



NEXT GENERATION METAL BUILDINGS

Designer Pre-Engineered Buildings | Structural Fabrication | Steel Decking Profiles
Insulated Sandwich Panels | Portable Buildings | Roofing & Walling

We Cover You Well™

Product Catalogue



MULTICOLOR STEELS (INDIA) PVT. LTD.

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www.frames25.com | www.framesfactory.in



About Us



Manesar Plant , Haryana

Bawal Plant, Haryana



DESIGNING

Multicolor Steels, since 1994, has been a pioneer leader in India in the field of Metal roofing and wall cladding systems. Having installed over 7 million square meters of metal roofing systems in over 500 projects all over India, now offers Next Generation Pre-Engineered Steel Building Systems.

Our Head Office at New Delhi, works at IMT Manesar and a modern unit at Bawal, Haryana, India with sales exceeding 40 million US \$, Multicolor Steels is expanding with ambitious growth plans.

Multicolor steels is an ISO-9001:2008, ISO 14001:2004 and OHSAS 18001:2007 certified company, and approved by E-in-C , Defence HQ , Railways, MES, airports etc.



ERECTION

Multicolor offers following products

- Multi-Star™ next generation Pre Engineering Building Systems
- Metal Roofing and Wall Cladding Systems (wide range)
- Steel Deck Floor Systems (wide range)
- Insulated Sandwich Panels

Our Services

We offer complete turnkey solutions from conceptualization to designing, manufacturing and erection with the strength of 300 technical staff and more than 1000 workers.

Our valued projects includes Top Indian & International Corporates like:- SMCC, Takenaka, Tata Steel, TATA Motors, Hero Honda, Maruti-Suzuki, Honda Motors, TVS, Vedanta, Moser Baer, Samtel, Pepsi, Coca Cola, DLF, Samsung, JSW, Unitech, Jindal Steel Group, Bhushan Steel to name a few and leading PSU & Government sector clients like Indian Railways, CPWD, Defence, NTPC, BHEL and many more.

Multicolor Steels products have also been exported and well accepted in foreign countries.

“Our motto has always been Safety, Speed & Quality.”

We Offer Turn Key Solution for your project..... a complete Peace of mind to you.



CNC Bending



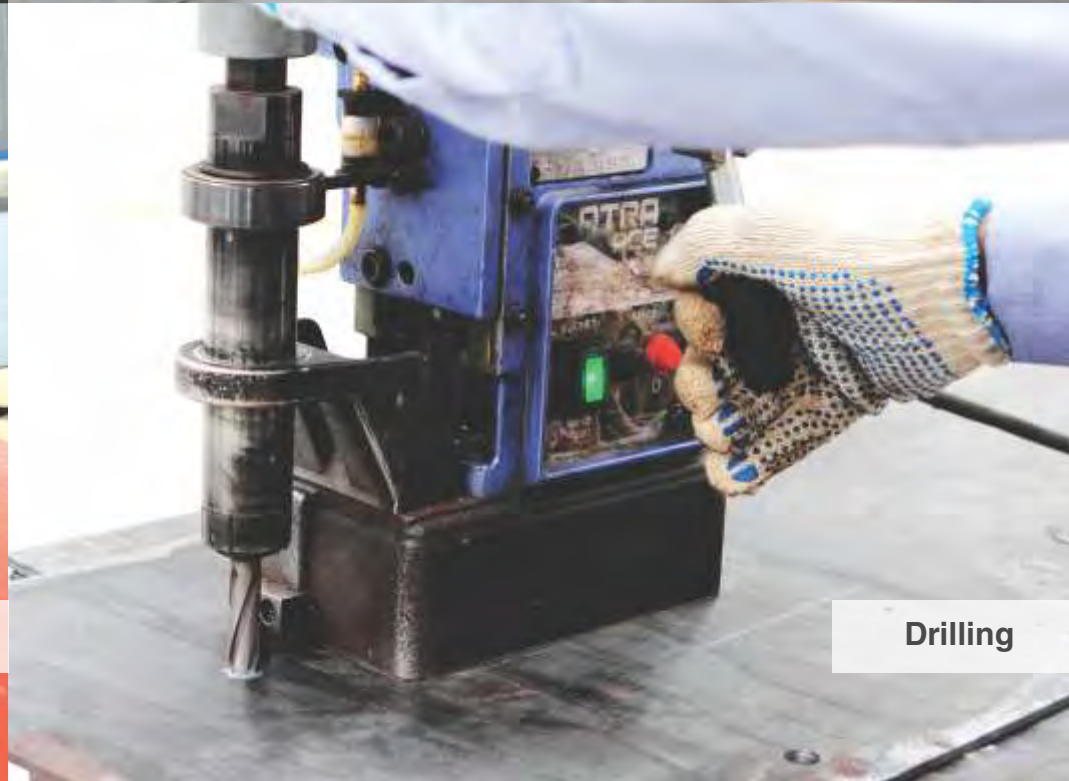
CNC Cutting



Roll Forming



Shearing



Drilling



Painting



Punching



Welding

Each component of MultiStar PEB is manufactured on state of the art CNC machines in our facilities.



The Pre-Engineered Building system is, without doubt, one of the fastest growing building systems in the world. The advantages that it offers appeal to all parties involved in the project. After all, who can resist a building system that offers speed, quality and value. PEB are suitable for both industrial and commercial operations.

In addition to the lower initial cost and faster delivery, you will only have to deal with one company MULTICOLOR STEELS, for the design and fabrication of our buildings.

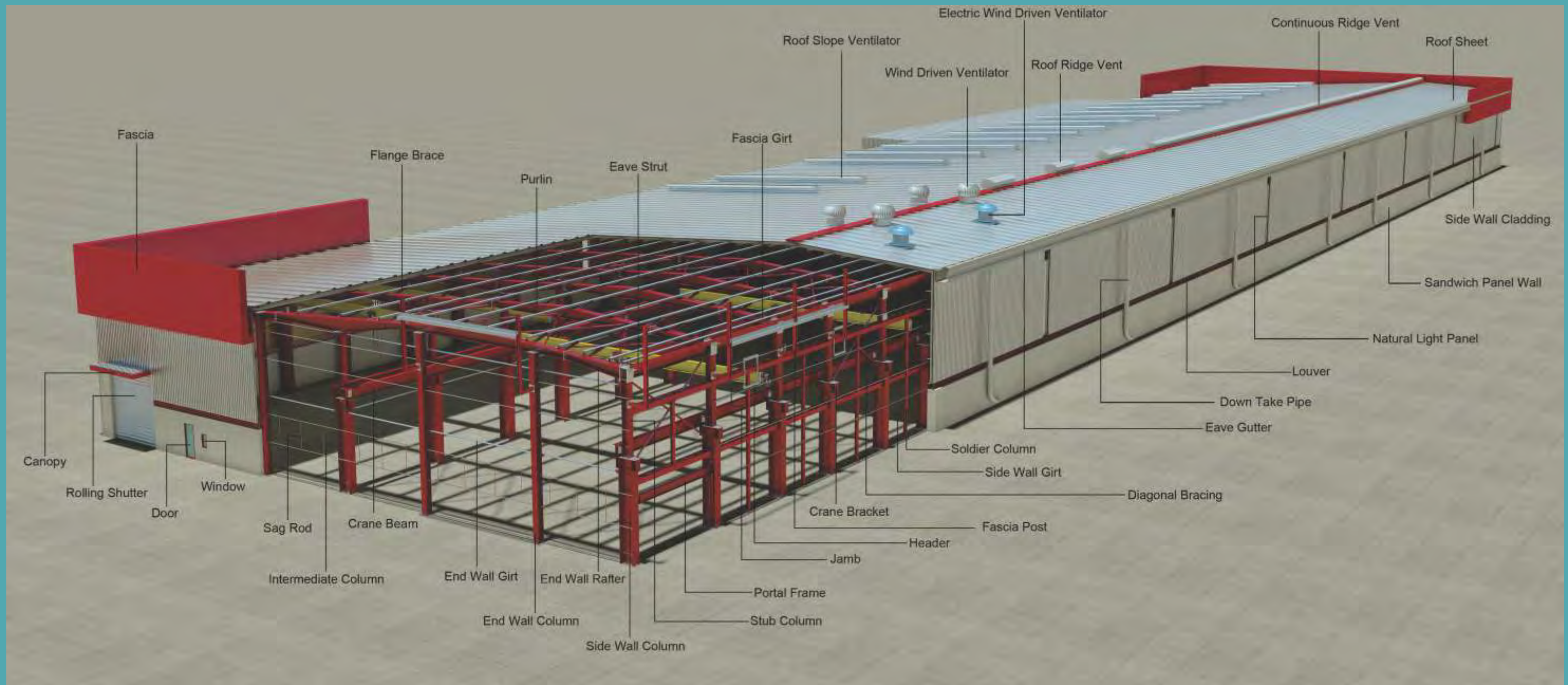
MULTISTAR-PEB offers modern solutions to all building construction such as Ware-houses, factories, aircraft-hangers, cold-storages, workshops, sports-halls, super-markets or any high rise buildings

MULTICOLOR offers world class screwless engineered roof and wall cladding profiles for PEB to suite customer requirements. Every building from design till erection is created with satisfaction of the owners in mind.



Designer Pre-Engineered Buildings

Typical Metal Building Systems & Its Constituent Elements



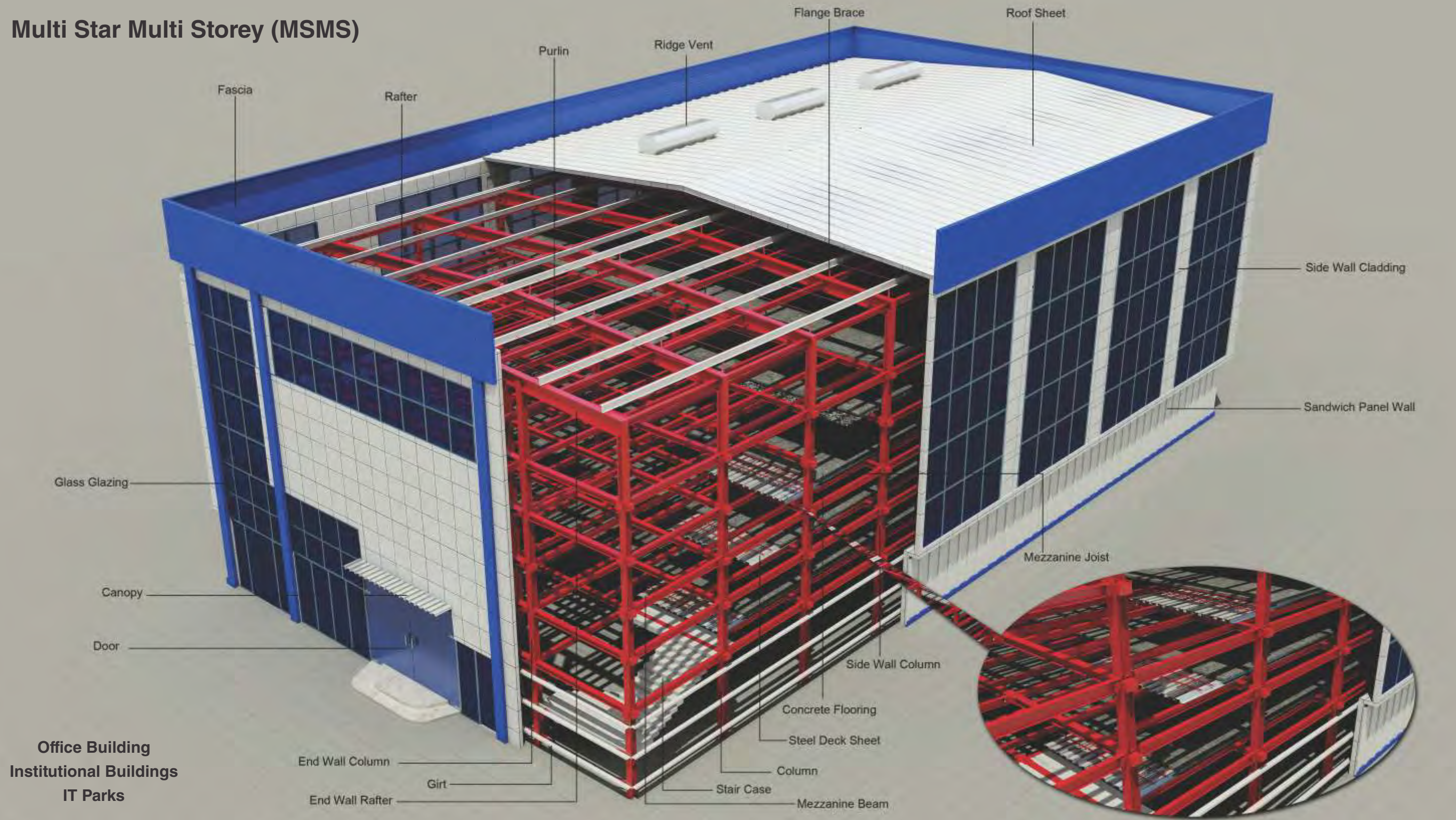
Suitable for Industrial / Warehousing Buildings

Multi-star Pre-engineered buildings are designer made solution to fulfill customer needs and requirements. A classic Pre-engineered building consist of primary and secondary structures, choice of thermal and acoustic insulation, variety of Roof and Wall claddings, mezzanine floors, cranes beam and integrated accessories.

Some salient features

- Can be designed according to the individual needs and requirements and later can be expanded to fit the needs, can be dismantled and relocated easily.
- Unique design of steel reduces the weight and handles extremely large load.
- Shorten the time from design to finished building erection compared to traditional building system.
- Wide span without or few intermediate column provides more open space.

Multi Star Multi Storey (MSMS)



Multi-Storey Steel Building

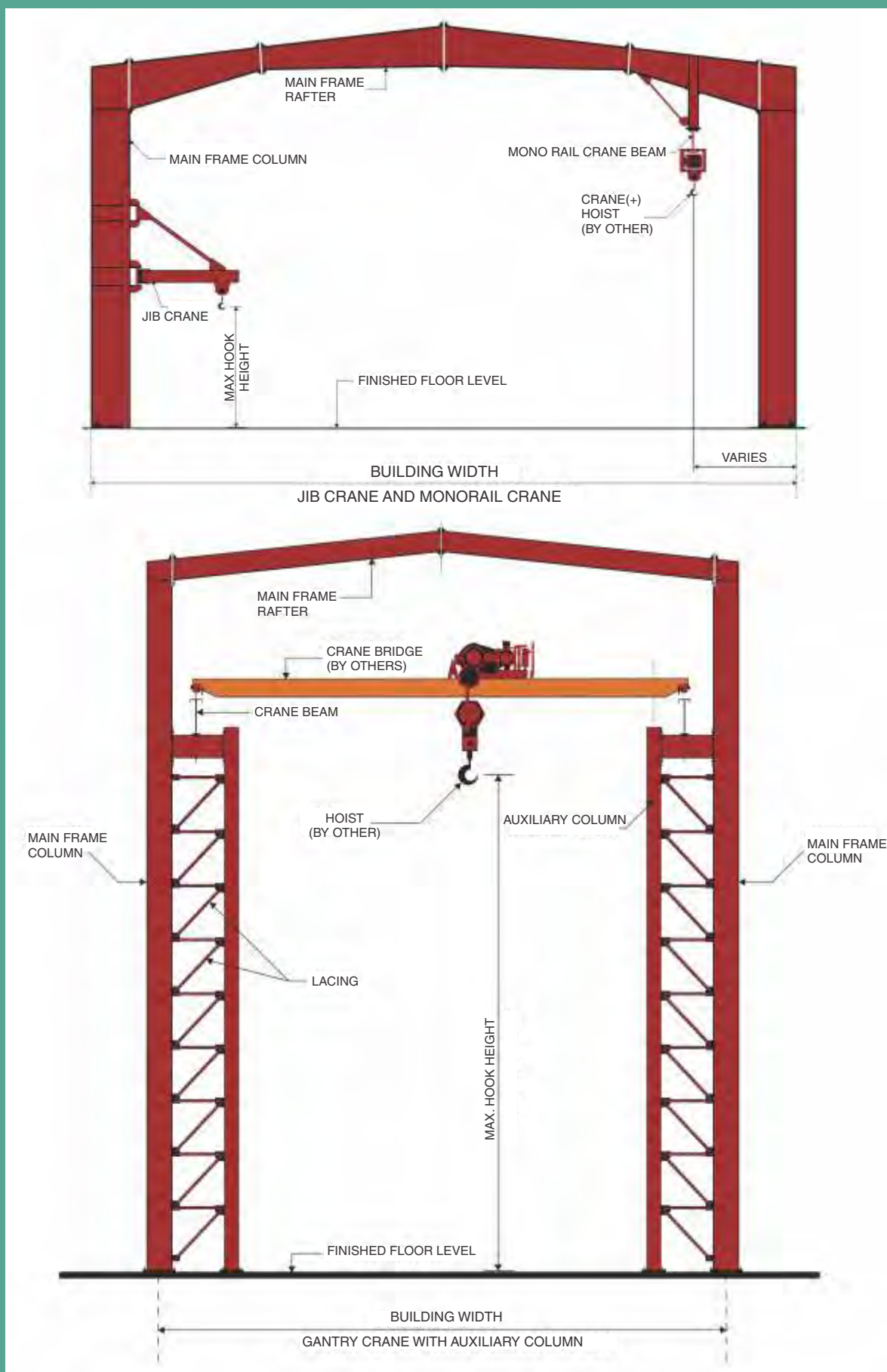
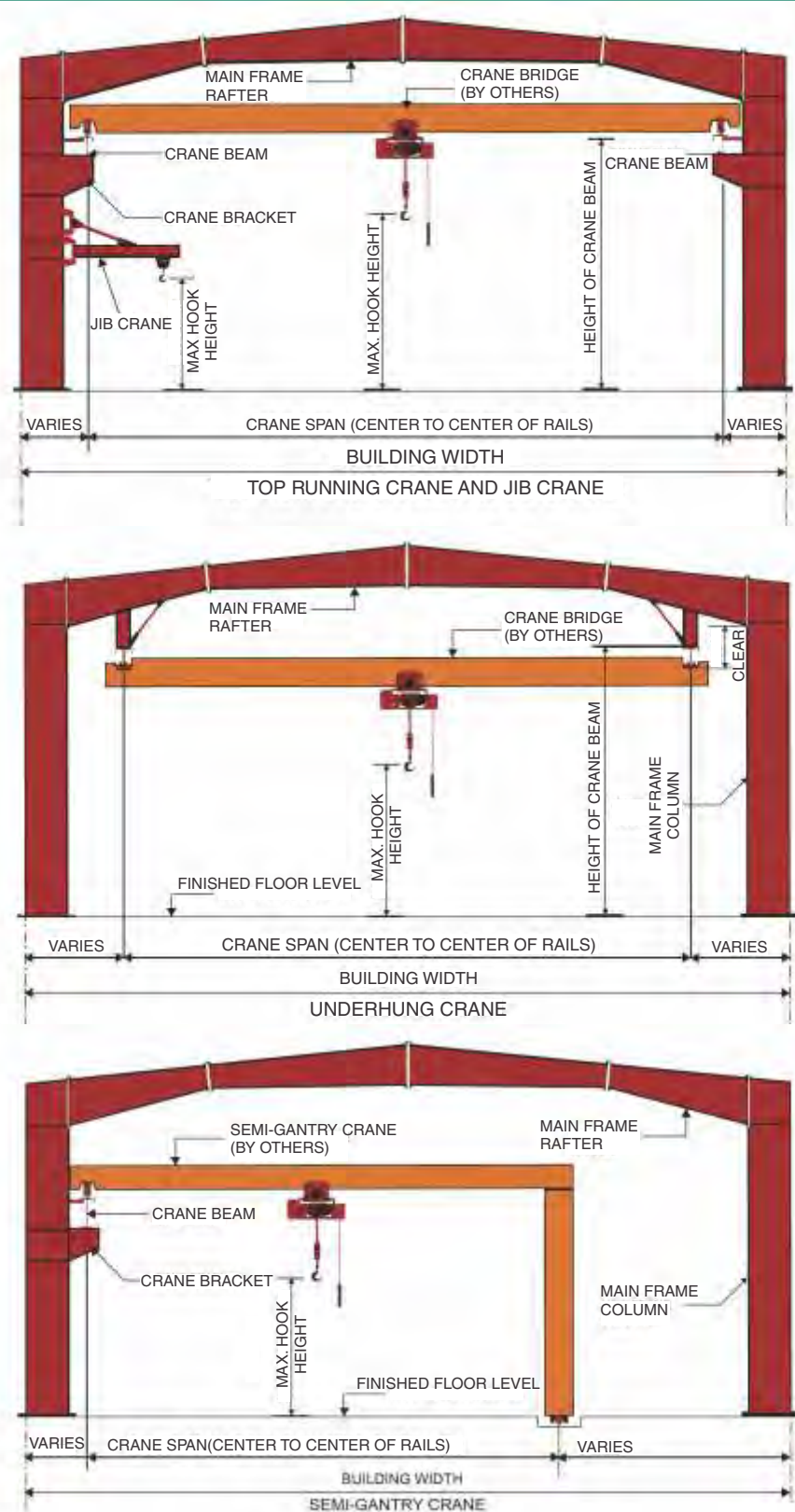
The Multi-Storey Steel Building can be fixed with different structural accessories including mezzanine floors, canopies, fascias, interior partitions etc. This is a very versatile building system and can be finished internally to serve any required purpose and accessorized externally to achieve attractive and distinctive architectural styles. It is most suitable for any high rise building and offers numerous benefits over low-rise or conventional buildings.

Some salient features of Multi-storey building

- Faster design, manufacturing and setting up of building in comparison to any conservative RCC building.
- All frames are prime coated, which protect the base metal from corrosion for much longer period of time than any conservative fabricated steel structure.

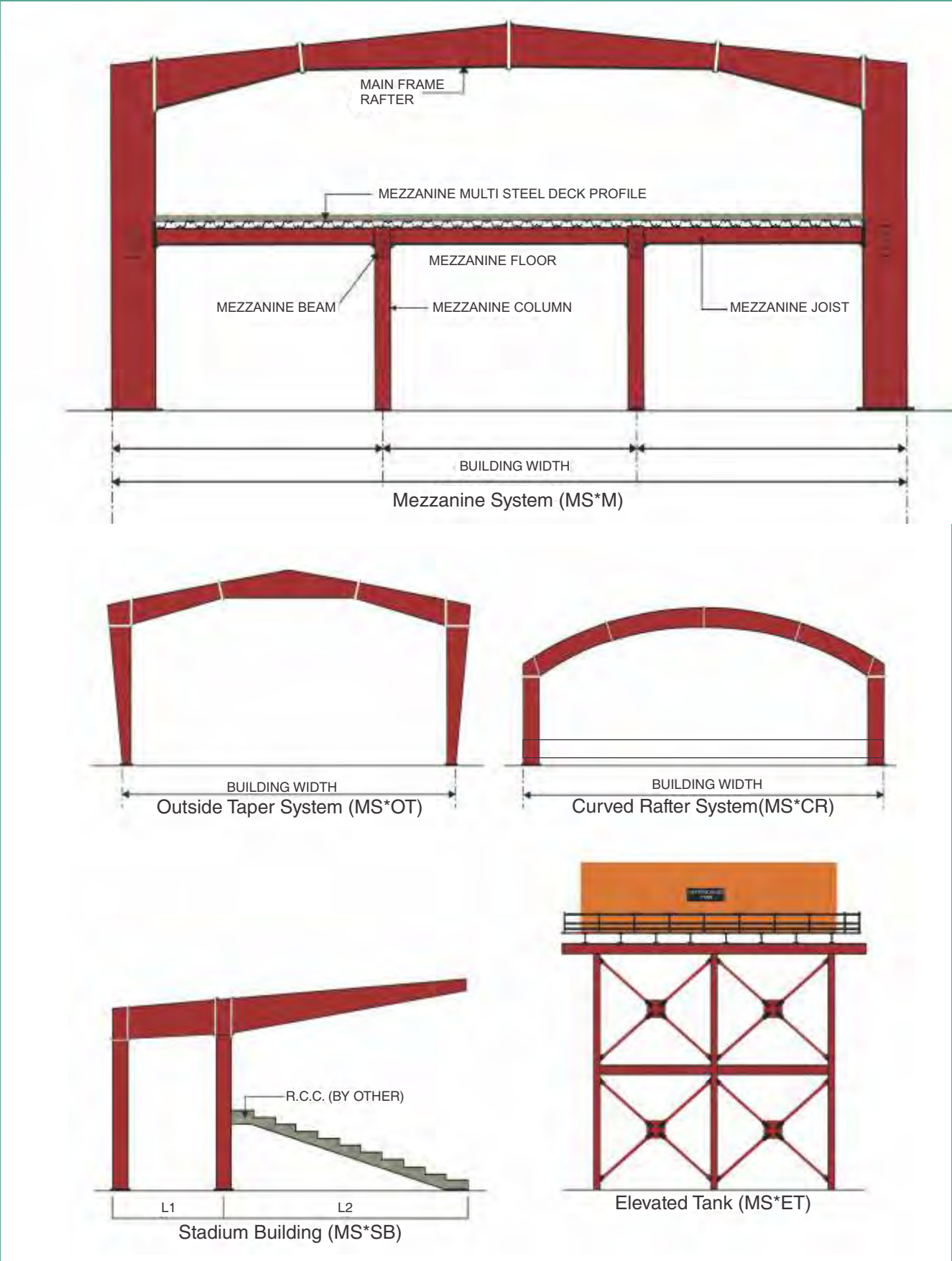
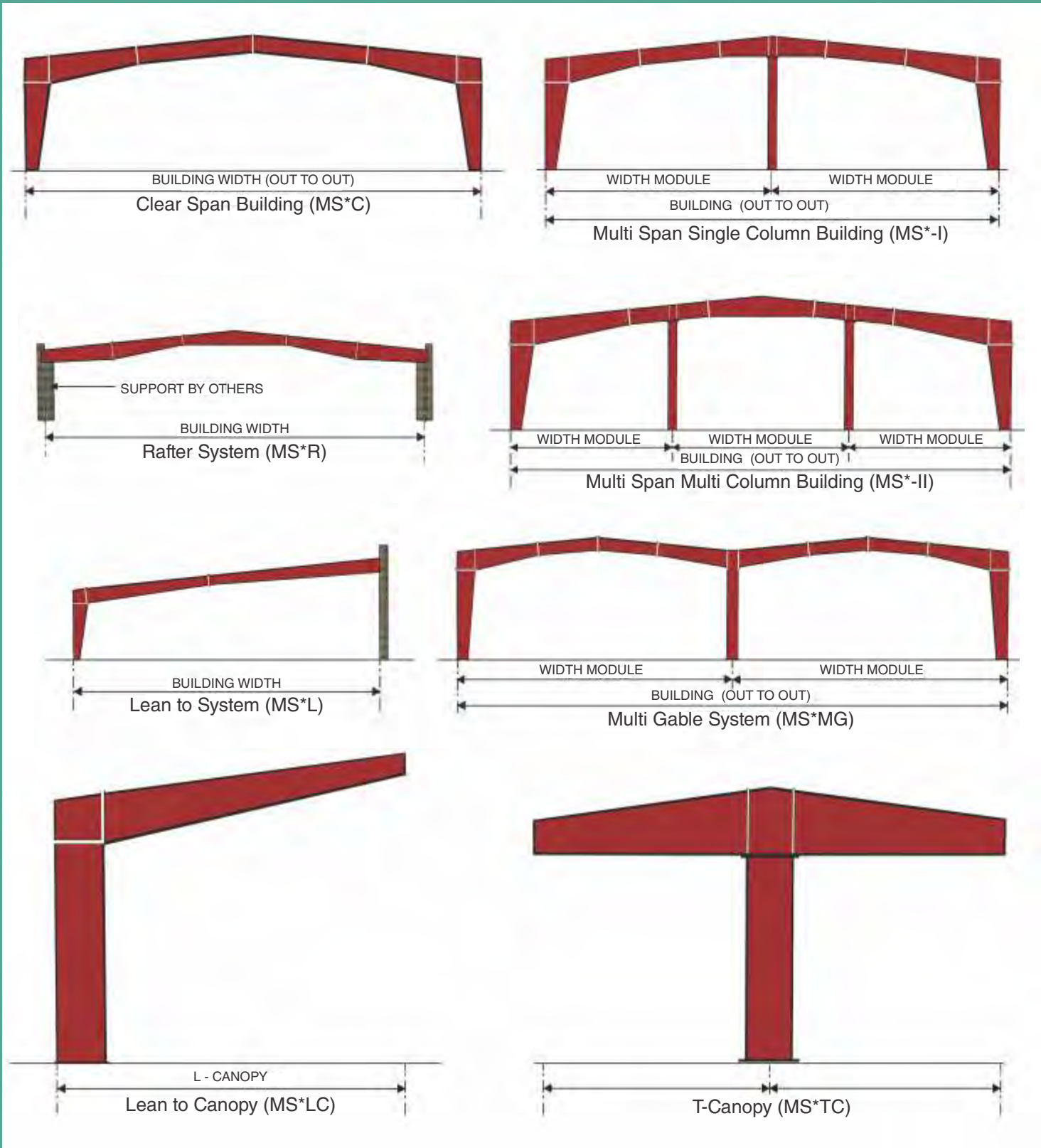
Building with Cranes

Multi-star Pre-engineered building solutions are ideal for industrial buildings and manufacturing units which requires mechanism of cranes for material management. Multicolor steels can be designed to support various kind of cranes system.



