Safety Barrier System
Acceptance Conditions

HighwayGuard LDS Safety Barrier - Permanent

| Issue Date: | 16 March 2020 | Supplier: Ingal Civil Products |

These conditions take precedence over any instructions in the Product Manual. These acceptance conditions should be read in conjunction with the Product Manual and Transport for NSW Specification R132 – Safety Barrier Systems and Austroads Guide to Road Design Part 6:Roadside Design, Safety and Barriers.

Transport for NSW may withdraw or modify this acceptance at any time without notice. Users should refer to the Transport for NSW website to ensure they have the latest version of the conditions related to this product.

Acceptance of this product does not place any obligation on Transport for NSW, or its contractors, to purchase or use the product.

Status
Accepted - may be used on the classified road network

Product accepted
HighwayGuard LDS Safety Barrier

Variants
Nil

Variants that are NOT listed above are NOT recommended for acceptance.

Accepted speed
110 km/h

Tested Outcomes

<table>
<thead>
<tr>
<th>Containment Level</th>
<th>Point of Redistribution</th>
<th>Tested Article Length (m)</th>
<th>Anchor/Post Spacing (m)</th>
<th>Dynamic Deflection (m)</th>
<th>Working Width (m)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>MASH TL3</td>
<td>Interface between barrier and end treatment</td>
<td>60</td>
<td>12</td>
<td>0.68</td>
<td>1.22</td>
<td></td>
</tr>
</tbody>
</table>

Approved Connections

Crash Cushions or Terminals must be fitted to both ends of a barrier

Public Domain Products

- W-Beam Guardrail Not Permitted
- Thrie-Beam Guardrail Not Permitted
- Concrete Not Permitted

Proprietary Products

- BG800 Steel Safety Barrier
  - Refer to BG800 Safety Barrier acceptance documents for conditions of use.
  - The HighwayGuard BG800 transition must be used to connect the barriers.

Design Guidance

This product must be installed and maintained in accordance with the Product Manual and Transport for NSW specifications

- Minimum installation length: 60 metres between crash cushions/terminals (tested article)
- System width (m): 0.54 metres
- Minimum distance to excavation: Recorded dynamic deflection
- Slope limit: Side slope limit: 12 Horizontal to 1 Vertical (8%).
**Systems conditions**

1. Installation on top of a kerb is not recommended, however if installed on top of a kerb, all system components must be free to operate.
2. Flaring across the clear zone without a terminal listed above is NOT permitted.

**Gore area use**
Permitted

**Pedestrian area use**
Permitted – consider potential for snagging and deflection

**Cycleway use**
Permitted – consider potential for snagging and deflection

**Frequent impact likely**
Permitted

**Remote location**
Permitted

**Median use**
Permitted

### Foundation Pavement Conditions

<table>
<thead>
<tr>
<th>Pavement</th>
<th>Use</th>
<th>Accepted Speed (max)</th>
<th>Post/Pin Spacing (m)</th>
<th>Post/Pin Type</th>
<th>Pavement Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete</td>
<td>Permitted</td>
<td>100 km/h</td>
<td>12</td>
<td>M24 x 330mm threaded rod with resin</td>
<td>Min 200mm reinforced</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Min 250mm non-reinforced</td>
</tr>
<tr>
<td>Deep lift asphaltic concrete</td>
<td>Permitted</td>
<td>100 km/h</td>
<td>12</td>
<td>M24 x 330mm threaded rod with resin</td>
<td>Min 250mm</td>
</tr>
<tr>
<td>Asphalitic concrete over granular pavement</td>
<td>Permitted</td>
<td>100 km/h</td>
<td>12</td>
<td>M24 x 330mm threaded rod with resin</td>
<td>150mm asphalt concrete over granular subbase</td>
</tr>
<tr>
<td>Flush seal over granular pavement</td>
<td>Not Permitted</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unsealed compacted formation</td>
<td>Not Permitted</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Installation in pavement conditions not listed above have not been justified to the Transport for NSW's satisfaction.*