The Troxler Model 4640-B measures the density of asphalt and concrete layers between one and four inches (two and a half and ten centimeters) without influence from the underlying material.

Fast and Accurate Results
In as little as one minute, the Model 4640-B measures and displays density results that are reliable and repeatable.

Eliminates the Need for Nomographs
Variations in the density or composition of the base material do not affect the test results. No field calculations are needed.

Operator-Selected Depth of Measurement
The thickness of the top layer is entered into the software by the operator. This allows the gauge to correctly calculate the top layer density without influence from the underlying material.

Meets ASTM and AASHTO Standards
The Model 4640-B meets or exceeds all applicable ASTM and AASHTO standards.

Widely Accepted in the Industry
Many departments of transportation depend on Troxler thin layer gauges for reliable, real-time compaction control of new pavement and asphalt overlays.
Special Functions

- Automatic standard count comparison and storage
- Data storage of 750 records for later viewing, printing, and/or downloading
- Determination of the count time for selected precision
- Field offsets of density and a special calibration function
- Calculator mode
- Diagnostics and self-test modes
- Simple data transfer to a portable device using the free Troxler App

### Measurement Specifications

<table>
<thead>
<tr>
<th>Time</th>
<th>Thickness</th>
<th>kg/m³</th>
<th>pcf</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 minute</td>
<td>1 in (2.5 cm)</td>
<td>±16</td>
<td>±1.0</td>
</tr>
<tr>
<td>2 in (5.0 cm)</td>
<td>±10</td>
<td>±0.6</td>
<td></td>
</tr>
<tr>
<td>2.5 in (6.3 cm)</td>
<td>±8</td>
<td>±0.5</td>
<td></td>
</tr>
<tr>
<td>4 minutes</td>
<td>1 in (2.5 cm)</td>
<td>±8</td>
<td>±0.5</td>
</tr>
<tr>
<td>2 in (5.0 cm)</td>
<td>±5</td>
<td>±0.3</td>
<td></td>
</tr>
<tr>
<td>2.5 in (6.3 cm)</td>
<td>±4</td>
<td>±0.25</td>
<td></td>
</tr>
</tbody>
</table>

### Mechanical Specifications

| Gauge Size (Excluding Handles) (L x W x H) | 18.6 x 9.1 x 6.2 in (472 x 231 x 158 mm) |
| Gauge Height (Including Handles) | 9.5 in (240 mm) |
| Weight | 29.7 lb (13.5 kg) |
| Shipping Weight (Including Case) | 90 lb (40.8 kg) |

### Electrical Specifications

- Stored Energy: 30 W/h
- Battery Recharge Time: 14 to 16 hours
- Battery Recharge: 110/220 VAC 50 to 60 Hz or 12 to 14 VDC
- Power Consumption: 0.16 W/h

The battery packs are fully protected against overcharge and overdischarge and can operate using D alkaline batteries if necessary.

### Environmental Specifications

- Operating Temperature: Ambient
  - 14°F to 158°F (-10°C to 70°C)
  - Surface: 350°F (175°C)
- Storage Temperature: -70°F to 185°F (-55°C to 85°C)

### Radiological Specifications

- Gamma Source: 0.30 GBq (8 mCi) ±10% Cs-137
- Source Type: Sealed source, special form
- Source Housing: Stainless steel, double encapsulated
- Shielding: Tungsten, lead
- Case: DOT 7A, Type A, Yellow II label, Tl = 0.2

Made in USA