Impact test report
Quick-Guard® Standard

Date: 2015-10-05
Place: Kungsbacka, Sweden
Testing Company: ABB Jokab Safety

Report No: QG-TR-35
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</td>
<td>JSM YGP1A9</td>
<td>JSM G2/PL1_ Cellular rubber/infill-securing strip</td>
<td>JSM A44A Aluminum profile 44x44</td>
</tr>
<tr>
<td></td>
<td>Steel panel 1,0 mm X-reinforced</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Other: Cellular rubber mounted inside hazard zone and infill securing strip on the outside

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>
<tr>
<td>Body mass</td>
<td>Drop height</td>
<td>Calculated impact energy [E]</td>
<td>Floor fixation</td>
</tr>
<tr>
<td>34 kg</td>
<td>380 mm</td>
<td>127 J</td>
<td>M10x68 expander shell bolts</td>
</tr>
</tbody>
</table>

Pendulum speed: 9,8 km/h (2,7 m/s)

\[ E = mgh = 34 \times 9.82 \times 0.38 = 127 J \]

or

\[ E = \frac{mv^2}{2} = \frac{34 \times 2.7^2}{2} = 124 J \]

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 90 mm, no penetration or parts departed.