



## GREEN METAL INFRA

Pre-Engineered Buildings | Structural Fabrication | Erection & Fixing (Structures & Roofing)  
Roofing & Cladding Solutions | Effluent Treatment Plant Solutions  
Regd. Govt. Contractors

**HOT ROLLED** **COLD ROLLED** **METAL SHEET** **STRUCTURES**  
**PRE ENGINEERED** **BUILDING** **COLUMN** **PUFF PANEL**  
**ENGINEERING** **THERMAL INSULATION** **ENGINEERING** **COIL**  
**COLOR COATED PROFILE** **SHEET**  
**POLY CARBONATE**  
**GMI** **PPGI**  
**EFFLUENT TREATMENT PLANT** **FLASHINGS**  
**Z PURLIN** **L LOUVERS** **PIPE**  
**PPGL** **FRP SHEETS**

## About us

GMI is a company managed by highly experienced team having an experience of more than 10 Years in the field of steel industry & in Designing ,Engineering ,Fabrication & Erection. We are providing a complete solution in Pre-Engineered Building ,Effluent Treatment Plant We also offers following products.

### **PRE-ENGINEERED BUILDINGS COMPONENTS**

- C & Z Purlin
- Hardware

### **STRUCTURAL FABRICATION**

- Hollow Sections
- I Beam (Girders)/Plates / H Beam

### **ROOFING & CLADDING SOLUTION**

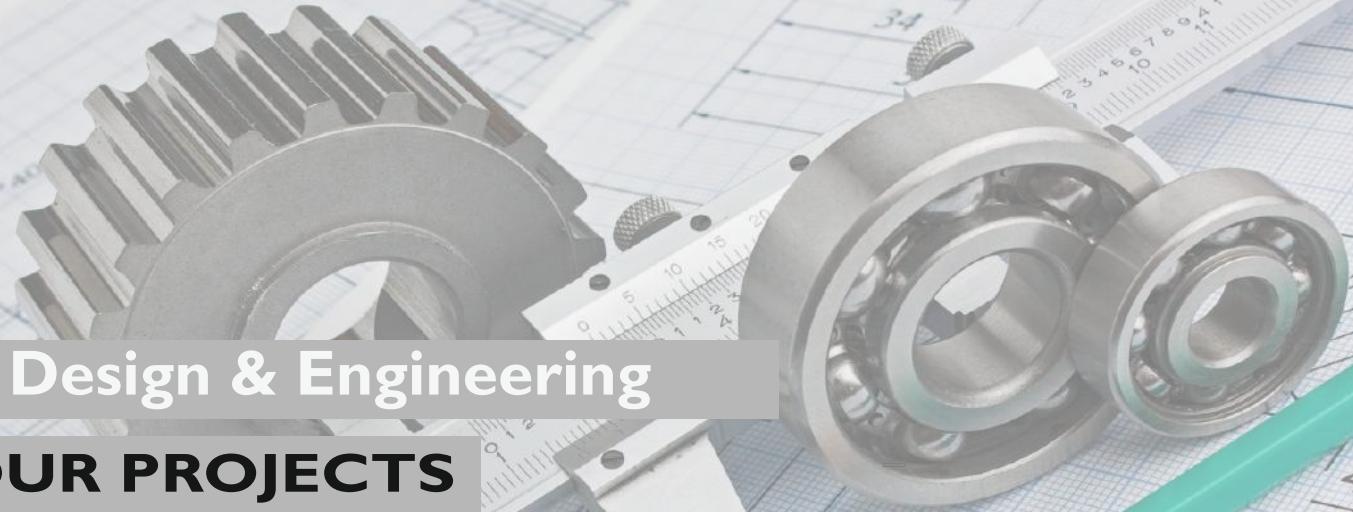
- Pre Painted Galvanized Sheets (PPGI)
- Pre Painted Galvalume Sheets (PPGL)
- Bare Galvalume Sheets (BGL)
- Metal Deck Sheet
- Roof/Cladding Puff Panel
- Polycarbonate/FRP Sheets
- Self Drilling Screws
- Roofing Accessories (Gutter, Ridge, L Corner, Downtake Pipe, etc.)

