

BRINGING
REVOLUTION
TO BUILDING
CONSTRUCTION



ISO 9001:2015
ISO 14001:2015
ISO 45001:2018



The image shows the interior of a vast industrial warehouse. The ceiling is high and features a series of parallel steel beams supporting a corrugated metal roof. Several rectangular skylights are integrated into the roof, allowing natural light to enter. Numerous industrial-style pendant lights are suspended from the ceiling. The walls are also made of corrugated metal, with a dark lower section and a lighter upper section. The floor is a smooth, light-colored concrete. In the background, some construction materials and equipment are visible, suggesting the space is under development or recently completed.

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INTRODUCTION

Pakistan Insulations Pvt. Limited was established in 1986, as a manufacturing company with the aim to improve thermal efficiency and set new standards for the industry in Pakistan.

Not many companies have sought to conserve energy through viable, cost-effective solutions. This gave us the vision and determination to bridge the gap between rising energy costs and promote the cause of energy conservation.

We started with one initial product, Rockwool, with which we have insulated most of the renowned industries in Pakistan. To this day, it remains the prime material of choice for thermal and acoustic insulation in the entire country.

In order to pursue our promise of eco-friendly manufacturing goal, Pakistan Insulations Pvt. Ltd. now offers energy efficient Pre Engineered Buildings. The buildings we commit to construct are easy to build, durable, well insulated and above all, they are economical.



Vision

To strengthen Pakistan's Building system by providing innovative, energy-saving and cost effective solutions.

To provide quality workmanship and maintain the highest level of professionalism, integrity and honesty in our relationship with clients.

Mission

To provide product with zero compromise on quality and workmanship.

About The Company

Pakistan Insulations Pvt Limited was established as a manufacturing company dedicated for improving thermal efficiency in the country. Our initial product was Mineral wool/Rock wool. In order to take our goals to a higher level we had started offering energy efficient, quick to construct, durable, well insulated and above all economical Pre Engineered Buildings. We are blessed to manufacture brown and resin Rockwool boards, Rockwool sandwich panels, Rockwool blankets, Rockwool pipe covers, Pu sandwich panels. Moreover, we have been working in the field of light gauge steel since 2011.

Till now, we have designed, manufactured and supplied many steel buildings. We have delivered customized PEB structures to a wide range of customers in sectors such as oil, gas refineries, textile, chemical and fertilizer industries.



Our Promise

INTEGRITY

We are honest and accountable in our actions with one another and with all our stakeholders, and we strive to build trust at every opportunity. Our commitment to doing what's right underscores everything we do each day.

INNOVATION

We challenge the status quo and proactively seek opportunities for continuous improvement and transformative breakthroughs. We develop products and solutions to meet our customers' evolving needs and improve communities through our commitment to environmental sustainability.

TEAMWORK

We work side by side to create an environment of collaboration and mutual respect. Our backgrounds are as varied as our efforts, and we stand together as one winning team whose diversity reflects the communities we serve.

SAFETY

Safety is an essential part of our culture. We approach each day with careful attention to the well-being of every individual. From the moment we leave home to the time we return, we take personal responsibility for our safety and the safety of those around us.

Quality

We offer high Quality standardized products to our customers. Our products are PS/ISO/IEC/ASTM certified.



Why use Steel?

Strength/Durability:

Steel has the highest strength to weight ratio of any construction material. Thus, construction with steel requires the least possible material in structure for achieving desired strength.

Reusable/Recyclable:

Steel is 100% recyclable material which makes it economically stable, environment friendly and energy efficient material.

Scrap Value:

Steel can be sold as scrap metal when recycling of steel is not required.

Wide Spans:

Steel provides excellent stability for wide/large clear spans.

Speed of Construction:

The majority of the work of steel structure is prefabricated. Minimal site work is involved except assembly via bolted connections.



Pre-Engineered Building Concept

From conception to occupancy, any steel structure uses hundreds of parts that fit together to create a purposeful building. But if we look from a broader viewpoint, all components of a modular steel building can be compartmentalized into the following segments.

Pre-Engineered Building Concept:

The concept of Pre-Engineered Building is not up to the minute. It was the revolution which was commenced in early 1900's. Pre-Engineered buildings are the structures that are built using structural steel framing system specifically engineered at factory and assembled on site as per client design requirements.

Components of Pre-Engineered Building:

The Primary Components

The primary components of a pre-Engineered Building includes the main frame for the skeleton of the structure like columns, rafters, bracing which create the portal frame.

