


Safety Barrier Technical Conditions for Use

RAMSHIELD Steel Safety Barrier - Permanent

	Issue Date: 30 November 2023	Proponent: Safe Direction
	<p>These conditions take precedence over any instructions in the Product Manual.</p> <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.</p> <p>The Austroads Safety Assessment Panel may at any time, withdraw or modify this Technical Conditions for Use without notice.</p> <p>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.</p> <p>Acceptance of this product does not place any obligation on the Northern Territory Government or its contractors, to purchase or use the product.</p>	

Status	Accepted – may be used on the classified road network
Product accepted	RAMSHIELD Steel Safety Barrier <u>Variants</u> Single 6 metre clear span – no closer than the system dynamic deflection from hinge point Base plate installation – may only be installed on concrete foundation pavements 1 metre post spacing (810mm post embedment) – should be limited to constrained locations Variants that are NOT listed above are NOT recommended for acceptance.
Accepted Speed	100 km/h
Product Manual reviewed	PM 020/04
Product Manual	https://www.safedirection.com.au/products/road-barriers/ramshield/

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 the end treatment		96.5	2.0	1.56	1.63	

Approved Connections

<i>An accepted end treatment must be provided at both ends of all barrier installations</i>	
Public Domain Products	
W-Beam Guardrail	Permitted
Thrie-Beam Guardrail	Permitted
Concrete	<ul style="list-style-type: none"> Permitted using SBTA 21-005 Transition from strong post w-beam to rigid concrete barrier Permitted using Ramshield Transition

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Proprietary Products	
MSKT Steel Rail Terminal - Permanent	<ul style="list-style-type: none"> Refer to MSKT Steel Rail Terminal Technical Conditions for Use.
Max-Tension Guardrail Terminal	<ul style="list-style-type: none"> Refer to Max-Tension Guardrail Terminal Technical Conditions for Use.
Bikershield Motorcyclist Protection Device	<ul style="list-style-type: none"> Motorcyclist Protection Device Tested to EN1317.8 – Class C60 with Severity Level 2 Not permitted on kerbed roads

Design Guidance

Minimum installation length	66 metres between crash cushions/terminals (tested article)
System width (m)	0.18
Minimum distance to excavation (m)	1.56 – measured from the face of the barrier
Slope limit	10%
Systems conditions	<ol style="list-style-type: none"> Only to be installed with system designed driving head. Installation on top of a kerb is not recommended, however if installed on top of a kerb, a semi-mountable or flatter kerb is recommended with system height to be measured from top of kerb. All components are to be free to operate.
Gore area use	Not permitted
Pedestrian area use	Permitted
Cycleway use	Permitted
Frequent impact likely	Permitted
Remote location	Permitted
Median use	Permitted – not suitable for impact on the post side

Foundation Pavement Conditions					
Pavement	Use	Max Accepted Impact Speed (km/h)	Post/Pin Spacing (m)	Post/Pin Type	Pavement Construction
Concrete	Permitted	100	2.0	Ramshield base plate post	Refer to drawings (RAM009 Rev.0)
Deep lift asphaltic concrete	Permitted	100	2.0	Ramshield driven post	Minimum AASHTO standard soil strength
Asphaltic concrete over granular pavement					
Flush seal over granular pavement					
Unsealed compacted formation					

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