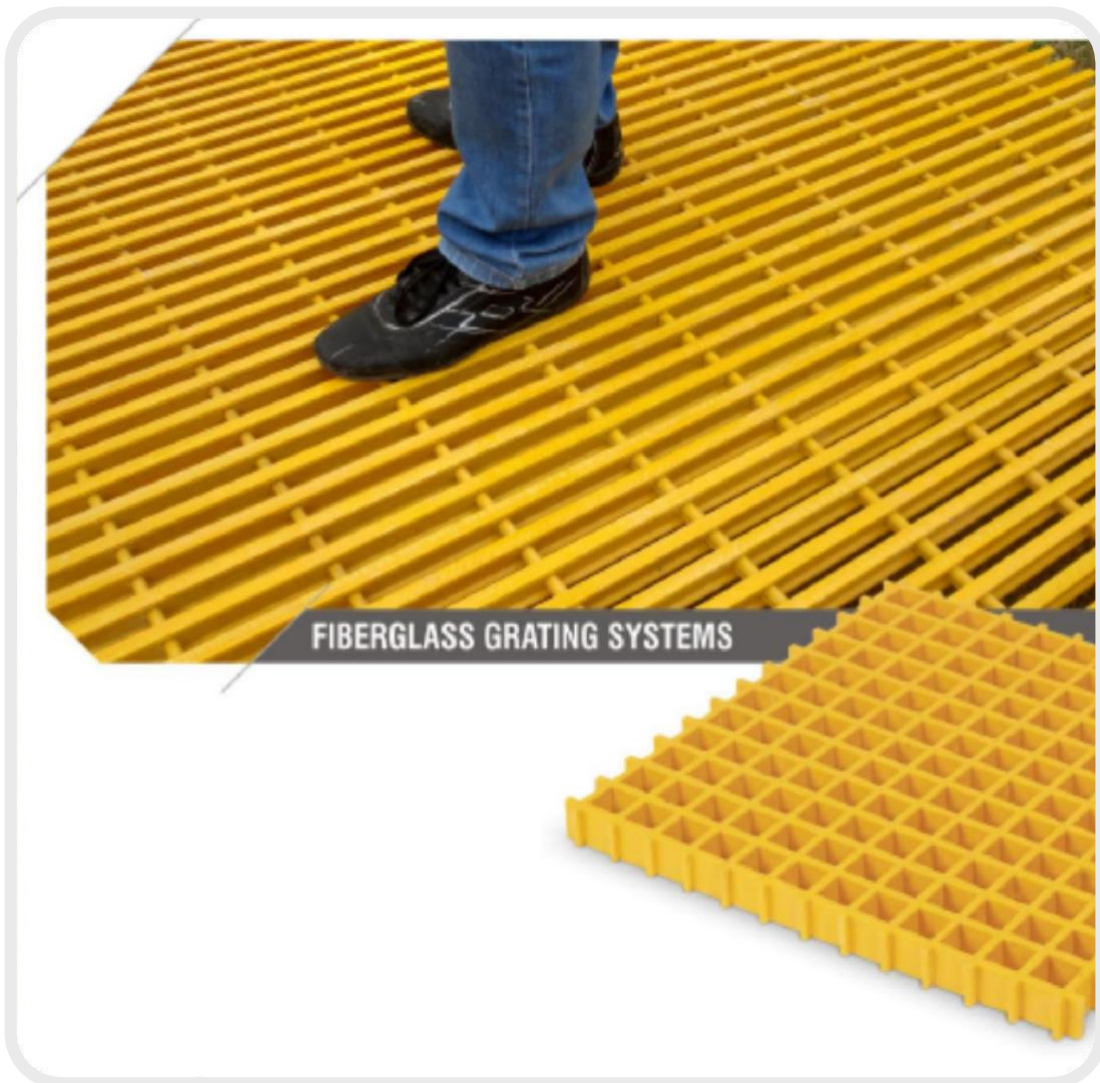


SPECIFICATION SHEET FOR **RAWJI MAKE FRP/GRP GRATINGS** **MOLDED & PULTRUDED**

(Version 3.0)



MATERIAL DETAILS

COMPOSITE MATERIAL:

Composites are material that are made up of at least two different component materials, of which neither are well suited for construction purposes on their own, but the combination result in a very sturdy and firm material.

FRP/GRP MATERIAL:

Fibre Reinforced Plastic/ Glass Fibre Reinforced plastic is a composite material made of a polymer matrix reinforced with fibres. The fibres are usually fibreglass, carbon, or aramid, while the polymer is usually an epoxy, vinylester or polyester thermosetting plastic.

RAW MATERIAL OF FRP:

Glass fibres: Glass Fibres are used to give stiffness and resist tensile and compressive loads

Resin: Resin is matrix material which transfers load between fibres and bonds and holds fibres together.

Other Additives: To provide additional properties like Fire retardant, high electrical insulation etc.

RESIN SYSTEM:

Polyester: Unsaturated polyester resins are the most commonly used for the composites industry. Polyester resins have a good balance of mechanical, electrical and chemical properties. The polyester resins are mainly used in glass fibre profiles. Polyester resins can be modified so that they are flame-retardant or self-extinguishing.

The polyester resins have good chemical resistance properties. The chemical environment have to be known before a polyester or vinylester resin can be chosen. Polyester resins are good in weak alkalis and excellent in weak acid conditions.

