

### Description

Based on Aluminum Honeycomb technology, the SC-MDB-V2 barrier (Side Impact Moving Deformable Barrier) is a new development barrier to be used in the C-NCAP 2025 side impact crashworthiness evaluations.

SC-MDB-V2 barrier is designed by CATARC, developed jointly with Argosy XAC Composite Materials LTD., and produced by Argosy XAC Composite Materials LTD., which is suitable for China's road conditions.

## **Technical Properties**

The SC-MDB-V2 barrier consists of two parts: a Main Honeycomb Block and a Bumper Honeycomb Block. The Main Honeycomb Block comprises Six elements: three Upper and three Lower Element. The Bumper Honeycomb Block comprises one element.

#### Upper Element Honeycomb Block 1 & 3 Material

Aluminum 3003 - cell size 1" Progressive Crush strength according to CATARC Tech. Spec.

#### **Upper Element Honeycomb Block 2 Material**

Aluminum 3003 - cell size 1" Crush strength according to CATARC Tech. Spec.

#### Lower Element Honeycomb Block 4 & 6 Material

Aluminum 3003 - cell size 1/2" Progressive Crush strength according to CATARC Tech. Spec.

### Lower Element Honeycomb Block 5 Material

Aluminum 3003 - cell size 3/4" Crush strength according to CATARC Tech. Spec.

#### **Bumper Element Honeycomb Block Material**

Aluminum 3003 - cell size 3/4" Crush strength according to CATARC Tech. Spec.

Back plate Element - Aluminum 5754-0, T3.0mm

Front Plate Element - Aluminum 5754-0, T=0.5mm

Lower Front Plate Element - Aluminum 5754-0, T=0.5mm

Bottom Front Plate Element - Aluminum 5754-0, T=0.5mm

Bumper Front Plate Element - Aluminum 5251 H22 or 5052 H32/H34, T=3.0mm

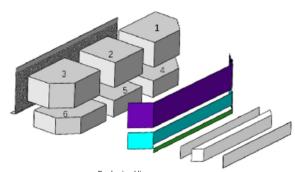
Bumper Rear Plate Element - Aluminum 5251 H22 or 5052 H32/H34, T=3.0mm

#### Adhesive

Two-part Polyurethane

A complete testing procedure for certification of aluminum honeycomb is performed in-house according to C-NCAP Side Impact Crashworthiness Evaluation, Moving Deformable Barrier Specification and in accordance with the procedure defined by CATARC.

The aluminum honeycomb blocks are processed such that the force deflection-curve when statically crushed is within the corridors defined for each block.



#### Explosive View

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# CATARC Side Impact Moving Deformable Barrier SC-MDB-V2



### Certification

The SC-MDB-V2 CATARC barrier is developed for the C-NCAP 2025 Side Impact Crashworthiness Evaluation Crash Test Protocol - 2025.

## **Technical Specification**

The AXAC SC-MDB-V2 CATARC side impact Moving deformable barrier are manufactured according to CATARC Moving Deformable Barrier Specification, in compliance with the C-NCAP 2025 Side Impact Crashworthiness Evaluation Crash Test Protocol - 2025

### Side Barrier Impact Test



### Quality

AXAC has an approved IS09001-2015 Quality Management System, which demonstrates a commitment to supplying customers with the highest quality products and services.

### Delivery

- + Individual cardboard crate
- + Anti-reflective paint as standard
  - Blue anti-reflective paint as standard
  - Light gray anti-reflective paint or customized painting available

SC-MDB-V2 Issued Date : 2023-09-01 Approved by: Ryan Flugel