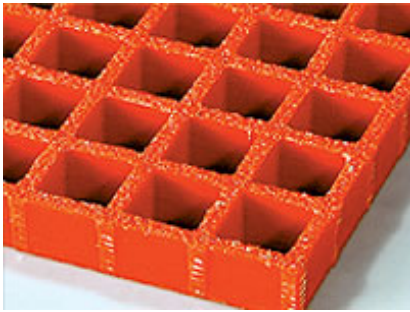




frp grating and floor panels



typical characteristics

Corrosion Resistant

FRP Grating and Floor Panels are available in a range of resins designed to provide resistance to corrosive attack from harsh materials such as: acids, salt, organic solvent (in gas or liquid form) and other potentially damaging media. Consult your HORIZON Industrial representative to ensure the Grating is suitable for the environment in which it will be installed.

Fire Resistant

Proven matrix resins as well as unique fire-retardants provide grating with excellent fire resistant performance. Our FRP gratings have passed various fire rating tests in accordance with ASTM standards. The flame spread & smoke index for polyester grating is 15/500, for vinyl ester grating 10/300 and for phenolic aldehyde grating 5/5.

Light Weight & High Strength

The combination of the continuous E- fiberglass strand and resin provides our grating with light weight and high strength characteristics. The specific gravity of FRP Grating is only 1/4 that of steel. The rigidity of FRP Grating is equal to or better than Steel and meets many of the design and construction codes for use throughout industry.

Safe & Anti-slip

Various surface finishes provide excellent anti-skid performance. The range of surface finishes available include: smooth surface, meniscus surface, grit surface which are suitable for installation in most workplaces.

Insulating properties

E-fiberglass and high-grade resins provide excellent insulation properties against electrical conductivity. Electrical breakdown strength could reach 10KV/mm. FRP will not cause sparks and is non-magnetic. The material can be used in applications such as: diamagnetism and electric-resistance.

Aging Resistant

The high-grade resin and anti-ageing (UV) inhibitors or provide a long-life service life. The design of our grating also aids in self-cleaning. In some cases the expected service life of FRP Grating can easily exceed 25 years.

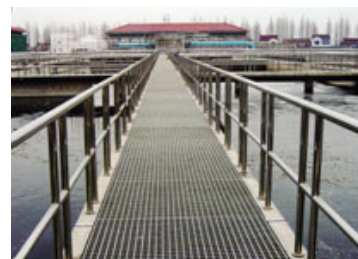




resin types

| STANDARD RESIN TYPES | | | | |
|-------------------------------------|---|--|--|--|
| Resin Type | Orthophthalic Polyester | Isophthalic Polyester | Vinyl ester | Phenolic Aldehyde |
| product performance characteristics | Has a comparatively low corrosion resistant properties. Used in areas where there is little or no likelihood of corrosion attack. OK for use with inorganic acids and salt. Has a constant temperature rating of -50°C+52°C | Has medium corrosion resistant properties. Used in areas where there is likelihood of some corrosion attack. OK for use with inorganic acids and salt. Has a constant temperature rating of -50°C+90°C | Has excellent corrosion resistant properties. Used in hazardous and highly corrosive environments such as acids, salt, solvent and other harsh chemicals. Has a constant temperature rating of -50°C+100°C | Has a excellent good fire-retardant and corrosion resistant properties. High resistance to attack from acids and solvents. The oxygen index is <50, and the material does not hold a flame and generates low smoke. Has a constant temperature rating of -50°C+180°C |

Special resins can also be formulated to suit specific application criteria. Consult your HORIZON Industrial representative.





