95.91	31.51
	LZP25030	1256	10.13	250	75	70	16	3.0	11.495	1.231	91.98	15.93	95.68	31.31
10"	LZP25016	708	5.67	250	85	80	16	1.6	6.766	0.955	53.87	10.82	97.76	36.73
	LZP25020	887	7.04	250	85	80	16	2.0	8.404	1.181	67.02	13.42	97.36	36.49
	LZP25025	1100	8.76	250	85	80	16	2.5	10.423	1.455	83.28	16.61	97.35	36.37
	LZP25030	1316	10.82	250	85	80	16	3.0	12.410	1.722	99.35	19.74	97.13	36.18
12"	LZP30016	836	6.70	300	100	95	16	1.6	11.442	1.477	75.96	14.30	116.99	42.04
	LZP30020	1043	8.33	300	100	95	16	2.0	14.227	1.829	94.57	17.75	116.81	41.88
	LZP30025	1300	10.36	300	100	95	16	2.5	17.666	2.258	117.63	22.00	116.58	41.68
	LZP30030	1556	12.80	300	100	95	16	3.0	21.059	2.677	140.46	26.19	116.35	41.49
14"	LZP35016	916	7.47	350	100	95	16	1.6	16.422	1.477	93.45	14.28	133.90	40.16
	LZP35020	1143	9.48	350	100	95	16	2.0	20.429	1.829	116.39	17.74	133.71	40.01
	LZP35025	1425	11.85	350	100	95	16	2.5	25.384	2.259	144.83	21.99	133.48	39.81
	LZP35030	1706	14.17	350	100	95	16	3.0	30.279	2.678	173.00	26.16	133.24	39.62

Z PURLIN MAXIMUM ALLOWABLE SPAN (M)

Size	Z Purlin Spacing					
	0.9	1.2	1.5	1.8	2.1	2.4
100 x 50 x 1.6	5.1	4.6	4.3	4.0	3.8	3.7
100 x 50 x 2.0	5.5	5.0	4.6	4.3	4.1	3.9
100 x 50 x 2.5	5.9	5.3	4.9	4.6	4.4	4.2
100 x 50 x 3.0	6.2	5.6	5.2	4.9	4.7	4.5
125 x 50 x 1.6	6.1	5.5	5.1	4.8	4.6	4.4
125 x 50 x 2.0	6.5	5.9	5.5	5.2	4.9	4.7
125 x 50 x 2.5	7.0	6.4	5.9	5.6	5.3	5.0
125 x 50 x 3.0	7.4	6.7	6.2	5.9	5.6	5.3
150 x 65 x 1.6	7.5	6.8	6.3	5.9	5.6	5.4
150 x 65 x 2.0	8.0	7.3	6.7	6.3	6.0	5.8
150 x 65 x 2.5	8.6	7.8	7.2	6.8	6.5	6.2
150 x 65 x 3.0	9.1	8.3	7.7	7.2	6.9	6.6
175 x 75 x 1.6	8.6	7.8	7.3	6.9	6.5	6.2
175 x 75 x 2.0	9.3	8.4	7.8	7.4	7.0	6.7
175 x 75 x 2.5	10.0	9.1	8.4	7.9	7.5	7.2
175 x 75 x 3.0	10.6	9.6	8.9	8.4	8.0	7.6
200 x 75 x 1.6	9.6	8.7	8.1	7.6	7.2	6.9
200 x 75 x 2.0	10.0	9.4	8.7	8.2	7.8	7.4
200 x 75 x 2.5	11.1	10.1	9.3	8.8	8.3	8.0
200 x 75 x 3.0	11.8	10.7	9.9	9.3	8.8	8.5
250 x 75 x 1.6	11.5	10.4	9.7	9.1	8.6	8.3
250 x 75 x 2.0	12.3	11.2	10.4	9.8	9.3	8.9
250 x 75 x 2.5	13.2	12.0	11.2	10.5	10.0	9.5
250 x 75 x 3.0	13.9	12.8	11.8	11.1	10.6	10.1
250 x 85 x 1.6	11.4	10.4	9.6	9.1	8.6	8.2
250 x 85 x 2.0	12.3	11.2	10.3	9.7	9.3	8.8
250 x 85 x 2.5	13.2	12.0	11.1	10.5	9.9	9.5
250 x 85 x 3.0	14.0	12.7	11.8	11.1	10.5	10.1
300 x 100 x 1.6	14.0	12.7	11.8	11.1	10.5	10.1
300 x 100 x 2.0	15.0	13.7	12.7	11.9	11.3	10.8
300 x 100 x 2.5	16.2	14.7	13.6	12.8	12.2	11.6
300 x 100 x 3.0	17.1	15.6	14.4	13.6	12.9	12.3
350 x 100 x 1.6	15.8	14.3	13.3	12.5	11.9	11.4
350 x 100 x 2.0	17.0	15.4	14.3	13.5	12.8	12.2
350 x 100 x 2.5	18.2	16.6	15.4	14.5	13.7	13.1
350 x 100x 3.0	19.4	17.6	16.3	15.4	14.6	13.9

(A) Design Loading

- (i) Dead Load: 0.06kN/m² (metal roofing) + purlin self weight
(ii) Live Load: 0.25kN/m²

(C) Support Condition

- Simply supported with pinned joints over supports

(B) Roof Pitch

- Application for maximum roof pitch 30°

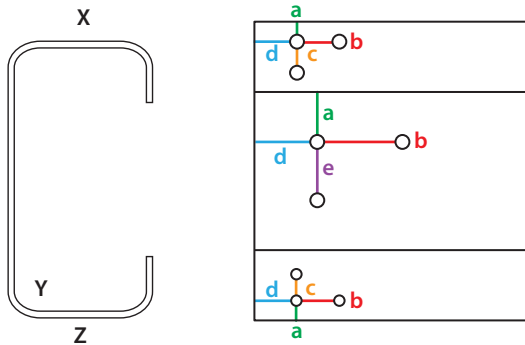
(D) Deflection Limits

- Span/150 under load case 1.0DL + 1.0LL
- Span/180 under load case 1.0LL

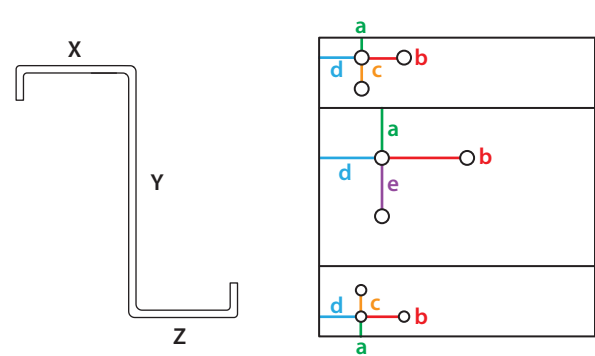
Disclaimer: The information on the materials presented herein is provided for informational purposes only. Le Nam Megashet (M) Sdn. Bhd. shall not liable for any loss or damage whatsoever arising from, but not limited to the usage of information provided. Any omission, errors, typographic errors and technical inaccuracies relating to the information may be changed or updated without notice.

