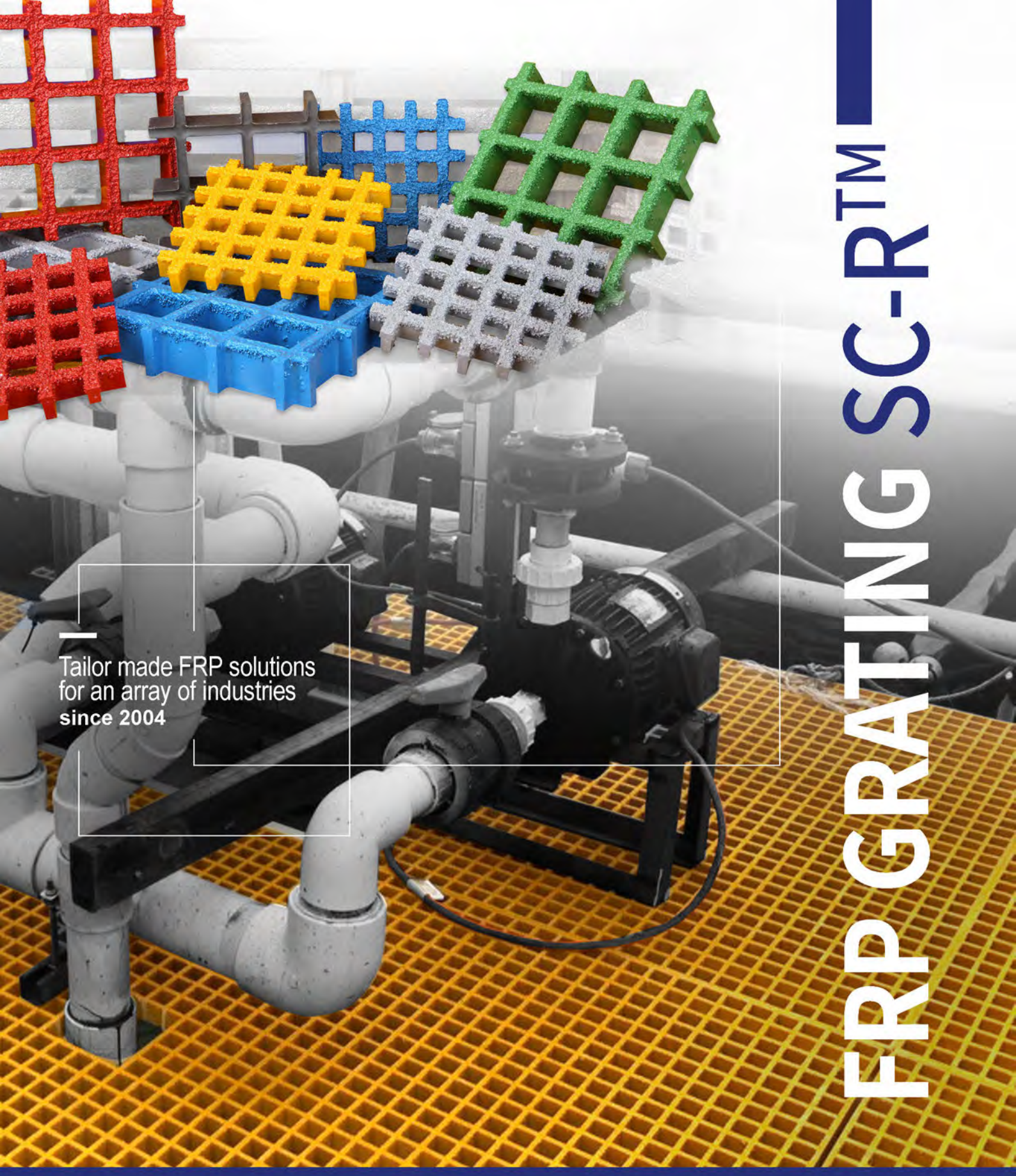


FRP GRATING SC-R™

Tailor made FRP solutions
for an array of industries
since 2004

STAIRCAREFRP
COMPOSITE DESIGN & FABRICATION

Fiberglass Molded Products

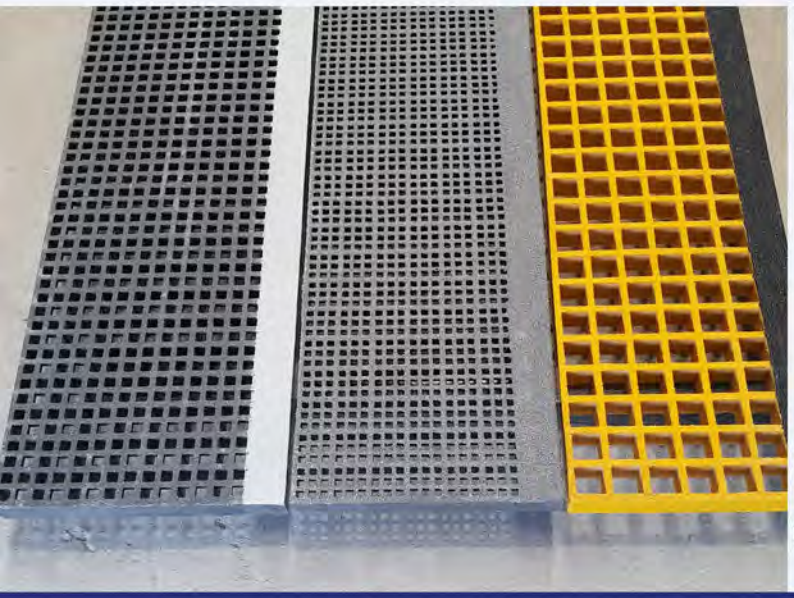
INTRODUCTION

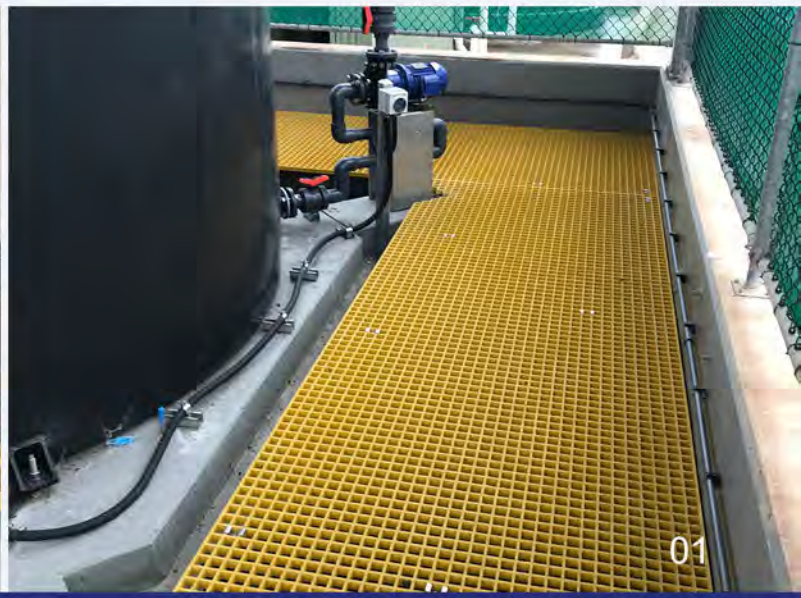
STAIRCARE SC-R products are environmentally friendly and offer exceptional corrosion and chemical resistance. They are always prepared with advanced manufacturing techniques. Our FRP gratings are light in weight compared to steel and offer resilient, low maintenance, safe and versatile access.

The SC-R Fiberglass Reinforced Polymer Grating make up the core of the FRP range, providing flooring, step and walkway solutions in heavy duty applications, such as factories, workshops and Offshore platforms.

SC-R Mini and Micro Mesh FRP systems offer an excellent alternative to conventional flooring products providing the ultimate in corrosion resistance and slip protection. The small mini and micro mesh opening allow the use for wheel-chair access ramps and pedestrian walkways.

STAIRCARE SC-R offer highly innovative product solutions to our clients based on latest tools and techniques.





STAIRCARE SC-R markets

- Construction
- Electrical, telecommunications and electronics
- Transportation, rail, road, tunnel, bridge
- Chemical industries
- Marine, submarine, and Offshore oil and gas
- Water and wastewater industries
- Mine, mass transportation, conveyor
- Defense, Navy, Aviation
- Local Government and National Parks
- Architectural

STAIRCARE SC-R markets

Corrosion Resistant: The ability to resist corrosion and chemical resistance in the harshest environments, maintaining structural integrity unlike metal or wood.

Adjustable: Easy and adjustable installation to create a walking surface even on sloped floors using adjustable pedestals in a variety of designs.

Fire Retardant: Designed according to ASTM E-84 standard with spread rating of 25 or less as well as self-extinguishing requirements based on ASTM D-635. Tested to AS ISO 9239.1;2003.

Low Installation Cost: Unlike steel, STAIRCARE SC-R products can be cut easily and quickly with ordinary hand tools and do not require the use of heavy equipment and machinery, thus requiring less manpower and installation costs for elevated flooring.

Non-Conductive: STAIRCARE SC-R are electrical insulators that increase safety compared to conductive materials (i.e., metal). These products also have low thermal conductivity.

Light Weight: Steel gratings are two to two and a half times heavier than FRP gratings. Therefore, Staircare SC-R products reduce Transport and installation costs.

Long Service Life: STAIRCARE SC-R products provide outstanding durability and corrosion resistance in demanding applications. Maintenance costs are reduced and increasing product life saves costs over the life cycle of the product.

Easy Installation: System components can be easily repositioned and redesigned if needed for new layouts. The system does not require floor penetration, heavy lifting equipment or hot-work permits.

Slip Resistant: STAIRCARE SC-R grating have an imbedded silicon carbide anti-slip grit giving High coefficient of friction and remain safe even when wet. With this unique feature, workers' safety will increase and lead to fewer workplace accidents.

