


Safety Barrier Technical Conditions for Use

SAFEZONE LDS Safety Barrier - Temporary

	Issue Date: 5 December 2020	Proponent: Laura Metaal Road Safety
	<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. The Austroads Safety Barrier Assessment Panel may at any time, withdraw or modify this document without notice.</p> <p>These Technical Conditions for Use do not imply that this product may be used on roads under the care and control of individual Road Agencies. Users should refer to individual Road Agency websites to determine whether this product is accepted for use within that jurisdiction, and if the Road Agency has adopted any additional or specific requirements.</p> <p>These conditions do not take precedence over Road Agency specifications and standards.</p> <p>These conditions do take precedence over instructions in the Product Manual.</p>	

Status	Recommended for Acceptance
Product accepted	SAFEZONE LDS Safety Barrier
	<u>Variants</u> Variants that are NOT listed above are NOT recommended for acceptance.
Accepted impact speed	100 km/h
Product manual reviewed	Ver.1.12

Design Requirements

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 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	<ul style="list-style-type: none"> • 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. • 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.
UNIVERSAL TAU-M Crash Cushion	<ul style="list-style-type: none"> • 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 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 Safezone LDS to Absorb-M Crash Cushion transition must be used to connect the crash cushion to the barrier. • This is a gating device.
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Design Guidance

Minimum installation length	40.6 metres between crash cushions/terminals (tested article)
System width (m)	0.639
Minimum distance to excavation (m)	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
Side slope limit	8%
System conditions	<ol style="list-style-type: none"> 1. 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. 2. 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 Type	Use	Max Accepted Impact Speed (km/h)	Post/Pin Spacing (m)	Post/Pin Type	Pavement Construction
Concrete	Permitted	100	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	11.6	M30 x 300mm threaded rod with epoxy TL3 and TL4	Min. 250 mm
Asphaltic concrete over granular pavement	Permitted	100	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.