

For Every Season, For Every Reason...
AN ISO 9001: 2008 CERTIFIED COMPANY
Mfg: uPVC Multilayer Roofing Sheets
www.dioninc.in





About Us:

DION INCORPORATION (An ISO 9001:2008 Certified Company) is a professional new enterprise providing complete roofing system 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, in the year 2011.

DION uPVC sheets are manufactured at its plant at Shapar-Veraval, a fully developed industrial estate near Rajkot. The manufacturing facility is equipped with latest state-of-the art automated machineries. Enabling us to offer the best quality, uPVC sheets, at the most competitive prices.

DION uPVC sheets conform to international safety standard board. Our product development is backed by our year's long technical expertise in manufacturing uPVC products.

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 and 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 70%.

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, Hotels etc.

Promotors:

DION INCORPORATION is promoted by none other than **SAMAY** Group. The group that is better known as World's leading clock manufacturers. DION with the inceptions of the new brand, which follows quality standards and work ethics of "**SAMAY**" has a reputation of beating all competitive brands and emerging as a product leader in the manufacturing field.

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

Product Information:

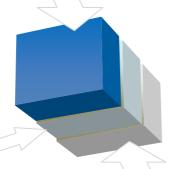
DION is a modern rigid three layer Un-plasticized polyvinylchloride (uPVC) roofing sheets. The advanced technology of manufacturing ensures superior quality and performance of the roofing product. This uPVC is the best replacement to conventional asbestos, metal G.I. sheets, fiberglass sheets, ceramic tile sheets and uPVC sheets considering the heat insulation, sound insulation, water resistance, chemical and alkali resistance, corrosion proof, fire retardant, eco friendly, easy to install and move, light weight as well as cost effective in installation and it can save construction cost up to 70%. As per the efficiency and benefits it provides. DION Roofing sheets have attractive design and appearance, possess wide range of advantageous properties and have affordable price. DION is an optimum choice for roofing, walling & cladding in civil and industrial construction. It can be uses in many applications both exterior and interior i.e. Factory Building, Warehouses, Market, Vehicle Parking sheds, Farm House, Water Resorts, Cottages, Chemical Industries, Animal House, Construction House, Schools, Colleges, Hotels etc.

Material Structure:

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.

Intermediate Layer - contains Multi foam giving to the material light weight and improved sound and thermal insulating properties

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 the product durability, corrosion resistance, small rigidity, a sense of space and aesthetics issues.



Underlying layer - for just a good material toughness special to ensure the strength at the same time, increase the rigidity and light illumination

> Eco Friendly & Energy Efficient Green product

Properties of uPVC Material:

Property	Test Method	Value
Density	ASTM D 792	1.47 gm/cc
Softening Temp. at 10 N	ASTM D 1525	90.6 °C
HDT 66 PSI	ASTM D 648	71.9 °C
HDT 264 PSI	ASTM D 648	66.2 °C
Rate of Burning		<5 mm
Tensile Strength at break	ASTM D 638	410 Kg/cm ²
Elongation at break	ASTM D 638	32 %
Oxygen Index	ASTM D2863	38 %
Flammability	UL94	Match with V _o
Water Absorption	ASTM D 570	0.07 %

Product Profiles & Specifications (Unit: mm)

(Trapezoidal Wave Profile)

Profile Name: TW-1130

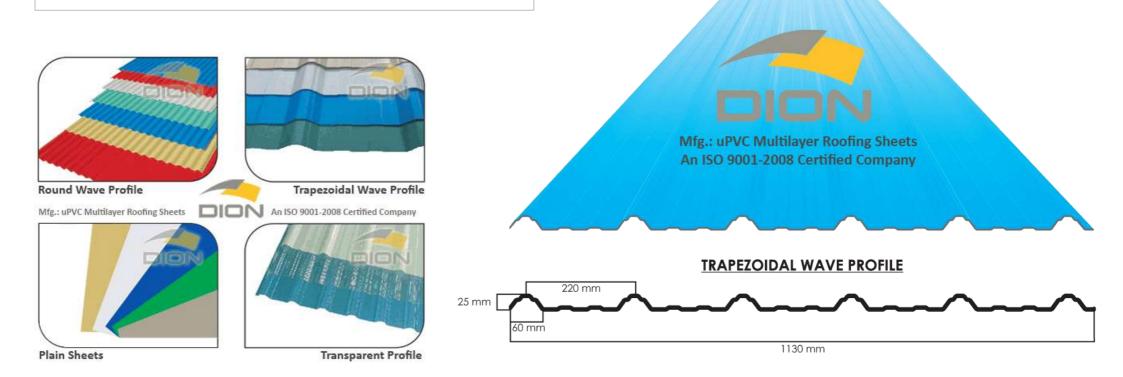
Thickness: 1.0, 1.5, 2.0, 2.5, 3.0

Width: 1130 (1.13mtr.)

