

DHUMAL

D H U M A L M E T A L S

Build For Tomorrow



**STRONG AND DEPENDABLE
PARTNER TO PROVIDE CUSTOMIZED
AND ECONOMICAL SOLUTION**

www.dhumalmetals.com



METAL BUILDING SYSTEMS

At the start of any new venture one needs a Strong and Dependable partner to provide customized and economical solution for structural needs.

DMPL is such a partner where dreams are translated into plans and then plans are executed to achieve desired goals. With our customer centric approach, "We Deliver what We Promise."

Improvements in technology over the last few years have contributed immensely to the enhancement of quality of life. The pre-engineered buildings are the best example of one such technological marvel.

DMPL PEBS are pre-engineered, pre-fabricated metal Structures, manufactured at Sinnar (Nashik) with only the assembly and erection being carried out on customer site. DMPL PEBS are specially engineered with precision and advanced technologies to best suit the customer requirements.

At DMPL all the design, manufacturing and quality processes are set at par with industry benchmarks. We have dedicated, well trained and enthusiastic professionals to execute the various functions from design to erection and back up services.

Advantages



Aesthetically
Appealing



Fastest Roofing
Solution



Cost Effective



Long Life



Large
Clear Spans



Single Source
Responsibility



Low
Maintenance



Customization



PRE ENGINEERED BUILDINGS VS CONVENTIONAL STEEL BUILDING

Property	PEBs	Conventional Buildings
Structure Weight	Pre engineered buildings are 30% lighter than conventional structures due to optimized use of steel sections.	These are heavier than PEBs as primary members are constant cross sections regardless of the magnitude of the local stresses.
Design	Design process is more quicker and efficient as standard sections and connections are used.	Design process is lengthy and complicated as each conventional structure is designed from scratch.
Secondary members	Secondary members are light weight roll formed "Z" or "C" shaped members called PURLINS.	Secondary members are heavier as they are selected from standard hot rolled sections .
Foundation	Simple to design and Easy to construct.	Extensive and heavy foundation required.
Lower Cost	Price per square meter may be as low as by 30% than the conventional building.	Higher price per square meter.
Single Source Responsibility	One STOP SHOP Facility from Design to execution and erection.	Many sources of supply - becomes difficult to co-ordinate.
Order to Delivery Time	Average 6 to 8 weeks.	Average 20 to 26 weeks.
Erection & Future Expansion	It is Convenient, Simple and requires lesser time.	Complex, costly & requires more time.
Salvage Value	It has high Salvage Value.	It has negligible Salvage Value.

Applications



Manufacturing Facilities



Warehouses



Work Shops



Poultry & Cattle Farms



Site Offices



Agriculture



Infrastructure



Cabins



Cold Storage



PRIMARY MEMBERS

DMPL PEBs main frames are rigid high tensile strength steel structures. We fabricate these frames from built up members by following specific in line process sequence at our state of the art manufacturing facility.

The process sequence is as follows.

- Using special welding process, flanges are connected to webs.
- The splice plates are then welded to the ends of tapered sections.
- The final frame, thus formed is then erected at the site location by bolting the splice plates of connecting members together.

The use of Steel with High Tensile strength reduces the overall material usage compared to other forms of construction and effectively saves cost up to 30 to 45%.

At DMPL we use:

- Design Code = AISC' 1989
- Loading Code = MBMA'1996
- IS:2062 - E 350 with minimum yield strength 350 Mpa to manufacture all primary members.
- IS:2062 - E 250 with minimum yield strength 250 Mpa for Bracing and Anchor Bolts.
- Gr. 8.8 - For Primary connections bolts

We have a range of machines from Cutting, Punching, Bending, Shot Blasting and Painting booth. Most of the machines are CNC controlled which offer high accuracy, consistency & repeatability leading to high quality and Cost saving.

CHALLENGES FACING THE INDUSTRY

- Variable Construction quality – Lack of common certification program that promotes specific quality standards of design and manufactures
- Lack of reserve strength – Often Manufacturers load the structures to the absolute limit in name of efficient design and lowest cost to make the structure as economical as possible
- Non-adherence to Local Codes – The State or Central government should come up with certain certifications specific for Pre-Engineered Buildings

Structural Loads

- Dead and collateral Loads – will include all permanent loads like construction materials such as roofing and framing. Collateral Loads will include Fire safety systems, solar panels and HVAC and electricals.
- Live Load – Weight of building occupants and service personnel on the roof
- Wind Load
- Earthquake Load
- Crane Load
- Rain & Temperature Loads

INDUSTRIAL PROJECTS DIVISION

- Why should you consider appointing us as the Single source agency to get your project executed from Dhumal Metals IP division ?
- Access to multiple industrial layouts across Nashik City with multiple options for Bridge financing and long term lease for 15 years
- Established relationship with Architects and Liasioning agents best suited for the specific Job
- Established ground skills not only in the field of civil work and metal buildings but will also undertake supervision responsibility for your Fire safety, electrical and Solar rooftop projects.
- Reduces your headache of Co-ordinating with Multiple agencies and allows you to focus and grow your Core business.
- Undertaking projects in the range of 2 crores to 20 crores.