PUNCH HOLE GUIDELINE

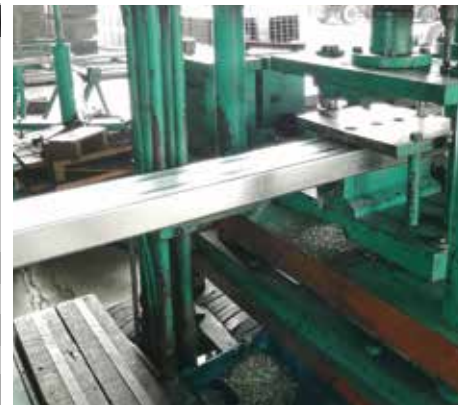
C Purlin



Z Purlin



Height H (mm)		14mm					14mm x 16mm					17mm x 19mm				
		a	b	c	d	e	a	b	c	d	e	a	b	c	d	e
		Round Hole Size					Standard Elongated Hole Size					Option Elongated Hole Size				
3"	75	12	19	19	12	19	12	21	19	13	19	14	24	22	15	24
4"	100	12	19	19	12	19	12	21	19	13	19	14	24	22	15	24
5"	125	12	19	19	12	19	12	21	19	13	19	14	24	22	15	24
6"	150	12	19	19	12	19	12	21	19	13	19	14	24	22	15	24
7"	175	12	19	19	12	19	12	21	19	13	19	14	24	22	15	24
8"	200	12	19	19	12	19	12	21	19	13	19	14	24	22	15	24
9"	225	12	19	19	12	19	12	21	19	13	19	14	24	22	15	24
10"	250	12	19	19	12	19	12	21	19	13	19	14	24	22	15	24
12"	300	12	19	19	12	19	12	21	19	13	19	14	24	22	15	24
14"	350	12	19	19	12	19	12	21	19	13	19	14	24	22	15	24



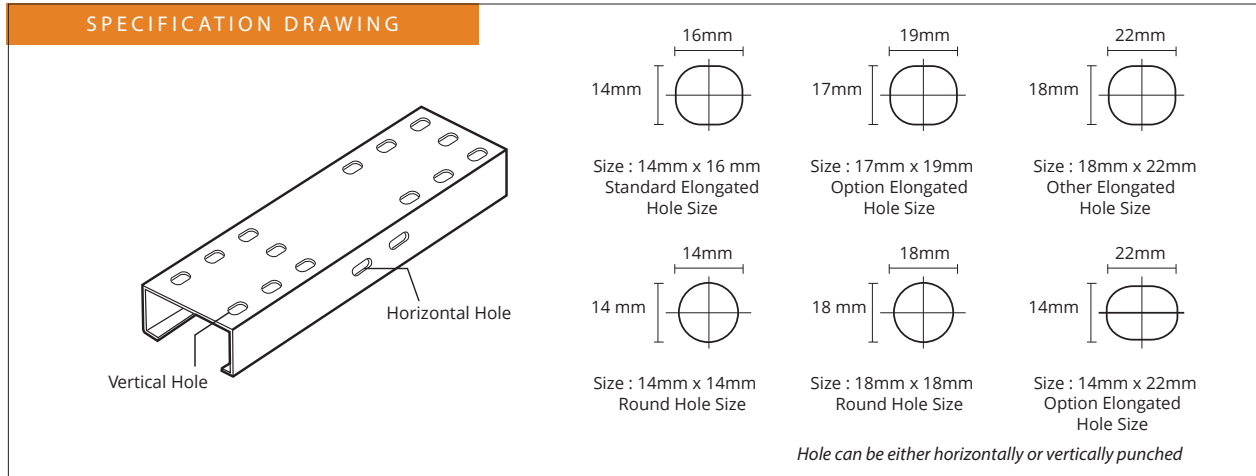
Height H (mm)	18mm					18mm x 22mm					14mm x 22mm					
	a	b	c	d	e	a	b	c	d	e	a	b	c	d	e	
	Round Hole Size					Option Elongated Hole Size					Other Elongated Hole Size					
3"	75	14	23	23	14	23	14	27	23	16	23	12	27	19	16	19
4"	100	14	23	23	14	23	14	27	23	16	23	12	27	19	16	19
5"	125	14	23	23	14	23	14	27	23	16	23	12	27	19	16	19
6"	150	14	23	23	14	23	14	27	23	16	23	12	27	19	16	19
7"	175	14	23	23	14	23	14	27	23	16	23	12	27	19	16	19
8"	200	14	23	23	14	23	14	27	23	16	23	12	27	19	16	19
9"	225	14	23	23	14	23	14	27	23	16	23	12	27	19	16	19
10"	250	14	23	23	14	23	14	27	23	16	23	12	27	19	16	19
12"	300	14	23	23	14	23	14	27	23	16	23	12	27	19	16	19
14"	350	14	23	23	14	23	14	27	23	16	23	12	27	19	16	19



PUNCHING HOLE DIMENSION

C Purlin

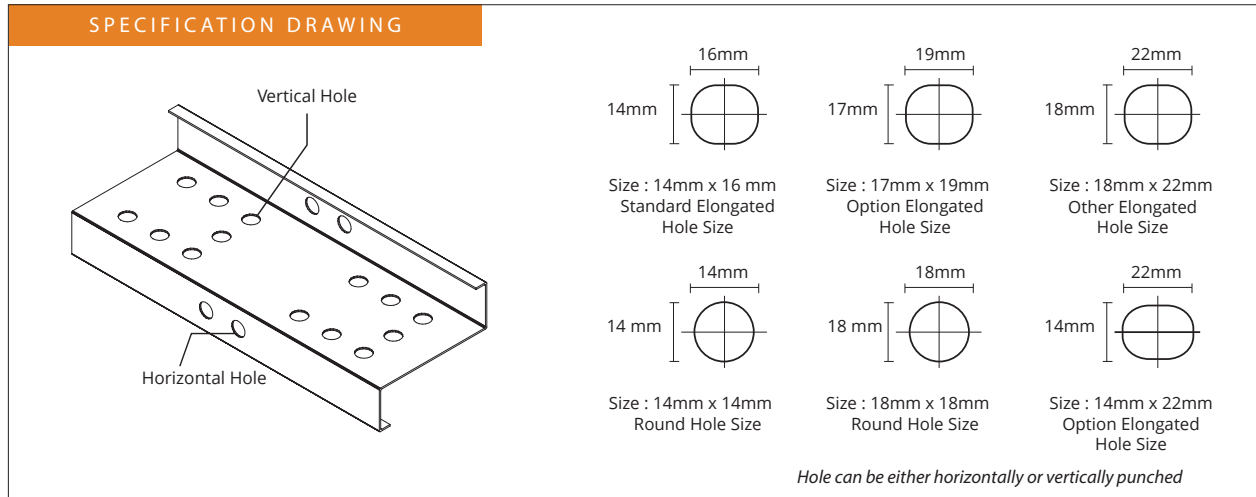
SPECIFICATION DRAWING



* Custom made position & hole size are also available

Z Purlin

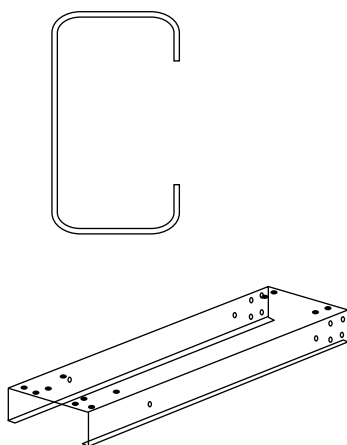
SPECIFICATION DRAWING



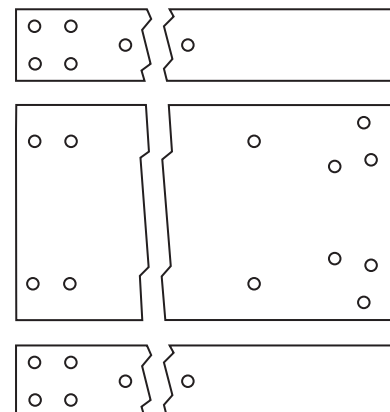
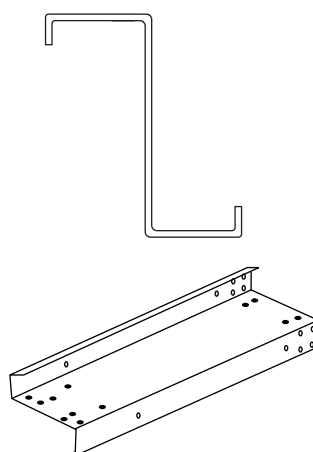
* Custom made position & hole size are also available

