

12<sup>th</sup> December 2018

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Our Ref: 11109085-A297\_rev1

Dear Mr Almanza,

**RE: TrafFix Scorpion II Trailer Mounted Attenuator (TA)**

The TrafFix Scorpion II Trailer Mounted Attenuator (TA) (identified by the Test Report Numbers shown in Table 1) has been shown to be acceptable for use on Highways England road schemes (subject to the conditions stated) by meeting the performance criteria identified within the American Standard MASH, and the Highways England Technical Document TD49/07, with the following configuration:

**Mandatory Speed Limit not to exceed 70mph**

Description: The TrafFix Scorpion II TA is a mobile crash cushion that is designed with an axle/wheel assembly for towing the TA by the support vehicle. The TA connects directly to the support vehicle's pintle hook from a lunette eye on the attenuator. The TA has overall dimensions of 5.4m x 2.4m x 1.3m and has a ground clearance of 305mm ± 25mm when deployed into a horizontal operating position. The Scorpion II TA consists of three main components: The trailer tongue, front Strut and rear Cartridge. The steel tongue is a single point trailer attachment for towing the TA under normal use with a built-in anti-rotation design that activates a three-point contact engagement when the TA is impacted. The Strut and Cartridge are the energy attenuation components. The Strut consists of four outboard convex aluminium tubes forming an aluminium structural weldment. The Cartridge consists of four outboard convex aluminium tubes forming an aluminium structural weldment.

**Table 1 – Scorpion II Test Matrix**

Velocity Class	Test Type	Test Report No	Test House	Date	ORA (≤20g)	OIV (≤12m/s)
110	3-50	TR-P36284-01-NC	KARCO	10.11.2016	12.7	10.2
	3-51	TR-P36017-01-NC	KARCO	09.12.2016	19.3	9.5
	3-52	TR-P36165-01-NC	KARCO	20.12.2016	10	9.2
	3-53	TR-P36177-01-NC	KARCO	21.12.2016	12.6	8.5
	<b>Test Type</b>	<b>Test Report No</b>	<b>Test House</b>	<b>Date</b>	<b>ASI (≤1.9)</b>	<b>THIV (≤44km/h)</b>
3-51.UK	TR-P38133-01-NC	KARCO	10.08.2018	1.3	41	

The TrafFix Scorpion II TA may be used on Highways England Trunk Road Network provided that a special dispensation order known as a Vehicle Special Order (VSO) is obtained from the Department for Transport.

Use on other UK highways will be at the discretion of the relevant highway authority.

The use of the TrafFix Scorpion II TA system will also be required to comply with the requirements of the Traffic Signs Manual, Chapter 8, 'Traffic Safety Measures and Signs for Road Works and Temporary Situations'. Particular reference should be made to Section O5 and Appendix 4.2 of Part 2 of Chapter 8. TrafFix Devices Inc. is responsible for ensuring this compliance.

TrafFix Devices Inc. will be responsible for defining any features of the highway, which would limit the use and operation of the TrafFix Scorpion II TA system. They will also be responsible for defining any operational, environmental or material features that would restrict the use of your system.

The TrafFix Scorpion II TA system will be included in Highways England's List of Accepted and Registered Products during its next revision. This can be obtained at the following Internet address:

[http://www.standardsforhighways.co.uk/ha/standards/tech\\_info/en\\_1317\\_compliance.htm](http://www.standardsforhighways.co.uk/ha/standards/tech_info/en_1317_compliance.htm)

TrafFix Devices Inc. shall remain responsible for the accuracy and content of all Drawings associated with the product.

The acceptance of the use of this system is based on the information that you have supplied. This acceptance does not indemnify you against any claims in law. Highways England and/or TRL reserve the right to withdraw its acceptance if there is evidence that the system performs in a different way from that shown in the Initial Type Test or if it is necessary to do so for any other reason.

Highways England and TRL can give no guarantee that this current acceptance will be satisfactory to any other National or Assessment body(s) undertaking this responsibility.

Yours sincerely,



Ceki Erginbas

Senior Researcher – Roadside Safety

cc: Mr Gavin Williams, Highways England