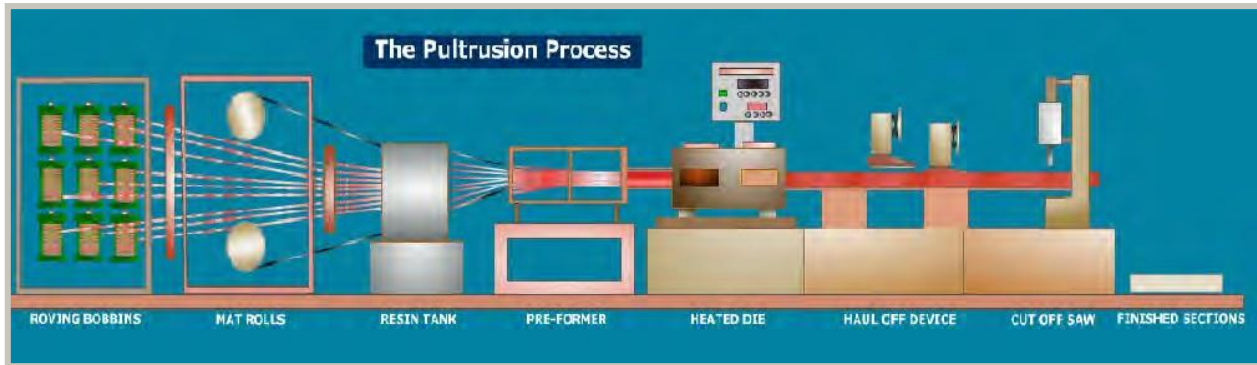
The maximum recommended operation temperature is 80°C for the basic grade polyesters. Modified versions are also available

Vinyl esters(VE): Vinyl ester resins combine the best features of polyester- and epoxy resins. The strength is good and the resin has a very good chemical resistance in acids and alkalis environments, especially at high temperatures. The glass fibre vinyl ester profile has good electrical and thermal insulation properties.

Epoxy based vinyl ester resins have good chemical resistance at elevated temperatures.

The maximum recommended operating temperature is 90-150°C. Modified versions are also available.

PULTRUSION PROCESS



Pultrusion is the process of pulling fiberglass reinforcements such as mats and strands through a proprietary resin and heated die. The result is a specific complex profile that can be cut to any length. This process offers speed and consistency making it the best method for producing high-volume linear fiberglass products that require constant cross sections.

Pultrusion refers to pulling plastic raw material through a preformer. This production method is particularly suitable for tubes, profiles etc. reinforced with continuous fibres, involving pulling of impregnated fibres via preformers providing the form as, simultaneously, the plastic is hardened with heat (thermoset) or cooled until solid (thermoplast).

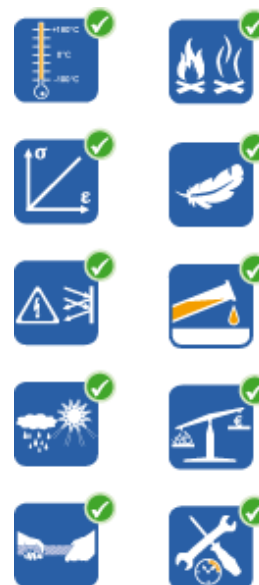
MOULDING PROCESS



GRP/FRP 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 Moulded GRP 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.

FEATURES OF FRP MATERIAL

- Corrosion And Chemical Resistance
- High Strength To Weight Ratio
- Electric And Thermal Non Conductive
- EMI/RFI Transparent
- Less Environmental Impact
- Long Life Cycle
- Superior Ergonomics
- Good Aesthetics
- UV Stable
- Fire Retardant

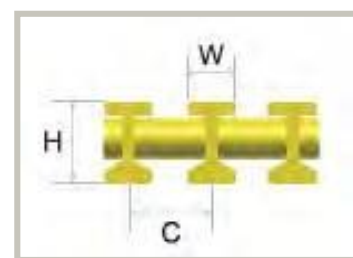
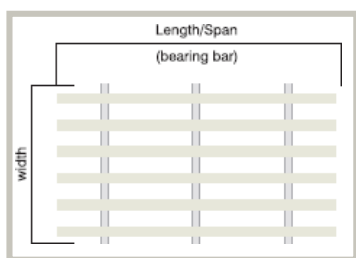
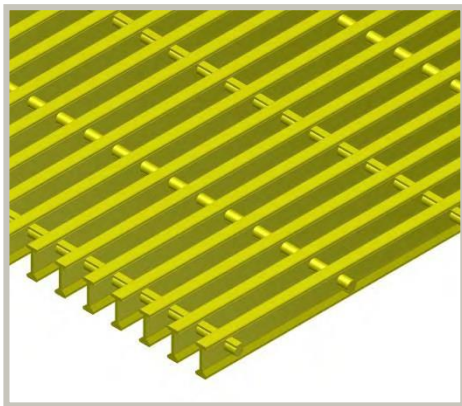


COMPARISON WITH CONVENTIONAL MATERIAL

	RAWJI FRP	Steel	Aluminium	Timber
Corrosion Resistance	High	Low	Medium	Low
Strength	High	High	High	Low
Weight	Low	High	Low	Medium
Electrical Conductivity	Low	High	High	Moderate
Thermal Conductivity	Very Low	High	High	Low
EMI/RFI Transparency	Yes	No	No	Yes
Fabrication	Easy	Easy	Moderate	Easy
Life Cycle Cost	Low	Moderate	Moderate	High
Environmental Impact	Low	High	High	Low



NOMENCLATURE FOR FRP/GRP PULTRUDED GRATING



	H- Height	W- Top Width	C- Spacing	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%

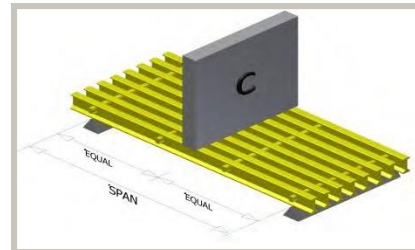
RESIN SYSTEM FOR GRATINGS

Resin Type	Resin Base	Description	Flame spread rating ASTM E84
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 V	Vinyl Ester	Superior Corrosion resistance & fire retardant	Class 1, 25 or less
Type P	Phenolic	Low smoke and superior fire retardant	Class 1, 5 or less

LOAD DEFLECTION TABLE

PULTRUDED GRATINGS

CONCENTRATED LINE LOAD (deflection in mm)



I-1040 - 25MM THICK GRATING : 40% OPEN AREA

SPAN	LINE LOAD IN KG/MTR														MAX. REC.
In mm	300	500	800	1000	1300	1500	2000	2500	3900	5000	10000	15000	20000	25000	
400	0.3	0.4	0.7	0.9	1.1	1.3	1.7	2.1	3.3	4.3	8.5	12.8			8300
600	0.7	1.2	1.9	2.3	3.0	3.5	4.7	5.8	9.1	11.7					6200
800	1.5	2.6	4.1	5.2	6.7	7.7	10.3	12.9							5000
1000	2.9	4.9	7.8	9.8	12.7	14.7									3800
1200	5.0	8.3	13.3												3100
1400															
1600															

