

# ARMORZONE MASH

## REVISION REGISTER

Revision	Description	Date
1	Issued for use.	22/05/2019

The ArmorZone MASH Barrier is a portable water filled longitudinal temporary barrier. It can be used in worksites with design speeds up to 70 km/h (i.e. posted speed up to 60 km/h). The barrier units are orange in colour, while the end treatments (which are empty) are yellow.

The ArmorZone MASH Barrier shall NOT be installed with the ArmorZone Barrier units (which are rated to NCHRP 350 TL-2) due to their different crash rating and performance.

To differentiate from ArmorZone barrier, the ArmorZone MASH barrier units have a white filler lid, a steel connector bar (visible at the ends of units) and "MASH TL2" text moulded into the top of the barrier.

The ArmorZone MASH barrier uses the same yellow end unit (not filled with water) as the ArmorZone barrier.

### Images / Drawings.



Figure 1: Photographs of ArmorZone MASH Barrier and Terminal units

## ARMORZONE MASH

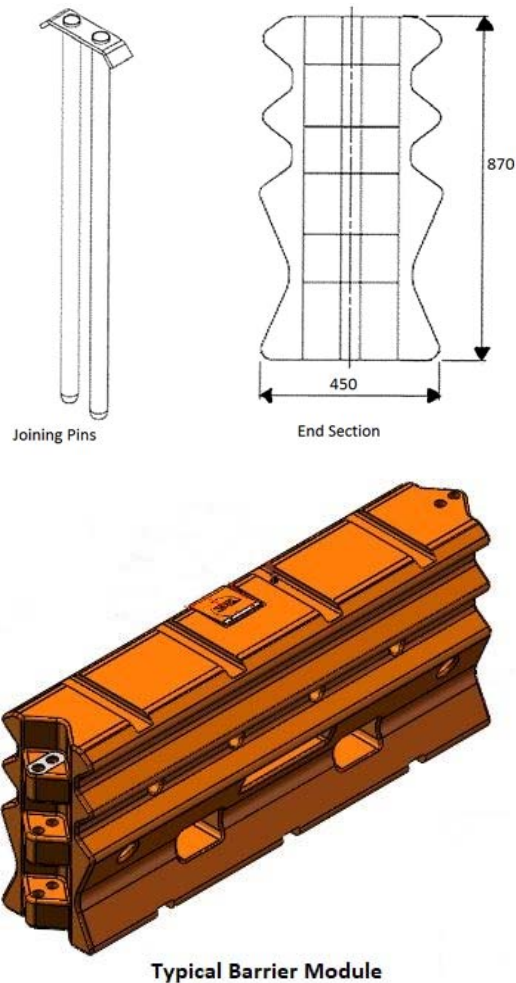


Figure 2: Typical Details of ArmorZone MASH Barrier

**Ownership:** Valmont Highway Distribution Ltd

**Supplier:** Ingal Civil Products  
3 Temperley Close, Welshpool WA 6106  
Ph: (08) 9452 9111 Fax: (08) 9358 9111  
Website - <http://www.ingalcivil.com.au/>

**Test Level:** Tested in accordance with MASH to TL2.

**Test Deflection:** 4.10 m under MASH TL2 conditions  
(i.e. design speed = 70 km/h, posted speed = 60 km/h)

Note that these deflections were measured in crash tests performed under controlled conditions. The deflections recorded are the horizontal offset between the face of the barrier units measured prior to and following vehicle impact. Designers should be aware that the deflection published as a test result may not be the deflection value achieved in the field for all impacts by errant vehicles.

**Working Width:** 4.6 m under NCHRP 350 TL2 conditions  
(i.e. design speed = 70 km/h, posted speed = 60 km/h)

Note that the working widths above are equivalent to the test deflections plus the width of the system.

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## Configuration:

Units must be interconnected and requires a sufficient length to resist impact.

## Design:

- Design to be in accordance with the ArmorZone MASH TL2 Temporary Safety Barrier Product Manual (Release 03/19 (Australia)).
- Barrier should be placed a minimum of 250 mm from the edge of travelled way to avoid nuisance impacts.
- Amount of deflection to be allowed depends on whether traffic is un-directional or bi-directional and offset to barrier and speed.
- The barrier has its own end terminals which must be installed.
- Barrier length must be sufficient to adequately protect the hazard. The minimum length of barrier to be installed is 46 m (between terminal units).
- Plant, personnel or roadside hazards should not be located within the hazard free and deflection area as shown in Figure 3.

