Safety Barrier Technical Conditions for Use

SENTRY W BEAM Safety Barrier - Permanent

| Issue Date: | 2 December 2019 | Supplier: | Australian Construction Products |
| These conditions take precedence over any instructions in the Product Manual. |
This document is a summary of the Austroads Safety Barrier Assessment Panel's assessment of the technical performance of the product against AS/NZS 3845 Parts 1 or 2 only. It does not consider procurement practices by individual Road Agencies.

The Austroads Safety Assessment Panel may at any time, withdraw or modify this Technical Conditions for Use without notice.

These acceptance conditions should be read in conjunction with the Product Manual and Austroads Guide to Road Design Part 6: Roadside Design, Safety and Barriers.

Acceptance of this product does not place any obligation on the Northern Territory Government or its contractors, to purchase or use the product.

Status

Accepted – may be used on the classified road network

Product accepted

SENTRY W BEAM SAFETY BARRIER - PERMANENT

Variants

Back to back installations (median)
Baseplate Installation

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

Accepted speed

100 km/h

Product manual reviewed

V1.6 – September 2019

Product manual


Design Requirements

<table>
<thead>
<tr>
<th>Containment Level</th>
<th>Point of Redirection</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 terminal</td>
<td>90</td>
<td>2.0</td>
<td>1.59</td>
<td>1.59</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
Permitted

Thrie-Beam Guardrail
Not Permitted

Concrete
Not Permitted

Proprietary Products

MAX-TENSION Guardrail Terminal
- Refer MAX-TENSION Guardrail Terminal Technical Conditions for Use.
- The MAX-TENSION transition to SENTRY W Beam must be used to connect the terminal to the barrier.
Design Guidance

This product must be installed and maintained in accordance with the Product Manual and Road Agency specifications. Road Agency specifications and standards shall have precedence.

<table>
<thead>
<tr>
<th>Minimum installation length</th>
<th>78 metres between crash cushions/terminals (tested article)</th>
</tr>
</thead>
<tbody>
<tr>
<td>System width (m)</td>
<td>0.20 metres</td>
</tr>
<tr>
<td>Minimum distance to excavation</td>
<td>Recorded dynamic deflection</td>
</tr>
<tr>
<td>Slope limit</td>
<td>Side slope limit: 6 Horizontal to 1 Vertical (17 %).</td>
</tr>
</tbody>
</table>

Systems conditions
1. Installation without an end treatment listed above is NOT permitted.
2. 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.
3. Flaring across the clear zone without a terminal listed above is NOT permitted.
4. To be installed in soil that meets or exceeds AASHTO Grade B standard.

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></td>
<td></td>
<td></td>
<td>Not Permitted</td>
<td></td>
</tr>
<tr>
<td>Deep lift asphaltic concrete</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asphaltric concrete over granular pavement</td>
<td>Permitted</td>
<td>100 km/h</td>
<td>2.0</td>
<td>ACP Sentry Barrier Post</td>
<td>Minimum AASHTO Standard Soil strength</td>
</tr>
<tr>
<td>Flush seal over granular pavement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Unsealed compacted formation</td>
<td></td>
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</tbody>
</table>

Note: Installation in pavement conditions not listed above have not been justified to the Panel’s satisfaction.