

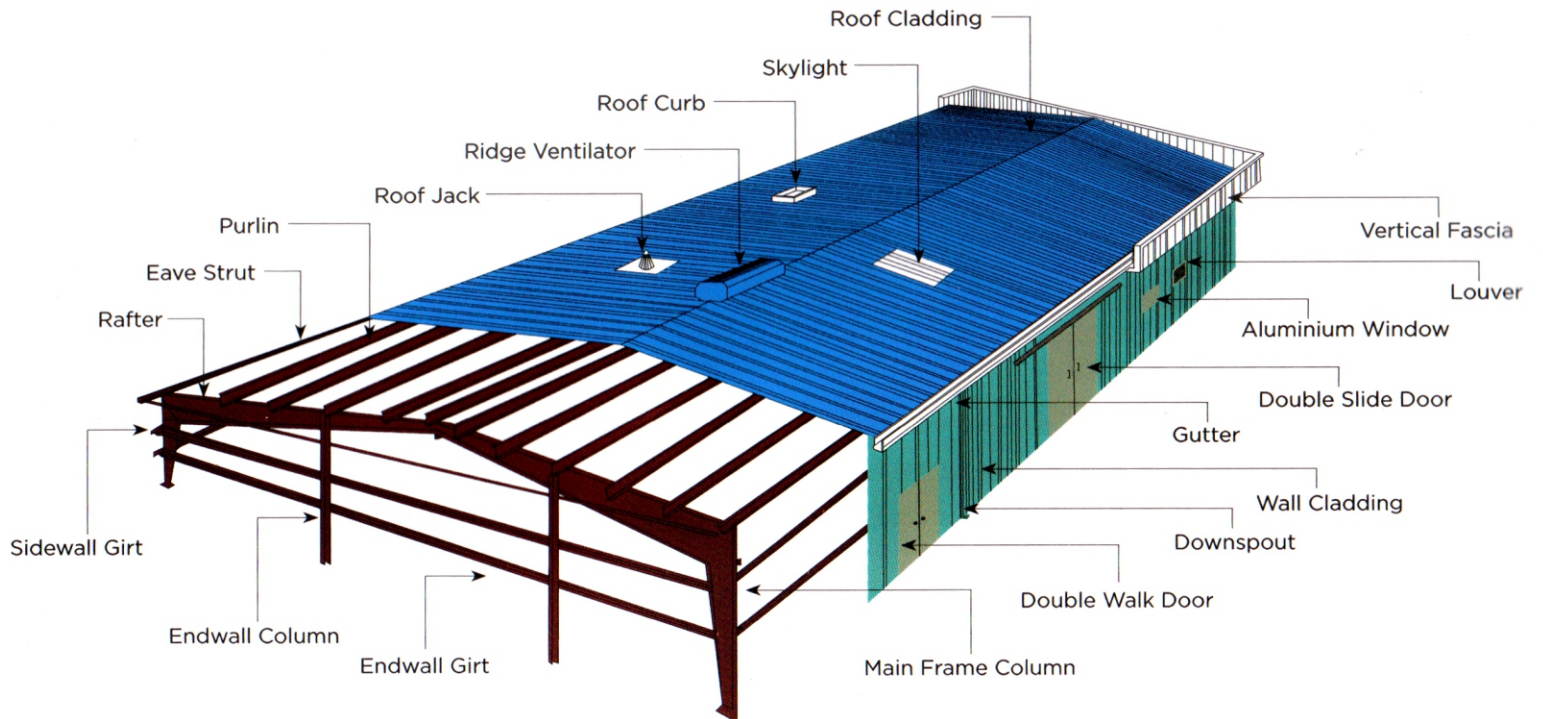
BUILT STRONG TO BUILD STRONGEST

Engineering & Construction



www.orientalpeb.com

PEB GRAPH



WELCOME TO ORIENTAL PEB

Oriental Pre-Engineered Building (PEB) solution are tailor-made to fit the customer's needs and requirements. They offer complete solution from concept to implementation. This mode of construction uses standard section and connection, reducing design time significantly. PEB's are flexible enough to suit different building dimensions as they are expandable, resistant to harsh climatic conditions and come with maintenance-free exteriors.

