



THE COMPOSITE EXPERT...

www.aeroncomposite.com



CORROSION FREE **COMPOSITE SOLUTIONS**

Advantages of FRP/GRP/ FIBERGLASS

-  Corrosion/Chemical Resistance
-  High Strength
-  Light Weight
-  Electrical Non Conductivity
-  Thermal Non Conductivity
-  EMI/RFI Transparent
-  Ease of Fabrication
-  Low Life Cycle Cost
-  Less Environmental Impact
-  Termite Proof
-  Flame Retardant



>> and many more ...

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).

FIBERGLASS ADVANTAGE



INDUSTRY
SEGMENT

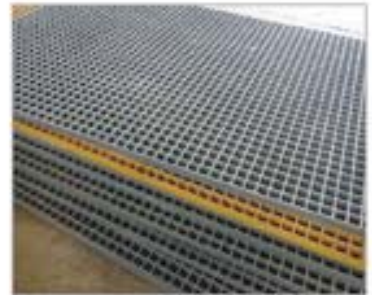


FIBERGLASS MOLDED GRATINGS

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.

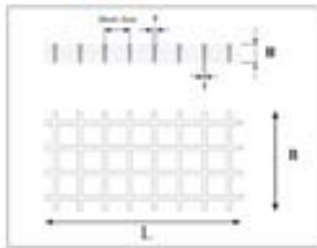
Comparable with steel at the installed cost stage, their low maintenance and long life means a significantly lower life cycle cost than that of steel. Fiberglass Molded Gratings are available with Polyester, vinyl ester or phenolic resin. All kinds of resin are self-extinguishing and UV-stabilized.

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



Aeron Grating complies standards stipulated by FGMC of (Fiberglass Grating Manufacturer's Council) of ACMA (American Composite Manufacturing Association)

Fiberglass Molded Gratings



SM-Square Mesh



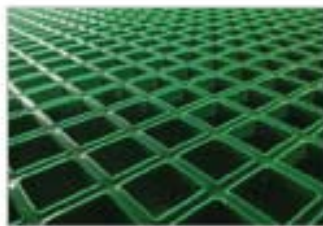
RM-Rectangle Mesh



MM-Mini Mesh

Surface

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



Concave/Meniscus Top



Grit Top



Chequered Plate Top



Covered Grit Top

Size

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, 1007 X 2007*, 1007 X 4047*, 1247 X 4047*
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	1220 X 3660, 1007 X 2007*, 1007 X 4047*, 1220 X 4045
SM 38 x (38 x 38)	38	38 x 38	7-5	68	1220 X 3660, 1007 X 2007*, 1007 X 4047*, 1247 X 4047*
SM 50 x (50 x 50)	50	50 x 50	8-5	71	1220 X 4068
MM 30 x (20 x 20)	30	20 x 20 (Mini)	7-5	42	2003 X 740

For Panel Size marked with (*), Mesh Size will be 40 X 40

FIBERGLASS MOLDED GRATINGS

Construction

Fiberglass Molded Gratings are produced by wet moulding and hot curing in a heated mould. The reinforcement consists of continuous fibreglass rovings 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.

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	Isophthalic Polyester	Industrial Grade Corrosion resistance & fire retardant	Class 1, 25 or less
Type I	Isophthalic 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

Applications

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



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.

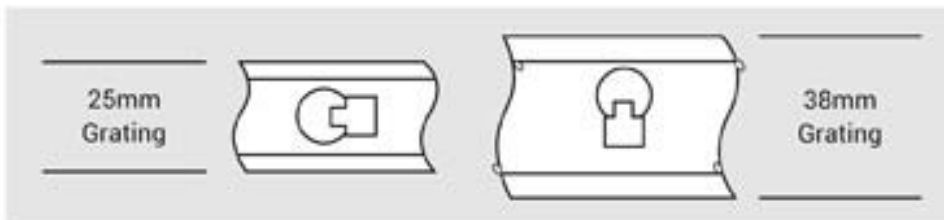
Being lightweight, easy to put together and install, good performance and cost effectiveness makes it a better choice than steel in several major industries.

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

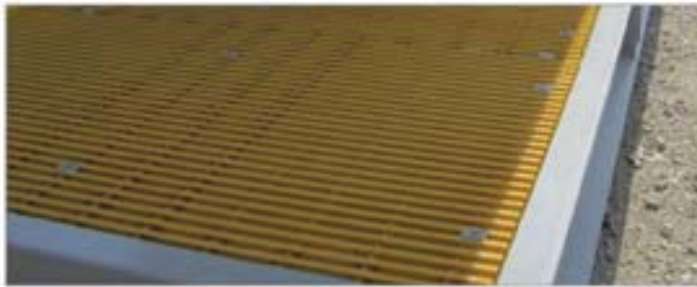
Bearing Bars & Cross-rod Assemblies

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.



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.

