ABOUT JAMISON

When you buy from Jamison, you buy more than a door. You buy the expertise and experience of a demonstrated leader in the design and manufacture of quality acoustical doors for projects of every size and complexity. Since 1941, Jamison’s commitment to research and development, our engineering know-how, and highly skilled work-force have enabled us to provide innovative solutions for effective noise control.

Jamison Sound Reduction Doors are found in:

- Theatres
- Auditoriums
- Television and radio broadcasting facilities
- Vehicle and component test centers
- Military and commercial jet engine facilities
- Laboratories
- Industrial plants

... anywhere noise containment or sound isolation is essential.

Today, Jamison Sound Reduction Doors are offered in a wide range of models and styles with STC ratings of 45 to 62. Whatever your requirements, we urge you to talk to us before you design. We'll help you find effective answers to your most demanding acoustic challenges.

RATINGS YOU CAN TRUST...

Jamison Sound Reduction Doors are measured using the latest ASTM E-90 test standards and the STC ratings defined by ASTM E-413. ASTM E-90 tests are comprehensive, requiring a fully operable door to ensure that the total panel, seals, frame, and hardware design are measured for transmission loss.

All Jamison Sound Reduction Doors are tested by the internationally recognized Riverbank Acoustical Laboratories of Geneva, Illinois - the world’s first independent laboratory constructed for measuring the acoustical properties of architectural elements. With 75+ years experience, Riverbank is a frequently identified source for acoustical data in commercial, civic, and military specifications. The Riverbank facility and staff are annually certified and accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) through the National Bureau of Standards of the U.S. Department of Commerce.
**Door Types**

**Swinging Doors**
- Single: 3' x 7' to 10' x 12'
- Double: 6' x 7' to 30' x 30'
- Double Counter-swing
  - **Some double doors may have unequal leaves. For example, a 10' x 15' door, plus a 20' x 15' door may be employed together to close a 30' x 15' doorway.**

**Sliding Doors**
- Horizontal: 7' x 7' to 20' x 30'
- Single or Bi-Parting

**Vertical Doors**
- Vertical: 7' x 8' to 20' x 30'
  - Take advantage of unused space above the doorway rather than valuable floor space. Commonly used for industrial sound applications; television studios, performing arts centers, including university and junior college theatres.

