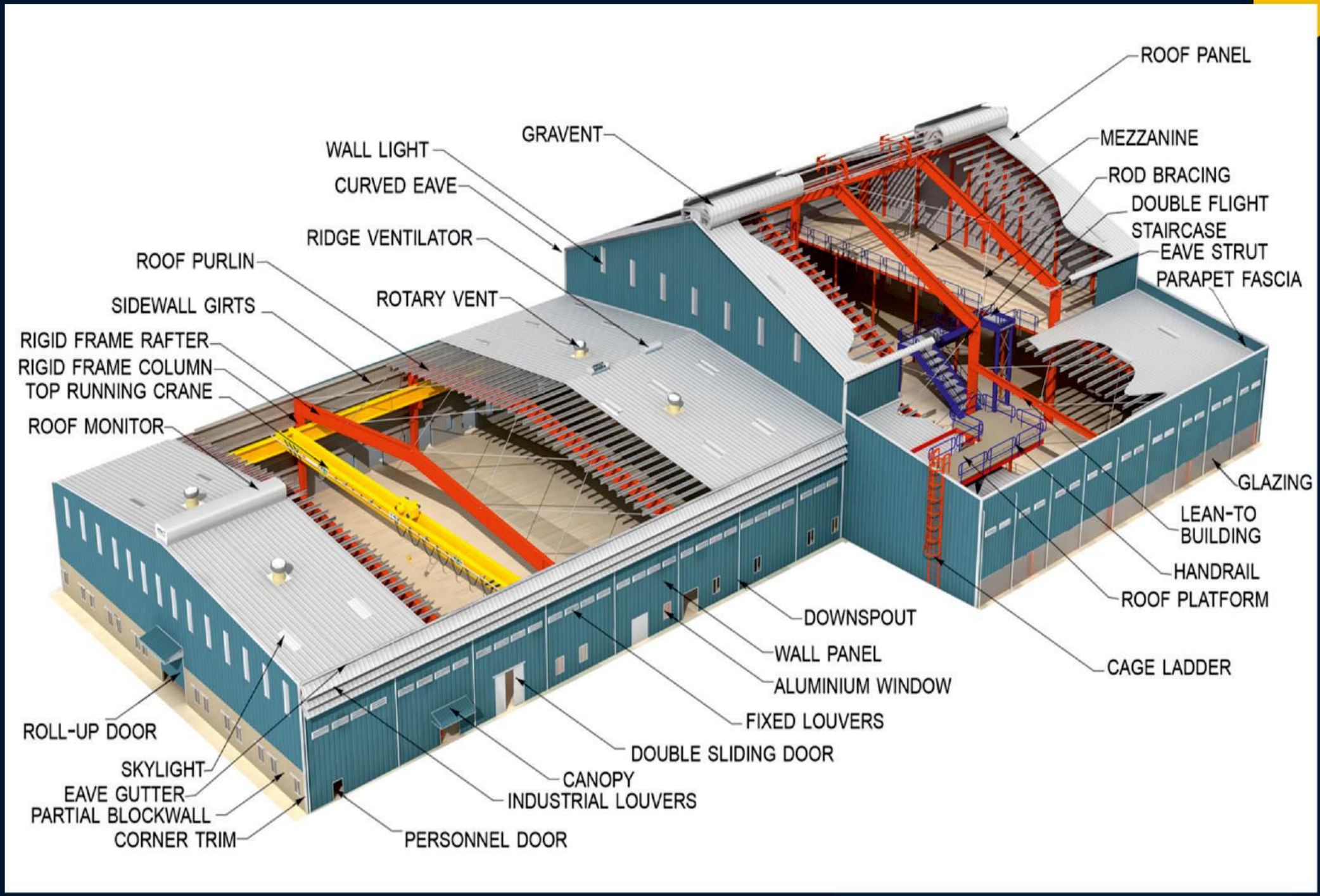
AARUS
Pre-Engineered Building

www.aarus.co.in

A Leading Pre-Engineered Building Manufacturer In Odisha

Industrial **Commercial** **Residential**

aaruspeb aaruspeb @aaruspeb aaruspeb


ROOF PANEL
GRAVENT
MEZZANINE
WALL LIGHT
ROD BRACING
CURVED EAVE
DOUBLE FLIGHT STAIRCASE
RIDGE VENTILATOR
EAVE STRUT
ROOF PURLIN
PARAPET FASCIA
ROTARY VENT
SIDEWALL GIRTS
RIGID FRAME RAFTER
RIGID FRAME COLUMN
TOP RUNNING CRANE
ROOF MONITOR
GLAZING
LEAN-TO BUILDING
HANDRAIL
ROOF PLATFORM
DOWNSPOUT
WALL PANEL
CAGE LADDER
ALUMINIUM WINDOW
FIXED LOUVERS
ROLL-UP DOOR
DOUBLE SLIDING DOOR
SKYLIGHT
CANOPY
EAVE GUTTER
INDUSTRIAL LOUVERS
PARTIAL BLOCKWALL
CORNER TRIM
PERSONNEL DOOR

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Aarus is a leading PEB manufacturing company in Odsiha. We value prompt completion and delivery of the finished product as well as client satisfaction.

We have a wealth of knowledge in this industry, as well as the most up-to-date manufacturing facilities and enough room to handle any volume of work. Prefabricated steel buildings by Aarus are made to meet customer specifications. We offer erection flexibility and speed of delivery in even the most extreme circumstances.

