



ACTION 2 – DESIGN OF THE BARRIER WITH THE NEW MATERIALS

ACTION 2.3. Design of barriers report

1. INTRODUCTION

When a construction product is covered by a harmonized standard, the manufacturer shall draw up a declaration of performance when such a product is placed on the market, in such a case the CE marking shall be affixed to those construction products.

From January 1st, 2011 all vehicles restraint systems installed in the European Union must bear CE marking. Restraint Systems must comply specifically with requirements established in EN 1317, which include full scale crash tests to assess the performance and safety level.

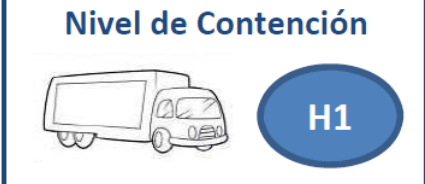


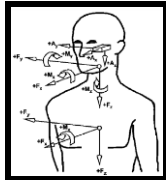
The standard EN 1317-2 defines the performance classes, impact test acceptance criteria and test methods for safety barriers. The three most important criteria for characterization of the safety barrier are:

- Containment level.
- Impact Severity.
- Working width.

2. OBJECTIVE

The main objective of this action is to design and size the new models of safety barriers. Firstly, taking into account the experience and discussions with the manufacturer selected for the development of barrier (ALBERDI), the following parameters are defined for the prototype n°2:

	<p>D.2.3 Design of barriers report - Prototype nº2 (abstract)</p>	<p>Page. 2/3 April 2014</p>
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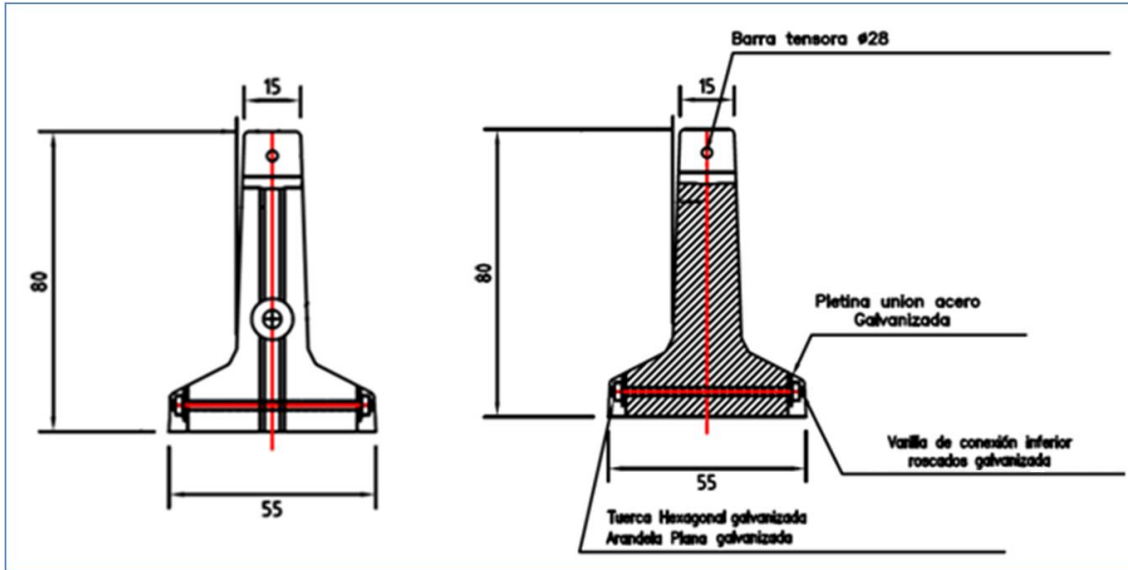
Safety criteria of design (prototype nº2)		
<p>Containment level</p>	<p>H1</p>	<p>Nivel de Contención</p> 
<p>Impact Severity</p>	<p>B</p>	<p>índice de Severidad</p> 
<p>Working width</p>	<p>W4</p>	<p>Anchura de Trabajo</p> 
<p>Severity Level (motorcyclist)</p>	<p>NI</p>	

Safety criteria of design (prototype nº2)

3. GEOMETRICAL DESIGN PROPOSED (prototype nº2)

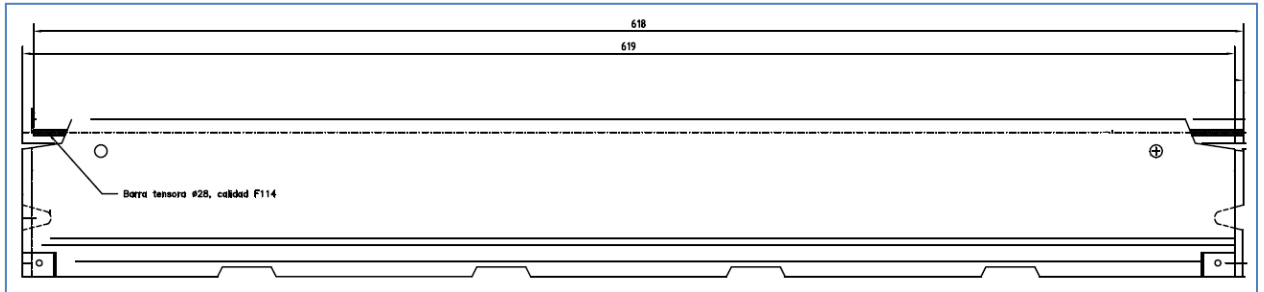
According to the aspects described in the section 3.1., the geometrical design proposed for the prototype nº2 will be 0,8 m-high and 6 m-long. As it can be observed the barrier height is different to the prototype nº1. However, this is not a problem because it is discussed and agree to install the two prototypes on different roads stretches.



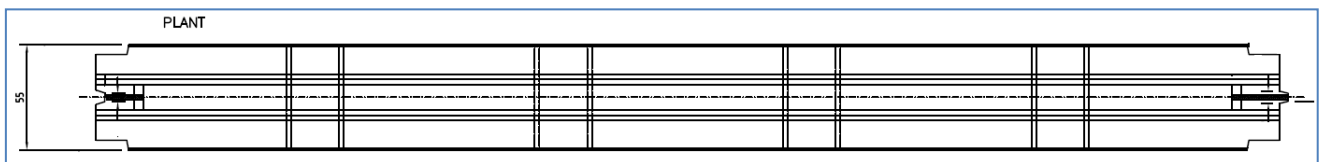


cross section

connexion area cross section



longitudinal section.



plant section.