UV Resistant: STAIRCARE SC-R grating are UV resistant with a special coating.

Color: Grating products can be produced in any color according to the STAIRCARE SC-R catalog.

Electromagnetic waves: Metal and concrete constrictions stop all electromagnetic waves while STAIRCARE SC-R grating are free for electromagnetic waves. Grating products can be used in radar and defense stations.

Molded Grating Selection & Details

Molded grating are popular in various parts of the industry. Molded gratings are a combination of fibers and resins that have been used to replace metal gratings. Molded gratings are produced in a variety of resins, standard colors, and different panel sizes and mesh configurations and are a great alternative to metal mesh, where there are problems of rust, corrosion or chemical damage. Due to its structure (approximately 65% resin and 35% roving fiberglass), the grating is unique in terms of corrosion resistance in demanding environments and offers excellent impact resistance. SC-R Open grates have good ventilation and drainage properties, they can also be supplied with a solid surface for Pedestrian and Vehicle traffic.

SC-R™ grating colors

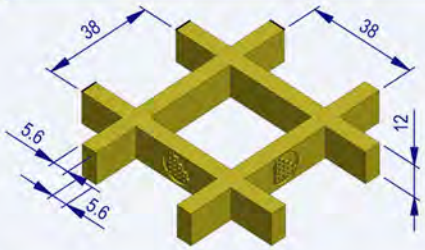
NAME	COLOR
Light Gray RAL7035	
Slate Grey RAL7015	
Black Grey RAL 7021	
Grass Green RAL6010	
Signal Yellow RAL 1003	
Orange	
Red	

Maximum Span calculation is based on single span assumption. The maximum span will be higher for continuous span condition. Please contact us for more information.
The maximum allowable span has been calculated according to the ultimate and serviceability load combination AS1170.0 (ULS:1.2D+1.6L, SLS=D+0.6L), the maximum deflection was assumed Span/200 and Span/300. The more technical consideration for complex loadings and support conditions are available, please contact us for technical advice.

- Standard SC-R™ grating colors are dark gray, green, yellow, orange, red and light gray. Custom colors available.

SC-R Molded Grating Square Mesh

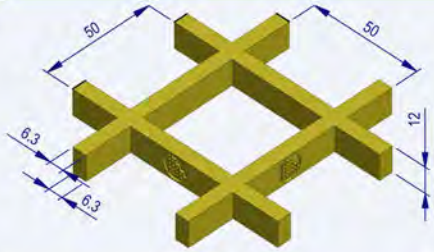
SC-R MG-S 12 x 38 x 38



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
373 (325)	351 (307)	320 (279)	NOT OK (259)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1220×3660	12	5.6	38×38	6.4	72

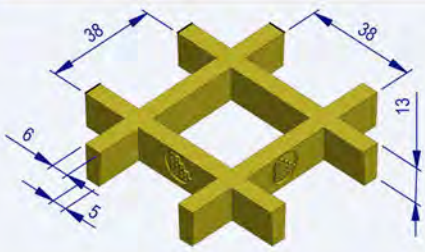
SC-R MG-S 12 x 50 x 50



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
355 (310)	334 (292)	304 (265)	NOT OK (247)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1220×3660	12	6.3	50×50	4.8	78

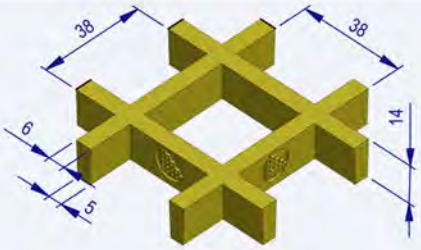
SC-R MG-S 12 x 38 x 38



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
413 (361)	389 (340)	355 (309)	330 (288)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1220×3660,1220×4000,1220×2440, 921×3055,1264×4010	13	6.0/5.0	38×38	6	78

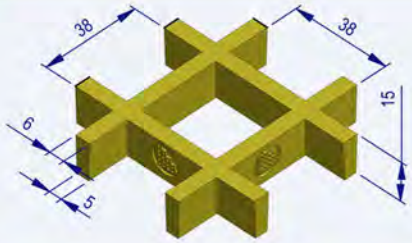
SC-R MG-S 14 x 38 x 38



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
445 (388)	419 (366)	382 (333)	355 (310)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1220×3660,1220×4000,1220×2440, 921×3055,1264×4010	14	6.0/5.0	38×38	6.5	78

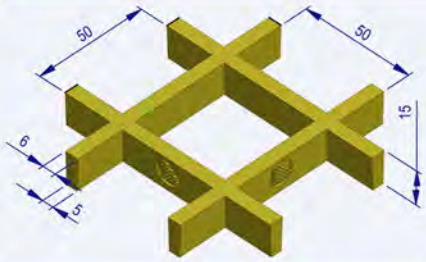
SC-R MG-S 15 x 38 x 38



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
476 (416)	449 (392)	409 (357)	380 (332)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1220×3660,1220×4000,1220×2440, 921×3055,1264×4010	15	6.0/5.0	38×38	7	78

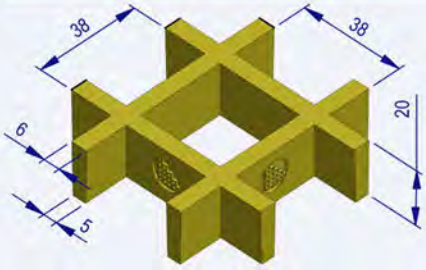
SC-R MG-S 15 x 50 x 50



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
435 (380)	410 (358)	374 (326)	NOT OK (303)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1228×4020	15	6.0/5.0	50×50	5.9	82

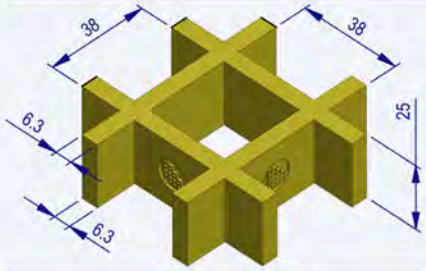
SC-R MG-S 20 x 38 x 38



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
631 (551)	596 (520)	543 (474)	505 (441)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1220×3660,1220×4000, 1524×4010,997×3012	20	6.0/5.0	38×38	9.8	65

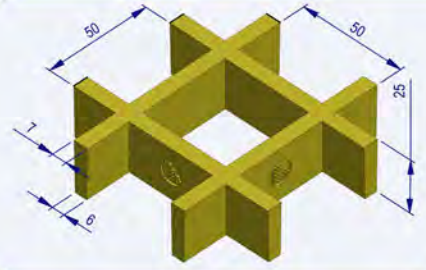
SC-R MG-S 25 x 38 x 38



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
798 (697)	754 (658)	688 (601)	641 (559)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1220×3660,1226×4010,1530×4010, 921×3055,1524×4000,997×3012	25	6.3	38×38	12.2	70

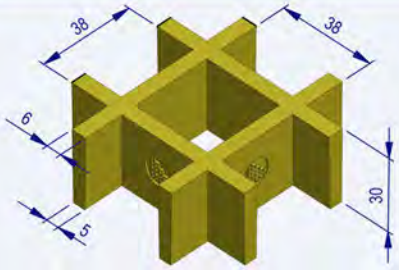
SC-R MG-S 25 x 50 x 50



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
755 (659)	713 (622)	651 (568)	NOT OK (528)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1230×4020	25	7.0/6.0	50×50	11.5	78

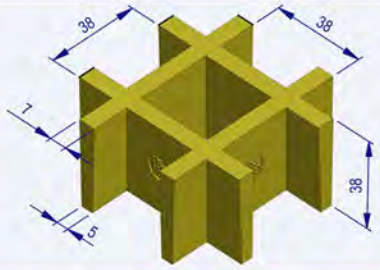
SC-R MG-S 30 x 38 x 38



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
938 (818)	886 (774)	810 (707)	754 (658)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1220×3660,1220×4010,921×3055, 1524×4010	30	6.0/5.0	38×38	14.6	68

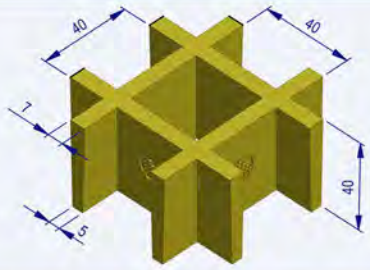
SC-R MG-S 38 x 38 x 38



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1238 (1081)	1173 (1023)	1073 (937)	1001 (873)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1220×3660, 1220×4010, 1000×4000, 2100×4240,998×4010,1220×2440, 921×3055,1530×4010,1530×3050, 1226×3665	38	7.0/5.0	38×38	19.5	68

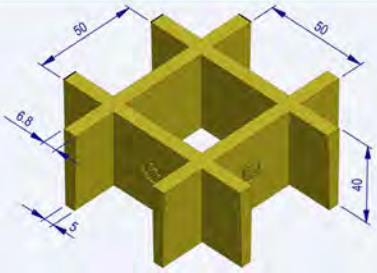
SC-R MG-S 40 x 40 x 40



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1281 (1119)	1213 (1059)	1111 (969)	1036 (904)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1007×3007, 1007×4007, 1247×4007, 1527×4047	40	7.0/5.0	40×40	19.5	67

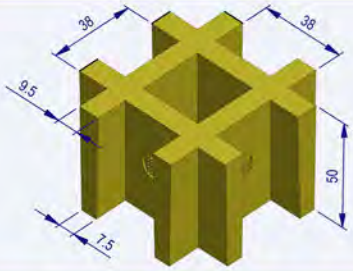
SC-R MG-S 40 x 50 x 50



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1182 (1032)	1119 (976)	1023 (893)	NOT OK (832)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1787×4530	40	6.8/5.0	50×50	17.5	80