Critical Issues in Primary Design & Fabrication

- Single Sided Welding
- Fabrication & Erection Tolerances
- Torsion & Member Eccentricities
- Elimination of cleats and stiffners to reduce costs
- Adherence to Design and manufacturing manual guides such as MBMA, AISC and AWS is important

Primary Framing

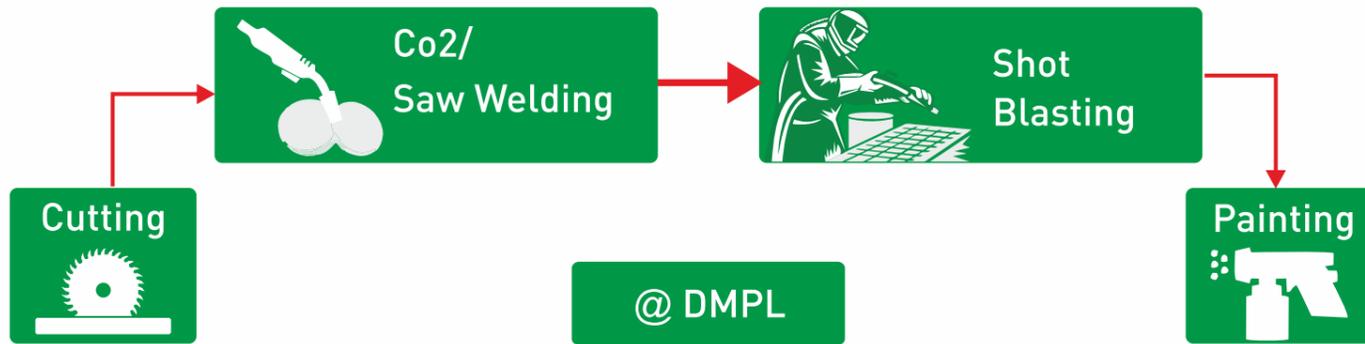
- The required dimensions of the building (width, length & height), roof slope, column-free clear span requirement along-with proposed roof and wall materials are the key factors that influence the choice of Primary Framing
- The available systems are
 - Tapered Beam
 - Single Span Rigid Frame
 - Multispan Rigid Frame
 - Single span & Continuous Trusses
 - Lean-To
- Roof Slopes as low as 1/4:12 are also possible with the Dhumal SuperSeam Roofing System



MANUFACTURING PROCESS

Manufacturing process starts with cutting and welding appropriate sections and plates as per requirements. These sections are then passed through shot blasting booth. Material is expose to accelerated metal granules which removes rust, dirt from material surface.