Example

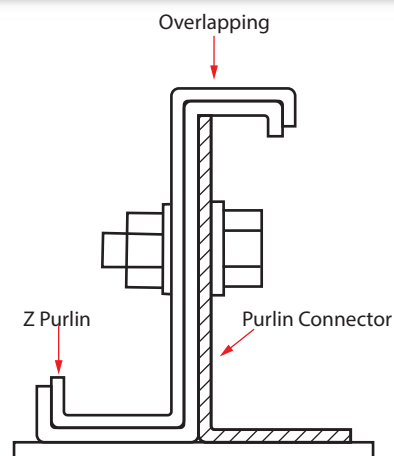
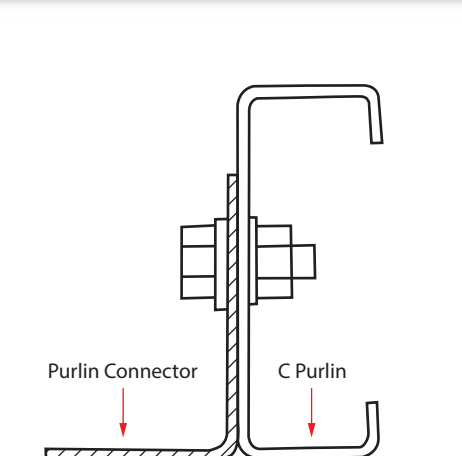
C Purlin



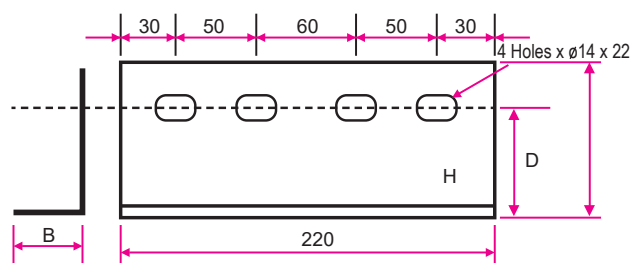
Z Purlin



ACCESSORIES & SPECIFICATIONS



Ledex Purlin Connector



* All units are measured in mm



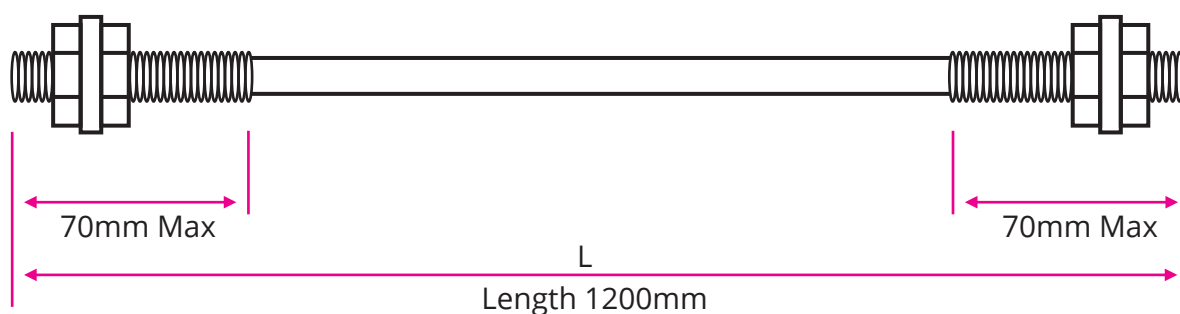
C Purlin Height (mm)	Base B (mm)	Height H (mm)	Hole Distance D (mm)	Thickness (mm)	Weight (kg)	Materials
75	51	63.5	38.5	4.0	0.60	Mild Steel
100	65.5	76	51	4.0	0.90	Mild Steel
125	63.5	89	63.5	4.0	1.00	Mild Steel
150	76	102	76	4.0	1.05	Mild Steel
175	76	114	88.5	4.0	1.10	Mild Steel
200	89	127	101	4.0	1.40	Mild Steel

Ledex Tie Rod

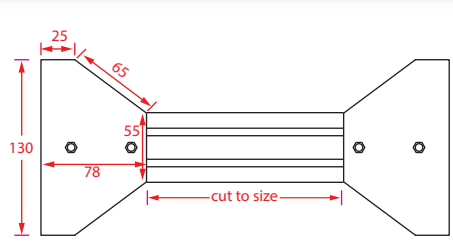


TECHNICAL SPECIFICATIONS

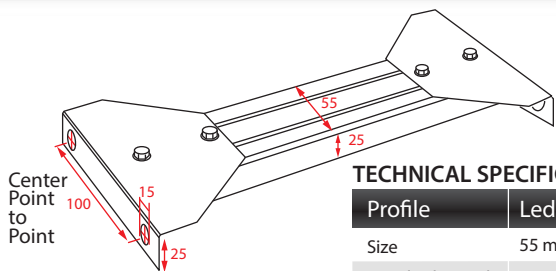
Profile	Ledex Tie Rod
Size	12 mm
Thread Length	70 mm Max
Standard Length	1200 mm



PURLIN BRIDGING



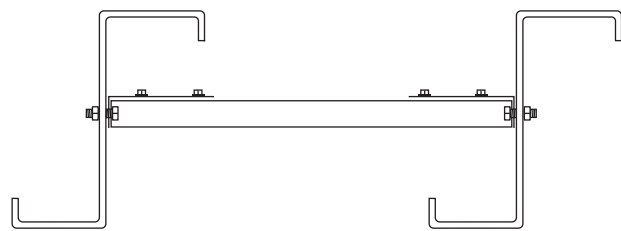
* All units are measured in mm



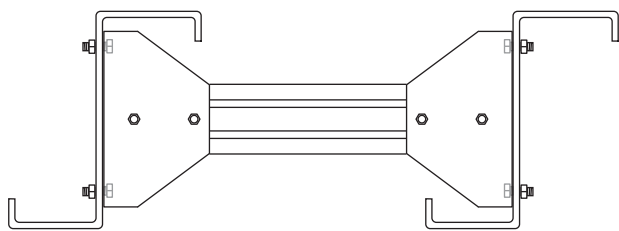
TECHNICAL SPECIFICATIONS	
Profile	Ledex Purlin Bridging
Size	55 mm x 25 mm
Standard Length	1200 mm

Z Purlin

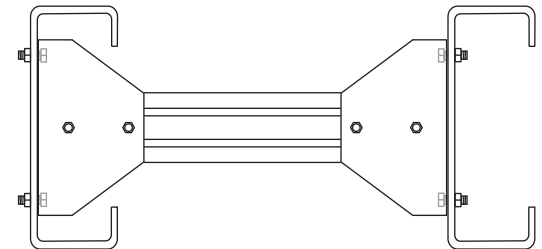
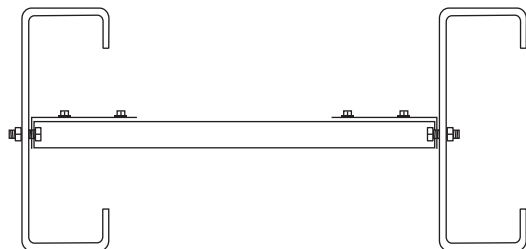
Horizontal



Vertical

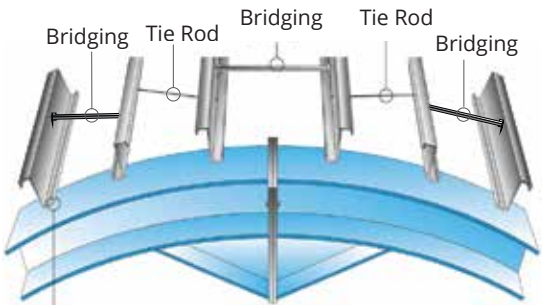


C Purlin

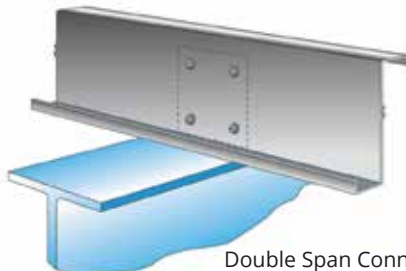


*Drawings are for illustration purpose only

Z PURLIN INSTALLATION



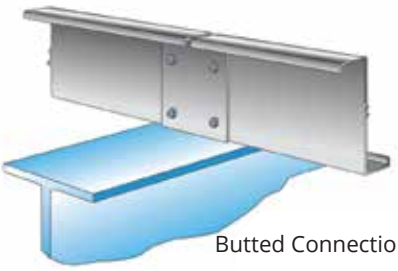
Alternative purlin directions reversed when roof tangent is less than 3°



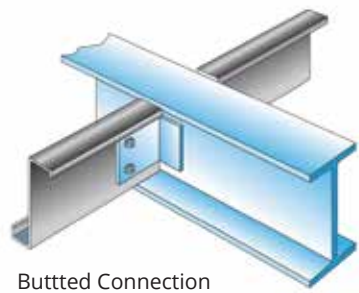
Double Span Connection



Sleeved Connection



Butted Connection



Butted Connection with inset cleat for flush construction

PROJECT REFERENCE



Kellogg's, Negeri Sembilan



DIY Channel, Batu Kawan



Ultimate Manufacturing Solution, Juru

PROJECT REFERENCE



Amindo Packaging, Kulim



Inventec, Bayan Lepas



Suan Leong Hang, Batu Kawan



Floor Deck



Floor Deck Introduction



Ledex Floor Deck is the next generation composite steel deck that combines the tensile strength of steel with compressive strength of concrete. This is to improve design efficiency with minimal use of concrete. Hence, this enables a new benchmark for more shallow and efficient concrete slab construction.