A SUCCESS STORY, POWERFULLY BUILT!

Oriental Group holds an expertise of 50 years being the largest supplier of Aluminum and Steel products in the country. Oriental Group is noted for delivering quality and durable aluminum roofing sheets, galvalume roofing sheets and steel structurals for decades. Born as Oriental Steel Trunks and Agrico Industries in 1965 as the brain child of the visionary Late VA Mohammed Kunju, it grew into Oriental Metals in 1980. It has been unstoppable since then setting new standards in the industry, which is spearheaded by the Director, MS Mohammed Kutty. The company has a global reach and recognition with its innovation, service excellence and above all quality.

RANGE AND SCOPE

- ☞ High-rise Commercial Buildings
- ☞ Large Span Buildings-Warehouses, Factories, School Buildings, Hostel Buildings, Auditoriums, Stadiums, Supermarkets, Shopping Malls
- ☞ Buildings with Complex Design
- ☞ Residential Buildings-Multi/Single Stories Homes
- ☞ Energy Efficient Building Construction
- ☞ Buildings at Seismic Zone/Hilly Regions/Remote Localities
- ☞ Construction of Lightweight Buildings
- ☞ Fast Track Construction

ADVANTAGES OF PEB

- ☞ Lightweight, Easy to Construct and Eco-friendly
- ☞ Excellent Quality & Quality Control, Unique Aesthetic Appeal
- ☞ Extensive Choice of Layouts
- ☞ Superior Flexibility in Design and Fabrication
- ☞ Economical Construction
- ☞ Immense Strength, Durability and Resilience
- ☞ Easily Transportable and Modular
- ☞ Fire Resistant and Earthquake Resistant
- ☞ Speedy Construction and Implementation



OUR VISION

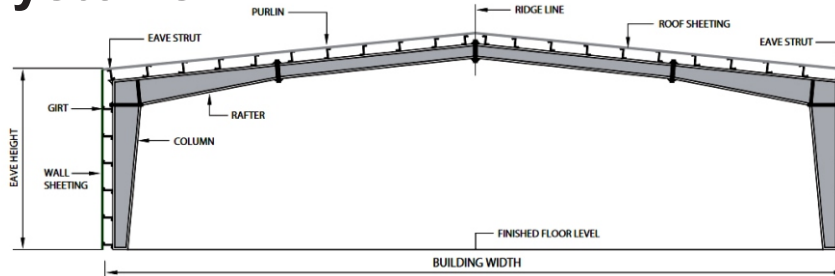
Our vision is to provide infrastructure solutions with cost-effective modes of architecture. The Pre Engineered building including high rise buildings are perfectly designed and implemented according to the customer satisfaction. As a leading steel building manufacturer in India, we strive to improve the overall building concepts with safe, earthquake free and environment-friendly steel buildings. Our experienced and enthusiastic team opens the perfect design with the help of latest technologies. Our aim is 100% customer-centric designing and implementation of steel buildings



OUR MISSION

Oriental PEB is on a mission to improve the quality of Pre Engineered building in India. We will provide customized designs and implement them with perfect care. The quality is assured at each stage of production and it is based on strict values. We also try to make it affordable for a common man to have a dwelling with minimum cost. Our mission will help the society to build an eco-friendly and earthquake resistant buildings.

Structural Systems



Structures are the main load carrying and support members of a pre engineered building. The shape and size vary based on application and requirements. The main frame members are main load carrying member of structural systems which include columns, rafters, and other main support members. All structural steel sections and welded plate members that are designed in accordance with the applicable sections, relating to design requirements and allowable stresses of the latest edition of American Institute of Steel Construction (AISC) Metal Building Manufacturers Association(MBMA) Specification for Design, Fabrication, and Installation of the Structural steel for Buildings.