The Secondary Components

These are all of those components which support primary components like girts, eave, struts, Z or C purlins etc. The main purpose of secondary components is to transfer load from cladding to primary steel structure. It also provides lateral support to it.

The sheeting

Components need proper roofing, wall panels and insulation. This is the outer structure of the steel building, which separates the building from the external environment. Sheeting transfers load to the secondary steelwork, provides thermal and acoustic insulation, prevents fire spread and provides an airtight envelope as well as providing ventilation to a building. It also dictates whether the building receives natural sunlight or not, depending on the purpose of the building.

Miscellaneous building components

For structures that are designed for recreation, leisure or personal use, the miscellaneous components provide a distinct uniqueness in appearance and practicality, along with additional features customized as per your requirements.

Merits Of Pre-Engineered Buildings

There is no debate in the way that Pre-Engineered building systems are the new wave in the tremendous development of the construction industry. Pre-Engineered buildings offers numerous benefits. These benefits include:

Low Initial Cost:

A steel building is lighter so it can be installed with minimal foundations without heavy investment in foundation work. The use of tapered portal frame reduce the consumption of steel in main frame, Z shaped secondary structural member gives continuity in secondary framing contribute in maintaining low initial cost for the structure.

Quality Control:

The majority of the steel structure work is performed in factory's controlled environment. Standards of different codes are applied during design, manufacturing, welding and selection of raw materials. Hence, quality control is the strict/restricted criteria in the manufacturing of Pre-engineered buildings.

Fast Construction:

Its construction speed is double than conventional systems. As bolting system is used on pre-fabricated members.

Easy Installation:

Subsystems, insulation, ducting, exterior systems are so easy to install because of the nature of framing, primary and secondary structure.

Low Maintenance Cost:

Due to the usage of standard quality of paint over structural members, it increases its ability to sustain which results in minimal maintenance cost.