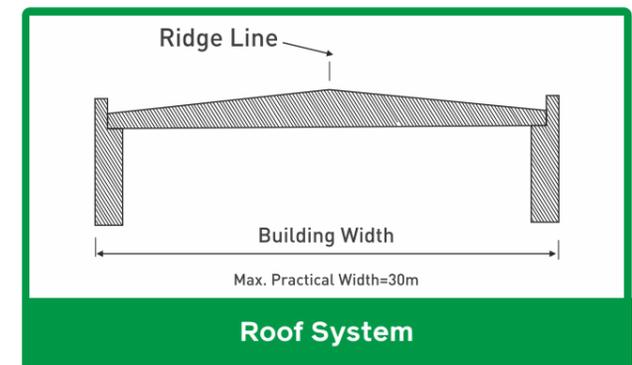
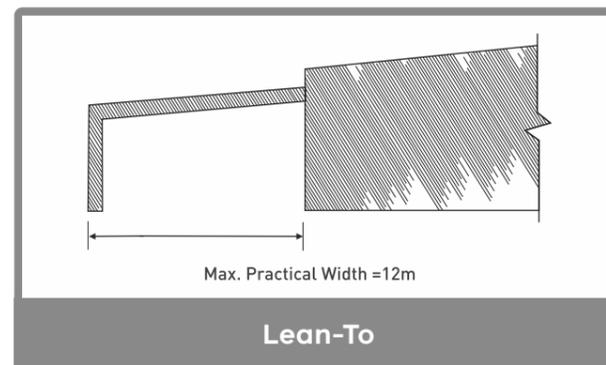
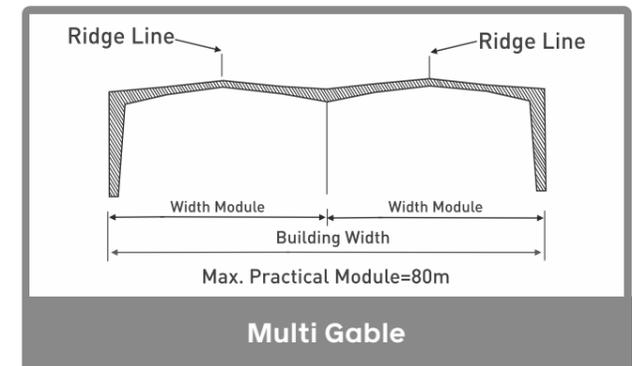
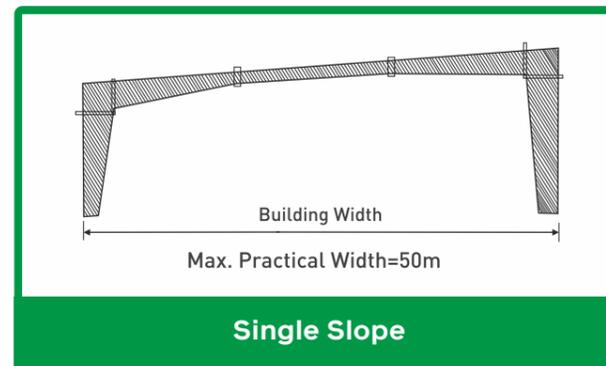
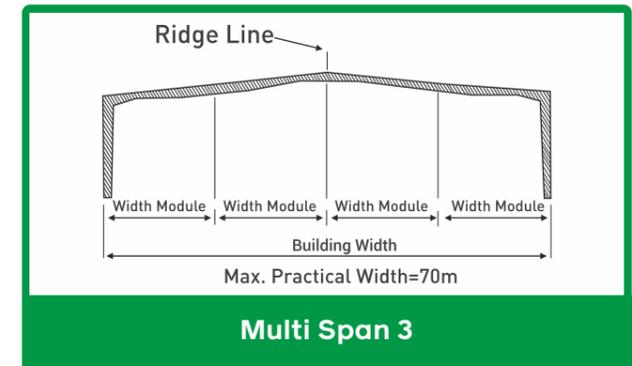
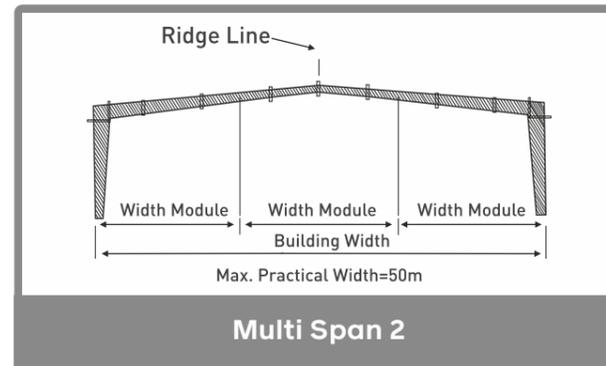
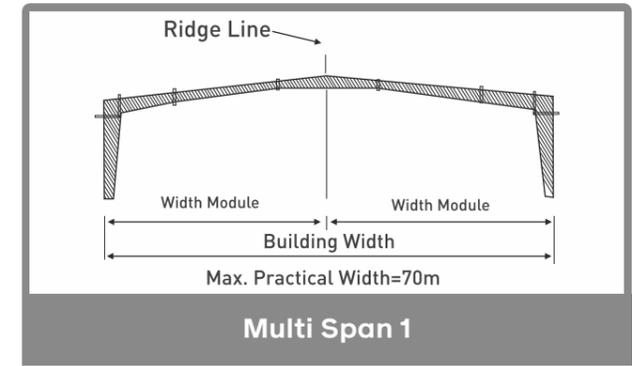
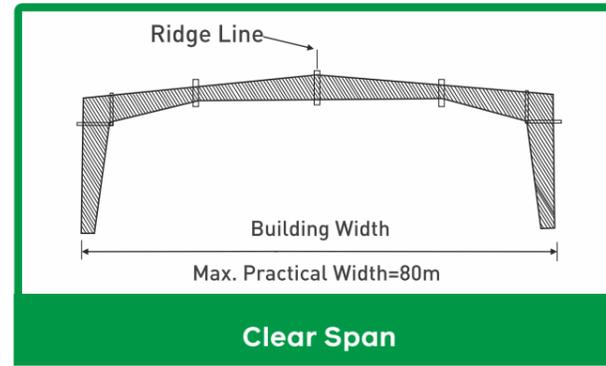
