

# Impact test report

## Quick-Guard® Standard

Date	Place	Testing Company
2014-09-22	Kungsbacka, Sweden	ABB Jokab Safety
Report No:	Test method	
QG-TR-29	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 YPC5A1 Polycarbonate 5 mm	JSM PL3 Panel 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	1200 mm	400 J	M10x68 expander shell bolts
Other			

Pendulum speed: 17,5km/h (4,9m/s)

$$E = mgh = 34 * 9,82 * 1,2 = 401 J$$

or

$$E = \frac{mv^2}{2} = \frac{34 * 4,9^2}{2} = 409 J$$

Where:

E is the calculated impact energy in Joule [J]

m is the pendulum mass [kg]

g is 9,82 m/s<sup>2</sup> (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 210 mm, no penetration or parts departed.