Applications of Pre-Engineered Buildings

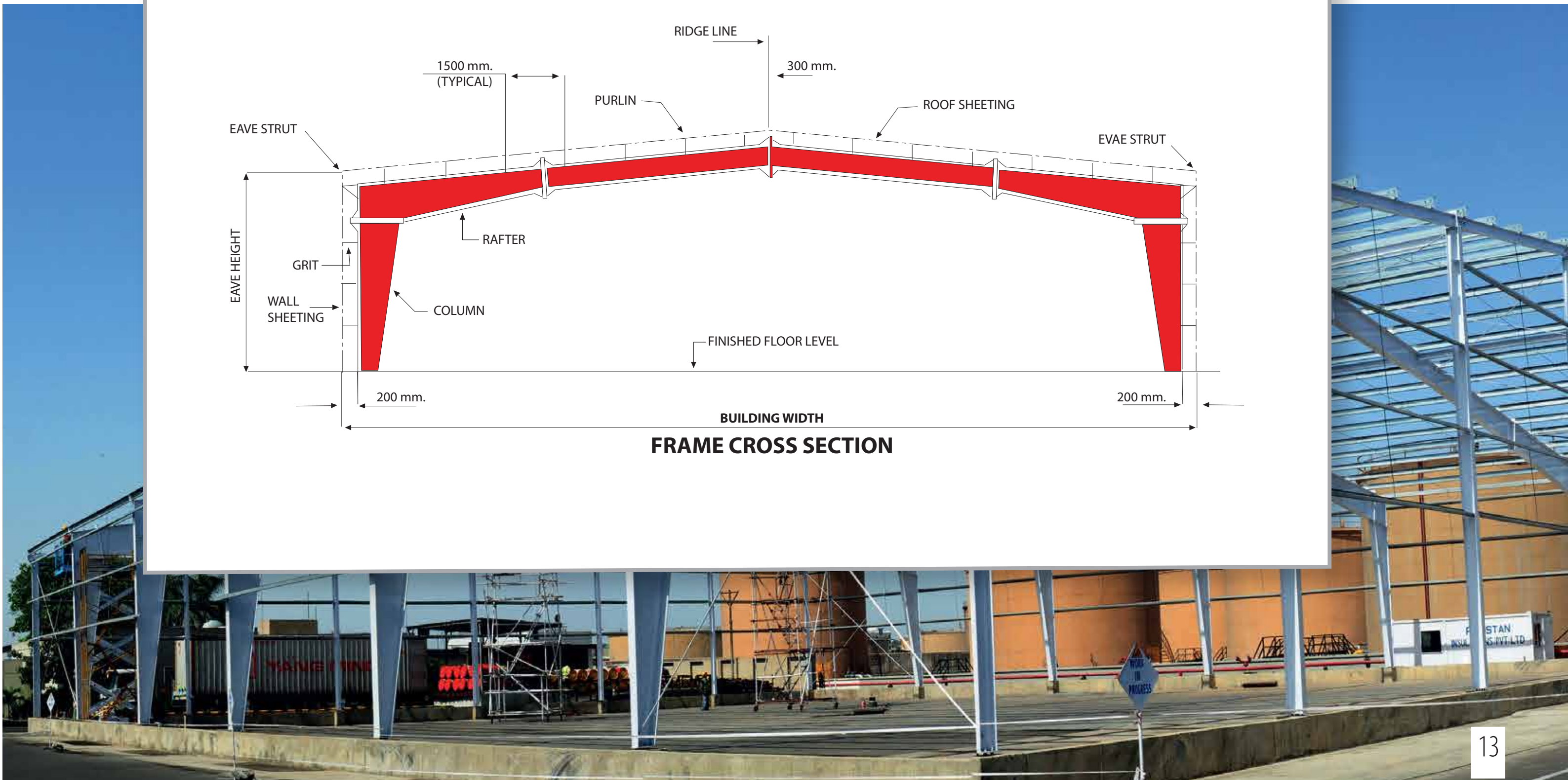
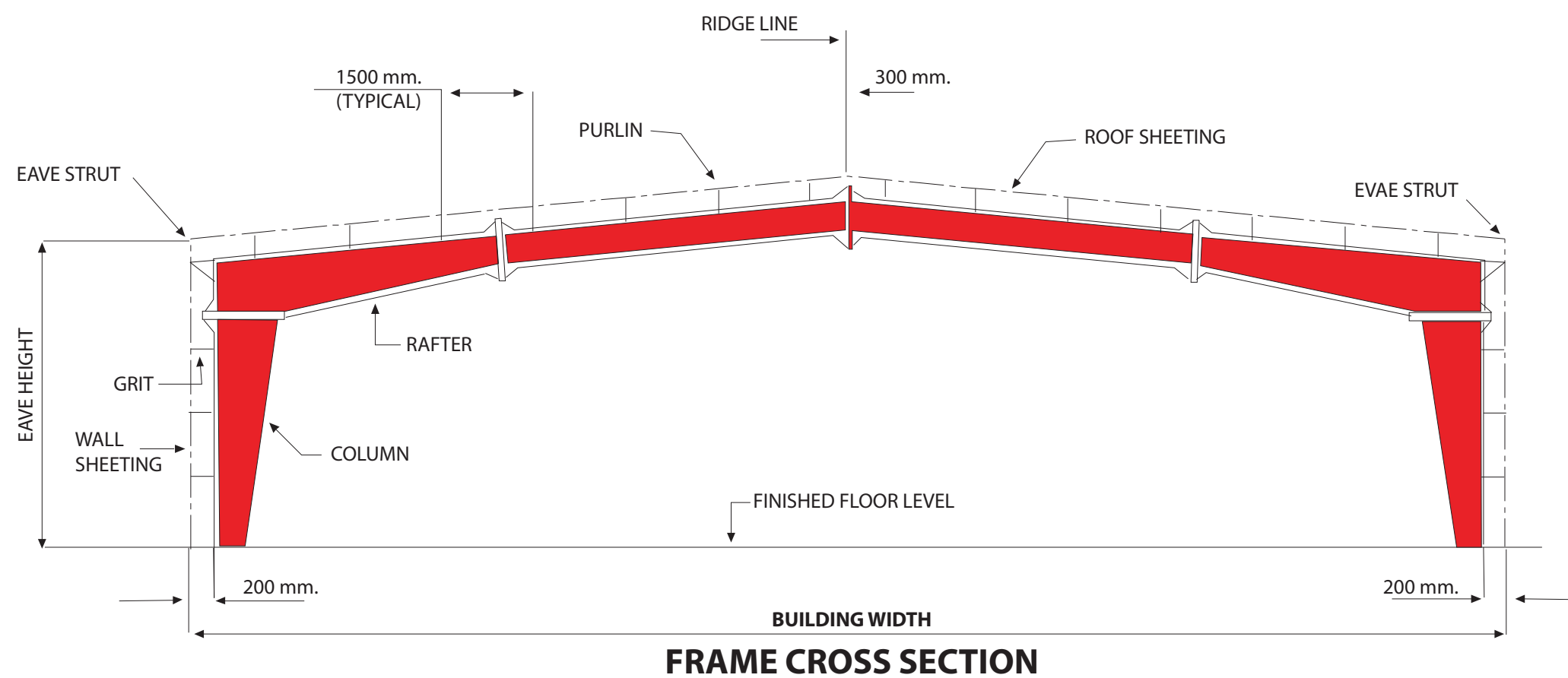
Whether you're a contractor or an owner, steel buildings are the way to go in terms of making a cost-cutting and time-saving decision. Steel buildings are the ideal choice for modernization reconfiguring, extending or adapting your space with minimal disruption. And when it comes to the application of a pre-engineered steel building, your imagination is its only limit.