---

**Performance You Can Count On**

**Sound Transmission Test Ratings**

<table>
<thead>
<tr>
<th>STC</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>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>20</td>
<td>25</td>
<td>32</td>
<td>40</td>
<td>50</td>
<td>63</td>
<td>80</td>
<td>100</td>
<td>125</td>
<td>160</td>
</tr>
<tr>
<td>45</td>
<td>25</td>
<td>32</td>
<td>40</td>
<td>50</td>
<td>63</td>
<td>80</td>
<td>100</td>
<td>125</td>
<td>160</td>
<td>200</td>
</tr>
<tr>
<td>50</td>
<td>30</td>
<td>38</td>
<td>48</td>
<td>60</td>
<td>75</td>
<td>95</td>
<td>120</td>
<td>150</td>
<td>190</td>
<td>250</td>
</tr>
<tr>
<td>55</td>
<td>35</td>
<td>45</td>
<td>58</td>
<td>75</td>
<td>95</td>
<td>120</td>
<td>150</td>
<td>200</td>
<td>250</td>
<td>300</td>
</tr>
<tr>
<td>60</td>
<td>40</td>
<td>53</td>
<td>70</td>
<td>90</td>
<td>120</td>
<td>150</td>
<td>200</td>
<td>250</td>
<td>300</td>
<td>350</td>
</tr>
<tr>
<td>65</td>
<td>45</td>
<td>60</td>
<td>80</td>
<td>100</td>
<td>130</td>
<td>160</td>
<td>200</td>
<td>250</td>
<td>300</td>
<td>350</td>
</tr>
<tr>
<td>70</td>
<td>50</td>
<td>70</td>
<td>95</td>
<td>120</td>
<td>155</td>
<td>195</td>
<td>250</td>
<td>300</td>
<td>350</td>
<td>400</td>
</tr>
<tr>
<td>75</td>
<td>55</td>
<td>80</td>
<td>110</td>
<td>140</td>
<td>180</td>
<td>230</td>
<td>300</td>
<td>350</td>
<td>400</td>
<td>450</td>
</tr>
<tr>
<td>80</td>
<td>60</td>
<td>90</td>
<td>125</td>
<td>160</td>
<td>205</td>
<td>260</td>
<td>325</td>
<td>400</td>
<td>450</td>
<td>500</td>
</tr>
<tr>
<td>85</td>
<td>65</td>
<td>100</td>
<td>140</td>
<td>185</td>
<td>235</td>
<td>300</td>
<td>400</td>
<td>450</td>
<td>500</td>
<td>550</td>
</tr>
<tr>
<td>90</td>
<td>70</td>
<td>120</td>
<td>170</td>
<td>220</td>
<td>280</td>
<td>350</td>
<td>450</td>
<td>500</td>
<td>550</td>
<td>600</td>
</tr>
<tr>
<td>95</td>
<td>75</td>
<td>130</td>
<td>190</td>
<td>250</td>
<td>320</td>
<td>400</td>
<td>500</td>
<td>600</td>
<td>650</td>
<td>700</td>
</tr>
<tr>
<td>100</td>
<td>80</td>
<td>150</td>
<td>220</td>
<td>290</td>
<td>360</td>
<td>450</td>
<td>550</td>
<td>650</td>
<td>750</td>
<td>800</td>
</tr>
</tbody>
</table>

*Door performance equal to or exceeded transmission loss capabilities of laboratory.*

*SL indicates sliding door ratings.
Performing Arts Theatre Broadcast

In the fast-paced, competitive world of broadcast TV, isolating the sound stage from on-going construction noise is critical to the financial success of the studio. Jamison has supplied sliding doors as large as 20' x 24' with STC ratings in the high 50's for several major television production studios.

This STC 51 power-operated single horizontal sliding door installed in a major shopping network television studio closes a 10'-wide x 8'-high opening. Six doors isolate outside noise from hallways and preparation rooms from the studio where live broadcasts originate nearly 24 hours a day. The doors are operable from both sides to allow easy passage of personnel and display props.
You'll find Jamison doors at ABC's Washington Network News Bureau, behind the scenes of "Good Morning America" and "The Oprah Winfrey Show" and on a number of soap opera sets including "General Hospital" and "All My Children."

This 20' x 23' power-operated, vertical sliding door at Keene State College in New Hampshire creates a small "black box" theatre behind the main theatre. When the door is shut, the black box serves as a classroom or mini theatre. The door also creates a unique set for the larger theatre when images are projected through the open door to create exciting scenic and backdrop elements during performances.

This STC 53 rated 16' x 23' power-operated horizontal sliding door is installed on the exterior wall of a major television network studio to exclude outside noise during live shows.

This STC 57 double-swinging door at the New York City University Performing Arts Center isolates scenery construction shop noise adjacent to the stage. Extra-large scene construction and props pass easily through either side of this 18' x 20' door.
Jet Engine

Jamison STC 59 double-swinging jet engine door

Jamison has designed engine test cell doors in a variety of sizes, from 3’ x 7’ personnel-size doors to 30’ x 30’ doors. Jamison engine test cell doors are used in government and airline test cells, automotive, marine, and railroad engine testing facilities, military equipment and turbine testing laboratories.

This double-swinging 18’ x 14’ power-operated door seals the opening to a jet engine test cell at Pratt and Whitney Aircraft in East Hartford, CT. With an STC rating of 57, it is designed to withstand an acoustical pressure of +74 psf (164 dB RE .0002 microbar) and cell de-pressurization of -42 psf.