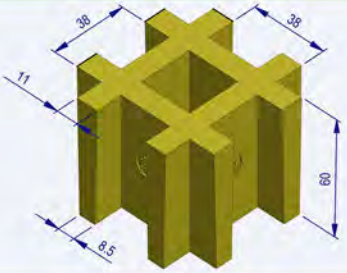
SC-R MG-S 50 x 38 x 38



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1732 (1512)	1650 (1440)	1522 (1329)	1427 (1245)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1230×4020,1532×4020	50	9.5/7.5 heavy duty	38×38	42	56

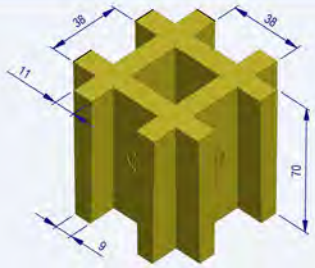
SC-R MG-S 60 x 38 x 38



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
2153 (1880)	2054 (1793)	1900 (1659)	1784 (1557)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1230×4010	60	10.5/8.5 heavy duty	38×38	50.4	54

SC-R MG-S 70 x 38 x 38

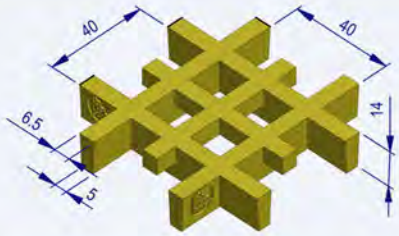


Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
2478 (2163)	2368 (2068)	2196 (1917)	2065 (1803)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1230×4010	70	11.0/9.0 heavy duty	38×38	58.8	49

SC-R Molded Grating Mini-Mesh

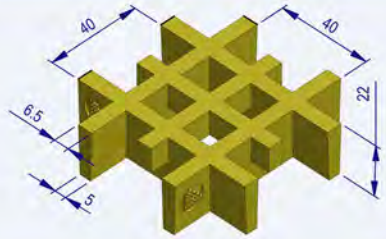
SC-R MG-mini 14 x 40 x 40



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
542 (474)	512 (447)	467 (408)	435 (380)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1247×4047,1007×3007	14	6.5/5.0	40×40	10.5	42

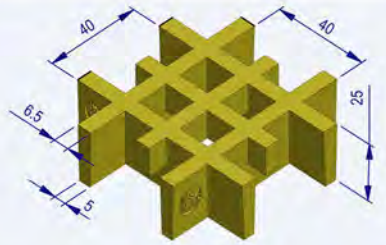
SC-R MG-mini 22 x 40 x 40



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
791 (691)	748 (653)	684 (597)	637 (556)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1247×4047,1007×3007, 1527×4047	22	6.5/5.0	40×40	14.8	42

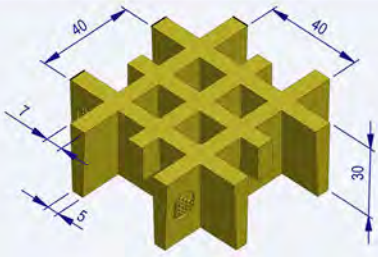
SC-R MG-mini 25 x 40 x 40



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
890 (777)	842 (735)	770 (672)	718 (626)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1247×4047,1527×4047	25	6.5/5.0	40×40	16.8	42

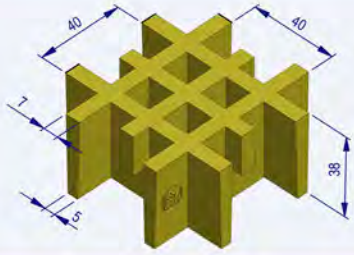
SC-R MG-mini 30 x 40 x 40



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1078 (941)	1020 (891)	934 (815)	871 (760)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1007×4047,1007×3007,1247×4047, 1527×4047	30	7/5.0	40×40	18.3	42

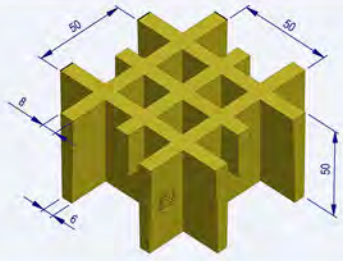
SC-R MG-mini 38 x 40 x 40



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1342 (1172)	1272 (1111)	1166 (1018)	1089 (950)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1007×4047,1007×3007,1247×4047, 1527×4047	38	7/5.0	40×40	23.2	42

SC-R MG-mini 50 x 50 x 50

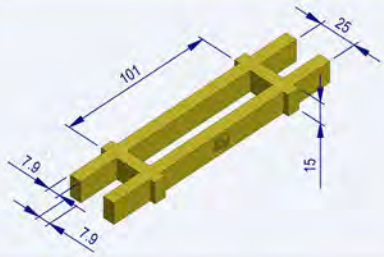


Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1665 (1453)	1580 (1379)	1451 (1267)	1356 (1183)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1518×4023	50	8.0/6.0	50×50	28.5	42

SC-R Molded Grating Rectangular-Mesh

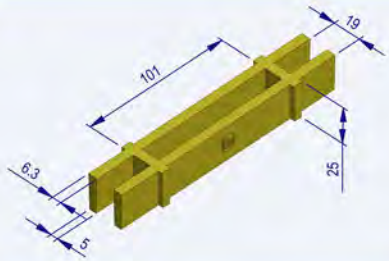
SC-R MG-R 15 x 25 x 101



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
597 (521)	564 (492)	514 (449)	478 (418)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1220×3660	15	7.9	25×101	9.6	58

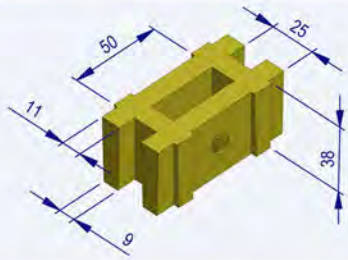
SC-R MG-R 25 x 19 x 101



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
966 (843)	913 (797)	835 (728)	777 (678)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1220×3660	25	6.3/5.02	19×101	14.6	62

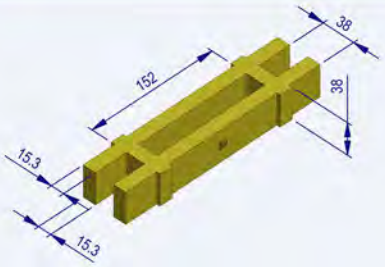
SC-R MG-R 38 x 25 x 50



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1570 (1371)	1491 (1302)	1371 (1197)	1283 (1120)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1220×3660,1220×2440	38	11.0/9.0 heavy duty	25×50	30.8	48

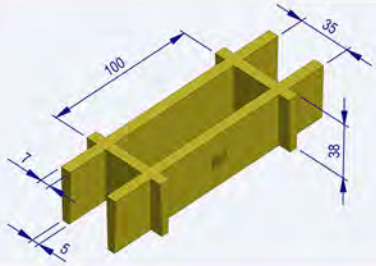
SC-R MG-R 38 x 38 x 152



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1609 (1405)	1523 (1330)	1395 (1218)	1301 (1136)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1500×3660	38	15.24	38×152	19	62

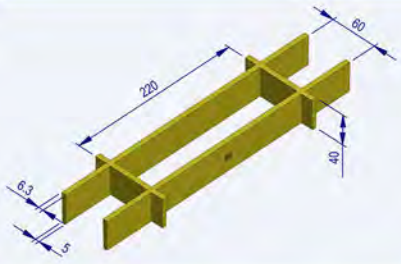
SC-R MG-R 38 x 35 x 100



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1219 (1064)	1153 (1006)	1053 (919)	981 (856)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1407×4277,2407×2982	38	7.0/5.0	35×100	15	63

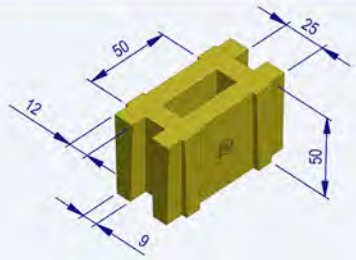
SC-R MG-R 40 x 60 x 220



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1063 (927)	1003 (875)	NOT OK (797)	NOT OK (741)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1788×2238, 1788×4250	40	6.3/5.0	60×220	9	67

SC-R MG-R 50 x 25 x 50

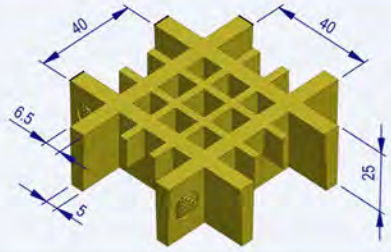


Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
2058 (1797)	1961 (1712)	1810 (1580)	1695 (1481)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1220×3660,1220×2440	50	12.0/9.0 heavy duty	25×50	41.8	67

SC-R Molded Grating Micro-Mesh

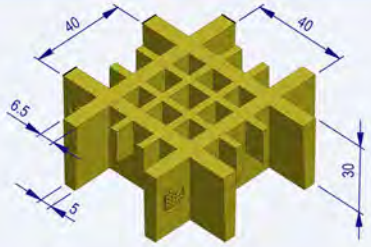
SC-R MG-Micro 25 x 40 x 40



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
850 (743)	805 (703)	737 (643)	687 (600)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1247×4047,1007×3007, 1007×4047,1530×4047	25	6.5/4.5/5.0	40×40	17.8	30

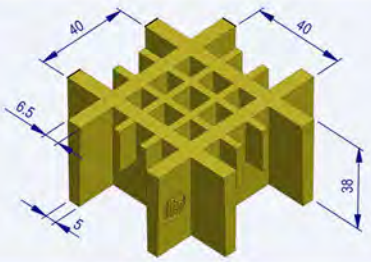
SC-R MG-Micro 30 x 40 x 40



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1012 (884)	959 (837)	877 (766)	818 (714)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1527×4047,1247×4047, 1007×3007,1007×4047	30	6.5/4.5/5.0	40×40	19.1	30

