

Interim Acceptance for Safety Barrier Product

Product: ArmorGuard™ Gate Steel Median Gate System

Safety Barrier - Permanent

Expiry Date: 30 June 2020

The ArmorGuard™ Gate Steel Median Gate System is a steel median gate system with clear opening spans of 8m, 12m, or 16m, transitioning to anchored concrete median barrier at each end. Larger openings may be permitted at the discretion of the National Traffic & Safety Manager. All ArmorGuard™ Gate Steel Median Gate System components are fabricated from galvanised steel panels joined using a proprietary connection system, installed between permanent F-shape concrete barrier.

The system has been tested under NCHRP Report 350 Test Level 3 test conditions with the submitted results being accepted by the FHWA (refer FHWA Letter B-87 dated 6 July 2001). The system has also been accepted by the Austroads Safety Barrier Assessment panel (ASBAP). ASBAP concluded that from the tests carried out, a minimum in-service impact deflection of up to 0.6m should be allowed for irrespective of configuration (up to 16m opening). Maximum site gradient limits of 3% (1V:33H) apply to both side slope and longitudinal slopes at the proposed installation location which must be within a straight alignment.

All installations require site specific acceptance on a case-by-case basis from the National Traffic & Safety Manager to ensure safe operation.

Based on these results, and pending further updates to the NZ Transport Agency's M23 Specification for Road Safety Barrier Systems, the ArmorGuard™ Gate Steel Median Gate System is granted interim acceptance by the NZ Transport Agency for use on the State highway network subject to site specific acceptance, with the following conditions as detailed below.

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

Product Identification



ArmorGuard™ Gate Steel Median Gate System

Conditions of Use

The ArmorGuard™ Gate Steel Median Gate 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 impact conditions may result in significantly different results than those experienced in testing.

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.

Maximum site gradient limits of 3% (1V:33H) apply to both side slope and longitudinal slopes at the proposed installation location. Gradients above this level may be agreed at time of site specific acceptance by the National Traffic & Safety Manager. All installations must be within a straight alignment of both carriageway and median barrier.

The ArmorGuard™ Gate Steel Median Gate System installation may only be installed between anchored lengths of F-shape concrete median barrier. Both ends of the F-shape concrete median barrier must have base thickening and additional end reinforcement to tolerate the anchorage loads imposed by an impact with the gate system. The F-shape barrier installation must be integral with, or structurally connected to, the concrete anchor foundations for the ArmorGuard™ Gate steel transition sections. The transition sections of the ArmorGuard™ Gate Steel Median Gate System must be fully pinned in accordance with the manufacturer's instructions and in a manner suitable for the pavement conditions.

The maximum clear opening of any ArmorGuard™ Gate Steel Median Gate System installation is 16m.

The installation designer (not the system supplier) must write a standard operating procedure (SOP) written for each installation to ensure safe operation of the gate. The SOP must include clear indication of the site gradients and require opening of the gate at the upslope end only, with a suitable restraint system detailed (e.g. chain or stop attached to a stationary braked vehicle). **This requirement must be included in the system documentation.**

Expiry of Acceptance

This acceptance expires on 30 June 2020 and replaces any previous acceptance.

New installations of the ArmorGuard™ Gate Steel Median Gate 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 ArmorGuard™ Gate Steel Median Gate System.

Authorised by the National Traffic and Safety Manager