

Superseded

Specification (Measurement)

**Transport and Main Roads Specifications
MRS104 Retarding Pavement Reflective Cracking using
Asphalt Geosynthetics**

July 2021

Copyright

© The State of Queensland (Department of Transport and Main Roads) 2021.

Licence



This work is licensed by the State of Queensland (Department of Transport and Main Roads) under a Creative Commons Attribution (CC BY) 4.0 International licence.

CC BY licence summary statement

In essence, you are free to copy, communicate and adapt this work, as long as you attribute the work to the State of Queensland (Department of Transport and Main Roads). To view a copy of this licence, visit: <https://creativecommons.org/licenses/by/4.0/>

Translating and interpreting assistance



The Queensland Government is committed to providing accessible services to Queenslanders from all cultural and linguistic backgrounds. If you have difficulty understanding this publication and need a translator, please call the Translating and Interpreting Service (TIS National) on 13 14 50 and ask them to telephone the Queensland Department of Transport and Main Roads on 13 74 68.

Disclaimer

While every care has been taken in preparing this publication, the State of Queensland accepts no responsibility for decisions or actions taken as a result of any data, information, statement or advice, expressed or implied, contained within. To the best of our knowledge, the content was correct at the time of publishing.

Feedback

Please send your feedback regarding this document to: tmr.techdocs@tmr.qld.gov.au

Contents

- 1 Introduction1**
- 2 Measurement of work1**
 - 2.1 Standard Work Items 1
 - 2.2 Work Operations 1
- 3 Bituminous surfacings and bitumen bond coats2**
- 4 Asphalt2**

Superseded

1 Introduction

This Specification applies to the material and construction requirements for asphalt geosynthetics used to retard reflective cracking in road pavement applications. The asphalt geosynthetic is installed to delay reflective cracking in the overlying asphalt layer(s), thereby reducing future maintenance issues.

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. The measured quantity for payment shall be the pavement area installed excluding all overlaps, joints and wastage.

Table 2.1 – Standard Work Items

Standard Item No.	Description	Unit of Measurement
Retarding Pavement Reflective Cracking using Asphalt Geosynthetics		
43904	Supply and placement of asphalt geosynthetic [<i>Geogrid without geotextile backing</i> <i>Geogrid with geotextile backing</i>]	m ²

2.2 Work Operations

Item 43904 Supply and placement of asphalt geosynthetic [*Geogrid without geotextile backing* | *Geogrid with geotextile backing*]

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 asphalt geosynthetic [*Geogrid without geotextile backing* | *Geogrid with geotextile backing*] including allowances for overlaps, joints, and wastage
- c) loading, hauling, delivery and storage of the asphalt geosynthetic in a manner that prevents exposure to sunlight and moisture
- d) all pavement surface preparation works prior to placement of the asphalt geosynthetic
- e) where specified, supply and placement of an asphalt corrector layer as per the relevant Measurement and Technical Specification (refer to Clause 4)
- f) where specified, supply and application of any bituminous primes and surfacings as per the relevant Measurement and Technical Specification (refer to Clause 3)
- g) supply and application of bitumen bond coat as per the relevant Measurement and Technical Specification (refer to Clause 3)
- h) where applicable, supply and application of bituminous emulsion tack coat

- i) dispensing and placement of geosynthetic material including all lapping and jointing requirements
- j) where applicable, the pinning and nailing of the asphalt geosynthetic
- k) rolling of the asphalt geosynthetic
- l) removal and replacement of any damaged asphalt geosynthetic
- m) supply and placement of overlying asphalt as per the relevant Measurement and Technical Specification (refer to Clause 4)
- n) removal and disposal of excess asphalt geosynthetic from the site, and
- o) all associated material and construction compliance testing.

3 Bituminous surfacings and bitumen bond coats

Sprayed bituminous primes, surfacings and bitumen bond coats shall comply with MRS11 *Sprayed Bituminous Treatments (Excluding Emulsions)*, MRS12 *Sprayed Bituminous Emulsion Surfacing* and any other relevant Measurement and Technical Specifications.

Sprayed bituminous primes, surfacings and bitumen bond coats shall be measured and specified under the abovementioned Specifications (for example, work items).

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

4 Asphalt

Supply and placement of asphalt shall comply with the relevant Technical Specification.

Supply and placement of asphalt shall be measured and specified under the abovementioned Specifications (for example, work items).

Notwithstanding the above, this Specification takes precedence and the supply and placement of asphalt shall also comply with this Specification.

Superseded