Safety Barrier System Acceptance Conditions

SMART Crash Cushion

Issue Date: 14 January 2021

Supplier: LB Australia

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

These acceptance conditions should be read in conjunction with the Product Manual and Transport for NSW Specification R132 – Safety Barrier Systems and Austroads Guide to Road Design Part 6:Roadside Design, Safety and Barriers.

Transport for NSW may withdraw or modify this acceptance at any time without notice. Users should refer to the Transport for NSW website to ensure they have the latest version of the conditions related to this product.

Acceptance of this product does not place any obligation on Transport for NSW, or its contractors, to purchase or use the product.

Status	Accepted - may be used on the classified road network
Product accepted	SMART Steel Crash Cushion Variants SCI100GM SCI70GM 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) – SCI70GM 100 km/h (TL3) – SCI100GM

Tested Outcomes

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

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	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 approved connections

Design Guidance

This product must be installed and maintained in accordance with the Product Manual and Transport for NSW specifications	
System length (m)	4.2 SCI70GM (TL2) 6.6 SCI100GM (TL3)
System width (m)	0.61 – standard Up to 0.914 – variable width
Minimum distance to excavation	Not applicable
Slope limit	Side slope limit: 10 Horizontal to 1 Vertical (10%)
Systems conditions	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.
Gore area use	Permitted
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	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 Transport for NSW's satisfaction.