





FIBERGLASS GRATING SYSTEMS

A well designed Composite system like AERON Composite gratings is needed for flooring, walkway and decking areas in corrosive environment for superior load bearing and corrosion resistance.

This can be achieved with the use of good quality grade resins With UV inhibitors and other additives with sufficient glass fibre reinforcement.

AERON offers Pultruded as well as Molded Composite Gratings:

Molded Grating:

- » Installation around piping, tanks and other obstacles is much simpler with molded grating.
- » Fixed panels sizes to be fitted on site.
- » The chemical resistance of molded grating is superior.
- » Well suited for forklift traffic.
- » Designed for a max deflection of SPAN/100.

Pultruded Grating:

- » Used where mechanical load is very high or support distances are very wide.
- » Panels are fabricated to drawing with minimum wastage.
- » Performs structurally better than molded grating with a maximum deflection to be limited to SPAN / 200 (the same limit as for steel grating).

Features & Benefits:

- » Corrosion & Chemical Resistance
- » Slip & Impact Resistant
- » Maintenance Free
- » Fire Retardant
- » High Strength to Weight Ratio
- » Electrically & Thermally Non Conductive
- » Easy Fabrication & Low Installation Cost
- » Long Service Life
- » Good Load Bearing Capability
- » UV Resistant
- » Superior Ergonomics & Aesthetic







FIBERGLASS MOLDED GRATINGS

Aeron is one of the India's leading producers of molded grating. Renowned for their high strength, corrosion resistance in the harshest environments, long life and safety. Molded Gratings meet the highest international standards. Produced from carefully selected resin systems, Aeron Grating is designed to deliver many years of reliable service, outperforming the traditional materials they replace.

Aeron Fiberglass Gratings are lightweight, easy to fabricate and install. Their acceptance in many major industries has made them the first choice over steel, not only for their performance but cost competitiveness. Comparable with steel at the installed cost stage, their low maintenance and long life means a significantly lower life cycle cost than that of steel.

Fiberglass Molded Gratings are available with Polyester, vinyl ester or phenolic resin. All kinds of resin are self-extinguishing and UV-stabilized.



Applications

- » Walkways
- » Platforms
- » Trench covers
- » Staircase
- » Floorings
- » Foot Bridges
- » Step Treads
- » Swimming pool overflow
- » Fencing
- » Elevated car parking
- » Earth pit covers
- » Etc....

Industry

- » Chemical
- » Marine
- » Oil & Gas
- » Power
- » Food & Beverage
- » Desalination
- » Cements
- » Constructions
- » Pharmaceuticals
- » Pulp & Paper
- » Recreation
- » Water & Waste Treatment
- » Railways
- » Shipping
- » Transportation
- » Architectural
- » Telecommunications
- & Many more

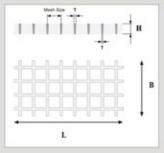
Size

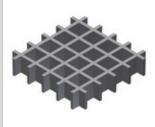
Fiberglass Molded Gratings are made into various mesh patterns and surface suitable for demanding applications.

Product Code	Height (MM)	Mesh Size (MM)	Rib Thickness (MM)	Open Area (%)	Sheet Size (MM)
SM 12 x (50 x 50)	12.5	50 x 50	6-5	82	1007 x 2007, 1007 x 4047
SM 25 x (38 x 38)	25	38 x 38	7-5	69	1220 x 3660
RM 25 x (25 x 100)	25	25 x 100	6.35	68	1220 x 3660
SM 30 x (38 x 38)	30	38 x 38	7-5	68	1007 x 2007, 1007 x 4047
SM 38 x (38 x 38)	38	38 x 38	7-5	68	1220 x 3660, 1007 x 2007, 1007 x 4047
SM 50 x (50 x 50)	50	50 x 50	8-5	71	1220 x 3660
MM 30 x (20 x 20)	30	20 x 20 (Mini)	7-5	42	2003 x 740

When Panel Size 1007 X 4047 Or 1007 X 2007, Mesh Size Will Be 40 X 40

Fiberglass Molded Gratings

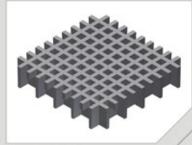








RM-Rectangle Mesh



MM-Mini Mesh



FIBERGLASS MOLDED GRATINGS

Surface

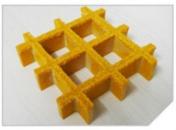
To Provide safest walking surface Aeron Fiberglass Gratings are available in three anti-slip surfaces.



