PRE-ENGINEERED BUILDING

BUILD YOUR IMAGINATION

RELIABLE, AFFORDABLE, STEEL BUILDING TECHNOLOGY

விரும்பிக்கட்டலாம்
விரைவாக !

UNIQUEROOF

UNIQUE ROOF PRIVATE LIMITED

Manufacturers of Pre-Engineered Buildings, Roofing Sheets & Purlins

In Unique Roof Private Limited we focus on meeting the needs of our worldwide customers for durable, affordable and versatile pre engineered steel structures. After over twenty years in business, our customers remain our first priority. Every building that we design, manufacture and erect is created with the satisfaction of the future occupants and owners in mind.

Pre Engineering division is one of our various business units having 1,00,000 sq.ft manufacturing capacity at Coimbatore, Tamil Nadu, India with modernized machineries. PEB is responsible for the major share of company's annual sales.

Balu Engineering works is one of our group company have been executing various civil turnkey projects in connection with the PEB buildings. We, one of the 'Capex' Contractor and LT Contractor for Indian Oil Corporation Limited completed various infra structures and Canopies for them in TamilNadu and Karnataka.

Unique Roof Private Limited – Unit II, located at Palladam to Cochin highway, to be commissioned shortly, having 1,50,000 Sq. feet covered area, is our new plant, having manufacturing facility of various types of Sandwitch panels, Aluminium Composite Panels, Surface cleaning and Coating facilities, De-coiling and Slitting etc.

Since its establishment, Unique Roof Private Limited has supplied more than 1000 buildings to clients in various states of India and in abroad like Kingdom of Saudi Arabia, Sri Lanka etc.

Our customers choose pre-engineered steel buildings (PEB) over other types of construction for the following reasons:

Value

Pre-engineered steel structures require a lower initial investment, lower maintenance cost once completed and are environment friendly as all materials can be recycled.

Strength

Our structures are designed and built to withstand severe weather conditions (wind, snow, rain) and even earthquakes.

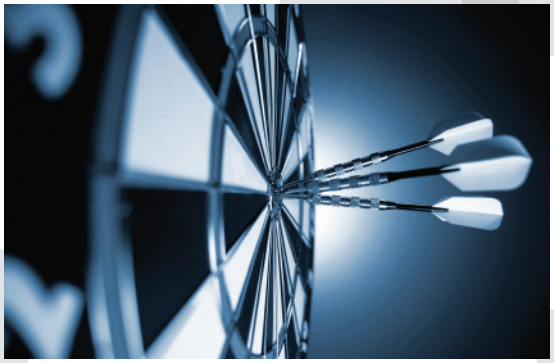
Flexibility

Large, clear spans allow our customers to house almost any type of business comfortably and efficiently, as well as to expand and change their setup whenever they desire.

Other distinct advantages include quick construction time and capacity for design flexibility – allowing our engineers to create a unique and attractive appearance that fits the distinctive business image of each customer.

Vision

Aiming Better & Best Our Success built on a strong foundation of quality, versatility, Time bound services with dedicated man power.



Mission

Build a Stable production Infrastructure Time bound supply to our client's financial stability. Made more benefits of employees fulfilling the responsibility for society. Aiming global collaboration to enhanced our facilities.

We offer unique features including

- Plain Galvalume roof sheeting and Coated cladding material
- High Strength chemical HILTI Bolts
- Hot-dip galvanized connection bolts
- Hot-dip galvanized anchor bolts
- Self drilling fasteners
- Optional pre-galvanized material for secondary members
- All type of Louvers, Gutter, down take pipes and all type of Flashings

Strict quality control procedures are maintained in order to ensure the utmost consistency in the quality of Unique Roof's materials.

Our applications are

Shopping Malls | Factories | Commercial Showrooms | Hyper markets | Office Buildings Warehouses | Convention Centers | Sports Arenas Workshops | Labor Camps | Distribution Centers Poultry Farmhouses | Steel Buildings.

We meet and exceed Indian and International quality standards as required by our client. We provide our clients with design calculations, approved drawings, erection drawings and other related documents required for the successful completion of the projects.

Customer service and Project Management

Instant Information

Marketing Manager, Sales Support Manager, and Project Manager can address your needs immediately and thoroughly.

Quick Cost Quotes

Over 80% of the inquiries we receive regarding price are answered within three working days by our Marketing Manager.

Complete Quotes

Every quote is supplied complete with proposal drawings for your verification, ensuring that your order is processed according to your exact specifications.

Fastest Delivery

Due to the efficient engineering systems, huge manufacturing capacity and sustained high stock levels of raw material, our buildings are designed, detailed, fabricated and delivered in record time. We will do everything possible to help meet your target date.

Expert Site Coordination

Site Engineer will address your site needs once your materials arrive at site. The Site Engineer will inspect your building site and give advice according to our proven, stringent erection methods.

Project Management Department

Project Management Department is responsible for projects with special needs and requirements that include the Supply and/ or Erection.

Services include but not limited to

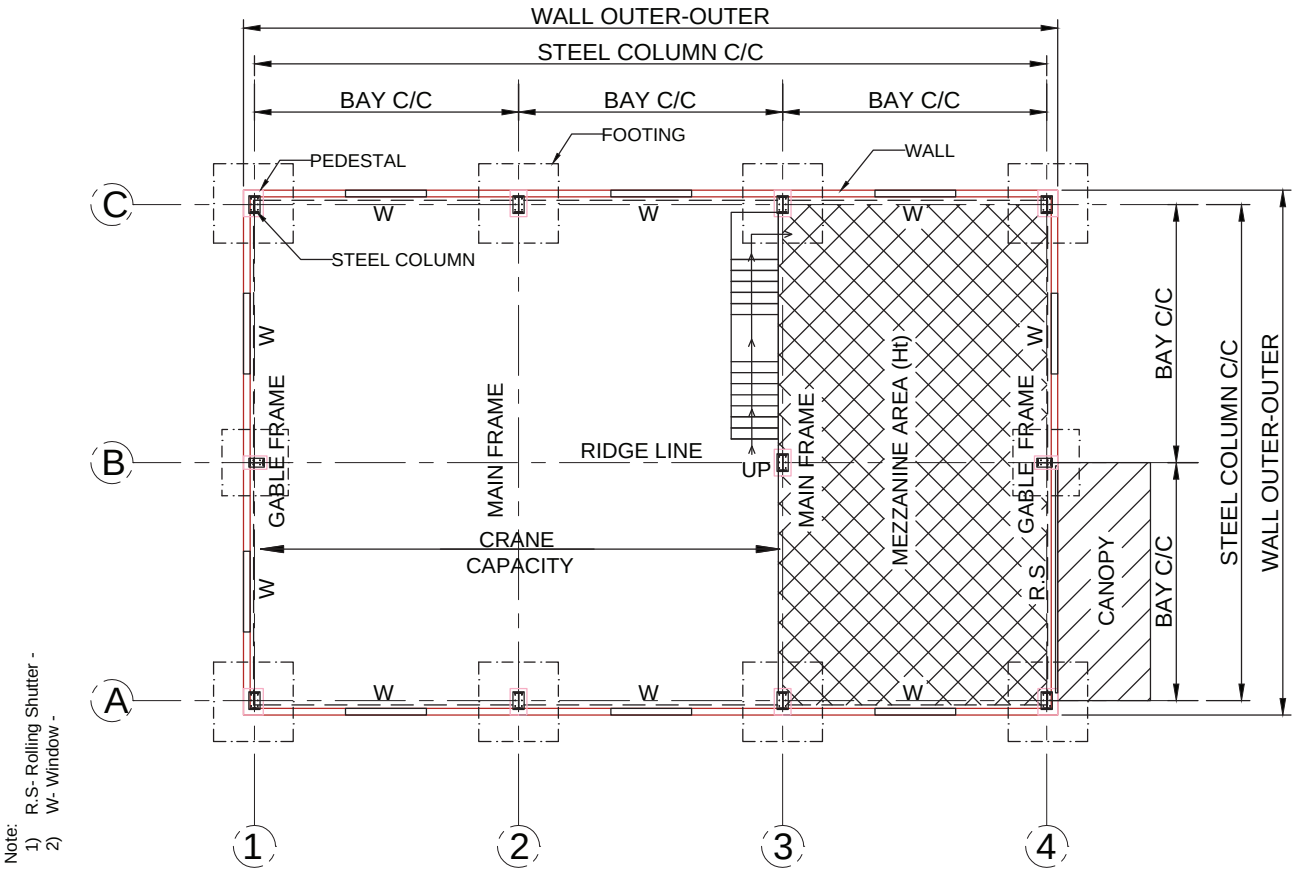
- Prepare & submit the Site Quality Plan for the project including the erection method statement & rigging plans.
- Prepare detailed schedule showing the project priorities with delivery and erection sequences.
- Monitor & control the site progress and milestones including change orders.
- Prepare comprehensive daily, weekly & monthly site reports.

