Safety Barrier System
Acceptance Conditions

BG800 Steel Safety Barrier

<table>
<thead>
<tr>
<th>Distributor</th>
<th>Ingal Civil Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Issued</td>
<td>26 March 2019</td>
</tr>
</tbody>
</table>

**Status**

Accepted – May be used on the classified road network.

These acceptance conditions should be read in conjunction with the Product Manual and Roads and Maritime Specification R132 – Safety Barrier Systems.

These acceptance conditions take precedence over any instructions in the Product Manual.

Roads and Maritime Services may withdraw or modify this acceptance at any time without notice. Users should refer to the Roads and Maritime Services website to ensure they have the latest version of the conditions related to this product.

**Product accepted**

Accepted for temporary and permanent installations

- BG800 Steel Rail Safety Barrier pinned at 60m spacing.
- 6 metre BG800 Steel Safety Barrier sections.
- 12 metre BG800 Steel Safety Barrier sections.
- BG800 Full Height Terminal End (6 and 12 metre).
- 0.61 metre BG 800 5° Radius Section.
- 0.61 metre BG 800 10° Radius Section.

**Variants NOT accepted**

- Variants that are not on the list above are not accepted.
- Variants accepted in other jurisdictions, but not accepted in the local jurisdiction, are NOT permitted.

**Speed limit (km/h)**

100 km/h (70 km/h if used with ABSORB 350 Plastic Terminal)

May be used in 110 km/h speed zones (permanent installations only)

**Tested containment**

- MASH Test Level 3 (2,270 kg at 100 km/h and 25°)
- EN1317 High Containment Level 2 (13,000 kg at 70 km/h and 20°)
- NCHRP 350 Test Level 4 (8,000 kg at 80 km/h and 15°)
- NCHRP 350 Test Level 3 (2,000 kg at 100 km/h and 25°)
- EN1317 Normal Containment Level 2 (1,500 kg at 110 km/h and 20°)

**Accepted dynamic deflection**

<table>
<thead>
<tr>
<th>Speed limit</th>
<th>Dynamic Deflection</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 70 km/h</td>
<td>1.66 metres</td>
</tr>
<tr>
<td>≤ 70 km/h</td>
<td>1.36 metres</td>
</tr>
</tbody>
</table>

Note: the accepted deflections are those measured in crash tests performed under controlled conditions. Crash tests represent an approximation of what is likely to be seen in the field. The use of interpolated/extrapolated deflection values is not accepted.
### Accepted working width

<table>
<thead>
<tr>
<th>Accepted working width</th>
<th>All speeds</th>
<th>Not specified. Refer to Austroads Guide to Road Design Part 6: Section 6.3.16 for guidance</th>
</tr>
</thead>
</table>

Working width is the distance between the traffic face of the road safety barrier system before the impact and the maximum lateral position of any major part of the system or vehicle during and after the impact.

Note: the accepted working widths are those measured in crash tests performed under controlled conditions. Crash tests represent an approximation of what is likely to be seen in the field. The use of interpolated/extrapolated values is not accepted.

### Point of need

- Leading Point of Need is 2 metres downstream of the approach end of the barrier.
- Trailing Point of Need is 2 metres upstream of the departure end of the barrier.

### Minimum length of barrier between terminals

<table>
<thead>
<tr>
<th>Minimum length of barrier between terminals</th>
<th>60 metres</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is the tested article length.</td>
<td></td>
</tr>
</tbody>
</table>

### System conditions

1. Anchor spacing greater than 60 metres is NOT permitted.
2. Flaring across the clear zone without a terminal listed below is NOT permitted.
3. 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.

### Approved terminals and connections

[A terminal must be fitted to both ends of the barrier]

<table>
<thead>
<tr>
<th>Approved terminals and connections</th>
<th>W-Beam guardrail</th>
<th>Thrie-Beam guardrail</th>
<th>Type F Concrete Safety Barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not Permitted</td>
<td>Not Permitted</td>
<td>Permitted – BG800 to Thrie Beam to Type F Concrete Safety Barrier. The transition includes the Full Height Terminal End</td>
</tr>
</tbody>
</table>

### Proprietary products

1. **UNIVERSAL TAU-II STEEL RAIL CUSHION**
   - Permitted for use with BG800 Steel Safety Barrier – Permanent.
   - See UNIVERSAL TAU-II Steel Rail Crash Cushion acceptance document for conditions of use.
   - The UNIVERSAL TAU-II COMPACT BACKSTOP must be used to connect the terminal to the barrier. The transition includes the Full Height Terminal End.
   - Permitted as a terminal on a flare.

2. **QUADGUARD**
   - Permitted for use with BG800 Steel Safety Barrier – Permanent.
   - See QUADGUARD acceptance document for conditions of use.
   - The BG 800 to QG TRANSITION must be used to connect the terminal to the barrier. The transition includes the Full Height Terminal End.
   - Permitted as a terminal on a flare.
3. SMART Steel Crash Cushion
- Permitted for use with BG800 Steel Safety Barrier – Permanent.
- See SMART Steel Crash Cushion acceptance document for conditions of use.
- The BG 800 to SMART STEEL CRASH CUSHION TRANSITION must be used to connect the terminal to the barrier. The transition includes the Full Height Terminal End.
- Permitted as a terminal on a flare.

4. ABSORB 350 PLASTIC TERMINAL – TEMPORARY
- Permitted for use with BG800 Steel Safety Barrier – temporary installations only
- The installation is restricted to a Speed Limit of 70 km/h or less.
- See ABSORB 350 Plastic Terminal acceptance document for conditions of use.
- The ABSORB 350 TRANSITION ASSEMBLY must be used to connect the terminal to the barrier. The transition includes the Full Height Terminal End.
- Not permitted as a terminal on a flare.

| Gore area use | Permitted |
| Pedestrian area use | Permitted – consider potential for snagging and deflection |
| Cycleway use | Permitted – consider potential for snagging and deflection |
| Median use | Permitted |
| Slope limit | Side slope limit: 12.5 Horizontal to 1 Vertical (8%) |

| Foundation pavement conditions | Concrete | Permitted |
| Deep lift Asphaltic Concrete | Permitted |
| Asphaltic concrete over granular pavement | Permitted |
| Flush seal over granular pavement | Permitted with driven ground anchor |
| Unsealed compacted formation | Permitted with driven ground anchor |
| Natural surface | Not Permitted |

Foundation pavement conditions must be smooth and free of snag points, kerbs or obstructions that may interfere with the operation of the product.
| Attachments and screens | In accordance with the requirements of Australian/New Zealand Standard AS/NZS 3845, road furniture such as headlight screens, signs, lighting posts and fences for pedestrians, visual screens, debris screens, platforms for workers and other non-product hardware must not be attached to the product.

Screens may be placed adjacent to the side of the product not exposed to traffic. The distance between the screen and the product shall be determined by a site specific risk assessment that considers the deflection distance.

Screens must not have horizontal members that present a risk of impaling errant vehicles that impact the product.

Acceptance of this product does not place any obligation on Roads and Maritime Services, or its contractors, to purchase or use the product. |