


# Safety Barrier Technical Conditions for Use

## BG800 LDS Steel Safety Barrier - Temporary

	<b>Issue Date:</b> 4 March 2021	<b>Supplier:</b> Highway Care International Pty Ltd
	<p><b>These conditions take precedence over any instructions in the Product Manual.</b></p> <p>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.</p> <p>The Austroads Safety Assessment Panel may at any time, withdraw or modify this Technical Conditions for Use without notice.</p> <p>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.</p> <p>Acceptance of this product does not place any obligation on the Northern Territory Government or its contractors, to purchase or use the product.</p>	

<b>Status</b>	<b>LEGACY from 1 January 2021</b>
<b>Product accepted</b>	<p>BG800 LDS Steel Safety Barrier</p> <ul style="list-style-type: none"> <li>6 metre BG800 LDS Steel Safety Barrier – Temporary sections</li> <li>12 metre BG800 LDS Steel Safety Barrier – Temporary sections</li> <li>BG800 LDS Full Height Terminal End (6 and 12 metre).</li> <li>0.61 metre BG 800 5° Radius Section.</li> <li>0.61 metre BG 800 10° Radius Section.</li> </ul> <p><u>Variants</u></p> <p>Variants that are NOT listed above are NOT recommended for acceptance.</p>
<b>Accepted Speed</b>	100 km/h
<b>Product Manual reviewed</b>	Rev. F – 11/20
<b>Product Manual</b>	<a href="https://az276019.vo.msecnd.net/valmontstaging/docs/librariesprovider35/manuals/bg800-manual-australia-amp-new-zealand---rev-c51847c7898cf6a15a1a9ff5200d30354.pdf?sfvrsn=364b1639_2">https://az276019.vo.msecnd.net/valmontstaging/docs/librariesprovider35/manuals/bg800-manual-australia-amp-new-zealand---rev-c51847c7898cf6a15a1a9ff5200d30354.pdf?sfvrsn=364b1639_2</a>

### Design Requirements

Containment Level	Point of Redirection (m)		Tested Article Length (m)	Anchor/Post Spacing (m)	Dynamic Deflection (m)	Working Width (m)	Notes
	Leading	Trailing					
NCHRP 350 TL3	Interface between barrier and the end treatment		60	12	0.89	1.43	
NCHRP 350 TL4	30	30	72	12	0.42	2.8	

### Approved Connections

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<i>Crash Cushions or Terminals must be fitted to both ends of a barrier</i>	
<b>Public Domain Products</b>	
W-Beam Guardrail	Not Permitted
Thrie-Beam Guardrail	Not Permitted
Concrete	Permitted – BG800 to Thrie Beam to Type F Concrete Safety Barrier. The transition includes the Full Height Terminal End.
<b>Proprietary Products</b>	
<b>LEGACY:</b> UNIVERSAL TAU-II Crash Cushion	<ul style="list-style-type: none"> <li>• <b>LEGACY status recommended from 1 January 2021.</b></li> <li>• Refer Universal Tau-II Crash Cushion Technical Conditions for Use.</li> <li>• The BG800 LDS to Universal Tau-II Crash Cushion transition must be used to connect the crash cushion to the barrier. The transition includes the Full Height Terminal End.</li> <li>• Reverse impacts into the transition section can produce a greater occupant severity value than preferred. Where reverse impacts are possible (e.g. bi-directional traffic), a risk assessment must be completed and steps to mitigate the likelihood of reverse impact should be implemented.</li> </ul>
<b>LEGACY:</b> QUADGUARD CZ Crash Cushion	<ul style="list-style-type: none"> <li>• <b>LEGACY status recommended from 1 January 2021.</b></li> <li>• Refer QUADGUARD CZ Crash Cushion Technical Conditions for Use.</li> <li>• The BG800 LDS to Quadguard CZ transition must be used to connect the crash cushion to the barrier. The transition includes the Full Height Terminal End.</li> <li>• Reverse impacts into the transition section can produce a greater occupant severity value than preferred. Where reverse impacts are possible (e.g. bi-directional traffic), a risk assessment must be completed and steps to mitigate the likelihood of reverse impact should be implemented.</li> </ul>
SMART Crash Cushion	<ul style="list-style-type: none"> <li>• Refer SMART Crash Cushion Technical Conditions for Use.</li> <li>• The BG800 LDS to SMART Crash Cushion transition must be used to connect the crash cushion to the barrier. The transition includes the Full Height Terminal End.</li> <li>• Risk assessment</li> </ul>
<b>LEGACY:</b> ABSORB 350 Plastic Terminal	<ul style="list-style-type: none"> <li>• <b>LEGACY status recommended from 1 January 2021.</b></li> <li>• <b>The installation is restricted to an impact speed of 70 km/h or less.</b></li> <li>• Refer to ABSORB 350 Terminal Technical Conditions for Use.</li> <li>• The BG800 LDS to AB350 Terminal transition must be used to connect the terminal to the barrier.</li> <li>• This is a gating device.</li> </ul>
HIGHWAYGUARD LDS Safety Barrier	<ul style="list-style-type: none"> <li>• Refer to HighwayGuard LDS Technical Conditions for Use</li> <li>• The BG800 LDS to HighwayGuard LDS Barrier transition must be used to connect the barriers.</li> </ul>
ABSORB-M Crash Cushion	<ul style="list-style-type: none"> <li>• <b>The installation is restricted to an impact speed of 80 km/h or less.</b></li> <li>• Refer to Absorb-M Crash Cushion Technical Conditions for Use.</li> <li>• The BG800 LDS to Absorb-M Crash Cushion transition must be used to connect the crash cushion to the barrier.</li> <li>• This is a gating device.</li> </ul>

### Design Guidance

<b>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</b>	
Minimum installation length	60m – TL3 72m – TL4
System width (m)	0.54
Minimum distance to excavation	0.89m - measured from the outer edge of the foot on the works side
Slope limit	8%
Systems conditions	<ol style="list-style-type: none"> <li>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.</li> <li>2. All offsets are to be measured from the relevant outer edge of the foot. The foot is not trafficable.</li> </ol>
Gore area use	Permitted
Pedestrian area use	Permitted

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Cycleway use	Permitted
Frequent impact likely	Permitted
Remote location	Permitted
Median use	Permitted

Foundation Pavement Conditions					
Pavement	Use	Accepted Speed (max)	Post/Pin Spacing (m)	Post/Pin Type	Pavement Construction
Concrete	Permitted	100 km/h	12	Refer to manual	Refer to manual
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				

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