FRP / GRP Grating — Technical Data Sheet

NANTONG ZEALL (ZeAllgrate) · moulded and pultruded fibreglass grating · indicative values for preliminary design. Confirm the final figure against the project load table and a stamped calculation before ordering.

1. Moulded grating — standard range

Thickness (mm)	Bar depth (mm)	Mesh (mm)	Weight (kg/m²)	Open area	Panel (mm)
25	25	38 x 38	12.5	68 %	1220 x 3660
30	30	38 x 38	15.0	66 %	1220 x 3660
38	38	38 x 38	19.5	68 %	1220 x 3660
38	38	40 x 40	18.0	70 %	1220 x 3660
50	50	50 x 50	27.0	60 %	1220 x 3660
65 (HD)	65	50 x 50	38.0	56 %	1220 x 3660

2. Pultruded grating — profile series

Series	Depths (mm)	Unit weight (kg/m²)	Typical use
T-bar	25 / 38 / 50	7.5-9.5 / 11.5-13 / 15-17	Walkways, trenches, moderate spans
I-bar	25 / 38 / 50 / 76	10.5 / 12.5-14.5 / 16.5-19 / 23-26	Long spans, heavy platforms

3. Allowable uniform load — indicative (kN/m², L/200, simply supported single span)

Build-up	600 mm span	900 mm span	1200 mm span
Moulded 25 mm	12.5	6.0	3.2
Moulded 38 mm	25	12	6.5
Moulded 38 mm, 50 x 50 mesh	22	10	5.5
Pultruded 38 mm	35	18	9
Pultruded 50 mm	48	26	14
Pultruded 65 mm (HD)	62	35	20

Deflection limit L/200 unless stated. Figures are indicative allowable uniform loads for preliminary sizing only; concentrated loads, cantilever and point-load cases need a separate check.

4. Material and conversion factors

Density	about 1.5-2.0 g/cm^3 depending on resin and glass content (carbon steel 7.8 g/cm^3)
Barcol hardness	40 or above on a sound panel
Weight conversion	1 kg/m² = 0.2048 lb/ft²
Load conversion	1 kN/m² ≈ 20.9 lb/ft²
Resin systems	Isophthalic polyester, orthophthalic polyester, vinyl ester, phenolic
Surface options	Smooth, concave (dished), grit top with embedded silica

5. Quality and certification

ISO 9001	GB/T19001-2000 idt ISO9001:2000 · registration 01708Q11888R0S · valid 2025-03-31 to 2028-12-30
ASTM F3059	Test report 211122012SHF-001 · test period 2021-11-22 to 2021-12-01 · 8 pages
ABS PDA	17-SQ1647539-PDA (product design assessment, expired)
SGS	Load and material reports available on request

6. Commercial terms

Minimum order	10 m^2
Lead time	7-35 working days, stock to production depending on section and resin; custom mesh, thickness, colour and resin on request
Panel sizes	1220 x 3660 mm as standard; cut-to-size on a diamond saw

Issued 2026-11-15 · www.gratingfrp.com · sales@gratingfrp.com · Figures in this sheet are indicative and do not replace a project-specific load calculation.