I-1050 - 25MM THICK GRATING : 50% OPEN AREA

SPAN	LINE LOAD IN KG/MTR														MAX. REC.
In mm	300	500	800	1000	1300	1500	2000	2500	3900	5000	10000	15000	20000	25000	
400	0.3	0.5	0.8	1.1	1.4	1.6	2.1	2.6	4.1	5.3	10.6				6950
600	0.8	1.4	2.3	2.9	3.7	4.3	5.8	7.2	11.3						5150
800	1.9	3.2	5.1	6.4	8.3	9.6	12.8								4150
1000	3.6	6.1	9.7	12.2											3150
1200	6.2	10.3													2600
1400															
1600															

I-1060 - 25MM THICK GRATING : 60% OPEN AREA

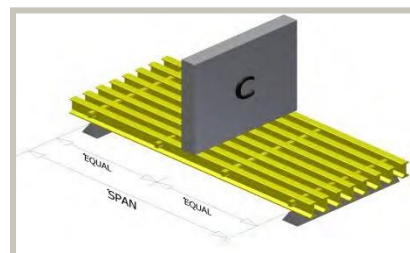
SPAN	LINE LOAD IN KG/MTR														MAX. REC.
In mm	300	500	800	1000	1300	1500	2000	2500	3900	5000	10000	15000	20000	25000	
400	0.4	0.6	1.0	1.3	1.7	1.9	2.6	3.2	5.0	6.4	12.8				5600
600	1.0	1.7	2.8	3.5	4.5	5.2	7.0	8.7	13.6						4100
800	2.3	3.9	6.2	7.7	10.0	11.6	15.4								3300
1000	4.4	7.3	11.7	14.7											2500
1200	7.5	12.4													2100
1400															
1600															

NOTES:

1	It is advised not exceed the MAX RECOMMENDED LOAD at any given span. MAX RECOMMENDED LOAD represents a 2:1 factor of safety on ULTIMATE CAPACITY.
2	ULTIMATE CAPACITY represents a complete and total failure of the grating. Max recommended and ultimate loads do not change as a result of adding a 3mm thick covered plate.
3	Walking loads, typically 250-300 kg/m ² maximum are recommended for pedestrian traffic. Deflections for worker comfort are typically limited to the lesser of 10mm or CLEAR SPAN divided by 125; for a firmer feel, limit deflection to the lesser of 6 or CLEAR SPAN divided by 200.
4	The allowable loads in this table are for STATIC LOAD CONDITIONS at ambient temperatures only. Allowable loads for impact or dynamic conditions should be a maximum of ONE-HALF the values shown. Long term loads will result in added deflection due to creep in the material and will also require higher safety factors to ensure acceptable performance. For applications at elevated temperatures, consult our technical team
5	All gratings were tested in accordance with the proposed standard of the Fiberglass Grating Manufacturers Council of the American Composites Manufacturers Association

PULTRUDED GRATINGS

CONCENTRATED LINE LOAD (deflection in mm)



I-1540 - 38MM THICK GRATING : 40% OPEN AREA

SPAN	LINE LOAD IN KG/MTR														MAX. REC.
In mm	300	500	800	1000	1300	1500	2000	2500	3900	5000	10000	15000	20000	25000	
400	0.1	0.2	0.3	0.4	0.5	0.6	0.8	0.9	1.5	1.9	3.8	5.6	7.5	9.4	11400
600	0.3	0.5	0.7	0.9	1.2	1.4	1.9	2.3	3.6	4.6	9.3	13.9			7800
800	0.6	1.0	1.6	2.0	2.6	2.9	3.9	4.9	7.7	9.8					6100
1000	1.1	1.8	2.9	3.7	4.7	5.5	7.3	9.1	14.2						5000
1200	1.9	3.1	5.0	6.2	8.1	9.3	12.5	15.6							3900
1400	3.0	4.9	7.9	9.9	12.8	14.8									2900
1600	4.4	7.3	11.7	14.7											2400

I-1550 - 38MM THICK GRATING : 50% OPEN AREA

SPAN	LINE LOAD IN KG/MTR														MAX. REC.
In mm	300	500	800	1000	1300	1500	2000	2500	3900	5000	10000	15000	20000	25000	
400	0.1	0.2	0.4	0.5	0.6	0.7	0.9	1.1	1.8	2.3	4.7	7.0	9.4	11.7	9500
600	0.3	0.6	0.9	1.1	1.5	1.7	2.3	2.9	4.5	5.8	11.6				6450
800	0.7	1.2	2.0	2.4	3.2	3.6	4.9	6.1	9.6	12.2					5100
1000	1.3	2.2	3.6	4.6	5.9	6.8	9.1	11.4							4150
1200	2.3	3.9	6.2	7.7	10.1	11.6									3250
1400	3.7	6.1	9.8	12.3											2400
1600	5.5	9.1													1950

I-1560 - 38MM THICK GRATING : 60% OPEN AREA

SPAN	LINE LOAD IN KG/MTR														MAX. REC.
In mm	300	500	800	1000	1300	1500	2000	2500	3900	5000	10000	15000	20000	25000	
400	0.2	0.3	0.5	0.6	0.7	0.8	1.1	1.4	2.2	2.8	5.6	8.4	11.36	14.1	7600
600	0.4	0.7	1.1	1.4	1.8	2.1	2.8	3.5	5.4	7.0	13.9				5100
800	0.9	1.5	2.4	2.9	3.8	4.4	5.9	7.4	11.5	14.7					4100
1000	1.6	2.7	4.4	5.5	7.1	8.2	10.9	13.7							3300
1200	2.8	4.7	7.5	9.3	12.1	14.0									2600
1400	4.4	7.4	11.8	14.8											1900
1600	6.6	11.0													1500

