

Safety Barrier Technical Conditions for Use

SafeZone Safety Barrier – Permanent & Temporary

	Issue Date: 26 November 2024	Proponent: Jaybro Group
	Status: Recommended for acceptance	Accepted Impact Speed: 100 km/h
<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 take precedence over instructions in the Product Manual, refer Austroads Technical Advice SBTA 22-001. Product manual current at time of TCU: V1.25</p>		

Design Requirements

Containment Level	MASH TL3	MASH TL4
Accepted Impact Speed	100 km/h	100 km/h
Point of Redirection – Leading (m)	Interface between the barrier and the end treatment	27.4
Point of Redirection – Trailing (m)		42.2
Tested Article Length (m)	69.6	69.6
Anchor/Post Spacing (m)	69.6	69.6
Dynamic Deflection (m)	1.70	2.07
Working Width (m)	2.06	2.96
System Width (m)	0.45	0.45
Unit Length (m)	5.80	5.80
Minimum Support Width (m)	Requires site specific analysis. Refer Austroads Technical Advice SBTA 22-001.	
Minimum Installation Length (m) <small>between crash cushions/terminals - tested article</small>	69.6	69.6
System Conditions	<ul 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. 	

Approved Variants

Variant	Functional Purpose	Conditions
Nil		
<i>Variants that are not listed above are NOT recommended for acceptance. Alterations to or combinations of the variants listed above are not recommended unless noted.</i>		

Approved Connections

An accepted end treatment must be provided at both ends of all barrier installations	
End Treatments – Permanent & Temporary Installations	
Tau-XR Crash Cushion	<ul style="list-style-type: none"> Permitted for use in unidirectional applications only. Not permitted as a departure terminal. Refer to Tau-XR Crash Cushion Technical Conditions for Use.

Universal Tau-M Crash Cushion	<ul style="list-style-type: none"> • Refer Universal Tau-M Crash Cushion Technical Conditions for Use. • The Safezone barrier adjacent to the Universal TAU-M Crash Cushion must be anchored to the pavement as required by the Product Manual. • The SafeZone 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 product 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.
End Treatments – Temporary Installations Only	
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 Absorb-M Crash Cushion Technical Conditions for Use. • The SafeZone to Absorb-M Crash Cushion transition must be used to connect the crash cushion to the barrier. • This is a gating device.
<i>Connections that are not listed above are NOT recommended for acceptance.</i>	

Foundation Pavement Conditions

Permanent Installations Only			
Pavement Type	Post/Pin Spacing (m)	Post/Pin Type	Pavement Construction
Concrete	69.6	M30 X 300mm threaded rod with epoxy	Min 250mm reinforced or non-reinforced
Deep lift asphaltic concrete	69.6	M30 X 300mm threaded rod with epoxy	Min 250mm
Asphaltic concrete over granular	69.6	M30 X 300mm threaded rod with epoxy	Min 150mm AC over 100mm granular pavement
Flush seal over granular	Not permitted		
Unsealed compacted formation	Not permitted		
<i>Installation in pavement conditions not permitted above have not been justified to the Panel's satisfaction.</i>			

Temporary Installations Only			
Pavement Type	Post/Pin Spacing (m)	Post/Pin Type	Pavement Construction
Concrete	69.6	M30 X 300mm threaded rod with epoxy (TL4) or M20 x 300mm Excalibur Bolt (TL3 only)	Min. 250mm reinforced or non-reinforced
Deep lift asphaltic concrete	69.6	M30 X 300mm threaded rod with epoxy (TL4) or M20 x 300mm Excalibur Bolt (TL3 only)	Min 250mm
Asphaltic concrete over granular	69.6	M30 X 300mm threaded rod with epoxy (TL4) or M20 x 300mm Excalibur Bolt (TL3 only)	Min 150mm AC over 100mm granular pavement
		M30 x 520mm smooth pin (TL3 only)	Min 150mm AC over 350mm granular pavement
Flush seal over granular	69.6	M30 x 520mm smooth pin (TL3 only)	Min 500mm granular pavement
Unsealed compacted formation	69.6	M30 x 520mm smooth pin (TL3 only)	Min 500mm formation (AASHTO standard soil strength)
<i>Installation in pavement conditions not permitted above have not been justified to the Panel's satisfaction.</i>			