



NOTES:

- FABRICATION: Precast planks shall be manufactured to MRTS72.
- DESIGN LOADING: This plank is designed for a multi axle trailer of maximum 2 tonnes per axle at minimum 750 centres.
- CONCRETE: All concrete supply and placement shall be in accordance with MRTS70. The design mix shall be S50/20 for Exposure Classification C2.
- GFRP REINFORCEMENT: All reinforcement shall be supplied in accordance with MRTS271 and have these properties:

Transverse coefficient of thermal expansion	$\leq 30 \times 10^{-6}/^{\circ}\text{C}$
Minimum tensile strength	1000 MPa
Durability designation	D1 (as defined in CSA S807)
Elastic Modulus	Grade III (as defined in CSA S807): 60GPa

- Minimum cover to reinforcement: 30 unless shown otherwise.
- LINK BARS: Link bars shall be Grade 316 stainless steel flats in accordance with ASTM A276. All sharp edges shall be removed and neatly finished.
- TRAFFICABLE SURFACE FINISH: The concrete matrix shall be removed to about 1mm below the top of the exposed aggregate to achieve a non-slip finish. The invert of the drainage groove shall retain the off-form finish.



- MASS of Type RG4000FRP plank is 2000 kg. MASS of Type RG3500FRP plank is 1750 kg. The mass shall be clearly and permanently marked on a side surface.
- M20 FERRULES shall be Grade 316 stainless steel footed ferrules – either:

Registered Supplier	Product Number (M20)
Reid	FE20095SS
Ancon	FF2096S316

- LIFTING, TRANSPORTATION AND STORAGE: Planks shall not be moved before attaining a minimum strength of 32 MPa. Lifting shall be in accordance with the Lifting Details diagram. Transport and storage shall be in accordance with MRTS72.
 - DIMENSIONS are in millimetres unless shown otherwise.
- Departmental Specifications:
MRTS70 Concrete.
MRTS271 Glass Fibre Reinforced Polymer (GFRP) Reinforcement.
MRTS72 Manufacture of Precast Elements.

- Australian and International Standards:
ASTM A276 Standard Specification for Stainless Steel Bars and Shapes.
CSA S807 Specification for fibre-reinforced polymers.

REINFORCEMENT SCHEDULE					
Bar Mark	D _{nom} *	D _{max} **	Length	Quantity	Centres
15A1	15	18	3930	10	-
13A2	13	14	930	28	240
13A3	13	14	880	8	-

* Nominal diameter.
** Maximum diameter including the surface profile.

Department of Transport and Main Roads			
PRECAST PLANKS FOR BOAT RAMP			
TYPES RG4000 FRP		A3	Standard Drawing No
		Not to Scale	4003
			Date 3/2024