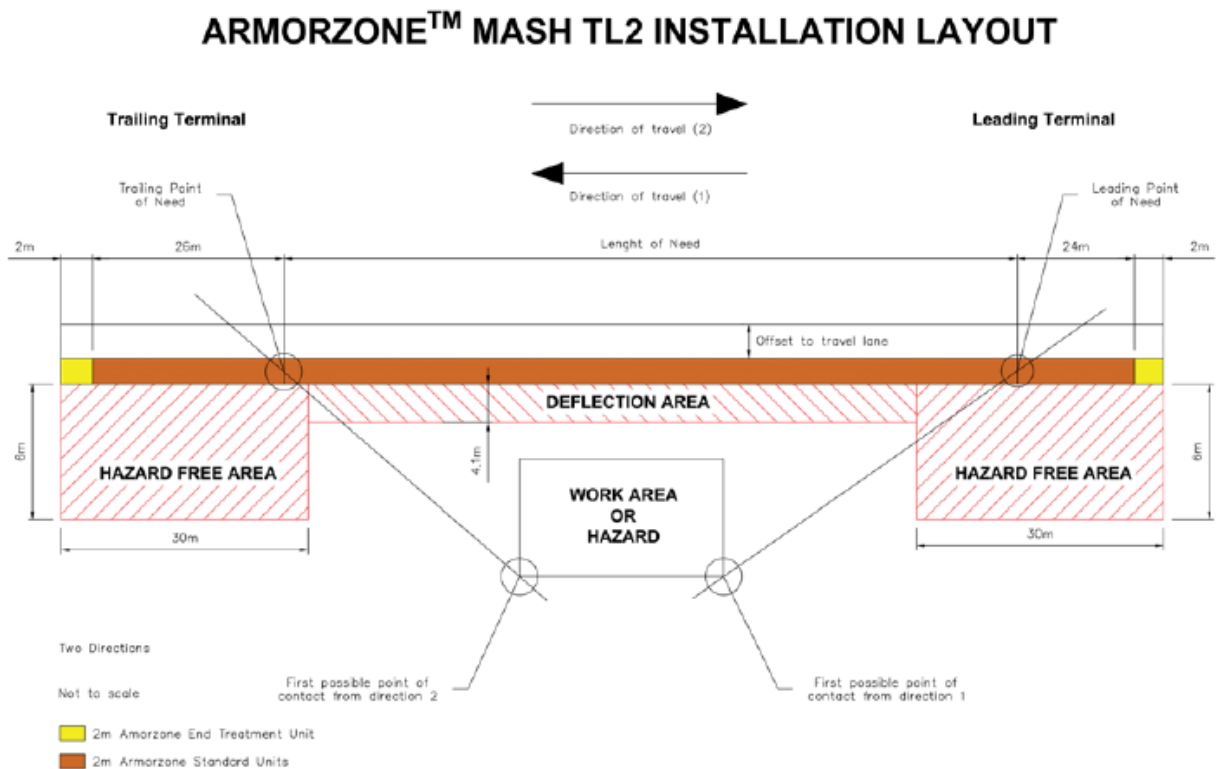


Figure 3: ArmorZone MASH Layout Diagram  
(Not to Scale)

## Limitations:

- Not to be used on longitudinal slopes or crossfalls greater than 5%.
- Cannot be used on radii smaller than 28m.
- Cannot be placed adjacent to kerbs or other objects which may prevent lateral displacement.

## Installation and Maintenance Requirements:

In accordance with the ArmorZone MASH TL2 Temporary Safety Barrier Product Manual (Release 03/19 (Australia)).

## ARMORZONE MASH

### Parts to be Replaced after Impact:

Units may need to be repaired after impact or replaced depending on the extent of damage.

### Parts Typically Re-Useable after Impact:

Undamaged units.

### References:

Item	Description
1	Barrier system information can be found on Main Roads file 19/1574.