



**Transport Scotland**  
**Executive Agency of the Scottish Government**  
**Roads (Standards and Asset Management)**

***Summary***

This Interim Amendment provides revised guidance on the Specification for Surface Course Materials for use on the Scottish Trunk Road Network.

## 1. Background

This TSIA contains the Transport Scotland National Application Annex (NAA) to CD236.

## 2. Action

The Transport Scotland NAA contained in Appendix 1 is to be used in conjunction with CD236.

## 3. Implementation

This TSIA shall be implemented immediately except where the procurement of works, at any stage from conception through design to completion of construction, has reached a stage at which, in the opinion of the TS Project Manager, use of this document would result in significant additional expense or delay progress.

## 4. Further action

Any questions or feedback regarding the use or content of this TSIA should be directed to Transport Scotland: [info@transport.gov.scot](mailto:info@transport.gov.scot).

## 5. Withdrawal conditions

This TSIA shall be applied until the Transport Scotland National Application Annex to CD236 is published in CD236 (Design Manual for Roads and Bridges 7.5.1).

## Appendix A

Transport Scotland National Application Annex to CD236 (formerly HD36) Surface course materials for new and maintenance construction

Revision: 0

Date: November 2018

### Summary

This National Application Annex sets out Transport Scotland's specific requirements on surface course materials.

### Feedback and enquiries

Users of this document are encouraged to raise any enquiries and/or provide feedback on the content and usage of this document to Transport Scotland using the email address: [TSStandardsBranch@transport.gov.scot](mailto:TSStandardsBranch@transport.gov.scot)

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## Foreword

### **Publishing information**

This document is a National Application Annex to DMRB document CD236.

### **Contractual and legal considerations**

This document forms part of the works specification. It does not purport to include all the necessary provisions of a contract. Users are responsible for applying all appropriate documents applicable to their contract.

## **Introduction**

### **Background**

This National Application Annex gives the Transport Scotland-specific requirements related to:

Surface course material options Section 2 of CD236 (former HD36/06) see Section S1,

Aggregate selection: amendment to clause 3.2 and; replacement of clauses 3.10 and 3.11 of CD236 (former HD36/06) - see Section S2,

Supplementary references to Section 4 and Section 5 of CD236 (former HD36/06) - see Section S3 and Section S4.

### **Assumptions made in the preparation of the document**

The assumptions made in G.GP 01 'General information: Introduction to the DMRB' apply to this document.

## S1. Surface course material options

### Choice of surfacing

S1.1. Surface course materials shall be selected from those listed in Table S1.1 as permitted options.

**NOTE 1** More information on the permitted materials can be seen in the 0900 and 1000 Series of the Manual of Contract Documents for Highway Works, Volume 1 (MCHW1).

**Table S1.1: Permitted pavement surface course materials**

	New Construction	Maintenance
Clause 911TS Hot rolled asphalt <sup>1</sup>	✓	✓
Clause 918 Slurry surfacing and microsurfacing	✗	ATP
Clause 922 Surface dressing <sup>1</sup>	✗	ATP
Clause 924 High-friction surfacing	✓	✓
Clause 938 Porous asphalt	ATP	ATP
Clause 942 Thin surface course system	ATP	ATP
Clause 942TS Stone mastic asphalt surface course (TS2010)	✓	✓
Clause 943 Hot-rolled asphalt <sup>1</sup>	✓	✓
Clause 1044 Exposed aggregate concrete <sup>1</sup>	ATP	✗
NOTE: Key:		
✓	Use permitted without further approval	
ATP	Approval to Proceed to be obtained from Overseeing Organisation	
✗	Not Permitted for use	
1	Not generally permitted within Noise Management Areas – see Cl. 1.7	

- S1.2. Where required by Table S1.1, an 'Approval to Proceed' shall be obtained from the Overseeing Organisation for use of the material.
- S1.3. The decision on which permitted surface course materials are selected or excluded shall be made on a site-specific basis and a record of the decision shall be made with sufficient supporting evidence.
- S1.4. A Departure shall not be required for retexturing.
- S1.5. High friction surfacing shall be grey in colour unless colour contrast is specifically required for demarcation purposes.
- S1.6. High friction surfacing shall not be used for the sole purpose of achieving colour contrast.
- S1.7. The specification for Clause 942TS Stone mastic asphalt surface course (TS2010) is detailed in Transport Scotland Interim Amendment 35: TS2010 Surface Course Specification and Guidance [Ref. S3.N].

