


Safety Barrier Technical Conditions for Use

HighwayGuard LDS Safety Barrier - Temporary

	Issue Date: 4 March 2021	Supplier: Highway Care International
	<p>These conditions take precedence over any instructions in the Product Manual.</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>	

Status	Recommended for Acceptance
Product accepted	HighwayGuard LDS Safety Barrier <u>Variants</u> Variants that are NOT listed above are NOT recommended for acceptance.
Accepted Speed	100 km/h
Product Manual reviewed	Revision 1.1 – 11/20
Product Manual	Highwayguard Temporary Barriers Ingal Civil Products

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 end treatment		60	12	0.68	1.22	

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	
LEGACY:	• LEGACY status recommended from 1 January 2021.

Quadguard CZ Crash Cushion	<ul style="list-style-type: none"> Refer to Quadguard Crash Cushion Technical Conditions for Use. The HighwayGuard LDS to Quadguard Crash Cushion transition must be used to connect the crash cushion to the barrier. 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.
LEGACY: Universal Tau-II Crash Cushion	<ul style="list-style-type: none"> LEGACY status recommended from 1 January 2021. Refer to Universal Tau-II Crash Cushion Technical Conditions for Use. The HighwayGuard LDS to Universal Tau-II Crash Cushion transition must be used to connect the crash cushion to the barrier. 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.
ABSORB-M Crash Cushion	<ul style="list-style-type: none"> The installation is restricted to an impact speed of 80 km/h or less. Refer to Absorb-M Crash Cushion Technical Conditions for Use. The HighwayGuard LDS to Absorb-M Crash Cushion transition must be used to connect the crash cushion to the barrier. This is a gating device.

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	60 metres between crash cushions/terminals (tested article)
System width (m)	0.54
Minimum distance to excavation (m)	0.68 – measured from the outer edge of the foot on the works side
Slope limit	8%
Systems conditions	<ol style="list-style-type: none"> 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. All offsets are to be measured from the relevant outer edge of the foot. The foot is not trafficable.
Gore area use	Permitted
Pedestrian area use	Permitted
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	100km/h	12	M24 x 330mm threaded rod with epoxy	Min 200mm reinforced Min 250mm non-reinforced
Deep lift asphaltic concrete					Min 250mm
Asphaltic concrete over granular pavement					150mm asphalt concrete over granular subbase
Flush seal over granular pavement	Not Permitted				
Unsealed compacted formation					

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