### **THERMAL INSULATION**

- Rock wool Insulation
- Glass wool Insulation
- Polynum Insulation

### **VENTILATION PRODUCT**

- Turbo Ventilators
- Louvers
- Ridge Vent



**Design & Engineering**

**OUR PROJECTS**

**From Concepts to Completion**

## **Designing & Engineering**

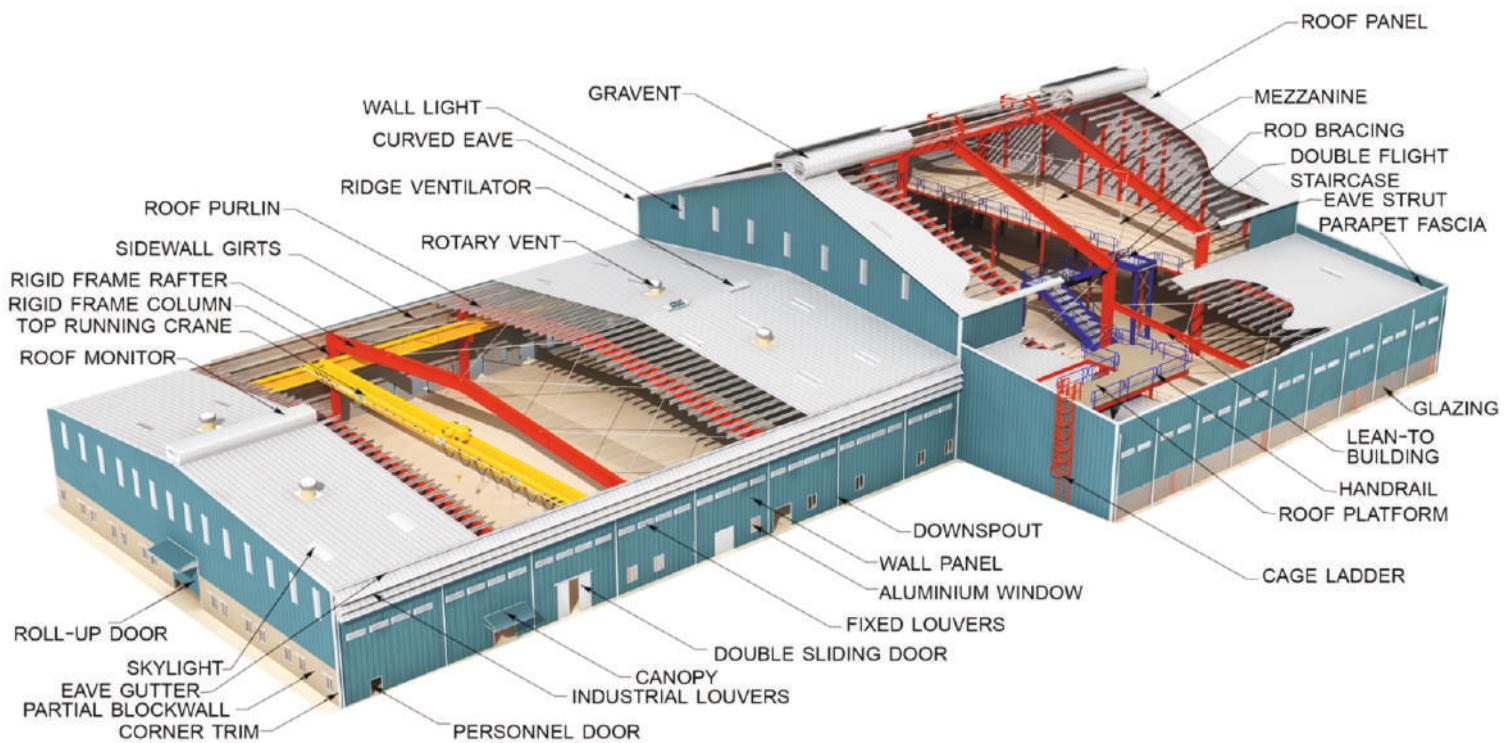
The entire engineering process is automated through dedicated software and custom developed analysis. STAAD design calculations are furnished with the design for validation. Our computer backed design and estimation system ensures precise estimation and ensures delivery of the project in a timely manner and for project planning we are using software like MS Project & Primavera.