Cover Width: 1050 (1.05mtr.)

Length: 2.0, 2.5, 3.0, 3.66 (mtr.) Also customizable as per customer's

required on bulk order only Color: Green, Blue, White & Gray



Product Features:



Environmental protection and energy conservation:

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



Color Lasting:

DION sheets consists uPVC material, which has extra lasting performance in the natural environment. Even it is exposed in the conditions of ultra violet ray, moisture, high and low temperature for a long term, it still can maintain the stability of the color.



Longevity:

DION uPVC profiles maintain excellent inherent material property, which is treated to stay fresh longer than usual. The longevity and superior quality of the material has been conclusively over 20 years.



Light Weight:

The weight is 3.5 kg per square meters (2mm). Belonging to light structural material, it can effectively reduce the load of the building and save the assumption of building framework materials. In the mean time, it is easy to be handled and lifted, which reduces the construction cost.



Pressure Prevention:

DION sheets has very good load bearing performance. No damaged when 150kg is evenly loaded with the support distance being 750mm.



Sound & Heat Insulation:

The coefficient of heat conductivity is 0.104 W/m.⁰ C, which is about 1/3 of clay tile, 1/5 of 10-mm-thick cement tile, and 1/2000 of 0.5-mm-thick color-coated steel tile. It can well absorb the noise when influenced by storm, hail and windstorm etc..



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 the salt, alkali etc.



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 big and there is very few joint on the roof. The connecting point is tightly connected; therefore the sheet has the 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.



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.

COMPARATIVE ANALYSIS BETWEEN ROOFING SHEET					
Fankuuna	Material				
Features	Metal Sheet	Asbestos Sheet	Ceramic Tile Sheet	DION uPVC Sheet (2mm)	
Tensile Strength	550 MP a	20 MP a	23 MP a	38 MP a	
Flexural Strength	15 MP a	16 MP a	10 MP a	45-55 MP a	
Thermal Conductivity	15 W/m. C°	0.46 W/m. C°	0.27 W/m. C°	0.104 W/m. C°	
Pressure Prevention	Sheets will become flat & damage	Sheets will become fully breakage	Sheets will become fully breakage	Sheets will rebounded to its original shape	
Weight of 1m² (kg)	4.20 kg	13.40 kg	55 kg	3.5 kg	
Health Hazards	Insecure	Lung Cancer	Insecure	Nil	
Energy Efficient	No	No	No	Excellent	
Sound Insulation	Very Poor	Poor	Good	Good absorbing effect	
Corrosive Resistance	Very Poor	Poor	Good	Excellent	
Moisture Resistance	No	No	No	Excellent Resistance, Better use in chemical Industries	
UV Resistance	No	No	No	Excellent	
Economical Installation	High	Very High	Very High	Very low	
Need for Insulation Materials	Involves more labor and effort	Highly brittle, can crack while working	Involves more labor and effort, Highly breakage while working	Easily cut, drilled or worked with standard carpentry tools	

Benefits of DION Sheets:

- Long Life: treated to stay fresh longer than usual.
- ➤ Heat insulation up to 40%.
- Excellent sound insulating properties.
- Fire retardant Non-combustible material conforms to international fire safety standards. Self-extinguishing does not propagate fire.
- High Impact Strength.
- Light weight: 3.5Kg/m2 (2mm).
- Chemical Resistance: Resistance to acids, alkalis, salts and solvents, corrosion.
- ➤ 100% protection against harmful U.V. radiations. (Resistance to the influence of ultra-violet rays & Highly UV protected)
- Excellent Non Corrosive.
- Climate Resistance DION sheets can be use in any different climate.
- Hail Resistance with stable volume.
- Excellent Water Proof properties.
- Excellent thermal insulation.
- Highly flexible can be bent perpendicular or parallel to the corrugation.
- ➤ High Strength Characteristic: Tensile strength 38 Mpa, Flexural strength 45-55MPa, Impact Resistance 50-60kj/m2.
- ➤ Temperature Resistance: Temperature usage Range: from -40 °C to +75 °C. Material withstands over 100 cycles of freezing and thawing.
- Corrosive Resistance: Ideal use for corrosive industrial environments
- Moisture Resistance: Excellent use for some industries i.e. chemical, pharmacy, fertilizer, leather, process etc.
- Non-conductor of electricity.

- Resistance to the extreme weather conditions: snow, hail & high wind pressure.
- Rich Color and no fading.
- Self-cleaning system.
- Eco friendly & energy efficient green product.
- Rust proof ideal for use in coastal regions.
- Ability to withstand wind load, better usable in earthquake zones & coastal areas.
- Non-Carcinogenic: It's good for life, fully protected from health hazards.
- Hygienic Suitable for contact with food stuffs, DION sheets can be used in the food industry.
- Easiness of installation : Easy to cut, sawed & nailed
- Virtually maintenance free.
- Economical Installation: save construction up to 70% and overlapping waste doesn't exceed 8%. High utilization efficiency up to 95%.
- Increase labor productivity and machinery efficiency.
- DION transparent sheets better for creation of sky-lights.
- Wide variety of available colors. Good aesthetic appeal.
- Wide Applications: DION sheets uses in Industrial, Commercial, domestic & Agricultural.
- Customizable: DION sheets can ne use in Interior and Exterior as per customer's requirements.
- Good Re-sale value: best usable for temporarily construction house or any project purpose.

