Impact test report
Quick-Guard® Standard - Door

Date: 2016-03-07
Place: Kungsbacka, Sweden
Testing Company: ABB Jokab Safety

Report No: QG-TR-89
Test method: Test method stated in EN ISO 14120:2015 Annex C

Test object data

<table>
<thead>
<tr>
<th>Test object</th>
<th>Infill material / panel</th>
<th>Panel fixation</th>
<th>Post profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quick-Guard Standard, Door</td>
<td>JSM YPC5A9</td>
<td>JSM PL1</td>
<td>JSM A44A</td>
</tr>
<tr>
<td></td>
<td>Polycarbonate 5 mm</td>
<td>Infill securing strip</td>
<td>Aluminum profile 44x44</td>
</tr>
</tbody>
</table>

Test object height: 2000 mm
Test object width: 1056 mm

Manufacturer: ABB Jokab Safety

Test equipment and conditions

Test method: Pendulum test
Impact body: Hard body
Impact side: Inside hazard zone
Height of impact point: 1340 mm

Body mass: 34 kg
Drop height: 350 mm
Height of impact point: 1340 mm

Floor fixation: M10x68 expander shell bolts

Pendulum speed: 9.4 km/h (2.6 m/s)

\[
E = mgh = 34 \times 9.82 \times 0.35 = 117 J
\]

or

\[
E = \frac{mv^2}{2} = \frac{34 \times 2.6^2}{2} = 115 J
\]

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/door absorb and resist the energy impact caused by the pendulum body, no remaining deformation observed. Total deflection of the fence was approximately 95 mm, no penetration or parts departed.