Ledex Floor Deck has a structurally efficient ribbed profile that provides an excellent interlock between steel and concrete. This creates a positive reinforcement to maximize load capacity. The efficient shape of the deck is an ideal choice for composite slab construction.

Ledex Floor Deck increases the speed of floor construction and provides a safe working platform to enable low interruption during construction. It requires low maintenance and gives lightweight building a longer life span.

DETAILS TO SPEC IN BQ

Ledex® Mega Floor Deck Z180 0.8 mm TCT

Brand Profile Zinc Coating Mass Thickness

Example

Design, fabricate & install Ledex® Mega Floor Deck GI Z275, 1.00 mm TCT reinforced with shear stud, BRC to required with engineer's approval associated edge cappings design in accordance to manufacturer specifications.

ADVANTAGES

Steel floor decking can be supplied and installed by steel floor decking contractors as part of a composite flooring system. It is a versatile and sustainable flooring solution widely acknowledged to minimise onsite construction durations.

1. Low Material Cost

Ledex Floor Deck's composite has high strength to weight ratio. The lighter weight composite material reduces the steel works frame weight and the ribbed profile shape reduces the concrete volume. As a result, delivery, erection and structural framing costs can be lower. This is not only used as formwork purpose but also serves as wide working platform, thus decreases the period of construction.

2. Reduce Construction Time and Cost

Ledex Floor Deck can be easily cut, joined and fitted to any required shapes. Laying and reinforcing the deck are combined to a single stage. The low weight deck can be laid by hand and not by crane. Shorter construction stages and reduced dependency of heavy machines helps to speed up construction time. Since there is no wooden formwork support needed, it produces no assembly waste.

3. Greater Durability with Improved Quality and Realibility

Ledex offers excellent quality through engineering and continuously refined production techniques. The steel base has superior corrosion protection with guaranteed minimum yield strength depending on the specification used. The long sustainability of steel can offer low maintenance cost over time.

4. Unbeatable Strength

When the steel and concrete composite slabs are constructed, they are lighter and stronger than most conventional slabs. Steel floor decking provides flexible reinforcement, combined with the comprehensive strength of the concrete, for an all-round stronger slab. The steel floor decking profiles are designed to inhibit any longitudinal slip between the steel and concrete in the slab itself, and any transverse movement between the slab and the supporting beams.

5. Easy On-Site Handling

Steel floor decking is transported to site in pre-cut lengths, and in pre-packaged bundles. These bundles can be easily craned into specific work areas, and the individual sheets quickly laid by hand.

6. Speedy, Safe Construction

One advantage of metal deck steel flooring is its speedy erection. Another is that as the concrete slab is being poured, progress is not hindered in other areas e.g. the floors above. The floor deck is also able to offer stud welding and concrete flooring contractor services allowing the entire installation of the concrete slab to be undertaken by one skilled and experienced provider.

7. More Flexible Design

Steel floor decking can be varied in design and will give more strength, flexibility and efficiency.

8. Much Better Longevity

Steel floor decking will not twist and warp over time and is resilient to weather, moisture, time and pest deterioration.

Ledex Floor Deck	Traditional Wooden Mould
• Increase construction speed and less workers are required to complete the same construction. • Construction can be completed in a shorter time in any different floors at the same time. • No need to consider for formwork removal prematurely without affecting template. • Less floor crack seepage happening because better floor quality. • Do not need formwork support. • Consecutive floor level can be carried out immediately. • Reduce the accumulation of material on-site (Reduce wooden materials stacking on job site), work safety and good health.	• Construction is slow. More workers are required to complete the same construction. • Construction cannot be completed in a shorter time in any different floors at the same time. • Need to consider for formwork removal prematurely. Thus the floor cracks easily, resulting in seepage. • The working platform can be dispensed with and the need of crane for internal transport maybe reduced significantly. • Increase the accumulation of material on-site (Increase wooden materials stacking on job site, site dirty, prone to danger).

FLOOR DECK ON SITE INSTALLATION CONCEPT



Installation of structure

1



Laying of floor deck

2



BRC arrangements

3



Supports for long length spacing

4



Sealing of opening & lapping

5



Concrete mixture pour

6



Concrete mixture levelling

7



Concrete floor curing

8

Ledex® Mega Floor Deck



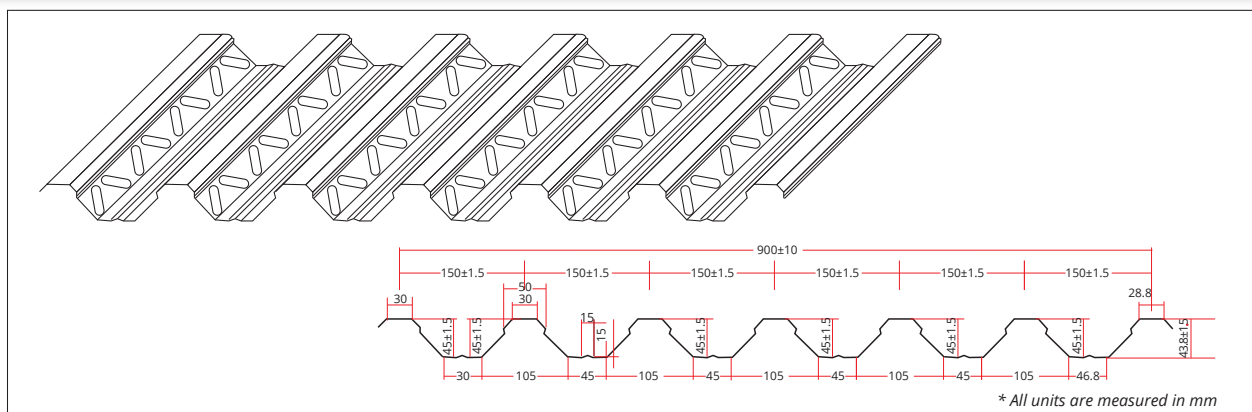
Ledex Mega Floor Deck is a corrugated steel sheet supported by steel joints or beams. It creates high strength-to-weight that incurred lower material cost and handling time while maintaining the durability.

Ledex Mega Floor Deck offers wide range steel decking solutions for multi-rise buildings.

