### PROPERTY TEST METHOD VALUE

Sr.No.	Test	Test Method	Unit	Results Obtained
1	Vicat softening temperature at 1kg.	ASTM D 1525	°C	93.5
2	Vicat softening temperature at 1.8Mpa		°C	69.2
3	Vicat softening temperature at 66 PSI.	ASTM D 648	°C	77.2
4	Vicat softening temperature at 364 PSI.	1/18	°C	69.2
5	Flammability	UL-94	***	Math with vo
6	Rate of burning	ASTM D 635		The flame front did not reach the 25 mm ef.mark
7	Tensile strength at break	ASTM D638	MPa	30.63
	Elongation at break	ASTM D638	%	130
8	Flexural strength	ASTM D 790	MPa	73.3
9	Resistance to chemical (10% H2SO4 for 24Hrs.)	ASTM D 543		No visible change observed
10	Density	ASTM D 792	gm/cc	1.56
11	Water absorption (change in mass,24 Hrs.)	ASTM D 570	%	0.07
12	Charpy impact	ASTM D 6110	KJ/m²	8.10
13	Themal resistance	At70°C/72Hrs.		No effect
14	Chemical resistance	In 18% HCL/24Hrs		No effect
15	Chemical resistance	In 20% NaOH/24Hrs		No effect
16	Chemical resistance	In Saturated CaCL <sup>2</sup> /24Hrs		No effect



#### Corrosion Resistance:

DION sheets can resist the chemical corrosion of acid, alkali, salt etc. for a long time. the test proves that there is no chemical reaction when dipped in salt, alkali etc.



#### Heat & Sound Insulation:

The coefficient of heat conductivity is  $0.104~\text{W/m.}^{\,\,\text{OC}}$ , which is about 1/3 of clay tile,1/5 of 10-mm-thick cement tile, and 1/2000 of0.5-mm-thick color-coated steel tile. It can well absorb the noise when influenced by Strom, and windstorm etc.

# PRODUCT FEATURES



# Environmental protection & energy conservation:

It is a kind of environmental-friendly, energy conservation and recycling building material popular in developed and developing countries.





#### Pressure Prevention:

DION sheets has very good load bearing performance. no damaged when 150kg is evenly loaded with support distance being 750mm for 2.0mm thickness.



# Cost effective & Non-Carcinogenic:

Cost effective in installation and save construction up to 70% overlapping waste doesn't exceed 8% High utilization efficiency up to 95% and its good for life fully protected from health hazards.



#### Light Weight:

The weight is 3.6kg per square meters (2mm). Belonging to light structural material, it can effectively reduce the load of the building framework materials. In the mean time, it is easy to be handled and lifted, which reduces the construction cost.



### Good water resistance :

The surface material of DION is compact and doesn't absorb water without the problem of water penetration by micro pores. the single sheet is beg and there is very few joint on the roof. The connecting point is tightly connected; therefore the sheet has outstanding water resistance performance.



#### Flame Retardant:

Self extinguishing the main body material polyvinyl chloride resin and its chemical performance determine that it is difficult to be burned.

# **APPLICATIONS**

DION is an optimum choice for roofing & cladding in civil and industrial construction as per the efficiency and benefits it provides. It can be used in many applications both exterior and interior. i.e. industrial places, commercial places, residential places & Agricultural firms etc like Factory Building, Warehouses, Market, Vehicle Parking Sheds, Farm House, Water Resorts, Cottages, Chemical Industries, Animal House, Construction House, Schools, Colleges, Hostels, Sheltered Walkways, Security Guard Shelters, roof extensions, summer huts cycles etc.





After 10 years, 2021 No Corrosion & No Other of

BENEFITS OF DION UPVC MULTILAYER SHEET















PROJECT TYPE: GALVANIZING PLANT COVER AREA: 180000 SQ.FT. (APPROX.) ISSUE TYPE: HIGHLY CORROSION METAL SHEET LIFE: MAX. 2 YEARS REPLACE MATERIAL: DION UPVC SHEET
THICKNESS: 3.5MM
MAX. LENGTH: 39 FEET.
LIPE EXPECTATION 5 CYCLES OF METAL SHEET WITH PROPER INSTALLATION

Note: The white is our raw material color. The other colors are derived from pigmentation and pigment are subject to sunlight fading.

Above all information are only for good reference, DION is not responsible for any loss from miss uses or misunderstanding of instruction. Company has power to change in specification at any time. For more details, please visit our website.



# DION INCORPORATION

Manufacturer: uPVC MULTILAYER ROOFING SHEETS

**Corporate Office :** 403, Alap-A, Limbda Chowk, Rajkot - 360001 (Gujarat-India). Ph.: 0281-2460580, Mob.: \$\mathbb{\Bar}\$ +91-90330 57756 / +91-96388 47636 E-mail: dion@dioninc.in, marketing@dionic.in • Web: www.dioninc.in

**Factory:** Plot No 345 to 348 & 367 to 370, Golden Green Industrial Park, Ravki Road, Village Khambha, Ta. Lodhika, Dist. Rajkot-360311 Gujarat (India)





DION Quality & Aesthetics - A perfect combination to match your roofing needs.