SC-R MG-Micro 38 x 40 x 40

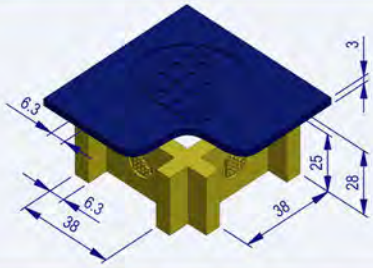


Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1269 (1108)	1203 (1005	1103 (963)	1030 (899)

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1527×4047,1247×4047, 1007×3007,1007×4047	38	6.5/4.5/5.0	40×40	23.8	30

SC-R Molded Grating Solid-Top

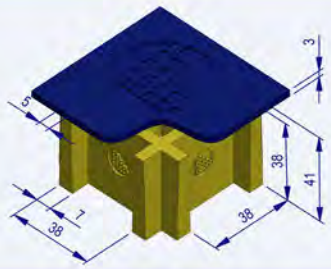
SC-R MG- ST 28 x 38 x 38



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
865	817	746	695

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1220×3660	28	3.3	38×38	13.3	Covered

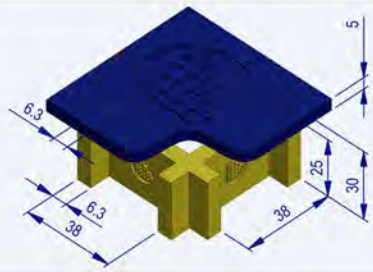
SC-R MG- ST 41 x 38 x 38



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1169	1108	1015	948

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1220×3660	41	3.3	38×38	23.1	Covered

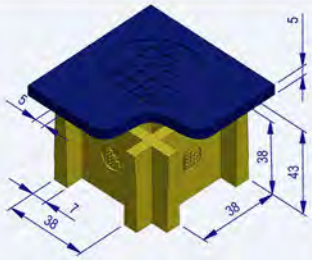
SC-R MG- ST 30 x 38 x 38



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1006	951	869	809

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1220×3660	30	5	38×38	13.3	Covered

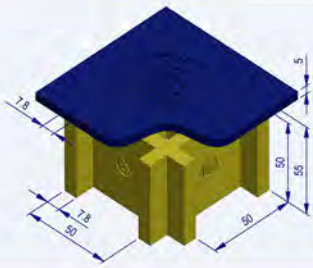
SC-R MG- ST 43 x 38 x 38



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1317	1248	1144	1068

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1220×3660	43	5	38×38	23.2	Covered

SC-R MG- ST 55 x 50 x 50

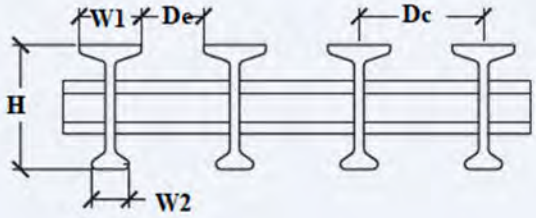


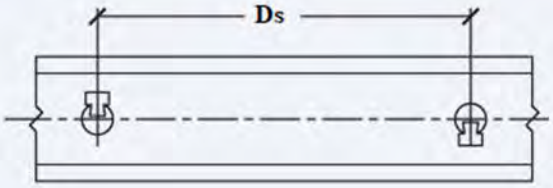
Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1605	1522	1397	1305

Panel Size available (mm)	Thickness (mm)	Bar thickness (Top/Bottom) (mm)	Mesh size (mm)	Weight (kg/㎡)	Open Rate (%)
1220×3660	55	5	50×50	52	Covered

Pultruded Grating Selection & Details

While the molded grating is a single panel composed of layers of resin and fiberglass, the pultruded grating is made of a set of parallel load-bearing rods - with T-shaped or I-shaped profiles - held together by several perpendicular cross-rods to each other.
Compared to molded grating of similar sizes, pultruded grating can withstand heavier longitudinal loads - making it suitable for more demanding applications that require tension, compression and bending strengths.





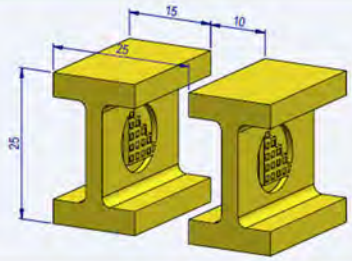
SC-R™ grating colors

PART NAME	NAME	COLOR
Bearing bar	Light Gray	
	Yellow	
Cross rod	Black	
	Light Gray	
	Yellow	

Two standard SC-R™ bearing bar colors are light gray or yellow and the two standard cross rod colors are light gray (polyester) or black (vinyl ester). Custom colors available.

Pultruded Grating (SC-R™ PGI H x W1 x DC)

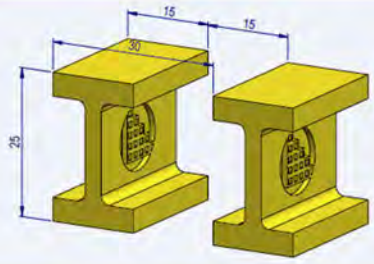
SC-R PGI 25 x 15 x 25



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1385 (1209)	1311 (1144)	1199 (1046)	1117 (975)

Panel Size available (mm)	Thickness (mm)	Flange width (mm)	Beam spacing (mm)	Weight (kg/㎡)	Gap (mm) Open Area (%)
Custom	25	15	25	17.1	10 (40%)

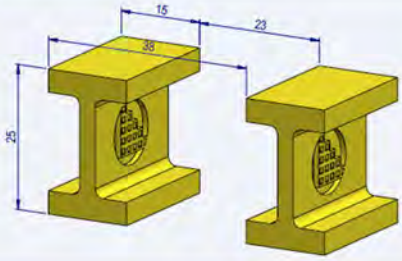
SC-R PGI 25 x 15 x 30



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1311 (1144)	1239 (1081)	1132 (988)	1054 (919)

Panel Size available (mm)	Thickness (mm)	Flange width (mm)	Beam spacing (mm)	Weight (kg/㎡)	Gap (mm) Open Area (%)
Custom	25	15	30	14.2	15 (50%)

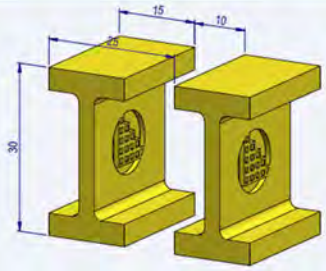
SC-R PGI 25 x 15 x 38



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1219 (1063)	1151 (1004)	1050 (915)	977 (851)

Panel Size available (mm)	Thickness (mm)	Flange width (mm)	Beam spacing (mm)	Weight (kg/㎡)	Gap (mm) Open Area (%)
Custom	25	15	38	11.2	23 (60%)

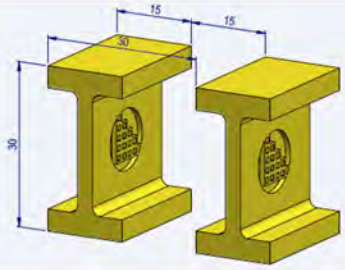
SC-R PGI 30 x 15 x 25



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1609 (1405)	1523 (1330)	1394 (1217)	1300 (1134)

Panel Size available (mm)	Thickness (mm)	Flange width (mm)	Beam spacing (mm)	Weight (kg/m²)	Gap (mm) Open Area (%)
Custom	30	15	25	18.8	10 (40%)

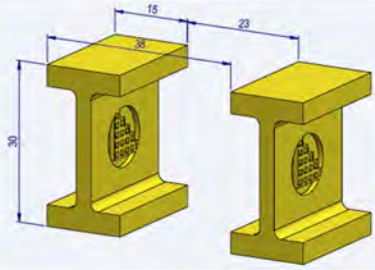
SC-R PGI 30 x 15 x 30



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1523 (1329)	1441 (1257)	1317 (1149)	1227 (1070)

Panel Size available (mm)	Thickness (mm)	Flange width (mm)	Beam spacing (mm)	Weight (kg/m²)	Gap (mm) Open Area (%)
Custom	30	15	30	15.7	15 (50%)

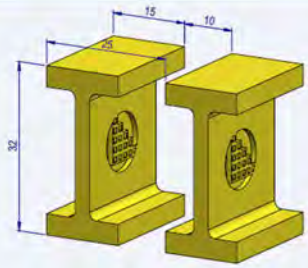
SC-R PGI 30 x 15 x 38



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1416 (1236)	1138 (1167)	1221 (1065)	1136 (991)

Panel Size available (mm)	Thickness (mm)	Flange width (mm)	Beam spacing (mm)	Weight (kg/m²)	Gap (mm) Open Area (%)
Custom	30	15	38	12.6	23 (60%)

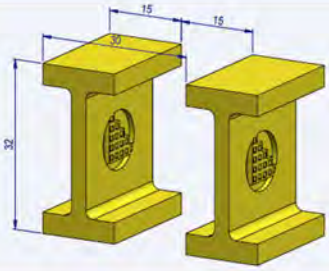
SC-R PGI 32 x 15 x 25



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1695 (1479)	1605 (1400)	1469 (1282)	1370 (1196)

Panel Size available (mm)	Thickness (mm)	Flange width (mm)	Beam spacing (mm)	Weight (kg/m²)	Gap (mm) Open Area (%)
Custom	32	15	25	19.8	10 (40%)

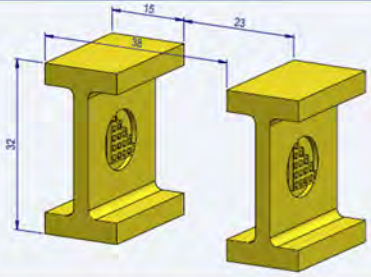
SC-R PGI 32 x 15 x 30



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1602 (1398)	1516 (1323)	1386 (1210)	1292 (1127)