INDUSTRIAL BUILDINGS

- Design and construction of all types of factory buildings as well as metal structures.
- Construction of buildings and process plant buildings.
- Single or multi storeyed structures for industrial estates, technology parks, production units, bottling plants and factory buildings.
- Facility to design and install integrated personnel and vehicle access doors and other accessories.
- Can set up large fabrication facilities despite space constraints and minimizing cost.



MEZZANINES

A Mezzanine floor is a raised platform between the floor and ceiling of a building. They come in all shapes and sizes and aim to maximize the use of so-called vertical space. They provide additional room above and below and can be built free of existing structures.

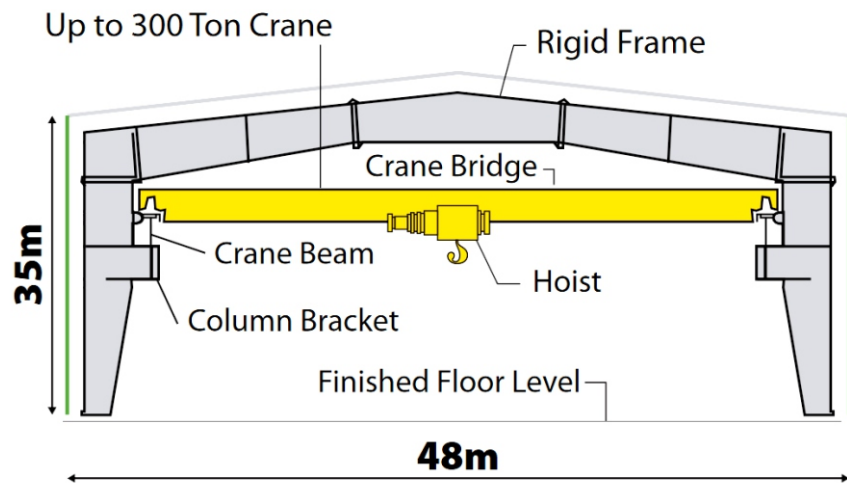
Mezzanines are usually constructed from steel, aluminum or fiberglass and can be tailored to suit their settings. They are made up of beams, purlins, columns and decking, although handrails, pallet gates and staircases are common accessories, sometimes also added to Mezzanines.

Mezzanines are always custom-made, manufactured from detailed drawings and tailored to the needs and specifications of clients. Building the steel frames which supports a Mezzanine takes a degree of skill and although some companies out source their engineering, others choose to employ in house engineers – reducing the overall cost to their customers and keeping their prices competitive.



CRANE BEAMS

Crane beams are members that support the crane girders and facilitate the crane movement. These can be supplied to support the overhead cranes, underslung cranes and monorail cranes. Crane support includes brackets, beams and bracings. Building can be designed to support any required capacity. Generally overhead travelling crane up to 20 Mton are supported on Brackets. For higher capacity independent support system is provided.