The PEB System

Technical Data

Our goal is not merely to win in the current business, but to establish a lasting, beneficial partnership that meets all of your current building needs. We know that if every member of our staff works to earn your trust and confidence – we will win your future business.

The following pages provide important technical information about our products



Basic Building Parameters

Building Length

Building length is the distance between the wall outer in opposite end walls. It is a combination of several bay lengths.

Building Height

Building height is the eave height, which is usually the distance from the bottom of the main frame column base plate to the top outer point of the eave strut. When columns are recessed or elevated from the finished floor, eave height is the distance from the finished floor level to the top of the eave strut.

End Bay Length

This is the distance from the outside of the outer flange of end wall columns to the center line of the first interior frame

Interior Bay Length

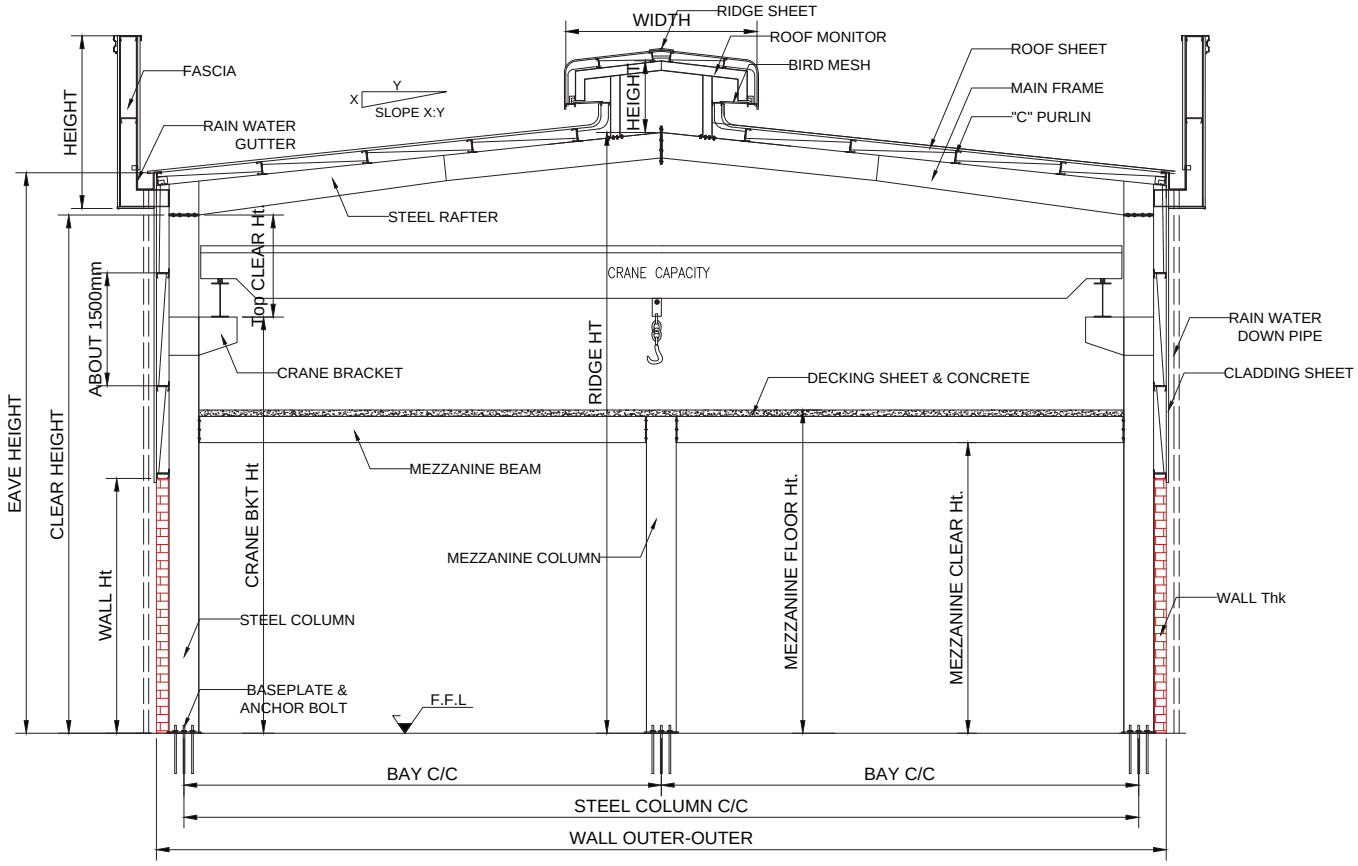
This is the distance between the center lines of two adjacent interior main frame columns. The most common bay lengths are 6, 7.5, and 9 meters. Any bay length is possible up to 15 meters.

Minimum Roof Slope

The normal recommended minimum roof slope is 1:10 However, in non-cyclonic areas where roofs are in single sheet lengths, with a run of less than 12 meters, a maximum roof slope of 1 in 30 may be used. For recommended slope of roofs in cyclonic areas, please consult our UNIQUE ROOF (P) LTD Structural Engineers.

Lengths

All products are available in lengths up to 12 meters custom-cut to your length requirements. Lengths longer than 12 meters can be supplied, provided satisfactory transport and on-site handling can be arranged.