Application of Ledex Mega Floor Deck includes :

- Multi Storey Buildings
- Bridge Walkways
- Parking Garages
- Mezzanines Floor
- Car Porches
- Warehouse

SPECIFICATION DRAWING



PRODUCT SPECIFICATIONS

Profile		Ledex Mega Floor Deck	
Effective Width		900 mm	
Steel Grade		Hot Dip Galvanized High Tensile Steel with Minimum Yield Strength of 550Mpa	
Zinc Coating Mass		180g/m ² , 275g/m ²	
Tolerance		Length ±10 mm, Width ±10 mm, Thickness ±0.03 mm	
Thickness TCT (mm)		0.8	1.0
Weight	(kg/m)	8.80	10.35
	(kg/m ²)	9.78	11.50
Steel Area (mm ² /m)		978.59	1219.24
Second Moment of area I _{NA} (mm ⁴ /m)		295938	368161
Height to Neutral Axis $\bar{y}$ (mm)		20.22	20.16
Moment Capacity M _c (kNm/m)		43.34	55.55

LEDEX MEGA FLOOR DECK SPAN LIMIT

Maximum Un-Propged Span								
(a)	Thickness TCT (mm)	0.80						
(b)	Slab Thickness (mm)	100	125	150	175	200	225	250
(ci)	Single Span (mm)	2300	2200	2100	2000	1900	1800	1700
(cii)	Continuous (mm)	2300	2200	2100	2000	1900	1800	1700

(a)	Thickness TCT (mm)	1.00						
(b)	Slab Thickness (mm)	100	125	150	175	200	225	250
(ci)	Single Span (mm)	2500	2400	2300	2200	2100	2000	1900
(cii)	Continuous (mm)	2800	2700	2600	2500	2400	2300	2200

Maximum Span With 1 Line Temporary Support At Midspan								
(d)	Thickness TCT (mm)	0.80						
(e)	Slab Thickness (mm)	100	125	150	175	200	225	250
(fi)	Single Span (mm)	3100	3000	2900	2800	2700	2600	2500
(fii)	Continuous (mm)	3500	3400	3300	3200	3100	3000	2900

(d)	Thickness TCT (mm)	1.00						
(e)	Slab Thickness (mm)	100	125	150	175	200	225	250
(fi)	Single Span (mm)	3400	3300	3200	3100	3000	2900	2800
(fii)	Continuous (mm)	3900	3800	3700	3600	3500	3400	3300

Raw Material

Ledex Mega Floor Deck use high tensile steel with minimum yield strength of 550Mpa and a minimum zinc coating mass of 180 g/m² or 275 g/m².

Embossment

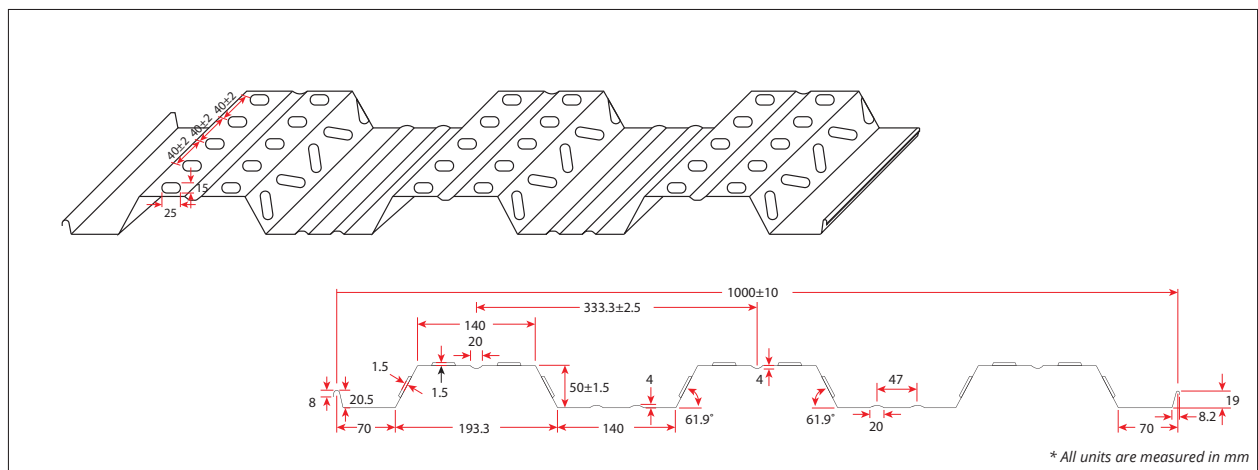
Embossed on each face of the web to provide mechanical connection between the steel and the hardened concrete.

Ledex® Giga Floor Deck



Ledex Giga Floor Deck is precisely engineered with stucco design on the trapezoidal rib face, directly contribute to the concrete bonding with the corrugated rib, hence provide strong bonding between concrete and steel.

SPECIFICATION DRAWING



PRODUCT SPECIFICATIONS

Profile		Ledex Giga Floor Deck		
Effective Width		1000 mm		
Steel Grade		Hot Dip Galvanized High Tensile Steel with Minimum Yield Strength of 550Mpa		
Zinc Coating Mass		180 g/m ² / 275 g/m ²		
Tolerance		Length ±10 mm, Width ±10 mm, Thickness ±0.02 mm		
Thickness TCT (mm)		0.8	1.0	1.2
Weight	(kg/m)	8.80	10.35	12.30
	(kg/m ²)	8.80	10.35	12.30
Steel Area (mm ² /m)		911.3	1142.0	1371.5
Second Moment of Area I _{NA} (mm ⁴ /m)		466142	583778	700657
Height to Neutral Axis $\bar{y}$ (mm)		25.05	25.06	25.08
Moment Capacity M _c (kNm/m)		29.45	39.97	48.69

LEDEX GIGA FLOOR DECK SPAN LIMIT

Maximum Un-Propped Span								
(a)	Thickness TCT (mm)	0.80						
(b)	Slab Thickness (mm)	100	125	150	175	200	225	250
(ci)	Single Span (mm)	1830	1750	1690	1630	1590	1540	1500
(cii)	Continuous (mm)	2460	2360	2270	2200	2130	2080	2020

(a)	Thickness TCT (mm)	1.00						
(b)	Slab Thickness (mm)	100	125	150	175	200	225	250
(ci)	Single Span (mm)	1970	1890	1820	1760	1710	1660	1620
(cii)	Continuous (mm)	2650	2540	2450	2370	2300	2240	2180

(a)	Thickness TCT (mm)	1.2						
(b)	Slab Thickness (mm)	100	125	150	175	200	225	250
(ci)	Single Span (mm)	2090	2010	1940	1870	1820	1770	1720
(cii)	Continuous (mm)	2820	2700	2600	2520	2440	2380	2320

Maximum Span With 1 Line Temporary Prop At Center								
(d)	Thickness TCT (mm)	0.80						
(e)	Slab Thickness (mm)	100	125	150	175	200	225	250
(fi)	Single Span (mm)	3010	2880	2780	2680	2620	2540	2470
(fii)	Continuous (mm)	3690	3540	3400	3300	3190	3120	3030

(d)	Thickness TCT (mm)	1.00						
(e)	Slab Thickness (mm)	100	125	150	175	200	225	250
(fi)	Single Span (mm)	2900	3110	3000	2900	2820	2730	2670
(fii)	Continuous (mm)	3800	3810	3670	3550	3450	3360	3270

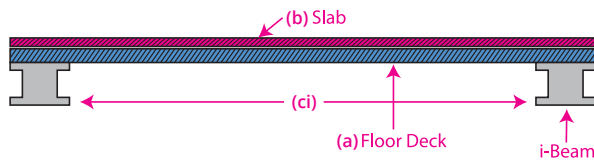
(d)	Thickness TCT (mm)	1.20						
(e)	Slab Thickness (mm)	100	125	150	175	200	225	250
(fi)	Single Span (mm)	2900	3310	3200	3080	3000	2920	2830
(fii)	Continuous (mm)	3800	4050	3900	3780	3660	3570	3480

* Maximum construction imposed load is 1.5kN/m²

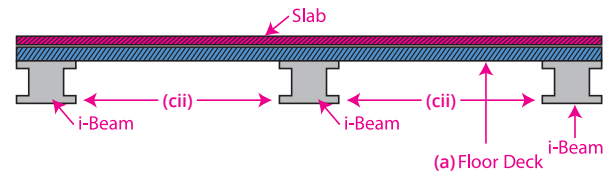
* Deflection based on L/360, wet concrete density of 24kN/m³

