

## NEW RELEASE

## SPECIFICATION FOR A STANDARD TEST TYRE FOR FRICTION COEFFICIENT MEASUREMENT OF A PAVEMENT SURFACE

2009R02: SMOOTH TEST TYRE  
2009R03: RIBBED TEST TYRE

Control of pavement surface characteristics is essential to ensuring the functionality and safety of the road system. Skid resistance in particular, is becoming an increasingly important characteristic to manage for road authorities, to ensure vehicle tyres can maintain sufficient contact with the road surface. Surface skid resistance is determined by considering the friction measurement carried out using one of a range of different devices.

The accuracy of skid resistance measurements is dependent on the attributes of the tyre used in the testing. These two reports, prepared by World Road Association (PIARC) Technical Committee C1 'Surface Characteristics' cover the general requirements for a radial ply standard tyre for pavement skid resistance testing. The specifications cover both smooth and ribbed test tyres for use in the evaluation of tyre/pavement friction forces.

The specifications provide a standard design of certified construction and the accurate dimensions required for the determination and correlation of friction coefficients using skid trailers and other vehicles on various pavement surfaces.

Both specifications are based on the same generic structure with the following key areas addressed:

1. Material and Manufacture;
2. Material Requirements;
3. Physical Properties;
4. Dimensions Weights and Permissible Variations;
  - General
  - Construction
  - Wear Indicators
5. Workmanship;
6. Quality Control Measures;
  - Factory production control of the thread
  - Conformity of production
  - Test to be conducted before use
7. Storage and preservation;
8. Recommendations for tyre use and operational requirements.

The specifications have been developed utilising various existing international standards including ASTM<sup>1</sup>, DIN<sup>2</sup> and ISO<sup>3</sup> Standards. References to these standards are provided indicating the relevant issue date (where appropriate).

The two specifications, '*Specification for standard test tyre for friction coefficient measurement of pavement surface: smooth and ribbed test tyres*', provide road authorities with a valuable tool, collating and summarising best international practice in skid resistance test tyre standards. The specifications will be updated when required as international standards evolve.

**These reports can be accessed through PIARC's Virtual Library at:**

2009R02: <http://publications.piarc.org/en/search/detail.htm?publication=3479&solo>

2009R03: <http://publications.piarc.org/en/search/detail.htm?publication=3485&solo>

<sup>1</sup> American Society for Testing and Materials

<sup>2</sup> Deutsches Institut für Normung (German Institute for Standardisation)

<sup>3</sup> International Organisation for Standardisation