

Product Catalogue

VIBGYOR METAL. L.L.C.
An ISO 9001:2015 Certified Company
www.vibgyorsteel.org



Products



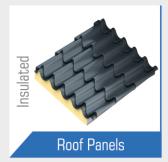




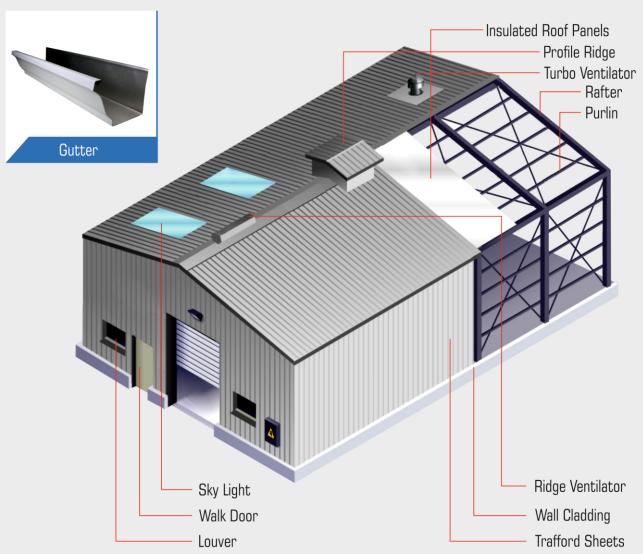














Introduction

Vibgyor Metal is one of the best company in UAE manufacturing insulated sandwich Panels, Purlin, Decking Sheets, Single skin etc. with markets spanning middle east, Indian sub continents, South east Asia and Africa.

Vml with its experience in the industry and exposure to the market during last 10 years has gained trust and good will of its consumersproviding quality meterials at cost effective prices and on time deliveries to the delight of its customers.

Vision

To lead in customers delight, sustain a reputation of value creation and process.

Mission

To provide best quality products at competitive prices to the delight of the customers to become the market leaders.

We Make

- Vibgyor Roof And Wall Cladding
 - 1. Aluminum Cladding
 - 2. Steel Cladding
- Vibgyor Insulated Panels
 - 1. Insulated Sandwich Panel (Roof Wall)
 - 2. Polyurethane
 - 3. Rock wool panels
- Vibgyor Turbo Ventilator (Renewable Energy Solutions)
- Vibgyor Curved Roof Solutions
- Vibgyor Z Purlings/c Channels
- Vibgyor Roofing Accessories

Capacity

Sandwich Panel : 100,000 Sq.mtr/Month Single Skin : 400,000 Sq.mtr/Month Rock wool : 30,000 Sq.mtr/Month

Types Of Vibgyor Insulated Sandwich Panels



TYPES OF PROFILE	DRAWING	APPLICATION
Trafford profile 25/253		Roof / wall sheets
Trafford profile 38/200		Roof / wall sheets
Trafford profile 45/250		Roof / wall sheets
Flat panel		External & Internal wall partition

Polyurethane Insulation Property

Composite Panels are produced using polyurethane with Internal and External Sheets of Alumium/ Steel/other suitable texture and aechitectural meterials of different Thickness, Coating and Colours.

Density: 35kg/m³

"U" Value (W/m² -°C)			
PU Thickness	"U" Value		
25 mm	0.96		
35mm	0.68		
50 mm	0.48		

Density: 40kg/m³

"U" Value (W/m² -°C)			
PU Thickness	"U" Value		
25 mm	1.08		
35mm	0.77		
50 mm	0.54		

Polyurethane Thickness RANGE-25 mm to 200 mm

Note: Higher density is available upon request

Vibgyor Insulated Sandwich Panel



Aluminium Alloy

Aluminium alloy, used in the production of corrugated roof and wall cladding panels, is A-3105 H 16 for mill dinish and H46 for pre-painted.

Material Properties

Yield strength Min 140 Mpa Modules of elasticity 69000 Mpa Coeff. Of linear thermal expansion 24 x 10 per deg.C

Durability

Aluminum is highly resistant to corrosion against saline water making it the ideal choice in coastal region for roof cladding.

Fire

Aluminium is classified as a non-combustible material, as defined by BS 476: part 4:1970

Mill Finish

This is the natural untreated surface of metal as it leaves the rolling mill.