### **Noise Management Areas**

- S1.8. The design of maintenance and construction schemes within Scotland Noise Management Areas [Ref. S2.N] shall incorporate the requirements of the Transportation Noise Action Plan [Ref. S2.N] in the selection of surface course materials.
  - S1.8.1. Where traffic speeds are lower than 30mph the full range of surface course materials should be considered for use.
  - S1.8.2. Where traffic speeds are greater than 30mph, materials that are not normally permitted for use (as indicated in S1.1) can be specified subject to departure.
  - S1.8.3. A submission for justification for selecting materials not normally permitted within Noise Management Areas shall not be based solely on value for money.
- NOTE 1 More information on Scotland Noise Management Areas can be found in the Scottish Government 'Transportation Noise Action Plan' 2014 [Ref. S2.N].
- NOTE 2 Further advice with respect to road noise can be found in TRL report PPR443 [Ref. S2.I].

## **S2. Aggregate Selection**

S2.1. Section 3.2 of CD236 shall not apply to TS2010 material other than for consideration prior to approval of initial stage 3 trials.

S2.2. Section 3.10 shall be replaced with  
Aggregate with a PSV other than those contained within CD236 Tables 3.2a and 3.2b shall be permitted providing it has been demonstrated that the aggregate is able to provide adequate skid resistance based on previous uses of the aggregate.

S2.3. Section 3.11 shall be replaced with  
When aggregate with a PSV other than those contained with Tables 3.2a and 3.2b is adopted, technical and historical data along with the reasoning and justification shall be documented, as well as the methodology adopted to support the case.

**NOTE 1** One methodology usable for supporting a case for the use of lower PSV aggregates with adequate skid resistance is presented in TRL report PPR820 [Ref. S3.I].

### **S3. Normative references**

The following documents, in whole or in part, are normative references for this National Application Annex and are indispensable for its application. They are to be used in addition to the normative references listed in DMRB document CD236 [Ref. S1.N]. For dated references only the edition cited applies. For undated references the latest edition of the referenced document (including any amendments) applies.

	<b>Title</b>
Ref. S1.N	Highways England. DMRB document CD236 'Surface course material for new and maintenance construction'
Ref. S2.N	Scottish Government. 'Transportation Noise Action Plan 2014' <a href="http://www.gov.scot/Publications/2014/07/4324/0">http://www.gov.scot/Publications/2014/07/4324/0</a>
Ref. S3.N	Transport Scotland Interim Amendment 35: TS2010 Surface Course Specification and Guidance <a href="https://www.transport.gov.scot/transport-network/roads/design-of-trunk-roads/#">https://www.transport.gov.scot/transport-network/roads/design-of-trunk-roads/#</a>

### **S4. Informative references**

	<b>Title</b>
Ref. S1.I	Scottish Government. 'Noise Maps' - <a href="https://noise.environment.gov.scot/noisemap/">https://noise.environment.gov.scot/noisemap/</a>
Ref. S2.I	TRL. TRL report PPR443: 'A review of current research on road surface noise reduction techniques'
Ref. S3.I	TRL. TRP report PPR820: 'A procedure for justifying aggregate use based on skid resistance'

## **S5. Authority**

All technical enquiries or comments on this National Application Annex should be sent in writing to:

Mr G McQuaker, Head of Standards, Transport Scotland, 8th Floor, Buchanan House, 58 Port Dundas Road, Glasgow G4 0HF, Scotland

Or email: [info@transport.gov.scot](mailto:info@transport.gov.scot)

For the main document CD236 (formerly HD36), all technical enquiries or comments should be sent in writing to:

Mr M Wilson, Chief Highways Engineer, Highways England, Temple Quay House, The Square, Temple Quay, Bristol BS1 6HA

Or email: [Standards\\_Enquiries@highwaysengland.co.uk](mailto:Standards_Enquiries@highwaysengland.co.uk)