

Description

Based on Aluminum Honeycomb technology, the AE-MDB barrier (Advanced European Mobile Progressive Deformable Barrier - Euro NCAP V1.0 TB014) is used by car manufacturers and test laboratories worldwide for the assessment of motor vehicle passenger protection in side impact test procedure according to European New Car Assessment Programme (Euro NCAP).

The side-impact test consists of a 1300 kg trolley impact on the driver's side of the test vehicle (1400 kg in far side occupant protection). The trolley is equipped with AE-MDB barrier, which aims at simulating the front of the impacting vehicle. The impact speed is defined according to the test specifications. ATD's dummies are used to evaluate the injuries in this type of crash.

Certifications

The AE-MDB barrier is certified for NCAP tests:

- + Euro-NCAP
- + Korea-NCAP
- + Japan-NCAP
- + China-NCAP

Technical Properties

The side barrier consists of six single blocks of aluminium honeycomb, which have been processed in order to give a progressively increasing level of force with increasing deflection. An additional single element is attached of 60mm depth to the front of the lower row of blocks. Front and rear aluminium plates are attached to the aluminium honeycomb blocks. The plates cover the angled surfaces.

Honeycomb Blocks A, C, D & F - Aluminum 3003 - cell size 19.10 mm
600 mm x 250mm Progressive Crush strength according to Euro NCAP Tech.
Spec Blocks are crushed by 10 +/- 2 mm

Honeycomb Blocks B & E - Aluminum 3003 - cell size 19.10 mm
500mm x 250mm Progressive Crush strength according to Euro NCAP Tech.
Spec Blocks are crushed by 10 +/- 2 mm

Honeycomb Bumper - Aluminum 3003 - cell size 6.35 mm
1220 mm x 200 mm Crush strength of 1.586 to 1.793MPa

Front Plates - Aluminum of series AlMg2 to AlMg3
T 0.5 mm

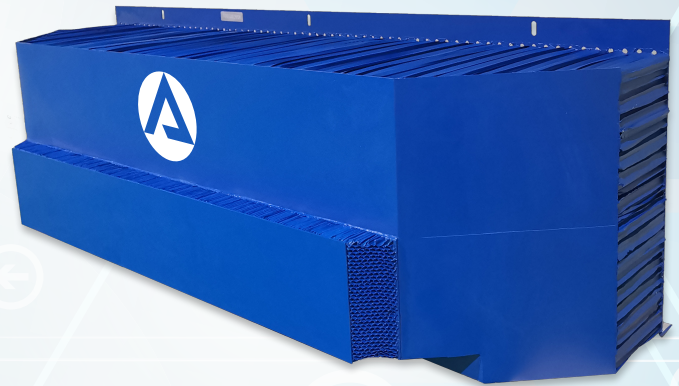
Bumper Plate - Aluminum of series 5251 H22, 5052 H32 or 5052 H34
T 3 mm

Back Plate - Aluminum of series AlMg2 to AlMg3
T 3 mm perforated for ventilation
The upper mounting flange shall be vertical
The lower mounting flange shall be bent through 90 degrees

Adhesive: Polyurethane
Expanded polyester: Synthetic polyester thermo bonded 60g/m ± 20%

A complete testing procedure for certification of aluminum honeycomb is performed in-house according to Euro NCAP Advanced European Mobile Progressive Deformable Barrier Face Specification version 1.0 from April 2013 - TB014 and in accordance with the procedure defined in NHTSA TP-214D. The aluminum honeycomb blocks are processed such that the force deflection-curve when statically crushed is within the corridors defined for each of the 6 blocks.

Euro NCAP Advanced European Mobile Progressive Deformable Barrier - AE-MDB



Technical Certification

The ARGOSY AE-MDB side impact barrier dynamic certification tests are performed at << certified EuroNCAP Laboratory >> in compliance with EuroNCAP TB 014 protocol.

Quality

AXAC has an approved ISO9001 Quality Management System, which demonstrates commitment to supplying customers with the highest quality products and services.

Delivery

- + Certificate of Conformity provided with the ARGOSY AE-MDB
- + Individual cardboard crate
- + Anti-reflective paint as standard
 - Blue anti-reflective paint as standard for Europe & Asia
 - Light gray anti-reflective paint standard for North America
 - Customized painting available

