


Safety Barrier Technical Conditions for Use

EZY-GUARD HIGH CONTAINMENT Steel Rail Safety Barrier - Permanent

	Issue Date: 30 November 2023	Proponent: Ingal Civil Products
	<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	EZY-GUARD HIGH CONTAINMENT Steel Safety Barrier Variants Back to back installation Base plate installation – may only be installed on concrete foundation pavements Single Post Omission Variants that are NOT listed above are NOT recommended for acceptance.
Accepted speed	100 km/h
Product manual reviewed	Release 08/22c – Ezy-Guard HC Safety Barrier Release 09/21 – Ingal MPR Ingal RBT Rigid Barrier Transition – Release 05/23b
Product manual	http://az276019.vo.msecnd.net/valmontstaging/docs/librariesprovider35/manuals/45706-ezyguard-hc-manual-aus-revision-0818.pdf?sfvrsn=d5b60739_2

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 the barrier and terminal		55.8	2.0	1.16	1.16	
MASH TL4	8	24	64	2.0	1.20	1.80	

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	Not Permitted
Concrete	Permitted using SBTA 21-005 Transition from strong post W-Beam to rigid concrete barrier Permitted using Ingal RBT
Proprietary Products	
QUADGUARD M10 Crash Cushion	<ul style="list-style-type: none"> • Not to be installed on a back to back installation. • Refer to QUADGUARD M10 Crash Cushion Technical Conditions for Use. • The QUAD-BEAM transition to end terminal must be used to connect the crash cushion to the barrier. • Reverse impacts into the transition section can produce a greater occupant severity value than 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.
Trend Median Terminal	<ul style="list-style-type: none"> • For back to back installations only • Refer to Trend Median Terminal Technical Conditions for Use.
ET-SS Terminal	<ul style="list-style-type: none"> • Refer to ET-SS Terminal Technical Conditions for Use.
Ingal MPR Motorcyclist Protection	<ul style="list-style-type: none"> • Motorcyclist Protection Device • Tested to EN1317:8 – Class C60 with Severity Level 1 • Not permitted on kerbed roads

Design Guidance

Minimum installation length	44 metres between crash cushions/terminals (tested article)
System width (m)	0.24
Minimum distance to excavation (m)	1.16 (TL3) – measured from the face of the barrier 1.20 (TL4) – measured from the face of the barrier
Side slope limit	10%
System 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

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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	Ezy-Guard High Containment base plate post Or Ezy-Guard High Containment driven post with coring holes	Refer to drawings
Deep lift asphaltic concrete	Permitted	100	2.0	Ezy-Guard High Containment 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.