Our goal is to offer a one-stop solution for all building needs. To do this, we provide a variety of products, such as staircases, canopies, cabins and mezzanine floors and rolling shutters with motors. We even accept turnkey projects. We can perform civil work at a very reasonable cost.

Peb structures come with side cladding, huge spans, multiple spans, and lean-to roofs when needed. We can additionally add an EOT crane to the PEB structure if that is what the customer requires. Additionally, Aarus offers a range of accessories like roof vents, louvres, and skylights in addition to insulation.

Our customers can choose from a wide variety of sheet materials, including precoated, gi, fibre, and ac sheets, to fit their needs and budget.

Why Choose Us?

Customer First : We value long-term relationships with our clients and place a high focus on them. We follow through on our promises.

Business Success : We work hard to expand and enhance our companies on a constant basis for the benefit of our investors and ourselves.

Result-driven : We give priority to results. We provide timely, high-quality product delivery.

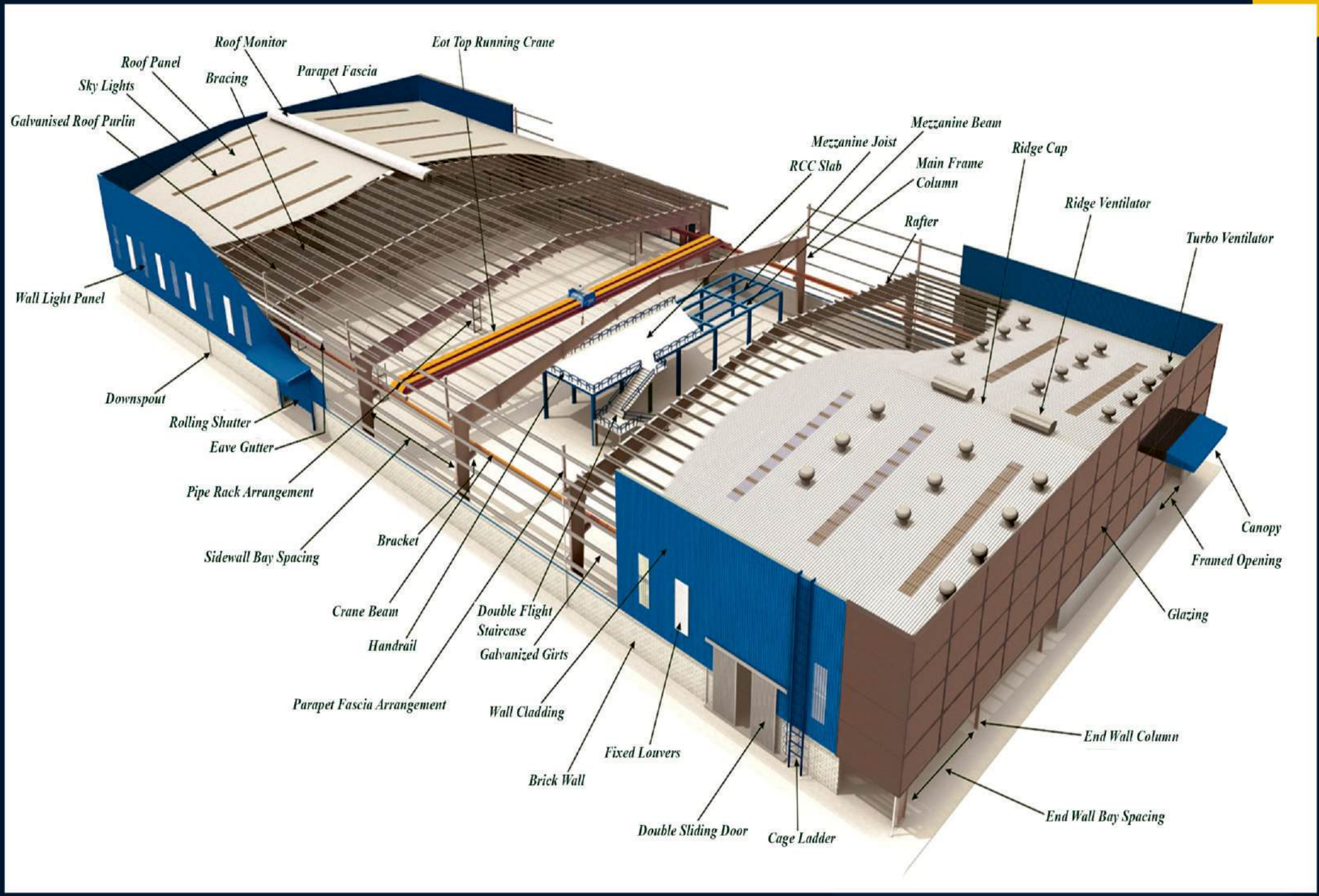
People : We treat each other with respect and care about our people.

