Safety Barrier Technical Conditions for Use

SENTRY W BEAM Safety Barrier - Permanent

Issue Date: 2 December 2019 | **Supplier:** Australian Construction 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	SENTRY W BEAM SAFETY BARRIER - PERMANENT Variants Back to back installations (median) Baseplate Installation Variants that are NOT listed above are NOT recommended for acceptance.
Accepted speed	100 km/h
Product manual reviewed	V1.6 – September 2019
Product manual	http://www.acprod.com.au/products/acp-sentry-barrier-w-beam-system-longitudinal-barrier

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 terminal		90	2.0	1.59	1.59	

Approved Connections

Crash Cushions or Terminals must be fitted to both ends of a barrier	
Public Domain Products	
W-Beam Guardrail	Permitted
Thrie-Beam Guardrail	Not Permitted
Concrete	Not Permitted
Proprietary Products	
MAX-TENSION Guardrail Terminal	• Refer MAX-TENSION Guardrail Terminal Technical Conditions for Use. • The MAX-TENSION transition to SENTRY W Beam must be used to connect the terminal to the barrier.

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	78 metres between crash cushions/terminals (tested article)
System width (m)	0.20 metres
Minimum distance to excavation	Recorded dynamic deflection
Slope limit	Side slope limit: 6 Horizontal to 1 Vertical (17 %).
Systems conditions	1. Installation without an end treatment listed above is NOT permitted. 2. 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. 3. Flaring across the clear zone without a terminal listed above is NOT permitted. 4. To be installed in soil that meets or exceeds AASHTO Grade B standard.
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	Not Permitted				
Deep lift asphaltic concrete	Permitted	100 km/h	2.0	ACP Sentry Barrier 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 listed above have not been justified to the Panel's satisfaction.