technical specifications

| DIMENSIONAL & WEIGHT SPECIFICATIONS FOR GRATING TYPES | | | | | |
|---|---------------------|---|------------------------------------|---------------|------------------------------|
| Grating Number | Profile Size (Code) | Standard Panel Dimensions L x W (mm) | Size of Openings L x W x T (mm) | Open Area (%) | Weight Kgs/M ² |
| 1 | AS38x38x25 | 1220x3660/1220x2440/915x3050 | 38 x 38 x 25 | 70 | 13 |
| 2 | AS100x25x25 | 1220x3660/1220x2440/915x3050 | 100 x 25 x 25 | 64 | 15.2 |
| 3 | AS38x38x38 | 1220x3660/1220x2440/915x3050 | 38 x 38 x 38 | 70 | 18.5 |
| 4 | AL38x38x38 | 1525x3965/1525x3660/1525x3050 | 38 x 38 x 38 | 70 | 18.5 |
| 5 | AST25x100x38 | 1220x 3660 | 25 x 100 x 38 | 47 | 20.2 |
| 6 | AS25x152x38 | 1220x3660 | 25 x 152 x 38 | 59 | 22.4 |
| 7 | AS152x38x38 | 1220x3660 | 152 x 38 x 38 | 73 | 18.5 |
| 8 | AS50x50x50 | 1220x3660/1220x2440/915x3050 | 50 x 50 x 50 | 78 | 20.7 |
| 9 | AD50x50x13 | 1220x3660 | 50 x 50 x 13 | 78 | 6.1 |
| 10 | AD38x38x25 | 1220x3660 | 38 x 38 x 25 | 70 | 12.8 |
| 11 | ST38x152x38 | 579x3660/579x3050 | 38 x 152 x 38 | 75 | 18.1 |
| 12 | JS40x40x25 | 1247x3087/1007x3007 | 40 x 40 x 25 | 72 | 12.9 |
| 13 | JS100x25x25 | 1009x3007 | 100 x 25 x 25 | 66 | 13.9 |
| 14 | JS25x100x25 | 1009x3007 | 25 x 100 x 25 | 70 | 12.9 |
| 15 | JS40x40x40 | 1247x3087 | 40 x 40 x 40 | 72 | 19.8 |
| 16 | JL40x40x40 | 1247x4047/1007x3007/1007x4447 | 40 x 40 x 40 | 72 | 19.8 |
| 17 | JM40x40x40 | 1007x4047 | 40 x 40 x 40 | 72 | 19.8 |
| 18 | S38x38x25 | 1000x4038/1000x3000/1000x2000 | 38 x 38 x 25 | 70 | 13 |
| 19 | ES38x38x30 | 1000x4038/1000x3000/1000x2000 | 38 x 38 x 30 | 70 | 16.1 |
| 20 | ES38x38x38 | 1000x4038/1000x3000/1000x2000 | 38 x 38 x 38 | 70 | 18.5 |
| 21 | ES38x38x25 - Mini | 1413x4000 | 38 x 38 x 12 x 12 x 25 | 42 | 20.5 |
| 22 | ES52x52x30 - Mini | 1000x4050/1000x3000/1000x2000 | 52 x 52 x 19 x 19 x 30 | 52 | 17.8 |
| 23 | ES52x52x38 - Mini | 1000x4050/1000x3000/1000x2000 | 52 x 52 x 19 x 19 x 38 | 52 | 20 |
| 24 | ES52x52x50 - Mini | 1000x4050/1000x3000/1000x2000 | 52 x 52 x 18 x 18 x 50 | 52 | 26.7 |
| 25 | ES52x52x55 - Mini | 1000x4050/1000x3000/1000x2000 | 52 x 52 x 18 x 18 x 55 | 52 | 28.2 |
| 26 | ES38x38x30 - Mini | 1220x3660/1000x4038 | 38 x 38 x 8 x 8 x 30 | 40 | 20.7 |
| 27 | AS50x50x32 - Mini | 1220x3660/1220x2440/915x3050 | 50 x 50 x 18 x 18 x 32 | 50 | 16.8 |
| 28 | GS100x100x25 | 1175x1480 | 100 x 100 x 25 | 84 | 5.2 |
| 29 | MH40x40x40 | Ø1180 x Ø690 | 40 x 40 x 40 | | 28.5/Assy |
| 30 | MH40x40x40 | Ø1180 x Ø800 | 40 x 40 x 40 | | 28.0/Assy |
| 31 | MH40x40x40 | Ø1780 x Ø800 | 40 x 40 x 40 | | 65.0/Assy |
| 32 | MH40x40x40 | Ø2500 x Ø800 | 40 x 40 x 40 | | 127.5/Assy |