Multi-Star (MS*) Primary Framing System

Multi-star Pre-engineered buildings primary structures are conventionally designed to give maximum freedom of use, excellent strength with maximum safety standard.

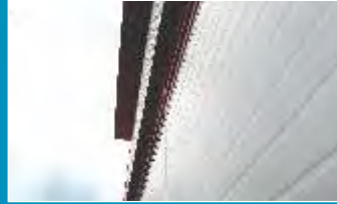




Good Design



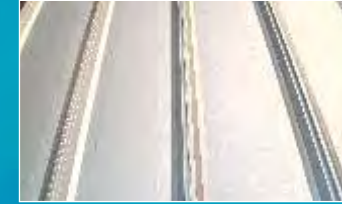
Sturdy Structure



Sandwich Panel wall



Natural Light System



Screwless Roof



**Aesthetic Wall
& Fascia**



Natural Ventilation System

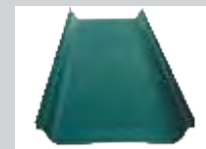


We welcome you to visit our model plant at Bawal, right outside New Delhi. A short tour around the plant can acquaint you with our range of latest roof and wall profiles, PEB System, Deck Floors, Sandwich Panels and other important components. This makes decision making so much easier and faster for you to choose from what suits your requirement and budget. We are confident that you will find all the right solutions for a building that works for you.

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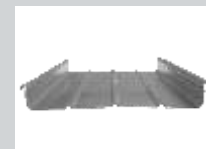
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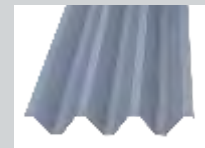
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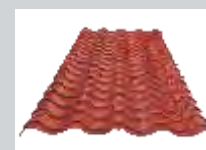
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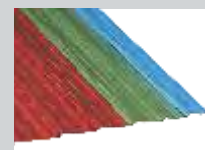
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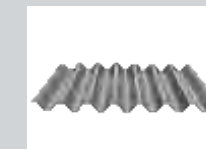
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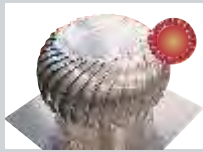
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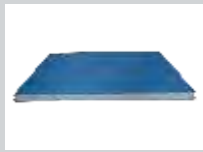
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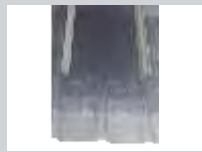
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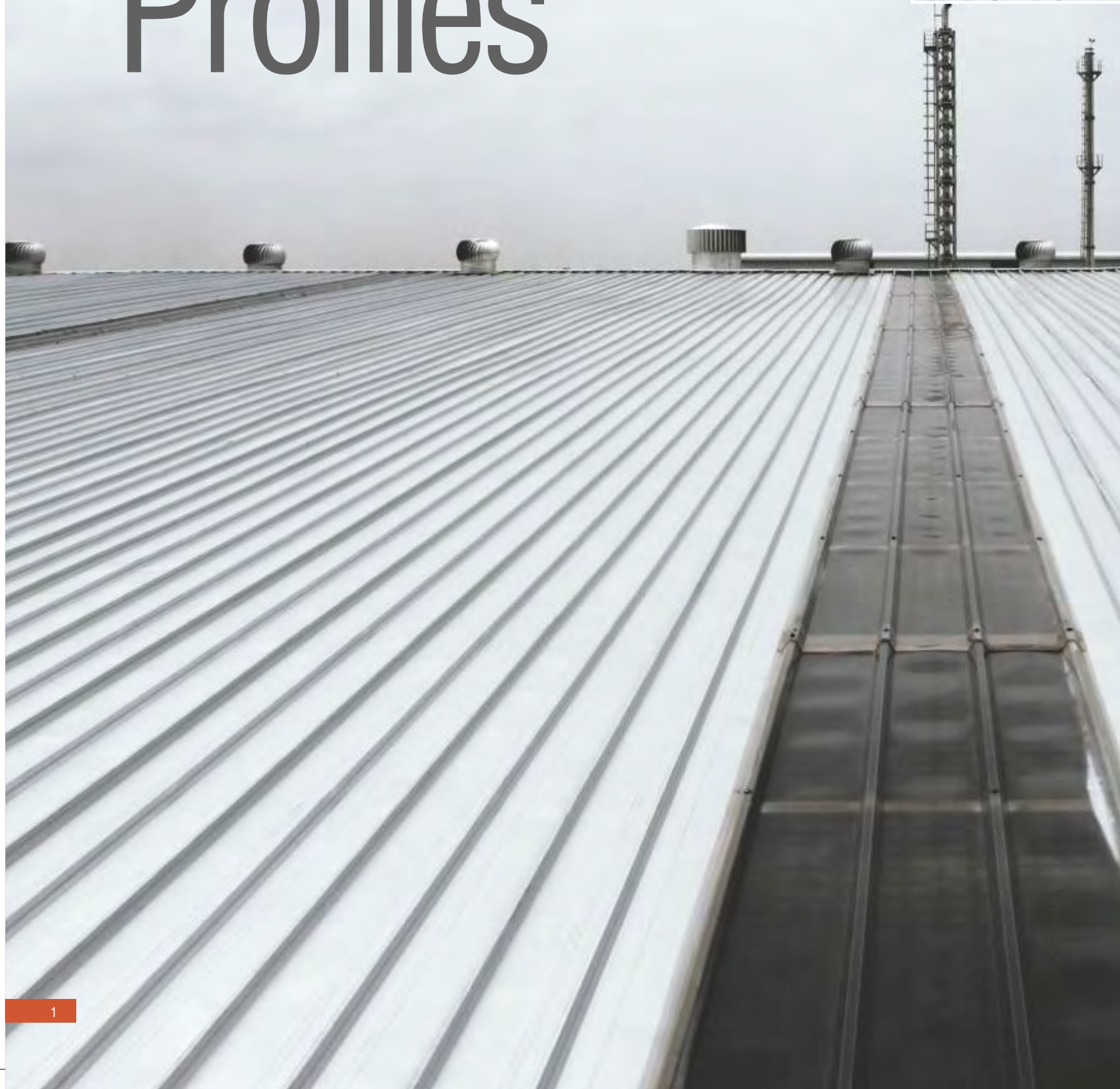
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Apollo

Clad-Tile™

Multi-Seam™

India's Finest Standing Seam Roofing System

SCREWLESS ROOF SYSTEMS



Weather Tight

Roof panels are permanently seamed together with a full 360° double lock seam to keep moisture out and designed as water and dust barrier. The raised seam assists drainage.



360° Double Lock seam

Roof Seamer

The seaming process uses a heavy duty, Electric, portable roll forming machine called the Roof Seamer.



Clip Design

Roof clips securely attach the roof panels to the supporting structurals by stainless steel tabs which are roll formed into the panel seam.

Stainless steel tabs are 50% stronger than other galvanized standing seam tabs.

The clip design allows for 32 mm of movement in either direction to accommodate expansion and contraction forces.

This permits buildings up to 500 feet wide without the need for special expansion joints.



Special Concealed Clip

Design Freedom High Strength

Multi-Seam™ has 51mm high ribs providing strength and beauty. The recommended minimum roof pitch for the profile is 2° (1 in 30). If the purlin and the roof plane are perfectly aligned Multi-Seam™ can be used for roof slope as low as 1° Steep Slope, Low Slope, and Flat Roof profiles can all be designed with standing seam metal roof.

MORE THAN 5,00,000 SQ. MTS INSTALLED IN LAST TWO YEARS FOR PROJECTS LIKE VIZAG STEEL, MARUTI SUZUKI, TIMKEN, TOTO INDIA, PANASONIC, TOYOTA JOINT VENTURES, HONDA CAR, FORD CAR ETC.

Advantages

Multi-Seam™ Roof System is a steel membrane like structure covering entire building with panels joined together with a double lock standing seam and a uniquely designed clip formed into the seam at the building site in a unique manner that requires no through fasteners or holes.

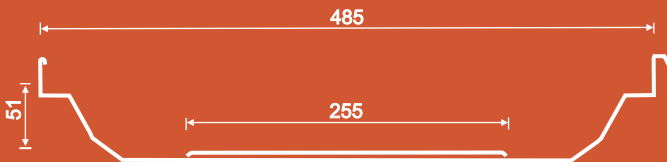
The panels are joined and sealed together by a portable electric seamer.

This roof system is attached to the building with a unique clip arrangement that requires no through panel fasteners yet is securely attached to prevent wind blow off while allowing the roof sheet to move up to 60 mm with thermal expansion and contraction without sacrificing structural integrity



Single Length Sheet up to 100 mts

The Multi-Seam™ sheets are custom rolled to any transportable length maximum upto 13 meters. However, our specialized service of On-Site Roll Forming enables single length sheet up to 100mts long, without end laps - therefore on most jobs you can have single sheet from ridge to eaves resulting into zero laps, which are otherwise potential areas of leakage. Multicolor™ recommends avoiding end laps for total maintenance free roof. However if unavoidable two pieces clamped connection is recommended to Seal end laps.

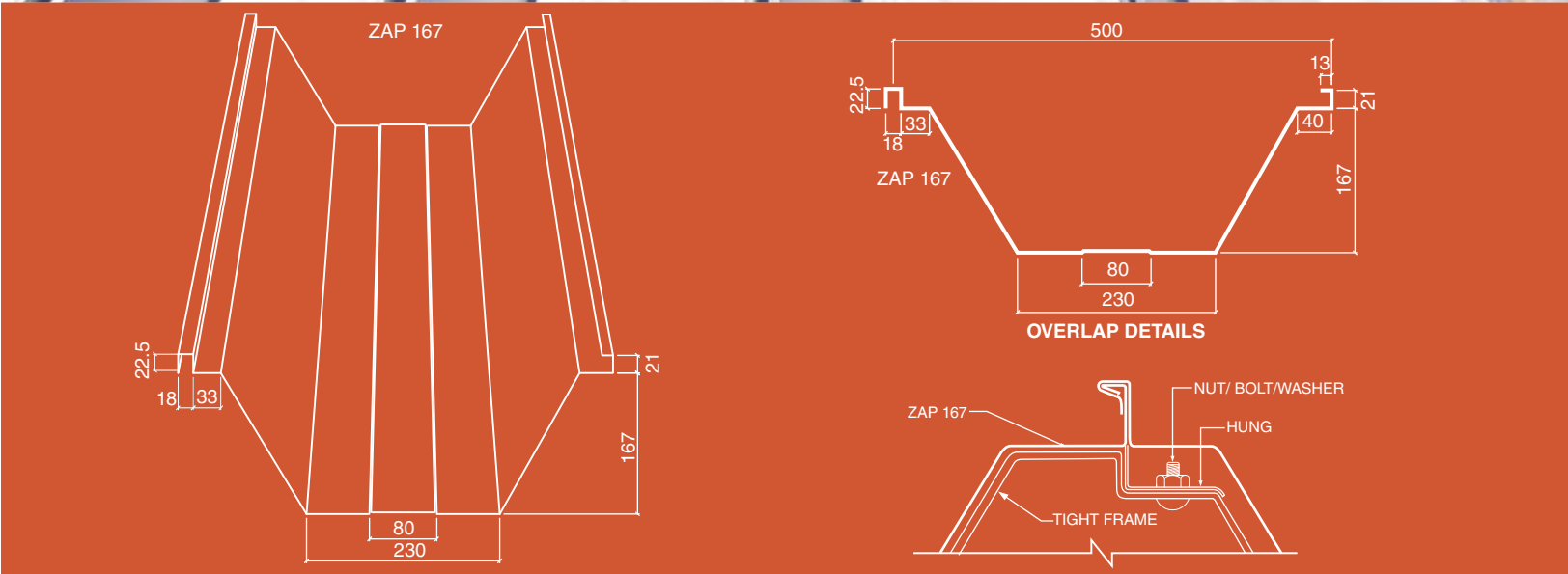
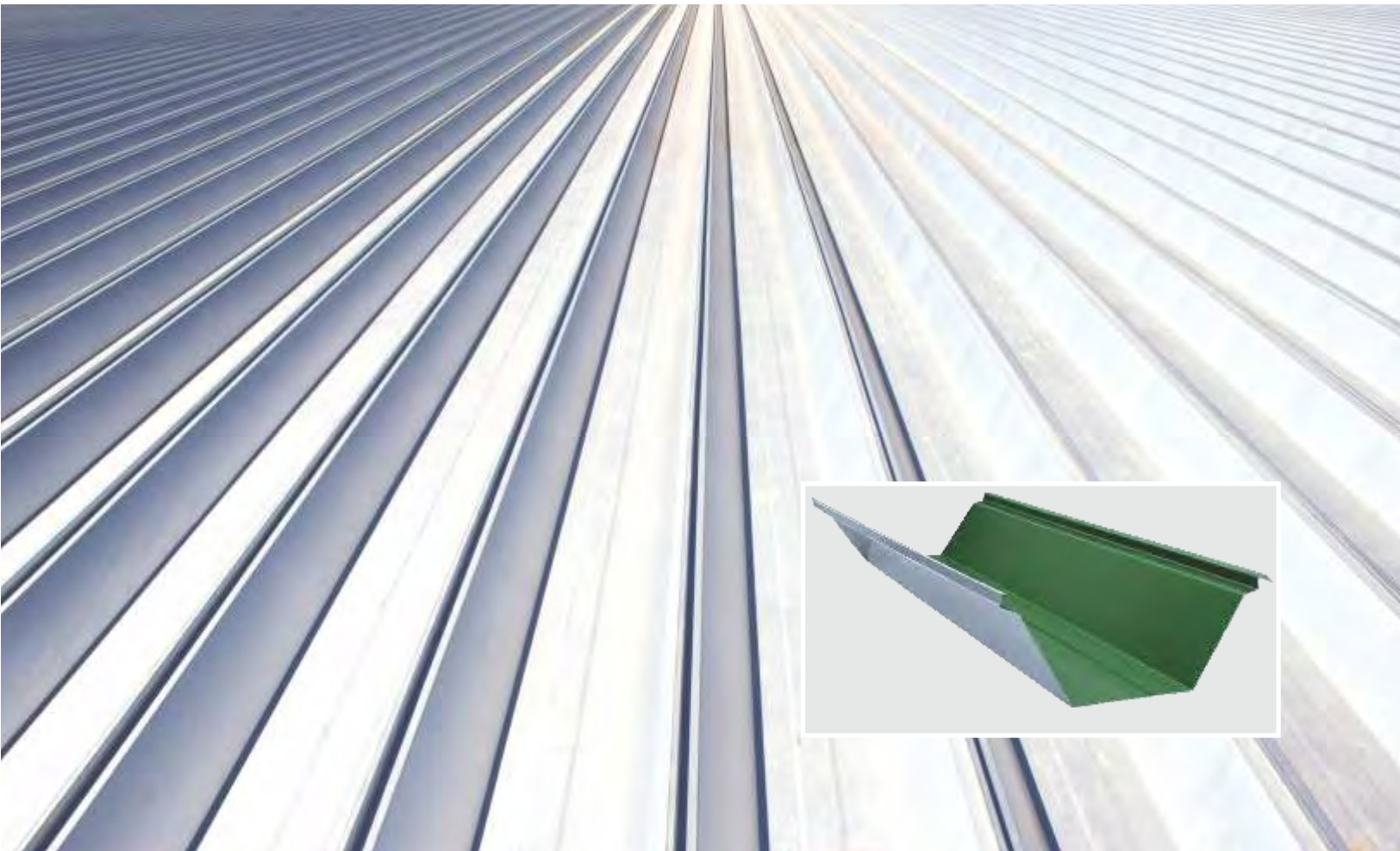


ROOF PROFILES	Yield Strength of Steel	Thickness to consider (TCT)	Weight		I _{xx} (cm ⁴)/m	Z _{xx} (cm ³)/m		Moment capacity at Top compression flange	Moment capacity at Bottom compression flange
			cover width	Running Length		Top	Bottom		
	MPa	mm	kg/m ²	kg/Rm				kNm/m	kNm/m
Multi-Seam™ 1. Cover Width: 485mm 2. Thickness: 0.45 - 0.6 mm 3. Roof Slope: 2° 4. Steel Strength: 240 & 350 MPa 5. Metallic coating: Galvalume/Galvanised 6. Color Coating: Bare Galvalume Polyester/SMP/PVDF	240	0.50	4.64	2.25	40.035	6.241	22.101	1.292	0.940
		0.55	5.13	2.49	44.125	6.880	24.383	1.483	1.067
		0.60	5.63	2.73	48.213	7.519	26.655	1.670	1.195
	340	0.45	4.15	2.01	35.924	5.600	19.811	1.457	1.046
		0.47	4.34	2.11	37.573	5.858	20.730	1.563	1.138
		0.50	4.64	2.25	40.035	6.241	22.101	1.724	1.263
		0.55	5.13	2.49	44.125	6.880	24.383	1.986	1.456
		0.60	5.63	2.73	48.213	7.519	26.655	2.254	1.635

* Please refer to the color shade card for colors. Technical details available on request

ZAP-167™ (Japanese Technology)

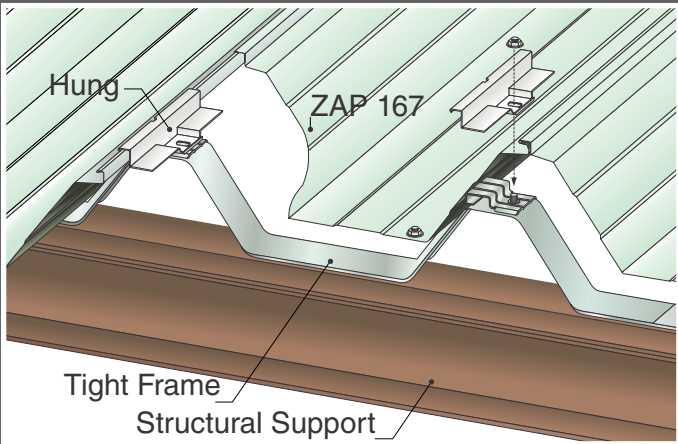
ZAP 167 Standing Seam Roofing System



Sectional property (Reference)					
"Sheet Thickness (mm)"	"Unit Weight (Kg/m²)"	Moment of inertia Lx(Cm⁴/m)		Sectional modulus Zx(Cm³/m)	
		Positive Pressure	Negative Pressure	Positive Pressure	Negative Pressure
0.6	6.82	341.9	201.5	33.5	22.1
0.8	9.09	525.1	323.6	51.5	35.6
1	11.36	628.9	445.7	61.7	49.1

* Please refer to the color shade card for colors.Technical details available on request

SCREWLESS ROOF SYSTEMS



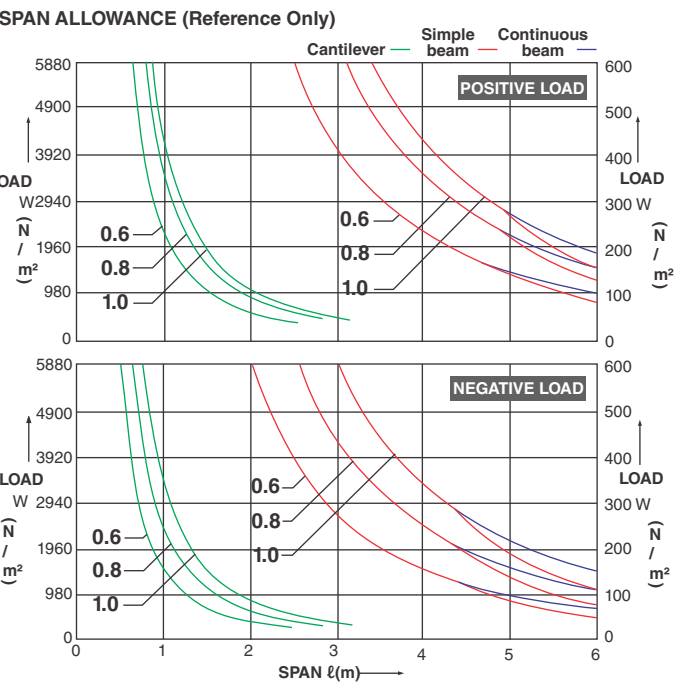
ZAP-167™ roofing system is a proven and most sturdy Japanese technology. It is a screw less standing seam profile which is 167mm deep, supported on tight frames and can be formed up to single length of 100mts.

Available in Galvalume and color coated steel in various colors. Aesthetical and robust looking.

80000 sqm installed for prestigious projects like Maruti Suzuki, Bridge Stone etc.

Advantages & Features

- Time tested and proven Japanese technology.
- Robust Design: Depth of 167mm and supported on galvanized steel tight frames makes it most sturdy roof system to date. It can span up to 4mts. making roof structure more economical and lighter.
- Fitted on tight frame system has high stability against wind velocity and uplift pressure which is fixed on Purlin.
- Watertight: An exactitude engineered roofing system. A unique, special designed screw less roof with no end joints and side laps are seam locked, making it a total leak proof roof.
- High water shedding ability enabling virtually flat roof as low as 1° Slope.
- Handsome appearance and excellent anti-corrosion performance.
- Outstanding durability and is suitable for extreme weather conditions.
- Maintenance free.
- Will last virtually lifetime.
- Matching light panels of FRP / Polycarbonate available.
- Option of under deck insulation of resin bonded glass wool / mineral wool.
- Application: Factory Buildings, Warehouses, Institutional Buildings etc



Reference design specification

use the original plate thickness	(0.6)0.8 ~1.0mm
use original plate width	767mm
working width	500mm
m² per required number of m	2.0mm
Gradient	possible 3/100 or more
Bending radius nature	250 or more carving processing R=30m or more

Multi-Lok™ 430

Screw less Roof Unmatched Performance

SCREWLESS ROOF SYSTEMS

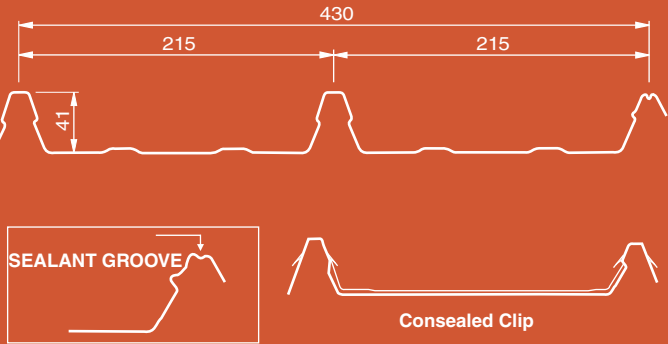


Asia’s longest 142 meters single length roof sheet installed at HONDA car factory

Advantages
Multi-Lok™ is a strong, durable, versatile, long length roof. It combines the strength of steel, smart fluted pans and a lock-action rib design, which together with concealed fastening, enables its use on application for low pitched roofs.

On-Site Mobile Roll-Forming Solution
Multi-Lok™ is available in long lengths, therefore on most jobs you can have single sheet from ridge to gutter without end laps, which is possible by on-site roll forming using our mobile machine. A single length up to 100 mts. is possible based on feasibility of manual installation.

Skilled Manpower & Intelligent Machine
We execute the job from roll forming to erection of roofing on-site with quality and speed.



Design Freedom
Multi-Lok™ has 41 mm high but slim ribs provide strength & beauty. Combined with long length and special anti-capillary side laps allows Multi-Lok™ to be used safely for a slope as low as 2° (1 in 30). If the Purlin and the roof plane are perfectly aligned Multi-Lok™ can be used for roof slope as low as 1°

High Strength
Multi-Lok™ excellent structural properties are derived from inherent strength of its high tensile steel combined with its modern design and roll forming techniques.



Concealed Fastening
The concealed clip installation system means that no fasteners penetrate the profile which makes it a long lasting product.

