Sound Insulation

According to
ISO 140/3

Authorizing Company: ETEM S.A.

Specimen description:

Sliding aluminium window
E-19 series

Area: 1.9 m²
Total glazing thickness: 22 mm

Layers:

Thermal insulating glazing
6+12+4 mm
Two rubber seals between
sash frame and glazing
Three brushes between
sash and frame

Test rooms:

Volumes:
V source = 29.7 m³
V receiving = 43.8 m³

Type of room: Laboratory test room
Room condition: Empty
Excitation: White noise
Filter: 1/3 octave

Evaluation according to ISO 717/1
Weighted Sound Reduction Index

\[ R_w = 36 \text{ dB} \]

<table>
<thead>
<tr>
<th>f(Hz)</th>
<th>100</th>
<th>125</th>
<th>160</th>
<th>200</th>
<th>250</th>
<th>315</th>
<th>400</th>
<th>500</th>
<th>630</th>
<th>800</th>
<th>1000</th>
<th>1250</th>
<th>1600</th>
<th>2000</th>
<th>2500</th>
<th>3150</th>
</tr>
</thead>
<tbody>
<tr>
<td>R(dB)</td>
<td>21.9</td>
<td>25.5</td>
<td>29.9</td>
<td>16.5</td>
<td>30.9</td>
<td>30.5</td>
<td>32.8</td>
<td>36.7</td>
<td>36.0</td>
<td>36.4</td>
<td>37.1</td>
<td>37.1</td>
<td>39.6</td>
<td>39.5</td>
<td>39.9</td>
<td></td>
</tr>
</tbody>
</table>

Test number: A5.376.05

Date of test: 16.05.2005 C

School of Architecture – Faculty of Technology – A.U.TH
Architectural Technology Laboratory
Director: E. Tzekakis

Signature