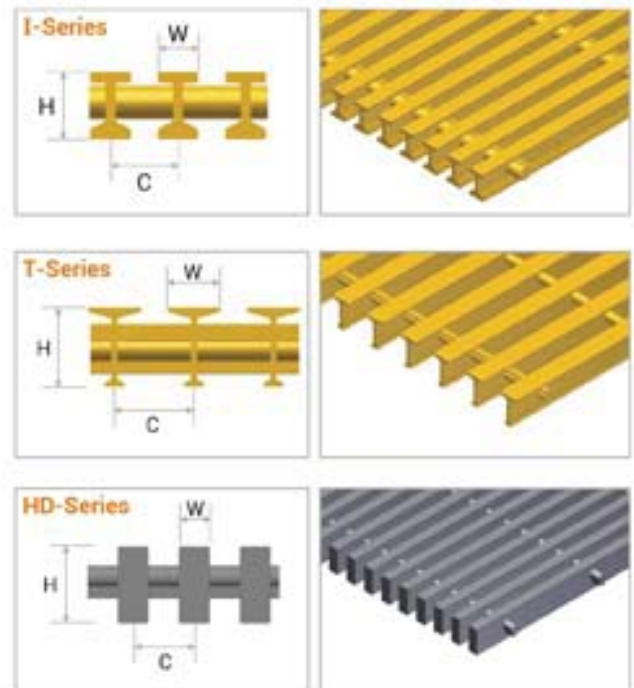
For example...

I1560 = I bearing bar : 60% open area : 38mm deep

T1033 = 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
HD-1540	38	15	25	40
HD-1550	38	15	30	50
HD-1560	38	15	38	60

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



Aeron Grating complies standards stipulated by FGMC of (Fiberglass Grating Manufacturer's Council) of ACMA (American Composite Manufacturing Association)

Allowable Spans for Vehicular Loads

	Wheel Load (kg) 1/2 Axle Load +30% Impact	Load Distribution (in mm)	Allowable span in mm		
			HD 1540	HD 1550	HD 1560
AASHTO Standard Truck4 / 14500kg Axle Load Dual Wheels(*formerly AASHTO H-20)	9425 kg	500	425	350	300
Automobile Traffic / 2200 kg Vehicle 700 kg Load / 55% Drive Axle Load	1000 kg	200	700	675	650
5 ton Capacity Forklift / 6500 kg Vehicle 11500 kg Total Load / 85% Drive Axle Load	6350 kg	275	375	350	300
3 Ton Capacity Forklift / 4500kg Vehicle 7500 kg Total Load / 85% Drive Axle Load	4150 kg	175	400	350	300
1 Ton Capacity Forklift / 2000 kg Vehicle 3000 kg Total Load / 85% Drive Axle Load	1650 kg	100	500	500	475

FITTINGS

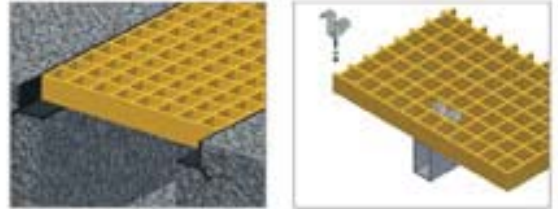
Accessories :

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.

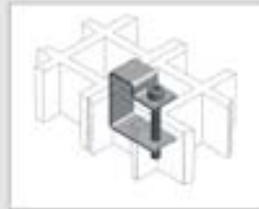
Stainless steel fixing sets can be used for all standard Fiberglass gratings and support constructions. To prevent Fiberglass gratings perfectly against lifting and sliding away each panel should be fixed on at least four points.



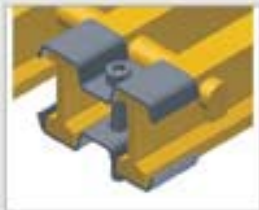
M-CLIP FOR MOLDED GRATING



C-CLAMP FOR MOLDED GRATING



M-CLIP FOR PULTRUDED GRATING

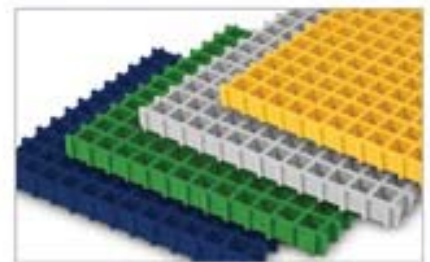


Fiberglass Step Treads

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.



Color Selection



SUCCESS IS ALL
ABOUT MAKING
RIGHT CHOICES!

WHY AERON

- » DESIGN & ENGINEERING SERVICE
- » CUSTOM SOLUTIONS
- » SHORT DELIVERY PERIOD
- » FABRICATION & ASSEMBLY
- » HIGH QUALITY
- » OPTIMUM INVESTMENT

Grow with us..





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



THE COMPOSITE EXPERT...

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