## **Vision Mission & values**



We desire to accomplish business excellence through the highest standard of ethics, assuring the best quality product & services, innovation, productivity and **customer satisfaction**.

To provide innovative metal building and its components to Indian Industry which are sustainable, energy efficient, cost effective and in turn a good life to all people associated with the Green Metal Infra.



## Suitable for Industrial/Warehousing buildings

Pre-engineered building (PEB) were introduced into the steel building industry to facilitate fast design, delivery and erection of simple low rise structure like canopies, ware house etc. PEB can be constructed in much less than the normal time other structure. There would be no cutting or welding at site, the erector would only use spanners to connect the various elements to gether.

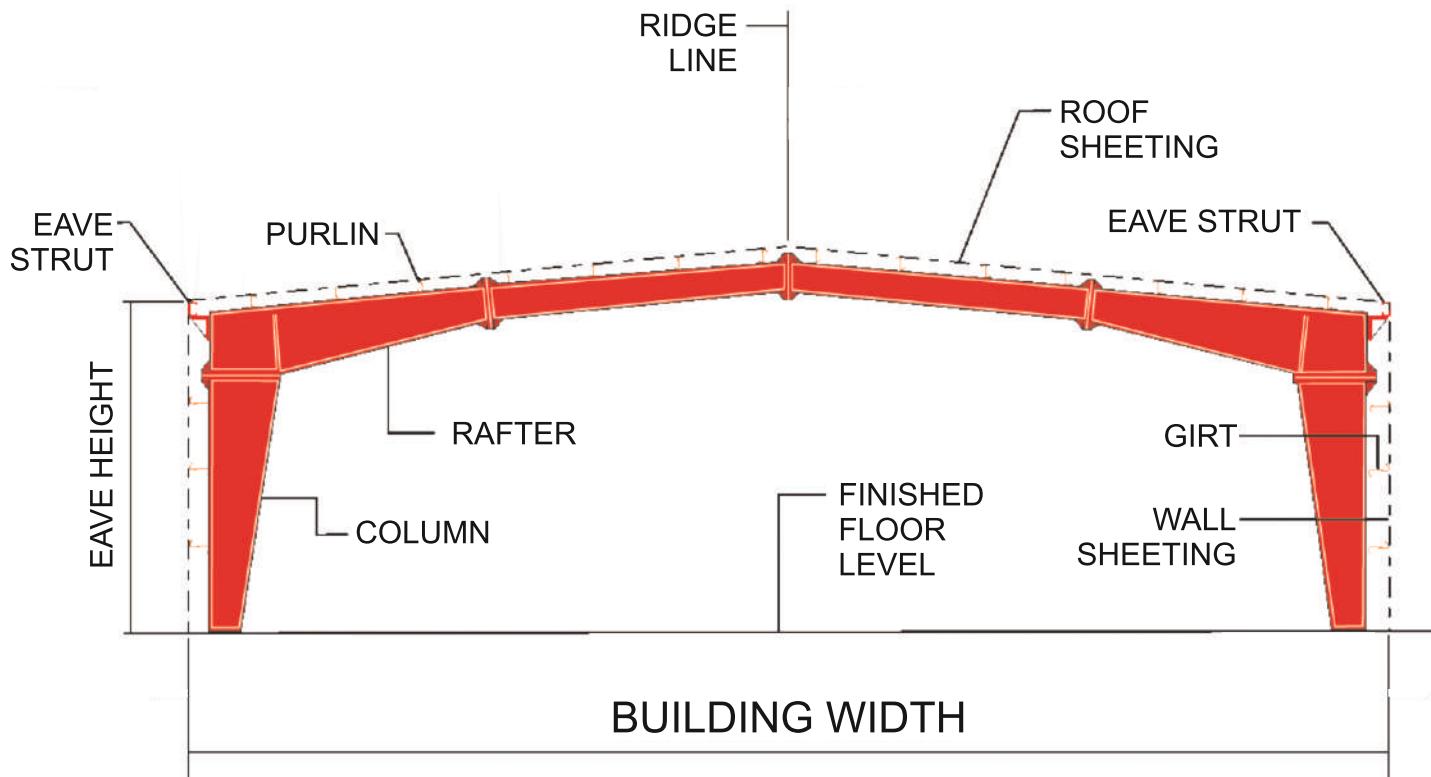
## Salient Features of PEB

- Economical.
- Seismic resistant.
- Maintenance free, energy efficient & environment friendly.
- Quality control.
- Flexible design for maximum utilization of interior space.
- Expansion/modification and relocation can be done.
- Faster Installation.
- Wide span without or few intermediate column.

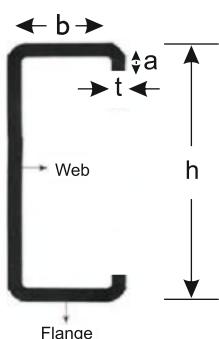


PRE ENGINEERED BUILDING

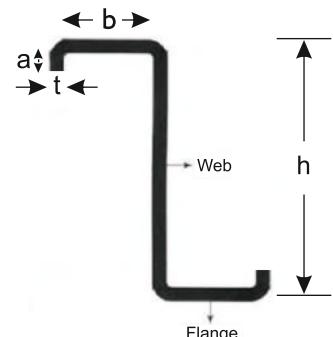
## BUILDING DESCRIPTION



## C & Z Purlins



C & Z Purlin	Dimensions
a	15-20 mm
b	40-70 mm
t	1.6-3 mm
h	80-300 mm





## PRE-ENGINEERED BUILDING VS CONVENTIONAL BUILDING

Green Metal Primary Structures are conventionally designed to give maximum freedom of use, excellent strength with maximum safety standard.

PROPERTY	PRE-ENGINEERED BUILDING	CONVENTIONAL STEEL BUILDINGS
Structure weight	Pre-engineered buildings are on the average 30% lighter because of the efficient use of steel Primary framing members are tapered built up section, with the large depth in areas of higher stress.	Primary steel members are selected hot rolled 'T' section. Which are many segments of the members heavier than what is actually required by design members have constant cross section regardless of the varying magnitude of the local stresses along the length.
