Safety Barrier Technical Conditions for Use

BG800 MDS Steel Safety Barrier - Temporary

Issue Date: 6 April 2020

Supplier: Ingal Civil 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.** These acceptance conditions take precedence over any instructions in the Product Manual.
Product accepted	BG800MDS Steel Safety Barrier <u>Variants</u> • 6 metre BG800 MDS Steel Safety Barrier – Temporary sections with an attached T-Top structure, concrete base using Hilti wedge bolt anchors • 12 metre BG800 MDS Steel Safety Barrier – Temporary sections with an attached T-Top structure, concrete base using Hilti wedge bolt anchors • BG800 MDS 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 that are NOT listed above are NOT recommended for acceptance.
Accepted Speed	100 km/h
Product Manual reviewed	Rev. E – 03/20
Product Manual	https://az276019.vo.msecnd.net/valmontstaging/docs/librariesprovider35/manuals/bg800-manual-australia-amp-new-zealand---rev-c51847c7898cf6a15a1a9ff5200d30354.pdf?sfvrsn=364b1639_2

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					
MASH TL3	Interface between barrier and the end treatment		42	6.0	0.44	0.98	

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	
SMART Steel Crash Cushion	• Refer SMART Crash Cushion Technical Conditions for 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.

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	
Minimum installation length	42 metres between crash cushions/terminals (tested article)
System width (m)	0.54 metres
Minimum distance to excavation	0.44 metres when anchored on concrete pavement 0.70 metres when anchored on flexible pavement
Slope limit	Side slope limit: 12.5 Horizontal to 1 Vertical (8 %).
Systems conditions	1. Anchor spacing greater than 6 metres is NOT permitted. 2. Installation on top of a kerb is not recommended. 3. Flaring across the clear zone without a terminal listed is NOT permitted.
Gore area use	Refer to approved terminal conditions
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					
Pavement	**Use**	**Accepted Speed (max)**	**Post/Pin Spacing (m)**	**Post/Pin Type**	**Pavement Construction**
Concrete	Permitted	100 km/h	6	M24 x 250mm threaded rod with resin	Approx. 204mm (8”) Concrete
Deep lift asphaltic concrete	Permitted	100 km/h	6	M24 x 450mm threaded rod with resin	Minimum 150mm (6”) Asphalt
Asphaltic concrete over granular pavement	Permitted	100 km/h	6	M24 x 450mm threaded rod with resin	Approx. 89-102mm (3.5-4”) asphalt over Approx. 152mm (6”) thick dense grade aggregate (DGA)
Flush seal over granular pavement	Not Permitted				
Unsealed compacted formation	Not Permitted				

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