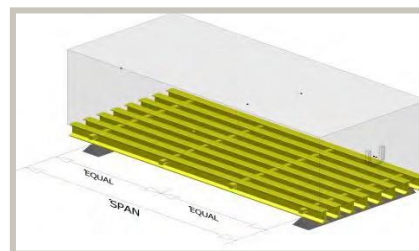
NOTES:

1	It is advised not exceed the MAX RECOMMENDED LOAD at any given span. MAX RECOMMENDED LOAD represents a 2:1 factor of safety on ULTIMATE CAPACITY.
2	ULTIMATE CAPACITY represents a complete and total failure of the grating. Max recommended and ultimate loads do not change as a result of adding a 3mm thick covered plate.
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4	The allowable loads in this table are for STATIC LOAD CONDITIONS at ambient temperatures only. Allowable loads for impact or dynamic conditions should be a maximum of ONE-HALF the values shown. Long term loads will result in added deflection due to creep in the material and will also require higher safety factors to ensure acceptable performance. For applications at elevated temperatures, consult our technical team
5	All gratings were tested in accordance with the proposed standard of the Fiberglass Grating Manufacturers Council of the American Composites Manufacturers Association

PULTRUDED GRATINGS

UNIFORMLY DISTRIBUTED LOAD

(deflection in mm)



I-1040 - 25MM THICK GRATING : 40% OPEN AREA

SPAN	UNIFORM DISTRIBUTED LOAD IN KG/SQ.MT														MAX. REC.
In mm	300	500	800	1000	1300	1500	2000	2500	3900	5000	10000	15000	20000	25000	
400	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.5	0.8	1.1	2.1	3.2	4.3	5.3	41900
600	0.3	0.4	0.7	0.9	1.1	1.3	1.8	2.2	3.4	4.4	8.8	13.1			20700
800	0.8	1.3	2.1	2.6	3.4	3.9	5.2	6.4	10.1	12.9					12600
1000	1.8	3.1	4.9	6.1	8.0	9.2	12.3	15.3							7700
1200	3.7	6.2	9.9	12.4											5200
1400															
1600															

I-1050 - 25MM THICK GRATING : 50% OPEN AREA

SPAN	UNIFORM DISTRIBUTED LOAD IN KG/SQ.MT														MAX. REC.
In mm	300	500	800	1000	1300	1500	2000	2500	3900	5000	10000	15000	20000	25000	
400	0.1	0.2	0.3	0.3	0.4	0.4	0.5	0.7	1.0	1.5	2.9	3.8	5.4	7.0	34900
600	0.3	0.6	0.9	1.1	1.5	1.9	2.3	3.0	4.9	6.0	12.1				17200
800	1.0	1.5	2.7	3.0	4.0	5.2	6.7	8.6	14.1						10500
1000	2.2	4.0	6.3	8.2	10.7	12.8									5600
1200	4.5	8.9	13.7												4300
1400															
1600															

I-1060 - 25MM THICK GRATING : 60% OPEN AREA

SPAN	UNIFORM DISTRIBUTED LOAD IN KG/SQ.MT														MAX. REC.
In mm	300	500	800	1000	1300	1500	2000	2500	3900	5000	10000	15000	20000	25000	
400	0.1	0.2	0.3	0.3	0.4	0.5	0.6	0.8	1.2	1.6	3.2	4.8	6.4	8.0	27900
600	0.4	0.7	1.0	1.3	1.7	2.0	2.6	3.3	5.1	6.6	13.1				13800
800	1.2	1.9	3.1	3.9	5.0	5.8	7.7	9.6	15.1						8500
1000	2.8	4.6	7.3	9.2	11.9	13.8									5100
1200	5.6	9.3	14.9												3500
1400															
1600															

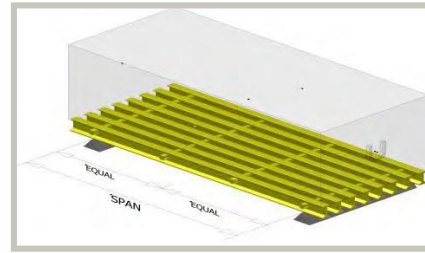
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5	All gratings were tested in accordance with the proposed standard of the Fiberglass Grating Manufacturers Council of the American Composites Manufacturers Association

PULTRUDED GRATINGS

UNIFORMLY DISTRIBUTED LOAD

(deflection in mm)



I-1540- 38MM THICK GRATING : 40% OPEN AREA

SPAN	UNIFORM DISTRIBUTED LOAD IN KG/SQ.MT														MAX. REC.
In mm	300	500	800	1000	1300	1500	2000	2500	3900	5000	10000	15000	20000	25000	
400	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.4	0.5	0.9	1.4	1.9	2.3	57400
600	0.1	0.2	0.3	0.3	0.5	0.5	0.7	0.9	1.4	1.7	3.5	5.2	7.0	8.7	25900
800	0.3	0.5	0.8	1.0	1.3	1.5	2.0	2.5	3.8	4.9	9.8	14.7			15500
1000	0.7	1.1	1.8	2.3	3.0	3.4	4.6	5.7	8.9	11.4					10000
1200	1.4	2.3	3.7	4.7	6.1	7.0	9.3	11.7							6600
1400	2.6	4.3	6.9	8.6	11.2	13.0									4200
1600	4.4	7.3	11.6	14.7											2900

I-1550- 38MM THICK GRATING : 50% OPEN AREA

SPAN	UNIFORM DISTRIBUTED LOAD IN KG/SQ.MT														MAX. REC.
In mm	300	500	800	1000	1300	1500	2000	2500	3900	5000	10000	15000	20000	25000	
400	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.5	0.7	1.9	2.4	2.9	3.0	47800
600	0.1	0.2	0.3	0.3	0.5	0.6	0.7	0.9	1.9	1.7	3.5	5.2	8.0	9.9	21600
800	0.4	0.5	0.9	1.0	1.4	1.5	3.0	3.5	4.8	5.7	11.8				12900
1000	1.0	1.1	1.9	2.9	3.4	3.9	4.9	6.7	10.9						8300
1200	1.7	3.3	4.7	5.7	7.1	8.0	12.3	14.7							5400
1400	3.2	5.4	8.9	10.0	13.2										3500
1600	5.4	8.4	13.6												2400