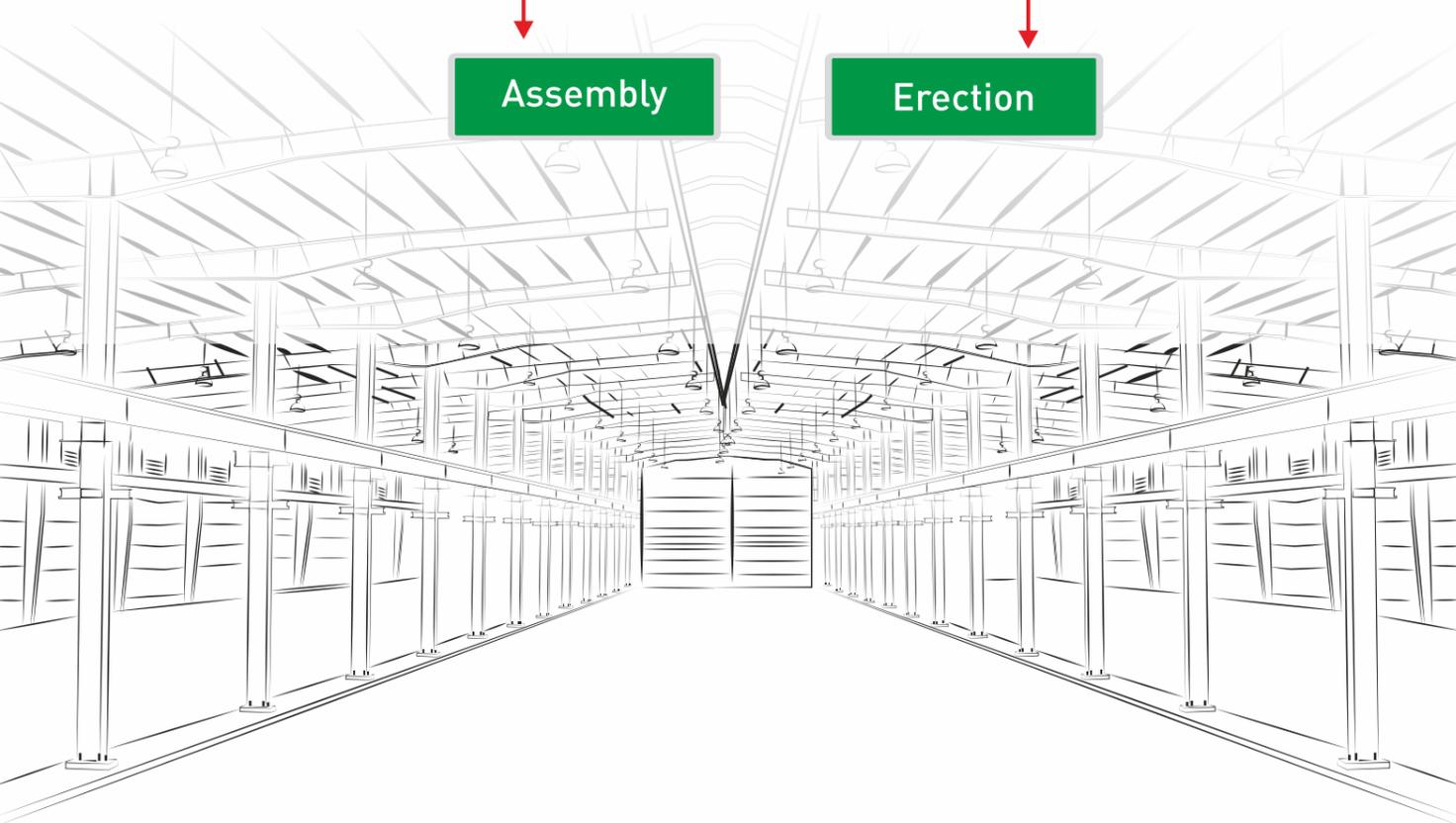
Micro craters are created on the surface which helps in neat application of paint. Sections are then passed through closed paint booth. With only filtered air coming in, contamination free painting is done. Use of special Anti-Corrosive paints give building long lasting shine and enhances its life.



