

Specification (Measurement)

**Transport and Main Roads Specifications
MRS271 Glass Fibre Reinforced Polymer (GFRP)
Reinforcement**

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1 Introduction

This Specification applies to the supply, fabrication and placement of glass fibre reinforced polymer (GFRP) reinforcing bars for use in concrete and slope stabilisation. Typical applications would include boating facilities and areas where low electric and magnetic conductivity are important.

This Specification shall be read in conjunction with MRS01 *Introduction to Specifications*, MRS50 *Specific Quality System Requirements* and other Specifications as appropriate.

This Specification forms part of the Transport and Main Roads Specifications Manual.

2 Measurement of work

2.1 Standard Work Items

This Specification contains no Standard Work Items. Subject to the provisions of Clause 2.2, supply and installation of GFRP reinforcing shall be measured by Standard Work Items associated with particular elements of work contained in the relevant Specification.

2.2 Reinforcement not always measured separately

In all concrete elements, payment for GFRP reinforcing bar shall be deemed to be included in the rate or lump sum amount for the relevant Standard Work Item(s) for that concrete element – unless a specific separate Standard Work Item has been included in the contract.

Separate Standard Work Items for GFRP typically follow this format:

[diameter] GFRP reinforcing bar in [application] -

Work Operations included in the above item include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*
- b) supply of all materials, and
- c) fixing reinforcing bar in place.

Unit of Measurement: m

2.3 Calculation of quantities

The quantity of GFRP reinforcing bar represented by any Standard Work Item included in the Specifications referred to in Clause 2.2, shall be the length calculated from the actual lengths shown in the Drawings.

When calculating quantities, no allowance shall be made for any additional GFRP reinforcing used:

- a) in cutting processes, or
- b) by the Contractor to improve the rigidity of a reinforcing cage or to suit the proposed installation procedure.