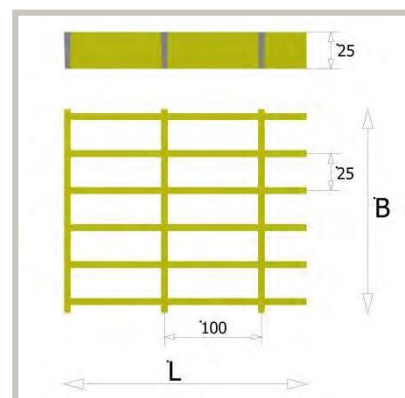
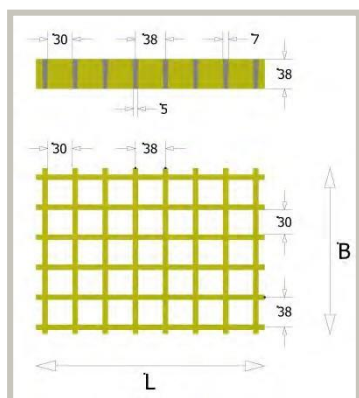
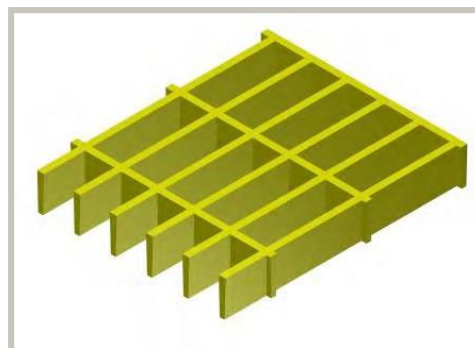
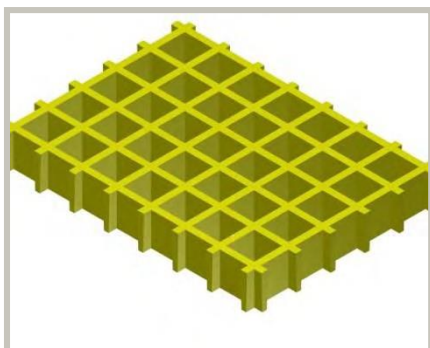
I-1560- 38MM THICK GRATING : 60% OPEN AREA

SPAN	UNIFORM DISTRIBUTED LOAD IN KG/SQ.MT														MAX. REC.
In mm	300	500	800	1000	1300	1500	2000	2500	3900	5000	10000	15000	20000	25000	
400	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.4	0.5	0.7	1.4	2.1	2.8	3.5	38300
600	0.2	0.3	0.4	0.5	0.7	0.8	1.0	1.3	2.0	2.6	5.2	7.8	10.4	13.0	17300
800	0.4	0.7	1.2	1.5	1.9	2.2	2.9	3.7	5.7	7.4	14.7				10300
1000	1.0	1.7	2.7	3.4	4.4	5.1	6.8	8.6	13.3						6700
1200	2.1	3.5	5.6	7.0	9.1	10.5	14.0								4300
1400	3.9	6.5	10.4	10.9											2800
1600	6.6	11.0													1900

NOTES:

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2	ULTIMATE CAPACITY represents a complete and total failure of the grating. Max recommended and ultimate loads do not change as a result of adding a 3mm thick covered plate.
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5	All gratings were tested in accordance with the proposed standard of the Fiberglass Grating Manufacturers Council of the American Composites Manufacturers Association

NOMENCLATURE FOR FRP/GRP MOULDED GRATING



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	1007 X 2007, 1007 X 4047, 1220 x 4045, 1220 x 3660
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	8-6	78	1220 x 4068
MM 30 X (20 X 20)	30	20 X 20 (Mini)	7-5	42	2003 X 740

WHEN PANEL SIZE 1007 X 4047, 1247 X 4047 OR 1007 X 2007, MESH SIZE WILL BE 40 X 40

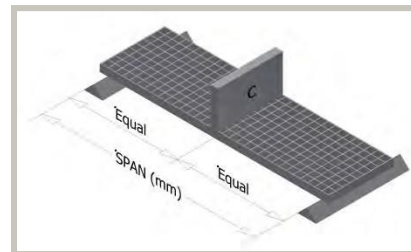
RESIN SYSTEM FOR GRATINGS

Resin Type	Resin Base	Description	Flame spread rating ASTM E84
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 V	Vinyl Ester	Superior Corrosion resistance & fire retardant	Class 1, 25 or less
Type P	Phenolic	Low smoke and superior fire retardant	Class 1, 5 or less

LOAD DEFLECTION TABLE

MOULDED GRATINGS

CONCENTRATED LINE LOAD (deflection in mm)



SM 25 X (38 X 38) : 25MM THICK & SQ. MESH 38MM X 38MM

SPAN	LINE LOAD IN KG/MTR														MAX. REC.
In mm	300	500	800	1000	1300	1500	2000	2500	3900	5000	6000	7000	8000	9000	
400	1.6	2.6	4.2	5.3	6.8	7.9	10.5	13.1							900
600	4.8	8.0	12.8	16.0											600
800	11.3														300

SM 30 X (38 X 38) : 30MM THICK & SQ. MESH 38MM X 38MM

SPAN	LINE LOAD IN KG/MTR														MAX. REC.
In mm	300	500	800	1000	1300	1500	2000	2500	3900	5000	6000	7000	8000	9000	
400	1.0	1.5	2.4	4.2	4.9	6.3	9.6	12.8							1800
600	2.2	3.5	5.8	7.9											900
800	7.1														600

SM 38 X (38 X 38) : 38MM THICK & SQ. MESH 38MM X 38MM

SPAN	LINE LOAD IN KG/MTR														MAX. REC.
In mm	300	500	800	1000	1300	1500	2000	2500	3900	5000	6000	7000	8000	9000	
400	0.6	0.9	1.5	1.9	2.4	2.8	3.7	4.7	7.3	9.3	11.2	13.1	14.9		1900
600	1.6	2.6	4.2	5.3	6.8	7.9	10.5	13.2							1300
800	3.5	5.9	9.5	11.8	15.4										1000
1000	6.9	11.4													700
1200	11.8														500