Design	Secondary members are light weight roll formed 'Z' or 'C' shaped members.  Quick and efficient since PEB's are mainly formed by standard sections and connections design, time is significantly reduced, Basic design based on international design codes are used over & over;	Secondary member are selected from standard hot rolled section which are much heavier.  Each conventional steel structure is designed from scratch with fewer design aids available to the engineer.
Delivery	Average 6 to 8 weeks	Average 20 to 26 weeks
Foundations	Simply & lightweight design, easy to construct	Extensive, heavy foundation required.
Erection Simplicity	Since the connection of compounds is standard the learning curve of erection for each subsequent project is faster	The connections are normally complicated and differ from project to project resulting in increasing the time for erection of the building.
Over All Price	price per square meter may be as low as lower 30% than the conventional building.	Higher price per square meter.
Sourcing of Coordination	Building is supplied complete with all accessories including erection for a single 'ONE STOP SOURCE'	Many sources of supply are there so it becomes difficult to coordinate and handle the things.
Cost of Change Order	PEB manufacturers usually stock a large amount of than can be flexible used in many types of PEB projects	Substitution of hot rolled sections infrequently rolled by mills is expensive and time consuming.
Future Expansions	All project records are safely and orderly kept in electronic format which makes it easy for the owner to obtain a copy of this building record at	It would be difficult to obtain project records after a long period of time. It is required to contract more than more number of parties.

