

# ARMORZONE MASH

## REVISION REGISTER

Revision	Description	Date
1	Issued for use.	22/05/2019
1A	MASH TL1 information added and barrier offsets updated.	06/04/2020
1B	Removal of ArmorZone (NCHRP 350) barrier approval.	25/10/2023

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), as these units are no longer accepted.

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.

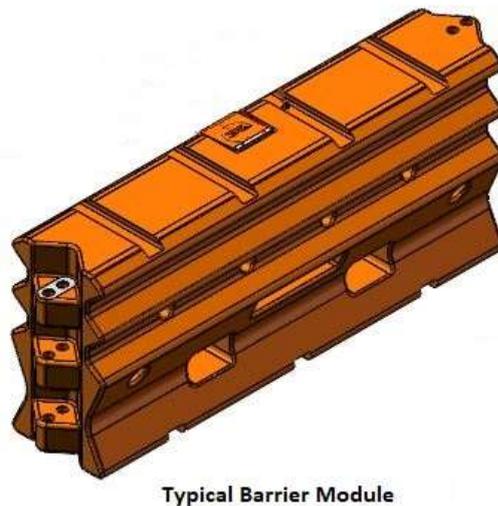
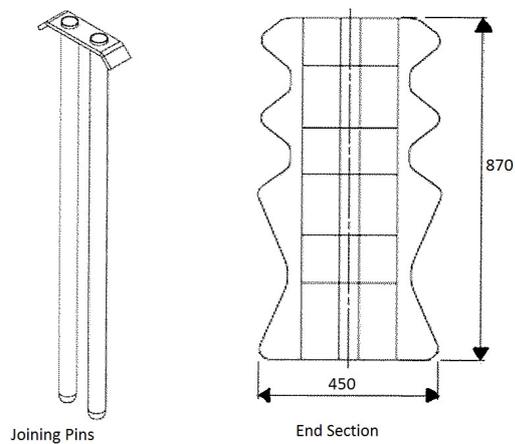
### Images / Drawings.



## ARMORZONE MASH



Figure 1: Photographs of ArmorZone MASH Barrier and Terminal units



Typical Barrier Module

Figure 2: Typical Details of ArmorZone MASH Barrier

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**Test Level:** Approved to MASH TL1 and MASH TL2.

# ARMORZONE MASH

Test Level	Test Description	Deflection	Working Width
MASH - TL1	2270 kg vehicle at 50 km/h 25° impact angle	2.16 m	2.61 m
MASH - TL2	2270 kg vehicle at 70 km/h 25° impact angle	4.10 m	4.55 m

## 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)).
- It is recommended that the barrier should be offset from the edge of traffic lane by:
  - traffic speed 40 km/h or less – 0.2m;
  - traffic speed 41 to 60 km/h – 0.3m;
  - traffic speed 61 to 80 km/h – 0.5m
- 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.
- Plant, personnel or roadside hazards should not be located within the hazard free and deflection area as shown in Figure 3.

## ARMORZONE™ MASH TL2/TL1 INSTALLATION LAYOUT

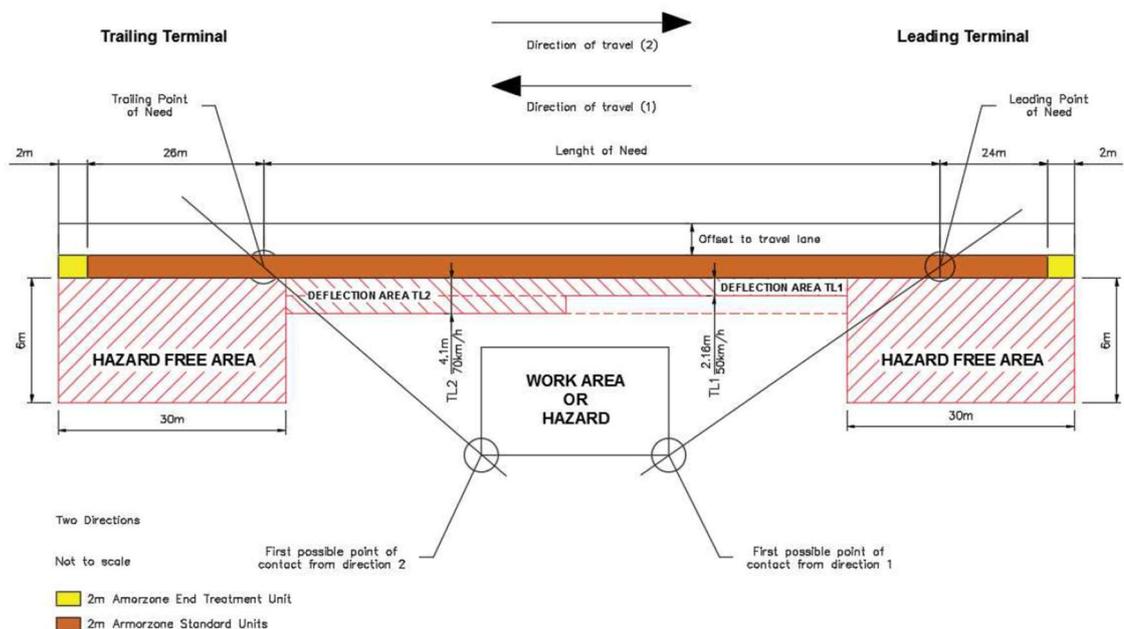


Figure 3: ArmorZone MASH Layout Diagram  
(Not to Scale)

## ARMORZONE MASH

### Minimum Length:

46 m excluding terminals

### Terminal permitted:

As shown in Figure 3.

### Point of Redirection:

The points of redirection are as per the "Points of Need" shown in Figure 3.

### Limitations:

- Not to be used on longitudinal slopes or crossfalls greater than 5%.
- Cannot be used on radii smaller than 28 m.
- 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)).

### 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.