Building Width

No matter what primary framing system is used, the building width is defined as the distance from outside of eave strut of one sidewall to outside of eave strut of the opposite sidewall.

Roof Slope (1:10)

This is the angle of the roof with respect to the horizontal. The most common roof slopes should not be less than 0.5/10. Any practical roof slope is possible.

Applicable Codes

The buildings are designed in accordance with the following codes:

AISC - Manual of Steel Construction – Allowable Stress Design.

AISI - Cold Formed Steel Design Manual.

MBMA - Low Rise Building System Manual.

Unique Roof Product Specifications

A standard Unique Roof system is made up of primary members, secondary members, connections, roof sheeting, wall sheeting, sheeting fasteners, sealer, closures, ridge caps, flashing and trim, gutters and downspouts.

A. Primary Members

Primary structural framing shall include the transverse rigid frames, lean-to-rafters and columns, canopy rafters, interior columns (beam and column frames), bearing frame and rafters.

B. Secondary Members

Secondary structural framing shall include the purlins, girts, eave struts, wind bracing, flange bracing, base angles, clips and other miscellaneous structural parts.

C. Connections

- All field connections shall be bolted (Unless otherwise noted).
- Primary bolted connections shall be furnished with high strength bolts conforming to the physical specifications of ASTM A325 (or equivalent).
- Secondary bolted connections shall be furnished with machine bolts conform to the physical specifications of ASTM A307 (or equivalent).

D. Physical Specifications of Structural Members

- Members fabricated from plate shall have flanges and webs, ie. join flanges on two side of the web by a continuous welding process and will confirm to the physical specifications of ASTM A570 (Grade 50) or equivalent and having a minimum yield strength of 345 MPa.
- Members fabricated by cold forming process shall confirm to the physical specifications of ASTM A570 (Grade 50) or equivalent and having a minimum yield strength of 345 MPa.
- Members fabricated from hot rolled structural shapes shall confirm to the physical specifications of ASTM A572 (Grade 36) or equivalent and having a minimum yield strength of 250 MPa.
- Rod and angle bracing shall confirm to the physical specifications of ASTM A36 (or equivalent) and having a minimum yield strength of 250 MPa.

- Roof and wall cladding shall confirm to the physical specification of ASTM A653 Grade 50 (or equivalent) and having a minimum yield strength of 345 MPa.
- All other miscellaneous secondary members shall have minimum yield strength of 250 MPa.

E. Roof Sheet And Wall Cladding Sheet

- Roof sheet 0.47mm thick profiled bargalvalume. Wall cladding sheet 0.47mm color coated steel sheet.
- The material shall conform to ASTM A792 and the galvalume coating to ASTM – AZ150. The yield strength of material shall be 280 MPa.

F. Sheeting Fasteners

Standard fasteners shall be No.14, Type A, self taping sheet metal screws with metal and neoprene washers. All screws shall have hexagonal heads made of zinc planted steel.

G. Sealer / Rope Seal

This is to be applied at all around self flashing windows. Sealer shall be 6mm wide x 5 mm thick, asbestos fibe filled, pressure sensitive Butyl tape. The sealer shall be non asphalted, non shrinking non drying and non toxic and shall have superior adhesion to metals, plastics and painted surface.

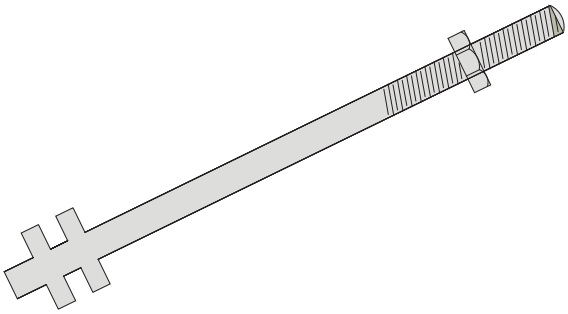
H. Flashing and Trim

Flashing and / or trim shall be furnished at the rake, corners, eaves framed openings and wherever necessary to provide weather tightness and finished appearance. Color shall be white for rake and eave flashing and color of wall for corner flashings unless otherwise specified by client from one of unique roof standard range of colors.

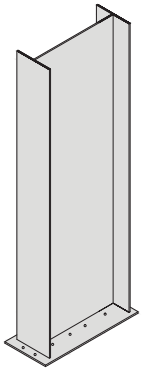
I. Eave Gutters And Downspouts; If Applicable

- Eave gutters shall be box shaped, color coated, and 0.47 mm nominal thickness galvanized steel. The outside face of the gutter shall be supported with color coated 0.47mm nominal thickness galvanized straps to the eave member at a maximum spacing of 1.2m.
- Downspouts shall be square shaped, color coated 0.47 mm nominal thickness galvanized steel. Downspouts shall have a 45 degree elbow at the bottom and shall be supported by attachment to the wall covering at 6.0 m maximum spacing.

