

# Scorpion II MASH TMA

## Product summary

Status	Accepted
Category	Truck Mounted Attenuator
Test Level	Test Level 2 (MASH): 70km/h Test Level 3 (MASH): 100km/h
Supplier	A1 Roadlines Pty Ltd
Description	Truck Mounted Attenuator

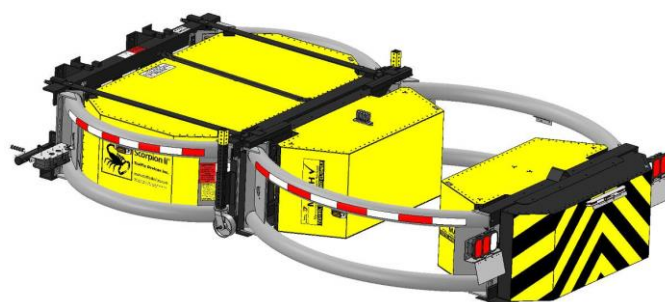


Figure 1. Scorpion II MASH TMA

## Introduction and purpose

This detail sheet is intended to supplement *VicRoads Road Design Note 06-04 - Accepted Safety Barrier Products*. Please refer to RDN 06-04 for the current VicRoads acceptance status, information on the product assessment process and general acceptance conditions.

The technical details within this document have been extracted from information submitted to VicRoads by the Supplier and the recommended 'Conditions for Use' from the Austroads Safety Barrier Assessment Panel (ASBAP).

***VicRoads requirements take precedence over the product manual and Austroads conditions.*** Where a departure from these requirements is required, users should understand the risks and document their engineering decisions.

For more detailed product information, refer to the individual product manual or contact the System Supplier.

## Technical information

The Scorpion II TMA should be designed, installed and maintained in accordance with the following VicRoads conditions for use.

These conditions for use have been based on an Austroads assessment of technical performance against AS/NZS 3845 and contain VicRoads specific requirements when necessary.

## Summary Conditions for Use

Accepted configuration	Scorpion II MASH TMA
Variants	Nil
Tested Roll Allowance	5.12 metres for MASH TL-3 (30m per the CoP- Worksite Safety)
Product manual reviewed	PN 13086 Revision A Dated 11/19/201
ASBAP issue	4 March 2019 – TL-3 9 March 2020 – TL-2

Refer *VicRoads conditions for use (below)*.

## VicRoads Conditions for Use

### Performance requirements

Containment level	Speed (km/h)	Impact vehicle mass (kg)	TMA dimension and weight				Roll ahead distance (m)	Support vehicle mass		Road Clearance (mm)
			Length (mm)	Width (mm)	Height (mm)	Mass (kg)		Min (kg)	Max (kg)	
MASH TL-2	70	2270	2300	2400	600	690	12.4	3000	NA	305
MASH TL-3	100	2270	3930	2450	600	900	5.12 (30m) <sup>2</sup>	6804	Unlimited <sup>1</sup>	280-330

Note 1: Scorpion II MASH was tested with a restrained host vehicle, thereby representing infinite weight.

Note 2: TMAs should be located a minimum distance of 30m before the workers or equipment that it is shielding, in accordance with the Road Management Act 2004 Code of Practice, Worksite Safety – Traffic Management.

### System Conditions

System conditions	<ol style="list-style-type: none"> <li>1. Support vehicle must be compliant with local vehicle legislation and relevant Vehicle Standards Guide (VSG)</li> <li>2. TMA mount must be structurally certified.</li> <li>3. Support vehicle should not have secondary braking restraint (chocked).</li> <li>4. TMA must be inspected prior to each deployment to ensure no damage to outer casing and support.</li> <li>5. Support vehicle must be deployed in second gear with handbrake engaged.</li> </ol>
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## Other considerations and comments

### Support vehicle mass

The support vehicle mass is the gross weight with ballasts attached. Vehicle mass limits must be in accordance with any National and/or VicRoads requirements.

### Damaged components

Damaged components must be replaced. Repaired components must not be used.

### Deployment and operation

TMAs must be deployed and operated in accordance with National and State requirements, specifically where operational best practice is prescribed.

## References

- Product Installation Manual and Product Operational Manual refer licensed product supplier website.
- VicRoads Road Design Note 06-04 Accepted Safety Barrier Products.
- VicRoads Guidelines for the use of Truck Mounted Attenuators (TMAs).
- Road Management Act 2004 Code of Practice, Worksite Safety – Traffic Management.

### Detail Sheet – Update Summary

Issue	Approved	Amendment
June 2019	M-SSE	First edition
May 2020	M-SSE	Second edition