

Interim Acceptance for Safety Barrier Product

Product: ABSORB 350® Crash Cushion

Safety Barrier - Temporary

Expiry Date: 30 June 2013

The ABSORB 350® crash cushion has FHWA approval and has been used in New Zealand as an end terminal for temporary traffic management barrier systems for over 10 years. To date it has not been listed in the NZTA M23 specification. This notice is intended as an interim authority to use the ABSORB 350® crash cushion as a TL-2 or TL-3 temporary barrier end treatment pending its listing in M23 Appendix C (Temporary Systems).

Product Identification



ABSORB 350® Crash Cushion

The ABSORB 350® crash cushion was successfully tested as an end terminal system under the NCHRP 350 standard for both Test Level 2 (70 km/h) and Test Level 3 (100 km/h). The FHWA issued letters of acceptance CC-66 (May 2000) and CC-66A (June 2000) for the use of the ABSORB 350®. Additionally, the FHWA issued a letter of acceptance CC-66B (December 2003) approving the use of the ABSORB 350® as an end treatment for temporary steel barrier.

The FHWA noted some concerns should the ABSORB 350® terminal be struck laterally near to the transition to the barrier section the terminal was protecting. Under some impact conditions vehicles can penetrate or vault the ABSORB 350® and intrude a significant distance (over 30m) into the shielded area.

The FHWA letters of acceptance emphasise that the supplier will give sufficient information on design and layout requirements to minimise the risks involved when this, non re-directive, attenuator is selected to shield the end of a concrete or steel barrier. This information must be included in any product installation manual.

Conditions of Use

In situations where the ABSORB 350® crash cushion is used to shield temporary traffic management barriers the following must be considered:

- There must be sufficient free space for recovery behind the terminal should the vehicle strike the terminal laterally and pass through.
- The terminal is only to be installed where it is likely to be struck head on.
- The terminal must not be installed on curves or wide roads where steep angles of impact are more likely.
- When installed on concrete barrier, the terminal must only be attached using the approved proprietary transition attachment.
- When installed on steel barrier, the terminal must only be attached using the approved proprietary transition attachment for the steel barrier system and the final lengths of steel barrier must be pinned or fixed to the road surface in accordance with the manufacturers specifications.
- The terminal must contain the correct number of segments required for the test level appropriate for the situation.
- The supplier of the hardware remains responsible under the Health and Safety in Employment legislation for ensuring that customers have the necessary knowledge and skills to correctly use the product.

A copy of this Interim Acceptance Notice must be appended to the Installation Manual.

Expiry of Acceptance

This acceptance expires on 30 June 2013 and replaces any previous acceptance.

New installations of the ABSORB 350® crash cushion system must not be deployed on the state highway network after the expiry date of acceptance unless a further period of acceptance is granted or the product has been formally included in the NZ Transport Agency M23 Specification for Road Safety Barrier Systems, in which case the M23 specification would replace this interim acceptance.

The NZ Transport Agency reserves the right to rescind or modify, at any time, acceptance of the ABSORB 350® crash cushion system.

Authorised by the National Traffic and Safety Manager