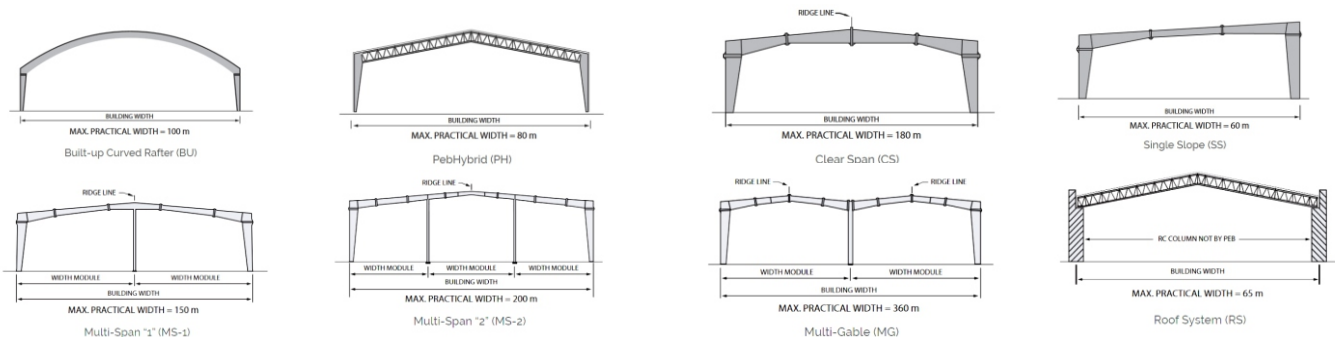
STEEL STRUCTURAL BUILDINGS

- Fully engineered, factory-fabricated high quality structures.
- Lighter than conventional buildings, with minimal steel intake.
- Use of high strength steel.
- Use of high yield strength hot rolled steel sections or hollow sections with maximum steel optimization.
- Cold form steel for light framing system and metal decking system.
- Shot blasted steel framing on par with international standards.
- Shear stud to ensure concrete steel bonding.
- Corrosion resistant priming on steel frames.
- Standard painting on steel of low VOC.
- Fire resistant painting to meet safety standards.
- High strength bolts for primary and secondary framing system.
- Use of eco-friendly materials to achieve high LEED rating.
- Provide complete interface solution for all types of internal and external needs.

Steel structural buildings are structures fabricated with steel for internal support as well as for exterior cladding and are used for purposes of storage, work spaces and for accommodation. Steel structural buildings were accepted by the early 20th century and are classified according to their usage. These buildings become widely accepted due to the cost efficiency and the range of its application improved with materials, products and design capabilities with the availability of CAD software. Common types of steel structural buildings are straight-walled, structural type and are categorized as clear span or multiple spans. Clear span steel structural buildings won't have structural supports in the interior space utilizes large beams and reduce internal supporting columns. This building is cost-effective than the buildings with interior columns.

For applications like agricultural industry, steel arch buildings are used and are very cost effective. Compared to arch buildings straight walled buildings provide more space. These straight walled buildings are commonly used for commercial, industrial and for many other purposes. Long bay buildings utilize prefabricated metal frames combined with beams to give out larger openings and clearances in buildings. Term prefabricated refers to the building portions that are assembled before shipment to site. Simple and small steel structural buildings are easier to be prefabricated or easier to be constructed. While larger steel buildings require expert and proficient workers that ensure proper and safe assembly.

Oriental PEB sustains in moulding and building up the high rise, low rise large span buildings and commercial steel buildings. For these buildings, we use latest design and expertise with advanced software facilities from the concept until the installation. We provide flexible options for customization for the pre-engineered industrial buildings. We design and fabricate at a single source before the erection. These buildings are lighter, durable and resilient because of the efficient use of steel.



HIGH RISE BUILDINGS

For high rise steel buildings latest design and engineering expertise along with advanced software facilitate complete solution, right from concept to installation. Not to mention, efficient material management and flawless transfer procedures.

LOW RISE LARGE - SPAN BUILDINGS

Construction of such buildings are cost-effective and can be done at a fast pace. Because all components are factory-made and can be transported and installed with ease. The most appealing aspects of pre-engineered industrial buildings are the flexibility of options and customization.

COMMERCIAL STEEL BUILDINGS

Oriental Steel Structural Buildings are designed, detailed and fabricated at a single source, before erection Through efficient use of steel, these buildings are considerably lighter, durable and resilient. Add to this, the flexible frames, and as a result, these structures are earthquake resistant too.