RM 25 X (25 X 100) : 25MM THICK & SQ. MESH 25MM X 100MM

SPAN	LINE LOAD IN KG/MTR														MAX. REC.
In mm	300	500	800	1000	1300	1500	2000	2500	3900	5000	6000	7000	8000	9000	
400	1.2	2.0	3.2	4.1	5.3	6.1	8.1	10.1	15.8						900
600	3.7	6.1	9.8	12.3	16.0										600
800	8.5	14.2													400
1000															

SM 50 X (50 X 50) : 50MM THICK & SQ. MESH 50MM X 50MM

SPAN	LINE LOAD IN KG/MTR														MAX. REC.
In mm	300	500	800	1000	1300	1500	2000	2500	3900	5000	6000	7000	8000	9000	
400	0.3	0.6	0.9	1.1	1.5	1.7	2.3	2.8	4.4	5.7	6.8	7.9	9.1	10.2	2270
600	0.9	1.5	2.4	3.0	3.9	4.5	6.1	7.6	11.8	15.1					1400
800	1.9	3.2	5.2	6.4	8.4	9.7	12.9								1110
1000	3.7	6.1	9.8	12.2	15.9										1100
1200	6.2	10.4													760
1400	9.8														660

NOTES:

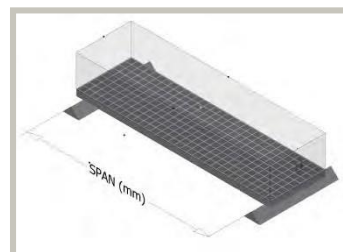
1	It is advised not exceed the MAX RECOMMENDED LOAD at any given span. MAX RECOMMENDED LOAD represents a 5:1 factor of safety on ULTIMATE CAPACITY.
2	ULTIMATE CAPACITY represents a complete and total failure of the grating. Max recommended and ultimate loads do not change as a result of adding a 3mm thick covered plate.

3	Walking loads, typically 250-300 kg/m ² maximum are recommended for pedestrian traffic. Deflections for worker comfort are typically limited to the lesser of 10mm or CLEAR SPAN divided by 125; for a firmer feel, limit deflection to the lesser of 6 or CLEAR SPAN divided by 200.
4	The allowable loads in this table are for STATIC LOAD CONDITIONS at ambient temperatures only. Allowable loads for impact or dynamic conditions should be a maximum of ONE-HALF the values shown. Long term loads will result in added deflection due to creep in the material and will also require higher safety factors to ensure acceptable performance. For applications at elevated temperatures, consult our technical team
5	All gratings were tested in accordance with the proposed standard of the Fiberglass Grating Manufacturers Council of the American Composites Manufacturers Association

MOULDED GRATINGS

UNIFORMLY DISTRIBUTED LOAD

(deflection in mm)



SM 25 X (38 X 38) : 25MM THICK & SQ. MESH 38MM X 38MM

SPAN	UNIFORM DISTRIBUTED LOAD IN KG/SQ.MT														MAX. REC.
In mm	300	500	800	1000	1300	1500	2000	2500	3900	5000	6000	7000	8000	9000	
400	0.4	0.7	1.1	1.3	1.7	2.0	2.6	3.3	5.1	6.6	7.9	9.2	10.5	11.8	4800
600	1.8	3.0	4.8	6.0	7.8	9.0	12.0	15.0							2000
800	5.7	9.5	15.1												900
1000	13.9														500

SM 30 X (38 X 38) : 30MM THICK & SQ. MESH 38MM X 38MM

SPAN	UNIFORM DISTRIBUTED LOAD IN KG/SQ.MT														MAX. REC.
In mm	300	500	800	1000	1300	1500	2000	2500	3900	5000	6000	7000	8000	9000	
400	0.2	0.4	0.8	1.0	1.3	1.9	2.2	2.9	4.5	5.9	6.9	8.5	9.5	10.9	6500
600	1.0	1.5	4.8	2.8	3.9	4.3	6.3	7.4							4300
800	3.9	7.1	8.9												1900
1000	5.5														1100

SM 38 X (38 X 38) : 38MM THICK & SQ. MESH 38MM X 38MM

SPAN	UNIFORM DISTRIBUTED LOAD IN KG/SQ.MT														MAX. REC.
In mm	300	500	800	1000	1300	1500	2000	2500	3900	5000	6000	7000	8000	9000	
400	0.1	0.2	0.4	0.5	0.6	0.7	0.9	1.2	1.8	2.3	2.8	3.3	3.7	4.2	10000
600	0.6	1.0	1.6	2.0	2.6	3.0	3.9	4.9	7.7	9.9	11.8	13.8	15.8		4500
800	1.8	3.0	4.7	5.9	7.7	8.9	11.8	14.8							2600
1000	4.3	7.1	11.4	14.3											1400
1200	8.9	14.8													900

RM 25 X (25 X 100) : 25MM THICK & MESH 25MM X 100MM

SPAN	UNIFORM DISTRIBUTED LOAD IN KG/SQ.MT														MAX. REC.
In mm	300	500	800	1000	1300	1500	2000	2500	3900	5000	6000	7000	8000	9000	
400	0.3	0.5	0.8	1.0	1.3	1.5	2.0	2.5	4.0	5.1	6.1	7.1	8.1	9.1	4800
600	1.4	2.3	3.7	4.6	6.0	6.9	9.2	11.5							2000
800	4.3	7.1	11.3	14.2											1000
1000	10.4														

SM 50 X (50 X 50) : 50MM THICK & SQ. MESH 50MM X 50MM

SPAN	UNIFORM DISTRIBUTED LOAD IN KG/SQ.MT														MAX. REC.
In mm	300	500	800	1000	1300	1500	2000	2500	3900	5000	6000	7000	8000	9000	
400	0.1	0.1	0.2	0.3	0.4	0.4	0.6	0.7	1.1	1.4	1.7	2.0	2.3	2.6	11300
600	0.1	0.2	0.3	0.3	0.4	0.5	0.7	0.8	1.3	1.6	2.0	2.3	2.6	2.9	4600
800	0.3	0.2	0.9	1.1	1.5	1.7	2.3	2.8	4.4	5.7	6.8	8.0	9.1	10.2	2780
1000	2.3	3.8	6.1	7.7	9.9	11.5	15.3								1810
1200	4.7	7.8	12.5	15.6											980
1400	8.5	14.2													790

NOTES:

1	It is advised not exceed the MAX RECOMMENDED LOAD at any given span. MAX RECOMMENDED LOAD represents a 5:1 factor of safety on ULTIMATE CAPACITY.
2	ULTIMATE CAPACITY represents a complete and total failure of the grating. Max recommended and ultimate loads do not change as a result of adding a 3mm thick covered plate.