Panel Size available (mm)	Thickness (mm)	Flange width (mm)	Beam spacing (mm)	Weight (kg/m²)	Gap (mm) Open Area (%)
Custom	32	15	30	17.4	15 (50%)

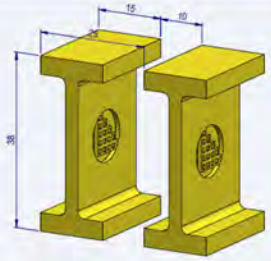
SC-R PGI 32 x 15 x 38



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1492 (1302)	1410 (1230)	1287 (1123)	1198 (1045)

Panel Size available (mm)	Thickness (mm)	Flange width (mm)	Beam spacing (mm)	Weight (kg/m²)	Gap (mm) Open Area (%)
Custom	32	15	38	13.5	23 (60%)

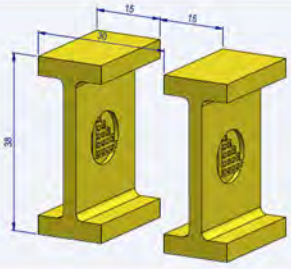
SC-R PGI 38 x 15 x 25



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1946 (1699)	1844 (1609)	1690 (1475)	1577 (1376)

Panel Size available (mm)	Thickness (mm)	Flange width (mm)	Beam spacing (mm)	Weight (kg/㎡)	Gap (mm) Open Area (%)
Custom	38	15	25	22	10 (40%)

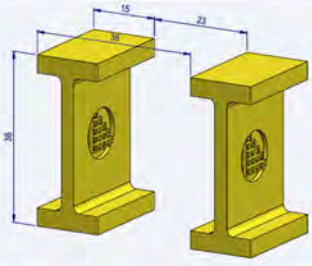
SC-R PGI 38 x 15 x 30



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1841 (1607)	1743 (1521)	1596 (1392)	1488 (1299)

Panel Size available (mm)	Thickness (mm)	Flange width (mm)	Beam spacing (mm)	Weight (kg/㎡)	Gap (mm) Open Area (%)
Custom	38	15	30	19.1	15 (50%)

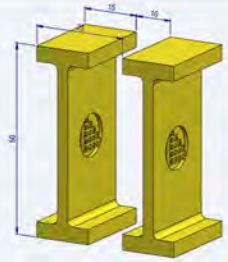
SC-R PGI 38 x 15 x 38



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1711 (1493)	1618 (1412)	1479 (1290)	1378 (1202)

Panel Size available (mm)	Thickness (mm)	Flange width (mm)	Beam spacing (mm)	Weight (kg/㎡)	Gap (mm) Open Area (%)
Custom	38	15	38	16.2	23 (60%)

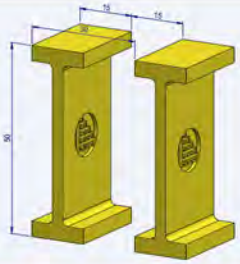
SC-R PGI 50 x 15 x 25



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
2412 (2106)	2290 (1999)	2104 (1836)	1966 (1716)

Panel Size available (mm)	Thickness (mm)	Flange width (mm)	Beam spacing (mm)	Weight (kg/m²)	Gap (mm) Open Area (%)
Custom	50	15	25	28.5	10 (40%)

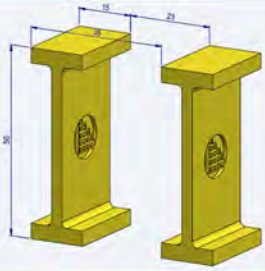
SC-R PGI 50 x 15 x 30



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
2288 (1997)	2169 (18931)	1990 (1736)	1858 (1621)

Panel Size available (mm)	Thickness (mm)	Flange width (mm)	Beam spacing (mm)	Weight (kg/m²)	Gap (mm) Open Area (%)
Custom	50	15	30	24.2	15 (50%)

SC-R PGI 50 x 15 x 38

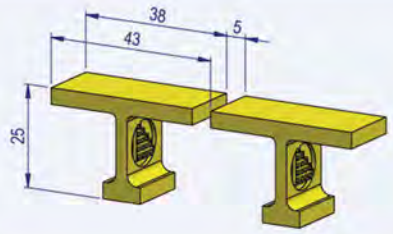


Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
2131 (1860)	2018 (1761)	1848 (1612)	1723 (1503)

Panel Size available (mm)	Thickness (mm)	Flange width (mm)	Beam spacing (mm)	Weight (kg/m²)	Gap (mm) Open Area (%)
Custom	50	15	38	20.1	23 (60%)

Pultruded Grating (SC-R™ PGT H x W1 x DC)

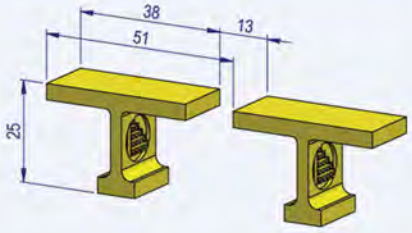
SC-R PGT 25 x 38 x 43



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1008 (880)	953 (832)	870 (759)	810 (707)

Panel Size available (mm)	Thickness (mm)	Flange width (mm)	Beam spacing (mm)	Weight (kg/㎡)	Gap (mm) Open Area (%)
Custom	25	38	43	14.5	5 (12%)

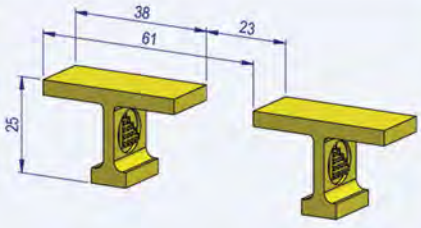
SC-R PGT 25 x 38 x 51



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
954 (833)	901 (786)	822 (717)	765 (668)

Panel Size available (mm)	Thickness (mm)	Flange width (mm)	Beam spacing (mm)	Weight (kg/㎡)	Gap (mm) Open Area (%)
Custom	25	38	51	13.8	13 (25%)

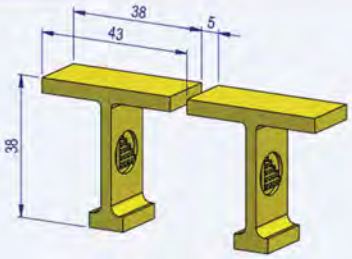
SC-R PGT 25 x 38 x 61



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
903 (789)	853 (744)	777 (678)	723 (630)

Panel Size available (mm)	Thickness (mm)	Flange width (mm)	Beam spacing (mm)	Weight (kg/㎡)	Gap (mm) Open Area (%)
Custom	25	38	61	10.2	23 (38%)

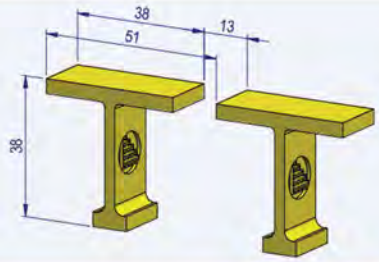
SC-R PGT 38 x 38 x 43



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1464 (1278)	1385 (1209)	1267 (1105)	1180 (1033)

Panel Size available (mm)	Thickness (mm)	Flange width (mm)	Beam spacing (mm)	Weight (kg/m²)	Gap (mm) Open Area (%)
Custom	38	38	43	19.6	5 (12%)

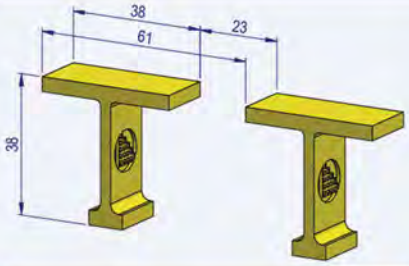
SC-R PGT 38 x 38 x 51



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1370 (1196)	1298 (1133)	1189 (1038)	1109 (968)

Panel Size available (mm)	Thickness (mm)	Flange width (mm)	Beam spacing (mm)	Weight (kg/m²)	Gap (mm) Open Area (%)
Custom	38	38	51	25	13 (25%)

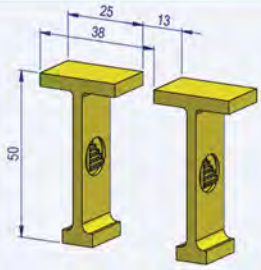
SC-R PGT 38 x 38 x 61



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1264 (1103)	1201 (1048)	1104 (963)	1033 (901)

Panel Size available (mm)	Thickness (mm)	Flange width (mm)	Beam spacing (mm)	Weight (kg/m²)	Gap (mm) Open Area (%)
Custom	38	38	61	38	23 (38%)

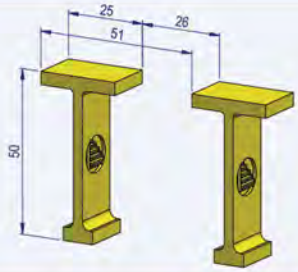
SC-R PGT 50 x 25 x 38



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1823 (1592)	1725 (1506)	1578 (1378)	1471 (1284)

Panel Size available (mm)	Thickness (mm)	Flange width (mm)	Beam spacing (mm)	Weight (kg/m²)	Gap (mm) Open Area (%)
Custom	50	25	38	20.3	13 (33%)

SC-R PGT 50 x 25 x 51

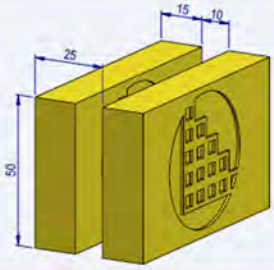


Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
1665 (1454)	1574 (1374)	1438 (1255)	1339 (1168)

