**#. Ride quality (longitudinal profile) of bituminous surface courses [section # of CC 20#, replacement for part of Clause 702]**

Requirement in SHW

#.1 Ride quality of bituminous surface courses shall be measured by continuous measurements of Ride Index (RI) with a laser measurement system in accordance with the requirements of [Accreditation and Quality Assurance of Devices for the measurement of ride quality of newly laid surfaces](https://www.ciht.org.uk/media/17293/specificationfordevicestomeasurenewlylaidsurfaceridequality.docx).

Verification within SHW

#.2 Verification shall be undertaken for the ride quality of bituminous surface courses by continuous measurements of RI with a laser measurement system in accordance with the requirements of [Accreditation and Quality Assurance of Devices for the measurement of ride quality of newly laid surfaces](https://www.ciht.org.uk/media/17293/specificationfordevicestomeasurenewlylaidsurfaceridequality.docx).

#.3 The laser measurement system shall be operated in accordance with, and within the limitations stated within, the accreditation certification.

#.4 Continuous measurements of RI shall be made for the full length of new surfacing material in each carriageway lane, plus 100 m before and after unless otherwise prevented by site constraints, such as at a junction.

#.5 Measurements shall be made between 3 and 28 days of completion of the surfacing.

#.6 All valid 10 m RI results within each carriageway lane shall be assessed for 300 m lengths, beginning 10 m before the start of the new surfacing and continuing until 10 m after the end of the new surfacing.

#.7 Lengths less than the those outlined in #.6 but forming part of a longer pavement length shall be reported with the adjoining prior section.

#.8 Where the full length of the new surfacing material is less than 280 m the assessment shall be carried out over the length of the new surfacing material together with the preceding 10 m length and the following 10 m length.

#.9 A minimum of 50 % of the 10 m RI values for each length assessed shall be valid.

#.10 The requirements for Verification [replacement for clause 105] shall apply to the ride quality measurements.

Requirement in SHW

#.11 The values obtained for each length assessed in accordance with #.6 to #.10 shall comply with the requirements stated in Table #.11.

**Table #.11: Requirements for initial ride quality using the laser method, for trunk roads including motorways.**

|  |  |  |
| --- | --- | --- |
|  | **Road type** |  |
| **Surface type** | Carriageway with one-way traffic | Carriageway with two-way traffic |
| Thin surface course system | 100% of 10m values < 5.0  80% of 10m values < 2.0 | 100% of 10m values < 6.5  80% of 10m values < 2.6 |
| Hot rolled asphalt | 100% of 10m values < 6.0  80% of 10m values < 2.4 | 100% of 10m values < 6.0  80% of 10m values < 2.4 |