Stucco-embossed

Stucco-embossed aluminum is mill finished aluminum. This is roller embossed to produce irregular male female pattern finish. The advantage of embossing is that direct reflections and sun glaze are diffused, without reduction in the total reflectivity.

Polyester Colour Coated

An economical, long-life coated, factory applied polyester on the exposed side, and a lacquer coating on the reverse side.

PVDF Colour Coated

Excellent U.V resistant, long-life coating of 2 coats of factory applied PVDF on the exposed side and lacquer coating on the reverse side.

Specification Of Steel Cladding

Base Material

The base material shall conform to ASTM A 653 or other equivalent standards like JIS 3302, EN 10326/10327 and IS 277.

PPGI-ZINC Coating (Galvanized)

The base steel material is hot dipped galvanized Zinc coated as per ASTM standard with a coating thickness range $180 \text{gm/m} ^2$ to $270 \text{gm/m} ^2$ subject to confirmation at the time of placing the order.

PVDF Colour Coated

Excellent U.V resistant, long-life coating of 2 coats of factory applied PVDF on the exposed side and lacquer coating on the reverse side.

Aluminium alloy, used in the production of corrugated roof and wall cladding panels, is A-3105 H 16 for mill dinish and H46 for pre-painted.

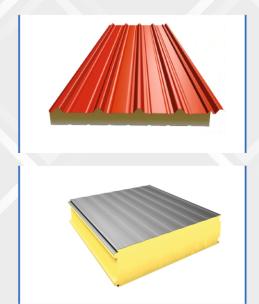
Aluminum Cladding



- Excellent thermal insulation which results in better working environment, productivity and cost.
- High load bearing capacity at low weight.
- Excellent water and vapor barrier.
- Capacity for rapid erection without lifting equipments, easier installation.
- Easy repair and replacement in case of damage.
- Good sound insulation.
- ♦ Light weight insuwalls are ideal for making chalets for tourist resorts.
- The ideal replacement for Asbestos sheets without modification for the structure.
- Both side aluminium facing will give exceptionally long durability comparable to concrete.
- No problems related to condensation.
- Can have aesthetically ingressive facing materials for architectural uses.

Vibgyor Insulated Trafford Panel





Polyurethane Properties

Polyurethane are macro cellular thermosets as a reaction between POLYOL and ISOCYANATE Vibgyor uses chemicals manufactured by international brands only.

Polyurethane Properties

- A. Low Thermal Conductivity (K & U Value)
- B. Fire Classification
- C. Structural Strength
- D. Auto-adhesion

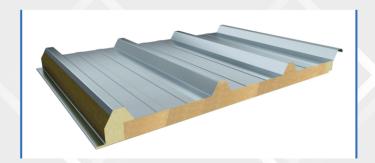
Rockwool Sandwich Panels



Rockwool wall panel



Rockwool roof panel



Advantages

- Perfect Fire resistance with A1 grade inflammable mineral rock wool
- Heat Insulation
- Perfect acoustic solutions with perforated models
- Energy Saver
- Economy in construction cost
- Requires less joint splice as a result of continous production
- Custom designed production with continous process
- Easy Installation
- Color variety
- Long life cycle
- Environment friendly products or bead to foam a roll, with paper backing

Thermal Performance		
Insulation Core Thickness (mm)	"U" Value (W/m2 -°C)	
25 mm	1.08	
35mm	0.77	
50 mm	0.54	

Vibgyor Turbo Air Ventilator



Advantages

- Strong, light weight and durable .
- Only 2 mph of wind velocity is required
- Improves working conditions and increase productivity
- No operating cost since it runs on wind power
- Only 2 mph of wind velocity is required
- No noise Super silent operation

Specifications of Ventilation systems	365 mm Turbo Ventilator	610 mm Turbo Ventilator
Air removing capacity at: 15 km /h wind speed	1800 m/h	6500 m/h
Sealed bearing in housing (Nachi, Japan or equivalent quality)	2	2
No.of bladed	24	44
Dome height	320 mm	440 mm
Dome width	445 mm	770 mm
Approximate mass: Aluminium Turbo ventilator	2.2 kg	5.9 kg

Note: The removing capacity figures shown have been calculated at an average roof height (heat stack) of five meters above working level.

(Vibgyor can supply Specail size Turbo Ventilators subject to quanity and duration for delivery.)



