

Skid Resistance Policy

December 2018 – Version 1

Surrey County Council Policy for Skid Resistance

1. Introduction

1.1 The provision of adequate levels of skidding resistance is a very important aspect of highway maintenance and one that contributes significantly to network safety particularly for cyclists, motorcyclists and equestrians. Whilst the frequency of accidents may increase as skidding resistance falls, there is no clear boundary at which a surface passes from being safe to dangerous.

1.2 Many factors can affect the rate and extent to which a road surface will wear and or polish. There is a need to monitor skid resistance, particularly on 'difficult sites', to ensure risks are managed effectively. Difficult sites are those where the geometry, for example bends, junctions, steep gradients, pedestrian crossings and traffic signals increase the risks of skidding accidents. This document outlines Surrey County Council's policy for monitoring and maintaining the skid resistance of the road network.

2. Policy

2.1 Surrey County Council's policy on Skid Resistance¹ follows the requirements of the Design Manual for Roads and Bridges, HD28/15. However, as these standards have been written for Trunk roads they have been amended where required to reflect the needs of Surrey County Council roads. The procedures adopted to monitor skid resistance on the network are risk based and rely on an integrated approach involving Pavement, Maintenance and Safety Engineers.

3. Site Testing

3.1 The SCRIM network is approx. 900Km and comprises all principal roads (A roads) and the rest of the Surrey Priority Network Level 1 & 2 but excludes traffic-calmed sections.

3.2 All routine skidding resistance survey tests shall be carried out using Surrey County Council's Sideways Force Coefficient Routine Investigation Machine (SCRIM).

3.3 In exceptional circumstances and for specific locations additional localised testing using the SCRIM vehicle or a portable skid resistance tester may be carried out to identify site specific skid resistance properties.

3.4 If for any reason part of the identified network cannot be surveyed as scheduled, the reasons for the omission must be approved and recorded.

¹In this document the term 'skid resistance' refers to the frictional properties of the road surface measured using a specified device under standard conditions.

3.4 Routes or sections with a known accident history shall be considered for site-specific assessment irrespective of their network designation or traffic volume.

4. Data Processing

4.1 Raw data from the SCRIM machine is processed against the referenced network and factored to adjust for seasonal variation using the most appropriate correction method defined in HD28/15 Annexes.

4.2 Results are compared with defined Investigatory Levels (IL) of skid resistance to assess their importance.

4.3 Following data processing a list of prioritised sites is produced for further investigation and action as appropriate. Initial investigation sites will be determined using the Alternative method set out in HD28/15 Annex 7.

5. Risk Assessment

5.1 All concerns about skid resistance will be examined to an appropriate level of detail. Annual condition survey data will be the basis for responding to an enquiry about any road which is not on the defined network.

5.2 The following should be considered:

- Determine whether the current IL is appropriate
- Determine whether some sort of action may be required
- Determine not to carry out any works, but to keep the site under review
- Determine whether a surface treatment is justified to reduce the risk of accidents in wet/damp conditions

5.3 When the need for remedial measures has been established these measures will be prioritised for inclusion into the appropriate works programme.

5.4 At all sites where a surface treatment has been recommended 'slippery road' warning signs should be erected as a matter of urgency.

6. Investigatory Levels

6.1 The approach for setting investigatory levels will follow guidance set out in The RSTA Guidance on Road Skid Resistance Policy Issue 1: August 2015 Appendix 1. The tables are based on HD28/04 and have been amended to give consideration to road speed and better reflect conditions associated with county networks.

6.2 Investigatory levels will be reviewed to reflect when significant changes are made of layout or traffic volumes on any of the routes in the identified network. The review will take place every 4 years (quarter of the network per annum).

7. References

- UK Roads Liaison Group: Well-managed Highway Infrastructure - A Code of Practice October 2016
- The RSTA Guidance on Road Skid Resistance Policy Issue 1: August 2015
- Design Manual for Roads and Bridges:
 - Vol 7, Section 3, Part 1. HD28/15 Skid Resistance.
 - Vol 7, Section 5, Part 1. HD36/06 Surfacing Materials for New and Maintenance Construction