QuietSwing—Wood Veneer Sound Control Doors
by NOISE BARRIERS, LLC.

Architectural

Single-Leaf, Double-Leaf or Bi-Fold Designs

- Radio/TV/Audio Recording Studios
- Stage and Rehearsal Areas
- Convention Halls
- Auditoriums
- Music Practice Rooms
- Concert Halls
- Home Theaters
- Conference Rooms
- Secure Areas
- Sensitive Compartmented Information Facilities (SCIF)
- Offices and Executive Suites
- Doctors’ Offices—HIPAA Compliance
- Psychiatrist/Psychologist Offices
- Audiometric Exam Rooms
- Schools
NoiseBarriers, LLC. is your turnkey provider for all sound control door needs.

- Guaranteed acoustic performance.
- All doors are tested at an independent NVLAP approved testing facility.
- All hardware, seals and hinges are factory installed.
- Door includes custom cam-lift hinge design, eliminating the need for a threshold in most applications.
- Adjustable mortised bottom seal allows the door to adapt to site floor conditions.
- Double magnetic seals at head and jambs.
- Split-frame assembly allows installation into existing openings.
- All doors with vision panels are factory glazed prior to shipment.
- Designed to work with standard building hardware, factory installed if desired.
- Ease of operation conforms to ADA.
- Available in single-leaf, double-leaf and bi-fold designs.
- These are metal doors with wood veneer applied to the face of the doors. The frames are prime painted metal.
- Noise Barriers’ Standard Wood Species of Veneer include: Anigre, Ash, Beech, Birch, Cedar, Cherry, Mahogany, Maple, Red Oak, White Oak, Pine and Spruce. Other species are available for special pricing not included below.
- Standard veneer does not include Rotary Cut or Book Matching. These options are offered at an additional cost.
- Wood veneered doors need to be stored in a clean, dry area that is temperature (60 to 90 degrees F) and humidity (50% maximum) controlled. If doors are purchased un-sealed they must be sealed as soon as possible after receipt on the jobsite but no more than 2 days. Only the use of polyurethane, acrylic urethanes or lacquer finishes are acceptable. Water based stains are not acceptable. They will not degrade the adhesive used to bond the veneer to the metal door face.

All door and frame components are tested as a complete assembly prior to shipment.

<table>
<thead>
<tr>
<th>Acoustic Performance Data</th>
<th>1/3 Octave Band Center Frequency, Hz</th>
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<tbody>
<tr>
<td></td>
<td>125</td>
</tr>
<tr>
<td>Sound Transmission Loss Data, dB</td>
<td></td>
</tr>
<tr>
<td>QS-45 - 2½&quot; Thick - 11.2 PSF</td>
<td>29</td>
</tr>
<tr>
<td>QS-46 - 2½&quot; Thick - 8.6 PSF</td>
<td>36</td>
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<tr>
<td>QS-50 - 2½&quot; Thick - 10.1 PSF</td>
<td>37</td>
</tr>
<tr>
<td>QS-51 - 2½&quot; Thick - 10.1 PSF</td>
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<tr>
<td>QS-52 - 2½&quot; Thick - 10.5 PSF</td>
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</tr>
<tr>
<td>QS-54 - 3½&quot; Thick - 18.3 PSF</td>
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</tr>
<tr>
<td>QS-56 - 3½&quot; Thick - 20.9 PSF</td>
<td>38</td>
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</tbody>
</table>

All tests performed by an independent NVLAP accredited acoustical testing facility.
The test method conforms with ASTM Designations E90-09 and E413-87.
The Cuts Used to Create Veneer

The size of the log, the species of wood, the grain pattern desired and other factors determine which type of cut will be made to create veneer. Below are some of the most common methods of cutting logs.

### Rotary Cut

The log is centered on a lathe and turned against a broad cutting knife set into the log at a slight angle.

![Rotary Cut Illustration](image)

### Quarter Slicing

The slicing is made perpendicular to the annual growth rings of the tree. This creates a straight grain appearance.

![Quarter Slicing Illustration](image)

### Lengthwise Slicing

This is done from a board of flat sawn lumber rather than from a log. A variegated figure is created with this slice.

![Lengthwise Slicing Illustration](image)

### Plain Slicing

By slicing parallel to the center of the log, a raised “cathedral effect” is formed by the innermost growth rings.

![Plain Slicing Illustration](image)

### Half-Round Slicing

Sliced on an arc parallel to the center of the log, this cut achieves a flat-cut veneer appearance.

![Half-Round Slicing Illustration](image)

### Rift Cut

This straight grain cut is derived by slicing red and white oak at a slight angle to minimize the irregularities in the wood.

![Rift Cut Illustration](image)
Veneer Matching Techniques

The way you match veneer sheets can create visual rhythm and enhance your project. Noise Barriers, LLC. can provide special sequence matching services for you for a nominal fee. Contact us for more information.

Here are some of the most common veneer matching approaches:

**Book Matching**

Alternating pieces of veneer are flipped over so they face each other as do the pages within a book. This creates a pleasing, symmetrical pattern.

**Slip Matching**

Veneer slices are joined in sequence without flipping the pattern. If the grain is straight, the joints will not be obvious.

**Pleasing Match**

Veneer is matched by color but not by grain pattern.

**Random Match**

Random matching is just what it sounds like. Usually done with lower grades of veneer, the leaves may be of varying width, colors and grains.