Safety Barrier Technical Conditions for Use

Thrie-Beam Steel Rail Safety Barrier - Permanent

Issue Date: 7 June 2019	**Supplier:** Public Domain

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. This Technical Conditions for Use does 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 Road Agency's jurisdiction.

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	**Phase Out** • New installations of connections to rigid bridge barriers permitted on the classified road network, until further notification. • New longitudinal standalone systems are to be replaced by MASH tested and accepted products.	
Product accepted	• Post type = Steel "C" section post • Post spacing = 2.0m • Footing = driven post <u>Variants</u> • Notched blockout • Un-notched blockout • Back to back installation • Transition to bridge barrier <u>Options</u> • Nested Rail • Post on base plate • Post on slip base plate	
Variants NOT accepted	• Multiple blockouts • Variants that are not on the list above are not accepted • Variants accepted in other jurisdictions, but not accepted at the local jurisdiction, are NOT permitted	
Accepted speed	110km/h	
Product manual reviewed		
Tested containment	NCHRP 350 Test Level 3 (2,000kg at 100km/h and 20º)	
Accepted dynamic deflection	All speeds	0.6m
	Note: the accepted deflections are those measured in crash tests performed under controlled conditions. Crash tests represent an approximation of what is likely to be seen in the field. The use of interpolated/extrapolated deflection values is not accepted.	
Product manual	https://www.ingalcivil.com.au/products/road-safety-barriers/guardrail/thriebeam#Manual http://www.acprod.com.au/technical-drawings/thriebeam-guardrail/1 https://www.safedirection.com.au/wp-content/uploads/2019/12/PDS-002-05-Thrie-Beam.pdf	

Accepted working width	All speeds	Not specified. Refer to *Austroads Guide to Road Design Part 6: Section 6.3.16* for guidance	
	Working width is the distance between the traffic face of the road safety barrier system before the impact and the maximum lateral position of any major part of the system or vehicle during and after the impact. Note: the accepted working widths are those measured in crash tests performed under controlled conditions. Crash tests represent an approximation of what is likely to be seen in the field. The use of interpolated/extrapolated values is not accepted.		
Point of need	The interface between the barrier and the terminal		
Minimum length of barrier between terminals	10 metres		
Systems conditions	1. Flaring across the clear zone without an approved connection and terminal is NOT permitted. 2. 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.		
Approved terminals and connections *[A terminal must be fitted to both ends of the barrier]*	W-Beam guardrail		Permitted
	Type F Concrete Safety Barrier		Permitted
	Proprietary Products		Refer to end treatment acceptance conditions for approved connections
Gore area use	Permitted		
Pedestrian area use	Permitted – consider potential for snagging and deflection		
Cycleway use	Permitted – consider potential for snagging and deflection		
Median use	Permitted		
Slope limit	Side slope limit: 10 Horizontal to 1 Vertical (10%).		
Foundation pavement conditions	Concrete		Permitted
	Deep lift asphaltic concrete		Permitted
	Asphaltic concrete over granular pavement		Permitted
	Flush seal over granular pavement		Permitted
	Unsealed compacted formation		Permitted
	Natural Surface		Permitted
	Foundation pavement conditions must be smooth and free of snag points, kerbs or obstructions that may interfere with the operation of the product.		
Attachments and screens	In accordance with the requirements of Australian/New Zealand Standard AS/NZS 3845, road furniture such as headlight screens, signs, lighting posts and fences for pedestrians, visual screens, debris screens, platforms for workers and other non-product hardware **must not be attached** to the product. Screens may be placed adjacent to the side of the product not exposed to traffic. The distance between the screen and the product shall be determined by a site specific risk assessment that considers the deflection distance. Screens must not have horizontal members that present a risk of impaling errant vehicles that impact the product.		
	Acceptance of this product does not place any obligation on Road Agencies, or is contractors, to purchase or use this product.		

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