Calculation For No. of Ventilator

A typical wre house of size 25x25x5m at 15 km/h wind velocity need 8 air exchange per hour

Volume of the shed (LxWxH)x Number of air exchange

Exhaust capacity of ventilator

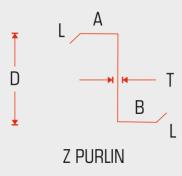
$$= 25x25x5x8 = 3.85 = 4 \text{ Nos}$$

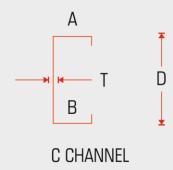
6500



Vibgyor Z Purlins / C Channels







Section Profile

AVAILABLE THICKNESS(T) IN mm: 1.5, 1.8, 2, 2.2,2.5

SECTION	122	142	172	202	250	300
DEPTH (D) in mm	122	142	172	202	250	300
TOP FLANGE(A) mm	45	38	50	50	62	84
BOTTON FLANGES(B) in mm	45	38	50	50	62	84
LIP SIZE(L) in mm	16	16	16	16	16	16

Material Specification

Z / C seclection structural Members designed for use as secondary supports for roof sheeting and where applicable insulation and liner trays for spans up to 10.0m depending on the load to be applied and where the cladding or liner tray offers adequate support by virtue of its fixing i.e, fixed according to sheet manufactures instructions.

Z/C Sections are manufactured from ASTMA653 structural quality pre hot dipped galavanied sheet to G90 with minium guaranteed yield strength of 345 N/mm

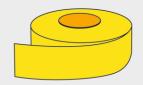
Vibgyor Roofings Accessories





Matching in shape, colour, material with the roofing system are available. Any desirable size of standard length can be made to order.

Purlin Tape
Polyester laminated to a polyethylene backing with a high tack, natural rubber adhesive.

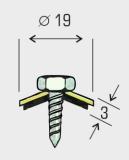




Water proof air inlet system can be provided with fly mesh. It is produced out of galvalum or aluminium polyester coated material. Ideal for ventilating storege areas. Stainless Steel Tapping Screws

Application:

Fixing of Sandwich panels Fixing of single skin cladding (Variable Screw sizes available with 19mm washer)



Pop Blind Rivets



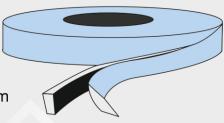
Sealed Type -99.5% pure Aluminum Material composition to BS 1475A199.5

Mandrel: Aluminum (A)
Tensile Strength 1060N
Shear Strength 1060N



Butyl Strip

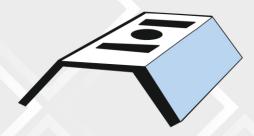
- Used for Cladding side & End laps
- Special "U" Shape strip available for double seal on end laps
- Composition-Blend of cross-linked Butyl and inert fillers extracted into strip or bead to foam a roll ,with paper backing



Size: Thickness 2.5 mm Width 9 mm

Saddle Washer

Used for crown fixing on single skin sheeting G.I/Alum.



Screw Cap

Coloured plastic caps to fix hexagonal head of screw & cover washer



Filler Block

BIG SMALL

Sealing all roofing / cladding profile against water / water vapours ingress. Roof light fillers. Eaves and ridge fillers

Notes: All printed catalogues, data sheets etc. should not be taken as specifications unless the are confirmed by Vibgyor International in Writing.

Vibgyor International reserves the right to alter any details of specifications with out notice.

Customers shall always get a copy of the mill certificate in order to find out the material available and allocated for the respective job.

Disclaimer:

Details provided in the guide are for indicative purpose only. Any information related to the product should be obtained in writting from the engineering department of the company



Types Of Cladding Manufactured By Vibgyor

TYPES OF PROFILE	DRAWING	APPLICATION
Trafford profile 25/253	1092 1012 1012 263 263 263 263 263 263 263 264	Roof/ wall sheets
Trafford profile 38/200	1033 1000 1000 106 94	Roof/ wall sheets
Trafford profile 45/250	1051 1000	Roof/ wall sheets
Decking profile 45/150	500(DASPAC WORD) 501(DASPAC WORD)	Ducking sheets

Note: All colours as per the choice of the customer is available. Base Material are available in Aluminum and Steel Aluzinc.



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