FLOOR DECK SPAN LIMIT EXPLANATION

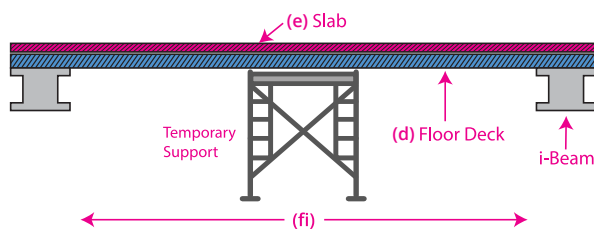
Single Span



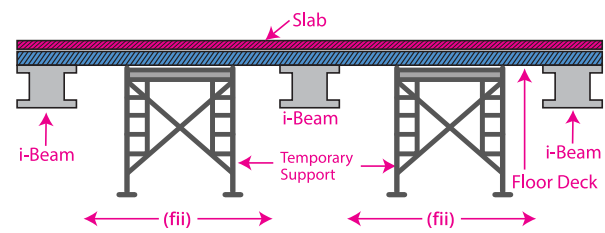
(cii) Continuous Span



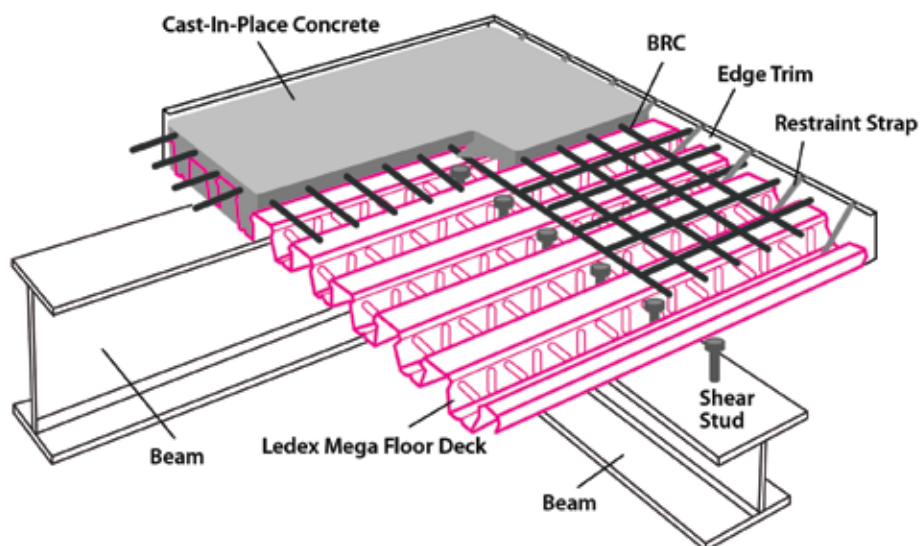
Single Span (With 1 Line Temporary Support At Midspan)



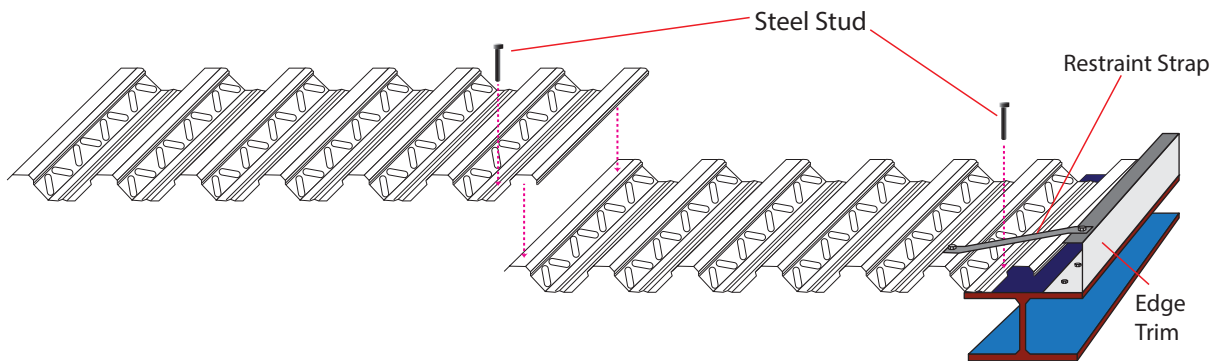
(fii) Continuous Span (With 1 Line Temporary Support At Midspan)



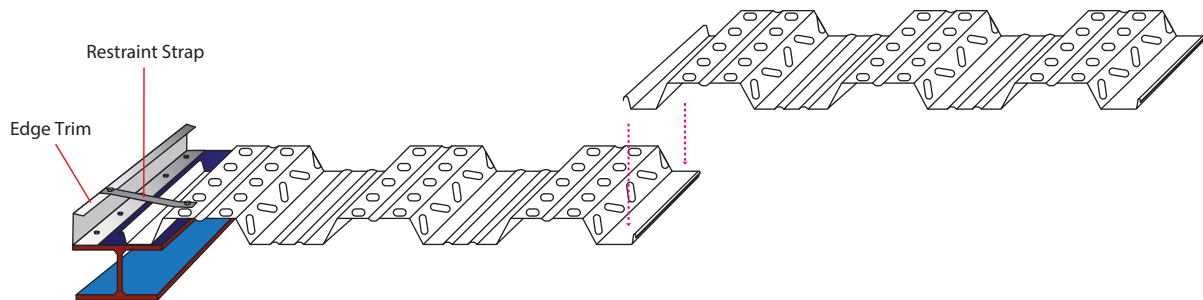
INSTALLATION



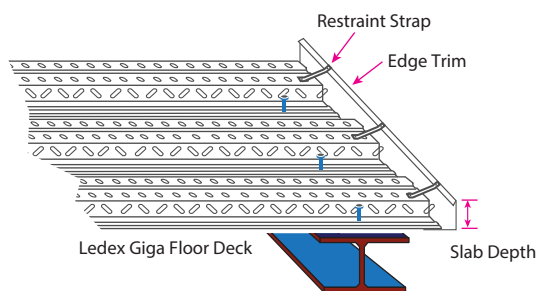
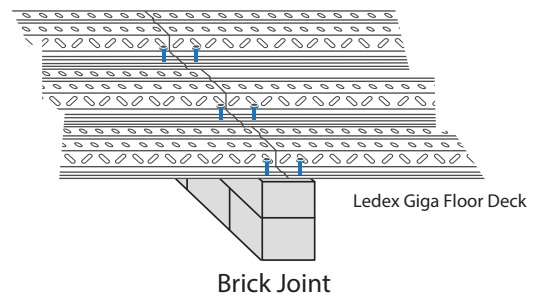
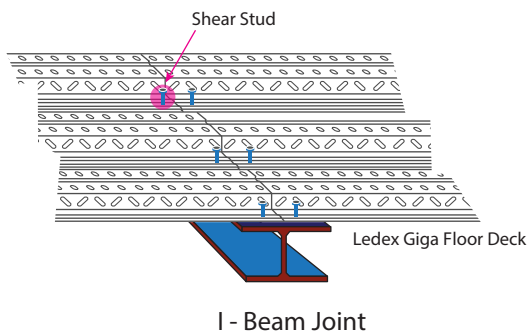
Ledex Mega Floor Deck INSTALLATION RECOMMENDATION



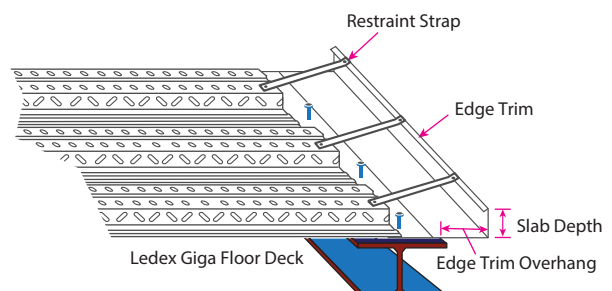
Ledex Giga Floor Deck INSTALLATION RECOMMENDATION