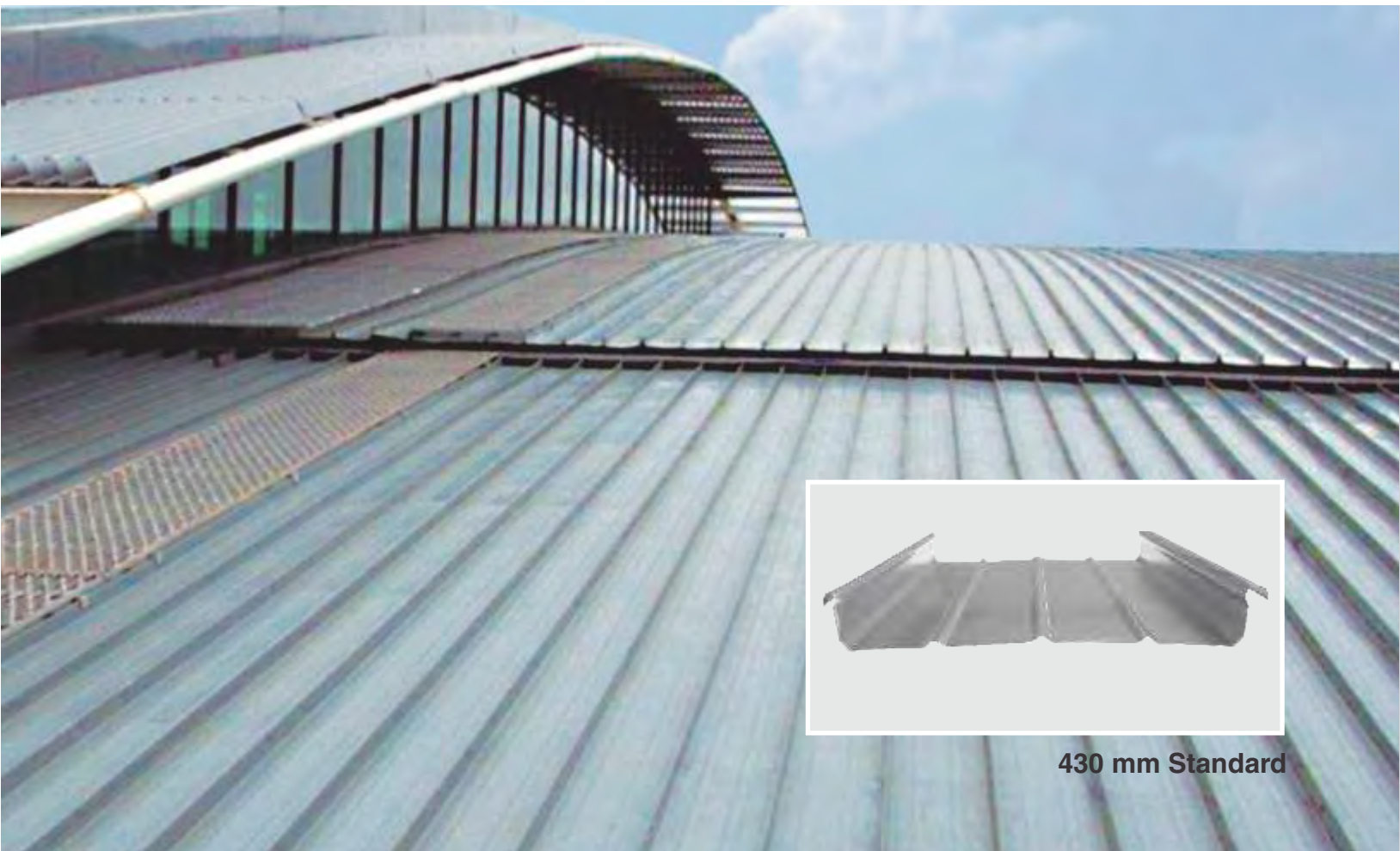
Matching light panels of FRP / Polycarbonate available.
MORE THAN TWO MILLIONS SQ. MTS INSTALLED SUCCESSFULLY SINCE LAST 10 YEARS FOR PROJECT LIKE VEDANTA, BALCO, HONDA CAR, TATA MOTORS, SAMSUNG, ITPO ETC.

ROOF PROFILES	Yield Strength of Steel	Thickness to consider (TCT)	Weight		I _x (cm ⁴)/m	Z _{xx} (cm ³)/m		Moment capacity at Top compression flange	Moment capacity at Bottom compression flange
			cover width	Running Length		Top	Bottom		
	MPa	mm	kg/m ²	kg/Rm				kNm/m	kNm/m
Multi-Lok™ 430 1. Cover Width: 430mm 2. Thickness: 0.5 - 0.6 mm 3. Roof Slope: 2° 4. Steel Strength: 240-550 MPa 5. Metallic Coating: Galvalume/Galvanized 5. Color Coating: Bare Galvalume/ Polyester/SMP/PVDF	240	0.50	5.255	2.26	12.827	3.890	11.676	0.882	0.685
		0.55	5.781	2.486	14.099	4.275	12.851	0.971	0.761
		0.60	6.306	2.716	15.353	4.654	14.013	1.059	0.837
	340	0.50	5.255	2.26	12.827	3.890	11.676	1.258	0.952
		0.55	5.781	2.486	14.099	4.275	12.851	1.390	1.057
		0.60	6.306	2.716	15.353	4.654	14.013	1.516	1.164
	550	0.50	5.255	2.26	12.827	3.890	11.676	1.893	1.463
		0.55	5.781	2.486	14.099	4.275	12.851	2.140	1.623
		0.60	6.306	2.716	15.353	4.654	14.013	2.387	1.786

*Please refer to the color shade card for colors. Technical details available on request.

Multi-Zip™

Standing Seam Roof Systems



430 mm Standard



Fixing Clip

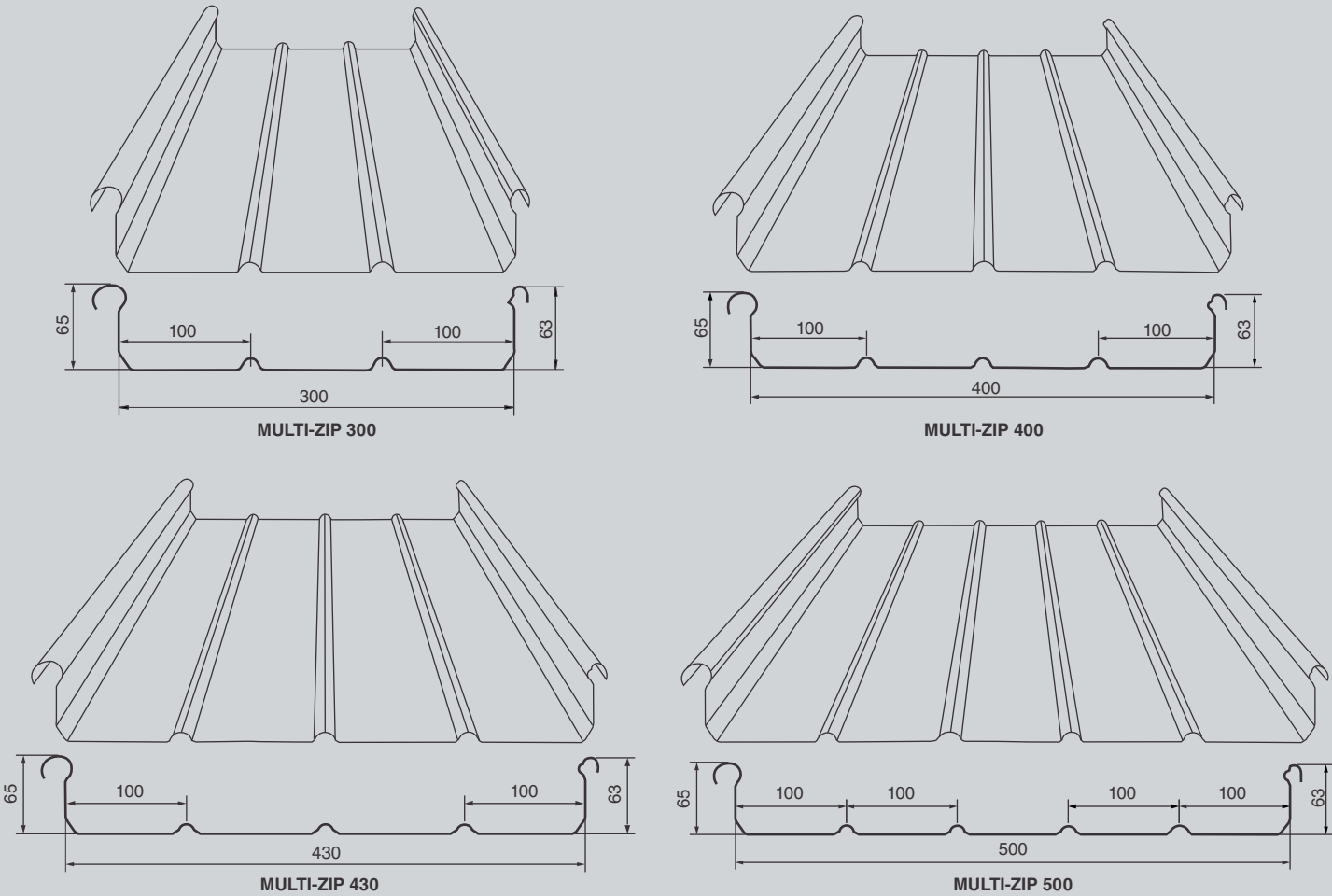


Tapered Profile



Curved Profile

SCREWLESS ROOF SYSTEMS



Profiles available in 300, 400, 430 & 500 mm width in steel and in Aluminum.

Advantages

- A versatile roofing system that can adopt all creative architectural design flexibility
- Different shapes of Convex Curve, Concave Curve, Taper, Taper Convex and Taper Concave, opens up a whole variety of fascinating options for creating stunning architectural designs
- Lightweight Screw less roofing system, outstanding durability.
- The special design of Clip Connector allows for the expansion movements of seamed panel.
- Various clip connector heights are available to accommodate insulation materials.

Material: Aluminium, Color Coated Steel, Galvalume, or other metallic materials.

Material Thickness (Post production): Aluminium 0.5 to 1.0, Steel 0.5 to 0.8

Maximum Length: 100m per single panel

Minimum Radius: Concave Curve- Aluminium 4m and Steel Curve 6m
Convex Curve-Aluminium 2m and Steel Curve 4m

Color Coating/ Finish: All standard RAL- colors special colors on request; minimum order may apply. Stucco or mill finish. Color finishes of multi-coat PVDF or Polyester.

Insulation Options: Glass, Fibre / Mineral Wool Blanket insulation.

Accessories: We provide full range of customizable accessories such as clips, clamps, safety systems and equipment.

Usage: Airports, Exhibition halls, Sports Facilities, Industrial Buildings etc.

ForEver Roof™

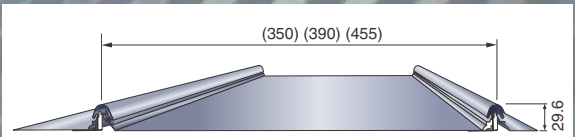
Concealed Clip Lock Japanese Roofing

ROOF SYSTEMS

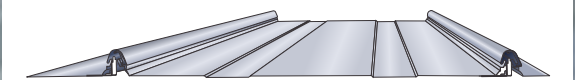
Delite Roof™

Concealed Clip Fixed Japanese Roofing

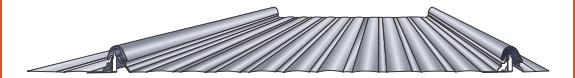
ROOF SYSTEMS



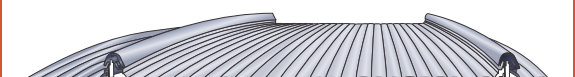
ForEver-Plain



ForEver-Ribbed



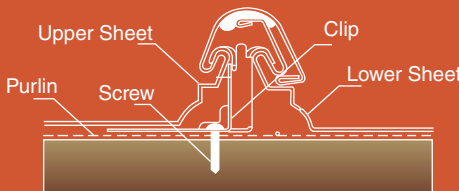
ForEver Multi-Ribbed



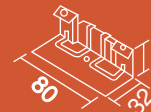
ForEver-Striped



FIXING DETAIL



Fixing Clip



Advantages

(Time Tested Japanese technology)

- Lightweight roofing with special concealed clip fixing. No holes hence leak proof.
- Special designed clip fixing System makes it strong roof to wind, rain and earthquakes.
- It supports the arc roof
- Available in many architectural designs:
FR Plain | FR Ribbed | FR Multiribbed | FR Stripes
- Available in materials-color coated galvanized, galvalume.
- Variety of colors available
- Any length upto 12 mtr. available (more than 12mtr. possible on request).
- Suitable for any kind of institutional, industrial building.

Reference design specification (type 2)

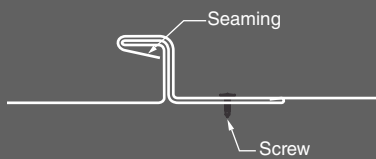
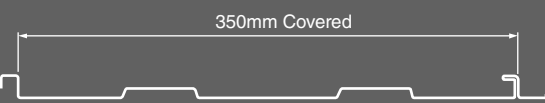
Use the original plate thickness	0.35 - 0.5 mm		
Steel Strength	240 ~ 550 MPa		
Use original plate width	456 mm	496 mm	560 mm
Working width	350 mm	390 mm	455 mm
m ² per required number of m	2.89 m	2.57m	2.19 m
Minimum bending radius	More than 4m		
Roof inclination	5/100 or more		
Maximum negative pressure strength	7840N / m ²	6860N / m ²	

*Please contact us for more specification, colors etc.



Features

- A screw less roofing system fixed using concealed clip.
- Goby shape and compact integration of the child hanging and body makes it strong against wind, rain and earth quakes.
- Lightweight, economical and suitable for curved roofs.
- Smooth and Clean Look.
- Available in materials - color coated galvanized, galvalume.
- Variety of colors available
- Any length upto 12 mtr. available (more than 12 mtr. available) on request.
- Suitable for any kind of institutional, industrial building.



ASSEMBLY

Reference Design Specifications

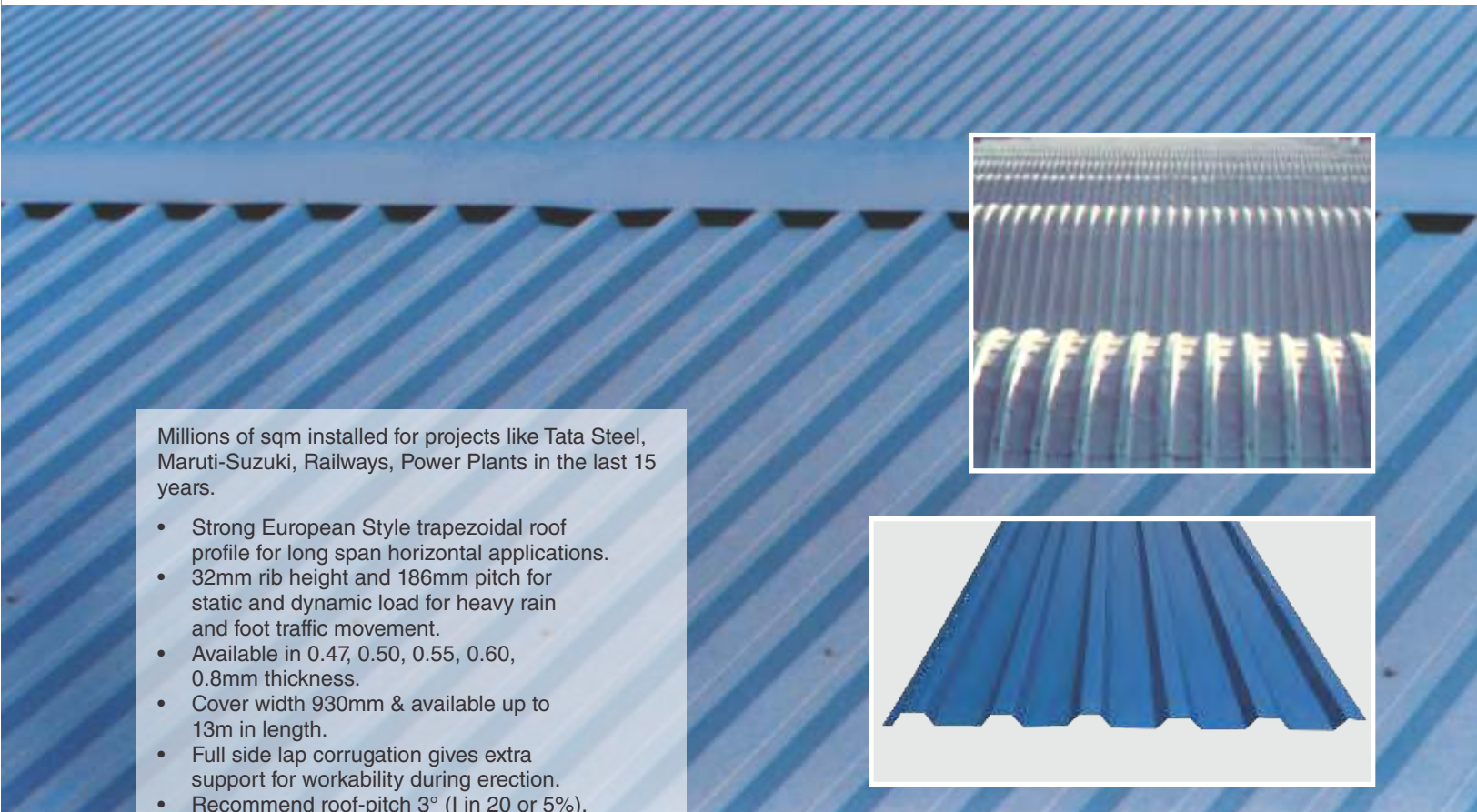
Delite Roof™					
Coil Size	Covered Width	Sheet Width	Wt/ Rm	Wt / m ²	Material
457	350	387	1.69	4.82	Thick=0.35 ~ 0.50
500	390	427	1.85	4.75	T. Strength=240 ~ 550mpa
530	420	457	1.96	4.67	

* Please refer to the color shade card for colors. Technical details available on request

Multi-Clad™ 930

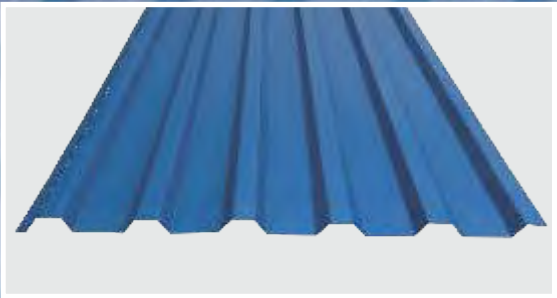
European Style Strong Screw-down Trapezoidal Roofing

ROOF SYSTEMS



Millions of sqm installed for projects like Tata Steel, Maruti-Suzuki, Railways, Power Plants in the last 15 years.

- Strong European Style trapezoidal roof profile for long span horizontal applications.
- 32mm rib height and 186mm pitch for static and dynamic load for heavy rain and foot traffic movement.
- Available in 0.47, 0.50, 0.55, 0.60, 0.8mm thickness.
- Cover width 930mm & available up to 13m in length.
- Full side lap corrugation gives extra support for workability during erection.
- Recommend roof-pitch 3° (1 in 20 or 5%).
- Available in attractive colors in PPGI, PPGL and Galvalume.
- Matching light panels of FRP / Polycarbonate available.
- Optional: - Various kinds of under deck insulation



Multi-Clad™ 930 Roof Profiles	Yield Strength of Steel	Thickness to consider (TCT)	Weight		I _{xx} (cm ⁴)/m	Z _{xx} (cm ³)/m		Moment capacity at Top compression flange	Moment capacity at Bottom compression flange
			cover width	Running Length		Top	Bottom		
	Mpa	mm	kg/m ²	kg/Rm				kNm/m	kNm/m
1. Overall Width: 1006 2. Cover Width: 930 3. Thickness: 0.45-1mm 4. Roof Slope: 1:20 5. Steel Strength: 240-550MPa 6. Metallic Coating:Galvalume/ Galvanised 7. Color Coating: Bare Galvalume/Polyester/ SMP/ PVDF	240	0.45	4.33	4.02	9.610	4.870	6.380	0.802	0.631
		0.47	4.53	4.21	10.060	5.096	7.149	0.853	0.673
		0.50	4.84	4.50	10.730	5.434	7.617	0.932	0.738
		0.55	5.35	4.98	11.856	5.996	8.400	1.068	0.853
		0.60	5.87	5.46	12.970	6.556	9.192	1.209	0.974
		0.65	6.38	5.94	14.080	7.113	9.981	1.354	1.101
		0.80	7.93	7.37	17.389	8.768	12.330	1.805	1.516
	340	1.00	9.99	9.29	21.740	10.935	15.432	2.422	2.141
		0.45	4.33	4.02	9.610	4.870	6.380	1.047	0.843
		0.47	4.53	4.21	10.060	5.096	7.149	1.130	0.898
		0.50	4.84	4.50	10.730	5.434	7.617	1.256	0.984
		0.55	5.35	4.98	11.856	5.996	8.400	1.437	1.132
		0.60	5.87	5.46	12.970	6.556	9.192	1.625	1.289
		0.65	6.38	5.94	14.080	7.113	9.981	1.820	1.454
	550	0.45	4.33	4.02	9.610	4.870	6.380	1.410	1.179
		0.47	4.53	4.21	10.060	5.096	7.149	1.525	1.285
		0.50	4.84	4.50	10.730	5.434	7.617	1.719	1.433
0.55		5.35	4.98	11.856	5.996	8.400	2.039	1.649	
0.60		5.87	5.46	12.970	6.556	9.192	2.372	1.872	

Multi-Rib™ 1010

Wide Span Trapezoidal Screw Down Roof Panels

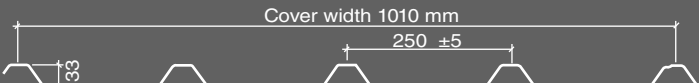
ROOF SYSTEMS



Millions of sqm installed for projects like Tata Motors, Vedanta, Defence services, Railways, Power Plants in last 10 years.

Feature

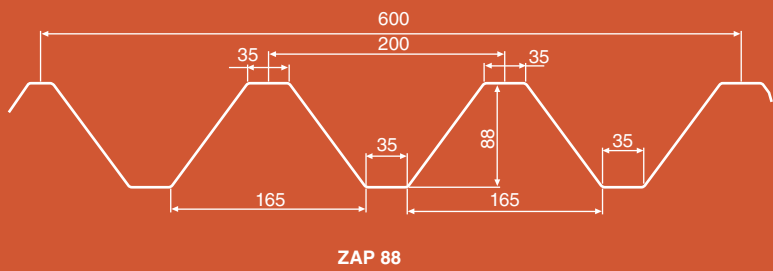
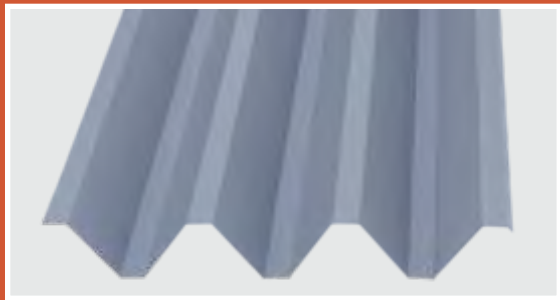
- Lightweight, Economical roof profile with excellent design flexibility
- 33mm height, 250 mm pitch with two stiffening ribs for easy water shedding.
- Available in 0.47, 0.50, 0.55, 0.80mm thickness
- Cover width 1010mm & available upto 13m in length
- Full side lap corrugation gives extra support at panel overlap.
- Recommended roof-pitch 3°(1 in 20 or 5%)
- Available in attractive colors in PPGI, PPGL &Galvalume
- Matching light panels of FRP / Polycarbonate available.
- Optional: - Various kinds of under deck insulation



Multi-Rib™ 1010 Roof Profiles	Yield Strength of Steel	Thickness to consider (TCT)	Weight		I _{xx} (cm ⁴)/m	Z _{xx} (cm ³)/m		Moment capacity at Top compression flange	Moment capacity at Bottom compression flange
			cover width	Running Length		Top	Bottom		
	MPa	mm	kg/m ²	kg/Rm				kNm/m	kNm/m
1. Overall Width: 1060mm 2. Cover Width: 1010mm 3. Thickness: 0.45-1mm 4. Roof Slope: 1:20 5. Steel Strength: 240-550MPa 6. Metallic Coating: Galvalume/ Galvanized 7. Color Coating: Bare Galvalume/ Polyester/SMP/ PVDF	240	0.45	3.98	4.02	7.521	3.132	7.999	0.599	0.606
		0.47	4.17	4.21	7.872	3.277	8.366	0.644	0.636
		0.50	4.46	4.50	8.397	3.495	8.914	0.713	0.681
		0.55	4.93	4.98	9.268	3.856	9.821	0.823	0.757
		0.60	5.40	5.46	10.135	4.214	10.721	0.920	0.833
		0.65	5.88	5.94	10.990	4.571	11.613	1.017	0.909
		0.80	7.30	7.37	13.562	5.629	14.244	1.276	1.137
	340	1.00	9.20	9.29	16.925	7.011	17.649	1.598	1.439
		0.45	3.98	4.02	7.521	3.132	7.999	0.794	0.848
		0.47	4.17	4.21	7.872	3.277	8.366	0.850	0.890
		0.50	4.46	4.50	8.397	3.495	8.914	0.921	0.954
		0.55	4.93	4.98	9.268	3.856	9.821	1.082	1.061
		0.60	5.40	5.46	10.135	4.214	10.721	1.246	1.167
	550	0.65	5.88	5.94	10.990	4.571	11.613	1.401	1.274
0.45		3.98	4.02	7.521	3.132	7.999	1.112	1.312	
0.47		4.17	4.21	7.872	3.277	8.366	1.199	1.377	
0.50		4.46	4.50	8.397	3.495	8.914	1.310	1.476	
0.55		4.93	4.98	9.268	3.856	9.821	1.403	1.002	
	0.60	5.40	5.46	10.135	4.214	10.721	1.742	1.806	

ZAP 88™

ZAP 88mm Roofing System (Japanese Technology)



ZAP 88

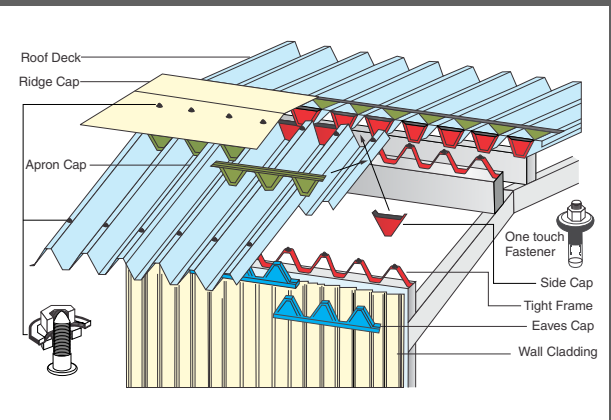
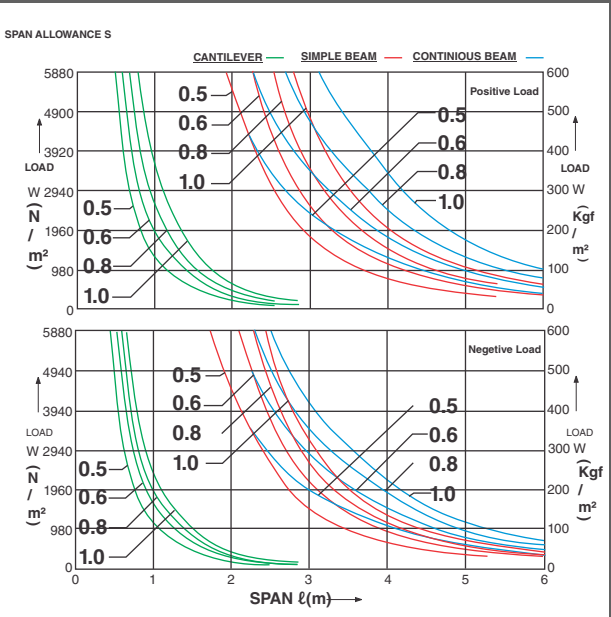
SCREWDOWN ROOF SYSTEMS

ZAP 88™ roofing system is proven and sturdy Japanese technology. It is a 88mm deep trapezoidal profile with very strong tight frame method of fixing and can be formed up to single length of 100mts.