Integrity, Honesty, Innovative Thinking and Credibility: The pillars upon which our ideals rest.

Upgrade Technology, Infrastructure and Manufacturing Systems : We periodically update our production processes, infrastructure, and technology to better serve our customers' expectations for quick turnaround times and improved accuracy.

Advantages

- ✔ On-site welding is not necessary. For industries where welding within plants is forbidden, it is extremely safe.
- ✔ The use of prefabricated, self-supporting parts significantly reduces the requirement for shuttering and scaffolding.
- ✔ Buildings are finished sooner and construction takes less time, providing for an earlier return on money.
- ✔ There is less construction on-site.
- ✔ Controlling the quality can be done during the product's manufacture.
- ✔ There is a lesser amount of waste produced.
- ✔ Moulds are used multiple times.
- ✔ Sheds are resellable.
- ✔ It is portable with ease.
- ✔ Better in terms of aesthetics and most affordable


Roof Monitor
Eot Top Running Crane
Roof Panel
Bracing
Parapet Fascia
Sky Lights
Galvanised Roof Purlin
Mezzanine Beam
Mezzanine Joist
Ridge Cap
RCC Slab
Main Frame Column
Ridge Ventilator
Rafter
Turbo Ventilator
Wall Light Panel
Downspout
Rolling Shutter
Eave Gutter
Pipe Rack Arrangement
Sidewall Bay Spacing
Bracket
Crane Beam
Handrail
Double Flight Staircase
Galvanized Girts
Parapet Fascia Arrangement
Wall Cladding
Brick Wall
Fixed Louvers
Double Sliding Door
Cage Ladder
Canopy
Framed Opening
Glazing
End Wall Column
End Wall Bay Spacing

Important Components Of Pre-Engineered Building Structure

The main components of Pre-Engineered Buildings are the connectors, roof and wall sheeting, sheeting fasteners, sealers, closures, flashing and trim for the ridge caps, gutters, and down pouts.

1. Primary Members : The primary structural framing consists of end wall wind columns, lean-to rafters and columns, and transverse rigid frames.

2. Secondary Members : Purlins, grits, eave struts, wind bracing, flange bracing, base angles, clips, and other various structural components are included in secondary structural framing configurations.

3. Paint : All structural members must be cleaned by wire brushing to remove dirt, grease, oil and loose mill scale and applied to the red oxide stop coat, air dying. If more finish painting is needed, it can be included in the Aarus scope.

