**6. Surface macrotexture depth of bituminous surface courses [section 6 of CC 202, replacement for Clause 921]**

Requirement in SHW

6.1 Surface macrotexture depth of bituminous surface courses shall be measured by continuous measurements of Mean Profile Depth (MPD) with a laser measurement system in accordance with the requirements of [Accreditation and Quality Assurance of Devices for the measurement of texture of newly laid surfaces](https://www.ciht.org.uk/media/17292/specificationfordevicestomeasurenewlylaidsurfacetexture.docx).

Verification within SHW

6.2 Verification shall be undertaken for the surface macrotexture depth of bituminous surface courses by continuous measurements of MPD with a laser measurement system in accordance with the requirements of [Accreditation and Quality Assurance of Devices for the measurement of texture of newly laid surfaces](https://www.ciht.org.uk/media/17292/specificationfordevicestomeasurenewlylaidsurfacetexture.docx).

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

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

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

6.6 The average and standard deviation of all valid 10 m MPD results within each carriageway lane shall be calculated for 100 m lengths, beginning at the start of the new surfacing and continuing until the end of the new surfacing.

6.7 Lengths less than 100 m but forming part of a longer pavement length shall be reported with the adjoining prior 100 m length.

6.8 Where the full length of the new surfacing material is less than 100 m the average shall be calculated over the length of the new surfacing material.

6.9 A minimum of 50 % of the 10 m MPD values for each length assessed shall be valid.

6.10 The requirements for Verification [replacement for clause 105] shall apply to the surface macrotexture depth measurements.

Requirement in SHW

6.11 The values obtained for each length assessed in accordance with 6.6 to 6.10 shall comply with the requirements stated in Table 6.10.

**Table 6.10: Requirements for initial surface macrotexture depth using the laser method, for trunk roads including motorways.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Material type | Surfacing type / application | Average MPD per 100 m length, mm | | Standard deviation per 100 m length, mm |
| Minimum | Maximum | Maximum |
| Thin surface course systems to Clause 942 | Upper (D) aggregate size of 14 mm | 1.0 | 1.6 | 0.2 |
| Upper (D) aggregate size of 10 mm | 1.0 | 1.5 | 0.2 |
| Upper (D) aggregate size of 6 mm | 1.0 | 1.4 | 0.2 |
| Chipped hot rolled asphalt surface course to Clause 943 | High speed roads  Posted speed limit ≥50 miles/h (80 km/h) | 1.3 | 1.8 | 0.25 |
| Lower speed roads  Posted speed limit <50 miles/h (80 km/h) | 1.0 | 1.5 | 0.25 |
| Roundabouts on high speed roads  Posted speed limit ≥50 miles/h (80 km/h) | 1.0 | 1.5 | 0.25 |
| Roundabouts on lower speed roads  Posted speed limit <50 miles/h (80 km/h) | 0.9 | 1.3 | 0.25 |

Retained surface macrotexture

6.12 For a period of two years from the date of opening to traffic, the average surface macrotexture depth shall be greater than or equal to the minimum values given in Table 6.10.