Our team of experts can help you visualize your business, designed in one of our custom structures which can serve a variety of purposes.

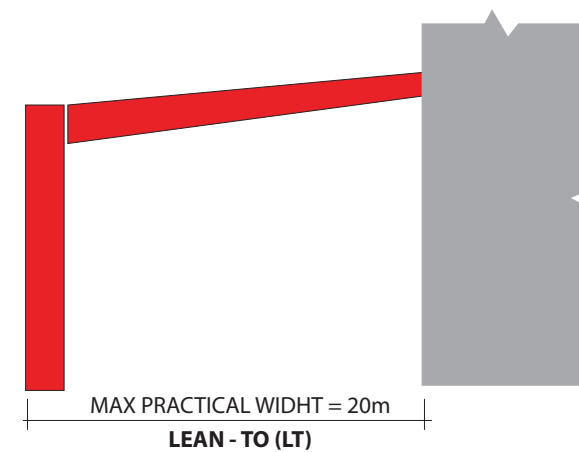
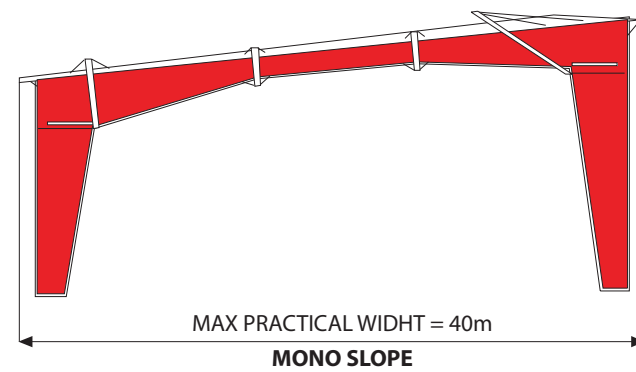
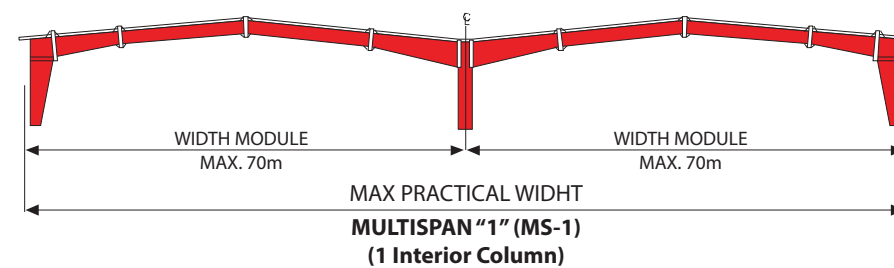
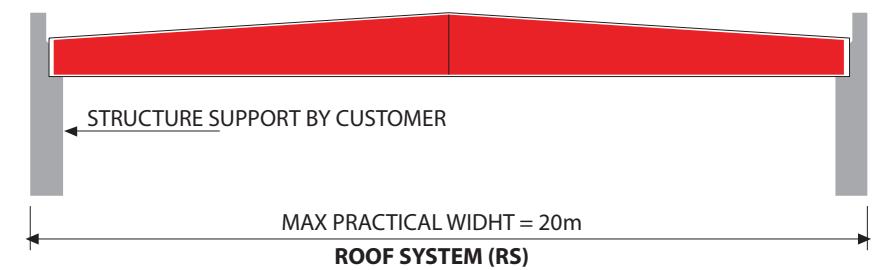
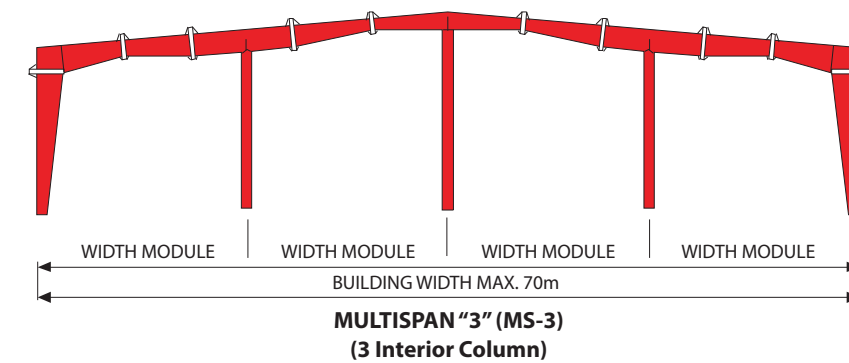
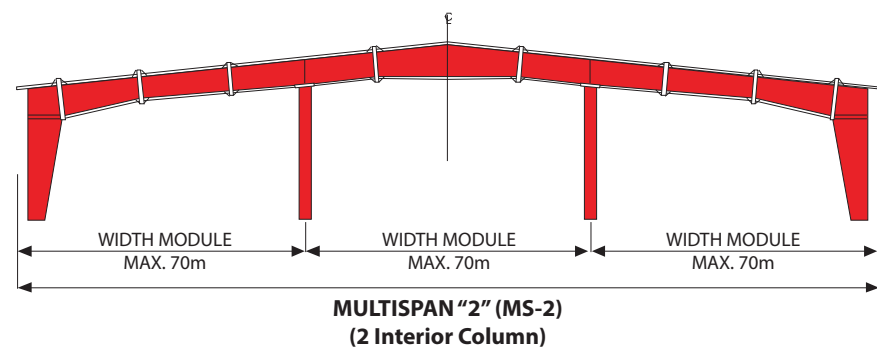
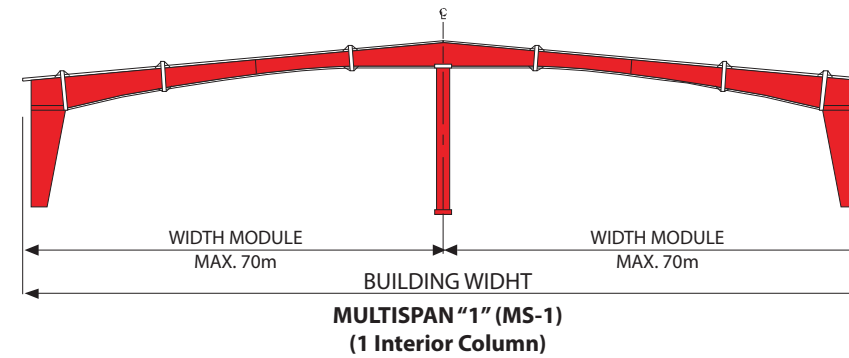
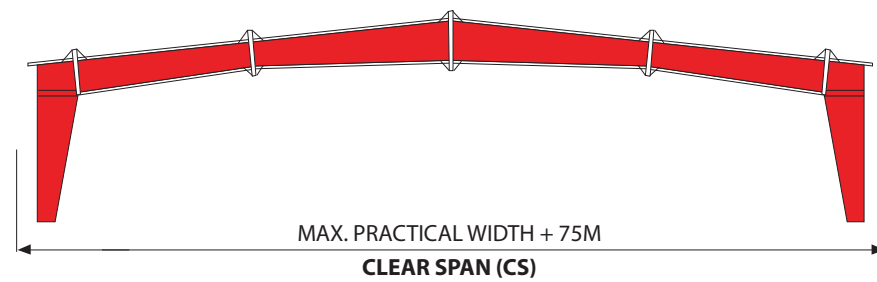
- **Industrial Buildings**
- **Logistic Centers/Warehouses/Fulfillment centers**
- **Industrial Sheds**
- **Educational Buildings**
- **Hospital Buildings**
- **Recreational Parks**
- **Hotels**
- **Hostels**
- **Disaster Relief Shelters**
- **Aircraft Hanger/ Airport Terminals**
- **Commercial Mall Buildings**
- **Agricultural Buildings**

Pre-Engineered buildings can also be used as temporary isolation centers in case of emergency. These structures are relocatable.