4. Connections :

- ✔ Bolting is required for all field connections.
- ✔ The high strength bolts used for primary bolted connections must meet ASTM 325 physical specifications or be comparable.
- ✔ The machine bolts used for the secondary bolted connection must meet the physical specifications of ASTM 3207 or an equivalent.

5. Physical Specifications Of Structural Members

- ✔ Flanges and webs connected on one side of the web by a submerged welding method with minimum yield strength of 345 mpa are required for members made of plates.
- ✔ The minimum yield strength required for members made using the so-called forming technique is 345 mpa.
- ✔ The minimum yield strength for members made of hot-rolled structural saves is 250 mpa.
- ✔ The minimum yield strength for angle and rod bracing is 250 mpa.
- ✔ Wall cladding and roof must meet physical requirements and have minimum yield strength of 345 mpa.
- ✔ The minimum yield strength for each of the remaining random secondary members is 250 mpa.

6. Roof sheeting / Wall sheeting : Steel sheeting with a profile of 26 gauge thick, galvalume colour coating or GI colour coating is required for the roof and wall panels. When it comes to pre-painted galvalume panels, the outside face is painted with one mil thick polyester paint that is applied by the factory. Every panel must be either grey or white. On request, additional materials, coatings, and thicknesses are available.

7. Sheeting Fasteners : Self-tapping sheet metal screws with metal and neoprene washers are required as standard fasteners. Every screw must have a hexagon-shaped head.

8. Sealer / Rope Seal : This needs to be put around self-flashing as well as at all side and end laps of roof panels.

9. Ridge Cap : A formed panel that matches the colour, slope, and profile of the material must be strategically placed to cover the peak of a gable roof, which is the point where the two slopes of the roof converge.

10. Flashing and Trim : Trim and/or flashing must be applied at the corners, eaves framed opening, and rake. Furthermore, to provide weathertightness and a polished appearance as desired.

11. Eave Gutters and Down-spouts : The eave gutter is made of galvanised steel that is box-shaped, color-coated and nominally thickened to 0.5 mm (26 gauges). The eaves member's exterior face at a maximum distance of 0.2 metres.

Pre-Engineered Building's Construction and Erection Process

Owner investment in Pre-Engineered Building (PEB) constructions must comprehend the implementation method in order to oversee and constantly monitor the project's advancement.

What is the typical construction procedure for pre-engineered steel buildings? This will be addressed by Aarus.

The Design Drawing of A Pre-Engineered Building

Pre-engineered building drawings must be created from the ground up since they are essential for illustrating the overall structure and all of the project's specifics. Contractors will then offer appropriate solutions for design and construction using the best possible plan.

The pre-engineered building's drawings must show the following elements:

- ✔ The building's structural plans
- ✔ The work's specifications, including dimensions, amounts, and statistics in clear
- ✔ Component and ground plan layout
- ✔ Drawing management

2. Process And Manufacture Pre-Engineered Building (PEB) Components

With accurate measurement data, layout drawings, and detailed design, the next step in the pre-engineered factory construction is processing the material components. It is necessary to absolutely adhere to the principles and data to produce components with correct requirements and measurements.

The component processing steps include cutting, processing gusset plate, assembling, welding, and assembling gusset plate. Finally, clean the structure's surface, then paint layers such as anti-rust, anti-fire, etc. The materials used are all made of steel, corrugated iron, etc., which are capable of insulating heat and is resistant to the effects of climate and weather.

3. Erecting The Pre-Engineered Building's Elements

Builders must have procedures in place to ensure worker safety when assembling pre-engineered building components to finish the job. To support and assemble the materials, supporting equipment is required.

1. Building of The Mainframe

First, put the mainframe together, making sure to install the columns, truss beams, rafter frames, and purlins. It is important that you follow the standards specified in the designs when installing anything. Techniques and equipment assistance are crucial in this process. It is imperative to ensure that the columns are straight and reach a specific height when aligning. The new frame will therefore guarantee stability to support the weight of the entire house.

