National Roads Authority
An tÚdarás um Bóithre Náisiúnta

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Date	Our Ref.	Your Ref.
5th September 2005.	**Certificate No. 086/09/05 (revised 3rd Jan 2006)**	

National Roads Authority - Approval of Safety Barrier System

The National Roads Authority approves the use of the under mentioned safety barrier system as fit for its intended purpose when used in accordance with DMRB Standard NRA TD 19/04, the NRA Specification for Road Works and the requirements of this Certificate.

This approval is based on the information contained in the impact test report numbers BASt/2004 7D 33/HB (TB11) and BASt/2004 7D 34/HB (TB51), compiled by Bundesanstalt fur Strabenwesen (Federal Highway Research Institute, Germany) and provided to this authority 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**

   M. D. S. H2 Parapet System with optional integrated Noise Barrier.

2. **Manufacturer**
   S.B.S. di Serafin,
   Saccon e C. s.n.c,
   San Polo di Piave (TV),
   Italy.

3. **Description**

   The system as tested consisted of 12 principle elements 6000mm in length and a start and end element. All elements are connected to a bridge construction by means of 4 connecting anchors with the exception of the first being connected by 2 connecting anchors. The last element projected over the bridge construction by 1000mm. The distance from the front edge of the system and the bridge step is 500mm. The main part of the system is a profiled steel plate with a thickness of 2.5mm. The base of the steel plate is attached to the bridge construction and the connection width is approximately 140mm. An integrated aluminium framed glass noise barrier is slotted into grooves on a support frame connected at the rear of the safety barrier.

   Details of the system are as shown on the following manufacturer's drawings included in the impact test reports:

   Drawing No’s H2-L01, ASS-01 and COS-01 to COS-08.

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4. Purpose

Use only as described in standard NRA TD 19/04 (NRA DMRB 2.2.8A), for safety barriers requiring the following performance criteria:

Containment Level	-	**H2**
Impact Severity Level	-	**B**
Working Width	-	**W7** (with integrated Noise Barrier)
Working Width	-	**W3** (without integrated Noise Barrier)

NOTE: The maximum lateral position of the test vehicle during the impact test was **1.1m.** This dimension should be used as the working width if the Vehicle Restraint System is to be used without the noise barrier and is to be installed in the vicinity of any physical obstruction or a structure, typically a bridge pier.

The length of the safety barrier 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 required service life of 20 years shall be deemed to be satisfied by providing a galvanised coating to all steel components in accordance with IS EN ISO 1461 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

Stephen Smyth.
Engineering Inspector.