PARAMETERS & PRIMARY FRAMING



PARAMETERS & PRIMARY FRAMING



Our Products

Polyurethane Sandwich Panels

Pakistan Insulation's insulated sandwich panels are processed using rigid poly urethane with external and internal sheet in steel, alu-zinc and aluminium of different thickness, coating and colors.

General Physical Properties of Polyurethane

Overall Density	= 35 to 38 kgs/m ³
Closed cell contents	≥ 90%
Thermal conductivity	= 0.021 W/m ² °k
Compressive strength (perpendicular to the main plane of the panel)	= 0.21N/mm ²

Dimensional Stability (Linear Changes)

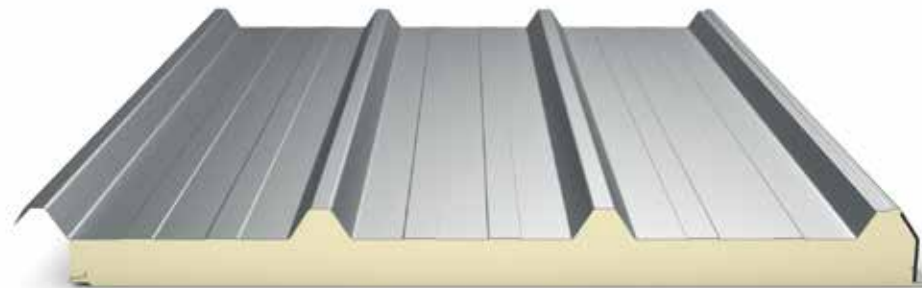
48 hours @ -25°C	= 1% max
48 hours @ 70°C	= 1% max
Pu Thickness	= 50 mm to 150 mm



Crimped Corner Profile

Benefits:

- Higher energy saving due to very low thermal conductivity.
- Reduce the effect of noise pollution.
- Lighter in weight, easy to move and highly insulated.
- Economical.
- Durable.
- Dimensional stability.



Z-Purlin & C-Channels



Z - Purlins / C - channels are the secondary structural members used to support the roof sheeting / wall cladding

Our range for depth of these purlin varies from 100mm upto 400mm and thickness varies upto 3.0mm

Flange widths / lip size / flange angles of the sections can be set in the machine, as per the requirement of the client

These Z/C sections give an excellent strength to weight ratio, thus giving tremendous cost savings.

These are manufactured from galvanized coils conforming to ASTM -A 653, Grade D having a yield strength of 345 Mpa.

Our purlins / channels are custom made to the desired size having the flexibility of its connection to the main structure either by overlapped system or sleeved system.

The anti-sag rods, connection fasteners for these purlins can also be designed and supplied by us upon client's request.

Benefits

- High strength to weight ratio.
- Economical.
- Can be used for large spans upto 11.0m
- Better quality and finish.
- Quick Installation.
- Custom made to requirement.

Our Products

35/200 Single Skin Profiled steel sheeting

Properties:

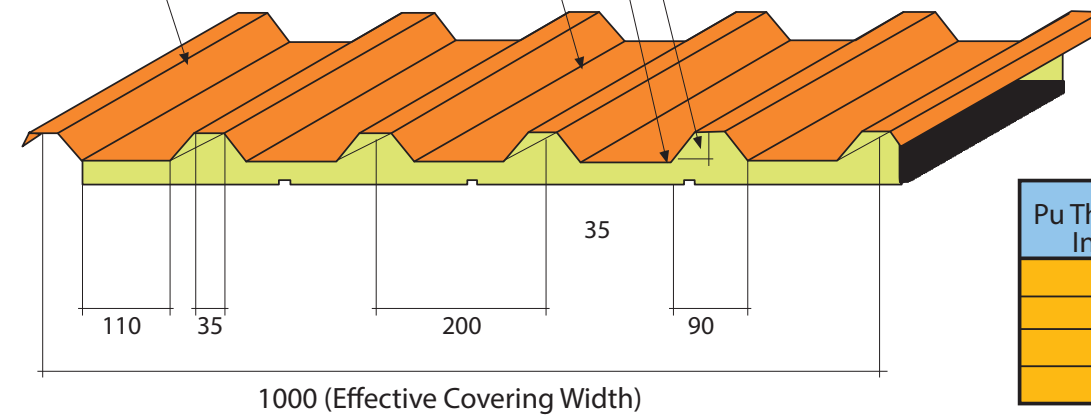
*Material: ASTM A653 Grade:50 ($F_y=35.0 \text{ KN/Cm}^2$).