# **COMPANY PROFILE**

# **DION uPVC SHEET**



DION (An ISO 9001:2015) is a professional largest manufacturer of the uPVC sheets in India. The company has ventured into producing uPVC (Unplasticized polyvinyl chloride) corrugated three layer Roofing sheets popularly known as plastic Roofing sheet under the brand name DION, since 2011. Today with the construction boom, we can meet the rising demand for modern, tough, life secure, economical, long lasting uPVC sheets.

DION UPVC sheets are optimum choice for roofing & cladding. uPVC roofing sheets is the best replacement to conventional asbestos, metal G.I. sheets, fiberglass sheets and ceramic tile sheets, considering its property of heat insulation, sound insulation, water resistance, chemical and alkali resistance, corrosion proof, fire retardant, eco friendly. They are easy to install and move. Light weight as well as cost effective in installation. Not only that, but it can save construction cost up to

DION Quality & Aesthetics - A perfect combination to match your roofing needs

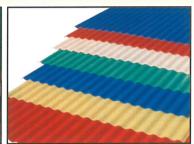
# MATERIAL STRUCTURE



- 1. Surface Layer The material is ultra-weather resin, to block the solar ultra violet and reduce the coefficient of heat conductivity, ensure product durability and resistance to chemical corrosion.
- 2. Surface Intermediate Layer contains Multi foam giving to the material light weight and improved sound and thermal insulating properties.
- 3. Underlying layer for just a good material toughness special to ensure the strength at the same time, increase the rigidity and light illumination.

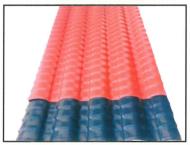
Three kinds of different materials to give the product their own features and the organically combined to make a new generation of heat insulation uPVC sheet to solve theproduct durability, corrosion resistance, small rigidity, a sense of space and aesthetics issues.

# **DION uPVC SHEET**



### **DION ASA UPVC TILE SHEET**





TRAPEZOIDAL PROFILE

**ROUND PROFILE** 

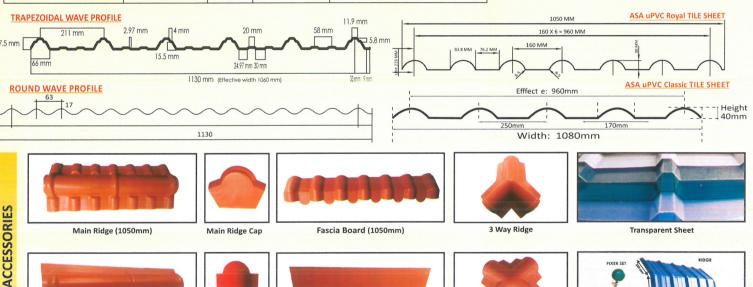
**ROYAL TILE SHEET** 

CLASSIC TILE SHEET

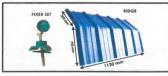
Profile Name	Thickness (mm)	Width (mm)	Standard Length	Color	
Trapezoidal Wave Profile	1.5, 2.0, 2.5, 3.0, 3.5, 4.0	1130	8,10,12 Ft.	Blue, White, Green, Gray, Terracotta, Off white, Beige	
Round Wave Profile	1.5, 2.0, 2.5, 3.0	1130	8,10,12 Ft.	Blue, White, Green, Gray, Terracotta	
ASA uPVC Royal Tile Sheet	2.3, 2.5	1050	2.41,3.07,3.73, 4.38, 5.03, 5.47, 6.13 Mtr.	Gray & Terracotta	
ASA uPVC Classic Tile Sheet	2.3, 2.5	1080	2.50,3.0,3.75 Mtr.	Gray & Terracotta	

Note: Length can be customized as per customers required on bulk order only.(Trapezoidal wave & round wave profile) Weight (Approx): - 2.6kg per square meter (1.5mm) 3.4 Kg per square meter (2mm), 4 kg per square meter (2.5 mm), 5.1 kg per square meter (3mm) 5.8 kg per square meter (3.5 mm), 6.3 kg per square meter (4mm)

Purlin span :- 1.5mm < 1.5feet, 2mm < feet, 2.5 mm < 2.5 feet, 3mm < 3 feet, 3.5mm < 3.5 feet, 4.0 mm < 3.5 feet







Side Ridge (1050mm)

Side Ridge Cap

Wall Flashing Board (1050mm)

4 Way Ridge

Tile sheet Plain Ridges (2000mm)

**Fixer Set** 

UPVC Gutter (8" X 7" X 8") Length – 6Mtr - 3.0mmthickness



Gutter Drop outlet **Gutter Joiner** 

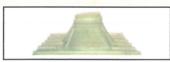












Face curve sheet

Gutter drain End cap

End cap

FRP GUTTER / CORNER

Air Ventilator

Polycarbonate Base Plates