Available in Galvalume and color coated steel in various colors.
More than 200,000 sqm installed for projects like Maruti-Suzuki, Musashi Auto Parts, Samtel Color, Moser Baer,

Advantages & Features

- Time tested and proven Japanese technology.
- Robust Design: Depth of 88mm and 200mm pitch supported on galvanized steel tight frames makes it very sturdy roof system. It can span up to 3-4mts. making roof structure more economical and lighter.
- Fitted on tight frame system, it has high stability against wind velocity and uplift pressure which is fixed on purlin.
- Watertight: An exactitude engineered roofing system. The deep profile of 88mm making it impossible for the water to overflow the fasteners and side laps of roof and further end laps are avoided by single length sheet up to 100mts, making it a total leak proof roof.
- High water shedding ability enabling virtually flat roof as low as 1° Slope.
- Handsome appearance and excellent anti-corrosion performance.
- Outstanding durability and is suitable for extreme weather conditions.
- Maintenance free.
- Will last virtually a lifetime.
- Matching light panels of FRP / Polycarbonate available.
- Option of under deck insulation of resin bonded glass wool / mineral wool.
- Application: Factory Buildings, Warehouses, Institutional Buildings etc.



Reference design specification

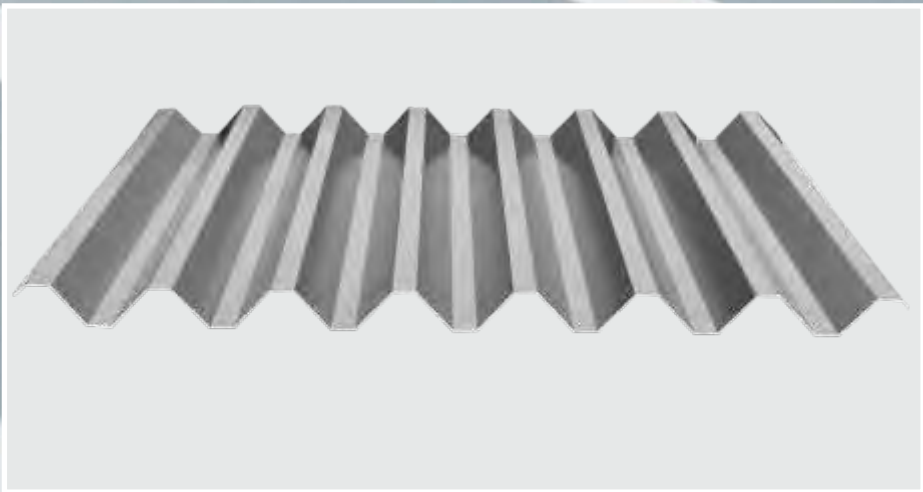
use the original plate thickness	0.5 -1.0mm
use original plate width	914 mm
working width	600mm
m² per required number of m	1670mm
Gradient	possible 3/100 or more
Bending radius nature	180 or more
Insulation material	Option

Sheet Thickness (mm)	Unit Weight (Kg/m²)	Moment of inertia		Sectional modulus	
		Lx(Cm³/m)		Zx(Cm³/m)	
		Positive Pressure	Negative Pressure	Positive Pressure	Negative Pressure
0.5	5.65	91.8	75.6	19.4	16
0.6	6.76	130.1	108.4	27.6	23
0.8	9.03	179.3	132.4	38	28.1
1	11.28	241.8	159	51.2	33.7

Burly-Clad 44™

Strongest Screw-down trapezoidal roofing

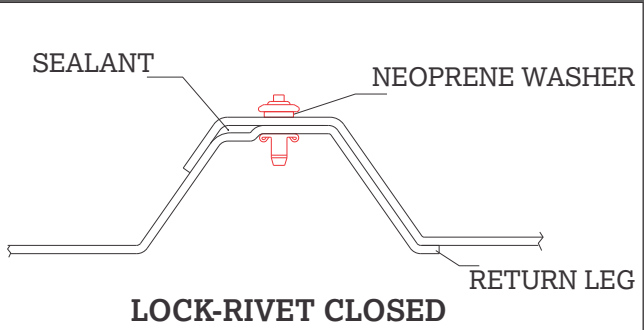
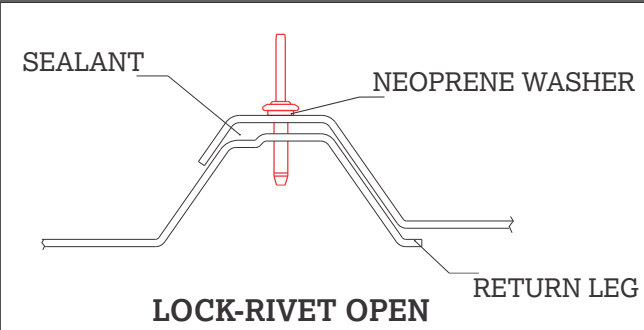
SCREWDOWN ROOF SYSTEMS



Burly-Clad 44™ Roof Profiles	Yield Strength of Steel	Thickness to consider (TCT)	Weight		I _{xx} (cm ⁴)/m	Z _{xx} (cm ³)/m		Moment capacity at Top compression flange	Moment capacity at Bottom compression flange
			cover width	Running Length		Top	Bottom		
1. Coil Width: 1250mm 2. Cover Width: 910mm 3. Thickness: 0.5- 1.0mm 4. Roof Slope: 1:20 5. Steel Strength: 240-550MPa 6. Metallic Coating: Galvalume / Galvanized 7. Color Coating: Bare Galvalume / Polyester/SMP/PVDF	240	0.50	5.07	4.61	15.440	7.242	6.716	1.478	1.478
		0.55	5.61	5.10	17.058	7.994	7.414	1.666	1.666
		0.60	6.15	5.59	18.671	8.743	8.110	1.838	1.838
		0.65	6.69	6.08	20.279	9.488	8.802	1.997	1.997
		0.80	8.30	7.56	25.074	11.704	10.860	2.474	2.474
	340	1.00	10.46	9.52	31.402	14.610	13.563	3.093	3.093
		0.45	4.53	4.12	13.818	6.486	6.015	1.706	1.706
		0.47	4.74	4.32	14.468	6.789	6.295	1.866	1.866
		0.50	5.07	4.61	15.440	7.242	6.716	2.120	2.120
		0.55	5.61	5.10	17.058	7.994	7.414	2.371	2.371
	550	0.60	6.15	5.59	18.671	8.743	8.110	2.572	2.572
		0.65	6.69	6.08	20.279	9.488	8.802	2.854	2.854
		0.80	8.30	7.56	25.074	11.704	10.860	3.542	3.542
		0.45	4.53	4.12	13.818	6.486	6.015	2.241	2.241
		0.47	4.74	4.32	14.468	6.789	6.295	2.436	2.436
		0.50	5.07	4.61	15.440	7.492	6.716	2.746	2.746
		0.55	5.61	5.10	17.058	7.994	7.414	3.314	3.314
		0.60	6.15	5.59	18.671	8.743	8.110	3.913	3.913
		0.80	8.30	7.56	25.074	11.704	10.860	5.599	5.599

Extra Support

The full side-lap corrugation gives extra support at the panel overlap for workability during erection and a better fit for weather tightness.



BEST SUITED TO YOUR NEEDS

Burly-Clad 44™ is available in wide range of aesthetically pleasing colors along with matching corner flashing, capping, gutter etc. to suit your need.

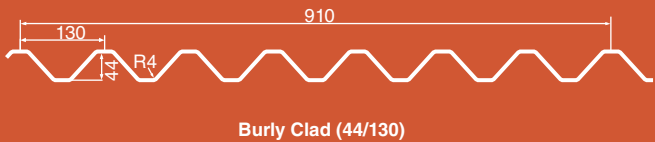
The Burly-Clad 44™ sheets are custom rolled to any transportable length maximum upto 13 meters.

Advantages

Burly-Clad 44™ as the name suggests is a lightweight & very strong trapezoidal shaped roofing and walling profile designed to take longer span in horizontal and vertical applications.

The Strength

Burly-Clad 44™ is a strong profile in its class with 44mm rib height and 130mm pitch designed to take static as well as dynamic loads.



Extra Support

The full side-lap corrugation gives extra support at the panel overlap for workability during erection and a better fit for weather tightness.

Clean Environment

Specially designed side lap anti-capillary groves, which can also be sealed using butyl based sealant tapes to give complete weather tightness from water and dust to make it most suitable roofing & walling system for environment sensitive application e.g. electronic industry, pharmaceutical industry etc.

Light Panels

Matching light panels of FRP / Polycarbonate available for roof and wall.

Tile - Roof Systems by Multicolor

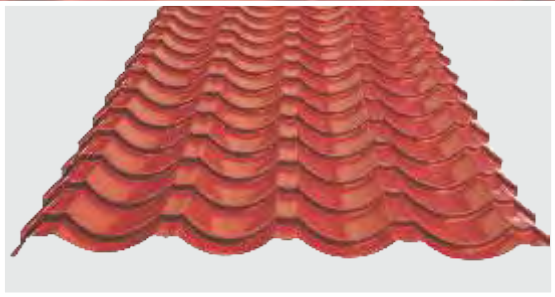
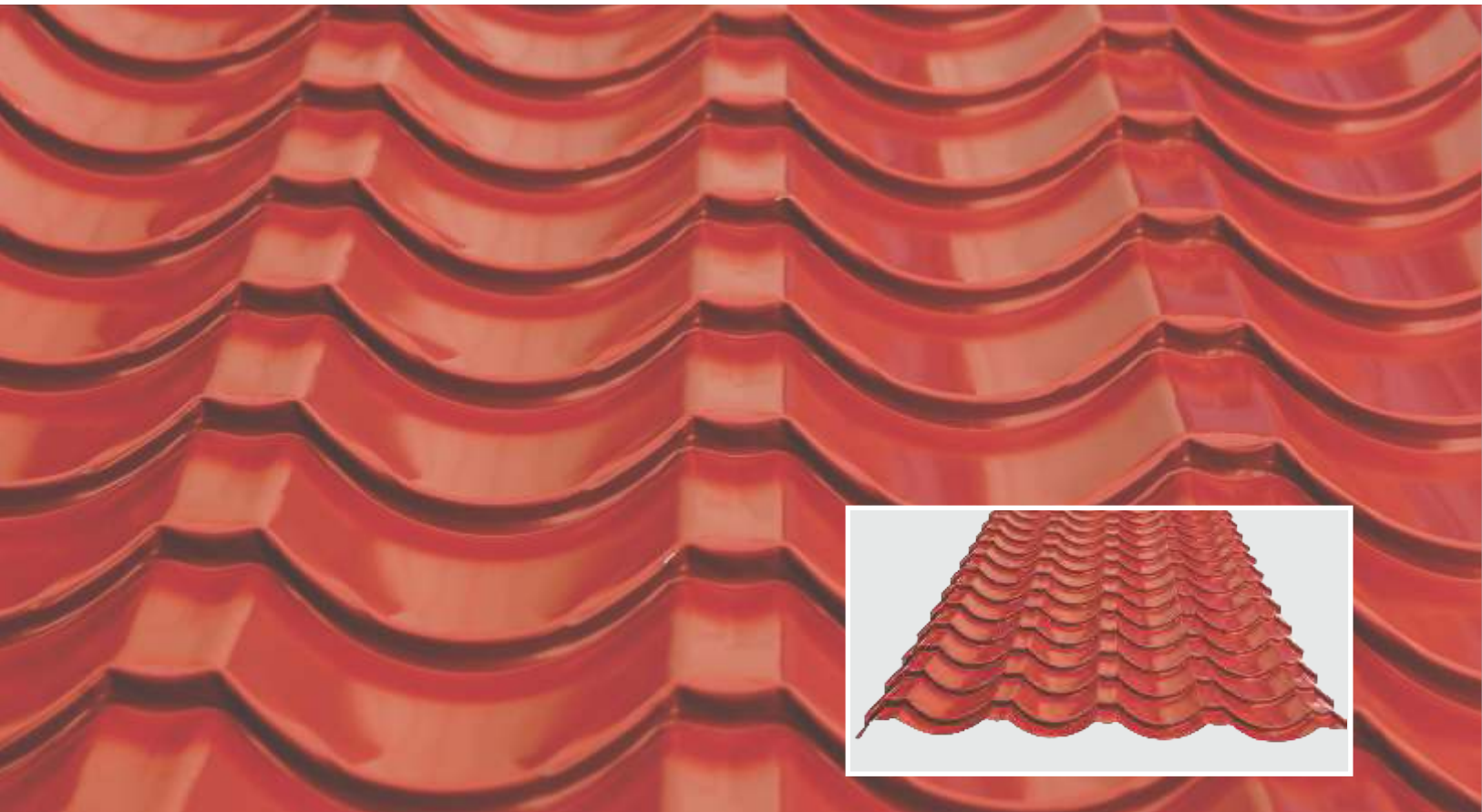
Wave-Tile™

Architectural, Aesthetical Screw Down Roof Tile

TILE ROOF PROFILES

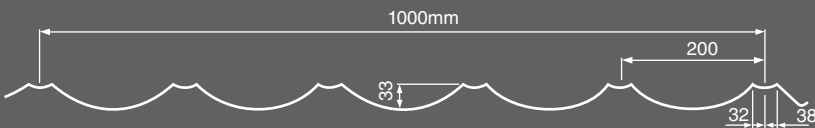
Architectural Steel Roof Tiles are unique products of Multicolor™ Steels (India) Pvt. Ltd. and it is the only product in the roofing sheet industry in India that blends the classical heritage looks of architecture with modern material. For many years, architects, contractors and building professionals everywhere have recognized metal roofing for its low maintenance, superior weather resistance and long life. Architectural Steel Roof Tiles are the latest generation of metal roofing - functional, durable, and ideally suited to commercial buildings, tourist resorts, farm houses, hotel, residential houses and public & semi public area residential use. Architectural Steel Roof Tiles help you save money by reducing assembling time and workmanship in installation.

Aesthetical | Long Life | Light Weight



KEY FEATURES

- Architecturally attractive, durable and add aesthetic look to the building
- Strong, resistant to fire and to all weather conditions
- Easy to assemble. Saves time and labor cost
- Light, easy to handle and store
- Does not break, crack or leak
- Environment friendly
- Offers the beauty of clay tile with minimal dead weight on the roof
- Unbeatable hurricane, hail, and all-weather resistance
- It also eliminates problems of pest infestation and rot that occur with wood and clay roofing materials



Wave-Tile (1000)

Material Specification

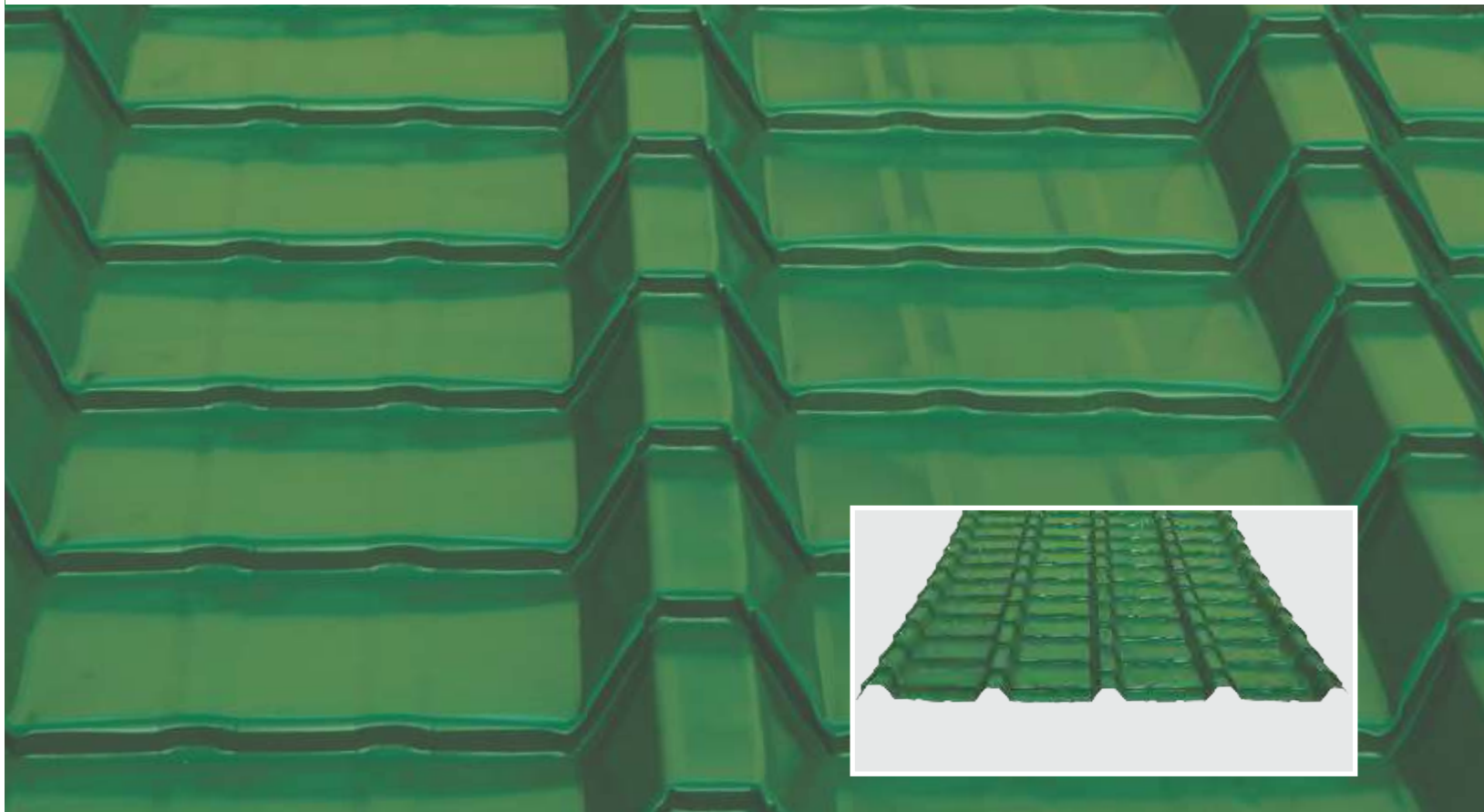
- Thickness (TCT): 0.5 mm, 0.55 mm, 0.60 mm.
- Available in any length from 1 to 6 meters
- Available in materials- color coated galvanized, galvalume.
- Variety of colors available

Specifications

Tile Roof Profile	Thickness	Weight	
		Running Length	Cover Width
Wave - Tile™			
Tile Pitch- 250 c/c	mm	Kg/Rm	Kg/m²
Coil Width: 1220mm Cover Width: 1000mm Overall Width: 1130mm Steel Strength: 240 & 300 MPa Metallic Coating: Galvalume/Galvanized Color Coating: Bare Galvalume/ Polyester/SMP/PVDF	0.45	4.23	4.23
	0.50	4.70	4.70
	0.60	5.64	5.64

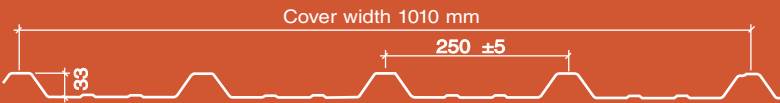
Rib-Tile™

Economical Trapezoidal Ribbed Tile, screw down roof TILE ROOF PROFILES



KEY FEATURES

- Architecturally attractive, durable and add aesthetic look to the building
- Strong, resistant to fire and to all weather conditions
- Easy to assemble. Saves time and labor cost
- Light, easy to handle and store
- Does not break, crack or leak
- Environment friendly
- Offers the beauty of clay tile with minimal dead weight on the roof
- Unbeatable hurricane, hail, and all weather resistance
- It also eliminates problems of pest infestation and rot that occur with wood and clay roofing materials



Material Specification

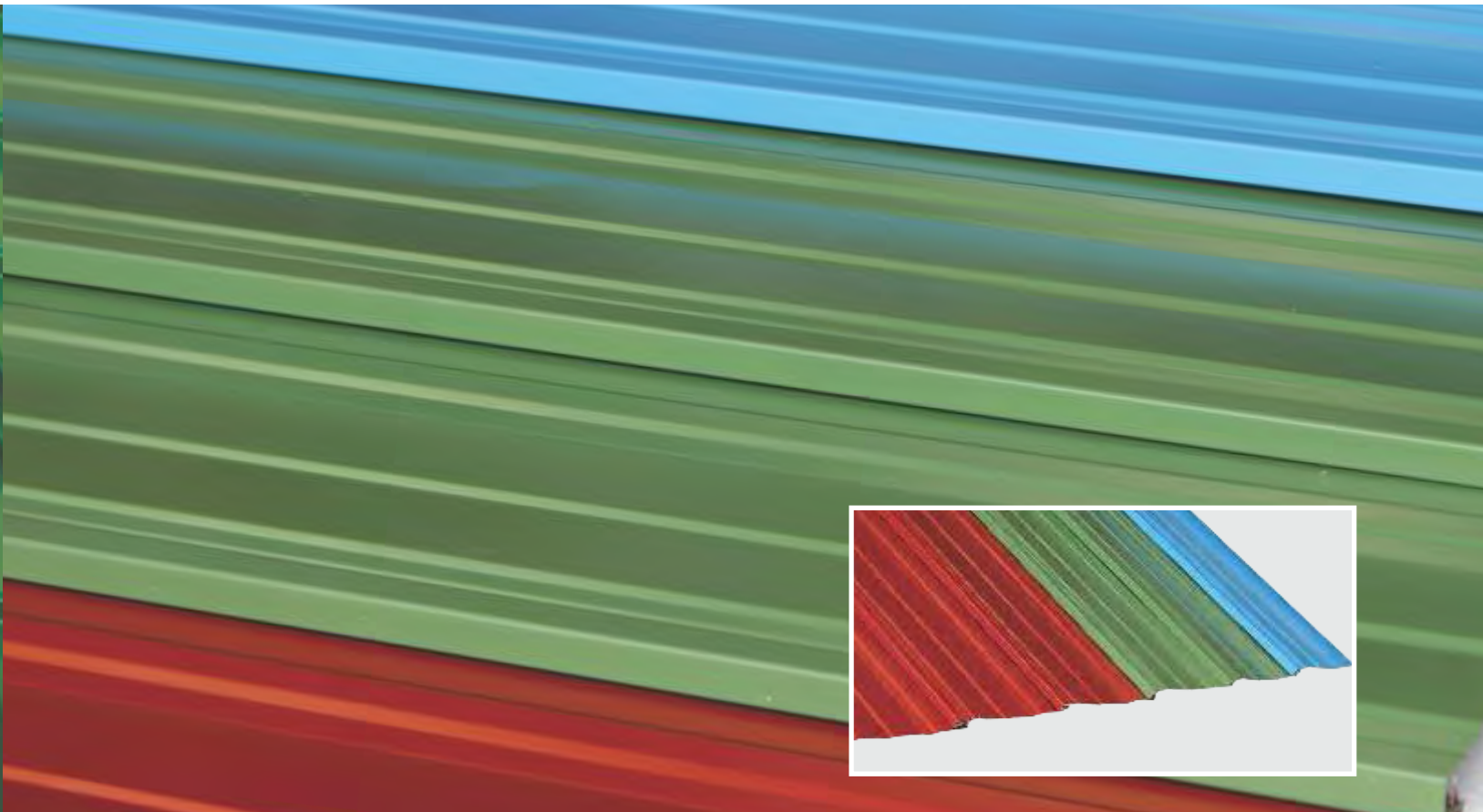
- Thickness (TCT): 0.5 mm, 0.55 mm, 0.60 mm.
- Available in any length from 1 to 6 meters
- Available in materials- color coated galvanized, galvalume.
- Variety of colors available

Specifications

Tile Roof Profile	Thickness	Weight	
		Running Length	Cover Width
Rib-Tile™	mm	Kg/Rm	Kg/m²
Coil Width: 1220mm Cover Width: 1010mm Overall Width: 1060mm Steel Strength: 240, 350, 550MPa Metallic Coating: Galvalume/Galvanized Color Coating: Bare Galvalume/ Polyester/SMP/PVDF	0.45	4.02	3.98
	0.50	4.50	4.46
	0.60	5.46	5.40

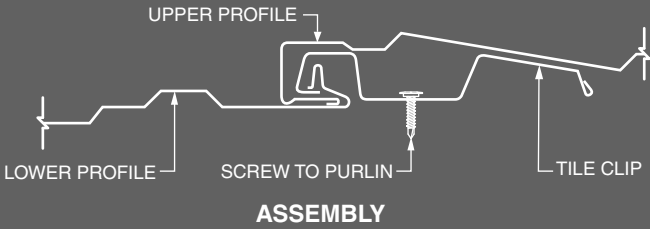
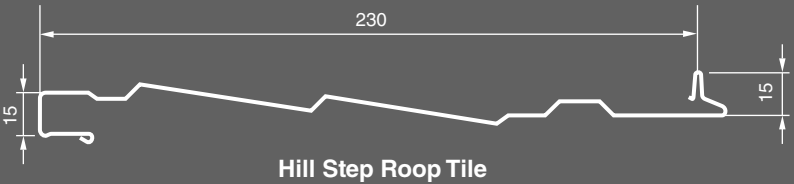
Hill Step

Hidden Screw Japanese Tile Roofing TILE ROOF PROFILES



Feature

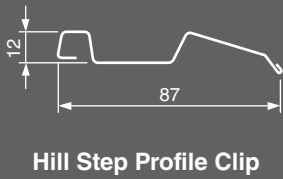
- Hidden screw fixed strong tile roof system
- Longitudinal and step up with smooth surface with no hole or fasteners visible making it aesthetically pleasing.
- The next stage lip, distortion at the time of molding and sounding due to thermal expansion and contraction does not occur. Work efficiency is outstanding.
- Available in color coated steel, PVDF2, stainless steel.
- Choice of colors.