Floor Deck Construction Detail Typical Side Detail



Typical End Cantilever



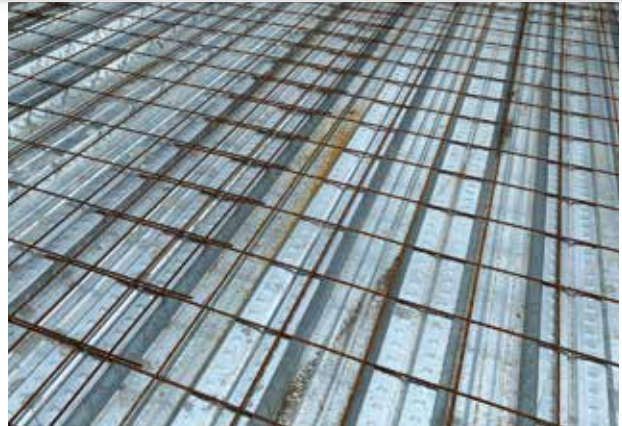
Typical End Detail

**Drawing for illustration purpose only*

INSTALLATION



I-Beam Joint - Top View



Overlapping Joint on top of I-Beam



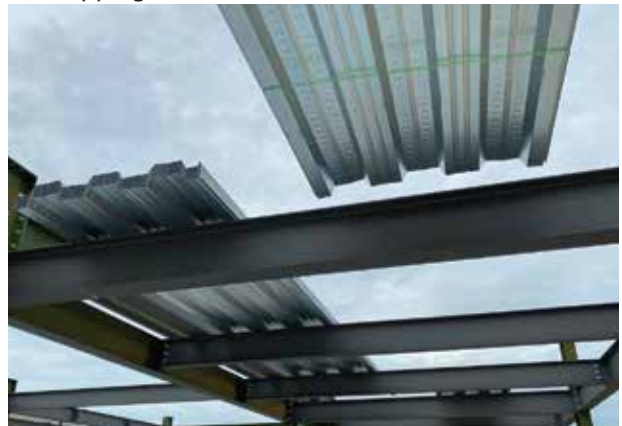
I-Beam Joint - Bottom View



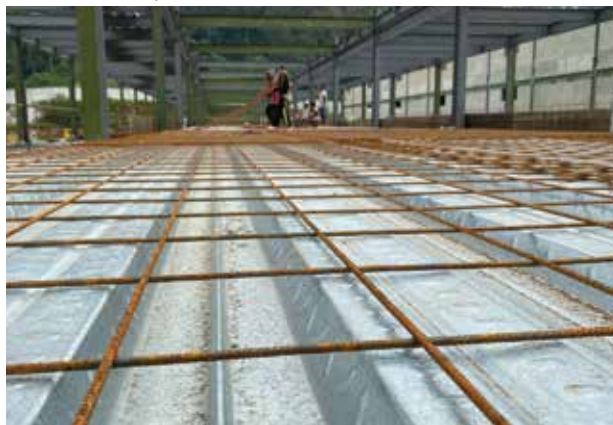
Overlapping Joint at bottom of I-Beam



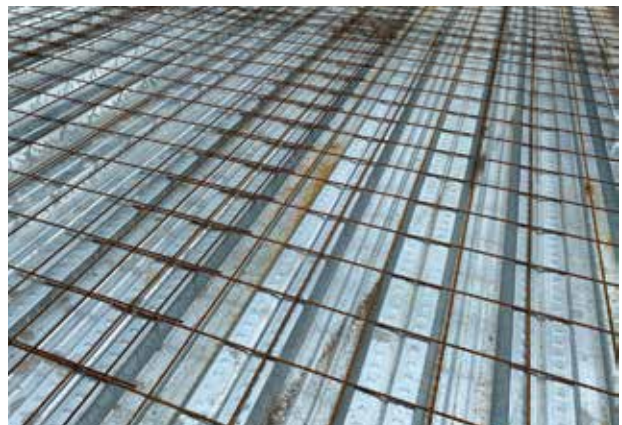
Continuous Span Installation



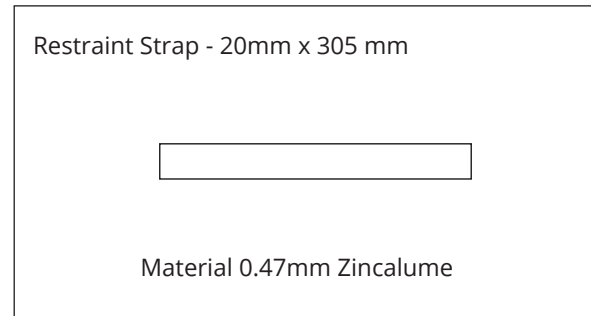
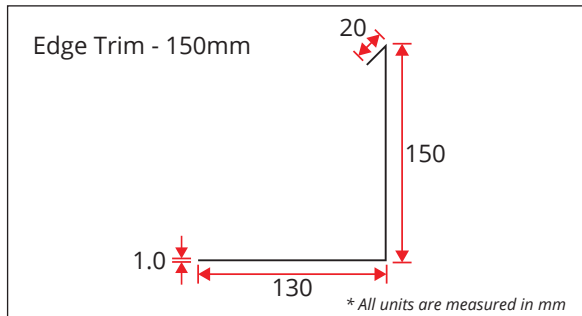
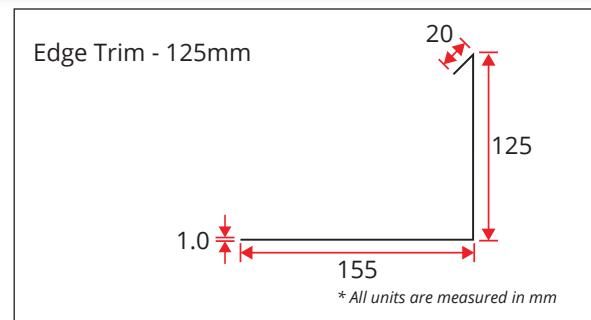
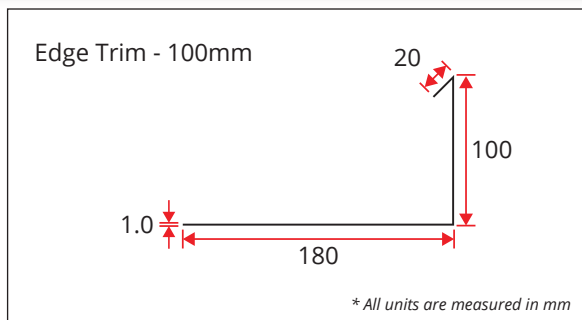
Continuous Installation



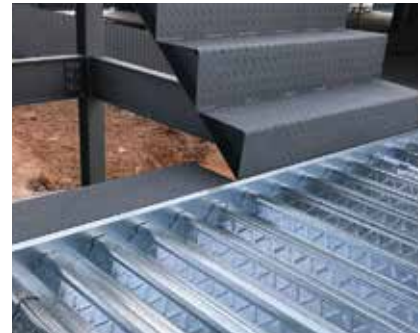
Lapping Joint



Lapping Joint



* Any special sizes will be customized on demand



Shear Stud

The purpose of the shear stud is to provide a structural connection between the poured in place concrete slab and the structural steel. This structural connection distributes any shear forces that the structure may incur. Without the shear studs in place, there is a slip plane between the concrete slab, the floor deck and the structural steel framework of the project. The structural engineer will determine, which beams will have the shear studs, the size of the studs as well as the number of studs to be installed. There are specialized subcontractors that will install the shear studs. The test for the shear studs integrity is simply striking the side of the shear stud with an iron mallet. This will ensure that the stud has been properly welded to the beam, if not, the stud will simply break off at the point of intersection with the steel beam. The stud will have failed due to a shear force. The deck may have to be installed and used as a platform before the studs are installed.



BONUS TIP: SHEAR STUD INSTALLATION THROUGH FLOOR DECK

Shear studs may be used as the primary attachment of the floor deck to the supporting members. Care should be taken at supports where floor ends meet, such as at a butt joint, to provide adequate attachment to the supporting member for sheet ends coming in from both sides of the support. Studs may not be welded directly over a butted deck seam—that is, a stud weld shared between two sheets—if they are to be used as the primary deck attachment. This can cause deck sheets to tear away from the weld on the end of the deck during concrete placement. The deck may have to be installed and used as a platform before the studs are installed.

PROJECT REFERENCE



Hepta, Penang



Inventec, Bayan Lepas



Yollink, Science Park Penang



Agro Chicken Farm



Sg Kob Homestay, Kulim



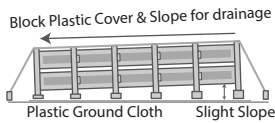
Warehouse Extension, Sg Lokan

STORAGE AND HANDLING

DO's



Store indoor and away from access to open areas. If left in the open, protect them with waterproof covers.



If material is not required for immediate use, stack them neatly and clear off the ground. Maintain a clear gap of 30cm between sheet package and ground.