Panel Size available (mm)	Thickness (mm)	Flange width (mm)	Beam spacing (mm)	Weight (kg/m²)	Gap (mm) Open Area (%)
Custom	50	25	51	15.7	26 (50%)

Heavy Duty Pultruded Grating (SC-R™ HDGT H x W1 x DC)

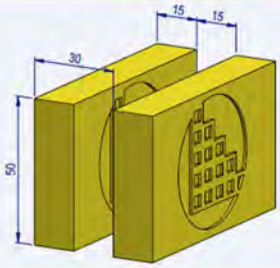
SC-R HDGT 50 x 15 x 25



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
2443 (2134)	2340 (2044)	2178 (1901)	2052 (1792)

Panel Size available (mm)	Thickness (mm)	Flange width (mm)	Beam spacing (mm)	Weight (kg/㎡)	Gap (mm) Open Area (%)
Custom	50	15	25	70.4	10 (40%)

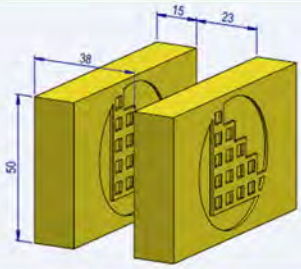
SC-R HDGT 50 x 15 x 30



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
2708 (2365)	2585 (2257)	2393 (2090)	2248 (1963)

Panel Size available (mm)	Thickness (mm)	Flange width (mm)	Beam spacing (mm)	Weight (kg/㎡)	Gap (mm) Open Area (%)
Custom	50	15	30	52.2	15 (50%)

SC-R HDGT 50 x 15 x 38



Maximum Allowable Span (mm), span/Δ=200 (span/Δ=300)			
2.5 (kPa)	3 (kPa)	4 (kPa)	5 (kPa)
3168 (2767)	3019 (2636)	2788 (2435)	2614 (2283)

Panel Size available (mm)	Thickness (mm)	Flange width (mm)	Beam spacing (mm)	Weight (kg/㎡)	Gap (mm) Open Area (%)
Custom	50	15	38	43.5	23 (60%)

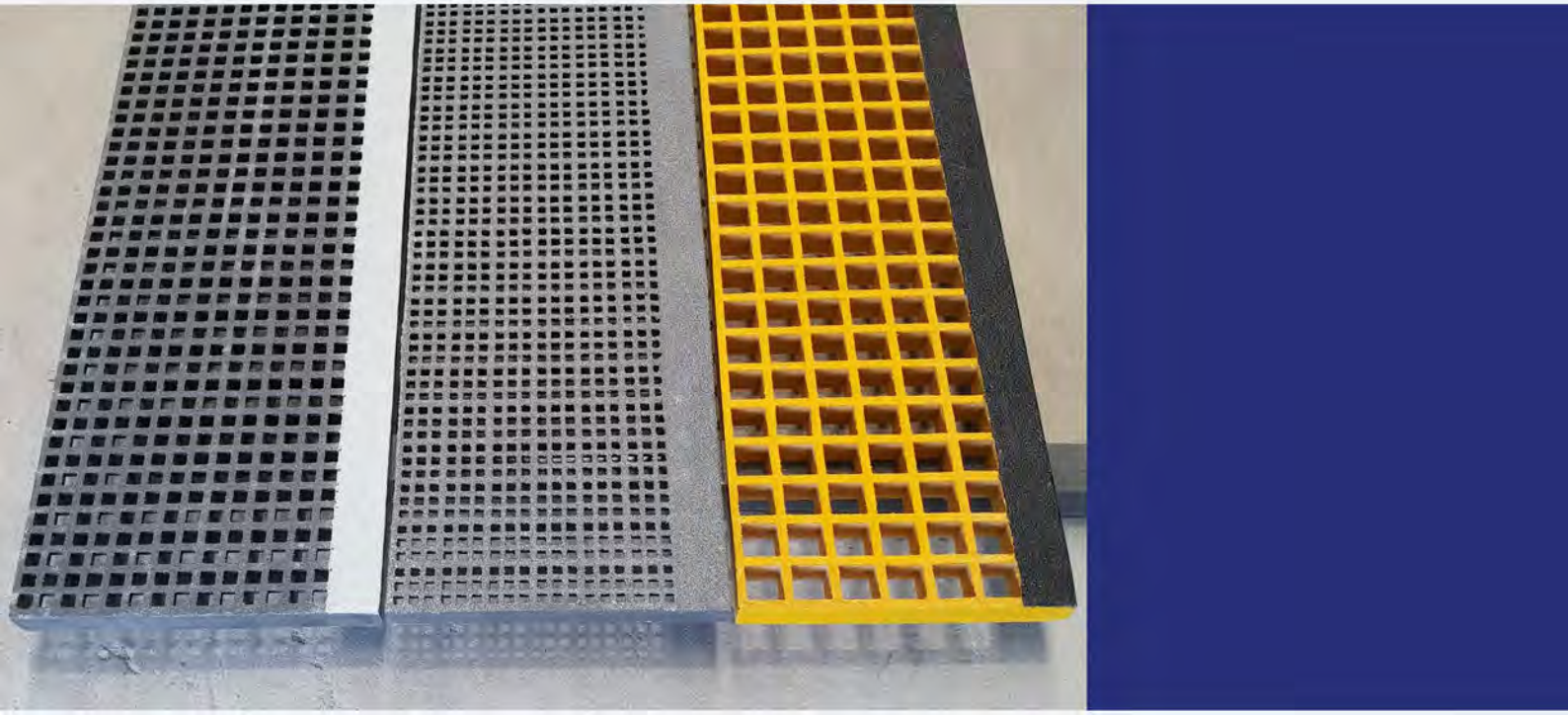
Stair Solutions

Staircare SC-R offers 3 different versions of FRP stair treads:-

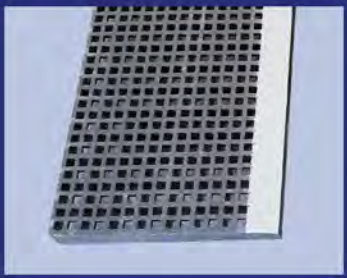
1. SC-R mini mesh stair treads with a solid colour contrasting nosing strip and silicon carbide anti slip grit and UV protection. Standard tread size is 287mm going x 38mm thick with an aperture of 12x12mm. Length can be up to 4 meters in one piece.

2. SC-R micro mesh stair tread with a sloid nose that can be in a contrasting colour on request and silicon carbide anti slip grit with UV protection. Standard tread size is 287mm going x 38mm thick with an aperture of 8x8mm, length can be up to 4 meters in one piece.

3. SC-R 38 x 38 square mesh stair treads with a solid colour contrasting nosing strip and heavy duty silicon carbide anti slip grit with UV protection as standard, for industrial use. Standard size is 272mm going x38mm thick with an aperture of 31x31mm, length can be up to 3.66 meters in one piece.



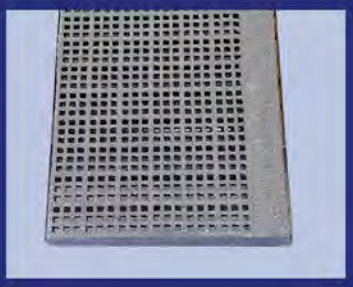
Australian Standard for stair and landings require a design uniform distributed load of 4Kpa (400kg/m2) and point load of 1.8Kpa (180kg) Deflection L/250. Recommendation for pedestrian comfort is maximum 5mm deflection



SC-R 20 X 20 /40 X 40 Mini Mesh Stair Tread With Solid Nose, Silicon Carbide
Anti-Slip Grit and UV Protection

Max. recommended Span mm	Tread width mm	going mm	thickness mm	tread support mm	aperture mm	open rate
900	995	287	38	50x6.4	12 x 12	42

Load and Deflection at Max. Recommended Span of 900 mm					
Uniform load Kpa (deflection in mm)			**Concentrated point load kg**		
span	2.5 kpa	4.0 kpa	span	200 kg	400 kg
900	1.45	2.4	900	2.42	4.84

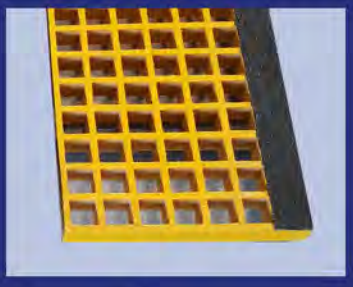


SC-R 13 x 13 /40 x 40 Micro Mesh Stair Tread With Solid Nose, Silicon Carbide
Anti-Slip Grit and UV Protection

Max. recommended Span mm	Tread width mm	going mm	thickness mm	tread support mm	aperture mm	open rate
900	995	287	38	50x6.4	8x8	30

Load and Deflection at Max. Recommended Span of 900 mm

Uniform load Kpa (deflection in mm)			Concentrated point load kg		
span	2.5 kpa	4.0 kpa	span	200 kg	400 kg
900	1.40	2.36	900	2.28	4.80



SC- R 38 x 38 Square Mesh Stair Tread with-Heavy Duty Silicon Carbide
Anti-Slip Grit and UV Protection

Max. recommended Span mm	Tread width mm	going mm	thickness mm	tread support mm	aperture mm	open rate
900	995	272	38	50x6.4	31x 31	68

Load and Deflection at Max. Recommended Span of 900 mm

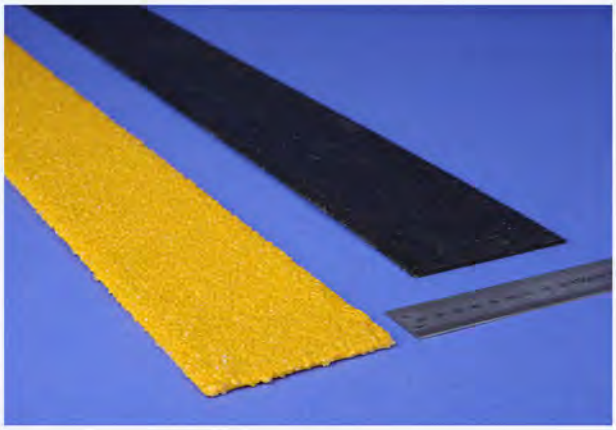
Uniform load Kpa (deflection in mm)			Concentrated point load kg		
span	2.5 kpa	4.0 kpa	span	200 kg	400 kg
900	1.71	2.58	900	2.60	6.18