Specifications

HILL-STEP				
Coil Size	Covered Width	Sheet Width	Wt / Rm 0.50	Wt / m² 0.50
305	230	240	1.13 Kg	4.91
333	260	270	1.23 Kg	4.74

* Please refer to the color shade card for colors. Technical details available on request



Apollo

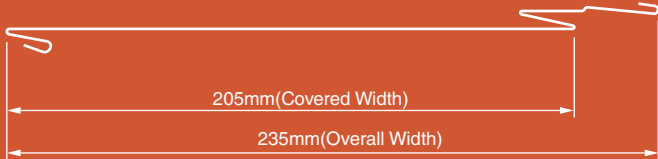
Hidden Screw Soft Tile Roofing Japanese

TILE ROOF PROFILES



Feature

- Hidden Screw soft roof tile
- Brilliant appearance.
- No hole and no fastener visible.
- Speedy construction and easy to construct by simply overlapping and fixing on the rafters with the screws.
- Available in color coated steel, PVDF2, stainless steel.
- Choice of colors.



APOLLO ROOF TILE

Specifications

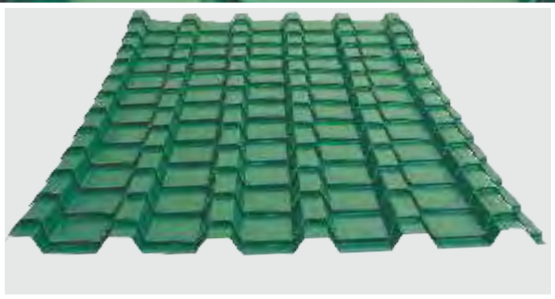
APOLLO					
Coil Size	Covered Width	Sheet Width	Wt/ RM 0.50	Wt/ M² 0.50	Material
305	205	235	1.13 Kg	5.51	Thick=0.35 ~ 0.50
333	230	260	1.23 Kg	5.35	T. Strength=240 ~ 350mpa

* Please refer to the color shade card for colors. Technical details available on request

Clad-Tile™

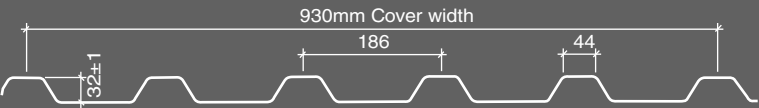
European style screw down Tile Roof

TILE ROOF PROFILES



KEY FEATURES

- Architecturally attractive, durable and adds aesthetic look to the building
- Strong, resistant to fire and to all weather conditions
- Easy to assemble. Saves time and labor cost
- Light, easy to handle and store
- Does not break, crack or leak
- Environment friendly
- Offers the beauty of clay tile with minimal dead weight on the roof
- Unbeatable hurricane, hail, and all-weather resistance
- It also eliminates problems of pest infestation and rot that occur with wood and clay roofing materials



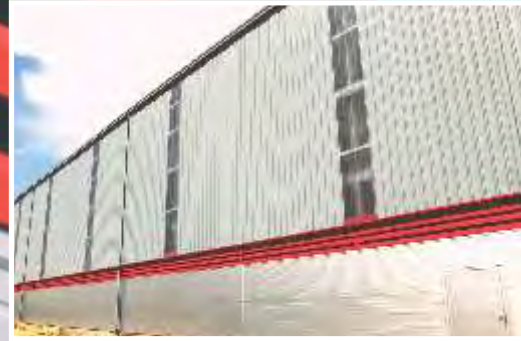
Material Specification

- Thickness (TCT): 0.5 mm, 0.55 mm, 0.60 mm.
- Available in any length from 1 to 6 meters
- Available in materials- color coated galvanized, galvalume.
- Variety of colors available

Specifications

Tile Roof Profile	Thickness	Weight	
		Running Length	Cover Width
Clad-Tile™	mm	Kg/Rm	Kg/m²
Coil Width: 1220mm Cover Width: 930mm Overall Width: 1006mm Steel Strength: 240, 350, 550 MPa Metallic Coating: Galvalume/Galvanized Color Coating: Bare Galvalume/ Polyester/SMP/PVDF	0.45	4.02	4.33
	0.50	4.50	4.84
	0.60	5.46	5.87

Wall & Fascia System



Hidden Screw Wall Panel

Multi-Lok™

Multi-SafeWall™

Strip-Clad™

Semi Concealed Fastner Wall Panel

Shadow™ Rib

Shadow™ Clad

Shadow™ Lok

Screw Down Wall Panel

Multi-Clad™

Multi-Rib™

Burly-Clad 44™

ZAP 88™

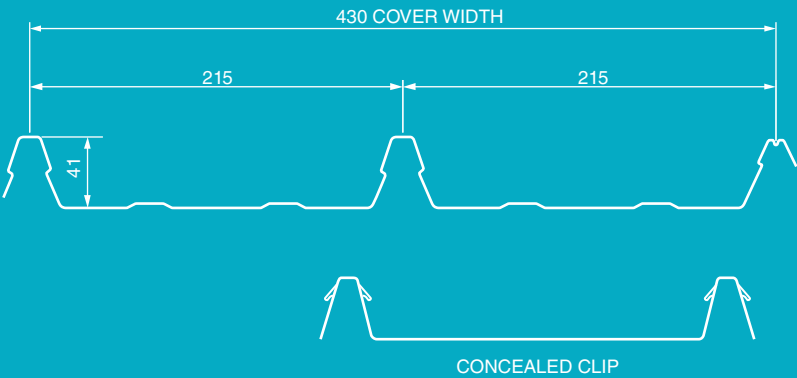
Multi-Lok™

Wall & Fascia System



(Popular Japanese façade profile)

- A screw-less ribbed look wall cladding
- Full 41mm deep corrugation for extra strength
- Support of special design clip
- Available upto 40' lengths for reduced erection costs
- Available in variety of colors
- Thickness from 0.50 mm to 0.60 mm



Specifications

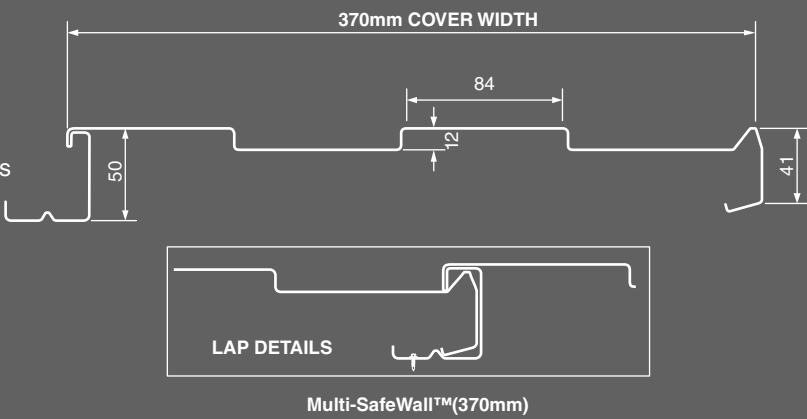
Wall Profile	Thickness	Weight	
		Running Length	Cover Width
Multi-Lok™	mm	Kg/Rm	Kg/m²
Coil Width: 610mm Cover Width: 430mm Overall Width: 460mm Steel Strength: 240, 350, 550 MPa Metallic Coating: Galvalume/Galvanized Color Coating: Bare Galvalume/ Polyester/SMP/PVDF	0.50	2.26	5.25
	0.60	2.71	6.30

Multi-SafeWall™

Wall & Fascia System



- An Architectural covering for buildings
- Concealed fasteners within panel joint
- The fluted Multi Safe-wall system box ribs provide shadow for this desired architectural appearance
- Available upto 40' lengths for reduced erection costs
- Available in variety of colors
- Thickness from 0.50 mm to 0.60 mm

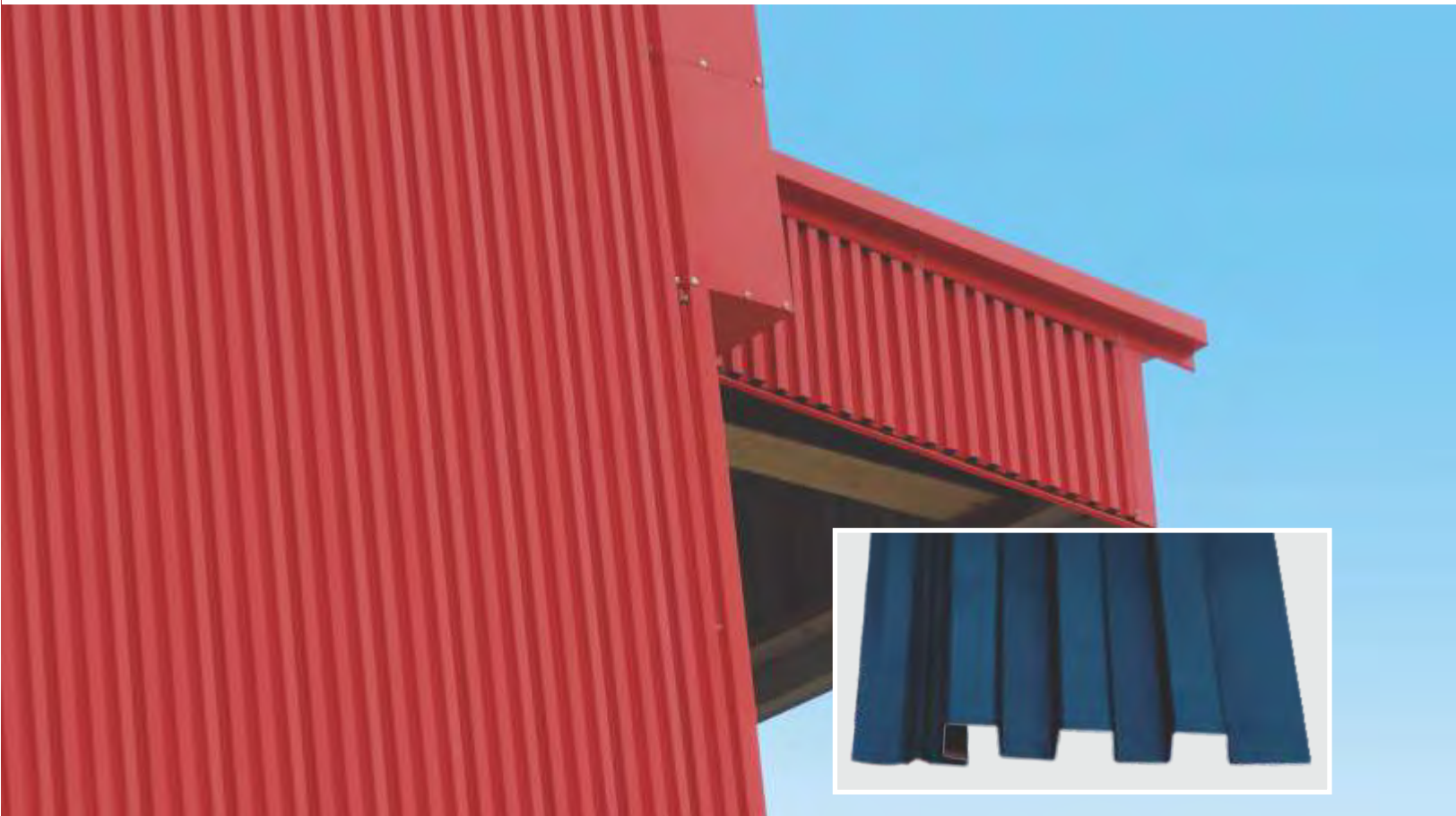


Specifications

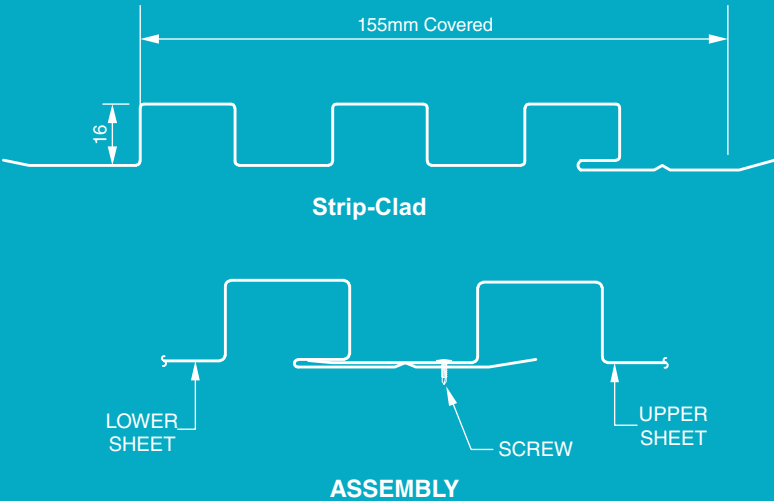
Wall Profile	Thickness	Weight	
		Running Length	Cover Width
Multi-SafeWall™	mm	Kg/Rm	Kg/m²
Coil Width: 610mm Cover Width: 370mm Overall Width: 420mm Steel Strength: 240, 350, 550MPa Metallic Coating: Galvalume/Galvanized Color Coating: Bare Galvalume/ Polyester/SMP/PVDF	0.45	2.04	5.49
	0.50	2.26	6.11
	0.60	2.71	7.33

Strip-Clad™

Wall & Fascia System



- Neat design
- Popular Japanese Facade Profile
- Clean Look, Sharp edge
- Longer length up to 12mts.
- Pitch of 51mm makes it very strong profile.
- Available in attractive colors
- Use in facades, wall cladding and false ceiling
- Fast and easy to erect
- Used for facades of multi-storey buildings, wall cladding of industrial buildings
- Fascias of showrooms and commercial buildings, false ceiling



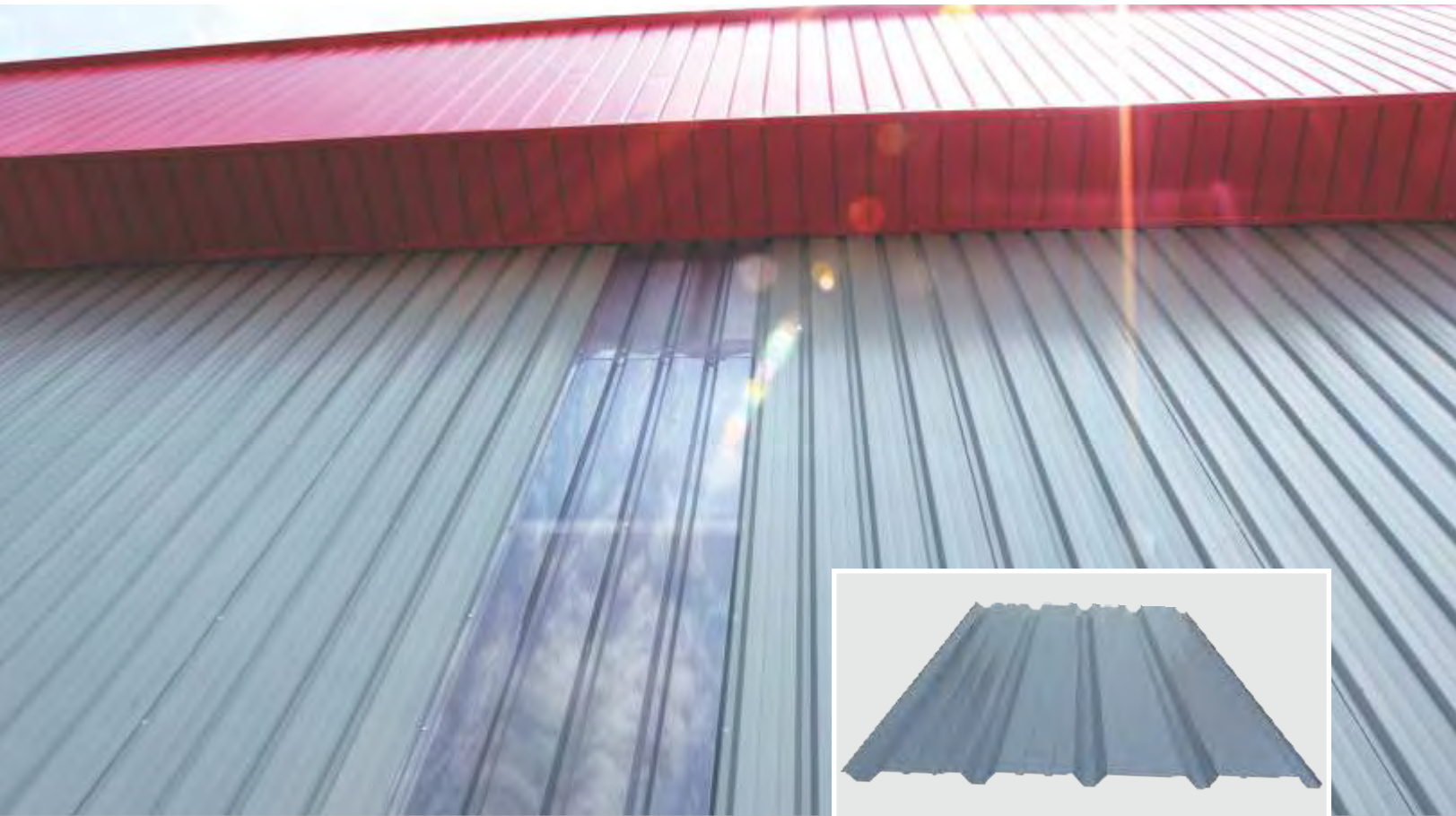
Specifications

Strip-Clad™					
Coil Size (mm)	Covered Width (mm)	Sheet Width (mm)	Wt/ Rm 0.50	Wt/ m² 0.50	Material
305	155	205	1.13 Kg	7.29Kg	Thick = 0.35 ~ 0.50
					T. Strength = h240 ~ 530MPa

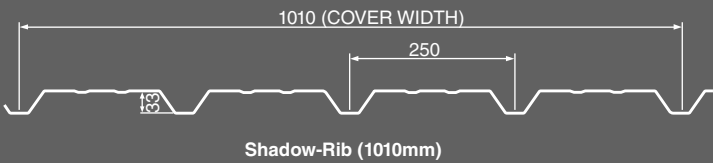
* Please refer to the color shade card for colors. Technical details available on request

Shadow™ Rib

Wall & Fascia System



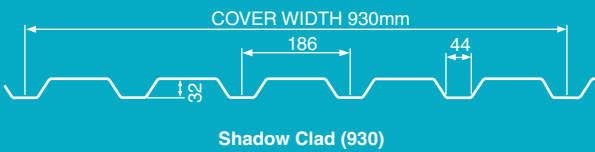
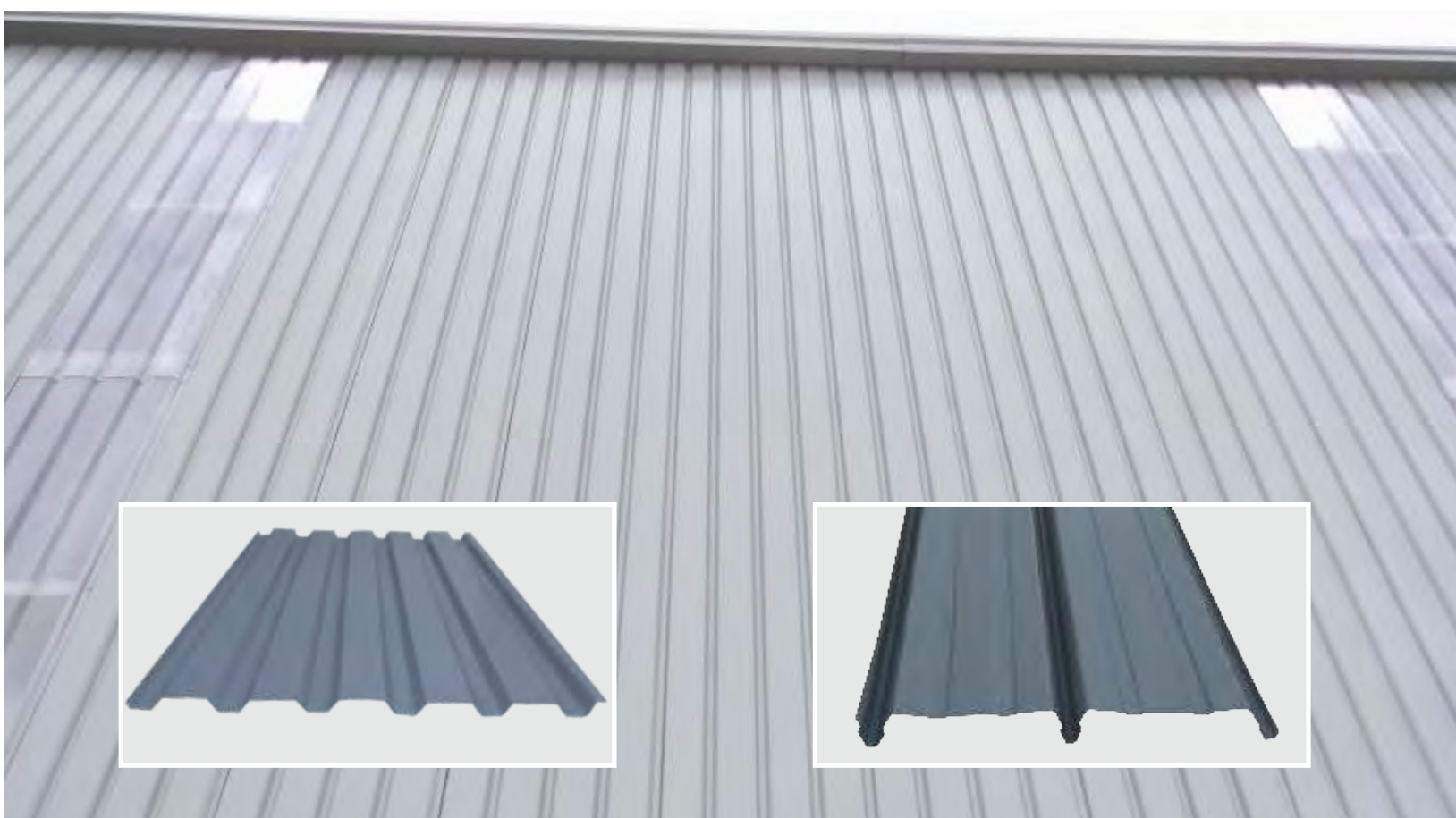
- An economical architectural covering for Multi-Star Building
- Semi-concealed fasteners
- Available upto 40' lengths for reduced erection costs
- Ribs provide special looks to wall
- Available in variety of colors
- Thickness from 0.50 mm to 0.80 mm



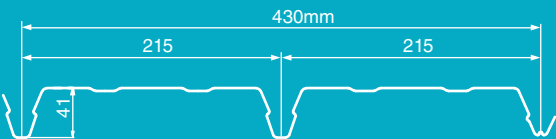
Shadow™ Clad

Shadow™ Lok

Wall & Fascia System



Shadow Clad (930)



Shadow-Lok (430)

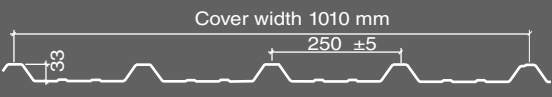
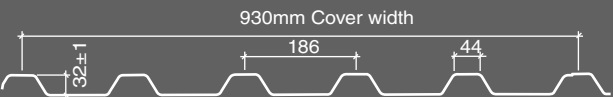
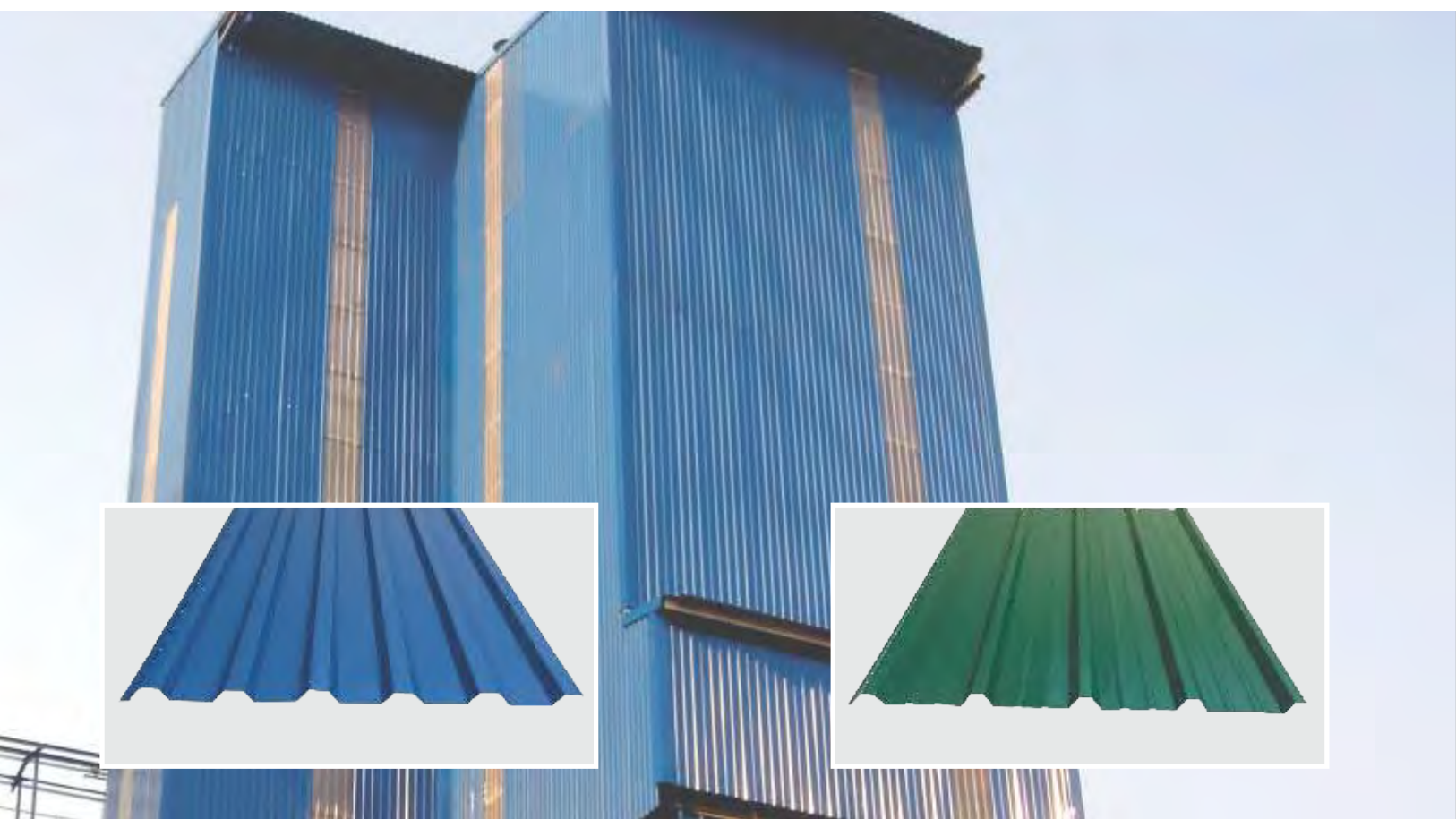
- An architectural covering for Multi-Star Building
- Semi-concealed fasteners
- Available upto 40' lengths for reduced erection costs
- European Style smooth surface
- Available in variety of colors
- Thickness from 0.50 mm to 0.80 mm

