


# Safety Barrier Technical Conditions for Use

## RAMSHIELD High Containment Steel Safety Barrier - Permanent

	<b>Issue Date:</b> 8 December 2022	<b>Proponent:</b> Safe Direction
	<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><b>These conditions do not take precedence over Road Agency specifications and standards.</b></p> <p><b>These conditions do take precedence over instructions in the Product Manual.</b></p>	

Status	Recommended for Acceptance
Product accepted	<p>RAMSHIELD High Containment Steel Safety Barrier</p> <p><u>Variants</u></p> <p>Ramshield Edge – requires site specific design. Acceptance of design at discretion of road controlling authority.</p> <p>Variants that are NOT listed above are NOT recommended for acceptance.</p>
Accepted impact speed	100 km/h
Product manual reviewed	<p>PM 030/02 – Ramshield HC Safety Barrier</p> <p>PM 025—05 – BikerShield MPR</p>

## 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 end treatment		82	2.0	1.00	1.10	
MASH TL4	9.5	40	82	2.0	1.10	2.20	

## Approved Connections

An accepted end treatment must be provided at both ends of all barrier installations	
Public Domain Products	
W-Beam Guardrail	Permitted
Thrie-Beam Guardrail	Permitted
Concrete	<p>Permitted using SBTA 21-005 Transition from strong post w-beam to rigid concrete barrier</p> <p>Permitted using Ramshield Transition</p>
Proprietary Products	
MSKT Steel Rail Terminal - Permanent	<ul style="list-style-type: none"> <li>Refer to MSKT Steel Rail Terminal Technical Conditions for Use.</li> </ul>
Ramshield Safety Barrier	<ul style="list-style-type: none"> <li>Refer to Ramshield Safety Barrier Technical Conditions for Use.</li> </ul>
BikerShield Motorcyclist Protection Device	<ul style="list-style-type: none"> <li>Motorcyclist Protection Device</li> <li>Tested to EN-1317.8 – Class C60 with Severity Level 2</li> <li>Not permitted on kerbed roads</li> </ul>

## Design Guidance

Minimum installation length	82 metres between crash cushions/terminals (tested article)
System width (m)	0.23
Minimum distance to excavation (m)	1.00 TL3 – measured from the face of the barrier 1.10 TL4 – measured from the face of the barrier
Side slope limit	10%
System conditions	1. Only to be installed with system designed driving head. 2. Installation on top of a kerb is not recommended, however if installed on top of a kerb all components are to 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	Permitted	100	2.0	Driven Post	Minimum AASHTO standard soil strength
Deep lift asphaltic concrete					
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.