@ Customer Site

Assembly

Erection



SECONDARY MEMBERS

Purlins, Girts and Eave Struts are secondary structural members used to support the wall and roof panels. Purlins are used on the roof, Girts are used on the walls and Eave Struts are used at the intersection of the sidewall and the roof.

Specifications

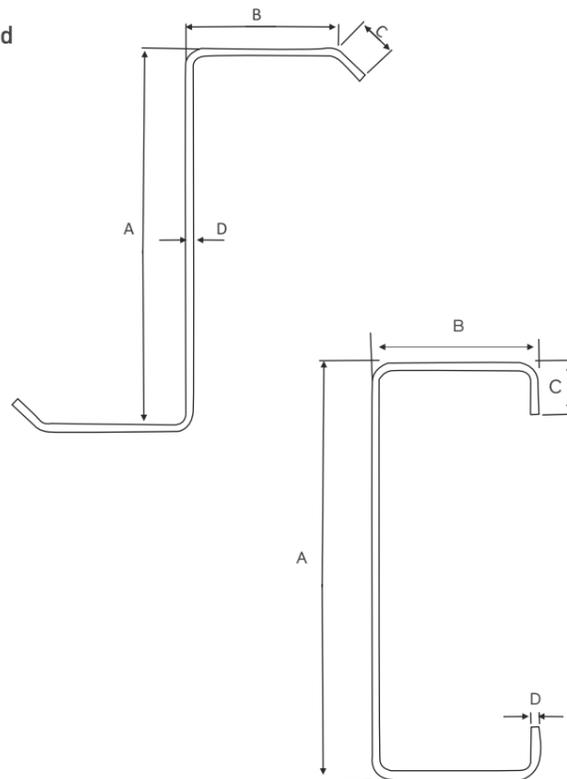
SPECS	DMPL PURLINS
Coating	120 to 270 GSM
"A"	100 to 300 MM
"B"	40 to 80 MM
"C"	0 to 20 MM
"D"	1 to 3.5 MM



"C" and "Z" Purlins

Important functions of Secondary Members:

- They act as struts that help in resisting part of the longitudinal loads that are usually applied on the building on account of wind and earthquake.
- The secondary members also provide lateral bracing to the compression flanges of the main frame members thereby increasing frame capacity.
- Transfer horizontal loads into the bracing system.



At DMPL, We Use

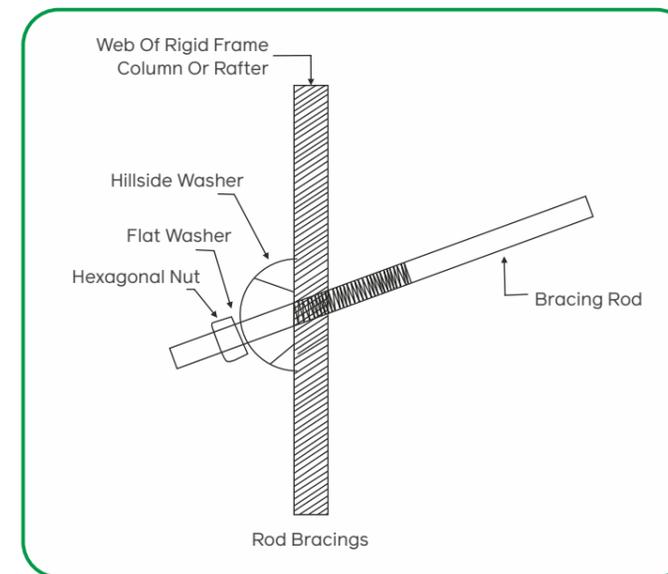
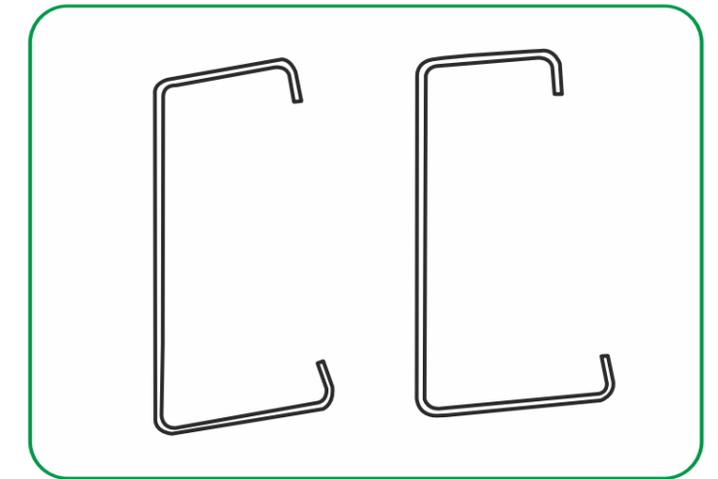
- Pre-Galvanized cold rolled sections with 120 to 270 GSM coating and yield strength as 350 Mpa.
- Gr. 4.6 - for Secondary connection bolts