- An economical architectural covering for Multi-Star Building
- Flat Surface look
- Semi-concealed fasteners
- Available upto 40' lengths for reduced erection costs
- Available in variety of colors
- Thickness from 0.50 mm to 0.60 mm

Multi-Clad™

Multi-Rib™

Wall & Fascia System



- Strong European Style covering for Multi-Star Buildings
- Full 32mm deep corrugation for extra strength
- Available upto 40' lengths for reduced erection costs
- Exposed fasteners
- Available in variety of colors
- Thickness from 0.50 mm to 0.80 mm

- Basic covering for Multi-Star Buildings
- Full 33mm deep corrugation for extra strength
- Available upto 40' lengths for reduced erection costs
- Exposed fasteners
- Available in variety of colors
- Thickness from 0.50 mm to 0.80 mm

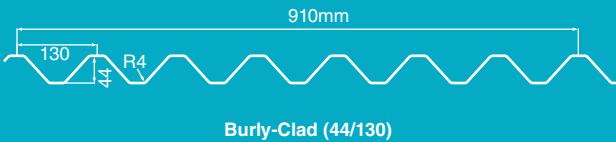
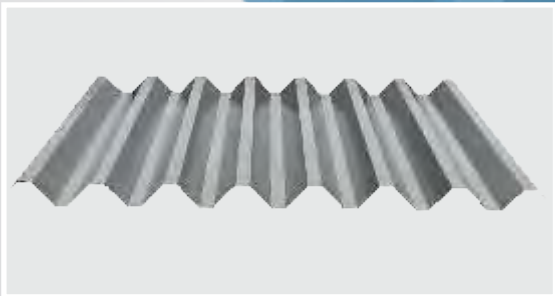
Specifications

Wall Profile	Thickness	Weight	
Multi-Clad™		Running Length	Cover Width
	mm	Kg/Rm	Kg/m²
Coil Width: 1220mm Cover Width: 930mm Overall Width: 1006mm Steel Strength: 240, 350, 550 MPa Metallic Coating: Glavalume/Galvanized Color Coating: Bare Galvalume/ Polyester/SMP/PVDF	0.45	4.02	4.33
	0.50	4.50	4.84
	0.60	5.46	5.87
Multi-Rib™ Coil Width: 1220mm Cover Width: 1010mm Overall Width: 1060mm Steel Strength: 240, 350, 550MPa Metallic Coating: Galvalume/Galvanized Color Coating: Bare Galvalume/ Polyester/SMP/PVDF	0.45	4.02	3.98
	0.50	4.50	4.46
	0.60	5.46	5.40

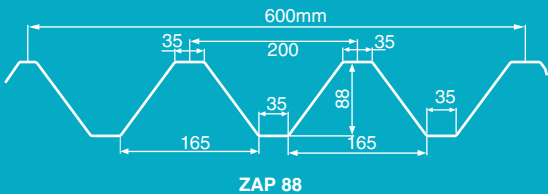
Burly-Clad 44™

ZAP 88™

Wall and Fascia System



- Strong Trapezoidal Wall Cladding
- Allows more girt spacing, good for high wind load areas
- Full 44mm deep corrugation for extra strength
- Available upto 40' lengths for reduced erection costs
- Exposed fasteners
- Available in variety of colors
- Thickness from 0.50 mm to 0.80 mm

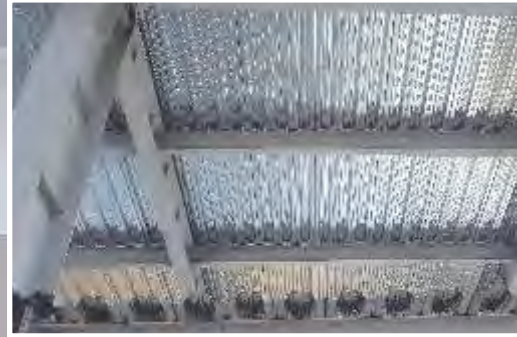


- Strong side wall cladding with deep corrugation
- Allows more girt spacing, good for high wind load areas
- Available upto 40' lengths for reduced erection costs
- Semi-Concealed fasteners
- Available in variety of colors
- Thickness from 0.50 mm to 0.80 mm

Specifications

Wall Profile	Thickness	Weight	
Burly-Clad 44™		Running Length	Cover Width
	mm	Kg/Rm	Kg/m²
Coil Width: 1250mm Cover Width: 910mm Overall Width: 960mm Steel Strength: 240, 350, 550MPa Metallic Coating: Galvalume/Galvanized Color Coating: Bare Galvalume/Polyester/SMP/PVDF	0.50	4.61	5.07
	0.60	5.55	6.09
	0.80	7.23	7.94
	1.00	9.26	10.17
Zap 88™ Coil Width: 914mm Cover Width: 600mm Overall Width: 640mm Steel Strength: 240 & 350 MPa Metallic Coating: Galvalume/Galvanized Color Coating: Bare Galvalume/ Polyester/SMP/PVDF	0.50	3.38	5.64
	0.60	4.06	6.76
	0.80	5.44	9.07
	1.00	6.77	11.28

Steel Deck Profiles



Multi- Steel Deck™ 76

Multi- Steel Deck™ 51 S

Multi- Steel Deck™ 51 L

Burly Deck 44

Zap-Deck 88

Multi-Steel Deck™

Structural Steel composite floor system

Multicolor steels offers a wide variety of steel deckings, used with in-situ concrete in composite floors, and has application in a wide range of buildings like mezzanine, multi-story buildings, industrial and commercial buildings etc. Composite floors are thin, lightweight, easily and quickly installed and have excellent load carrying capabilities.

Typical System Layout

'Composite deck floors' or 'composite slabs' provide an effective and economical floor slab in a range of building types. They comprise profiled steel decking, in situ-concrete and mesh reinforcement.

The steel decking acts as a permanent formwork to the concrete during construction and then acts compositely with the concrete to produce a strong and stiff long span floor. Temporary propping is not required in most applications.

Load capacity

Composite deck floors are robust and achieve excellent load carrying capacity due to the shear-bond developed between the embossed decking and the concrete slab. Load capacities upto 15kN/m² can be achieved, which can be enhanced by additional reinforcement in the slab. Light mesh reinforcement is generally used for fire resistance, and additional reinforcement required for crack control in exposed application.

Fire Resistance

Composite slabs have excellent fire resistance and can achieve upto 120minutes fire resistance with simple provision of mesh reinforcement. The exact period of fire resistance is dependent on: the slabdepth:the deck profiles;size of reinforcement and whether normal or light weight concrete is used. Longer fire resistance period can be achieved by placing additional reinforcing bars in the ribs.

Acoustic Performance

The acoustic performance of composite slabs with typical floor coverings is normally adequate for office or other work applications. In applications where a higher degree of acoustic insulation is required, such as apartment buildings, hotels and hospitals, additional insulation can be provided. The incorporation of resilient layers, or a concrete screed, can enable the floor to more than meet the requirements of the Buildings Regulations. Sound reduction of 62dB(airborne) and 50dB (impact) are really achievable.

Durability

Steel decking is normally galvanized with a standard G275 coating. The galvanized layer is not damaged during forming and provides suitable protection and durability for applications not subject to direct weathering, or in moderate exposure conditions. We offer special corrosion resistant 'ZAM' steel (a product of Nissan Steel, Japan) which has life of more than 3-4 times then galvanized coating.

Where the decking is used in exposed or damp conditions, additional measures should be provided to prevent corrosion, or the decking should be considered as permanent formwork only.

Advantages:

Value benefits of composite Floors	APPLICATIONS
• Overall lower initials costs	• Residential
• High load capacity	• Refurbishment
• Safe working platform	• Industrial
• Fast construction	• Commercial
• No temporary propping	• Buildings extensions
• Allow long span	• Multi-Storey buildings
	• Leisure facilities

Using composite deck floors can lead to initial cost savings of between 7% and 12% when compared to alternative solutions.

Better value for clients is achieved through:

TIME RELATED SAVINGS

Significant time savings can be made due to the rapid speed of construction. Construction periods for the framework can be reduced by 50%, leading to savings of site preliminaries, and interest charges.

STEEL FLOOR SYSTEM



REDUCED FOUNDATION COST

Foundation cost can be reduced by at least 20% because of the composite slabs light weight.

SERVICE INTEGRATION

Service can be located between and through the steel beams. Openings can be provided in the slabs.

INCREASED FLOOR AREA

Long span solutions decrease the number of columns required, thus increasing the overall floor area which is available. Flexibility of internal layout is also greatly enhanced.

SAVINGS ON CLADDING COSTS

Total building height decreases by typically 5% because of the shallow floor depth, reducing the overall cladding area and therefore cost. Cladding attachments can be made easily to the slabs.

WHOLE LIFE BENEFITS

Thermal and acoustic performance, fire resistance, durability, benefit the whole life value of the buildings.

ROBUST PERFORMANCE

Composite slabs are robust to impact, and can support high loading for all applications, including industrial buildings.

In-Service Benefits

Attachments for services can be provided into which special hangers can be fitted. Cladding can also be easily attached using special edge trims.

Composite floors decks are a high quality product. Together, the mesh reinforcement and decking, control shrinkage and crackings of the concrete.

The possibility of using long spans gives the occupier flexibility in internal floor layout and maximizes the amount of space.

ENVIRONMENT BENEFITS

Two important aspects of sustainable constructions are reduction in raw materials use and the increase in the recycled content. Steel as material is 100% recyclable and because steel composite deck floors are light in weight, fewer raw materials are consumed. Foundations are less complex and costly.

When composite slabs are compared to other forms of construction, there is less disruption to site activities, and also the amount of material wastage is significantly reduced.

More than 500,000 m² installed all over India.

Some major prestigious projects are mentioned here:

- 1 Adani power 120,000 m²
- 2 Mumbai International Airport 110,000 m²
- 3 NTPC Power Plant 90,000 m²
- 4 Hero Motors 65,000 m²
- 5 Maruti 45,000 m²
- 6 Maruti Joint Venture 15,000 m²
- 7 Jindal Stainless Steel, Orissa 15,000 m²
- 8 Tata Steel Kalinga Nagar 12,500 m²
- 9 NV Distallary 9500 m²
- 10 IIT Mandi 6500 m²

Multi-Steel Deck™ 76

Structural Steel composite Floor System

The Strength

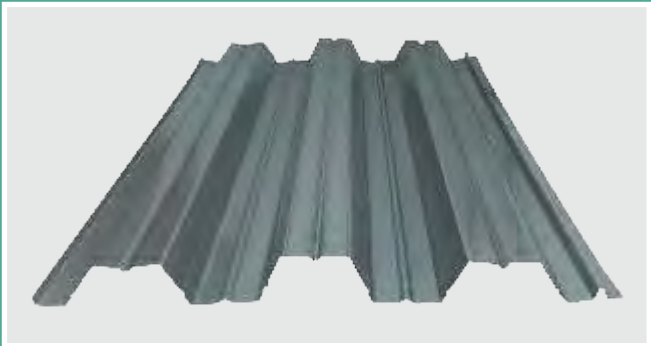
Multi Steel Floor Deck Panels; 76mm deep crest at 205mm distances having special embossment, rolled in to the profile created the highest bond between concrete and the steel floor, together with the smaller ribs and flutes enhances our product's composite action rigidity.

Material

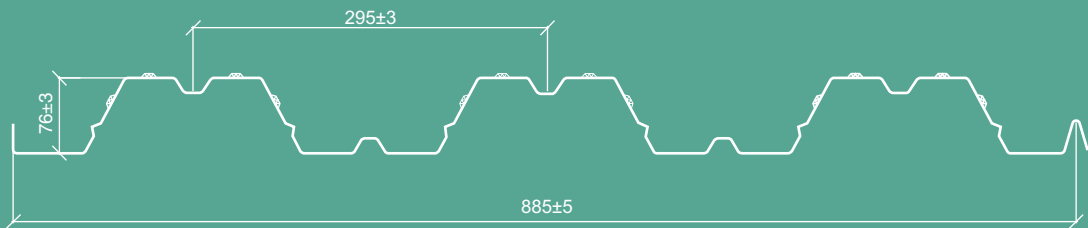
Multi Steel Floor Panel is produced from Galvanized steel Z275 (zinc 275gm/m²) and ZAM 150 (Zinc Aluminium Magnesium coated steel from Nisshin Steel, Japan) with the option of Color Coated Galvanized Steel produced in the thickness of 0.8mm, 1mm and 1.2mm. Available in steel grade 240 – 550 mpa

Multicolor Steels recommends use of ZAM steel which has life 3-4 times more than galvanized coated steel.

Multicolor steels recommends use of minimum 550 mpa steel for better strength



O & S Associate, Inc. USA has recommended Multi-Deck Galvanized 1 mm thick metal deck for 1,20,000m² installation at Mumbai International Airport - Project completed



Multi-Steel Deck 76

Material Specification					Sectional Properties				
STEEL FLOOR DECK PROFILES	Yield Strength of steel	Thickness to consider	Weight		I _{xx} (cm⁴)/m	Z _{xx} (cm³)/m		Moment capacity at Top compression flange	Moment capacity at Bottom compression flange
			cover width	Running Length		Top	Bottom		
	MPa	mm	kg/m²	kg/Rm				kNm/m	kNm/m
Multi- Steel Deck™ 76 1. Coil Width : 1220 mm 2. Cover Width : 885 mm 3. Thickness : 0.80 - 1.20 mm 4. Steel Grade : 240 - 550 MPa 5. Metallic Coating : ZAM 150, Z 120, Z 275 6. Color Coating (Optional) : Polyester, SMP, PVDF2	240	0.80	8.657	7.66	66.613	21.206	21.310	4.357	4.308
		1.00	10.821	9.58	82.012	26.173	26.277	5.891	5.585
		1.20	12.986	11.49	96.924	31.010	31.105	7.070	6.795
	340	0.80	8.657	7.66	66.613	21.206	21.310	5.781	5.761
		1.00	10.821	9.58	82.012	26.173	26.277	7.887	7.530
		1.20	12.986	11.49	96.924	31.010	31.105	10.056	9.250
	550	0.80	8.657	7.66	66.613	21.206	21.310	8.001	8.377
		1.00	10.821	9.58	82.012	26.173	26.277	11.936	10.950
		1.20	12.986	11.49	96.924	31.010	31.105	14.670	13.510

Multi-Steel Deck™ 51-S

Structural Steel composite Floor System

STEEL FLOOR SYSTEM

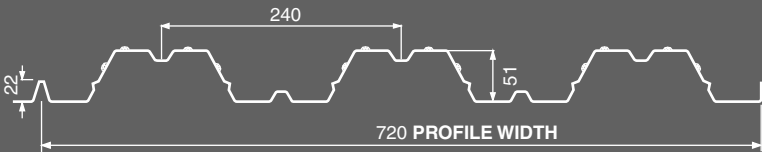
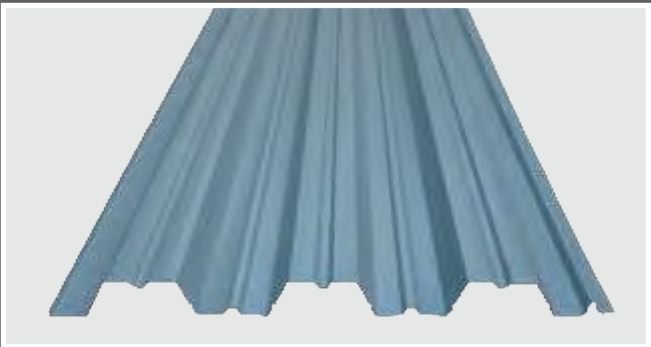
The Strength

Multi Steel Floor Deck Panels; 51mm deep crest at 240mm distances having special embossment, rolled in to the profile created the highest bond between concrete and the steel floor, together with the smaller ribs and flutes enhances our product's composite action rigidity. A pitch of 240mm makes it strongest deck profile in its class.

Material

Multi Steel Floor Panel is produced from Galvanized steel Z275 (zinc 275gm/m²) and ZAM 150 (Zinc Aluminium Magnesium coated steel from Nisshin Steel, Japan) with the option of Color Coated Galvanized Steel produced in the thickness 0.8mm, 1mm and 1.2mm. Available in steel grade 240 – 350 mpa

Multicolor Steels recommends use of ZAM steel which has life 3-4 times more than galvanized coated steel.



Multi-Steel Deck 51S

STEEL FLOOR DECK PROFILES	Yield Strength of steel	Thickness to consider	Weight		I _{xx} (cm⁴)/m	Z _{xx} (cm³)/m		Moment capacity at Top compression flange	Moment capacity at Bottom compression flange
			cover width	Running length		Top	Bottom		
	MPa	mm	kg/m²	kg/Rm				kNm/m	kNm/m
Multi-Steel Deck™ 51 S 1. Coil Width:1000mm 2. Cover Width:720mm 3. Thickness: 0.80-1.20mm 4. Steel Grade: 240-350MPa 5. Metallic Coating: ZAM150, Z120, Z275 6. Color Coating (Optional): Polyester, SMP, PVDF2	240	0.80	8.722	6.28	47.790	16.454	19.458	3.556	3.440
		1.00	10.903	7.85	56.905	19.471	23.022	4.370	4.287
		1.20	13.083	9.42	66.300	22.978	27.140	4.966	5.099
	350	0.80	8.722	6.28	47.790	16.454	19.458	4.886	4.710
		1.00	10.903	7.85	56.905	19.471	23.022	6.377	6.130
		1.20	13.083	9.42	66.300	22.978	27.140	7.525	7.300

Multi-Steel Deck™ 51-L

Structural Steel composite Floor System

The Strength

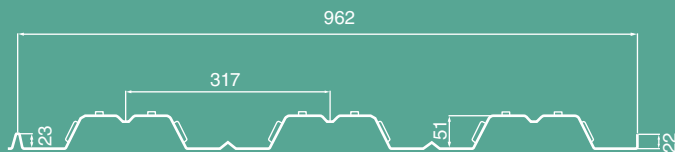
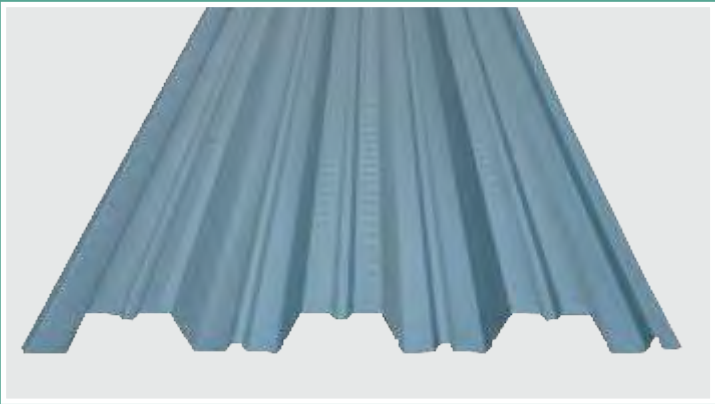
Multi Steel Floor Deck Panels; 51mm deep crest at 317mm distances having special embossment, rolled in to the profile created the highest bond between concrete and the steel floor, together with the smaller ribs and flutes enhances our product's composite action rigidity.

Material

Multi Steel Floor Panel is produced from Galvanized steel Z275 (zinc 275gm/m²) and ZAM 150 (Zinc Aluminium Magnesium coated steel from Nisshin Steel, Japan) with the option of Color Coated Galvanized Steel produced in the thickness 0.8mm, 1mm and 1.2mm. Available in steel grade 240 – 550 mpa

Multicolor Steels recommends use of ZAM steel which has life 3-4 times more than galvanized coated steel.

Multicolor steels recommends use minimum 550 mpa steel for better strength



Multi-Steel Deck 51-L

Material Specification					Sectional Properties				
STEEL FLOOR DECK PROFILES	Yield Strength of steel	Thickness to consider	Weight		I _{xx} (cm ⁴)/m	Z _{xx} (cm ³)/m		Moment capacity at Top compression flange	Moment capacity at Bottom compression flange
			cover width	Running length					
	MPa	mm	kg/m ²	kg/Rm		Top	Bottom	kNm/m	kNm/m
Multi-Steel Deck™ 51 L 1. Coil Width : 1220 mm 2. Cover Width : 962 mm 3. Thickness : 0.80 - 1.20 mm 4. Steel Grade : 240, 350 & 550 MPa 5. Metallic Coating : ZAM 150, Z 120, Z 275 6. Color Coating (Optional) : Polyster, SMP, PVDF2	240	0.80	7.964	7.66	44.485	16.961	17.543	3.082	3.243
		1.00	9.955	9.58	55.207	21.206	21.714	4.254	4.397
		1.20	11.946	11.49	65.754	25.023	25.802	5.418	5.390
	350	0.80	7.964	7.66	44.485	16.961	17.543	4.227	4.379
		1.00	9.955	9.58	55.207	21.206	21.714	5.920	6.007
		1.20	11.946	11.49	65.754	25.023	25.802	7.616	7.703
	550	0.80	7.964	7.66	44.485	16.961	17.543	5.966	6.485
		1.00	9.955	9.58	55.207	21.206	21.714	8.324	8.880
		1.20	11.946	11.49	65.754	25.023	25.802	10.810	11.280

Burly Deck (44/130)

Structural Steel composite Floor System

STEEL FLOOR SYSTEM

The Strength

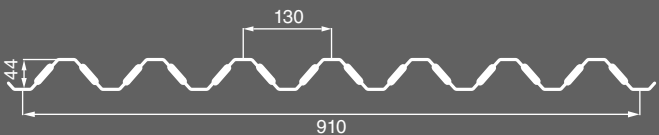
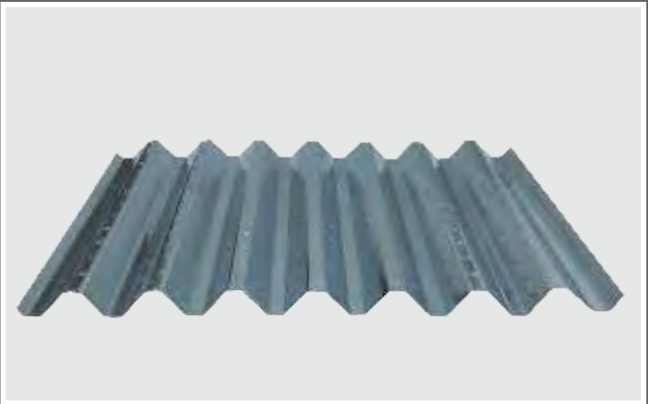
Multi Steel Floor Deck Panels; 44mm deep crest at 130mm distances having special embossment, rolled in to the profile created the highest bond between concrete and the steel floor, together with the smaller ribs and flutes enhances our product's composite action rigidity.

Material

Multi Steel Floor Panel is produced from Galvanized steel Z275 (zinc 275gm/m²) and ZAM 150 (Zinc Aluminium Magnesium coated steel from Nisshin Steel, Japan) with the option of Color Coated Galvanized Steel produced in the thickness 0.8mm, 1mm and 1.6mm. Available in steel grade 240 – 550 Mpa

Multicolor Steels recommends use of ZAM steel which has life 3-4 times more than galvanized coated steel.

Multicolor steels recommends use of minimum 550 MPa steel for better strength



Burly Deck 44/130

Material Specification					Sectional Properties				
STEEL FLOOR DECK PROFILES	Yield Strength of steel	Thickness to consider	Weight		I _{xx} (cm ⁴)/m	Z _{xx} (cm ³)/m		Moment capacity at Top compression flange	Moment capacity at Bottom compression flange
			cover width	Running Length					
	MPa	mm	kg/m ²	kg/Rm		Top	Bottom	kNm/m	kNm/m
Burly Deck (44/130) 1. Coil Width : 1220 mm 2. Cover Width : 910 mm 3. Thickness : 0.80 - 1.60 mm 4. Steel Grade : 240 - 550 MPa 5. Metallic Coating : ZAM 150, Z 120, Z 275 6. Color Coating (Optional) : Polyster, SMP, PVDF2	240	0.80	8.419	7.66	26.028	12.143	11.269	2.567	2.569
		1.00	10.524	9.58	32.345	15.041	13.964	3.184	3.184
		1.20	12.629	11.49	38.588	17.887	16.613	3.788	3.788
		1.50	15.786	14.37	47.817	22.059	20.501	4.673	4.673
	340	1.60	16.839	15.32	50.858	23.423	21.773	4.964	4.964
		0.80	8.419	7.66	26.028	12.143	11.269	3.678	3.690
		1.00	10.524	9.58	32.345	15.041	13.964	4.573	4.573
		1.20	12.629	11.49	38.588	17.887	16.613	5.440	5.440
		1.50	15.786	14.37	47.817	22.059	20.501	6.713	6.713
	550	1.60	16.839	15.32	50.858	23.423	21.773	7.131	7.131
		0.80	8.419	7.66	26.028	12.143	11.269	5.857	5.855
		1.00	10.524	9.58	32.345	15.041	13.964	7.291	7.291
		1.20	12.629	11.49	38.588	17.887	16.613	8.697	8.697

ZAP-Deck 88

Structural Steel Composite Floor System

STEEL FLOOR SYSTEM

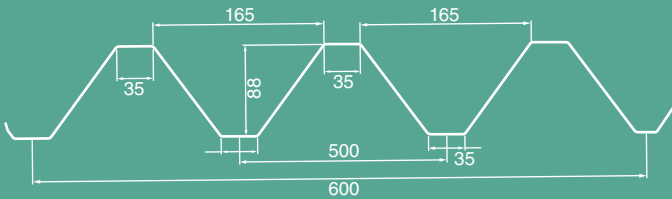
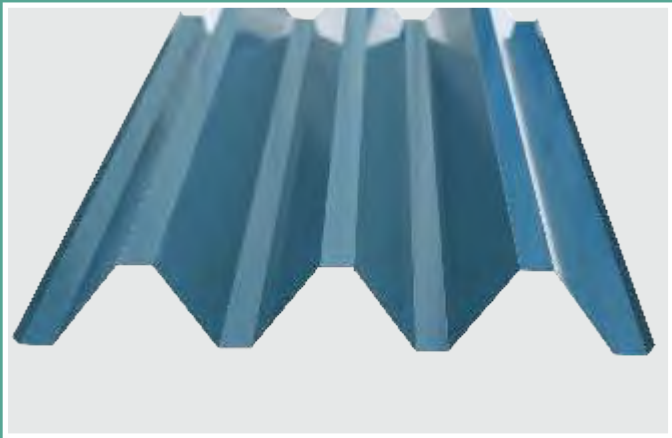
The Strength

Multi Steel Floor Deck Panels with 88mm deep crest at 200mm distances makes it strong composite deck panel.