2. Constructing The Cover and Its Surroundings

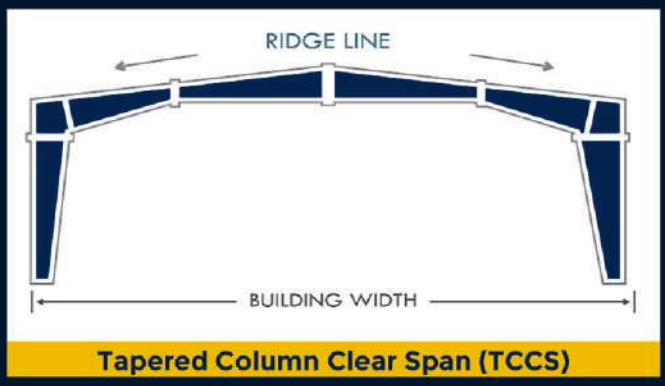
The roof, wall, gutter, etc. are all included in the scope of the work. Utilising sliding pipes, you must draw the corrugated iron sheets onto the roof, secured by iron hooks, during the installation process. To achieve excellent quality and outstanding aesthetics, the panels must be perfectly positioned to close the complete roof from the very beginning of installation.

4. Examining And Handing Over The Work

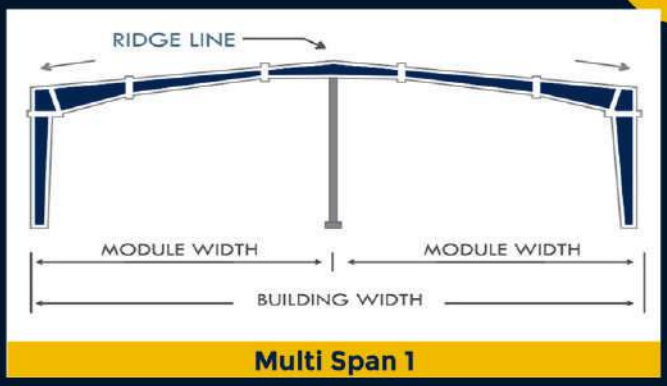
Examining the factory as a whole once it is constructed is a crucial stage in finishing the project. The work will be inspected more quickly and easily if the construction procedure adheres to standard construction at every stage. The contractor will turn over the project to the owners once it is determined that it has complied with all requirements and is ready for usage. In the event of an error, the owner should preserve all records and information for future warranties.

Aarus has given you all the details you need to know about the typical pre-engineered building construction procedure. To construct an aesthetically pleasing and high-quality project, you should be aware of the aforementioned procedure phases.

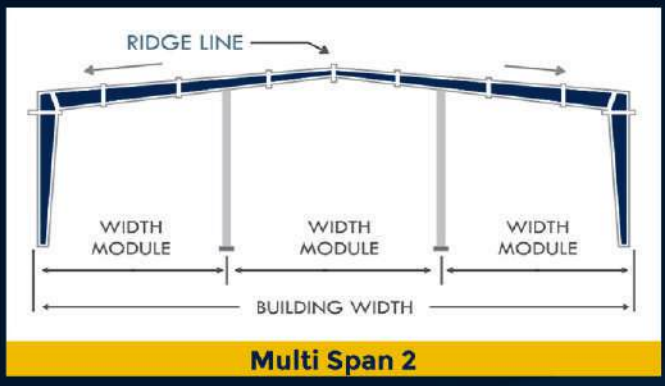
Types of Pre-Engineered Building Frames



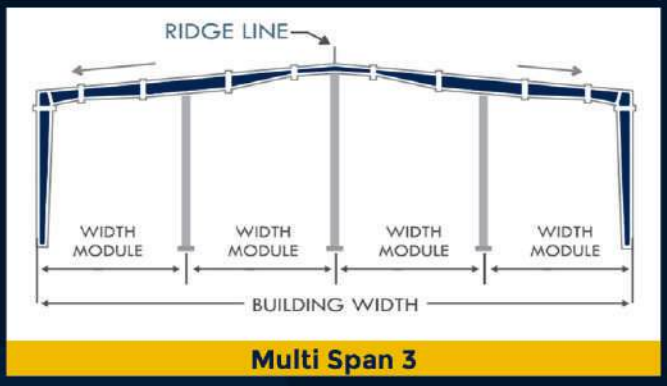
Tapered Column Clear Span (TCCS)



