

Main Roads Technical Standard

MRTS67

Bitumen Slip Layer on Piles

June 09

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FEEDBACK

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Bitumen Slip Layer on Piles

1 INTRODUCTION

This Standard applies to the requirement for a bitumen slip layer on piles for bridgeworks.

This Technical Standard shall be read in conjunction with MRTS01 *Introduction to Technical Standards* and other Technical Standards as appropriate.

This Technical Standard forms part of the Main Roads Specifications and Technical Standards Manual.

2 DEFINITION OF TERMS

The terms used in this Standard shall be as defined in Clause 2 of MRTS01 *Introduction to Technical Standards*.

3 REFERENCED DOCUMENTS

There are no Australian Standards referenced in this document.

4 MATERIAL

4.1 Registration

The requirements for bitumen slip layers on piles for bridgeworks include the use of suppliers and products for the items listed in Table 4.1 that are registered by Transport and Main Roads.

Table 4.1 – Items Requiring Use of Registered Suppliers and Products

Clause	Category of Work
4.2	Bitumen Slip Layer

For further information regarding registered suppliers and products for the above items refer to –

Queensland Department of Transport and Main Roads
Bridge Branch
GPO Box 1412
Brisbane Qld 4001

4.2 Primer

Primer shall be a medium curing cutback bitumen Grade AMC0 in accordance with MRTS20 *Cutback Bitumen*.

4.3 Slip Layer

The bitumen slip layer shall be Bitumen SL Compound (supplied by Shell) or an equivalent registered product (refer Clause 4.1).

5 CONSTRUCTION

5.1 General

A bitumen slip layer shall be applied to those sections of piles nominated in the Drawings to receive such treatment.

5.2 Priming

Concrete piles shall have achieved the characteristic 28 day strength and shall be surface dry, clean and free from laitance.

Steel piles shall be clean and dry and free of loose rust or millscale, and from any poorly adhering coatings.

A primer shall firstly be applied by brush or spray in accordance with the manufacturer's recommendations, at an application rate not less than 2 kg/m².

The primer shall be allowed to dry thoroughly before the bitumen slip layer is applied.

5.3 Slip Layer

Bitumen slip layer shall be applied by pouring or spraying at a temperature between 160°C and 190°C at a coverage rate of 10 kg/m² and 10 mm thickness.

5.4 Storage

In hot weather, coated piles shall be kept in the shade to minimise creep of the coating. If this is not possible, the coating shall be painted with limewash to reflect heat. If temperatures are such that, despite precautions, excessive creep of the coating occurs, piles can be sprayed with water and/or rotated periodically through 90°C.

Piles shall be driven as soon as possible after coating once the compound has cooled to ambient temperature, and shall not be stored for periods exceeding two weeks.

Following treatment, care shall be exercised in the handling and storage of piles to ensure that the bitumen slip layer is not damaged.

5.5 Transport

Where coated piles are transported, they shall be separated to prevent the coating sticking together. If piles are to be transported in summer, the coating shall be painted with limewash as a precaution against prolonged exposure to heat from the sun, which may result in excessive creep.