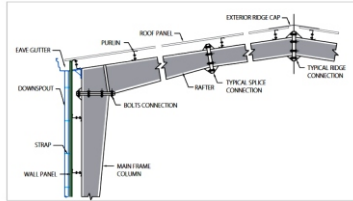


PEB vs CONCRETE

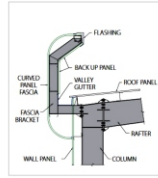
DIFFERENCE BETWEEN PEB AND CONCRETE

Evaluation Criteria	PEB BUILDING	CONCRETE BUILDING	STEEL ADVANTAGE
Fabrication	<ul style="list-style-type: none"> Members fabricated in a controlled environment. Precise fabrication. 	<ul style="list-style-type: none"> Fabrication done on site. Requires building the reinforcement cage and shuttering work prior the to pouring. 	90% saving in fabrication time on site.
Quality	<ul style="list-style-type: none"> It is a homogeneous product. Pieces are tailored according to shop drawings. Precise machinery is used for fabrication. It is fabricated under shop control. The weather has no effect on the quality. 	<p>Many factors lead to quality deterioration</p> <ul style="list-style-type: none"> Concrete is not a homogeneous product. Concrete mix ingredient ratios are difficult to maintain. Quality of water used may vary. Weather conditions. Labor experience in pouring. Adequate use of vibrators. Using proper curing methods. Concrete shrinkage. High manpower count may weaken control. 	Less time is spent to maintain steel quality.
Cost	<ul style="list-style-type: none"> Low manpower count needed. Erection cost is low at the site. 	<ul style="list-style-type: none"> Construction cost is high at the site. 	–
Error Modification	<ul style="list-style-type: none"> Easy to modify on site, even after erection. The modification can be done by cutting, welding or attaching steel pieces. 	<ul style="list-style-type: none"> Have to break concrete if the modification is necessary. 	–
Consistency and Reliability	<ul style="list-style-type: none"> Design assures strength. Steel properties are stable with time. 	<ul style="list-style-type: none"> Strength cannot be guaranteed without testing. Concrete properties may change over time and environmental conditions. 	–

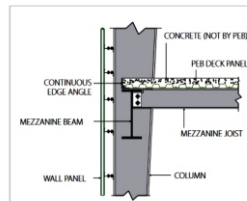
Rigid Frame With By-Pass Girts



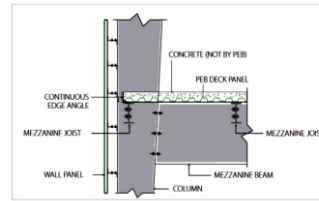
Curved Fascia



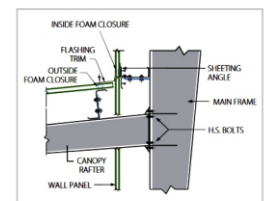
Mezzanine Joist to Beam



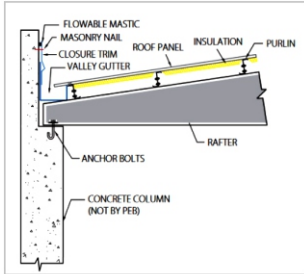
Mezzanine Beam to Main Frame



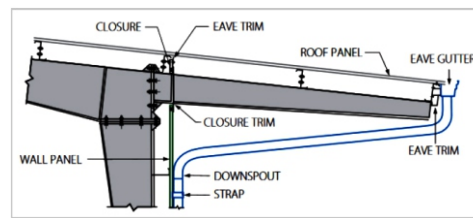
Canopy



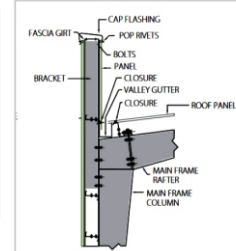
Roof System With Insulation



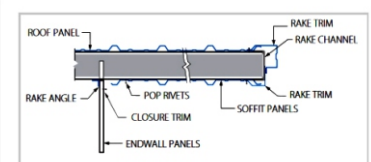
Sidewall Roof Extension



Parapet Fascia



Endwall Roof Extension With soffit



OUR PRODUCTS

1

TOUGH TO THE CORE

Coaster Sigma Purlins

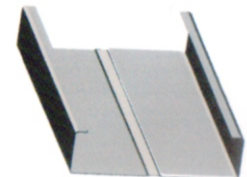
Manufacturing of a complete range of structural C and Z Section purlins and girts for a wide range of application. Made from quality, high-tensile galvanized steel, Coaster Sigma purlins and girts are supplied plain or punched. Produced with high-quality materials and machinery, C Purlins and Z Purlins are available in both GI and MS.C Purlin , Z Purlin and PEB (pre-Engineered Building) plates are available in different shapes and size to meet a wide range of needs without compromising on specific load bearing capacities.