Concave Top: Suitable for wet & oily conditions



Inbuilt Grit: A quartz grit finish applied in the mould during manufacture.



Applied Grit: A quartz grit sealed with a tough, long wearing epoxy coat.



Chequered Plate / Grit Top

Aeron's Resin Selection Systems

Resin Selection

The first step to ensure maintenance - free flooring solution is Aeron Grating. Having an appropriate resin makes highest performance in the most demanding circumstances. Aeron Gratings are available in five standard resin grades which are highly economical while they maintain high standards of performance.

Aeron Resin Grades

Resin Type Resin Base		Description	Flame spread rating ASTM E84	
Type V	Vinyl Ester	Superior Corrosion Resistance & Fire Retardant	Class1, 25 or less	
Type IFR	Isopthalic Polyester	Industrial Grade Corrosion resistance & fire retardant	Class 1, 25 or less	
Туре І	Isopthalic Polyester	Industrial Grade Corrosion resistance in acidic environment	Non fire retardant	
Type P	Phenolic	Low smoke and superior Fire Resistance	Class 1, 5 or less	

Comparison with conventional materials

PARAMETERS	FIBERGLASS GRATINGS	HOT DIPPED GI	SS
Life Span	High	Moderate	High
Strength To Weight Ratio	High	Low	Low
Life Cycle Cost	Low	High	High
Corrosion Resistivity	Very High	Moderate	High
Chemical Resistivity	Very High	Moderate	High
Electrical Conductivity	Nil	High	High
EMI / RFI Transparency	High	Nil	Nil
Installation Cost	Low	Moderate	Moderate
Handling	Very Easy	Difficult	Difficult
Anti Skid	Available	NA	NA
Colour Range	Available	NA	NA

Construction

Fiberglass Molded Gratings are produced by wet moulding and hot curing in a heated mould. The reinforcement consists of continuous fibreglassrovings in alternating layers, so the loads are distributed evenly in all directions. Regularly Molded Fiberglass Gratings have a polyester resin matrix. Glass content is approximately 35%. Standard colours are green, yellow or grey, other colours are available according to RAL.

FIBERGLASS PULTRUDED GRATINGS



Aeron Pultruded Gratings

Aeron Pultruded Gratings are famous for high strength, corrosion resistance, long life and safety in the most difficult environment. These also adhere to the highest international standards. Aeron design ensures that reliable services are possible for several years as they are assembled from interlocking pultruded profiles thus outperforming the traditional materials they replace.

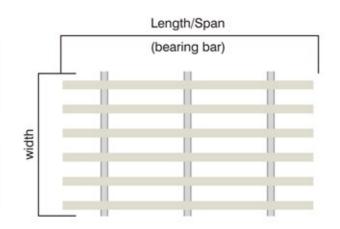
Being lightweight, easy to put together and install, good performance and cost effectiveness makes it a better choice than steel in several major industries.

An entire collection of gratings is offered to satisfy wide-ranging industrial needs and high load requirements for safety at work.

Bearing Bars & Cross-rod Assemblies

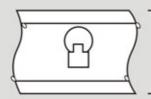
Unlike molded grating which has equal strength in both directions, Aeron Pultruded grating is stronger in the longitudinal direction as it is fabricated from bearing bars & interlocking rod and groove bar assemblies. For that reason Aeron Pultruded grating sizes are specified by width (the cross-rod dimension) x length or span (the bearing bar dimension).

The bearing bars used for Aeron Industrial grating are pultruded I bars and T Sections and these bars are 25mm (1 Inch) and 38mm (1.5 inches) deep. For the 25mm (1 inch) deep grating the cross-rod assembly is used horizontally, whilst for 38mm (1.5 inches) and 50mm (2 inches) deep products cross rods are used vertically.