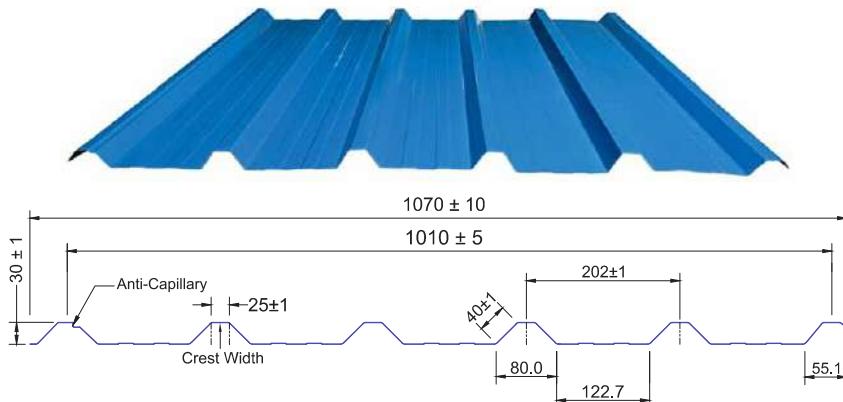


## Roofing & Cladding Solutions

**GMI** Color Coated Profile Sheets are high Quality products produced with Galvalume/Galvanised coated steel with a wide range of Zinc/Aluminum & Paint coatings with different colors.

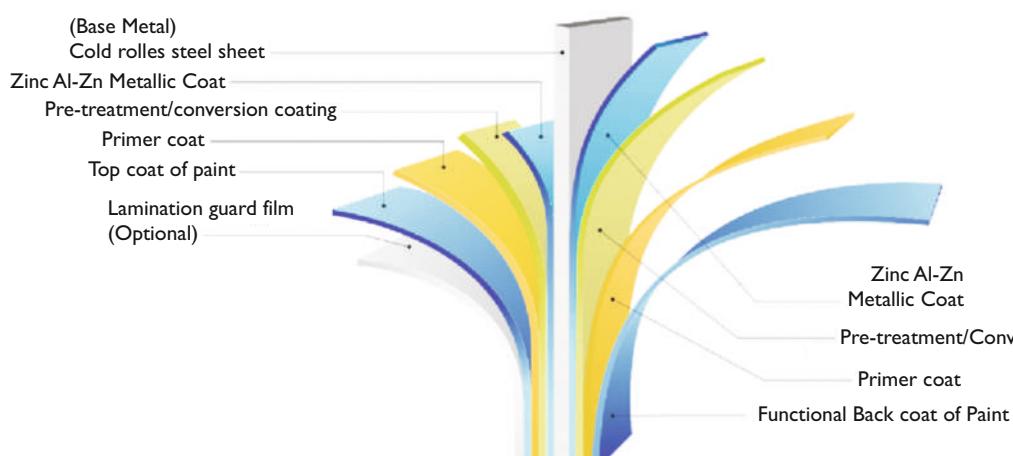
Zinc (gsm)	: 80, 100, 120 and 275 as per IS 277
Al-Zinc (Galvalume)	: Az-70, Az-150, Az-200 (gsm) as per ASTM A792M, AS 1397, JIS 3321, IS 15961
Primers	: Epoxy, Polyester & Polyurathene
Top coats	: Regular modified polyester, super durable polyester, silicon modified polyester, PVDF
Finish type	: Gloss regular matt finish, wrinkle finish and laminated sheets