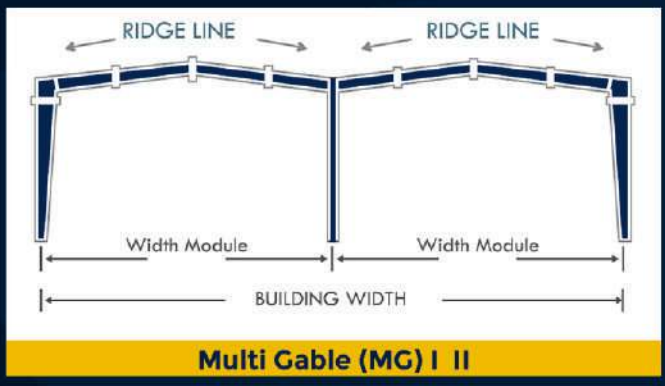
Multi Span 1



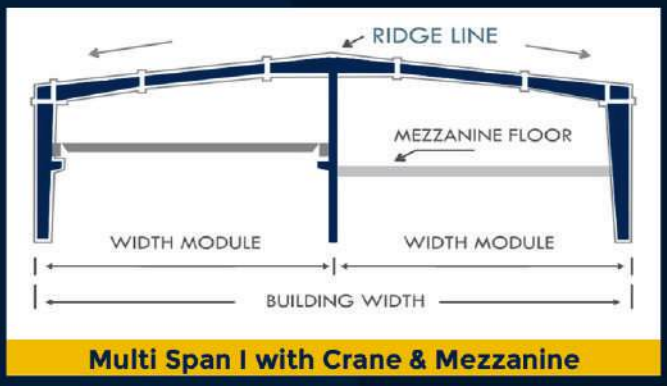
Multi Span 2



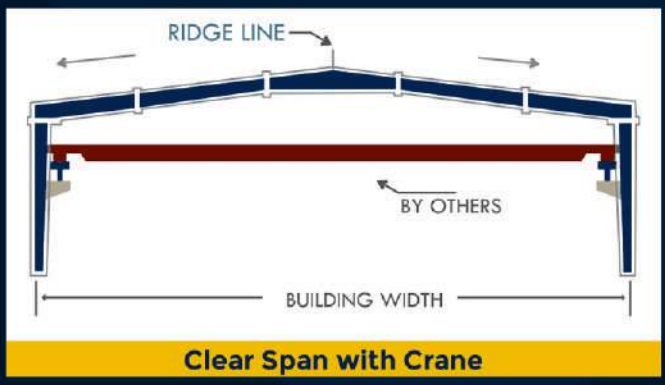
Multi Span 3



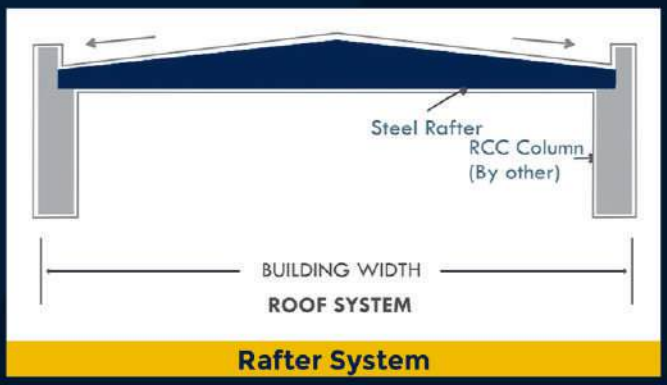
Multi Gable (MG) I II



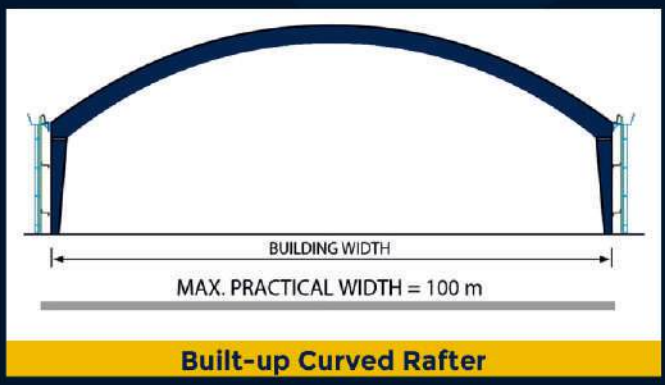
Multi Span I with Crane & Mezzanine



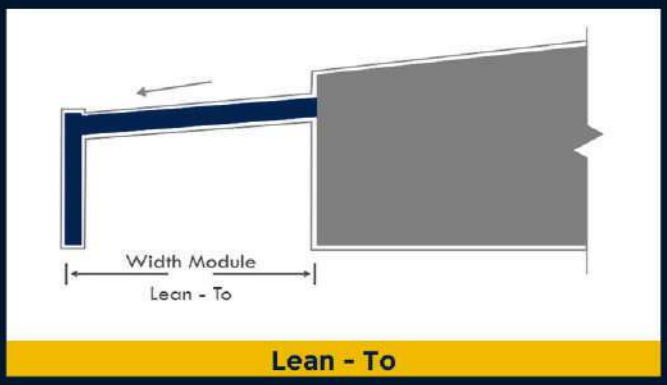
Clear Span with Crane



Rafter System



Built-up Curved Rafter



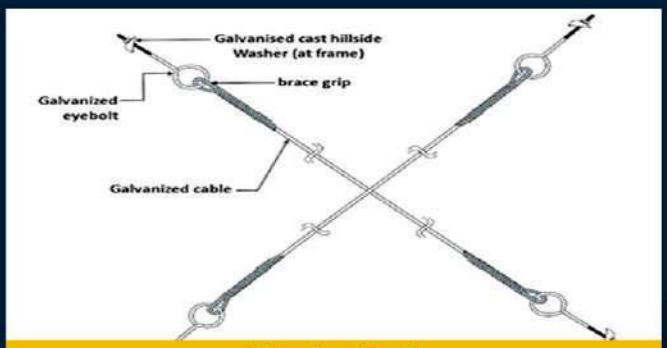
Lean - To

Pre-Engineered Building's Major Components

Column & Rafter

Purlin

Sag Rod



Bracing Rod

Insulation

Anchor Bolt

Flange Bracing

Day Light Panel / Polycarbonate Sheet

Ventilator

Roof & Wall Sheet

Aarus's Factory and Erection Work

Plasma Steel Plate Cutting

H Beam Machine Manufacturing

H Beam Machine Manufacturing

Welding

Drilling

Finished Column

Anchor Bolt Mounting

Erection Process

Roof & Wall Sheeting

Civil Work

Aarus Project

Shivansi Bottling Plant
Location : Tumudibandha, Kandhamal
Area : 58000 Square Feet

Waloni Group (Shed 1)
Location : Sambalpur
Area : 40000 Square Feet
EOT Crane : 30 Tonne Crane

Satyam Enterprises
Location : Dhenkanal
Area : : 53000 Square Feet

EC Poultry Farm (2 Shed)
Location : Baliguda
Area : : 2 * 12000 Square Feet = 24000

