

# HERCULES STEEL CRASH CUSHION

## REVISION REGISTER

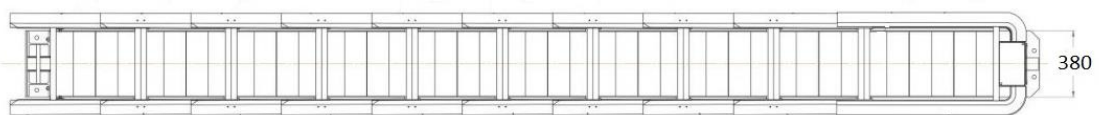
Issue & Revision	Description	Date
1	Issued for use.	22/04/2020

The Hercules Crash Cushion is a fully re-directive and non-gating crash attenuator that incorporates a collapsible beam split into 10 modular bays, and is suitable for connection to Type F concrete barriers. The Hercules Crash Cushion includes a Mounting Rail (also referred to as a Steel Basement) and Backstop that are anchored to the foundation.

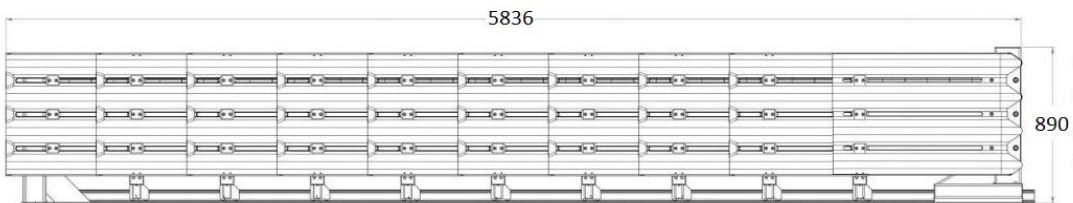
### Images:



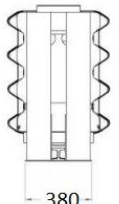
Photograph of Hercules Crash Cushion



Plan



Elevation



End

Hercules Crash Cushion Configuration

# HERCULES STEEL CRASH CUSHION

**Ownership:** SMA Road Safety

**Supplier:** Safe Barriers Pty Ltd  
PO Box 7178 HEMMANT, QLD 4174  
Ph: 1800 169 799  
<https://www.safebarriers.com/>

**Test Level:** Tested in accordance with MASH TL 3

Test Level	Design Speed (km/h)	System length (m)	System width (mm)
MASH TL 3	100	5.83	590

## Configuration:

- Hercules crash cushion may be transitioned to Type F concrete barriers.
- All supplied units to be installed with the front plate, having the yellow delineator attached (refer photograph).

## Design:

- Design to be undertaken in accordance with Hercules Crash Cushion Installation and Repair Manual (Rev 02, October 23, 2019).
- No item that can affect the height at which a vehicle could impact the unit at shall be placed 15 m prior to the unit or along the length of the unit to the rear of the backstop. For kerbing in this area it is Main Roads preference is to use Mountable Type M kerbing (i.e. flush), however Mountable Type A kerbing is permitted if required for drainage purposes.
- As the panels slide rearward during an impact the hazard width must not prevent the panels from this movement.
- The foundation acceptable to Main Roads for the Hercules crash cushion is a reinforced concrete pad (6.0m long x 800mm wide x 190 mm thick or 6.1m long x 1.0m wide x 250mm thick), with 40# chemical anchors as specified in Hercules Crash Cushion Installation and Repair Manual (Rev 02, October 23, 2019).

## Limitations:

- Not to be used on crossfalls steeper than 8%.
- A hazard free area should be provided as shown in Figure 1.

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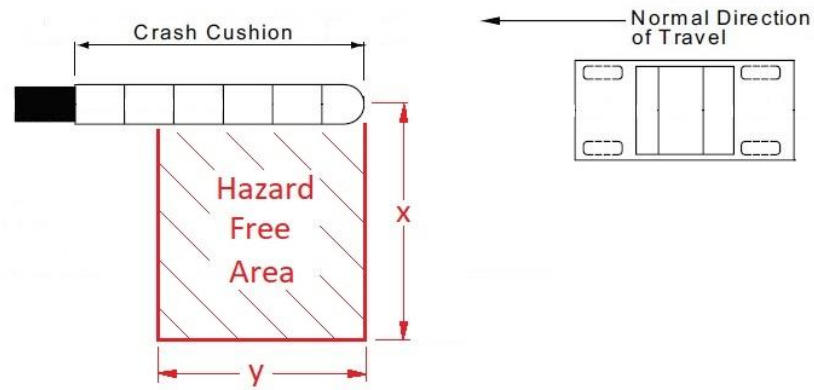


Figure 1: Hazard free area for crash cushion

Test Level	x (m)	y (m)
MASH TL 3	12	3

## Installation:

Installation to be in accordance with Hercules Crash Cushion Installation and Repair Manual (Rev 02, October 23, 2019).

## Parts to be Replaced After impact:

Damaged collapsible beam modules and slider panels.

## Parts Typically Re-useable After Impact:

Undamaged collapsible beam modules and slider panels.

## References:

Main Roads WA file 20/2212