

Interim Acceptance for Safety Barrier Product

Product: Ezy Guard 4 W-Beam Barrier System

Safety Barrier - Permanent

Expiry Date: 30 June 2020

The Ezy-Guard 4 W-Beam barrier system is an increased height (790mm/31”) variant of the Ezy-Guard Smart W-Beam side protection barrier system. Ezy-Guard 4 has been tested to NCHRP 350 Test Level 4 (TL4).

The Ezy-Guard Smart variant was previously tested successfully in accordance with the AASHTO Manual for Assessing Safety Hardware (MASH) testing criteria which exceed the current NZ Transport Agency minimum requirement of NCHRP 350 TL3 for side protection.

Based on the testing completed and other information considered, the Ezy-Guard 4 W-Beam barrier system is accepted as complying with both NCHRP 350 TL4 and MASH TL3 for side protection.

This interim acceptance, pending update of the NZ Transport Agency's M23 Specification for Road Safety Barrier Systems, is to confirm the acceptance by the NZ Transport Agency of the Ezy-Guard 4 W-Beam barrier system for use on the State highway network.

Note that this acceptance replaces all previous acceptances for any other variants of the Ezy-Guard W-Beam barrier system (Smart and Heavy). All new installations of Ezy-Guard are to be of the Ezy-Guard 4 W-Beam barrier system variant only. The proponent (Ingal Civil NZ) will ensure that the system literature provides clear instructions on the correct transition from Ezy-Guard Smart to Ezy-Guard 4 and amended repair techniques for existing Ezy-Guard Smart installations using the longer Ezy-Guard 4 posts.

Product Identification



Ezy-Guard 4 W-Beam barrier Front view



Ezy-Guard 4 W-Beam barrier Rear view

Conditions of Use

The Ezy-Guard 4 W-Beam barrier system must be installed and maintained in accordance with the product installation/maintenance manual and relevant NZ Transport Agency specifications. NZ Transport Agency specifications and standards shall prevail where there is discrepancy between the product manual(s) and the NZ Transport Agency specifications and standards.

Installers must ensure that they are familiar with relevant conditions, requirements and limitations of the system, particularly with regard to the appropriate length of need, minimum installation length and test deflection. Vehicle impacts that vary from the NCHRP Report 350 or MASH impact conditions may result in significantly different results than those experienced in testing.

Accepted M23-compliant end terminals must be used to terminate and anchor the Ezy-Guard 4 W-Beam barrier system.

Ingal Civil (NZ) must provide clear instructions on the correct transition from Ezy-Guard Smart to Ezy-Guard 4 and amended repair techniques for existing Ezy-Guard Smart installations using the longer Ezy-Guard 4 posts.

The Ezy-Guard 4 W-Beam barrier system has been evaluated in accordance with the Test Level 4 criteria presented in NCHRP 350 under the following test conditions:

- 8000kg single axle truck impacting at an angle of 15° and a nominal speed of 80kph;

The Ezy-Guard Smart W-Beam barrier system was previously evaluated in accordance with the Test Level 3 criteria presented in AASHTO Manual for Assessing Safety Hardware (MASH) under the following test conditions:

- 1100kg small car impacting at an angle of 25° and a nominal speed of 100kph;
- 2270kg pick-up truck impacting at an angle of 25° and a nominal speed of 100kph.

These criteria **exceed** those of NCHRP 350 Test Level 3.

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

Expiry of Acceptance

This acceptance expires on 30 June 2020 and replaces any previous acceptance for any previous variants of the Ezy-Guard W-Beam barrier system (Smart and Heavy). All new installations of Ezy-Guard are to be of the Ezy-Guard 4 W-Beam barrier system variant only.

New installations of the Ezy-Guard 4 W-Beam barrier 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.

Should the NZ Transport Agency discover that the qualification testing was flawed, that in-service performance reveals unacceptable safety problems, or that the system being marketed differs significantly from that which was crash tested, it reserves the right to modify or revoke its acceptance of the Ezy-Guard 4 W-Beam barrier system.

Authorised by the National Manager Traffic & Safety