# **Safety Barrier Technical Conditions for Use**

## **SAFEZONE LDS Safety Barrier - Temporary**



**Issue Date:** 5 December 2020 **Supplier:** Laura Metaal Road Safety

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	Recommended for Acceptance				
	SAFEZONE LDS Safety Barrier				
Product accepted	<u>Variants</u>				
	Variants that are NOT listed above are NOT recommended for acceptance.				
Accepted Speed	100 km/h				
Product Manual reviewed	Ver.1.12				
Product Manual	https://www.safedirection.com.au/wp-content/uploads/2023/04/Product-Datasheet-SafeZone.pdf				

#### **Design Requirements**

Containment	Point of Redirection (m)		Tested Article	Anchor/Post	Dynamic	Working	Neder
Level	Leading	Trailing	Length (m)	Spacing (m)	Deflection (m)	Width (m)	Notes
MASH TL3	Interface between barrier and end treatment		40.6	11.6	0.61	1.13	
MASH TL4	15.8	15.8	40.6	11.6	0.85	2.17	

#### **Approved Connections**

An accepted end treatment must be provided at both ends of all barrier installations			
Public Domain Products			
W-Beam Guardrail	Not Permitted		
Thrie-Beam Guardrail	Not Permitted		
Concrete	Not Permitted		



Proprietary Products				
LEGACY: UNIVERSAL TAU-II Crash Cushion	LEGACY status recommended from 1 January 2021.			
	Refer Universal Tau-II Crash Cushion Technical Conditions for Use.			
	• The Safezone LDS to Universal TAU-II Crash Cushion transition must be used to connect the crash cushion to the barrier.			
	<ul> <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>			
UNIVERSAL TAU-M Crash Cushion	Refer Universal Tau-M Crash Cushion Technical Conditions for Use.			
	• The Safezone LDS to Universal Tau-M Crash Cushion transition must be used to connect the cras cushion to the barrier.			
	<ul> <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>			
	The installation is restricted to an impact speed of 80 km/h or less.			
ABSORB-M Crash Cushion	Refer to Absorb-M Crash Cushion Technical Conditions for Use.			
	The Safezone 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**

Minimum installation length	40.6 metres between crash cushions/terminals (tested article)			
System width (m)	0.639			
Minimum distance to excavation	ce to excavation  0.61 (TL3) – measured from the outer edge of the foot on the works side  0.85 (TL4) – measured from the outer edge of the foot on the works side			
Slope limit	8%			
Systems conditions	nstallation 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	100 km/h	11.6	M30 x 300mm threaded rod with epoxy TL3 and TL4 M30 x 175mm threaded rod with epoxy TL3 only	Min. 250 mm reinforced or non- reinforced	
Deep lift asphaltic concrete	Permitted	100 km/h	11.6	M30 x 300mm threaded rod with epoxy TL3 and TL4	Min. 250 mm	
Asphaltic concrete over granular pavement	Permitted	100 km/h	11.6	M30 x 300mm threaded rod with epoxy TL3 and TL4	Min. 150 mm AC over 100 mm compacted base	
Flush seal over granular pavement	Not permitted					
Unsealed compacted formation						

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