



# NEXTEP



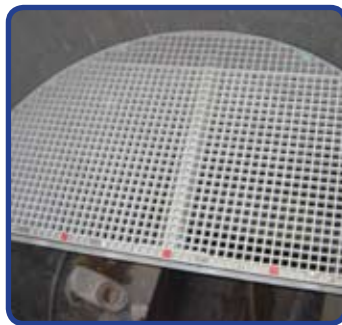
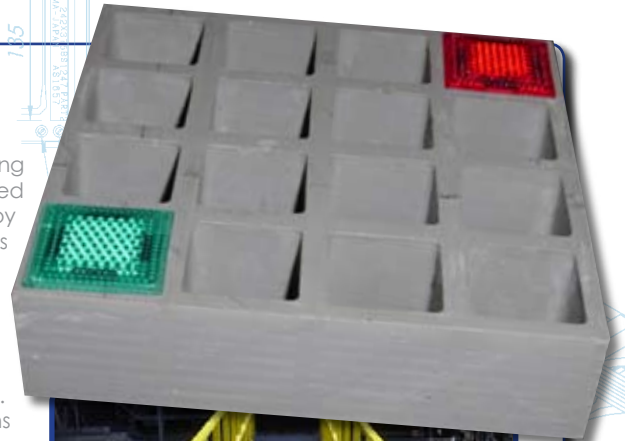
WATER SERVICES ASSOCIATION  
of Australia



## 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 B<sub>1</sub> 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
% Open Area		70%		70%
Weight		12.2 kg/m <sup>2</sup>		18.1kg/m <sup>2</sup>
	Span (mm)	Per metre width (kg)		Per metre width (kg)
Concentrated load at <b>1% deflection</b>	300	2567		5767
	450	1141		2563
	600	642		1442
	750	411		923
	900	285		641
	1050	210		471
Concentrated load at <b>10:1 safety factor</b>	300	1003		1540
	450	669		1027
	600	502		770
	750	401		616
	900	334		513
	1050	287		440
Uniform load at <b>1% deflection</b>	300	13651		30837
	450	4075		9137
	600	1706		3855
	750	874		1974
	900	506		1142
	1050	318		719
Uniform load at <b>10:1 safety factor</b>	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.

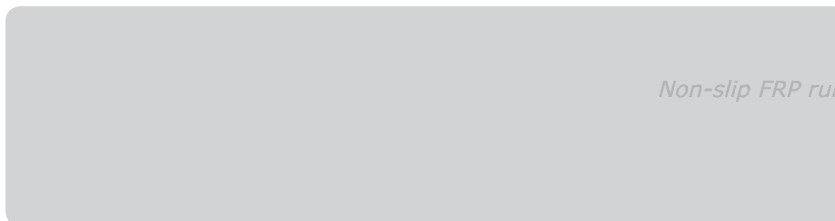
### 5. Areas of Application:

- 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