Cold rolled Purlins offer unique Advantages over Conventional members. They are summed up as below:

- Cold rolled purlins are upto 30 to 45 % lighter in weight.
- For same number of purlins, the cold rolled purlins require lighter primary structure.
- They offer higher strength compared to conventional members.
- Use of secondary members effectively reduces overall cost as lighter primary structure is required.

Eave Struts

Eave Struts are secondary members installed at the intersection of the roof and the exterior wall. It acts as both, the purlin and the girt.



Bracing System

Bracings are available in two types -
1) Rod Bracing 2) Wire Bracing

Wind and Flange bracings are generally rod bracing with min yield strength of 250 MPa conforming to specifications of ASTM A-36 or Equivalent.

ROOFING SHEETS

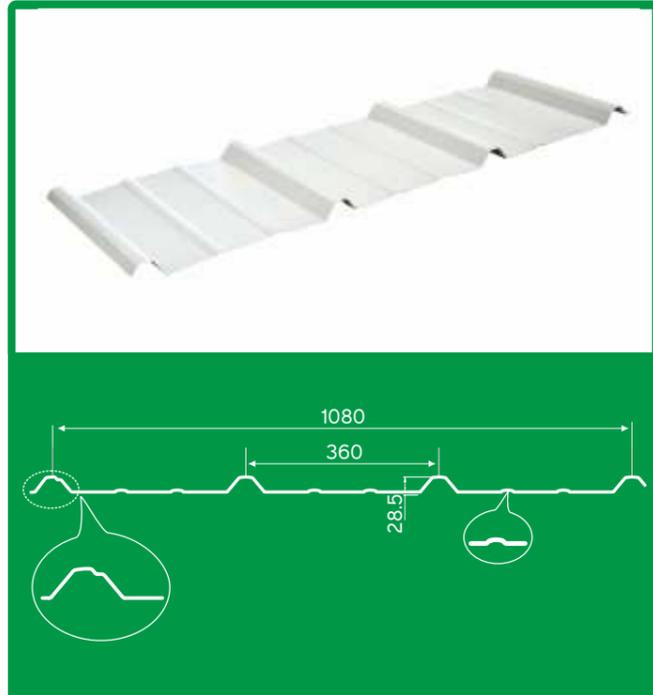
Profile

DMPL offers two specially designed profiles, namely, SuperRoof-1025 & SuperRoof-1080.

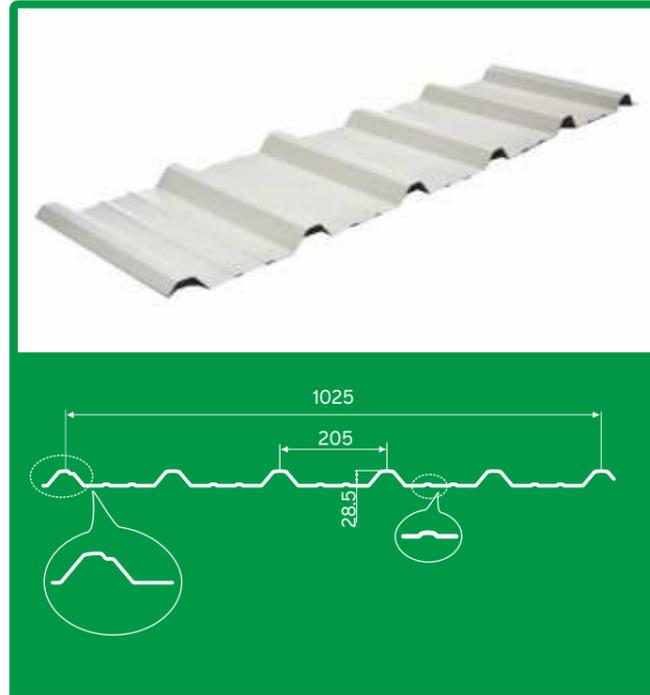
Our profiles have special features such as :

Anti-cappillary groove - stops leakage at overlaps.

Crests with curved tops - enables leakage proof fastening of sheets.



