

As an accredited laboratory, this laboratory is entitled to use the following accreditation symbol.



Valid from 14 May 2023
to 13 May 2026
Issued on 28 December 2023



ISO/ IEC 17025
TL 004-03

Schedule of Accreditation

Accreditation Scheme for Testing Laboratories
Sri Lanka Accreditation Board for Conformity Assessment

Accreditation Number: TL 004-03

**Materials Laboratory,
Industrial Technology Institute,
No.120 /4A,
Vidya Mawatha,
Colombo 07.**

Scope of Accreditation: Performing Chemical Testing on Cement and Mechanical Testing on (Reinforcement Steel), Cement and Rubber products as per the Test Methods appearing in this Schedule.

The Laboratory is accredited for the following tests appear on page 02 to 03;

| SI NO | Product(s) / Material of test | Specific tests performed | Test Method/Standard against which tests are performed | Range of testing/ Limits of detection |
|---------------------------|--------------------------------------|--|--|---|
| Chemical Testing | | | | |
| 01 | Cement | Loss on ignition | SLS 107:2015 | 0.1 – 10.0 % |
| | | Insoluble residue | SLS ISO 29581: Part 1:2011 | 0.1 – 10.0 % |
| | | Sulfate | BS EN 196: Part 2: 2013 | 0.1 – 5.0 % |
| | | Chloride | | 0.01 – 0.50 % |
| Mechanical Testing | | | | |
| 02 | Metal Reinforcement Steel (08- 32mm) | Yield strength | SLS 375:2009 and BS 4449:2005 + A3:2016 | 475-875 MPa ($\varnothing \leq 20\text{mm}$) 475-725 MPa ($\varnothing > 20\text{mm}$) |
| | | Tensile strength | | 500-850 MPa ($\varnothing \leq 20\text{mm}$) 500-750 MPa ($\varnothing > 20\text{mm}$) |
| | | Tensile strength to Yield strength ratio | | 1.00-1.50 |
| | | Total elongation at maximum force | | 1.0 -15.0 % |
| | | Mass per Meter | | 0.300-7.000 kg |
| | | Rebend test | | Up to 900 kN |
| | | Bend test | | SLS 375:2009 |
| | | Total Elongation at break | | 10-40 |
| 03 | Cement | Compressive strength (2 days) | SLS 107: 2015 | 7-35 N mm ⁻² |
| | | Compressive strength (28 days) | SLS ISO 679:2011 | 25 -70 N mm ⁻² |
| | | Setting time | SLS 107: 2015 | 20 -300 min |
| | | Soundness | SLS ISO 9597:2011 | 0.0 -20 min |
| 04 | Rubber Products | Shore A Hardness | ISO 48-4:2018 | 30 -90 Shore A |
| | | IRHD Hardness | ISO 48-2:2018 | 30 - 85 IRHD |
| | | Density | ISO 2781:2018 | 0.024 - 2.600 gcm ⁻³ |
| | | Abrasion | ISO 4649:2017 | Cylindrical test piece, Non rotating 0 - 400 mm ³ |

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|--------------|--------------------------------------|---|---|---|
| 05 | Rubber Products | Heat Aging | ISO 188:2011 | Method B 23 °C ± 1 °C 70 °C ± 1°C 85 °C ± 1°C 100 °C ± 1°C 1.5 – 50.0 MPa 30 – 90 Shore A 30- 85 IRHDN |
| | | After aging Tensile strength Hardness Shore A Hardness IRHD N | | |
| | | Compression Set | ISO 815 - 1:2019 | Type B, 25 % Compression 23 °C±1°C 70 °C ± 1°C 85°C ±1 °C 100 °C ± 1°C 0- 100% |
| | | Tensile properties (Elongation) | ISO 37:2017 | 1-1000%, 500mm/min |
| | | Tensile Strength | ISO 37:2017 | 1.5 – 50 Mpa Dumb-bell 500mm/min |

Director/CEO
Sri Lanka Accreditation Board for Conformity Assessment