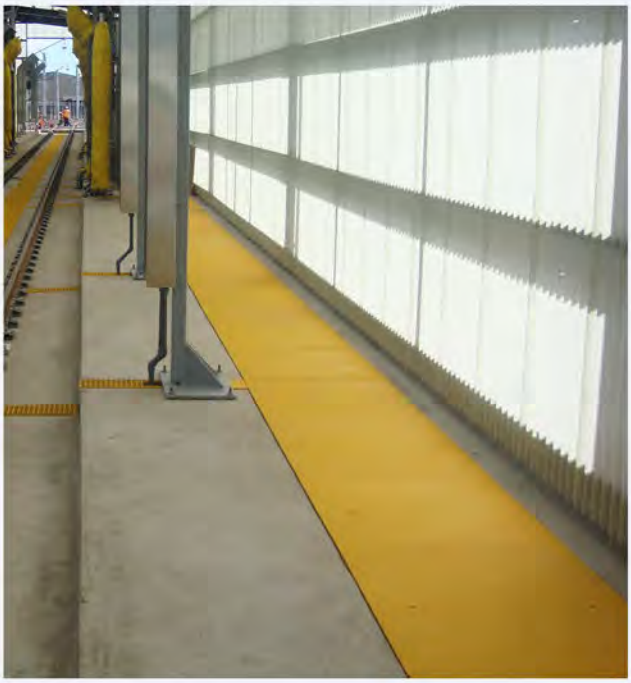
Staircare SC-R Composite FRP Staircase Systems combine FRP grating, flooring, stair treads, structural shapes and handrails to an FRP System that provides non-corrosive, non-conductive resilient safe and versatile access.

Staircare SC-R Resilient, low maintenance FRP fiberglass reinforced polymer staircases built to measure, including embedded silicon carbide anti-slip grit for high slip resistance.

Floor Plate

SC-R Anti-slip floor plates are manufactured with the same materials as grating and stair treads. They are suitable for high exposure to salt water and offer high resistance to chemicals such as; acid, alkali and solvent liquids. SC-R anti-slip plates are non-conductive, non-magnetic and contain a fire retardant. Plates are approximately 4mm thick and supplied in different custom made sizes with a variety of anti-slip grits ranging from light to heavy duty. SC-R anti-slip plates are ideal for wet or dry conditions where good slip resistance and traction are needed.





Staircare SC-R products are made to measure and since it is a finished product it can be used immediately.

SC-R Solid Top Cover Grating

Molded square mesh with solid top cover offers bi-directional strength and are ideal for installations requiring multiple penetrations. Panels are available with silicon carbide anti-slip grit and offer light but strong Trench covers, Walkways, Cable troughs and Pit covers.

Grating Colors

Staircare SC-R uses the international "RAL" colour system that is used for defining standard colours for varnish, powder coating and plastics. The resin and colour pigment mix in combination with UV inhibitors ensures that colour is throughout the materials, requiring no or very little painting maintenance, adding to a long service life.
Staircare has standardized RAL colours for FRP Grating, structural profiles and handrails, colour codes include: RAL1003 Signal Yellow, RAL7015 Slate Grey, RAL7035 Light Grey, RAL7021 Black Grey, RAL6010 Grass Green, please contact us to discuss your colour requirements.

UV Protection

UV inhibitors are mixed into the resin and also into a synthetic veil that is incorporated on the surface, ensuring optimum protection from UV radiation and the harsh outdoors. An optional UF coating can be applied for products with extreme UV exposure, such as off-shore platforms.

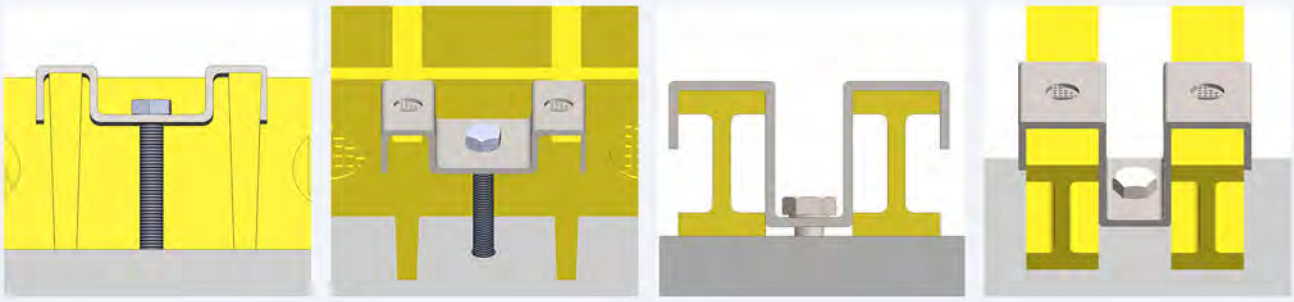
Translucent Grating

SC-R Molded Grating can be produced with a translucent finish to create a light and airy feel

Grating Connections

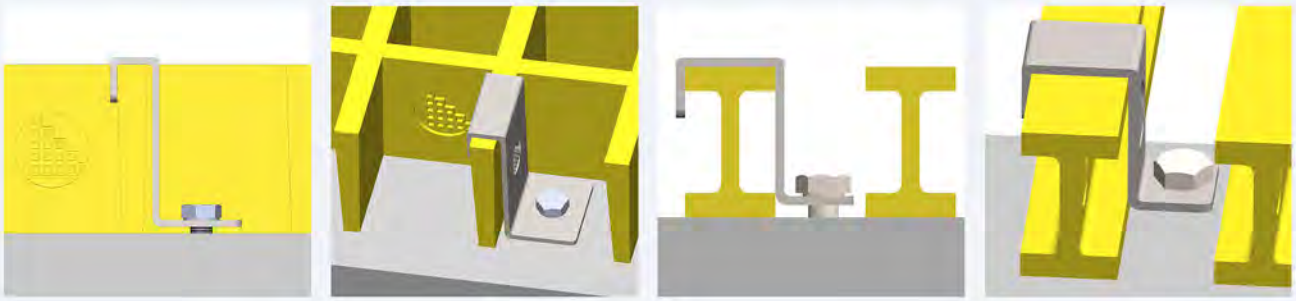
Staircare SC-R Grating products are adaptable and can be installed on any substrate with minimal effort. Fitting with mechanical fixings is well within the capabilities of a handy person.
The majority of fixing is achieved with three types of standard clips made of SS316 stainless steel for securing or joining FRP panels. There are many more specialist type of fixings as demonstrated in the following graphics, please contact us to discuss your special application. The bolts/nut/washer material specification can be FRP, HGD, or SS316.

- **M-Clips** - Hold down clips for securing grating to substrate
- **L-Clips** – Used for fixing grating to support frames
- **G-Clips** – For connecting two adjacent load bars

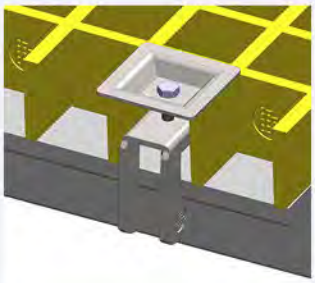


W-Clips are made for fixing solid plates, Mini or Micro mesh grating. The length of the bolt corresponds with the panel and substrate thickness.

L-Clips (J clips) are used to fasten molded or pultruded grating to a support bar for moderate loads.

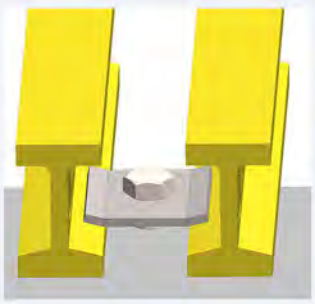


C-Clips (end panel clip) are used to join two ends of molded grating together.



G-Clips are designed to attach grating to any structural member flange, the size is governed by the load bar dimension and drilling is not required.

J- Bolts are used to secure grating to a support bars.

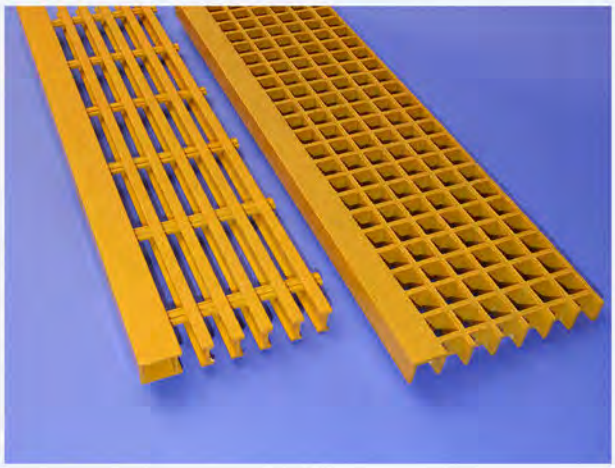


T-Clips are used to fasten pultruded grating to support frames.