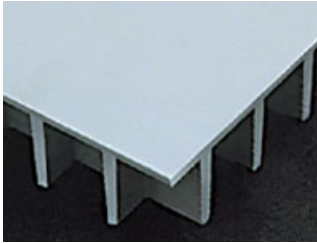
technical specifications

| Load Tables | | | | | | | | | | | | |
|---|---------------------------|------|------|---|------|------|----------------------------|---|------|---------------------------|-------|-------|
| F = Solid Deflection to Span Ratio of 1:180 | | | | S = Standard Deflection to Span Ratio of 1:120 | | | | 1% = Deflection to Span Ratio of 1:100 | | | | |
| Grating Size (opening - mm) | 38.1 x 38.1 x 25.4 | | | 38.1 x 38.1 x 38.1 | | | 25.4 x 101.6 x 25.4 | | | 50.8 x 50.8 x 50.8 | | |
| Maximum Loads for full panel size using Point Concentrated Load method - Stated as kgf | | | | | | | | | | | | |
| SPAN (mm) | F | S | 1% | F | S | 1% | F | S | 1% | F | S | 1% |
| 460 | 335 | 482 | 592 | 708 | 1061 | 1273 | 322 | 482 | 580 | 900 | 1350 | 1620 |
| 610 | 228 | 323 | 412 | 524 | 786 | 942 | 225 | 340 | 404 | 820 | 1230 | 1476 |
| 915 | 125 | 188 | 240 | 335 | 456 | 564 | 126 | 189 | 226 | 619 | 928 | 1161 |
| 1220 | 82 | 115 | 148 | 210 | 314 | 377 | 97 | 145 | 174 | 404 | 606 | 732 |
| 1524 | | | | 135 | 203 | 243 | | | | | | |
| Grating Size (opening - mm) | 38.1 x 38.1 x 25.4 | | | 38.1 x 38.1 x 38.1 | | | 25.4 x 101.6 x 25.4 | | | 50.8 x 50.8 x 50.8 | | |
| Maximum Loads for full panel size using 12" Wide Strip - Line Concentrated Load method - Stated as kgf | | | | | | | | | | | | |
| SPAN (mm) | F | S | 1% | F | S | 1% | F | S | 1% | F | S | 1% |
| 305 | 225 | 337 | 405 | 573 | 859 | 1032 | 330 | 495 | 595 | 899 | 1349 | 1620 |
| 460 | 125 | 175 | 208 | 370 | 555 | 666 | 177 | 265 | 319 | 512 | 768 | 922 |
| 610 | 67 | 98 | 117 | 208 | 314 | 373 | 103 | 155 | 185 | 350 | 525 | 632 |
| 915 | 29 | 43 | 52 | 93 | 140 | 167 | 46 | 68 | 82 | 189 | 284 | 341 |
| 1220 | | | | 51 | 77 | 92 | 33 | 49 | 58 | 111 | 167 | 197 |
| Grating Size (opening - mm) | 38.1 x 38.1 x 25.4 | | | 38.1 x 38.1 x 38.1 | | | 25.4 x 101.6 x 25.4 | | | 50.8 x 50.8 x 50.8 | | |
| Maximum Loads for full panel size using Uniform Load method - Stated as kgf/m² | | | | | | | | | | | | |
| SPAN (mm) | F | S | 1% | F | S | 1% | F | S | 1% | F | S | 1% |
| 305 | 3089 | 4636 | 5563 | | | | 5366 | 8053 | 9661 | 16849 | 25296 | 30360 |
| 460 | 912 | 1371 | 1644 | 3840 | 6308 | 7570 | 2088 | 3015 | 3619 | 5998 | 8998 | 10800 |
| 610 | 381 | 576 | 693 | 1615 | 2659 | 3192 | 858 | 1287 | 1545 | 2880 | 4320 | 5185 |
| 915 | 112 | 171 | 205 | 478 | 708 | 849 | 337 | 507 | 609 | 1108 | 1663 | 1996 |
| 1220 | | | | 200 | 293 | 351 | 138 | 207 | 249 | 467 | 702 | 843 |

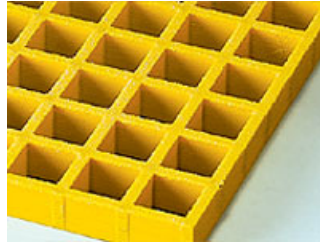


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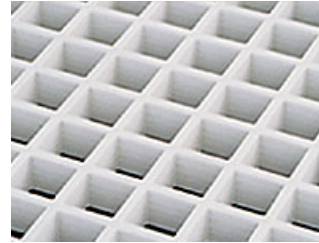
surface finishes



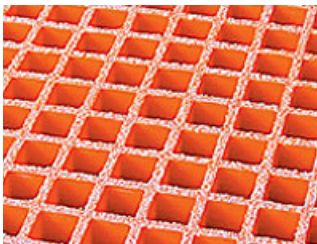
Closed Top/Smooth Finish



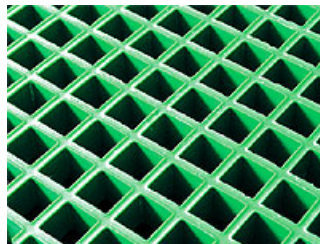
Smooth Finish



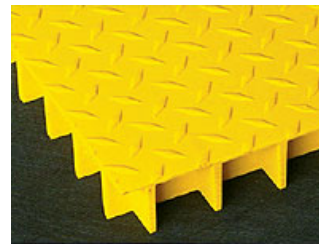
Pool Grit (Fine) Finish



Coarse Grit Finish



Meniscus Finish

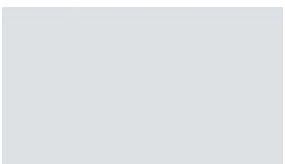


Chequer Plate Finish



Closed Top with Grit Finish

colours



Light Grey



Dark Grey



Blue



Green



Yellow



Orange



Black



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