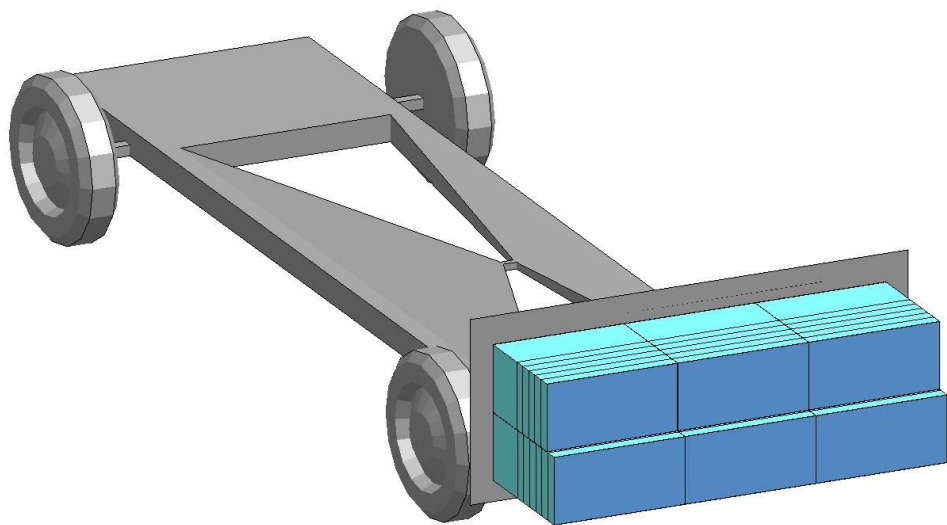


# Advanced 2000 EEVC Side Impact Barrier Model

Arup – Cellbond

This barrier is used in the EU front impact regulation and by several consumer test organisations such as Euro NCAP and the IIHS in their front offset impact test. The specification used for the deformable impact barrier in this documentation has been taken from the ECE R95 Amendment 3 dated September 2003.



## Specification

Element Type	Number of Elements	Timestep	Validation Code	Regulation Test	Regulation Speed
Solid	60022	1.2E-6sec	R9.2	-	-

## Validation

The LS-DYNA model calibration has been done using the test results provided by Cellbond:

- Offset Pole Impact at 5.6 m/s.
- Rigid wall impact at 9.7 m/s.

The force-deflection curves (generated from model analysis and test) for the individual block of the barrier have been compared. The results have also been checked against the force-deflection corridors from the specification document.

This validation work has been carried out in both SMP and MPP versions of LS-DYNA R9.2 and R7.12 to ensure the performance and accuracy.