SuperRoof - 1080 Offers greater coverage area



SuperRoof - 1025 Offers higher strength

We offers different color options



Other colors can be offered as per requirement

DMPL also offers special profiles such as Ridge Profile and Curved Profile



Keeping in mind the various demands of the customers, we at DMPL offer a large number of combinations in Thicknesses, Coatings and Colors.

We use only standard make raw material steel coils with following specifications.

- Yield strength - 550 MPa or as per requirement
- Coating - Galvanized / Galvalume 150 GSM or as per requirement
- Thickness - 0.35 mm to 0.8 mm
- Types of colour coating offered - RMP, SMP, SDP, ARS, PVDF

SuperRoof Highlights

- State of the art machinery, use of quality raw material and standardized processes are what set SuperRoof apart from other roofing sheets in the market.
- SuperRoof is immune to the problems such as Warpage, Sag, Twist or Bend.
- Use of superior equipments result in scratch proof sheets without any stresses.



High durability & Long lasting look



Corrosion & Weather Resistant



Environmental Friendly



Innovative & Specially designed Profiles



Return on Investment



UV Resistant

We also offers decorative Roofings. These Roofings are used for projects that demand high aesthetic value. The two options we offer are as shown.



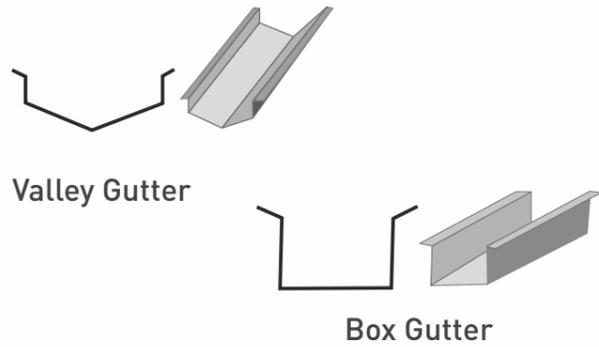
1. Wrinkle Finish



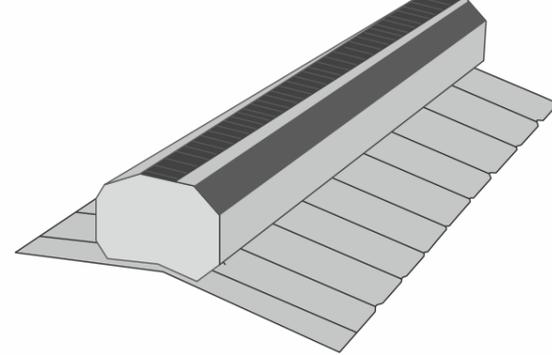
2. Wood Finish

Other colors can be offered as per requirement

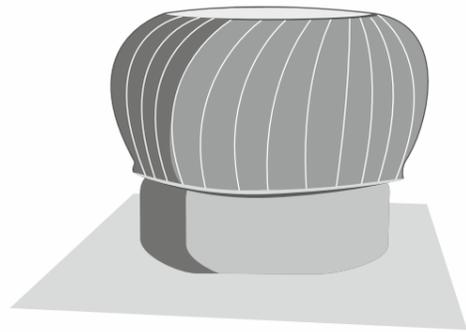
ACCESSORIES



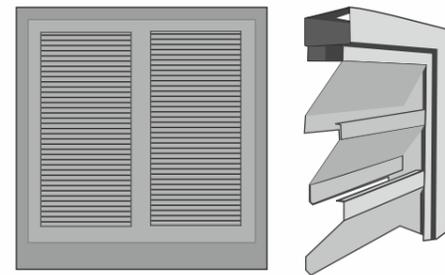
Flashing & Gutters



Ridge Ventilator



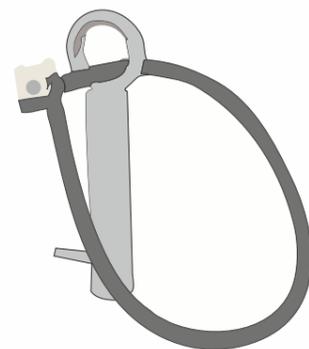
Turbo Ventilator



Windows & Louvers



Self Drilling Screws



Roof Safety Equipments

STATE OF THE ART MANUFACTURING FACILITY

Ventilators

Ventilators exhaust hot and stale air from the main working space of industries, warehouses, workshops, and other enclosed areas without use of electricity. We can provide Turbo and Ridge Ventilators as per requirement.

Gutters and Flashing

Gutters are mainly used as a form of roof water channel. They are of two types, namely, valley gutter & box gutter. Flashings are a type of a metal cover that stops water from penetrating the junction of a roof.