Store off the ground and with a minimum 50° slope (1:10) so that if rain penetrates the covering, water will drain away and not form a water pond.



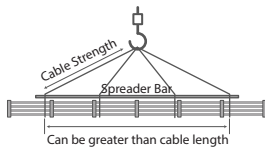
Inspect the storage site regularly to ensure that moisture has not penetrated the stock.



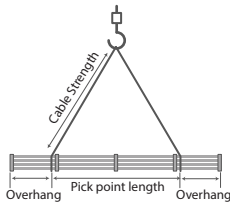
If stacked or bundled product becomes wet, separate it without delay, wipe it with a clean cloth and stack it to dry thoroughly.



It must be lifted by the seam to prevent buckling. Additional people may be required to transport the panel safely and without damage.



Use a spreader bar for long sheets. For small to medium size projects, without mechanical handling facilities, you can unload sheets by hand and pass them up to the roof one at a time.



When handling bundles with a crane, the distance between pick points must be no greater than the length of the cable. When possible, straps should be placed close to the supporting framework.

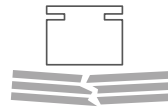


Cutting debris need to be swept away.



Welding particles need to be swept away.

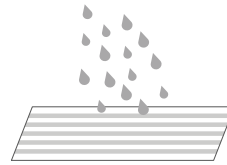
DON'Ts



Don't keep heavy material on stacked sheets to avoid damages.



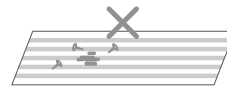
Don't use metal chain for lifting sheets.



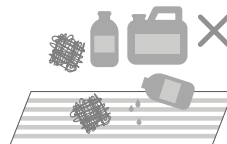
Don't let unused sheets get wet.



Don't keep sheets in direct contact with soil, cement or dirt.



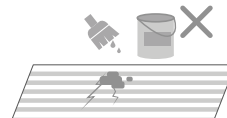
Extra or unused screw need to be removed from rooftop.



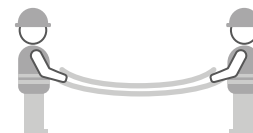
Avoid using spirit, petrochemical or wire brush to clean the roof.



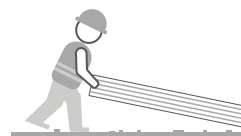
Don't use stainless steel screws.



Don't apply paint over scratches.



Don't lift the panels without seam.

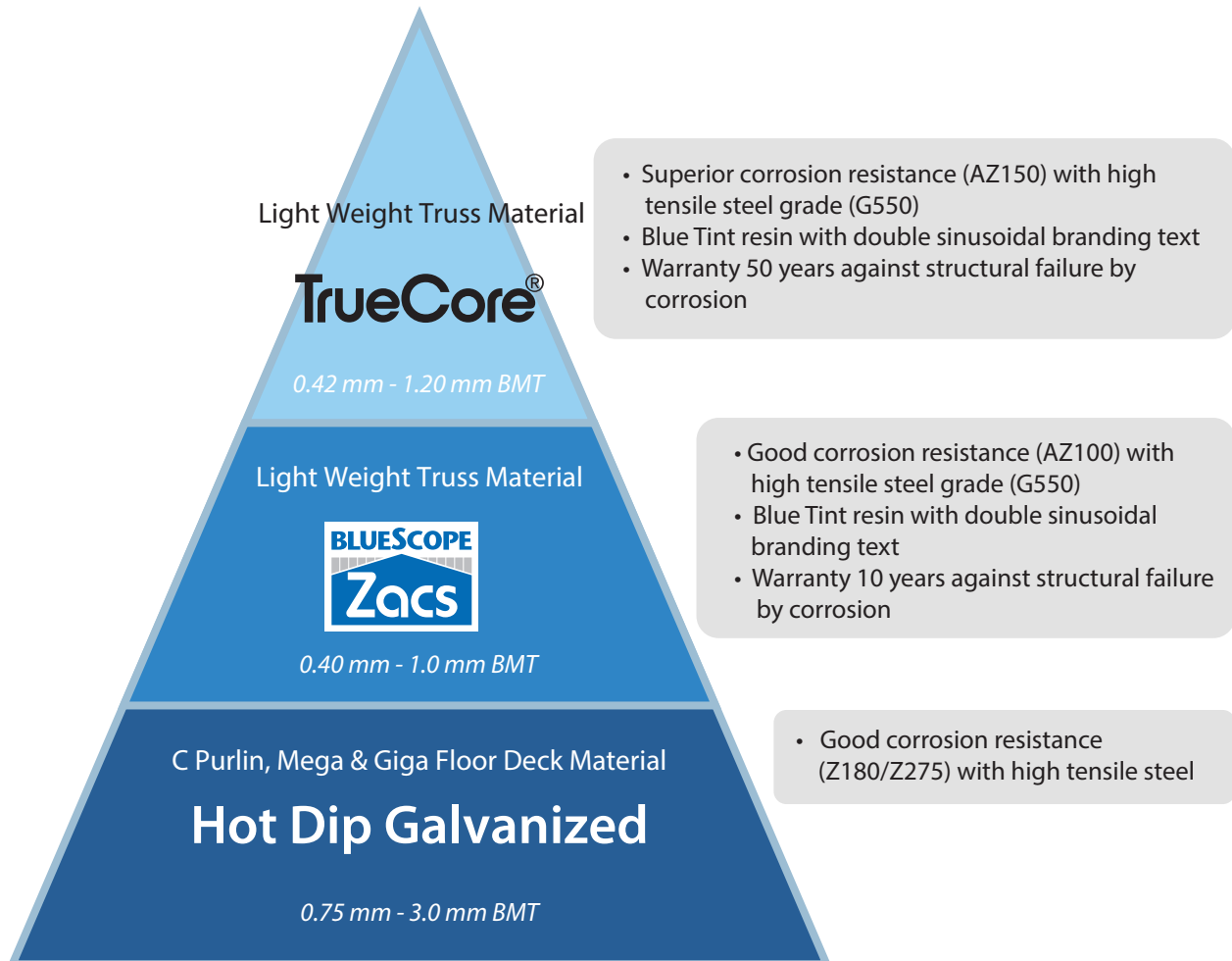


Don't slide sheets over rough surfaces or over each other. Always carry tools, don't drag them.

STRUCTURAL MATERIAL

Ledex Structural Products are made by 3 types of materials :

1. Hot dip galvanized
2. BlueScope Zacs
3. TrueCore



HEADQUARTER

No. 768 Lorong Perusahaan Bukit Minyak 9,
Kawasan Perindustrian Bukit Minyak,
MK 13, 14100 Seberang Perai Tengah,
Pulau Pinang.

BUKIT MINYAK BRANCH

No. 736, Lorong Perusahaan Bukit Minyak 11,
Kawasan Perindustrian Bukit Minyak, MK 13,
14100 Seberang Perai Tengah,
Pulau Pinang.

SUNGAI PETANI BRANCH

Lot 33, Jalan 8,
Kawasan Perindustrian Bakar Arang,
08000 Sungai Petani,
Kedah.

ALOR SETAR BRANCH

542, Jalan Tandop 1,
Kawasan Perindustrian Tandop Baru,
05050 Alor Setar,
Kedah.

IPOH BRANCH

Lot 304989, Jalan Seramik Chepor 11/1,
Pusat Seramik Fasa 2,
31200 Chepor,
Perak.

CONTACT US

LE NAM MEGASHEET (M) SDN BHD is committed to serve you the way you want conveniently. Contact us (+604-501 6133) in person at one of our many locations or email us enquiry@ledex.com.my



Disclaimer:

The information on the materials presented herein is provided for informational purposes only. Le Nam Megasheet (M) Sdn. Bhd. shall not liable for any loss or damage whatsoever arising from, but not limited to the usage of information provided. Any omission, errors, typographic errors and technical inaccuracies relating to the information may be changed or updated without notice.

Copyright © 2020 Le Nam Megasheet (M) Sdn. Bhd. All right reserved. No part of this catalogue may be reproduced, stored in a retrieval, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the written permission of Le Nam Megasheet (M) Sdn. Bhd.