## GMI Hi-Rib Profile (6 Crest)



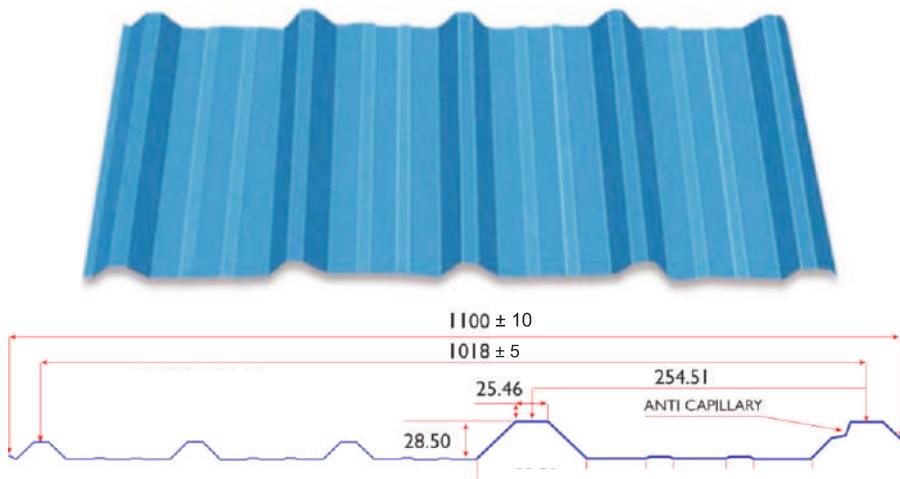
### Technical Detail

Supply Width	1070 ± 10
Covered Width	1010 ± 5
No of Crest	6
Pitch	202 ± 1
Thickness	0.40 – 0.80 MM





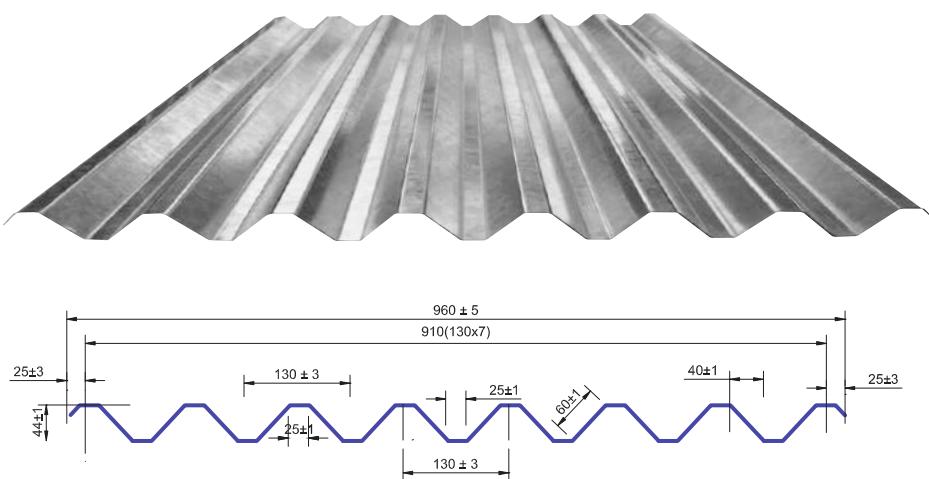
## GMI Hi-Rib Profile (5 Crest)



### Technical Detail

Supply Width	1100 ± 10
Covered Width	1018 ± 5
No of Crest	5
Pitch	254 ± 2
Thickness	0.40 – 0.80 MM

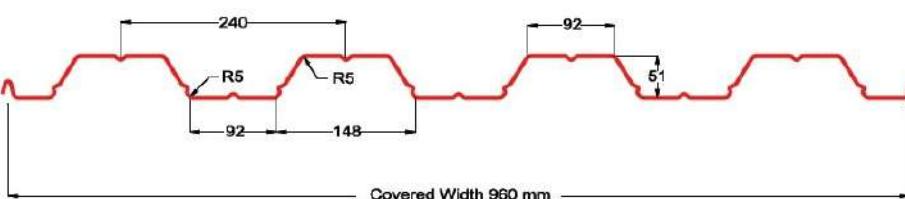
## GMI Metal Deck Profile



### Technical Detail

Supply Width	960 ± 5
Covered Width	910 ± 2
Pitch	130 ± 3
Depth	44 ± 1

## GMI Metal Deck Profile (Embossed)



### Technical Detail

Supply Width	960 ± 5
Covered Width	910 ± 2
Pitch	240 ± 2
Depth	51 ± 1



BUILDING COMPONENTS & ASSESSORIES

## Louvers

Green Metal provides a complete modern approach for walls by providing healthy working environment desirable for worker comfort and productivity, an efficient ventilation system - GMI, framed Louvers are designed to provide water resistance against all weather conditions.



Green Metal provides Self Drilling Screws having drill-Shaped Point to Cut through Sheet Metal or Steel Which eliminates the need for drilling a Pilot hole. Screws are Zinc and xylan Coated with Polymide or EPDM Bonded Washers.