Material

Multi Steel Floor Panel is produced from Galvanized steel Z275 (zinc 275gm/m²) and ZAM 150 (Zinc Aluminium Magnesium coated steel from Nisshin Steel, Japan) with the option of Color Coated Galvanized Steel produced in the thickness 0.8mm, 1mm and 1.2mm. Available in steel grade 240 – 350 MPa

Multicolor Steels recommends use of ZAM steel which has life 3-4 times more than galvanized coated steel.



ZAP-Deck 88

Material Specification					Sectional Properties				
STEEL FLOOR DECK PROFILES	Yield Strength of steel	Thickness to consider	Weight		I _{xx} (cm ⁴)/m	Z _{xx} (cm ³)/m		Moment capacity at Top compression flange	Moment capacity at Bottom compression flange
			cover width	Running length		Top	Bottom		
Zap-Deck 88 1. Coil Width : 914 mm 2. Cover Width : 600 mm 3. Thickness : 0.80 - 1.20 mm 4. Steel Grade : 240 - 350 MPa 5. Metallic Coating : ZAM 150, Z 120, Z 275 6. Color Coating (Optional) : Polyester, SMP, PVDF2	MPa	mm	kg/m ²	kg/Rm ²					
		0.80	9.567	5.74	110.388	26.993	23.665	5.389	5.395
		1.00	11.958	7.17	137.419	33.548	29.429	6.709	6.709
	350	1.20	14.350	8.61	164.228	40.028	35.131	8.009	8.009
		0.80	9.567	5.74	110.388	26.993	23.665	7.671	7.189
		1.00	11.958	7.17	137.419	33.548	29.429	9.633	9.633
		1.20	14.350	8.61	164.228	40.028	35.131	11.504	11.504



NATURAL VENTILATION SYSTEM



Wall Ventilation

Roof Ventilation

Multi-Louvers™

Wall Ventilation System

Natural Ventilation System

DETAILS

Multicolor™ Steels provides a complete modern approach for walls by providing healthy working environment desirable for worker comfort and productivity, an efficient ventilation system - Multi Louvers. Framed Louvers are designed to provide water resistance against all weather conditions.

The design acts to actively filter water from air. The air passage is designed to move water droplets to the LOUVER surfaces, where they are drained.

COLORS

The FRAME LOUVER vents are aesthetically pleasing and available in a range of finishes and colors to match or contrast adjoining materials.

ADVANTAGES

- Easily installs into end walls for increased ventilation which will eliminate condensation and maximize air circulation
- The color coating or Galvalume gives them a long lasting and aesthetic property
- These are technically designed to be made available in customized lengths and ready for installation
- The Louvers allow fresh air to come inside and prevent the entry of dust and rain water

KEY FEATURES

- It has excellent water and dust resistance
- Easy Installation and maintenance free
- Technically designed available in customized lengths
- Long Lasting - ten Years performance warranty
- The Louvers allow fresh air to come inside and prevent the entry of dust and rain water
- Removes dampness and humidity
- Corrosion free
- 24 Hours fresh air keeps workers active & healthy
- Available in Galvanized, Galvalume or Color coated forms

BENEFITS

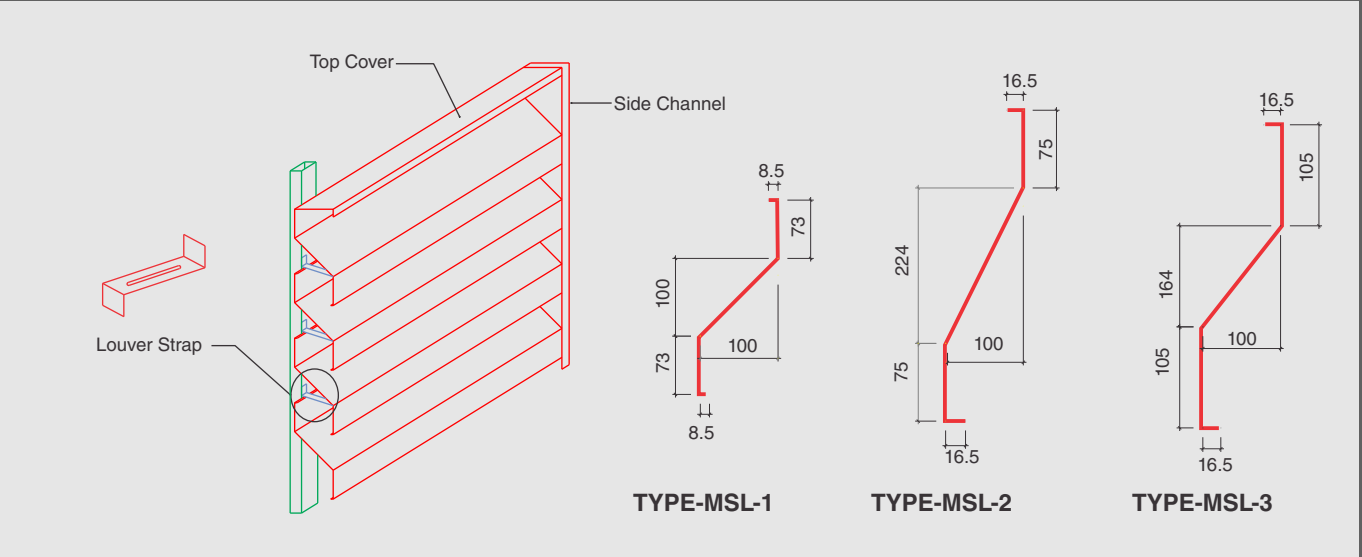
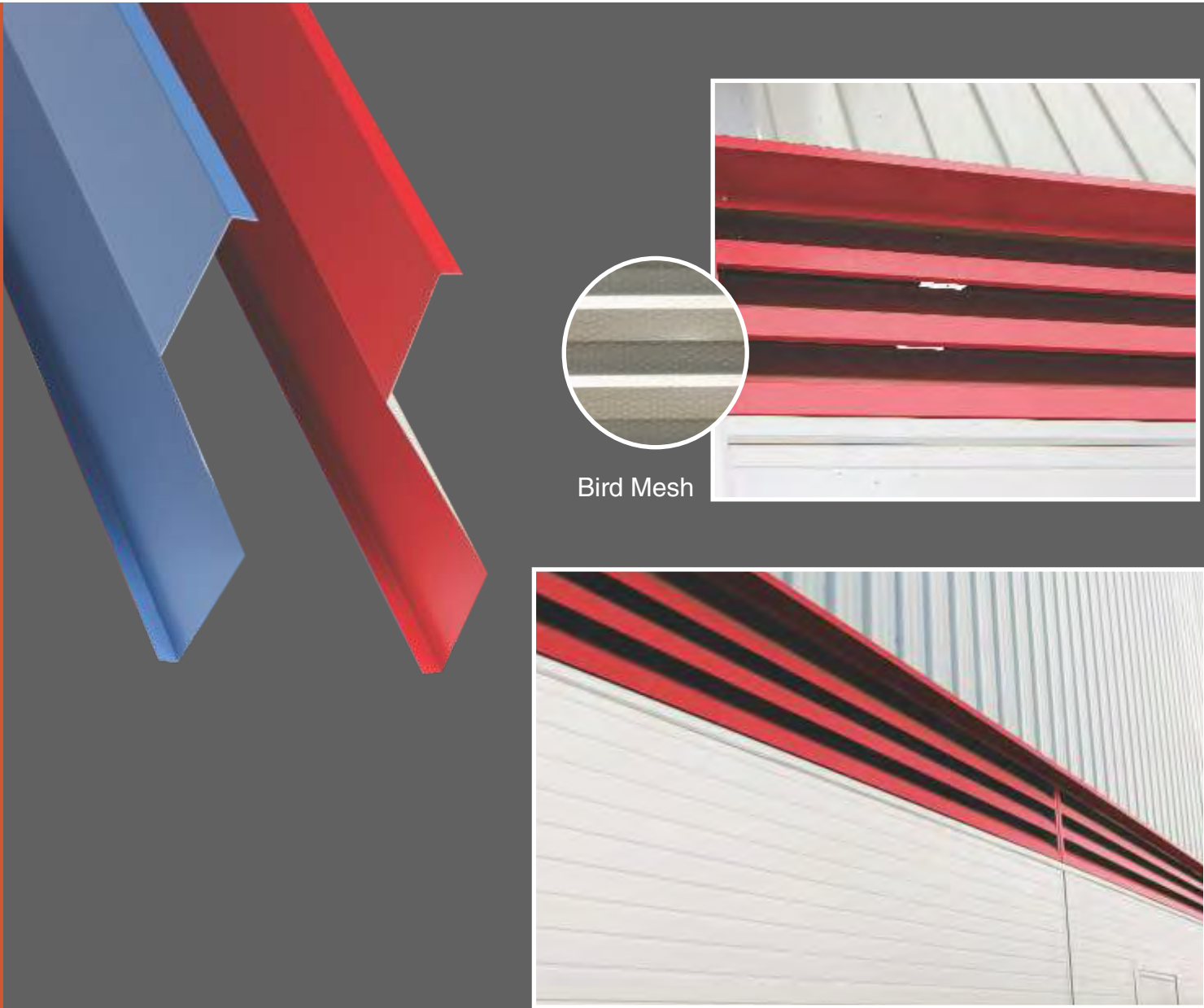
No Operational Costs: Louvers provide ventilation effect without the consumption of electric power.

Reduced Power Costs: Proper ventilation provides a cooler, low humidity working environment, which reduces the need for costly air conditioning or industrial fans.

Reduced Maintenance Costs: The maintenance cost is drastically reduced as they are fixed and have no rotating parts.

COMMON USES

Multi-Louvers for walls are meant for warehouses, factories and workshops, Gyms, Tennis courts, Assembly halls, garages, toilets, laundries etc.



Multi-Vent™

Wind Driven Roof Ventilation System

Natural Ventilation System

Details

Multicolor™ Steels has introduced a wind driven natural Ventilation system with a motive to expel hot, humid and moisture laden air from industrial buildings to give a more comfortable clean working environment replacing summer heat and winter damp with fresh air.

Wind Driven Ventilators is manufactured from rust-resistant, lightweight galvanized steel. It has been designed to meet AS2428.1-1993 to wind speeds of 200 km/hr and to the entry of wind driven rain at a range of 2.5L/sec, under cyclonic conditions.

Using only the power of wind, Wind Driven Industrial Ventilators silently draw hot, damp and stagnant air from the building, replacing it with clean, fresh air - all year round.... Without any maintenance costs. It will also extract deadly smoke and fumes from the building, allowing occupants a much better chance of escaping safely.

ADVANTAGES

- Installation on new or existing roof is a simple process as the metal base can be shaped on site to any roof profile
- In case of any difference in thermal and wind pressure, the turbine head and ball bearings help the ventilator to rotate freely providing natural ventilation
- It is corrosion resistant giving ruggedness to the structure. The variable pitch throat makes it possible to be fixed at any roof pitch
- Its storm proof feature enables rain water to drain through without spilling into turbine

KEY FEATURES

- Maintenance free and rotates freely due to the permanently lubricated bearing system
- Easy to handle and install with a variable pitch base, fitting all tile, metal and fiber cement roofs with pitches upto 45°
- Long Lasting - 10 years performance warranty
- Removes dampness and humidity
- 24 hour fresh air keeps workers active and healthy

BENEFITS

No Operating Costs: As the Multi-Vent System, is a self contained wind powered design, there are no operational costs incurred.

Reduced Power Costs: Proper ventilation provides a cooler, low humidity working environment, which reduces the need for costly air conditioning or industrial fans.

Reduced Installation Costs: Due to the versatility of the variable pitch throat, installation costs are reduced as one unit fits most industrial application (00 to 22.50).

Income Tax Benefit: Multi-vents are 100% depreciable under Income tax laws giving huge benefits.

Reduced Maintenance Costs: Rising damp & humidity causes corrosion of building structures, painted surface, metal fittings and electrical wiring. Proper ventilation eliminates these problems.

COMMON USES

Multi-Vent roof ventilation system is meant for warehouses, factories and workshops, Gyms, Tennis courts, Assembly halls, garages, toilets, laundries etc.

Calculating How many VENTILATORS

- Determine the volume (VOL) of the building in cubic meters. (Length x Width x Height)
- Dependent on the building type, select the required Air Changes (A/C) per hour, from the table below
- From local authority records, determine the typical wind sped, 6, 8, 10,12 or 16 km/h. This will establish the exhaust capacity M3 per hour (Refer Table)
- Calculate No. of Ventilators = VOL x A/C

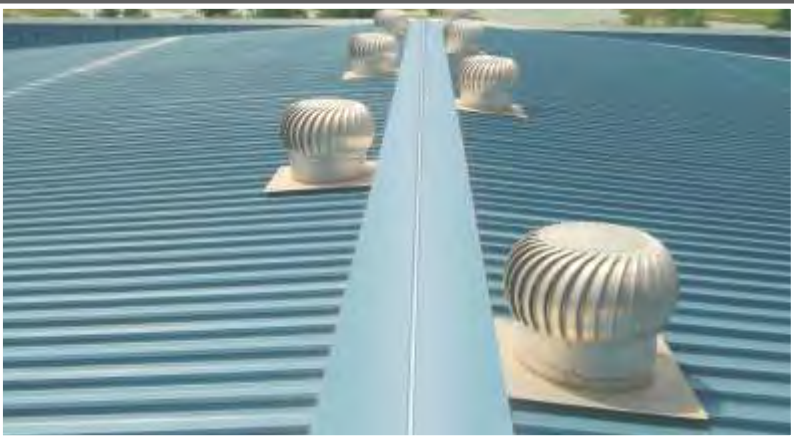
Exhaust Capacity M³/hr

Recommended Air Changes(A/C)For Various Building Types	
Building Type	Recommended Air Changes Per Hour
Warehouses	3 to 5
Factories & Workshops	3 to 8
Gyms, Tennis & Squash Courts	3 to 8
Assembly Halls	6 to 12
Garages	6 to 12
Toilets	7 to 12
Laundries	7 to 15
Stables, Piggeries & Poultry Houses	7 to 15

Recommended Tender Specifications: Multi-Vent™

Supply and erection of Multi-Vent™ roof vent:

- Made of high performance aluminum
- Construction designed to meet AS 2428,1,1993 to wind speeds of 200 Km/hr and to the entry of wind driven rain at a range of 2.5L/sec, under cyclone conditions
- Having diameter of 500mm
- Having base plate and variable pitch throat for better positioning of the ventilator



Ridge Ventilators

Roof Ridge Ventilator

Natural Ventilation System

MRV-235 & MRV-465

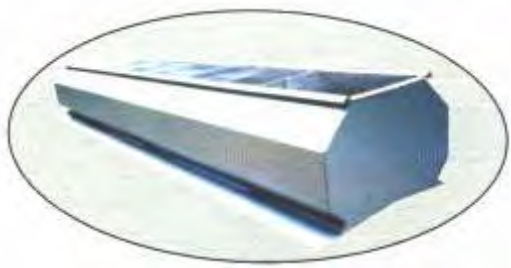
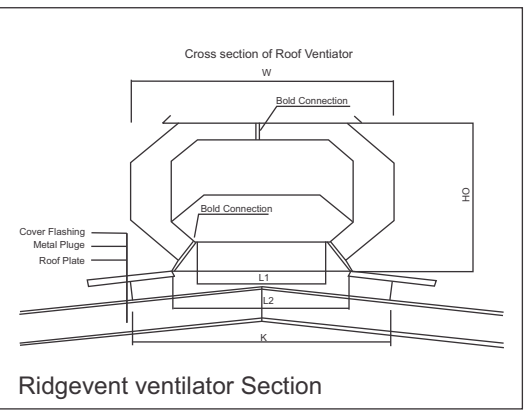
It is the best choice of workshop roofs with pleasant looking, strong capability of waterproof, high-standardized manufacturing and unique design, which could meet demands of a variety of users. It is coefficient of resistance is 1.65 or less than 1.65.

Moreover, world-class techniques are employed to enhance the performance.

It has been tested by related international organizations with satisfactory results. Compared with traditional skylights, its finished air changes more quickly. Moreover, it has a better performance in preventing rain penetration and air change capacity than skylight.

It has been applied in a wide range of areas, like oil, chemical, metallurgical, electric, machinery, textile and building material industry.

These are light weighted, integrated packing and easy transportation, easy installation, waterproof, safe and friendly using, applicable to different kinds of workshops (it could be manual or powered according to user's specific requirements).



(mm) Dimensions							
Model	Throat L1	Height H0	Width W	Length L	Ridge Width L2	Purlin Space K	Weight Kg/Unit
MRV-235	235	390	560	3000	355	600	56
MRV-315	315	530	750	3000	475	790	66
MRV-385	385	630	920	3000	575	960	85
MRV-465	465	760	1120	3000	695	1160	115
MRV-545	545	890	1300	3000	815	1340	145
MRV-615	615	1030	1480	3000	925	1520	175

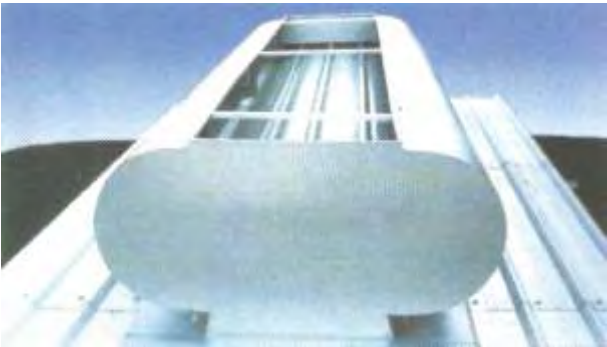
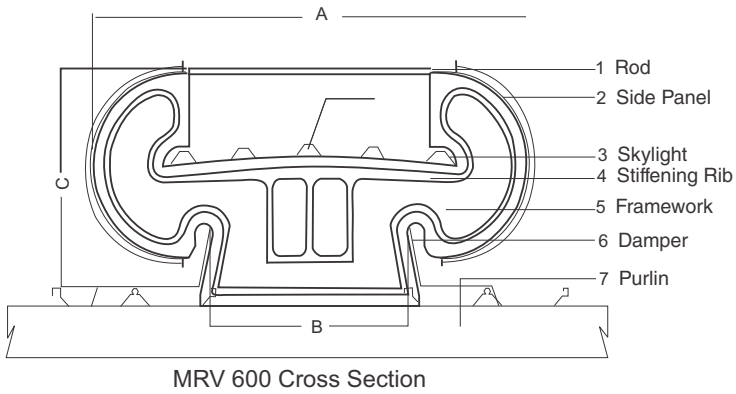
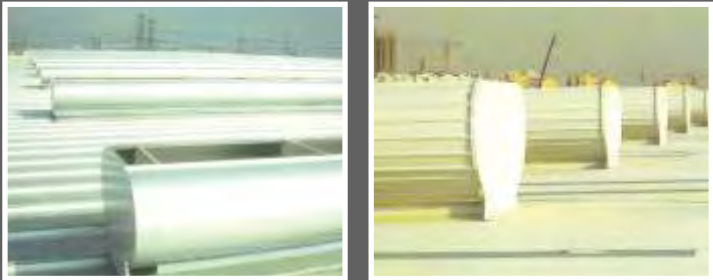
Roof Slope Ventilators with Sky Light

Natural Ventilation System

MRV-600, MRV-750 & MRV 900

It parallels with the roof with an arc edge and combines the functions of ventilation and lighting. The integrated inside part out of one mold only has the advantages such as high strength, easy installation, good looking, which is suitable for a variety of workshops with high requirements for lighting and ventilation.

(mm) Dimensions						
Model	(A) Throat	(C) Height	(B) Width	Length	(kg/m) Weight	H
MRV-600	560	630	1200	-	56	620-900
MRV-750	750	890	1620	-	65	750-900
MRV-900	900	950	1750	-	73	900-1200



Mutli CEE & Multi ZED

High strength Purlins

Secondary Structural Sections



Multi-Cee & Zed Purlins are structural members designed and produced using advanced technology, quality and customer oriented services for use as secondary supports for economical roof sheeting and wall cladding systems in any type of building with following added advantages :-

- Continuous splay or splicing for better Structural Strength, Stability & Economy.
- 45° Lip for better sectional modulus and easy nesting. These are supplied in required length with pre-punched holes for quick bolting. The system gives an excellent strength to weight ratio with flexibility for specific size requirement

Surface Treatment

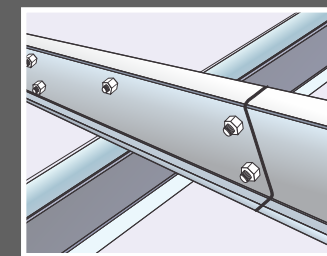
Multi-Zed and Multi-Cee made of Hot Rolled Coils are degreased, phosphated and then primer finished with Zinc Chromate Red Oxide Paint- matching test requirement of IS : 4777 and IS : 2074.

Special Treatment to combat severe atmosphere corrosion can be offered.

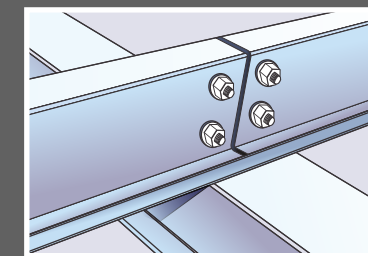
Multicolor Offers Cee & Zed in Galvanised coated Steel in 120GSM / 175GSM / 275 GSM Coating per customer requirement for high corrosion environment.

SYSTEM OF CONNECTIONS

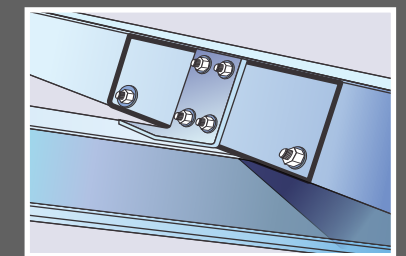
There are three systems of connections based on design of purlin and its connections:



Overlapping



Butt Connection



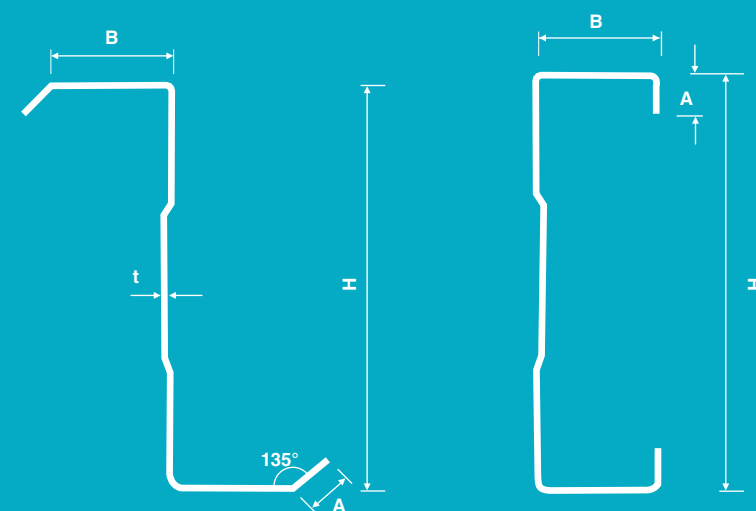
Sleeve Connection

Intelligent Roll Forming

Multi-Zed and Multi-Cee are Roll Formed using High Quality machine with online measuring, cutting, punching and Forming to give Best Quality Product.

Benefits

1. Saving in steel up to 40%
2. Saving in construction cost up to 30%
3. Light Weight reduces handling and transportation cost
4. Sections are supplied in exact length and pre-punched holes, there by reducing wastage of steel and fabrication cost
5. Saving in construction time
6. Close tolerances on sectional dimensions due to process of cold roll forming
7. Economy due to reduction in dead weight on the main frame structure
8. Ability to span long lengths
9. Fast to erect and easy handling
10. Assured dimensions and straightness
11. No site drilling/cutting required
12. Tailor made section lengths lead to no wastage and speedy erection
13. Multicolor offers ZAM® steel which has life 3-4 times more than galvanized coated steel.