Applications: DION is an optimum choice for roofing, walling & cladding in civil and industrial constructions 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, Hotels, Sheltered Walkways, Security Guard Shelters, Roof Extensions, Summer Huts Cycles etc.

Industrial Applications:





Commercial Applications:





Domestic Applications:





Agricultural Applications:





Installation Guidelines:

uPVC V shape Ridge:

Thickness: 1, 1.5, 2, 2.5, 3 (mm), Width: 1130 mm (1.13mtr.)

Length: 300mm + 300mm, Angle of ridge: optional (90~180 degree)



Special Waterproof Accessory:

The special waterproof accessory is very important for installation. We need to use the special waterproof accessory to fix the roofing sheet properly. To avoid the roof sheet have unusual circumstance (such as water-leakage, distortion etc.), then effect the lifespan of products. When install, must be use the waterproof fixing accessory and always recommend to experienced fabricator/worker to install our sheets.

- 1. with the special accessories can be waterproof, strong wind withstand and corrosion resistance, the structured of accessory fully sealed with screw lead, screw head so as to solve the corrosion, waterproof apron aging and screw holes of the leakage problem; pressed with a waterproof apron below, to prevent infiltration of surface water watt screw hole; screw fixed of the increase, also plays against typhoon function.
- 2. The accessory must be installed in the top of wave.
- 3. We request to use the accessory minimum 5 set/sq.mtr.
- 4. The roof truss structure adopts sectional steel or wood as purlin, the purlin is required to be flat without deformation, and two purlins must be in parallel with uniform span. For DION sheet with thickness of 1mm the purlin span <1.5 feet, 1.5mm the purlin span <2feet, 2mm the purlin span < 2.5feet, 2.5 mm the purlin span <3.5feet is recommended. The transverse lap joint must be a complete lap jointed slope, the longitudinal lap joint length >1feet. End overhang <1feet and Side overhang <0.3feet. In the case of fixing by tapping screw, drill a hole in advance, the aperture must be 50% larger then the screw diameter, fixing by DION hook is recommended. Screw and DION hook can be used together, the screw must not be over-tightened, and otherwise stress will occur, resulting in local crack on tile surface.

Tapping Screws & Fixer set (19mm, 25mm & 55mm)





Quality Certificates & Inspection Reports:

DION INCORPORATION is a name synonymous with unparalleled quality assurance and the groups four decades of industry reputation for global quality plastic products across all profiles. DION sheets an anti-corrosive, UVresistance, Non-carcinogenic &durability aesthetics product is produced with unique three stage modern plastic processing technology. It is the next generation product. DION products offer immense market potential for industrial, commercial, domestic & agricultural applications.

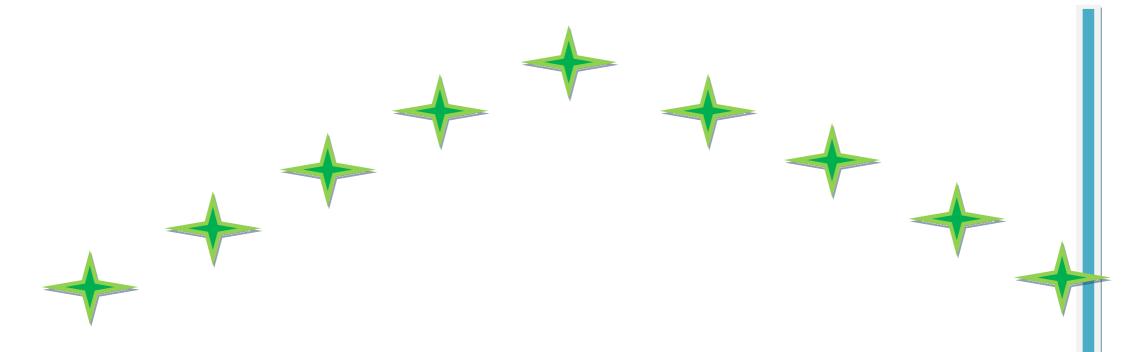
DION sheets are characterized by light weight, chemical resistance - resistance to acids, alkalis, salts and solvents, corrosion, highly flexible, high strength: tensile strength 38 Mpa, flexural strength 45-55 Mpa, impact resistance 50-60 ki/m².



ISO Certificate



TEST Certificate





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Mfg: uPVC Multilayer Roofing Sheets







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