


Safety Barrier Technical Conditions for Use

ArmorZone MASH Longitudinal Barrier - Temporary

	Issue Date: 5 September 2019	Supplier: Ingal Civil Products
	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	Accepted – may be used on the classified road network
Product accepted	Armorzone MASH Longitudinal Barrier <u>Variants</u> Nil Variants that are NOT listed above are NOT recommended for acceptance.
Accepted speed	70 km/h (TL2), 50 km/h (TL1)
Product manual reviewed	Release 03/19 (Australia/New Zealand)
Product manual	https://www.ingalcivil.com.au/products/temporary-barriers/armorzone-mash

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 TL1	24	26	50	n/a	2.16	2.61	Units must not be interchanged with Armorzone NCHRP 350 units
MASH TL2	24	26	50	n/a	4.10	4.60	Units must not be interchanged with Armorzone NCHRP 350 units

Approved Connections

Crash Cushions or Terminals must be fitted to both ends of a barrier	
Public Domain Products	
W-Beam Guardrail	Not Permitted
Thrie-Beam Guardrail	Not Permitted
Concrete	Not Permitted
Proprietary Products	
Armorzone MASH End Treatment Unit	<ul style="list-style-type: none"> This is a gating terminal. Terminal units are not filled with water.

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Design Guidance

This product must be installed and maintained in accordance with the Product Manual and Road Agency specifications. Road Agency specifications and standards shall have precedence.	
Minimum installation length	46 metres between crash cushions/terminals (tested article)
System width (m)	0.45 metres
Minimum distance to excavation	4.6 metres measured from the traffic face of the barrier.
Slope limit	Side slope limit: 10 Horizontal to 1 Vertical (10%).
Systems 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. Flaring across the clear zone without a terminal listed above is NOT permitted. 3. ArmorZone MASH barriers must NOT be installed with ArmorZone NCHRP 350 barriers, due to their different crash rating and performance.

Gore area use	Permitted
Pedestrian area use	Permitted – consider potential for snagging and deflection
Cycleway use	Permitted – consider potential for snagging and deflection
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	70 km/h	N/A	N/A	Not applicable
Deep lift asphaltic concrete	Permitted	70 km/h	N/A	N/A	Not applicable
Asphaltic concrete over granular pavement	Permitted	70 km/h	N/A	N/A	Not applicable
Flush seal over granular pavement	Permitted	70 km/h	N/A	N/A	Not applicable
Unsealed compacted formation	Permitted	70 km/h	N/A	N/A	Graded level surface

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