Impact test report
Quick-Guard® Standard

Date: 2014-09-23
Place: Kungsbacka, Sweden
Testing Company: ABB Jokab Safety

Report No: QG-TR-31
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</td>
<td>JSM YPC5A1</td>
<td>JSM PL1_</td>
<td>JSM A44A</td>
</tr>
<tr>
<td>Standard</td>
<td>Polycarbonate 5 mm</td>
<td>Infill securing strip</td>
<td>Aluminum profile 44x44</td>
</tr>
<tr>
<td>Test object height</td>
<td>2000 mm</td>
<td>Test object width</td>
<td></td>
</tr>
<tr>
<td>Manufacturer</td>
<td>ABB Jokab Safety</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Test equipment and conditions

<table>
<thead>
<tr>
<th>Test method</th>
<th>Impact body</th>
<th>Impact side</th>
<th>Height of impact point</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pendulum test</td>
<td>Hard body</td>
<td>Inside hazard zone</td>
<td>1340 mm</td>
</tr>
</tbody>
</table>

Body mass: 34 kg
Drop height: 600 mm
Calculated impact energy [E]: 200 J
Floor fixation: M10x68 expander shell bolts

Pendulum speed: 12.4 km/h (3.4 m/s)

\[ E = mgh = 34 \times 9.82 \times 0.6 = 200 \text{ J} \]

or

\[ E = \frac{mv^2}{2} = \frac{34 \times 3.4^2}{2} = 196 \text{ J} \]

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 150 mm, no penetration or parts departed.