► C - Purlin

Range: 1.6 mm - 3.2 mm
100 x 40 x 15 mm
120 x 45 x 15 mm
150 x 60 x 20 mm
180 x 65 x 20 mm



Range: 1.6 mm - 3.2 mm
200 x 70 x 20 mm
225 x 70 x 20 mm
250 x 70 x 20 mm
300 x 80 x 20 mm



► **Z - Purlin**

Range: 1.6 mm - 3.2 mm
100 x 40 x 15 mm
120 x 45 x 15 mm
150 x 60 x 20 mm
180 x 65 x 20 mm



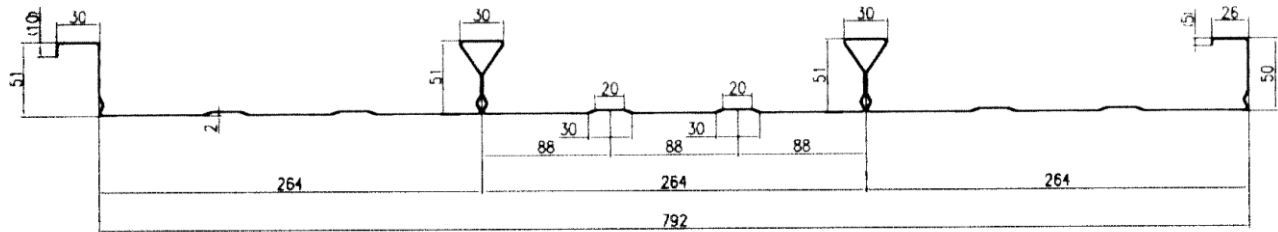
Range: 1.6 mm - 3.2 mm
200 x 70 x 20 mm
225 x 70 x 20 mm
250 x 70 x 20 mm
300 x 80 x 20 mm



ENDURANCE AT ITS BEST

Floor Deck (Decking Sheets)

Decking sheets are flat surfaces or platforms capable of supporting flooring and roofing sheets and are connected to the outer or inner parts of the building structure. These sheets are very helpful in reducing the concentrated loading effect of roofing on the building structures by proper distribution of load. The base materials for manufacturing these sheets are steel, aluminum or alloy. In normal roofing and flooring, decking enables the transfer of the shearing forces and helps to retain the proper structure of roofing. Besides, it offers proper roof safety against leakage, UV ray and cracking. We offer different range of decking sheets and can be customized according to the requirements.

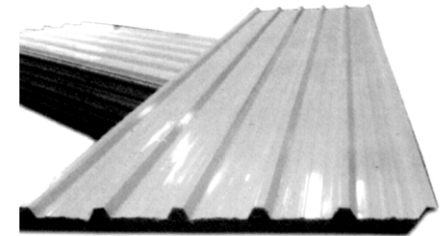


Coil (mm)	Thickness (mm)	Mass (kg/m)	Interia (cm/m)	Positive Resistance	Negative Resistance
1220	0.8	10.22	83.85	17.8	15.23
	0.9	12.26	100.25	21.3	17.05
	1.0	13.62	111.12	28.46	18.87
	1.2	16.35	132.7	28.23	22.46

3

COMPROMISE NO MORE ON SAFETY

PUF Cool Sandwich Panel



Manufactured in compliance with the set industrial norms and guidelines, PUF Cool Sandwich Panels never compromise on quality, High-quality raw materials go into their marking, giving them a commendable structure, superior strength and remarkable longevity. they are widely used for roofing and building walls in several industries

