Safety Barrier Technical Conditions for Use

Sentryline-M Wire Rope Barrier System - Permanent

Issue Date: 15 December 2023 | **Supplier:** CSP Pacific

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	**Recommended for Acceptance**
Product accepted	Sentryline-M Wire Rope Barrier System Variants • Driven post sleeve - to be installed in soil conditions which meet or exceed AASHTO standard Soil • Base plate installation - should be limited to constrained locations where a post installed in a concrete footing cannot be installed due to underground services. • Alternate anchor foundation block – 3.4 L x 1.5 W x 0.74 D • Alternate anchor foundation block – 3.4 L x 1.0 W x 1.0 D Variants that are NOT listed above are NOT recommended for acceptance.
Accepted Speed	100km/h
Product Manual reviewed	Sentryline-M Wire Rope Safety Barrier – December 2020 Sentryline-M Pro Terminal End – January 2023
Product Manual	https://www.safedirection.com.au/wp-content/uploads/2023/04/Installation-Manual-Sentryline-M-Wire-Rope-Safety-Barrier.pdf https://www.safedirection.com.au/wp-content/uploads/2023/04/Installation-Manual-Sentryline-M-Terminal.pdf

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	5.5 from anchor		165	2.0	2.14	2.14	
MASH TL3	5.5 from anchor		185	3.0	3.02	3.02	
MASH TL4	5.5 from anchor		185	3.0	3.02	3.05	

Approved Connections

An accepted end treatment must be provided at both ends of all barrier installations	
Public Domain Products	
W-Beam Guardrail	Not permitted
Thrie-Beam Guardrail	Not permitted
Concrete	Not permitted
Proprietary Products	
Sentryline-M Terminal End	• Non-release terminal. • This is a gating terminal. Gating terminals shall have a run-out area behind the terminal that is traversable and free of hazards. The run-out area is to be 18.5 m x 6 m from the point of redirection.
Sentryline-M Pro Terminal End	• Non-release terminal. • This is a gating terminal. Gating terminals shall have a run-out area behind the terminal that is traversable and free of hazards. The run-out area is to be 18.5m x 6m from the point of redirection.

Design Guidance

Minimum installation length	165 metres between crash cushions/terminals (tested article) – 2m post spacing 185 metres between crash cushions/terminals (tested article) – 3m post spacing
System width (m)	0.3
Minimum distance to excavation (m)	3.02 – measured from the face of the barrier
Slope limit	10%
Systems conditions	1. Minimum horizontal radius 200 metres 2. Minimum sag radius 3000 metres (K value = 30) 3. 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 Deep lift asphaltic concrete Asphaltic concrete over granular pavement Flush seal over granular pavement Unsealed compacted formation	Permitted	100	2.0 / 3.0	Posts in 300mm diameter x 750mm deep concrete footings or Posts in driven post sleeve	Minimum AASHTO Standard Soil strength

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