3	Walking loads, typically 250-300 kg/m ² maximum are recommended for pedestrian traffic. Deflections for worker comfort are typically limited to the lesser of 10mm or CLEAR SPAN divided by 125; for a firmer feel, limit deflection to the lesser of 6 or CLEAR SPAN divided by 200.
4	The allowable loads in this table are for STATIC LOAD CONDITIONS at ambient temperatures only. Allowable loads for impact or dynamic conditions should be a maximum of ONE-HALF the values shown. Long term loads will result in added deflection due to creep in the material and will also require higher safety factors to ensure acceptable performance. For applications at elevated temperatures, consult our technical team
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MOULDED GRATINGS

POINT LOAD

(deflection in mm)



SM 25 X (38 X 38) : 25MM THICK & SQ. MESH 38MM X 38MM

SPAN	POINT LOAD IN KG					
In mm	100	225	350	450	700	900
450	0.5	1.0	1.5	2.0	3.0	4.0
600	1.2	3.0	4.5	6.1	9.1	12.4
750	2.2	6.1	8.8	11.4		
900	3.3	8.3	12.4	16.7		
1050	6.1	15.4				
1150	7.3					

SM 30 X (38 X 38) : 30MM THICK & SQ. MESH 38MM X 38MM

SPAN	POINT LOAD IN KG					
In mm	100	225	350	450	700	900
450	0.3	0.5	0.9	1.0	2.7	3.5
600	0.9	1.1	2.5	2.7	8.1	9.2
750	1.1	2.2	5.2	8.9		
900	2.6	4.9	8.5	13.8		
1050	4.1	7.5				
1150	6.5					

SM 38 X (38 X 38) : 38MM THICK & SQ. MESH 38MM X 38MM

SPAN	POINT LOAD IN KG					
In mm	100	225	350	450	700	900
450	<0.25	0.2	0.5	0.7	1.0	1.5
600	0.5	1.0	1.5	2.0	3.0	3.8
750	0.7	1.7	2.5	3.3	5.0	6.6
900	1.0	2.5	3.8	5.3	7.8	10.4
1050	1.5	3.8	5.8	7.8	11.6	15.4
1150	2.0	5.0	7.3	9.9	14.9	

RM 25 X (25 X 100) : 25MM THICK & MESH 25MM X 100MM

SPAN	POINT LOAD IN KG					
In mm	100	225	350	450	700	900
450	0.2	1.0	1.2	1.7	2.7	3.8
600	1.0	2.2	3.5	4.8	7.1	9.4
750	1.7	4.5	6.8	9.4	13.9	
900	2.7	7.3	10.9	14.4		
1050	4.3	10.9	16.5			

SM 50 X (50 X 50) : 50MM THICK & SQ. MESH 50MM X 50MM

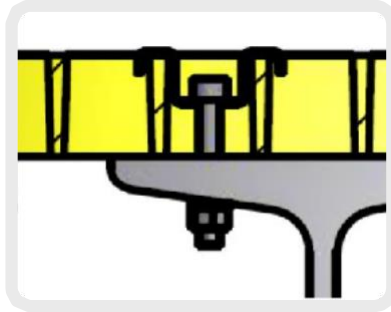
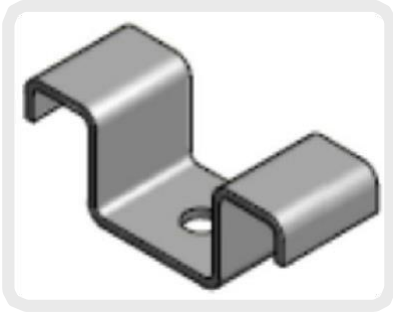
SPAN	POINT LOAD IN KG					
In mm	100	225	350	450	700	900
450	0.7	0.5	0.5	0.8	1.3	1.5
600	0.2	0.8	1.0	1.3	2.0	2.6
750	0.5	1.0	1.5	2.3	3.3	4.3
900	0.5	1.5	2.3	3.0	4.6	6.1
1050	0.8	2.3	3.3	4.3	6.6	8.9
1150	1.2	2.5	3.8	5.0	7.6	10.2

NOTES:

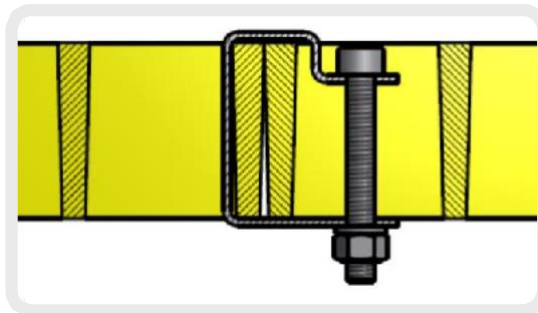
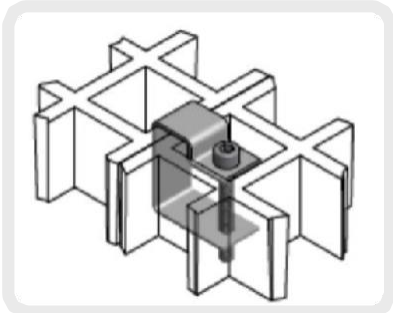
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ACCESSORIES

