

TAU-M CRASH CUSHION

REVISION REGISTER

| Issue & Revision | Description | Date |
|------------------|---|------------|
| 1 | Issued for use. | 20/04/2020 |
| 1 A | Reverse impact conditions amended. Acceptance of temporary installations connected to asphalt pavement added. | 26/07/2022 |
| 1 B | Supplier updated. | 12/01/2024 |

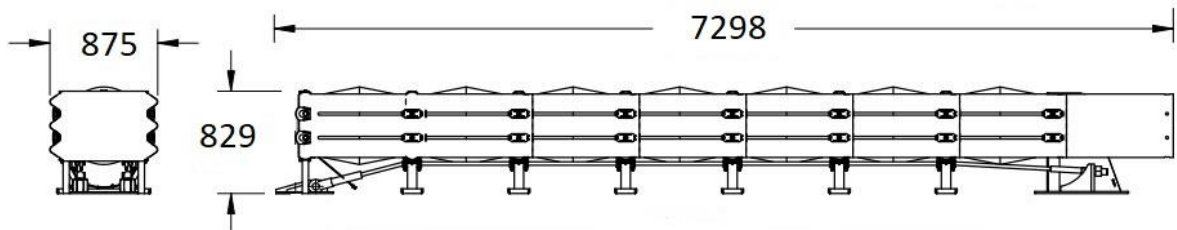
The TAU-M system is a fully re-directive and non-gating crash attenuator that incorporates energy absorbing cartridges contained within steel frames and sliding panels, and is suitable for hazards up to 0.76 m wide. The TAU-M system includes a Front Cable Anchor and a Backstop that are anchored to the foundation.

Note that the TAU-II crash cushion was previously accepted by Main Roads, but will no longer be accepted for new installations after a "phase out" period of six months from the above issue date (i.e. phase out period ends on 20/10/2020)

Images:

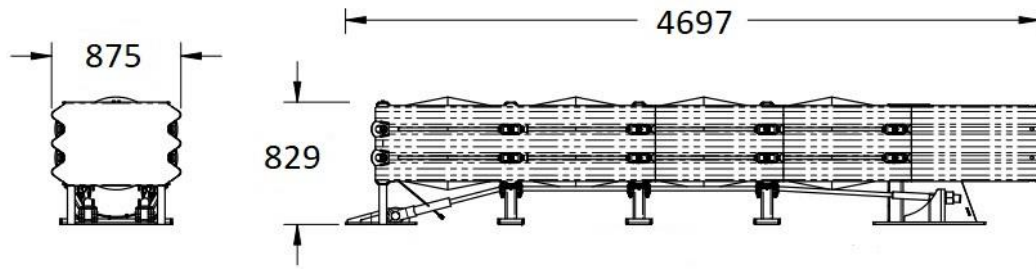


Photograph of TAU-M MASH TL 3 Configuration



TAU-M MASH TL 3 Configuration

TAU-M CRASH CUSHION



TAU-M MASH TL 2 Configuration

Ownership: Lindsay Transport Solutions

Supplier: Safe Direction Pty Ltd
 5 Simpson Close, Smeaton Grange, NSW 2567
 Ph: (02) 4648 0394
 Website - <http://www.safedirection.com.au/>

Test Level: Tested in accordance with MASH TL 3 and MASH TL 2

| Test Level | Design Speed (km/h) | Number of bays | System length (m) | System width (mm) |
|------------|---------------------|----------------|-------------------|-------------------|
| MASH TL 2 | 70 | 4 | 4.7 | 875 |
| MASH TL 3 | 100 | 7 | 7.3 | 875 |

Configuration:

- TAU-M crash cushions may be transitioned to Constant slope or Type F concrete barriers.
- TAU-M crash cushions may be transitioned to thrie beam or w-beam barriers, but only where reverse direction impacts are highly improbable and a risk assessment has been completed and steps undertaken to mitigate any risks identified.
- All supplied units to have the yellow front delineator panel.

Design:

- Design to be undertaken in accordance with Universal TAU-M Installation Instructions (Rev A, 10/01/2018).
- 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 TAU-M crash cushion is a concrete pad (150 mm thick reinforced or 200mm unreinforced) 28 MPa, with M20 x 210mm Gr8.8 chemical anchors. Refer Universal TAU-M Installation Instructions (Rev A, 10/01/2018).
- The TAU-M crash cushion may be used with asphalt pavement as a foundation in temporary workzones only. The asphalt pavement shall be a

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minimum 150mm thick asphalt placed on a minimum 150mm thick sub-base, with M20 x 460mm Gr8.8 chemical anchors.

Limitations:

- Not to be used on crossfalls steeper than 7%.
- A hazard free area should be provided as shown in Figure 1.

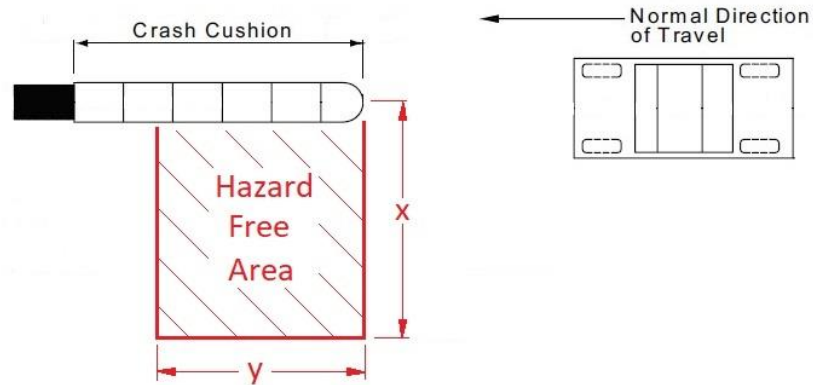


Figure 1: Hazard free area for crash cushion

| Test Level | x (m) | y (m) |
|------------|-------|-------|
| MASH TL 2 | 4.8 | 0.1 |
| MASH TL 3 | 9.0 | 5.6 |

Installation:

Installation to be in accordance with Universal TAU-M Installation Instructions (Rev A, 10/01/2018).

Parts to be Replaced After impact:

Damaged cartridges and sliding panels.

Parts Typically Re-useable After Impact:

Undamaged cartridges and sliding panels.

References:

Relevant FHWA Approval Letters:

https://safety.fhwa.dot.gov/roadway_dept/countermeasures/reduce_crash_severity/barriers/pdf/cc146.pdf

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| Code | Description |
|--------|------------------------------|
| CC-146 | MASH TL 2 approval - 4 bays |
| CC-147 | MASH TL 3 approval – 7 bays. |