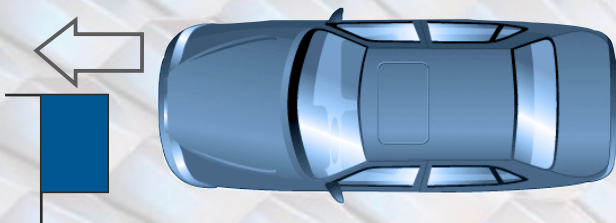


## Description

The prototype deformable barrier for frontal offset test PDB-XT is a calibrated kinetic absorber used for full scale crash testing in automotive passive safety and crashworthiness field. This product is based on works of several European working groups and car manufacturers. The PDB-XT barrier is a part of the ECE R94 regulation improvement proposal ECE/TRANS/WP.29/GRSP/2007/12.

Based on the honeycomb technology, this barrier proposes an evolution of the assessment of motor vehicles in case of frontal impact.

The offset frontal crash test PDB simulates a colliding with another vehicle. In this test, 50% of the test vehicle makes contact with the aluminium deformable barrier, at an impact speed of 60 km/h. Dummies allow assessment of the vehicle self-protection standard. The deformation of the barrier is investigated to assess the aggressivity of the tested vehicle.



A lot of tests in different configurations have been carried out with the PDB-XT barrier. This developing product is a worldwide exclusivity of AFL Honeycomb Structures.

## Technical properties

### The barrier is composed of :

- Aluminium sheets,
- Honeycomb deformable core :  
1/4, 3/8 and 3/4 inch cell size, 3003 alloy,
- Two-part Epoxy bi-component
- Anti reflective paint



### Packaging and delivery

Packaging : Individual cardboard box :  
1070 x 900 x 930 mm - 53 kg  
Unit delivery under two weeks within European Union.  
Blue anti reflective paint as standard ,  
customized painting on-demand.  
Certificate of conformity provided with the barrier.  
Quality management : ISO 9001 : 2015 certified

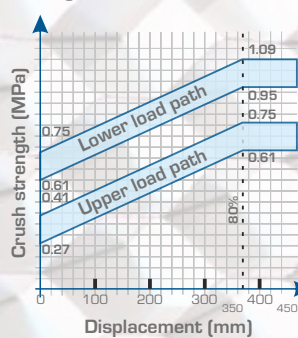
The barrier is composed of 3 honeycomb blocks.

The front deformable core crush strength is constant in depth and situated in the following target : 0.342 Mpa +0/-10%.

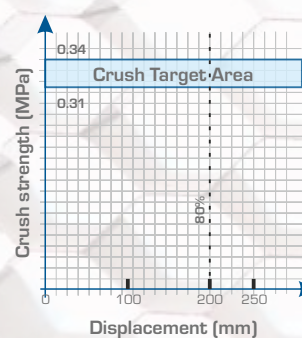
The central block is composed of four several strength areas. A chemical etching process of the aluminium honeycomb allows to have two constant strength areas and two progressive strength in depth areas.

The rear deformable core crush strength is constant in depth and situated in the following target : 1.711 Mpa +0/-10%.

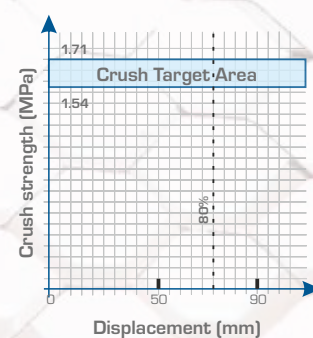
Progressive Deformable Core



Front Deformable Core



Back Deformable Core







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

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