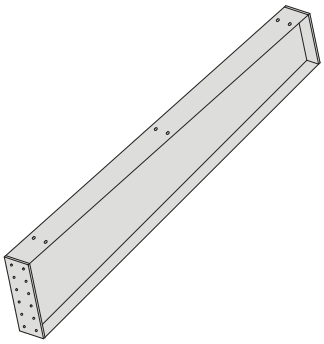
Anchor Bolt



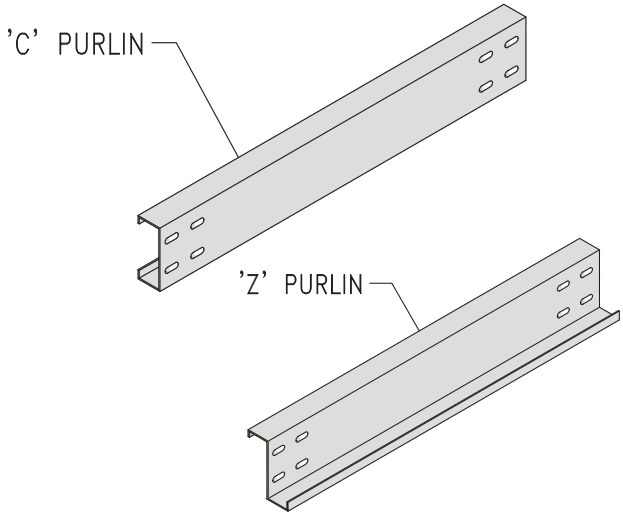
Column



Rafter



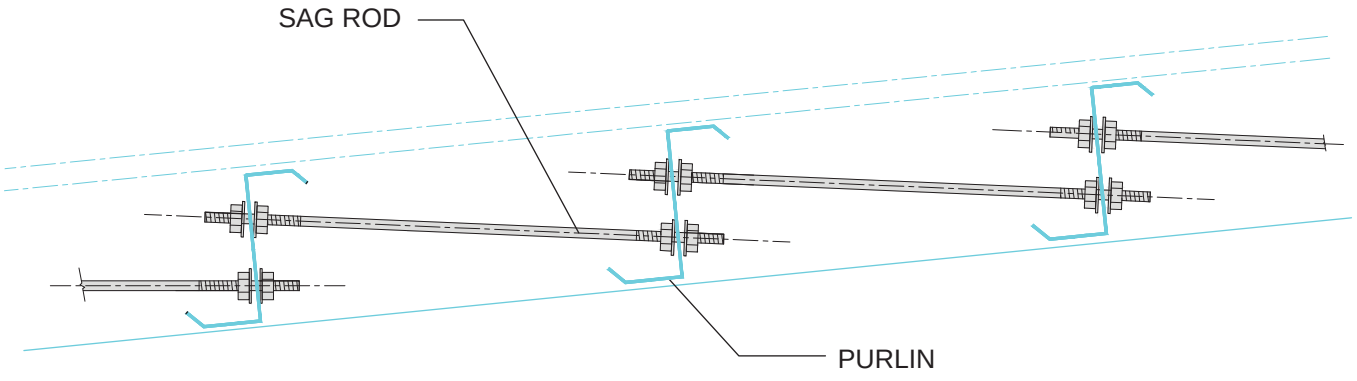
Unique Purlins



UNIQUE 'C' AND 'Z' Purlins are precise roll-formed from high tensile Zinc-galvanized steel,hot rolled coils and cold rolled coils. They are designed for use as secondary supports for all range of roofing and wall cladding. The light weight and high strength of steel, together with its Zinc-galvanized surface. UNIQUE Purlins are versatile and economical,requiring minimal maintenance to last as long as the building itself.

UNIQUE : Purlins are delivered in strapped bundles. The actual quantities in each bundle will vary according to the section type, size and length. Each bundle mass is generally limited to 1.2 tones for local delivery. proper export packing in containerized shipment or loose cargo shipement will allow 1.6 tones for export delivery.

Sag Rod

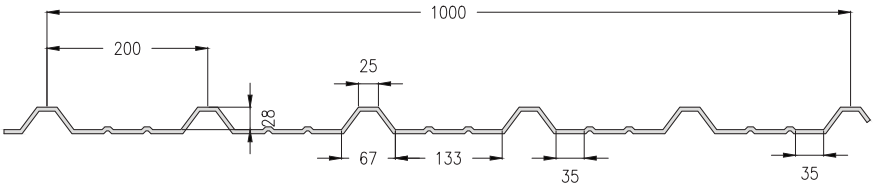


Roof / Cladding Sheets

Al-Zn Alloy Coated Steel (Bare Galvalume) Pre painted Al-Zn Alloy Coated steel (PPGL).

Effective width	-	1000 mm
Pitch	-	200 mm
Depth	-	28 mm
Sheet width	-	1060 mm
Feeding width	-	1220 mm
Variation on Tolerance	-	+or-5 mm

Unique Roof Sheet Profile



Base Material Specifications - Unique Roofing Sheets

DESCRIPTION	PPGL	BARE GALVALUME
Zinc coating	AZ 70/100/150/200	AZ 70/100/150/200
Paint coating	Regular modified polyster painting	5 to 7 microns acrylic coating
Painting thick (Top)	18 to 20 microns	- -
Painting thick (Bottom)	5 to 7 microns Expoy primer service coat	- -
Surface paint reflection	Glossy finish (Optional Matt finish)	- -
Tensile strength	250 to 350 MPA std./550 MPA optional	345 to 550 MPA
Total coated thickness (TCT)	0.45 mm to 0.60 mm	0.45 mm to 0.60mm

Decking Sheets

Unique Steel Deck

Composite slabs are a very practical and economical means of creating a floor system and works particularly well in conjunction with composite beam constructions. It is designed to act as a composite deck form and fulfils all the basic requirements that are mandatory for any composite deck form.

UNIQUE STEEL DECK is available in ▸ Normal CR ▸ Galvanized ▸ Pre Painted Galvanized

Application

1. Steel Deck for mezzanine floors.

2. Tensile steel for composite slab construction that cuts down on slab thickness and dead weight of buildings. No seperate form work required for slab casting.

Available thickness : 0.6 mm

Bearing : The minimum bearing for metal decking is 50mm on steel work. For concrete or masonry work this shall be 75 mm.

Fixing : At ends, fixing @ 300 mm center is recommended. At intermediate supports, fixing may be done @ 600 mm centers, Fixing to steelwork may be done using shot fired nails or self-tapping screws.

Slot may be cut in the decking to allow for the concrete encasement of beams.

Fixtures : Welding of brackets, Clips ect. for suspending fixtures may be done.

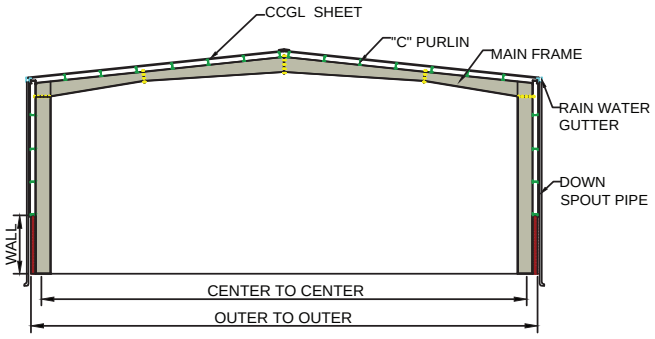
BUILDING TYPES

PRIMARY FRAMING SYSTEM

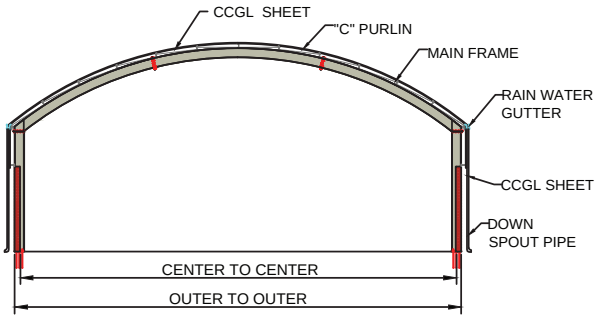
UNIQUE ROOF - PEB is practical type geometric frame.

Some of the most commonly used primary framing system are displayed here...

