

Assessment of vehicle security barrier according to ISO 22343-1:2023

VTI has performed a crash test and evaluated the vehicle security barrier called "Benders SAFE 880 SM". The test was ordered by Benders Sverige AB and was carried out on 2026-09-03 at VTI in Linköping, Sweden. VTI's test reference is 2026-09-03-1.

Tested item

- Product name: SAFE 880 SM
- Product description: Massive stone block attached to a metal foundation. The product weighed 3446 kg, and its dimensions were 1900x800x880 (length x height x width). Height above ground when installed was 600 mm.
- Foundation: A metal frame was attached to the stone block and buried under 190mm of compacted gravel.

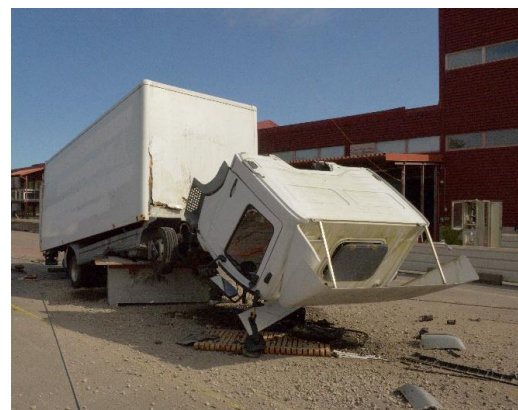
Test data:

Vehicle model: Mercedes Atego 816
Vehicle weight at test: 7200 kg
Actual impact speed: 51.0 km/h
Actual impact angle: 90 °

Test requirements:

Type N2A
7200 ±150 kg
48 +3 / -1 km/h
90±2 °

Test results



Complete test results are reported in VTI Test report 57041.

Vehicle was immobilized:	Yes
Vehicle static penetration distance:	3.70 m
Vehicle dynamic penetration distance:	4.12 m
Major debris (>2kg), max. distance:	10.00 m
Impact energy:	723 kJ
Performance rating:	ISO 22343-1 Wall V/7200[N2A]/48/90:4.1/10.0

2026-09-25

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