Impact test report
Quick-Guard® Standard

Date	Place		Testing Company
2016-01-11	Kungsbacka, Sweden		ABB Jokab Safety
Report No:	Test method		
QG-TR-52	Test method stated in EN ISO 14120:2015 Annex C		

Test object data

Test object	Infill material / panel	Panel fixation	Post profile
Quick-Guard Standard	JSM YN40W1 Welded steel mesh 40/3,5	JSM NL3 Net lock	JSM A44A Aluminum profile 44x44
Test object height	Test object width		Manufacturer
2000 mm	2000 mm		ABB Jokab Safety
Other			

Test equipment and conditions

Test method	Impact body	Impact side	Height of impact point
Pendulum test	Hard body	Inside hazard zone	1340 mm
Body mass	Drop height	Calculated impact energy [E]	Floor fixation
34 kg	1500 mm	500 J	M10x68 expander shell bolts
Other			

Pendulum speed: 19,5km/h (5,4m/s)

$$E = mgh = 34 * 9,82 * 1,5 = 501\,J$$

or

$$E = \frac{mv^2}{2} = \frac{34 * 5,4^2}{2} = 496\,J$$

Where:
E is the calculated impact energy in Joule [J]
m is the pendulum mass [kg]
g is 9,82 m/s² (constant)
h is the drop height in meters [m]
v is the pendulum speed [m/s]

Test result

Result:

The fence absorb and resist the energy impact caused by the pendulum body, and obtain a remaining deformation. Total deflection of the fence was approximately 215 mm, no penetration or parts departed.

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