Data Sheet
Noise-Lock® STC 51 Steel Acoustic Door

Overview

• Certified performance rating
• Manufactured to standard and custom sizes
• Available as single leaf or double door sets with glazing options
• Cam-lift hinges used to maximize acoustic seal
• Rugged steel construction
• Factory assembled and checked
• Finished in polyester powder coating as standard
• Wood veneer and powder coat finish options available
• Door leaf is 2 ½” thick

Acoustic Rating

STC 51 [dB] to achieve minimum NIC 46 once installed (subject to flanking).
Rw [C; Ctr] 50 [-3 ; -9] dB to achieve minimum R’w 45 dB once installed (subject to flanking).
Certified laboratory performance in single leaf arrangement as follows:

<table>
<thead>
<tr>
<th>Frequency (Hz)</th>
<th>63</th>
<th>80</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>
<th>4000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise-Lock® STC 51</td>
<td>24</td>
<td>20</td>
<td>23</td>
<td>28</td>
<td>37</td>
<td>44</td>
<td>47</td>
<td>49</td>
<td>48</td>
<td>50</td>
<td>53</td>
<td>52</td>
<td>52</td>
<td>51</td>
<td>51</td>
<td>54</td>
<td>58</td>
<td>59</td>
<td></td>
</tr>
</tbody>
</table>
Overview
IAC Acoustics produces an engineered system — fully factory assembled complete with a leaf, architectural split-frame, acoustic seals, cam-lift hinges and hardware. All doors are pre-hung for operational alignment, fit and finish before shipping.

Noise-Lock® doors are laboratory-tested for performance in independent laboratories, further supported by installed site testing. IAC Acoustics is renowned for quality, durability and guarantees in-field performance.

Hardware
IAC Acoustics Noise-Lock® doors are available with a number of standard and custom hardware options. Please contact your local IAC Acoustics office for further details.

The relationship between the clear and structural openings for both width and height is the same for all sizes of Noise-Lock® STC 51 doors. An example for a 3’ x 7’ door can be found in the table below:

<table>
<thead>
<tr>
<th>Door Opening</th>
<th>Width (X)</th>
<th>Height (Y)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural/Rough Opening</td>
<td>3’-5½”</td>
<td>7’-3”*</td>
</tr>
<tr>
<td>Clear Opening</td>
<td>3’</td>
<td>7’</td>
</tr>
</tbody>
</table>

* includes ¼” threshold

Performance Features
- Self-aligning magnetic seals assure long life and high in-field performance, even under constant use
- Cam-lift hinges lower and seal the door to the floor eliminating the high maintenance of automatic drop seals
- Split frames eliminate in-field grouting to achieve the specified acoustic performance with quick and clean installation