Adishakti Cashew
Location : Berhampur
Area : 20000 Square Feet

Bubbles (Water Bottle)
Location : Khodha Industrial Area
Area : 12000 Square Feet

Aarus Project

Barnali
Location : Bhubaneswar
Area : 9000 Square Feet (G Plus 2)

Bhawani Rice Mill
Location : Nayagarh
Area : 6000 Square Feet

Waloni Group (Shed 2)
Location : Sambalpur
Area : 20000 Square Feet
EOT Crane : 20 Tonne Crane

Cashew Factory
Location : Chatrapur
Area : : 15000 Square Feet

Bharat Garment Enterprises
Location : Rayagada
Area : 15000 Square Feet

HKGN Enterprises
Location : Cuttack
Area : 15000 Square Feet

Balaji iron -65000 sqft with 65 ton crane

banquet hall 12000 sqft cuttack

jaganath Mandir chariot godown- 16000 sqft

MAA BHAIRAVIRICE MILL -10000 sqft chamakhandi

maa Tareni cashew 22500 sqft Dhenkanal

Maruti service center 16000 sqft cuttack

MCP AGRO -22000 sqft Karanjia

MRF STOCK YARD- 86000 sqft

R2S plastics 12000 sqft DASPALA

RTO Work shop-14000 sqft KENDUJHAR

Tareni floor mill-45000 sqft Britaniya gown jankia

maa Tara tarini cashew -12000 sqft chamakhandi

Associate With

TATA BLUESCOPE STEEL

JSW

JINDAL STEEL & POWER

सेल SAIL

ESSAR STEEL

TATA STEEL

THANK YOU

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