AUSTROADS TECHNICAL SPECIFICATION ATS 3472

Sealing of Cracks in Flexible Pavements

Austroads

Contents

1. Scope

1.1 Austroads Technical Specification ATS 3472 sets out the requirements for sealing of cracks in existing asphalt and spray seal flexible pavements to prevent the ingress of water, debris, or foreign matter into the pavement.

2. Referenced Documents

2.1 The following documents are referenced in this Specification:

Austroads	
AP-C87	Austroads Glossary of Terms
ATS 3471	Supply of Hot Poured Elastomeric Sealants for Pavements

3. Definitions

3.1 In addition to the definitions in AP-C87, the following definition applies to this Specification.

Overband Treatment: A treatment applied to a crack where the sealant completely covers the crack and extends onto the pavement surface.

4. Quality System Requirements

4.1 The Contractor must prepare and implement a Quality Plan that includes the documentation in Table 4.1.

Table 4.1 Quality Plan

Clause	Description of Document
5.1	Details of the sealant, including the records specified in Clause 7.1 of ATS 3471
6.1	Details, procedures and/or Inspection and Test Plans for the application of the sealant.

HOLD POINT 1	
Process Held	Commencement of crack sealing work.
Submission Details	The Quality Plan must be provided to the Principal at least 10 working days prior to the commencement of work on site.

5. Materials

5.1 The sealant must comply with ATS 3471.

5.2 At any time, the Principal may request an audit sample from the site to verify that the sealant complies with this Specification.

5.3 Where the sealant is being applied in a jurisdiction where an approved or registered product system applies, the sealant must be approved or registered under that system.

5.4 Any preformed overbanding material must be compatible with the asphalt overlay and conform to the manufacturer's specification.

6. Application of Sealant

General

6.1 The Quality Plan must include details, procedures and/or Inspection and Test Plans for:

a) plant and equipment, including evidence of its suitability;

b) methodology to ensure that the crack sealing treatment is suitable for the crack, taking into account the pavement type being treated, pavement temperature at the time of year work is being undertaken, the crack width and the anticipated future crack width;

c) methodology to ensure that the sealant is kept agitated at the manufacturer's recommended temperature;

d) handling and storage of the sealant;

e) preparation of the surface, including routing where required; and

f) application of the sealant to the crack.

6.2 Crack sealing must not be carried out where extensive and closely spaced cracks exist, including areas of crocodile cracking.

6.3 The Contractor must transport, heat, store, and apply the sealant in accordance with the manufacturer's instructions.

WITNESS POINT 1	
Process	Commencement of surface preparation and application of the sealant to the crack.
Notification Period	2 working days prior to the commencement of work on site.

Surface Preparation

6.4 The crack must be cleaned of debris and all loose material, including any old crack sealant. If hot air is utilised, the surrounding pavement must not be burned. Once the crack is clean, it must be maintained in that condition and not exposed to traffic until the sealant is applied.

6.5 The crack must be dry at the time of application of sealant. This may require the use of heating.

6.6 Routing, where used, must:

a) be centred as closely as possible over the crack;

b) not damage the surrounding pavement surface;

c) be slightly wider than the maximum crack width, but not exceeding 12 mm; and

d) be approximately 15 mm deep.

Application of Crack sealant

6.7 The width of the applied sealant must not exceed 50 mm. An Overband Treatment must be between 2mm and 3 mm thick and between 35 mm and 50 mmm wide

6.8 Localised overheating of the sealant must be prevented by continuously agitating the crack sealant while heating and/or by using jacketed heaters with a calibrated temperature measuring device. The sealant must not be subject to prolonged heating and/or reheating.

6.9 If the Contractor's work is nonconforming, the Contractor's entitlement to payment is reduced by an amount commensurate with the proportion of nonconforming work. Nonconforming work includes:

a) the applied sealant width exceeds that specified in Clause 6.7;

b) failure to treat a crack;

c) incorrect selection of sealant for the crack width or pavement type;

d) a failure to apply the sealant in accordance with the manufacturer's instructions; and/or

e) not meeting any other specified performance requirements.

6.10 The Contractor is not entitled to payment for the application of sealant at any location where it is not required.

Tackiness

6.11 Work must be undertaken so that pick-up of crack sealant by vehicle tyres does not occur. The crack sealant must be trafficable no later than five minutes after application.

7. Repair of Defects

7.1 Unless another period is specified in the Contract documents, the Contractor is liable for the repair of defects for a period of 6 months, commencing at the completion of work at each location where crack sealing is carried out.

7.2 If any defect, such as a crack in the sealant, is evident during the period that the Contractor is liable for the repair of defects, the defect must be repaired within 20 working days of the Contractor becoming aware of the defect.

8. Records

8.1 Within 5 working days of completion of the Lot, the Contractor must a Lot Package Report to the Principal that includes the following details:

a) road name, location and where appropriate, the start and finish chainages;

b) product (crack sealant) details;

c) the date and start and finish times for each shift;

d) pavement temperatures and general weather conditions;

e) area of pavement treated in square metres and length of crack sealing undertaken;

f) test results for the crack sealant supplied for the lot;

g) litres of crack sealant used;

h) average estimated crack width;

i) details of any non-conformances; and

j) any additional documentation relevant for long term performance evaluation.

Annexure A: Summary of Hold Points, Witness Points and Records

The following is a summary of the Witness Points/Hold Points that apply to this Specification and the Records that the Contractor must submit to the Principal to demonstrate compliance with this Specification.

Clause	Hold Point	Witness Point	Record
4.1	1. Commencement of crack sealing work.		Quality Plan
6.3		1. Commencement of surface preparation and application of crack sealant.	
8.1			Lot Package Report

Amendment Record

Amendment no.	Clauses amended	Action	Date
-	New specification	New	June 2025

Key

Format	Change in format
Substitution	Old clause removed and replaced with new clause
New	Insertion of new clause
Removed	Old clauses removed