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Date

24th November 2005.

Our Ref.

Certificate No. 067/01/05 (Revised 6th January 2006)

Your Ref.

National Roads Authority - Approval of Safety Barrier System

The National Roads Authority approves the use of the under mentioned Road Restraint system as fit for its intended purpose when used in accordance with the forthcoming NRA Standard BD 52/05, the NRA Specification for Road Works and the requirements of this Certificate.

This approval is based on the information contained in crash test reports 04-1006915 (C0039) (TB11) and 04-1006788(C0034) (TB32), compiled by MIRA Ltd in accordance with the requirements of IS EN 1317 Parts 1 and 2, and other documentation submitted to this Authority by the manufacturer.

1. Safety Barrier System

VGAN 1000 Aluminium Bridge Parapet.

2. Manufacturer

Varley and Gulliver Ltd.,
Alfred Street,
Sparkbrook,
Birmingham,
B12 8JR.

3. Description

The system under test was described as an aluminium bridge parapet. It consisted of 14 No. Aluminium support posts spaced at 3.0m centres with 1.0m centres at each end and attached to the test plinth with ground anchors. Three extruded aluminium horizontal rails are attached to the support posts by means of captive fixings inserted into the rear of the rail and retained with an extruded bar. The rail centres are placed 268mm, 518mm and 883mm above the base plate (anchor).

Details of the system are as shown on the following manufacturer's drawings:

Drawing No's VGAN 1000 – 1 & 2 and VGAN 1000 – 7 to 10 inclusive.

4. Purpose

Use only as described in standard NRA BD 52/05 (NRA DMRB 2.3.3), for Bridge Parapets requiring the following performance criteria:

Containment Level	-	N2
Impact Severity Level	-	B
Working Width	-	W2

The length of the Bridge Parapet system shall be sufficient to demonstrate the full performance characteristic of the system.

5. Ground Conditions

The Manufacturer shall provide information on the ground conditions that existed when the system was successfully tested in accordance with IS EN 1317 Parts 1 & 2.

The Contractor/Installer shall demonstrate that the ground conditions on site are suitable for the safety barrier system to function as designed and tested (See NRA Specification for Road Works Clause 407).

6. Installation

The safety barrier shall be installed in accordance with the manufacturer's installation requirements and in the same manner as it was installed for the initial type test.

7. Durability

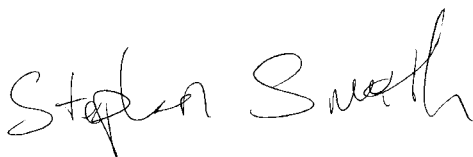
The aluminium alloy AW 6082 T6 and stainless steel components used to construct the restraint system shall satisfy the required service life of 20 years. Where steel components are used, a galvanised coating in accordance with IS EN ISO 1461 shall be used and in addition the coating weight shall comply with Table 4/1 of the NRA Specification for Road Works.

8. Period of Validity

The continuing validity of this Certificate is conditional upon an acceptable quality of materials, workmanship and performance being maintained.

The current validity of this Certificate may be checked by contacting the Specifications Section of the National Roads Authority.

Issued on behalf of the National Roads Authority by:



Stephen Smyth.
Engineering Inspector.