

# **HEAVY STEEL CONSTRUCTION**

## PRE-ENGINEERED







#### PRE ENGINEERED STEEL BUILDINGS

#### **Prismatic Constructions**

Work Shops, Storage Buildings etc.





Figure 1

Figure 2

Prismatic steel constructions can be manufactured as insulated or non-insulated depends on the request.

**TECHNICAL DATAS:** Constructions are manufactured with respect to 1.st degree seismic zone. Wind velocity 102 km/hour (h:0-8 m) TS498 ,snow load 80 kg/m². The constructions where manufactured in the factory area, can be assembled to the concrete ground which was pre-poured by the employer company. If required they can be dismantle and erect into another concrete ground several times.

**DIMENSIONS:** Construction width 10 m (single span - <u>Figure 1</u>) with column height h:4-5-6 m. Building length can be expanded in multiple of 2.5 m. Under the condition of 10 m of block width, it can be made triple, fourfold, fivefold blocks (**Figure 2**).

**BEARING SYSTEM:** NPI columns are made of filled framed steel truss and purlins with the wind connections Steel bolts and nuts will be used for these connections.

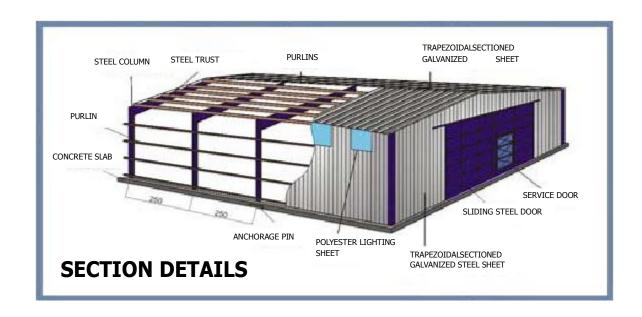
**ROOF AND FACADE COVERINGS:** 0.50 mm thick, galvanized trapezoidal sectioned steel sheets will be fixed to the purlins by using galvanized coated and screws with gasket.

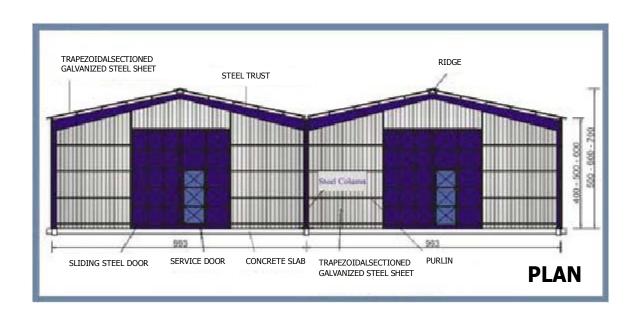
**DOORS:** 350-cmx350 cm as sliding doors. (900-mmx2000 mm sized door on the sliding door for service entrance.)

**PAINTING:** Whole steel system will be painted with 1 layer anti-rust to prevent rusting and 1 layer with oily based painting

**HEAVY STEEL CONSTRUCTION** 







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### PROJECT SAMPLE OF PRE-ENGINEERED STEEL BUILDING



Maintenance Workshop



**Covered Courts** 



### PROJECT SAMPLE OF PRE-ENGINEERED STEEL BUILDING



Storage Warehouse Structures



INDUSTRIAL WAREHOUSE TYPE STRUCTURE



#### PROJECT SAMPLE OF HOT ROLLED STEEL BUILDING







INDUSTRIAL WAREHOUSE TYPE STRUCTURE



## **TECHNICAL**

## **SPECIFICATION**





#### **HEAVY STEEL CONSTRUCTION (PRE-ENGINEERED)**

GENERAL INFORMATION	
DEFINITION	Pre-engineered steel buildings provide cost- effective alternative to large scale space requirements for various purposes.
ASSEMBLY	Pre-manufactured building materials are delivered in pieces to be assembled at site. Assembly will be as per Pre-engineered Steel Building Plans.
STORAGE AND HANDLING	Building materials should be stored in a dry and closed area.

STRUCTURAL DESIGN ANI	O STANDARD
	All statical calculations and design are arranged with respect to the wind speed, earthquake zone, weather conditions of the location where the building is going to be installed.
STANDARD	The structural is designed by strap structural design and analysis program, steel structures design codes with given design load.
DESIGN LOADS	Wind load: 80 kg/m2, Wind Speed: 145 Km/h
STANDARD PRODUCTION CONDITIONS	Constructions are manufactured with respect to 1st
EARTHQUAKE	degree seismic zone.

COLOR	
	Steel surfaces will be primed with epoxy primer. For galvanized material, no priming or painting shall be done. Coating materials are in the unpainted natural form.

STRUCTURAL PROPERTIE	TURAL PROPERTIES	
FRAME	The system is a single storey frame with steel profile columns and beams. Columns are anchored to the foundation.	
ANCHOR AND BOLT	Black steel solid material.	
FLASHING PROFILES	Galvanized bent steel profiles.	

FLOOR	
FOUNDATION	To be constructed according to the foundation plan.
FLOOR FINISH	As required and specified in plan

#### **TECHNICAL SPECIFICATION**



#### **HEAVY STEEL CONSTRUCTION (PRE-ENGINEERED)**

ROOF	
ROOF CLADDING	27mmx200mm deep corrugated,o.00mm thickness
	galvanized sheet
PURLIN	Painted bent steel profiles with galvanized bolts and nuts.
INSULATION	Available as per fire rating requirement.
SUSPENDED CEILING	Available upon request
EAVE	Available upon request
TRANSLUCENT COVERING	Available upon request
RAIN GUTTER AND DOWN PIPES	Available upon request

EXTERIOR WALL	
EXTERIOR FINISH	Unpainted galvanized corrugated steel sheet.
INSULATION	Available as per fire rating requirement.
INTERIOR FINISH	Unpainted galvanized corrugated steel sheet, and
	galvanized steel z profiles.
TRANSLUCENT COVERING	Available upon request

INTERIOR WALL	
FINISH	Unpainted galvanized corrugated steel sheet.
INSULATION	Available as per fire rating requirement.

DOORS AND WINDOWS	
DOOR FRAME	Galvanized steel sheet frames
INDUSTRIAL DOOR	370 cm x 360 cm sliding door with 900mm x 2000mm personnel door
EXTERIOR PERSONNEL DOORS	As required in the plan

ELECTRICAL INSTALLATION (OVER PANEL)	
SYSTEM	As required in the plan
FIXTURE	As per required specifications
ILLUMINATION LEVELS	As per required specifications
CABLING	As per required specifications

OTHER ITEMS	
PLUMBING INSTALLATION	As required in the plan
FIRE SYSTEM( OPTIONAL)	Available upon request
HEATING AND COOLING SYSTEM	Available upon request
FURNITURE AND EQUIPMENT	Available upon request

**TECHNICAL SPECIFICATION**