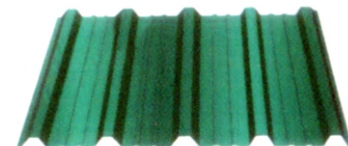
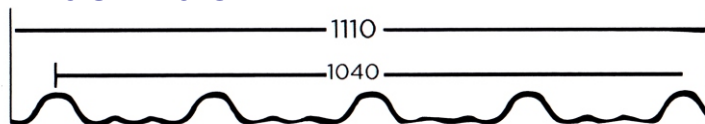
Roof Panel Properties	
PUF Density	$\geq 40\text{kg/m}^3$
Temperature Range	-60° C to +80° C
Panel Width	1080 mm
Panel Length	As per customer requirement
Thickness Range	30 mm 40 mm 50 mm 60 mm 75 mm 100 mm 125 mm 150 mm 175 mm 200 mm 225 mm 250 mm

Wall Cladding Panel Properties	
PUF Density	$\geq 40\text{kg/m}^3$
Temperature Range	-60° C to +80° C
Panel Width	1147 mm
Panel Length	1125 mm
Thickness Range	30 mm 40 mm 50 mm 60 mm 75 mm 100 mm 125 mm 150 mm 175 mm 200 mm 225 mm 250 mm

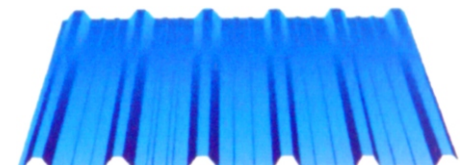
ROOFING SHEET

Alu Zinc (Jsw, Bhusan, Essar, TATA)

Wide Rib 5



Wide Rib 6

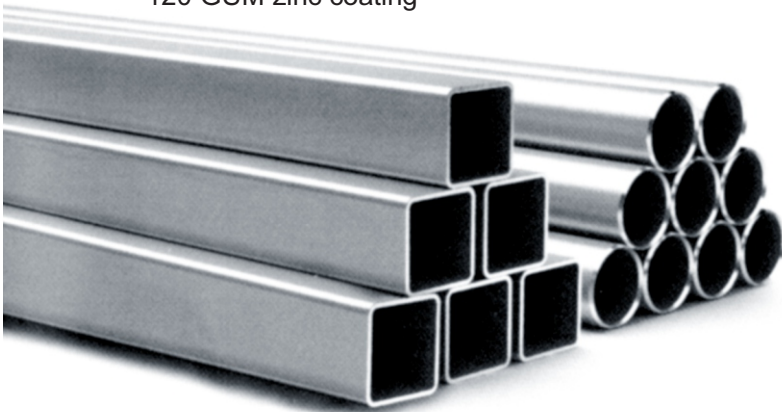


4

STAY STRONG AGAINST ALL ODDS

Hollow Strong

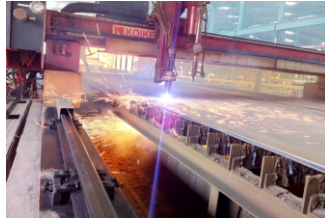
Sturdy, durable and corrosion resistant, Hollow Strong offers superior quality GI, GP and MS pipes in HR & CR Grades with **ISI** Standards. The pipes are available in varied shapes such as square, round and rectangle, and have an average 120 GSM zinc coating



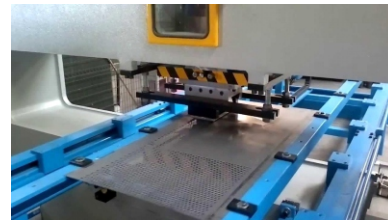
MANUFACTURING PROCESS



CNC Plasma cutting machine



CNC Punching Machine



CNC Hole punching machine



Automatic Continuous
SA welding machine



Welding by pull through machine



MIG Welding for connection
plates & stiffeners



ISO 9001-2015 CERTIFICATION

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