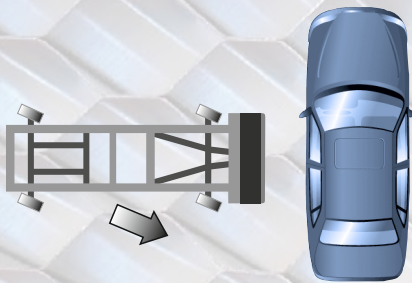


Description

Based on the Aluminum Honeycomb technology, the AFL NHTSA FMVSS 214 impact barrier is used by car manufacturers and test laboratories worldwide for the assessment of motor vehicle passenger's protection in case of side & rear impact collision according to the American NCAP protocol.

The side-impact test consists in a 1368 kg trolley impact on the driver's side of the test vehicle. The trolley is equipped with AFL NHTSA FMVSS 214 deformable barrier, which aims at simulating the front of the impactor vehicle. The impact speed with the vehicle is 55 km/h. 2 dummies (ES-2re as driver & SID-1Is as rear left passenger) are used to evaluate the injuries in this type of crash.

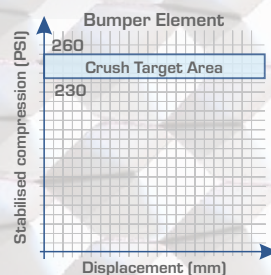
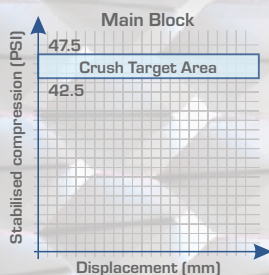
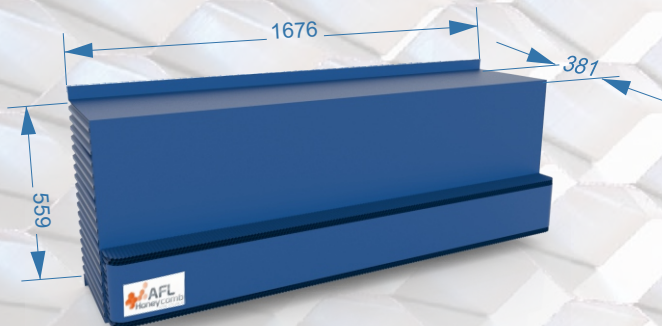


CERTIFICATIONS

The AFL NHTSA FMVSS214 side impact barrier is certified for USA-NCAP tests and manufactures according to the NHTSA Lab Test Procedure for Dynamic Side Impact Protection: TP214D Appendix C.

- NHTSA TP214-D
- NHTSA 49CFR571.214

Technical properties



The total quantity of kinetic energy to be absorbed by the AFL NHTSA FMVSS 214 side impact barrier is between 124 and 139 kJ.

The AFL barrier dimensions are:

- Width = 1676 +/- 6 mm
- Height = 559 +/- 6 mm
- Depth at Bumper Height = 483 +/- 6 mm
- Depth at upper impact face = 381 +/- 6 mm

Main honeycomb block

- Alloy 3003
- Cell Size: 19.1 mm

Bumper element Block

- Alloy 3003
- Cell Size: 6.4 mm

Backing sheet

- Aluminum 5052 H4
- T 0.8 mm

Cladding sheet

- Aluminum 5052 H4
- T 0.8 mm

Bumper facing sheet

- Aluminum 2024 T3
- T 0.3 mm

Adhesive

- Two-part polyurethane/resin with hardener

A complete testing procedure for certification of aluminum honeycomb is performed in-house according to the NHTSA Lab Test Procedure for Dynamic Side Impact Protection: TP214D Appendix C. The side impact barrier materials having crush strength of 45 PSI +/- 2.5 PSI for the main block and 245 PSI +/- 15 PSI for the bumper block.

Quality assurance

All products proposed by AFL Honeycomb Structures are designed and manufactured in the general pattern of our Quality Management System which fully complies with the ISO 9001: V2008 standard.

Our AFAQ accreditation guarantees the total quality and traceability of our production.

Packaging and delivery

Packaging : Individual cardboard crate : 1730 x 710 x 650 mm - 44 kg
Permanent sotck available, delivery unit is available under 15 days on request within European Community territory
Blue anti reflective paint as standard finishing, possibility of customised painting on-demand.



PRODUCT DATA SHEET *FMVSS*
(214, 301 et 305)



Vehicles **Safety**, our daily **priority**



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World leader for technologies using
aluminium honeycomb structures

We have the solution that meets your passive
safety requirements... and if we don't, we'll create one!