## Self Drilling Screws

## Turbo Ventilators

Green Metal has introduced a wind driven Natural ventilation System with a motive to expel hot, humid and moisture laden air from industrial buildings to give more comfortable clean working environment replacing summer heat and winter damp with fresh air.





BUILDING COMPONENTS & ASSESSORIES

## Thermal Insulation

Green Metal provides a complete modern approach for roof and walls by providing Insulation to enhance the productivity of the building by resistance of the heat. Rockwool, Glasswool, Polynum are main Products which are used for thermal Insulation.

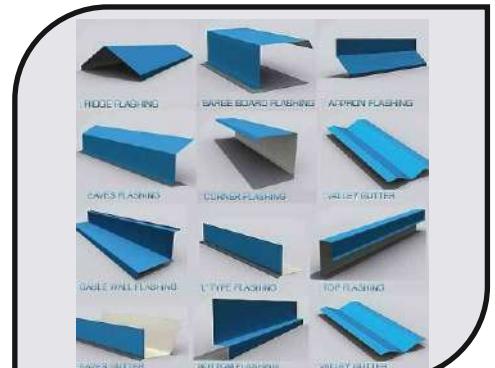


Green Metal provides polycarbonate sheet and FRP for natural light in matching hi-rib profile and standing seam profile with completet fixing accessories for water tight fixing

## FRP & Polycarbonate Sheets

## Roofing Accessories

Green Metal Provides Innovative range of Flashings (Gutter, Ridge, Corner, Gable end Flashings, Down take Pipe etc) in different designs for all type of Metal Buildings. These are manufactured on CNC bending and roll forming machines which can architectural imagery of the building.

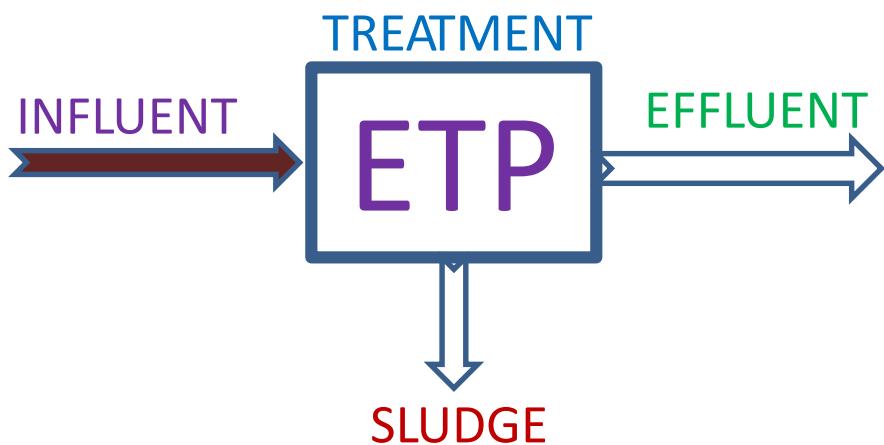




## **ETP (Effluent Treatment Plant)**

ETP is a process design for treating the industrial waste water for its reuse or safe disposal to the environment.

- Influent: Untreated industrial waste water.
- Effluent: Treated industrial waste water.
- Sludge: Solid part separated from waste water by ETP



## **Need of ETP**

- To clean industry effluent and recycle it for further use.
- To reduce the usage of fresh/potable water in Industries.
- To cut expenditure on water procurement.
- To meet the Standards for emission or discharge of environmental pollutants from various Industries set by the Government and avoid hefty penalties.
- To safe guard environment against pollution and contribute in sustainable development

## Design of ETP

The design and size of the ETP depends upon:

- Quantity and quality of the industries discharge effluent.
- Land availability.
- Monetary considerations for construction, operation & maintenance.

