



NEXTEP



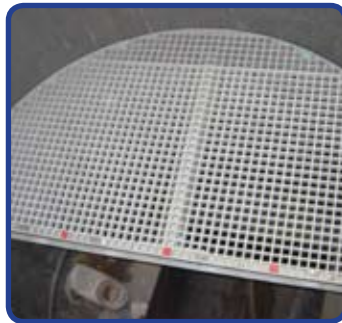
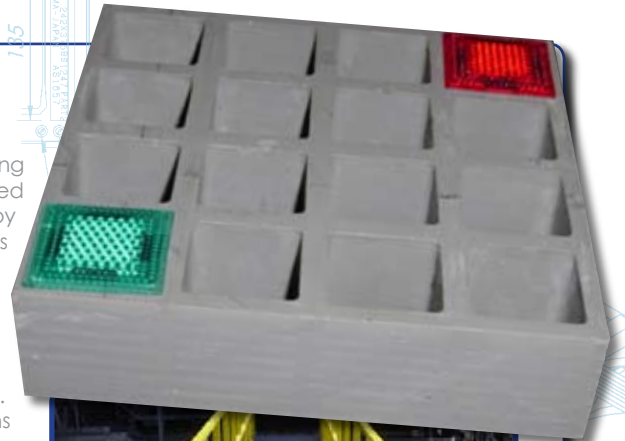
WATER SERVICES ASSOCIATION
of Australia



FRP Grating

Nextep FRP grating is manufactured by interlacing reinforcing glass fibre strands within a polyester resin. Gratings produced using this technique yield a product having 25-35% (by total weight) of fibreglass reinforcement. All grating is manufactured from a premium grade thermosetting polyester resin, thermally cured in the mould. For fire retardant protection, the resins used are complete with antimony trioxide to obtain Class 1 Fire Rating of 25 or less as per ASTM-E-84.

Colour pigmented throughout the resin will be light grey. Ultraviolet inhibitors are included to meet the specifications of UL-94-VO. Products manufactured to these specifications can expect a life rating B₁ or 50 years before rehabilitation is required.





NEXTEP



Load Tables

| Panel Size | 3007 x 1007 x 25mm | | 3007 x 1007 x 40mm | |
|-------------|--------------------|------------------------|------------------------|-------|
| Bearing Bar | Width | 6mm | 6mm | 6mm |
| | Space – Centres | 40mm | 40mm | 40mm |
| Cross Bar | Width | 6mm | 6mm | 6mm |
| | Space – Centres | 40mm | 40mm | 40mm |
| Top Surface | | Plain | Plain | Plain |
| % Open Area | | 70% | 70% | 70% |
| Weight | | 12.2 kg/m ² | 18.1 kg/m ² | |

| | Span (mm) | Per metre width (kg) | Per metre width (kg) |
|------------------------------------------------|-----------|----------------------|----------------------|
| Concentrated load at 1% deflection | 300 | 2567 | 5767 |
| | 450 | 1141 | 2563 |
| | 600 | 642 | 1442 |
| | 750 | 411 | 923 |
| | 900 | 285 | 641 |
| | 1050 | 210 | 471 |
| | 1200 | 160 | 300 |
| Concentrated load at 10:1 safety factor | 300 | 1003 | 1540 |
| | 450 | 669 | 1027 |
| | 600 | 502 | 770 |
| | 750 | 401 | 616 |
| | 900 | 334 | 513 |
| | 1050 | 287 | 440 |
| | 1200 | 251 | 385 |
| Uniform load at 1% deflection | 300 | 13651 | 30837 |
| | 450 | 4075 | 9137 |
| | 600 | 1706 | 3855 |
| | 750 | 874 | 1974 |
| | 900 | 506 | 1142 |
| | 1050 | 318 | 719 |
| | 1200 | 213 | 482 |
| Uniform load at 10:1 safety factor | 300 | 6667 | 10178 |
| | 450 | 2963 | 4523 |
| | 600 | 1667 | 2544 |
| | 750 | 1067 | 1628 |
| | 900 | 741 | 1130 |
| | 1050 | 544 | 831 |
| | 1200 | 417 | 636 |

1. Material:

Nextep FRP grating is manufactured by interlacing reinforcing glass fibre strands within a polyester resin. Gratings produced using this technique yield a product having 25-35% (by total weight) of fibreglass reinforcement.

2. Dimensions:

Please refer to Nextep drawings for specific dimensions. Standard cross section of grating shown below.

3. Inspection & Tests:

Please refer to Inspection & Testing sheets, or load deflection table shown below

4. Characteristics:

- 4.1 Excellent corrosion resistant properties.
- 4.2 Remarkable strength to weight ratio.
- 4.3 Requires no coating to resist attack from the chemical & natural environment.
- 4.4 Impact absorbing.
- 4.5 Maintenance free.
- 4.7 Lowest life cycle cost.
- 4.8 Low conductivity both thermally and electrically.
- 4.9 Non-magnetic properties (ideal for electrical applications).
- 4.10 Low installation cost.

5. Areas of Application:

- Shopping centers, footpaths and walkways.
- Sewerage treatment plants
- Water purification plants
- Saltwater areas
- Food processing plants
- Chemical plants

6. Product Applications

- Flooring
- Trench covers
- Pits covers
- Platforms
- Elevated walkways
- Stair treads
- Drainage grating
- Grilles and screens
- Battery and wash racks
- Machinery guards

Distributed by:



Other Products:

- Step Irons
- FRP Manholes
- FRP Access Covers
- FRP Platforms
- FRP Staircases
- Design and installation