*Sheet: Mill finish and color coated.

*Paint: Polyester coated 25-30 microns on the exposed surface and 5-7 microns epoxy on inner surface.

*Color: colors available as per RAL color chart (subject to the availability)

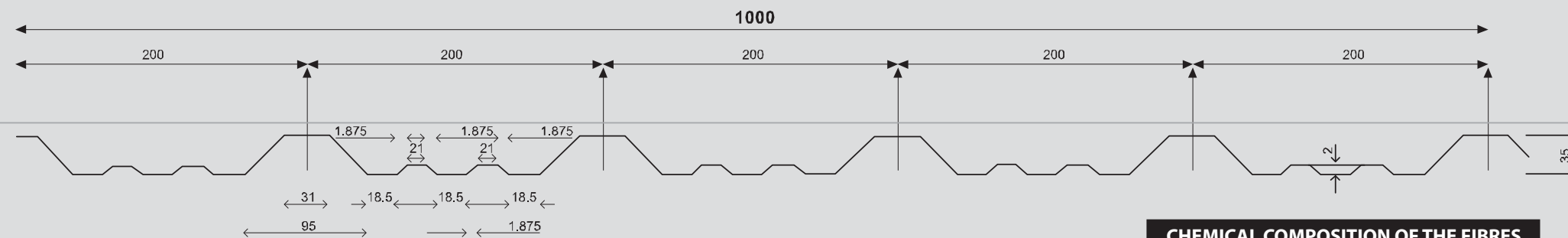
Factory Injected Polyurethane
Shallow Ribbed Liner Panel or Aluminium Foil Liner
TP35/200 Profiled Outer Sheet
Overtapping



PROFILE 35/200

Thermal resistance of Polyurethane at various Polyurethane Foam Thickness

Pu Thickness In mm	K w/m K	U Value w/m K/w
35	0.021	0.600
50	0.021	0.420
75	0.021	0.280
100	0.021	0.210



Rockwool Sandwich Panel

Pakistan Insulation producing termolan (Rockwool) under the technical collaboration of **Termolan s.p.a. Italy**. It is manufacturing on International Standard by practicing on **ISO 9001: 2010**. It is one of the best insulation material. It is best known for its fire resistant properties. Rockwool insulation panels offer protection from cold, heat, and ambient noise. It is environment friendly product.

Pakistan Insulations Rockwool

Density = 100-200 kg/m³

Thickness = 20 to 100 mm



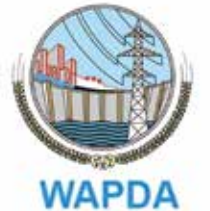
CHEMICAL COMPOSITION OF THE FIBRES

The chemical composition of the Termolan Fibres is as follows:

SILICA	as Si O ₂	43.42 ± 3%
ALUMINIUM	as Al ₂ O ₃	10.38 ± 2%
IRON	as Fe O	12.78 ± 2%
IRON	as Fe O ₃	14.21 ± 2%
TITINIUM	as Ti O ₂	2.40 ± 2%
MANGANESE	as Mn O	0.20 ± .1%
PHOSPHORUS	as Pa ₂ O ₅	0.96 ± .1%
CALCIUM	as Ca O	11.60 ± 2%
MAGNESIUM	as Mg O	10.18 ± 2%
SODIUM	as Na O	2.70 ± 1%
POTASSIUM	as K ₂ O	1.06 ± .2%
SULPHUR	as S O ₃	Trace

		THERMAL CONDUCTIVITY			
Density Kg/m		At 50°C	At 100°C	At 200°C	At 300°C
80	Kcal/mh°C	0.036	0.042	0.059	0.089
	W/mK	0.042	0.049	0.065	0.103
100	Kcal/mh°C	0.035	0.041	0.058	0.083
	W/mK	0.041	0.048	0.067	0.097
120	Kcal/mh°C	0.034	0.039	0.055	0.078
	W/mK	0.039	0.045	0.064	0.091

Our Clients



Delivered Projects

The City School



Peerani Ware House



Pakola Products



Pepsi Hyderabad



Shell Kemari



Agha Khan (Insulator)



Delivered Projects

LGSS Structure Of P&G



Indus Motors



www.rockwool.web.pk



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