Technical Specification Available on Request

H	B	A	t
90	45	15	1.6-2.0
100	45	15	1.6-2.0
100	50	20	1.6-2.0
120	50	20	2.0-2.5
120	60	20	2.0-2.5
140	50	20	2.0-2.5
140	60	20	2.0-2.5
160	60	20	2.0-2.5
160	70	20	2.0-2.5
180	60	20	2.0-2.8
180	70	20	2.0-2.8
200	70	20	2.0-2.8
200	80	20	2.5-3.0
220	70	20	2.5-3.0
220	80	20	2.5-3.0
250	70	20	2.5-3.0
250	80	20	2.5-3.0
300	70	20	2.5-3.0
300	80	20	2.5-3.0
350	80	20	2.5-3.0

All dimensions are in millimeter

Mutli CEE

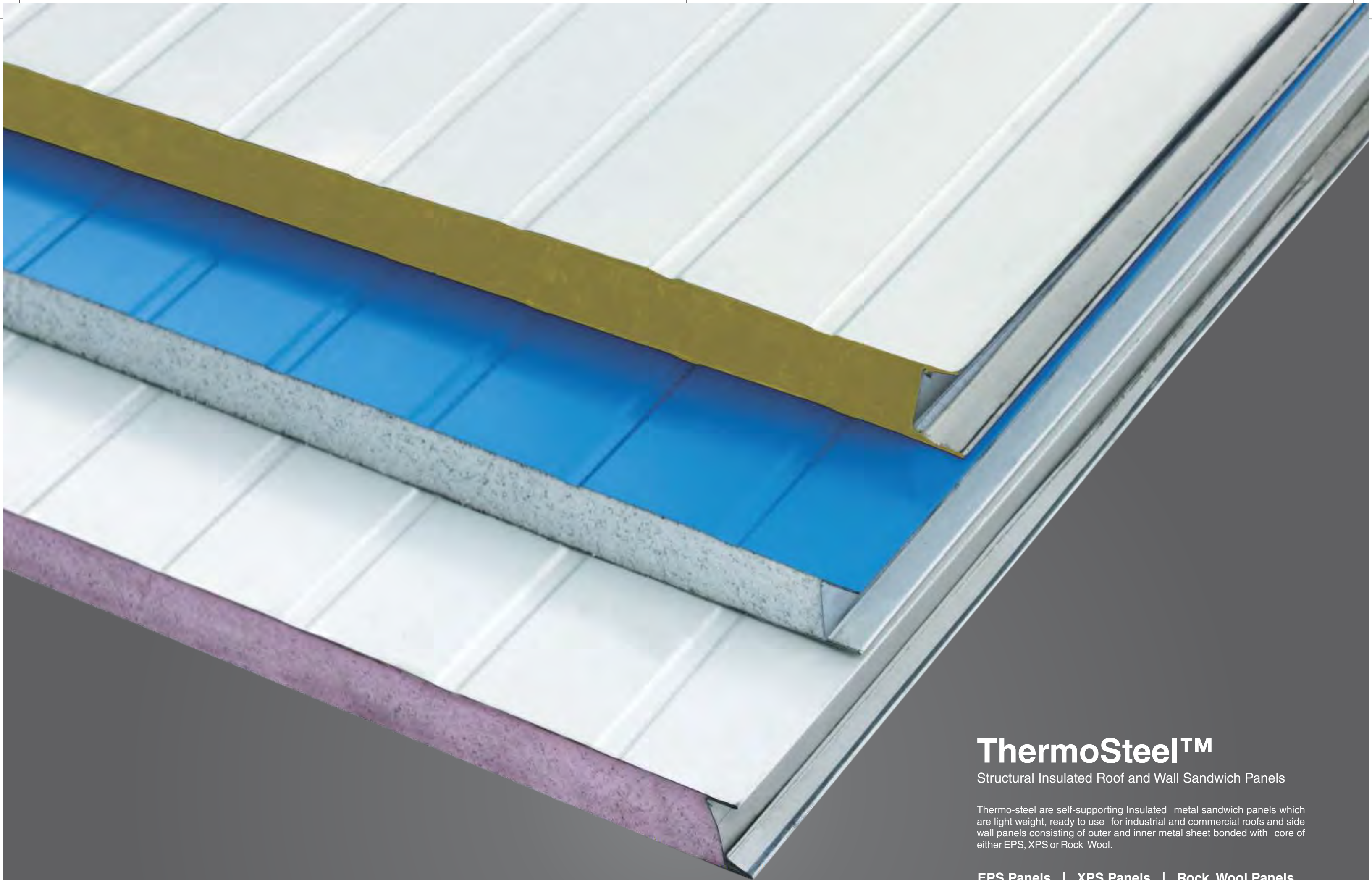
High strength Purlins

C-SECTION	Thickness to consider (TCT)	Weight	I _{xx}	I _{yy}	Z _{xx}
			(cm ⁴)	(cm ⁴)	(cm ³)
	mm	Kg/Rm			
C200X64x20	1.6	4.45	345.2753	31.7654	34.528
C200X64x20	1.75	4.87	376.0785	34.4649	37.608
C200X64x20	1.8	5.01	386.2875	35.3546	38.629
C200X64x20	1.9	5.27	406.6173	37.1186	40.662
C200X64x20	2	5.55	426.8299	38.8624	42.683
C200X64x20	2.3	6.32	486.7682	43.9737	48.677
C200X64x20	2.5	6.86	526.1464	47.2824	52.615
C200X64x20	2.8	7.7	584.3491	52.0999	58.435
C200X64x20	3	8.12	622.5773	55.2157	62.258
C220X64x20	1.6	4.71	432.2535	32.6706	39.296
C220X64x20	1.75	5.15	470.9135	35.4471	42.81
C220X64x20	1.8	5.25	483.7304	36.3621	43.975
C220X64x20	1.9	5.6	509.2587	38.1763	46.296
C220X64x20	2	5.88	534.6475	39.9699	48.604
C220X64x20	2.3	6.68	609.98	45.2269	55.453
C220X64x20	2.5	7.26	659.5091	48.6299	59.955
C220X64x20	2.8	8.02	732.7716	53.5846	66.616
C220X64x20	3	8.59	780.9284	56.7893	70.993
C250X80x20	1.6	5.53	664.6119	57.9993	53.169
C250X80x20	1.75	6.05	724.4576	63.0114	57.957
C250X80x20	1.8	6.22	744.3137	64.6664	59.545
C250X80x20	1.9	6.56	783.8868	67.9529	62.711
C250X80x20	2	6.9	823.2754	71.2083	65.862
C250X80x20	2.3	7.85	940.3353	80.7889	75.227
C250X80x20	2.5	8.54	1017.4583	87.023	81.397
C250X80x20	2.8	9.56	1131.7738	96.1479	90.542
C250X80x20	3	10.13	1207.0754	102.082	96.566
C300X80x20	2	7.62	1266.6336	74.9201	84.442
C300X80x20	2.3	8.75	1447.6517	84.9987	96.51
C300X80x20	2.5	9.42	1567.0457	91.5564	104.47
C300X80x20	2.8	10.55	1744.2222	101.1551	116.281
C300X80x20	3	11.19	1861.0662	107.3971	124.071
C350X80x20	2.5	10.5	2268.5522	95.2458	129.632
C350X80x20	2.8	11.76	2526.3088	105.2276	144.361
C350X80x20	3	12.49	2696.4468	111.7184	154.083

Multi ZED

High strength Purlins

Z-SECTION	Thickness to consider (TCT)	Weight	I _{xx}	I _{yy}	Z _{xx}	
			(cm ⁴)	(cm ⁴)	(cm ³)	
	mm	Kg/Rm			Top	Bottom
Z200X64x20	1.6	4.45	356.2244	59.3834	35.4290	35.8180
Z200X64x20	1.75	4.87	388.3779	64.6283	39.0510	44.3700
Z200X64x20	1.8	5.01	399.0492	66.3647	39.6880	40.1240
Z200X64x20	1.9	5.27	420.3215	69.8193	41.8040	42.2630
Z200X64x20	2	5.55	441.5009	73.2523	43.9100	44.3930
Z200X64x20	2.3	6.32	504.4837	83.4010	50.1740	50.7260
Z200X64x20	2.5	6.86	546.0113	90.0509	54.3040	54.9020
Z200X64x20	2.8	7.7	607.6159	99.8517	60.4300	61.0960
Z200X64x20	3	8.12	648.2304	106.2707	64.4690	65.1810
Z220X64x20	1.6	4.71	445.2606	59.3848	40.2700	40.6890
Z220X64x20	1.75	5.15	485.5407	64.6298	43.9130	44.3700
Z220X64x20	1.8	5.29	498.9123	66.3664	45.1220	45.5920
Z220X64x20	1.9	5.6	525.5731	69.8213	47.5330	48.0280
Z220X64x20	2	5.88	552.1248	73.2523	49.9340	50.4550
Z220X64x20	2.3	6.68	631.1233	83.4039	57.0790	57.6740
Z220X64x20	2.5	7.26	683.2455	90.0546	61.7920	62.4370
Z220X64x20	3	8.59	811.6618	106.2764	73.4050	74.1730
Z250X64x20	1.6	5.53	681.0235	101.7617	54.2400	54.7260
Z250X64x20	1.75	6.05	742.9389	110.8390	59.1710	59.7010
Z250X64x20	1.8	6.22	763.5048	113.8475	60.8090	61.3540
Z250X64x20	1.9	6.56	804.5274	119.8388	64.0760	64.6510
Z250X80x20	2	6.9	845.4051	125.7953	67.3320	67.9360
Z250X80x20	2.3	7.85	967.1713	143.4607	77.0290	77.7210
Z250X80x20	2.5	8.54	1047.6291	155.0683	83.4370	84.1870
Z250X80x20	2.8	9.56	1167.2417	172.2267	92.9630	93.7990
Z250X80x20	3	10.13	1246.2705	183.4988	99.2570	100.1500
Z300X80x20	2	7.62	1297.6921	125.8004	86.1670	86.8620
Z300X80x20	2.3	8.75	1485.4322	143.4681	98.6320	99.4290
Z300X80x20	2.5	9.72	1609.6036	155.0769	106.8770	107.7410
Z300X80x20	2.8	10.55	1794.3848	172.2383	119.1460	120.1100
Z300X80x20	3	11.19	1916.5920	183.5128	127.2600	128.2900
Z350X80X20	2.5	10.5	2325.5794	155.0853	132.4060	133.3780
Z350X80X20	2.8	11.76	2593.6614	172.2492	147.6680	148.7540
Z350X80X20	3	12.49	2771.0950	183.5268	157.7700	158.9310



ThermoSteel™

Structural Insulated Roof and Wall Sandwich Panels

Thermo-steel are self-supporting Insulated metal sandwich panels which are light weight, ready to use for industrial and commercial roofs and side wall panels consisting of outer and inner metal sheet bonded with core of either EPS, XPS or Rock Wool.

EPS Panels | XPS Panels | Rock Wool Panels

ThermoSteel™

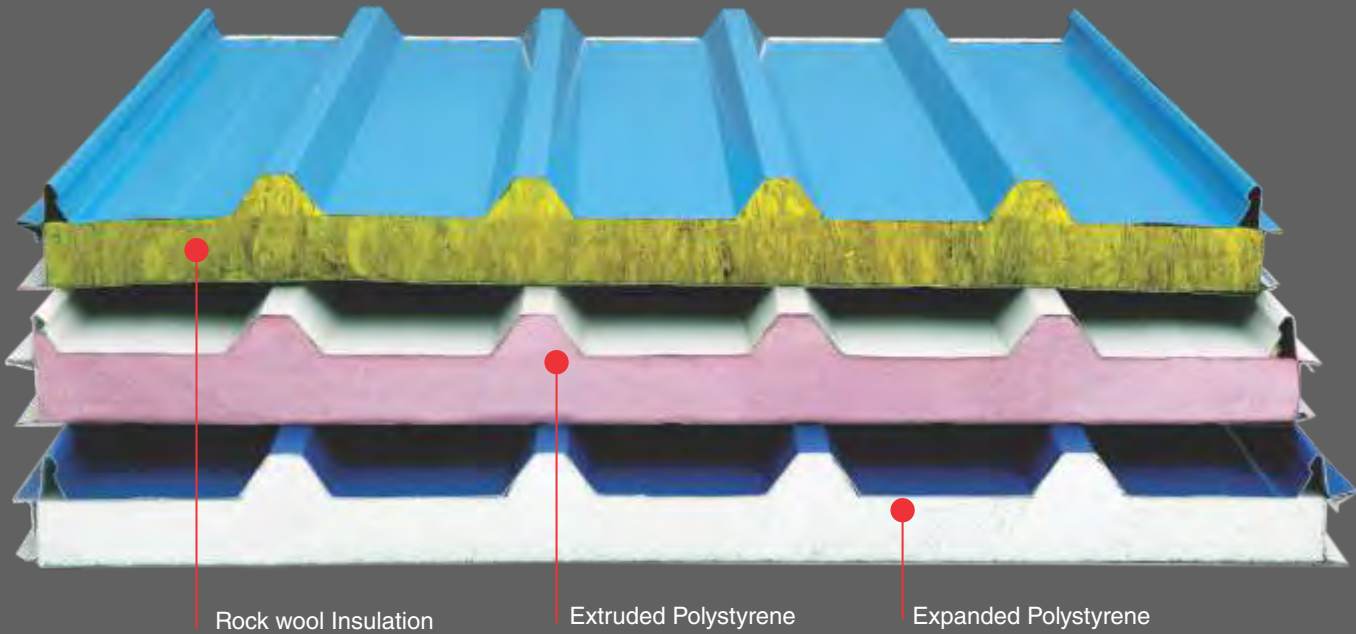
Structural Insulated Roof and Wall Sandwich Panels



Roof and Walls of the Building made of ThermoSteel Rock Wool Panel

Panel Specification: ThermoSteel-Roof	
Outer sheet	Trapezoidal color coated (0.40mm-0.6mm) steel/aluminum
Inner sheet	Plain/Ribbed color coated (0.40mm-0.6mm) steel/aluminum
Insulation	Fire retardant EPS/XPS/Mineral wool
Width	950 mm
Length	As per customers requirement-1 to 13 meters
Thickness	50-150mm
Weight	9-14 Kg m ²
Products and Specification are subject to change	

Roof Sandwich Panels

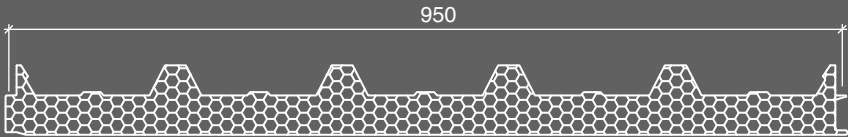


Roof panel consist of top trapezoidal sheet and bottom sheet with light profiled ribs with core of insulation.

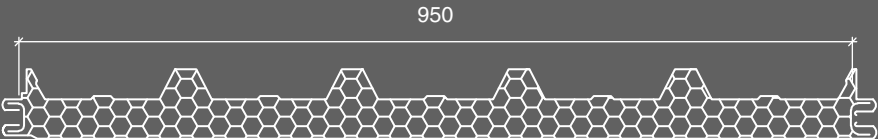
This product has a unique joint for side lap with concealed fastening system supported by in-built Channels. The joint is covered by clip flashing. The roof has no hole or fasteners making it leak proof and good looking.

ThermoSteel™ - Roof Structural Insulated Sandwich Roof Panel

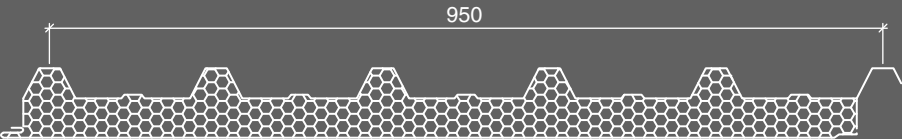
(a) Hidden Screw ThermoSteel™ - Roof Panel HS-950



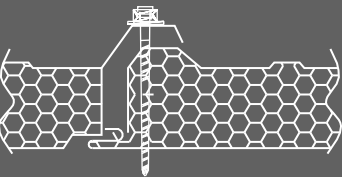
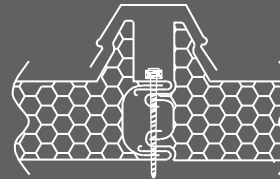
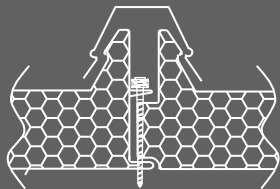
(b) Hidden Screw ThermoSteel™ - Roof Panel with side channels HSC-950



(c) Screw Down ThermoSteel™ - Roof Panel HSC-950



Side Lap



ThermoSteel™

Structural Insulated Roof & Wall Sandwich Panels

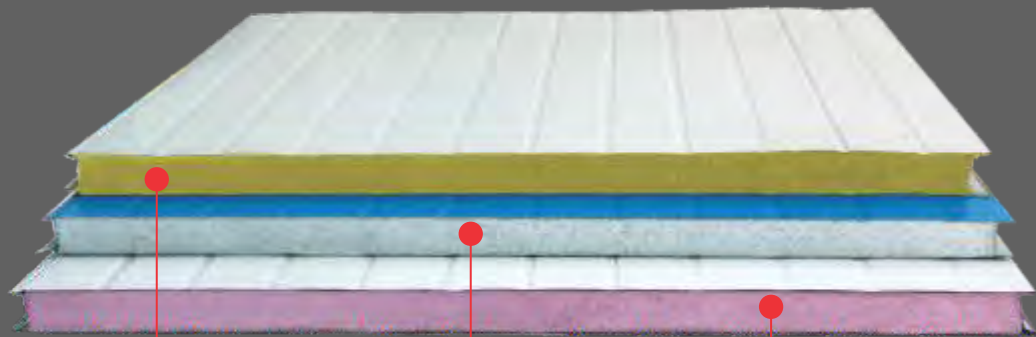


Three Storey Building

Sandwich Panel Walls instead of Brick walls

Panel Specification : ThermoSteel-Wall	
Outer sheet	Plain/ribbed or light profile made of color coated steel (0.4-0.6mm) /aluminum
Inner sheet	Plain/ribbed made of color coated steel (0.4-0.6mm)/ aluminum
Insulation	Fire retardant EPS/XPS/Mineral Wool
Width	1170 mm
Length	Easily transportable length up to 13 meters
Thickness	50-200mm
Weight	9-13 Kg m ²
Products and Specifications are subject to change	

Wall Sandwich Panels



Rock wool Insulation Extruded Polystyrene Expanded Polystyrene

Wall panel consist of top and bottom sheet with light profiled ribs with core of insulation. It has easy to fit male-female joints supported by in-built C channels.

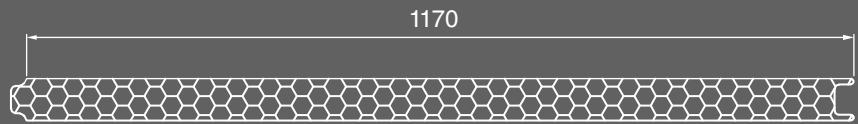
Thermo-Steel Wall Panels HS-1170 has special concealed fastening system with top side reverse deep rib profile giving aesthetic looks to the building.

These panels can be used in the walls in horizontal as well as vertical position. Can also be used in partitions and false ceilings.

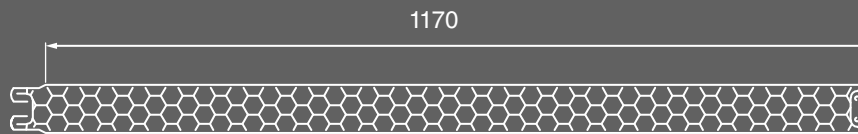


Corner Finish

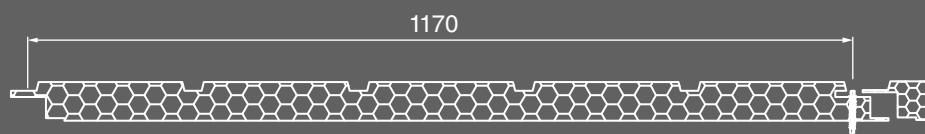
ThermoSteel™ Wall Structural Insulated Sandwich Wall and Partition Panels



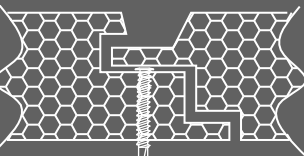
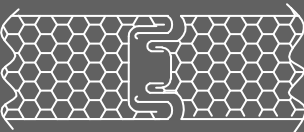
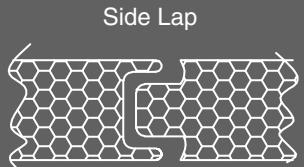
(a) Tongue and groove ThermoSteel™ Wall Panel TG-1170



(a) Tongue and groove ThermoSteel™ Wall Panel With Side Channel TGC-1170



(c) Hidden Screw ThermoSteel™ Wall Panel HS-1170



Guard-Hut™

Movable Cabins

Portable Buildings

Multicolor Steels offer a range of Pre-fabricated, ready to use Buildings in modular form for immediate plug & play uses at Project sites as well as for other applications. These are Metal Buildings of modules of different sizes and configurations which can be quickly modified to suit various applications.

We have developed two formats which can be tailored to suit client needs. We do maintain raw stock of such built up units for quick customization, finishing and shipping within a week of confirmed order. However, because of high demand from our existing customers, availability from ready stock is subject to prior sales.

Gurad-Hut™ Sleek

MODEL	Guard-Hut™ Sleek
SIZE	Length - 4ft, Width - 4ft, Height - 7.6 ft
BODY	Galvanized Steel Structure/Frame with High tensile Color coated Steel Roof & Side walls
FLOOR	Al. Chequered Plate.
DOOR & WINDOWS	Al. with Glass
ROOF VENTILATORS	MV-300 Wind Driven, Al. Body (Optional)



Gurad-Hut™ Super

MODEL	Guard-Hut™ Super
SIZE	Length - 8ft, Width - 6ft, Height - 7.6 ft
BODY	Galvanized Steel Structure/Frame with High tensile Color coated Steel Roof & Side walls
FLOOR	Al. Chequered Plate.
DOOR & WINDOWS	Al. with Glass
ROOF VENTILATORS	MV-500 Wind Driven, Al. Body (Optional)



Steel-Cab™

Movable Cabins

Portable Buildings



Details
Modular Building made of pre coated steel sheets and thermally insulated with EPS. It has strength of steel, good looking, light weight and have very effective heat and sound insulation.

Width: 3000mm, **Length:-**6000 - 12000mm (Approx), **Height:-** 2800mm

Walls: Made of pre-fabricated EPS sandwich panel 100 mm thick. Outer & inner having pre coated light profile sheet & core of EPS. The panels have snap on male-female joints for tight fixing panels and supported on steel floor with U channel

Roof: Made of pre-fabricated EPS sandwich panel with outer sheet pre coated trapezoidal profile & inner plain with core of EPS in 80mm thickness.

Doors Size: Width: 1170mm, height: 2000mm 1 No. (Per requirement)

Window Size: Height: 1100mm x 1100mm x 1100mm = 3Nos.

Floor: Base of the floor will be made of steel members over which wooden planks will be fitted as floor. The wooden planks are covered by waterproof vinyl flooring.

Frame Structure: All the wall, roof and floor panels are supported by Steel frame structure such that floor level is 300mm above the ground level. The roof has four hooks for ease of lifting by crane.

Electrical Points: All Hidden wiring is provided with the provision of point for A/C, Light and Fan.

A slightly larger, metal Cabin with Insulated Walls and Roof, Doors & Windows, Electrical cabling and distribution points as well as fittings is offered in 2 sizes; 20 ft & 40 ft , self contained in ready built form to primarily serve as a Site Office which is the prime need before a project construction starts. The module is equipped with lifting hooks and can be moved from site to site, and be made ready for use within an hour of arrival at site.

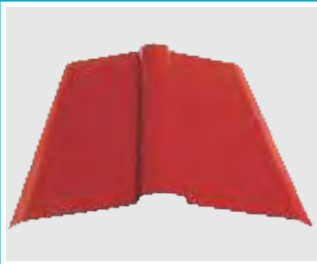
Can be provided in any size on demand



Flashing Components



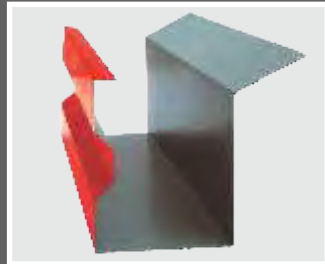
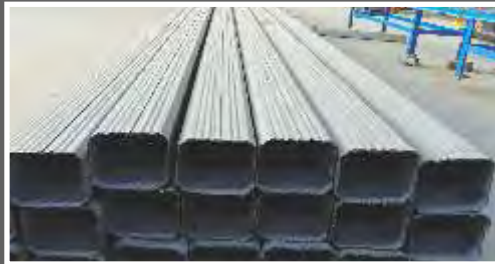
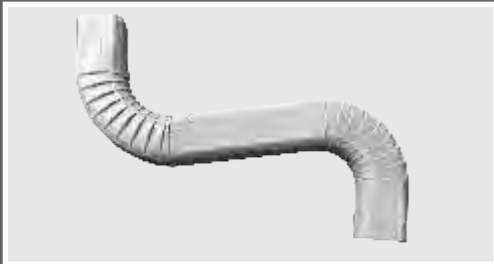
Manufactured on CNC Machines



Multicolor Steels designs and provides wide range of standard and tailor made flashing components for all types of metal buildings. These are manufactured on CNC bending and roll forming machines to any required shapes which can be used to enhance the architectural imagery of the building.

Available in variety of colors in thicknesses ranging from 0.40 mm to 1 mm in materials like pre-painted galvanized, pre-painted galvalume, bare galvalume, aluminium etc.

Gutter and Downtake Pipes



Downtake Pipes package has been designed to make installation very easy for gutter height of 12 m. The package includes all components needed for installation and they come in a single package, ensuring safe delivery. Our down pipe package includes:

Offers metal Downtake Pipes made out of 550 mpa color coated galvalume material. Length can be according to the customer's requirement.

These products are designed at our ultra-modern manufacturing unit using the superb quality material and progressive technology, in conformance with defined quality standards. Being a quality-oriented organization, we assure

our clients that these products are excellent on counts of durability and quality.

Features:

- Sturdy structure
- Excellent strength
- Easy to install

Our offered range is manufactured by utilizing optimum quality raw material and advanced technology by our skilled professionals. In order to ensure quality, these products are rigorously tested on various parameters. In tune with international standards we provide the entire range in various sizes and designs, as per the ever-evolving requirement of our clients.

Multi-Lite™

Natural Light Solution For Roof and Walls



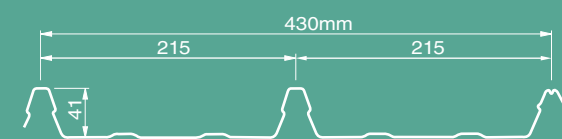
We provide polycarbonate sheet in matching all our profile along with complete fixing accessories for water tight fixing.

We provide rigid polycarbonate transparent roof glazing sheets in required length matching all our profiles made out of best quality Lexan polycarbonate sheets from Sabic. Excellent light transmission between 50%-92% depending on thickness.

We recommend to use both side UV Coated polycarbonate sheets.

Multicolor recommends 2mm thick-embossed sheets for roof and wall.

We provide matching FRP in 2-3mm thick to suit light diffusion classification Type II for moderately diffusing and minimum total light transmission as per IS:12866:1989



Our Projects

The following pages illustrate some of our projects. We have covered more than 50 million sq. ft. of metal roofing and wall cladding system since 1994, covering various types of buildings like:

- Factories
- Warehouses
- Aircraft Hangers
- Auditoriums
- Workshops
- Railway Stations
- Power Plants

Auto Parts Industries



AT - India Auto Parts



Toyota Tsusho India Pvt Ltd



Musashi - Bangalore



Nippon Express-Nimrana



Sanjo-Nimrana



T. I. Industries-Bawal



Jonson Mathey-IMT Manesar

Our Projects



Caparo-Indore

Steel/Aluminium Industries



Vedanta-Orissa



Mark Auto (Maruti Joint Venture)-Gurgaon



Balco-Korba



Jindal-Orissa



Tata Steel- Jamshedpur



TISCO-Jamshedpur



SMS Forge Shop- Hajira



Aarti Strips-Nepal

Automobile Industries



Hero Cycle- Ludhiana



Allied Strips Ltd- Haryana



Hero Motors-Manesar



Honda Car Factory- Bhiwadi



Maruti Car Factory- Manesar

Our Projects

Infrastructure Industries



Anand Vihar Railway Station- New Delhi



New Delhi Railway Station-New Delhi



Indian Airlines Aircraft Hanger-Delhi



Tis Hazari Metro Station- New Delhi



MOD- Jhansi Railways

Electronic Industries



Areva T&D India Ltd., Baroda



L. G. Electronics Greater Noida



Godrej GE- Mohali



Videcon Group -Baruch

Our Projects

Others



Asahi Glass- Chennai



Haldia Petro Chemical-Haldia



HNG-Kolkata



Navneet Publication-Ahemdabad



KITT Campus- Orissa



Unicharam-Nimrana



Adani Thermal Power Project- Maharashtra