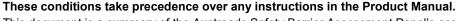
# **Safety Barrier Technical Conditions for Use**

## **EZY-GUARD SMART Steel Rail Safety Barrier - Permanent**

Issue Date: 15 September 2022

**Proponent:** Ingal Civil Products



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	EZY-GUARD SMART Steel Rail Safety Barrier					
	Variants  Back to back installations  Base plate installation – may only be installed on concrete foundation pavements  Ezy-Lift – only to be installed where the road surface has been overlayed  1.0m post spacing (880mm 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	Release 07/22					
Product manual <a href="https://www.ingalcivil.com.au/products/road-safety-barriers/guardrail/ezy-guard-smart#Manual">https://www.ingalcivil.com.au/products/road-safety-barriers/guardrail/ezy-guard-smart#Manual</a>						

#### **Design Requirements**

Containme Level	Containment	Point of Redirec		Tested Article	Anchor/Post	Dynamic	Working	
	_	Leading (m)	Trailing (m)	Length (m)	Spacing (m)	Deflection (m)	Width (m)	Notes
	MASH TL3	Interface between barrier and end treatment		90.8	2.0	1.65	1.65	

#### **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	Not Permitted			



### **EZY-GUARD SMART Steel Rail Safety Barrier - Permanent**

Proprietary Products				
QUADGUARD M10 Crash Cushion	<ul> <li>Refer QUADGUARD M10 Crash Cushion Technical Conditions for Use.</li> <li>The QUAD-BEAM transition to end terminal must be used to connect the crash cushion to the barrier.</li> <li>Reverse impacts into the transition section can produce a greater occupant severity value tha preferred. Where reverse impacts are possible (e.g. bi-directional traffic), a risk assessment must be completed and steps to mitigate the likelihood of reverse impact should be implemented.</li> </ul>			
ET-SS Terminal	<ul> <li>Refer to ET-SS Terminal Technical Conditions for Use.</li> <li>The ET-SS to EZY-GUARD SMART transition must be used to connect the terminal to the barrier.</li> </ul>			
Ingal MPR Motorcyclist Protection	Motorcyclist Protection Device     Tested to EN1317.8 – Class C60 with Severity Level 1     Not permitted on kerbed roads			

## **Design Guidance**

Minimum installation length	60 metres between crash cushions/terminals (tested article)				
System width (m)	0.20 (standard) 0.30 (back to back)				
Minimum distance to excavation (m)	1.65 – measured from the face of the barrier				
Slope limit	10%				
Systems conditions	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		400	2.0	Ezy-Guard Smart base plate post Or	Refer to drawings	
				Ezy-Guard Smart driven post with coring holes		
Deep lift asphaltic concrete	Permitted	100		Ezy-Guard Smart driven post	Minimum AASHTO standard soil strength	
Asphaltic concrete over granular pavement						
Flush seal over granular pavement	evement					
Unsealed compacted formation						

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