# **Safety Barrier Technical Conditions for Use**

# **HERCULES Steel Crash Cushion – Permanent and Temporary**

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Issue Date: 2 March 2023

**Proponent:** Safe Direction

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	HERCULES Steel Crash Cushion		
	<u>Variants</u>		
	Nil		
	Variants that are NOT listed above are NOT recommended for acceptance.		
Accepted impact speed	100 km/h		
Product manual reviewed	PM 034/01		
Product manual	https://www.safedirection.com.au/products/guardrail-products/road-barriers/crash-cushions/hercules/?gclid=EAIaIQobChMIjr2lubuQ9wIVApNmAh0ERQP4EAAYASAAEgJuEPD_Bv		

#### **Design Requirements**

Containment Level	Point of Redirection		Tested Article Length	Anchor/Post Spacing	
	Leading (m)	Trailing (m)	(m)	(m)	Notes
MASH TL2	Fully redirective		4.40	Refer to drawings	
MASH TL3	Fully redirective		5.83	Refer to drawings	

#### **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	Permitted - reverse impacts into the transition section can produce a greater occupant severity value than preferred. Where reverse impacts are possible (e.g. bidirectional traffic) a risk assessment must be completed and steps to mitigate the likelihood of reverse impact should be implemented.			
Proprietary Products				
	Refer to Safety Barrier Technical Conditions for Use for approved connections			



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## **Design Guidance**

System length (m)	TL2 - 4.40 TL3 - 5.83
System width (m)	0.59
Slope limit	8%
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	Permitted	100	Refer to drawings	M24 x 200mm threaded rod with epoxy	Installation on concrete pavement or pad is permitted in accordance			
Deep lift asphaltic concrete	Permitted	100	Refer to drawings	M24 x 350mm threaded rod with epoxy	with manufacturer's drawing			
Asphaltic concrete over granular pavement								
Flush seal over granular pavement	Not Permitted							
Unsealed compacted formation								

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