Staircare SC-R FRP Material Description

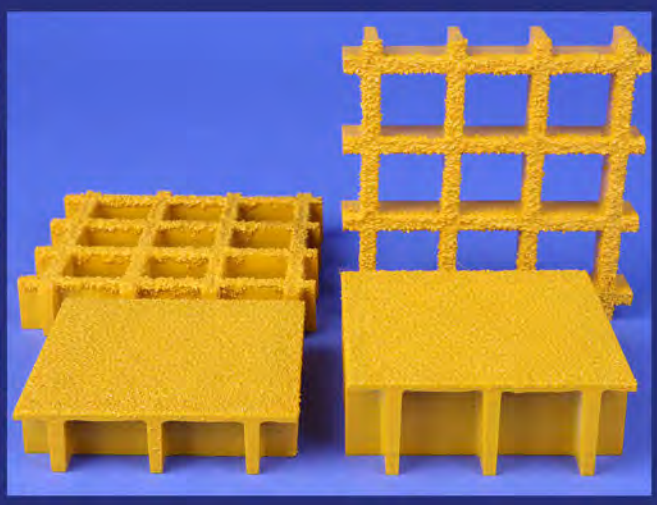
What are Molded FRP Grating

Molded FRP grating is composed of alternating directional layers of continuous glass fiber for strength, with resin to consolidate the fibers and provide the shape and corrosion resistance. Due to its bi-directional strength, molded grating can tolerate cutouts in the panel to allow pipe or equipment penetrations without requiring additional support around the opening. Molded grating has very high impact tolerance, as well as the highest chemical resistance of any fiberglass grating it can be made slip resistant by adding grit to the surface.



What are Pultruded FRP Grating and Structural Profiles

Staircare (FRP) components including Pultruded grating and structural shapes are manufactured using the well proven pultrusion process. Multi directional glass mats and continuous fiber roving as well as a synthetic veil are drawn through a resin bath that also contains the required colour pigments and is then pulled through a heated die to form the desired shape. The process creates an exceptional composite material with colour throughout, excellent corrosion resistance and UV inhibitors in the resin matrix and synthetic surfacing veil.



Corrosion Resistance

Staircare SC-R FRP railings, structural shapes and grating have exceptional corrosion resistance to a wide variety of chemical and petrochemical spillage, saltwater, fume and fire resistance making the products ideal for use in the harshest environments.

Life Time Cost

Staircare FRP materials provide significantly longer life expectancy, durability and corrosion resistance in demanding applications. The resin and colour pigment mix in combination with UV inhibitors ensures that colour is throughout the materials, requiring no or very little painting maintenance, adding to a long service life.

Electrical and Thermal Non Conductivity

SC-R fiberglass is electrically non-conductive providing safety benefits for installation in electrical substations or mitigate situations with stray current issues, to reduce step and touch voltage hazards. Low thermal conductivity makes for a comfortable material to work with that can also be a safety feature. Unlike metals FRP products do not contract or expand.

UV Protection

UV inhibitors are mixed into the resin and also into a synthetic veil that is incorporated on the surface, ensuring optimum protection from UV radiation and the harsh outdoors. An optional UV coating can be applied for products with extreme UV exposure, such as off-shore platforms etc.

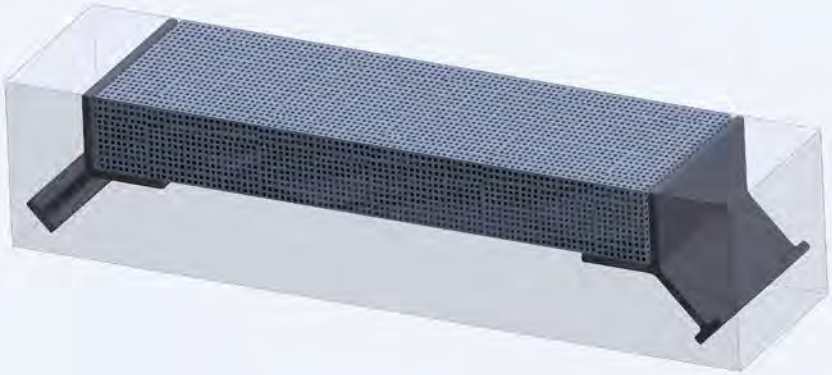
Environmental Impact

Staircare SC-R pultruded and molded FRP manufacture produces less greenhouse gas and consumes less energy compared with alternative materials such as steel and aluminum. FRP materials do not corrode or deteriorate and offer a very long service life and can be recycled.

SC-R Embedment Angle

The embedment angle is manufactured with premium-grade vinyl ester fire retardant resin. It is compatible with our standard sizes of SC-R Molded and SC-R Pultruded grating. Continuous anchoring is incorporated into the design to eliminate the need for additional anchors. The embedment angle is available in dark grey.
Embedment angels are set into concrete slabs with the T shape back securing it in place. It is light and easy to cut, and will not rust. It is also non-conductive. Embedment angel is made from vinyl ester resin.

Size (mm)
A x B x T
25 x38x6.4
38x38x6.4
50x38x6.4



Chemical Resistance Guide

Staircare SC-R is manufactured with high quality fiberglass reinforced resin. Our standard product lines use the superior isophthalic polyester resin. For special applications Staircare offers vinyl ester resin as an alternative. Chemical resistance guide for molded products (grated stair tread) are available on request.

CHEMICAL	ISOPHTHALIC POLYESTER		VINYL ESTER RESIN	
Environment	%Concentration	Max. Opera. Temp F/C	%Concentration	Max. Opera. Temp F/C
Acetic Acid	50	125/52	50	180/82
Aluminum Hydroxide	100	160/71	100	170/77
Ammonium Chloride	ALL	170/77	ALL	190/88
Ammonium Hydroxide	28	N/R	28	100/38
Ammonium Bicarbonate	15	125/52	50	150/65
Ammonium Sulphate	ALL	170/77	ALL	200/93
Benzene	N/R	N/R	N/R	N/R
Benzoic Acid	SAT	150/66	SAT	200/93
Borax	SAT	170/77	SAT	200/93
Calcium Carbonate	SAT	170/77	ALL	180/82
Calcium Nitrate	ALL	180/82	ALL	200/93
Carbon Tetrachloride	N/R	N/R	100	75/24
Chlorine Dry Gas	…	140/60	…	170/77
Chlorine Water	SAT	80/27	SAT	180/82

CHEMICAL	ISOPHTHALIC POLYESTER		VINYL ESTER RESIN	
Environment	%Concentration	Max. Opera. Temp F/C	%Concentration	Max. Opera. Temp F/C
Chromic Acid	5	70/21	10	120/49
Citric Acid	ALL	170/77	ALL	200/93
Copper Chloride	ALL	170/77	ALL	200/93
Copper Cyanide	ALL	170/77	ALL	200/93
Copper Nitrate	ALL	170/77	ALL	200/93
Ethanol	50	75/24	50	90/32
Ethylene Glycol	100	90/32	100	200/93
Ferric Chloride	ALL	170/77	ALL	200/93
Ferrous Chloride	ALL	170/77	ALL	200/93
Formaldehyde	50	75/24	ALL	100/38
Gasoline	100	80/27	100	150/65
Glucose	100	170/77	100	200/93
Glycerin	100	150/66	100	200/93
Hydro Bromic Acid	50	120/49	50	120/49
Hydrochloric Acid	37	75/24	37	100/38
Hydrogen Peroxide	5	100/38	30	100/38
Lactic Acid	ALL	170/77	ALL	200/93
Lithium Chloride	SAT	150/66	SAT	200/93
Magnesium Chloride	ALL	170/77	ALL	200/93
Magnesium Nitrate	ALL	140/60	ALL	180/82

CHEMICAL	ISOPHTHALIC POLYESTER		VINYL ESTER RESIN	
Environment	%Concentration	Max. Opera. Temp F/C	%Concentration	Max. Opera. Temp F/C
Magnesium Sulphate	ALL	170/77	ALL	190/88
Mercuric Chloride	100	150/66	100	190/88
Mercurous Chloride	ALL	140/60	ALL	190/88
Nickel Chloride	ALL	170/77	ALL	180/82
Nickel Sulphate	ALL	170/77	ALL	200/93
Nitric Acid	20	70/21	20	200/93
Nitric Acid	ALL	75/24	ALL	100/38
Perchloric Acid	N/R	N/R	30	120/96
Phosphoric Acid	100	120/49	100	80/27
Potassium chloride	ALL	170/77	ALL	200/93
Potassium Dichromate	ALL	170/77	ALL	200/93
Potassium Nitrate	ALL	170/77	ALL	200/93
Potassium Sulphate	ALL	170/77	ALL	200/93
Propylene Glycol	ALL	170/77	ALL	200/93
Sodium Acetate	ALL	160/77	ALL	200/93
Sodium Bisulphate	ALL	170/77	ALL	200/93
Sodium Bromide	ALL	170/77	ALL	200/93
Sodium Cyanide	ALL	170/77	ALL	200/93
Sodium Hydroxide	N/R	N/R	25	150/66
Sodium Nitrate	ALL	170/77	ALL	200/93

CHEMICAL	ISOPHTHALIC POLYESTER		VINYL ESTER RESIN	
Environment	%Concentration	Max. Opera. Temp F/C	%Concentration	Max. Opera. Temp F/C
Sodium Sulphate	ALL	170/77	ALL	200/93
Stannic Chloride	ALL	160/71	ALL	200/93
Sulphuric Acid	25	75/24	75	100/38
Tartaric Acid	ALL	170/77	ALL	200/93
Vinegar	100	170/77	100	200/93
Water, Distilled	100	170/77	100	180/82
Zinc Nitrate	ALL	170/77	ALL	200/93
Zinc Nitrate	ALL	170/77	ALL	200/93

ALL : concentrations | SAT – Saturated Solution | N/R – Not Recommended | … : No info. Available

REMARKS:

the corrosion resistance data listed above is for general information only. Resin manufacturers have provided test data, which indicates that the specific resin can withstand the corrosion conditions listed above. Staircare Australia Pty Ltd believes the data to be true and accurate but no guarantee is expressed or implied as to specific performance. Testing for specific environments is recommended. Our responsibility for claims arising from breach of warranty, negligence or otherwise is limited to the

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