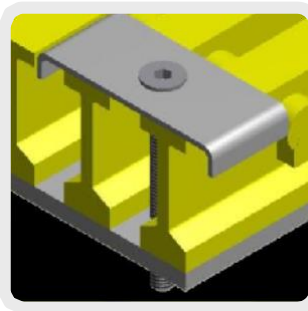
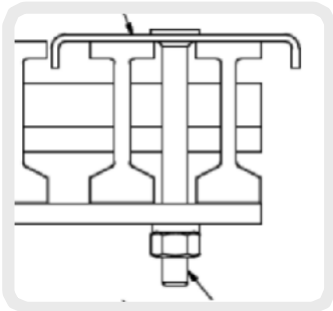
M CLIP – FOR FIXING MOULDED GRATING WITH SUPPORT STRUCTURE (ORDERING CODE: ASMGC-38)



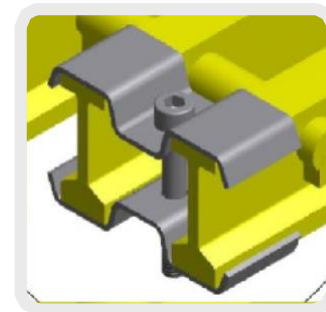
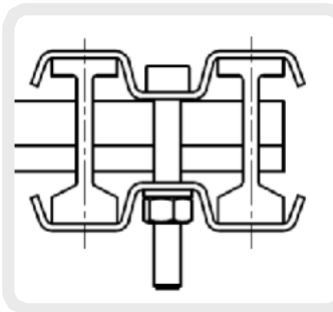
C CLAMP – FOR FIXING TWO MOULDED GRATING PANELS (ORDERING CODE: ASMGC-C-25/38)



C CLIP – FOR FIXING PULTRUDED GRATING WITH SUPPORT STRUCTURE (ORDERING CODE: ASPGC-I-00)



PULTRUDED GRATING CLAMP – FOR FIXING TWO PULTRUDED GRATING PANEL (ORDERING CODE: ASPGC-I-01)



TYPES OF SURFACE FINISH OF GRATING



Concave Top : Suitable for wet & oily conditions



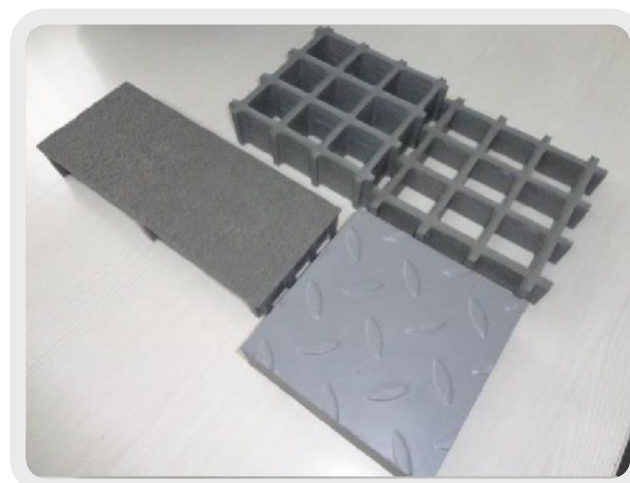
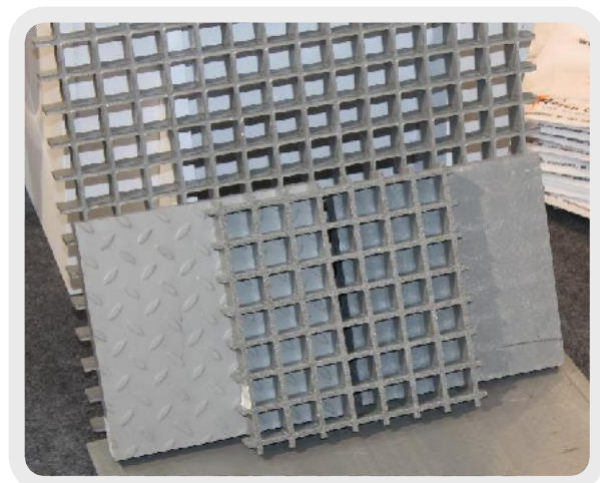
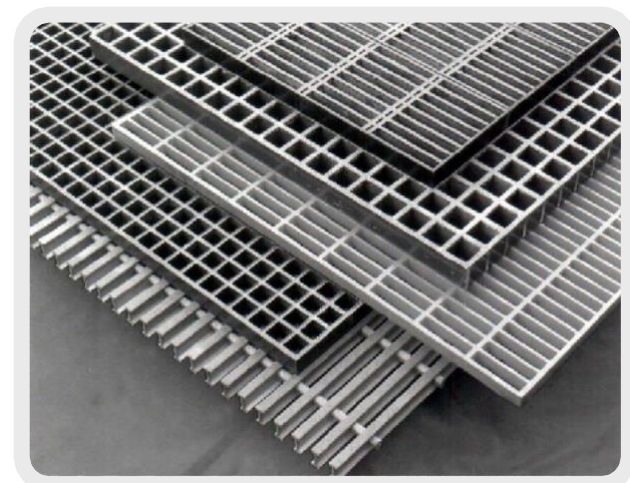
Inbuilt Grit : A quartz grit finish applied in the mould during manufacture.

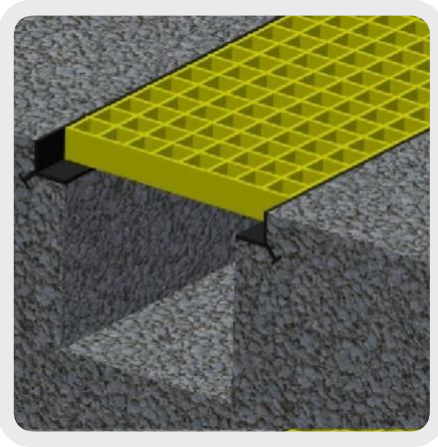


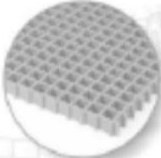
Applied Grit : A quartz grit sealed with a tough, long wearing epoxy coat.



Chequered Plate / Grit Top





				
Fiberglass Cable Tray	Fiberglass Structural Profiles	Fiberglass Molded Gratings	Trefoil Clamp	Fiberglass Poles & Mast
				
Fiberglass Pultruded Gratings	Fiberglass Handrails	Fiberglass Fencing	Fiberglass Ladder	Fiberglass Canopy