Area dimension depends on:

- Quality of wastewater to be treated,
- Flow rate
- Type of biological treatment to be used

In case of less available land, CETP (Common Effluent Treatment Plant) is preferred over ETP

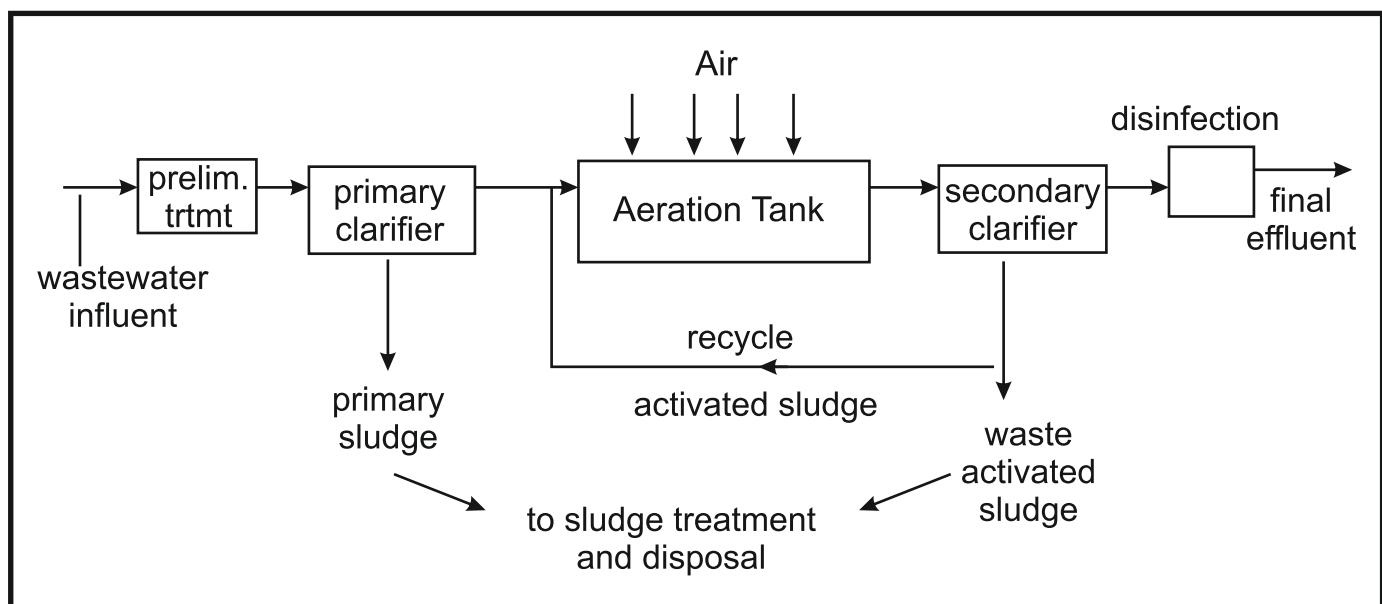
## Treatment Levels & Mechanisms of ETP

### Treatment levels

- Preliminary
- Primary
- Secondary
- Tertiary(or advanced)

### Treatment mechanisms

- Physical
- Chemical
- Biological





## Client List



INDIAN RAILWAYS



FOOD CORPORATION OF INDIA



MILITARY  
ENGINEER  
SERVICES



TOSHIBA

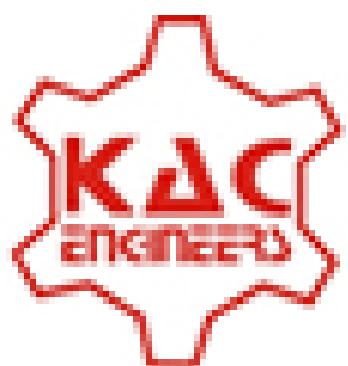


Sovrano Project  
Experts





DELHI DEVELOPMENT AUTHORITY





novack



SIR SHADILAL ENTERPRISES LIMITED

Regd.  
Government  
Contractors



and many more.....

**Government Regd. Contractors**

**Structural  
Fabrication**

**Roofing  
& Cladding  
Solutions**

**Pre-Engineered  
Buildings**

**Erection  
& Fixing  
(Structures & Roofing)**

**GMI**  
**Specialise in**

**Effluent Treatment Plant Solutions**



**You Think We Build**

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