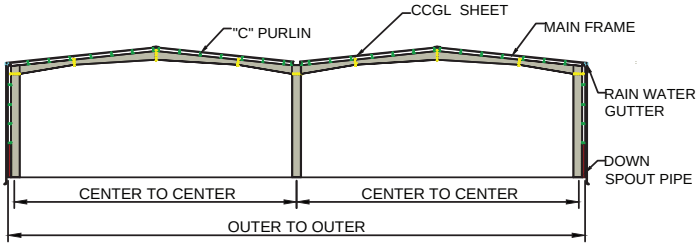
Clear Span



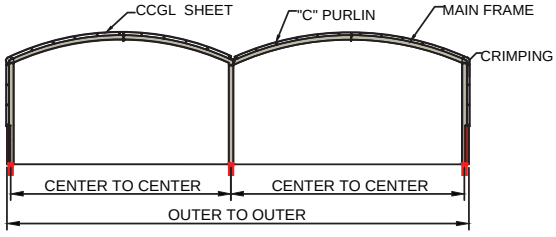
Arched Clear Span



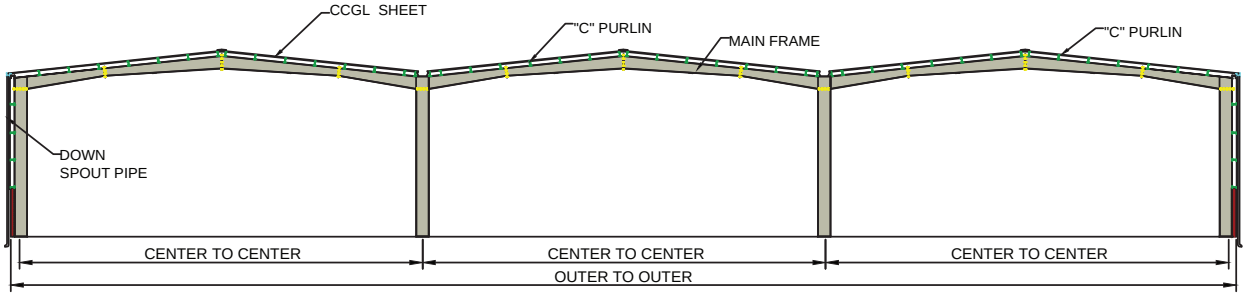
Two Multi Gable - Clear Span



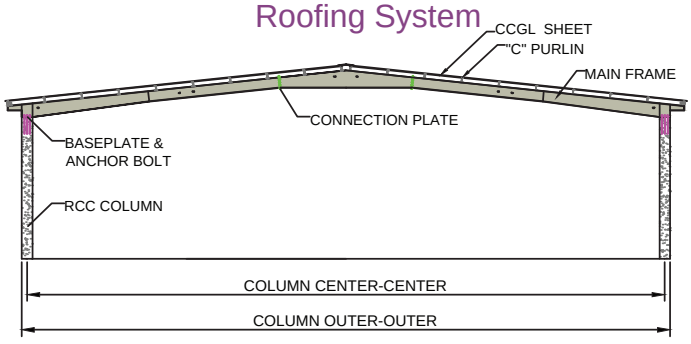
Two Multi Gable - Arched Clear Span



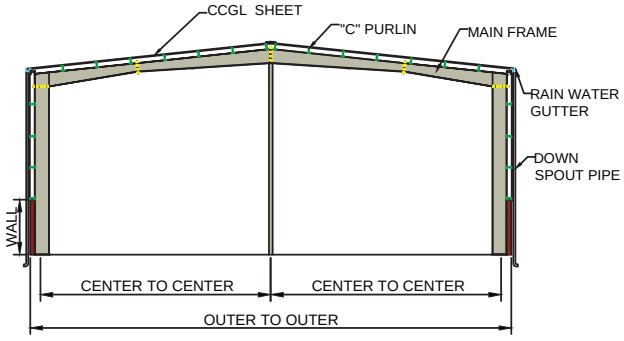
Three Multi Gable - Clear Span



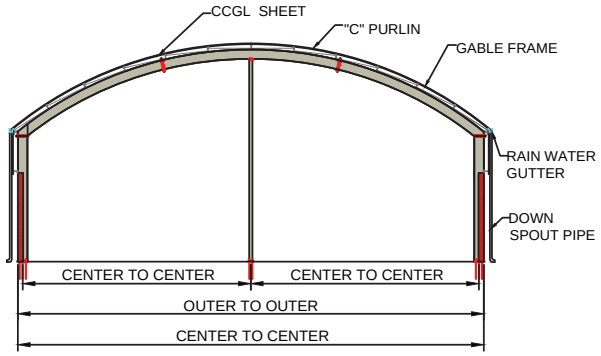
Roofing System



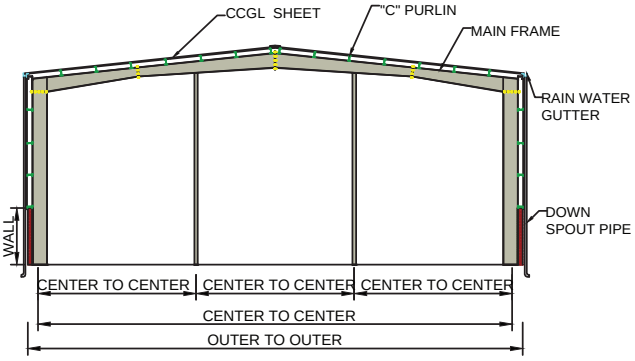
One Column - Multi Span



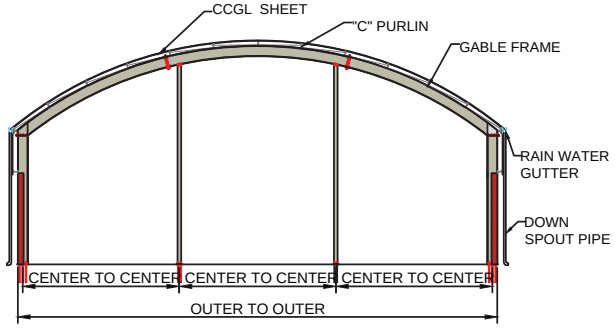
One Column - Multi Span Arched



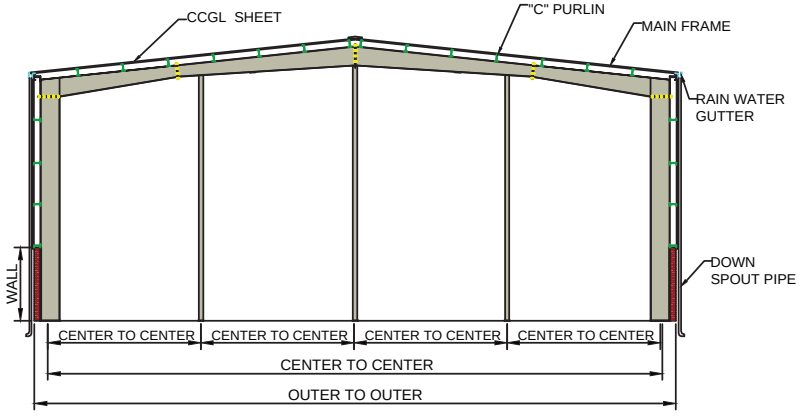
Two Column



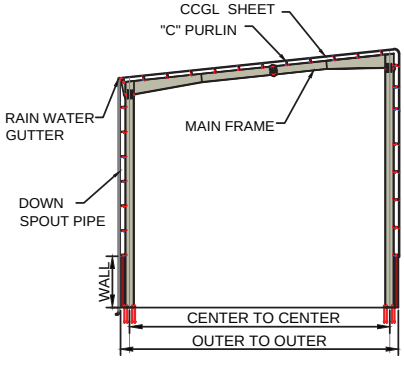
Two Column Multi Span Arched



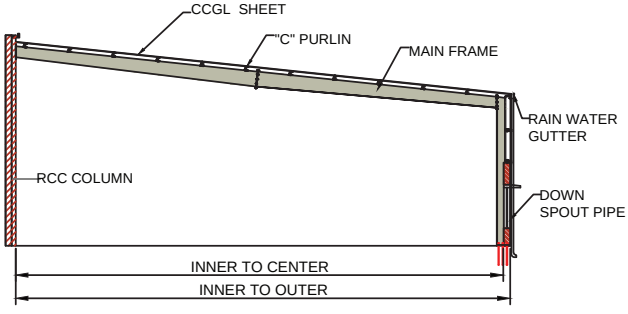
Three Beam Column

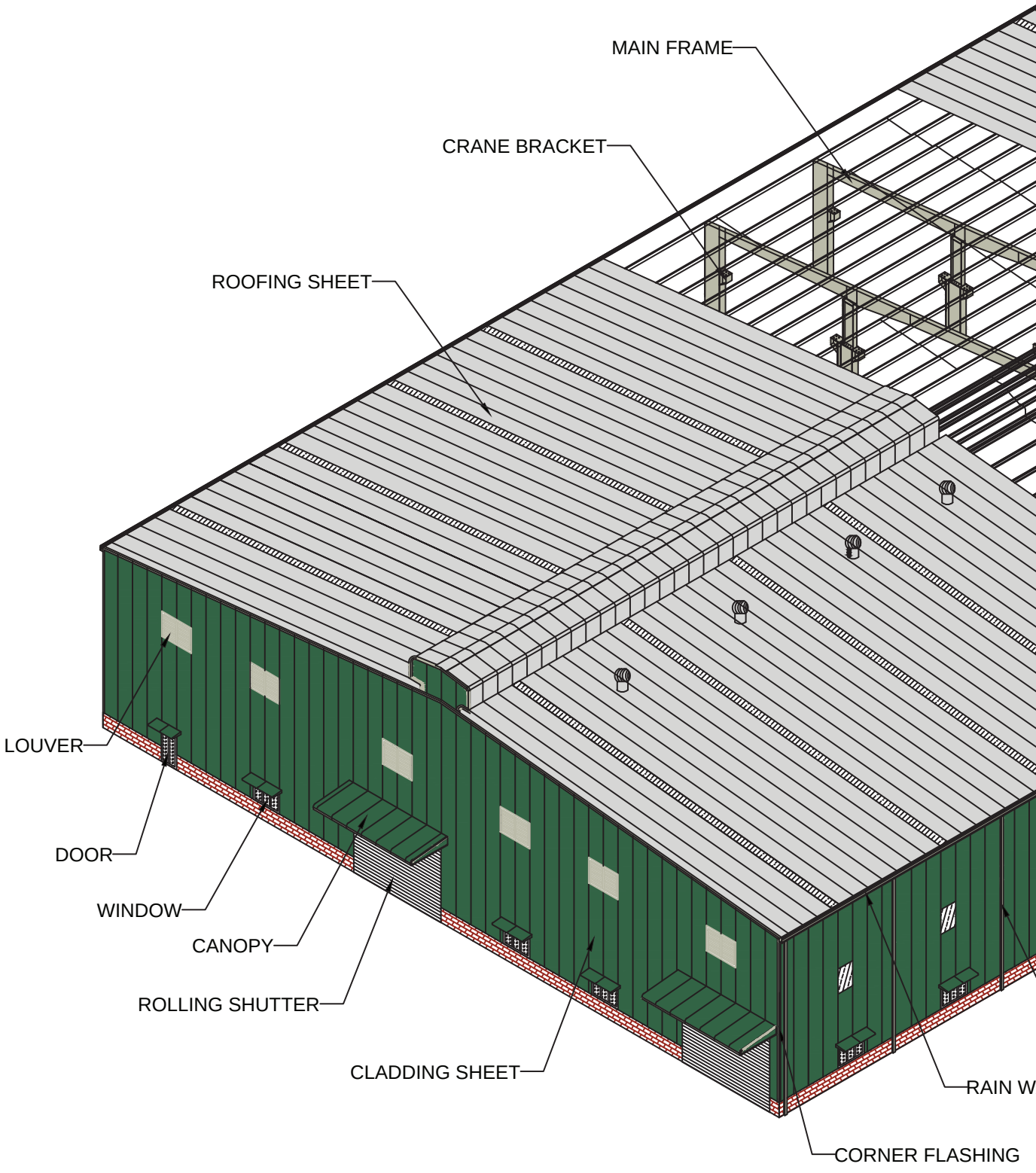


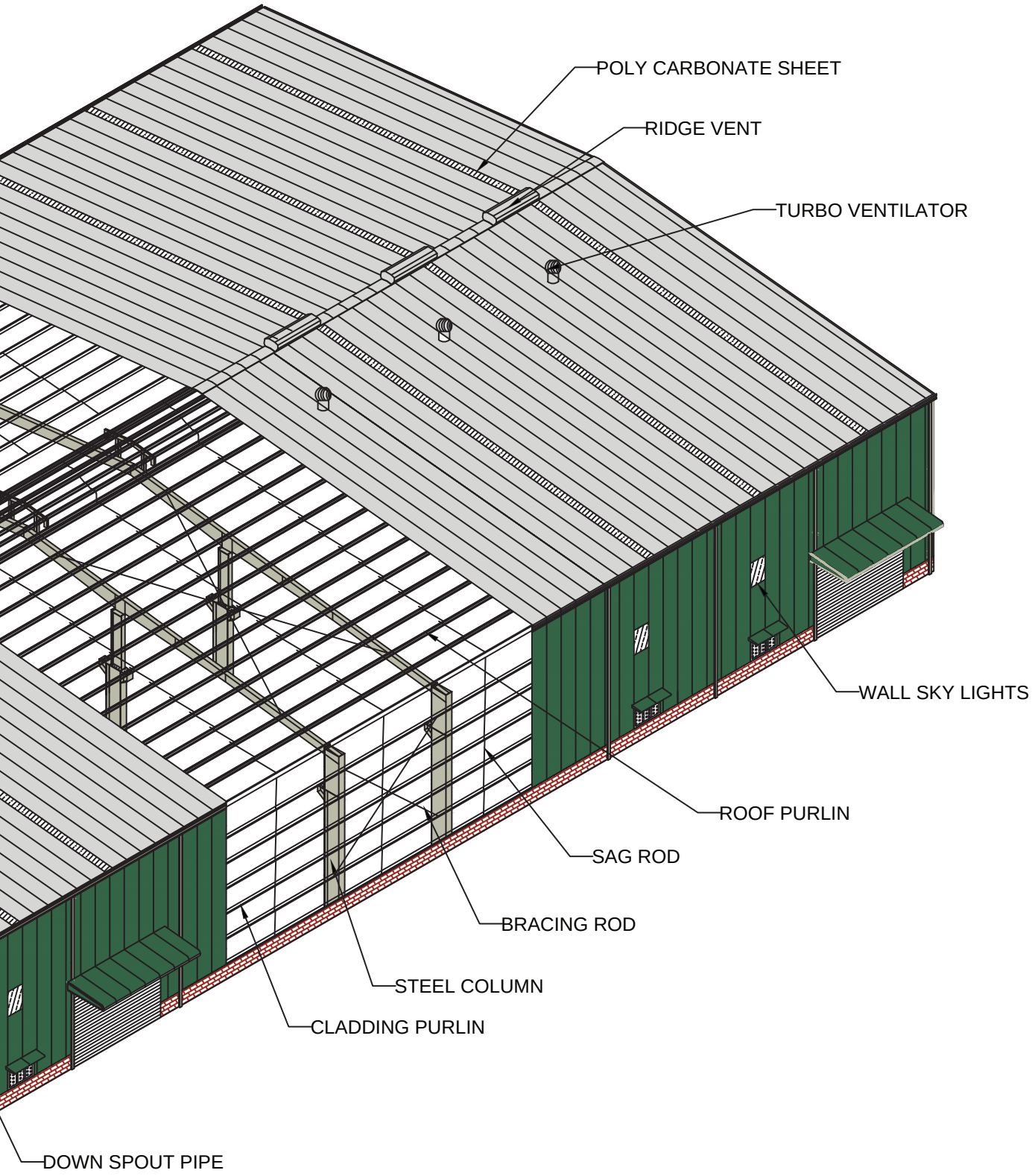
Single Slope



Lean to Roof

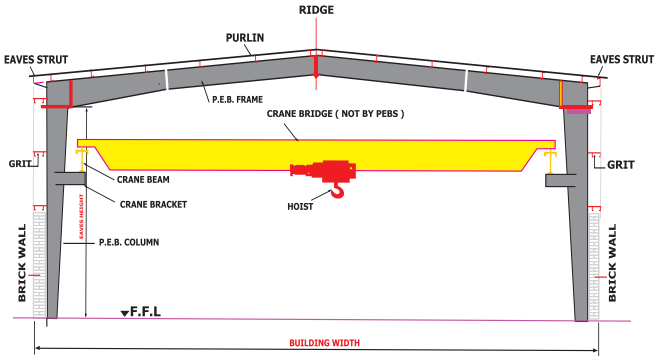



MAIN FRAME
CRANE BRACKET
