Safety Barrier Technical Conditions for Use

QUICKCHANGE REACTIVE TENSION – Concrete Safety Barrier – Temporary and Permanent



Issue Date: 3 September 2021 **Proponent:** Lindsay Transportation Solutions

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		
Product accepted	QUICKCHANGE REACTIVE TENSION – Concrete Safety Barrier – Temporary and Permanent		
	<u>Variants</u>		
	Variants that are NOT listed above are NOT recommended for acceptance.		
Accepted impact speed	100 km/h		
Product manual reviewed	Dated 24 January 2017		
Product Manual	https://www.lindsay.com/apac/en/infrastructure/brands/road-zipper/		

Design Requirements

	Point of Redirection		Tested	Anchor/Post	Dynamic	Working	
Containment Level	Leading (m)	Trailing (m)	Article Length (m)	Spacing (m)	Deflection (m)	Width (m)	Notes
MASH TL3	85	85	170	freestanding	1.05	1.52	

Approved Connections

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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		



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Proprietary Products					
	LEGACY status recommended from 1 January 2021. The installation is restricted to an impact speed of 70 km/h or less.				
ABSORB 350 Plastic Terminal	 Refer to ABSORB 350 Terminal Technical Conditions for Use. The Quickchange to AB350 terminal transition must be used to connect the terminal to the barrier. This is a gating device. 				

Design Guidance

Minimum installation length (m)	170 metres between crash cushions/terminals (tested article)			
System width (m)	0.46			
Minimum distance to excavation (m)	1.52 measured from the traffic face of the barrier			
Side slope limit	10%			
System conditions	 When used in 100 km/h speed zones exposed ends must be shielded by approved permanent barriers and overlapped by minimum of 85 metres. 			
	2. Must only be relocated using the approved Barrier Transfer Machine.			
	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			
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			Freestanding Foundation pavement conditions must be smooth and free of snag points, kerbs or obstruction that may interfere with the operation of the product			
Deep lift asphaltic concrete						
Asphaltic concrete over granular pavement	Permitted	100				
Flush seal over granular pavement						
Unsealed compacted formation			No	ot permitted		

 ${\it Note: Installation in pavement conditions not permitted above have not been justified to the {\it Panel's satisfaction.}}$