

## **Interim Acceptance for Safety Barrier Product**

**Product: VGAN 300 Aluminium Bridge Barrier System**

**Safety Barrier - Permanent**

**Expiry Date: 30 June 2014**

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The VGAN 300 Aluminium Bridge Barrier system is a permanent aluminium barrier system comprising cast aluminium posts carrying 3 main extruded aluminium barrier rails. The posts are at nominal 2.4m centres and the nominal system height is 1.1m. The VGAN 300 Aluminium Bridge Barrier system is classed as a rigid performance level 4 barrier system in terms of the NZ Transport Agency Bridge Manual.

The VGAN 300 Aluminium Bridge Barrier system was successfully tested as a bridge barrier system under the NCHRP 350 standard for both Test Level 3 and Test Level 4 conditions. The FHWA issued letters of acceptance B-213 (December 2010) for the use of the VGAN 300 Aluminium Bridge Barrier system as a permanent bridge barrier system.

Pending further updates to the NZ Transport Agency's M23 Specification for Road Safety Barrier Systems, the VGAN 300 Aluminium Bridge Barrier system is granted interim acceptance by the NZ Transport Agency for use on the state highway network, with the following conditions as detailed below.

### **Product Identification.**



**VGAN 300 Aluminium Bridge Barrier system**

## **Conditions of Use**

The VGAN 300 Aluminium Bridge 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.

Designer/Installers must ensure that they are familiar with all relevant conditions, requirements and limitations of the system, particularly with regard to the appropriate structural design of the foundations and fixings for the system.

The VGAN 300 Aluminium Bridge Barrier system has been evaluated in accordance with the Test Level 3 and Test Level 4 criteria presented in National Cooperative Highway Research Programme Project 350 (NCHRP350) under the following test conditions:

- 820kg small passenger car impacting at an angle of 20° and a nominal speed of 100kph;
- 2000kg pick-up truck impacting at an angle of 25° and a nominal speed of 100kph;
- 8000kg rigid single axle truck impacting at an angle of 15° and a nominal speed of 80kph;

Vehicle impacts that vary from the NCHRP Report 350 impact conditions may result in significantly different results than those experienced in testing.

The manufacturer's connection detail in conjunction with the NZ Transport Agency standard transition detail (RSB-5) must be used to connect the VGAN 300 Aluminium Bridge Barrier system to a semi-rigid road safety barrier on the structure approach. Where a rigid road safety barrier is installed on the approach, the manufacturer's detail must be used. Where parapet meshing is required to meet Building Code and or road controlling authority requirements, the manufacturer's detail must be used or an alternative fixing agreed with the supplier.

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

## **In-Service Performance Report**

This interim approval requires the notification to the NZ Transport Agency of any site where the VGAN 300 Aluminium Bridge Barrier system is to be installed and the submission of an in-service report covering all installations after 12 months from the date of this acceptance notice. Dependant on the number and timeframe of installations, this period may be extended.

## **Expiry of Acceptance**

This acceptance expires on 30 June 2014 and replaces any previous acceptance.

New installations of the VGAN 300 Aluminium Bridge 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 VGAN 300 Aluminium Bridge Barrier system.

## **Authorised by the National Traffic and Safety Manager**