ROOFING SHEET
LOUVER
DOOR
WINDOW
CANOPY
ROLLING SHUTTER
CLADDING SHEET
RAIN W
CORNER FLASHING


POLY CARBONATE SHEET
RIDGE VENT
TURBO VENTILATOR
WALL SKY LIGHTS
ROOF PURLIN
SAG ROD
BRACING ROD
STEEL COLUMN
CLADDING PURLIN
DOWN SPOUT PIPE

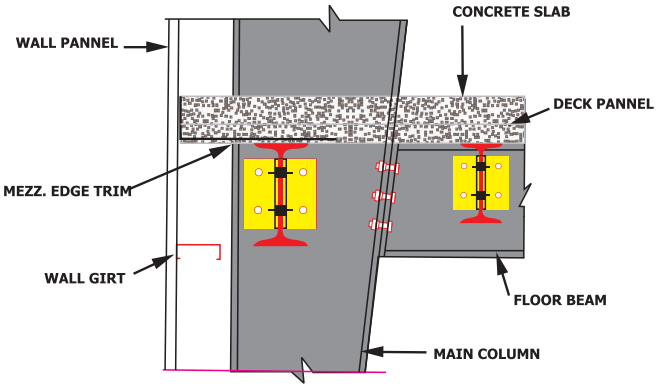
ATER GUTTER

Crane Systems



UNIQUE PEB designs buildings can support various crane systems, like EOT, Monorail, Under Hung, Jib etc. Overhead cranes of up to 25 MT are clearly supported with brackets.

Mezzanine At Sidewall



Mezzanine Systems

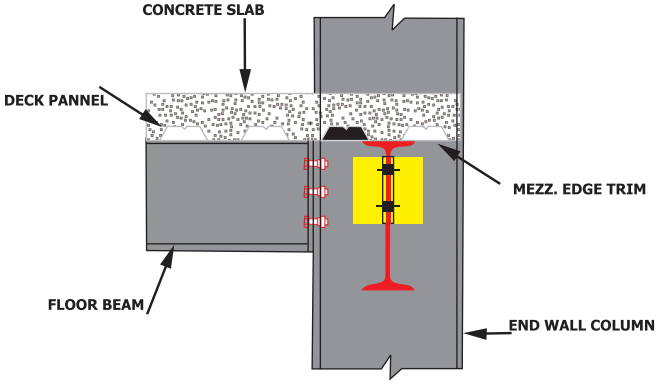
The mezzanine framing system consists of a steel deck supported by joists framed onto main mezzanine beams. The main beams may also be supported by intermediate columns if dictated by design loads. The top flange of the joists fits immediately below the top flange of the primary beams.

