


Safety Barrier Technical Conditions for Use

SMART Steel Crash Cushion

	Issue Date: 5 December 2020	Supplier: LB Australia
	<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	SMART Crash Cushion <u>Variants</u> SC1100GM SC170GM Variable width transition piece up to 914mm – unidirectional only. Not permitted as a departure terminal. Variants that are NOT listed above are NOT recommended for acceptance.
Accepted Speed	70 km/h (TL2) – SC170GM 100 km/h (TL3) – SC1100GM
Product Manual reviewed	Dated 2015
Product Manual	http://www.smartcushion.com.au/sites/smartcushion.com.au/files/documents/SCI_Smart_Cushion_Design_and_Installation_Manual_2015.pdf

Design Requirements

Containment Level	Point of Redirection (m)		Tested Article Length (m)	Anchor/Post Spacing (m)	Notes
	Leading	Trailing			
MASH TL2	Fully redirective		4.2	Refer drawings	
MASH TL3	Fully redirective		6.6	Refer drawings	

SMART Crash Cushion – Permanent & Temporary

Approved Connections

<i>Crash Cushions or Terminals must be fitted to both ends of a barrier</i>	
Public Domain Products	
W-Beam Guardrail	Not permitted
Thrie-Beam Guardrail	Permitted – reverse impacts into the transition section can produce a greater occupant severity value than preferred. Where reverse impacts are possible (e.g. bidirectional traffic) a risk assessment must be completed and steps to mitigate the likelihood of reverse impact should be implemented.
Concrete	
Proprietary Products	
	Refer to Safety Barrier Technical Conditions for Use for approval connections

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	
System length (m)	4.2 SCI70GM (TL2) 6.6 SCI100GM (TL3)
System width (m)	0.61 – standard Up to 0.914 – variable width
Slope limit	10%
Systems conditions	Installation on top of a kerb is not recommended, however if installed on top of a kerb all system component must be free to operate.
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	Refer to drawings	M18 x 178mm threaded rod with epoxy	Permanent installations on reinforced concrete pavement or pad is permitted in the manufacturer's drawings Temporary installations permitted pinned to asphalt in accordance with manufacturer's drawings
Deep lift asphaltic concrete					
Asphaltic concrete over granular pavement					
Flush seal over granular pavement					
Unsealed compacted formation	Not permitted				

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