Skylights

The skylights are polycarbonate sheets which are highly durable and virtually eliminates need of artificial lighting in day time.

Louvers

Allows air and light to pass through it and facilitate Ventilation

Fasteners and Sealants

Some of the main causes of corrosion are Swarf, installation debris and fasteners having poor resistance to corrosion. Fasteners particularly should have high corrosion resistance, usually Equivalent to coated sheet. At DMPL, we use only Xylan coated Fasteners and standard quality sealants to prevent any corrosion and leakages.

Roof Safety Equipment

Roof Safety Equipments are used while working on rooftop or while carrying out maintenance work.



STATE OF THE ART MANUFACTURING FACILITY



COMPLETED PROJECT



Harley Davidson Showroom



Sai Krupa, Gonde



P&G, Hyderabad



Pramod Fiber, Gonde



Tower House, Gangapur Back Waters



Shweta Print Pack

COMPLETED PROJECT



Ukay Metals, Jaulke MIDC, Ozar



Swapnil Agro, Deola



Anand Agro



Apsunde Sale Hall, Adgaon



Autofits, Sinnar



Autofits, Sinnar



Apsunde Sale Hall, Adgaon



Lyondell Basell, Sinnar



BSS Automobiles



Jamuna Feed Mill, Hyderabad



ABOUT DHUMAL METALS

Established in 1979, **Dhumal Industries** is a trusted business house since its inception. Guided by the philosophy to produce innovative and quality products, Dhumal Industries has come to be known for its "successful customer centric" approach.

We have a satisfied customer base spread all over India and in various other countries. At Dhumal Industries we are constantly striving to stay updated with latest technology and innovations, which is reflected by our No. 1 position in the Indian Poultry Solutions industry.

Dhumal Metals Private Limited (DMPL) is a sister company of Dhumal Industries. DMPL tries to replicate Dhumal Industries in terms of its core values and aims to achieve new heights. DMPL is a modern manufacturing setup equipped with the latest machinery & adopts standardized manufacturing processes.

Currently our manufacturing unit covers 1,00,000 sq .ft. area and expands across a sprawling 5 acre campus. The manufacturing unit consists of a wide range of machinery, right from cutting, punching, bending, roll forming, and heavy metal fabrication to blasting & painting. Most of the machines are CNC controlled offering high precision, repeatability and accuracy thus enhancing the quality of our product.

DMPL currently has a manufacturing capacity of 45,000 tons per year and are planning to expand gradually over next 5 years. With in-house facilities from cutting to painting, we offer customized solutions to suit customer requirements.



D H U M A L M E T A L S



E-36, D Road, MIDC, Satpur, Nashik - 422 007 , Maharashtra, India



Works : Plot No. H-8, MIDC, Malegaon, (Sinnar), Tal. Sinnar,
Dist. Nashik - 422 103, Maharashtra, India



+91 253 2350384 / 2350684,



+91 253 2351584



salesdm@dhumal.com

 **PUNE**

Gat no.296, Opp.Telephone exchange, Behind
Hind Electronics & Vaishnavi Nursing Home,
Pune -Solapur Road, A/P- Lonikalbhor, Tal-
Haveli Dist-Pune-412201.

 +91 92722 22284,
 +91 99701 00290,
 pune@dhumal.com

 **HYDERABAD**

H No.4-7-180, Anand Nagar Colony,
Beside Bawchi Hotel Line &
Near Titan Hospital, Hayat Nagar,
Hyderabad - 501506

 +91 99636 78884
 hyd@dhumal.com

 **BANGALORE**

House No.1094/3,
Annia Reddy Layout, Ramamurthy Nagar,
Main Road, Dodda Banaswadi,
Bangalore - 560043.

 +91 80 254 261 30
 +91 99725 78084
 banglr@dhumal.com

 **KOLKATTA**

47/A, Jessore Raod, Sathi Bhavan, Ground Floor,
Near FCI Godown, Opp-New Barrackpore Bus
Stop, Madhyamgram, Kolkatta-700132

 +91 33 251 325 36
 +91 99039 10984
 kol@dhumal.com

 **GHAZIABAD**

1036, Opp. Poysa Factory, Meerut Road,
Ghaziabad (UP), Pin. 201003

 +91 99900 80684
 ghaziabad@dhumal.com

 **AMBALA**

Kuldeep Nagar, Cantonment Area, D.R.M Road,
Ambala, Ambala, Haryana, 133001

 +91 788 787 7984
 ambala@dhumal.com

www.dhumalmetals.com