Applied floor loads, such as dead, live and collateral loads along with mezzanine column spacing, can affect the economy of a mezzanine system.

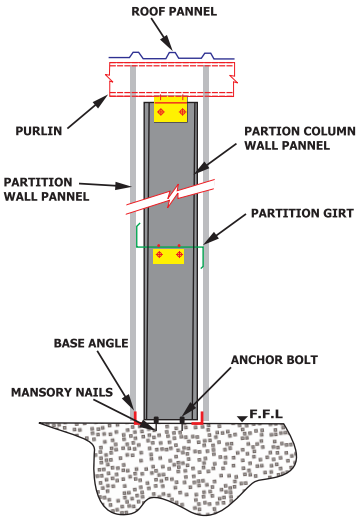
Unless otherwise specified, the primary mezzanine beams should run across the width of the building parallel to the main frame rafters. Joists should run parallel to the roof purlins along the length of the building.

Multi-level mezzanines, including features such as interior equipment platforms, catwalks, floor openings and staircases are also available.

Mezzanine at Endwall



Partition

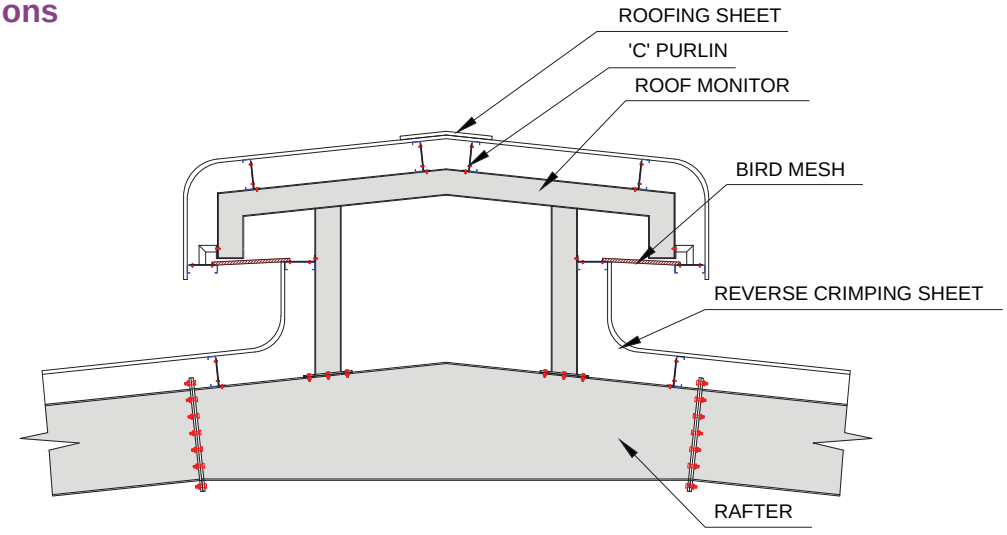


Building Accessories

Window

Fixed Louver

Building Additions



Monitor Roof

UNIQUE ROOF PEB standard monitor roof has a throat width of 1.6 M and a height of 1.2 M, made from hit rolled sections.panels for monitor roof will be the same as supplied for the main building. We can also supply monitor roof of varied sizes as per clients tailor made requirements.

