

Specification (Measurement)

**Transport and Main Roads Specifications
MRS57 Geotextiles for Geotextile Reinforced Seals**

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1 Introduction

This Specification applies to the material and construction requirements for geotextiles used in geotextile reinforced seals.

This Specification shall be read in conjunction with MRS01 *Introduction to Specifications* 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

In accordance with the provisions of Clause 2 of MRS01 *Introduction to Specifications*, the Standard Work Items covered by this Specification are listed in Table 2.1.

Table 2.1 – Standard Work Items

Standard Item No.	Description	Unit of measurement
Geotextiles for Geotextile Reinforced Seals		
43404P	Crack filling (Provisional Quantity)	m
43408	Supply and placement of geotextile for geotextile reinforced seal [Type 1 Type 2]	m ²

2.2 Work Operations

Item 43404P Crack filling (Provisional Quantity)

Work Operations incorporated in the above item include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*
- b) supply of crack sealant, and
- c) cleaning and filling of cracks.

Item 43408 Supply and placement of geotextile for geotextile reinforced seal [Type 1 | Type 2]

Work Operations incorporated in the above item include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*
- b) supply of geotextile [Type 1 | Type 2] including allowances for overlaps, joints, and wastage
- c) loading, hauling, delivery and storage of the geotextile in a manner that prevents exposure to sunlight and moisture
- d) any additional pavement surface preparation Works which are prescribed in the Contract, Drawings and/or *Supplier's Installation Guidelines*
- e) dispensing and placement of the geotextile, including all overlapping and jointing requirements
- f) rolling of the geotextile
- g) removal and replacement of any damaged, folded and/or wrinkled geotextile

- h) removal and disposal of excess geotextile from the Site, and
- i) all associated material compliance testing.

Supply and application of sprayed bitumen bond coats and bituminous surfacings (including all pavement surface preparation works) shall be in accordance with the relevant Measurement and Technical Specifications (refer to Clause 3).

2.3 Calculation of Quantities

The calculated quantity shall be the pavement surface area installed (in m²) excluding all overlaps, joints, and wastage.

3 Bitumen bond coats and bituminous surfacings

Polymer modified binder (including crumb rubber modified binder) and bitumen emulsions shall not be used in any part of the construction of a geotextile reinforced seal. This includes the bitumen bond coat and the bituminous surfacing sprayed on top of the geotextile.

Sprayed bitumen bond coats and bituminous surfacings shall be measured and specified (that is, Work Items) using MRS11 *Sprayed Bituminous Treatments (Excluding Emulsions)*, MRS22 *Supply of Cover Aggregate* and any other relevant Measurement Specifications.

Sprayed bitumen bond coats and bituminous surfacings shall comply with the requirements of MRTS11 *Sprayed Bituminous Treatments (Excluding Emulsions)*, MRTS22 *Supply of Cover Aggregate* and any other relevant Technical Specifications.

Notwithstanding the above, sprayed bitumen bond coats and bituminous surfacings shall also comply with this Specification.

When quantifying the materials used, a geotextile reinforced seal treatment will need to be scheduled using a number of Work Items.

Table 3 – Example of scheduling Work Items for a '14 mm Geotextile Reinforced Single / Single Seal' retreatment with Contractor supplied cover aggregate

Activity	Specification	Work Item	Description	Unit
Crack filling	MRS57	43404.01P	Crack filling (Provisional Quantity)	m
Supply and application of binder (bond coat) – 14 mm GRS S/S (which includes surface preparation prior to spraying)	MRS11	40721.01	Spraying bituminous material, treatment type [<i>Bond Coat</i>], binder [<i>C170</i>], spray rate [<i>0.7L/m²</i>], [<i>Pavement A</i>]	L
Supply and placement of geotextile – 14 mm GRS S/S	MRS57	43408.01	Supply and placement of geotextile for geotextile reinforced seal [<i>Type 1</i>]	m ²
Supply and application of binder – 14 mm GRS S/S	MRS11	40721.02	Spraying bituminous material, treatment type [<i>Geotextile Reinforced Seal with a Single/Single Seal</i>], binder [<i>C170</i>], spray rate [<i>1.8L/m²</i>], [<i>Pavement A</i>]	L
Supply and spreading of cover aggregate – 14 mm GRS S/S	MRS11	40723.01	Spreading cover aggregate [<i>14 mm</i>], [<i>110m²/m³</i>], [<i>including</i>] supply of cover aggregate, [<i>Pavement A</i>]	m ³
Adhesion agent	MRS11	40725.01P	Supply and addition of adhesion agent (Provisional Quantity)	L
Cutter oil	MRS11	40729.01P	Supply and addition of cutter oil (Provisional Quantity)	L