25mm Grating





38mm Grating











FIBERGLASS PULTRUDED GRATINGS

The I bar assemblies are offered in standard size with 40%, 50% and 60% open areas whereas the T bar assemblies have 17%, 33% & 50% open areas as standard. Nomenclature use to describe each industrial grating style refers to its bearing bar style (I or T), its open area and its metric depth.

For example...

I 1560 = I bearing bar: 60% open area: 38mm deep T 1033 = T bearing bar: 33% open area: 25mm deep

	H-Height(mm)	W-Top width(mm)	C-Spacing(mm)	Open Area(%)
I-1040	25	15	25	40
I-1050	25	15	30	50
I-1060	25	15	38	60
I-1540	38	15	25	40
I-1550	38	15	30	50
I-1560	38	15	38	60
T-1033	25	25	38	33
T-1050	25	25	50.8	50
T-1517	38	25	30.5	17
T-1533	38	25	38	33
T-1550	38	25	50.8	50

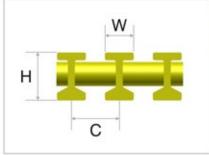


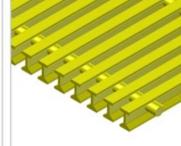
For customised size and loading standards please contact our sales team.

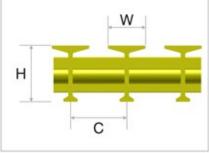
Fiberglass Step Treads

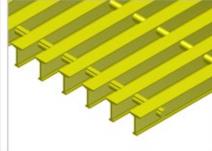
Easy to assemble and providing high safety. Fiberglass Step Treads fulfil high safety standards. They are produced in the same way as the Fiberglass Profile Gratings and the Fiberglass Molded Gratings with additionally reinforced and highlighted edges.















FITTINGS

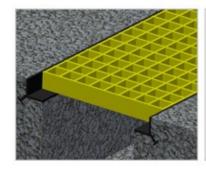
Accessories:

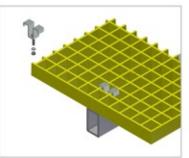
Applicable for our gratings we have special support angles which are concreted into the basement directly.

Fixing Sets

Easy to assemble without any special tools. A pultruded Fiberglass angle can be used as a frame for all Fiberglass gratings.

Stainless steel fixing sets can be used for all standard Fiberglass gratings and support constructions. To prevent Fiberglass gratings perfectly against lifting and sliding away each panel should be fixed on at least four points.



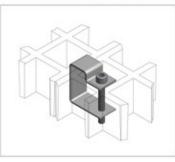


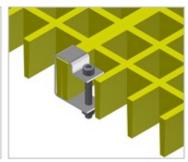
M-CLIP FOR MOLDED GRATING



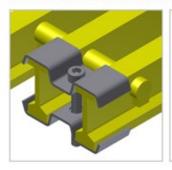


C-CLAMP FOR MOLDED GRATING



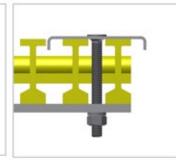


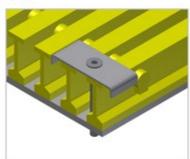
M-CLIP FOR PULTRUDED GRATING





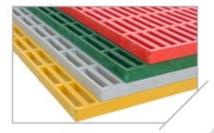
CLAMP FOR PULTRUDED GRATING





Color Selection

To complement any design project, Aeron Grating offers a wide selection of colors to choose from. Standard colors available for fiberglass grating: Dark Grey, Yellow and Green. Custom colors may be available upon request.















Fiberglass Cable Tray



Fiberglass Structural Profiles



Fiberglass Ladder



Trefoil Clamp



Fiberglass Handrails



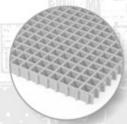
Fiberglass Pultruded Gratings



Fiberglass Canopy



Fiberglass Fencing



Fiberglass Molded Gratings



Fiberglass Poles & Mast



AERON COMPOSITE PVT. LTD.

Reg. Off.:- Block No. 496/P, Tajpur Road, Sarkhej Bawala Highway, Changodar – 382213 Tal. Sanand, Ahmedabad, Gujarat – INDIA. T: +91-79-6525 8500 | F: +91-79-26561238 | M: +91-99099 88266 E: info@aeroncomposite.com | W: www.aeroncomposite.com