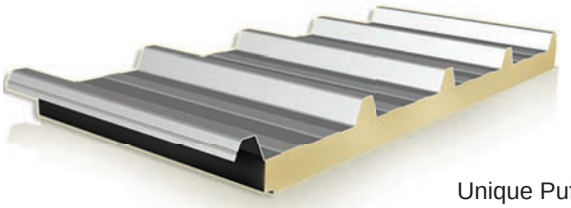
Insulation

Aluminium Foil

Glass Wool

Rock Wool

Puff Panel



Unique Puff Panel

Unique Wall Panel

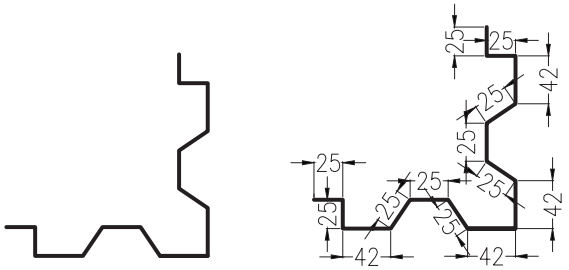
Ridge Ventilator

Roof Ventilator

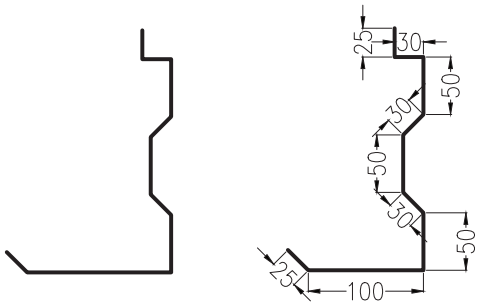
Every Industrial, Commercial or community building, no matter how big, has a problem-Air keeping natural air circulating combined with a comfortable working environment can be difficult and very expensive. Needless to say, fresh air makes people feel more alive and vital, whilst Stale hot air causes people to feel lethargic and disinterested. The movement of air over the body causes evaporation To occur which is the natural way of cooling down, thus preventing moderate heat stress. The Roofvent system 500/600 provides this much needed movement of air.

- No opertion cost
- Reduced power costs
- Reduced installation cost
- Reduced maintenance cost

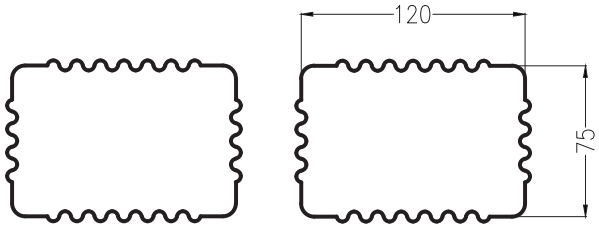
Coner Flash



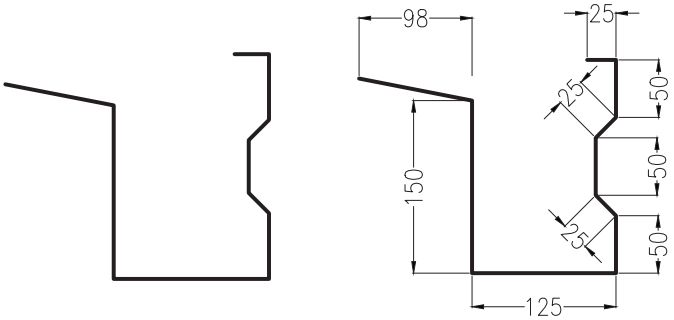
L Flash



Down Pipe



Rain Water Gutter



Uniqu Roof (P) Ltd - Registered Office - Coimbatore

Uniqu Roof (P) Ltd - Factory - Coimbatore

Ashwath Inc, Tirupur

Ambal Auto - Coimbatore

Shanthi Social Services, IOCL Retail Outlet - Coimbatore

Erode Texvalley - Ltd., - Erode

Ekki Pumps - Coimbatore

K2 Cranes & Components (P) Ltd., - Chennai

G.S. Machineries - Coimbatore

Super Auto Forge Ltd., - Chennai

MDL Vishal India (P) Ltd., - Coimbatore

AM Breweries (P) Ltd., - Chennai

Aadhi Cars Pvt., - Coimbatore

The Globe Radio Company - Tirunelveli

Aadhi Honda (P) Ltd., - Coimbatore

Parthasarathy CNC Technology (P) Ltd., - Coimbatore

Sri Maruthi Engineering Pvt Ltd., - Coimbatore

Flowcon Engineers India Pvt Ltd., - Coimbatore

Maxwell Auto Components (P) Ltd., - Cbe

Aerospace Materials Pvt Ltd., - Coimbatore

Kasee Ware Housing - Trichy

Vivaan Clothing - Pollachi

Sakthi Masala Pvt Ltd., - Erode

Aerotreatment (P) Ltd., - Bengaluru

LRN Motors Pvt Ltd., - Salem

Famous Foam & Mattresses Pvt Ltd., - Bengaluru

Gokul Knitt Fabs - Tirupur

Sharpline Automation Pvt Ltd, - Mumbai

Abdul Rahman Al-Hadar Factory - Saudi Arabia

Kadri Mills Ltd., - Coimbatore

Viswanathan Constructions (P) Ltd., - Coimbatore

Vignesh Gears (P) Ltd., - Coimbatore

Sri Maruthi Engineering (P) Ltd., - Coimbatore

Dev International - Coimbatore

UNIQUEROOF

BALU ENGINEERING WORKS

CIVIL ENGINEERING CONTRACTORS

S.F. No. 240/1, Irugur Road, Chinniampalayam,
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E-Mail : baluengworks@yahoo.com, www.baluengworks.com
Phone : +91 422 2625994, 2627177
Customer Care : +91 99655 20422

UNIQUE ROOF PRIVATE LIMITED, UNIT - I

PRE ENGINEERED BUILDING MANUFACTURERS

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Coimbatore, Tamil Nadu, India – 641 062
E-Mail : enquiry@uniqueroof.net, www.uniqueroof.net
Cell : +91 98422 40422, 98422 40423
Customer Care : +91 98420 40422

UNIQUE ROOF PRIVATE LIMITED, UNIT - II

ALUMINIUM COMPOSITE PANEL MANUFACTURERS

281/1E, K.Ayyampalayam & Post, Palladam,
Tirupur (Dt), Tamil Nadu, India – 641 662
E-Mail : enquiry@uniquebond.net, www.uniquebond.net
Cell : +91 73730 20423
Customer Care : +91 73736 52222