Dual Jet Engine Test Facility

At this General Electric engine test facility in Lynn, MA, a 21’ x 19’ door was designed with a 14’ diameter propeller shroud opening. This unique “split-porthole” door permits the test cell to be used in two ways; with the propeller shroud in place, the cell is configured to test turboprop engines, (left). By folding that door flat against the wall and closing another specially contoured door around the cell’s exhaust gas tube, turbojet and fanjet engines can be tested, (right).
Other Industrial Applications

Industry has come to depend on Jamison Sound Reduction Doors to effectively turn down the volume of production. From vehicle testing facilities to firearms testing plants, Jamison offers sound solutions. We will supply the right door for your industrial sound reduction needs.

1. This typical 6’ x 7’ STC 49 3” thick double-swinging door protects passing personnel by containing generator noise.

2. This 12’ x 10’ Jamison STC 49 double-swinging door on a small engine test cell is equipped with self-raising hinges to reduce wear of sill gaskets.

3. The double-swinging STC 51 doors on this truck manufacturer’s test cells help protect personnel from engine noise. The doors are equipped with special gravity hardware and gaskets to seal around overhead conveyors.

Each job is thoroughly researched, from the initial inquiry, to final installation. And each door is designed to meet or exceed the specified performance standards. However large or small, dangerously loud, or simply annoying the noise may be, you can trust Jamison to make sound sense of it all.
Hardware & Gaskets
Swinging Doors

Jamison designs and manufactures almost all the hardware for its specialty doors. Our capability and expertise in this area includes steel shaping, stamping, presswork, machining and welding. Hardware like our massive, vibration-proof hinges and latching systems are designed to contribute to a door’s performance and reduce maintenance.

Latches

Jamison latches are rugged, heavy-duty, vibration-proof and are self-tightening to assure sound-tight gasket compression.

Jamison STC 45 and 49 doors are equipped with lever-activated type latches interconnected to multiple latch points at top and bottom of doors. Back operation is provided with a lever-operated, thru-rod assembly.

The heavy-duty Series 3100 multi-point spring wedge seal latch also provides sealing points at the head and sill of the frame. A lever-operated thru-rod assembly makes it operable from the back. It can also be equipped with a key-operated cylinder lock.

This standard, multi-point spring wedge seal latch for single-swinging personnel size doors is equipped with a push type thru-rod and knob to facilitate exit from the room. The latch also can be equipped with a panic bar release mechanism.

For large, high-performance doors, Jamison uses a roller wedge action latch. This roller wedge latch provides the ultimate in sealing force for high acoustic power level applications. (See photo, page 5, NYC University Performing Arts Center.)
Hinges

Hinges are surface-mounted and reinforced to withstand vibratory and pressure loads. They include radial and/or thrust bearings and lubrication fittings.

Heavy-duty, reinforced hinge specially designed for use on large single and double leaf doors.

Gasketing

The remarkably efficient Jamison gasketing system is specially designed for sound applications. Comparisons between sealed-in-place panel tests and operable door tests often show no more than a one-to-two point difference in STC ratings - illustrating the effectiveness of the Jamison hardware and seal designs.

Panic Bar

Panic bar hardware permits personnel to easily exit room by depressing the bar against the thru-shaft to release the front latching device.
Hardware & Gaskets

Horizontal sliding doors are available with the same highly effective design panels and sealing features as the swinging doors. They are tested as fully-operable doors under the latest ASTM E-90 standards. Doors may be single or bi-parting, power or manually operated, top or bottom supported.

Hardware and Track System
Header includes steel channel and hardened steel track rail welded to heavy-duty support angle. Large diameter hardened steel wheels ride on rail to provide a smooth, quiet operation.

Electrical Power Operator
An all-gear drive, low profile operator offers dependable door operation and requires very little maintenance. Door travel is easily adjustable from outside of control panel.

This power latching system drives the door leaf against gaskets to achieve a tight seal. A separate 120 volt power supply is needed.

Typical Details

Sill Section

Head Jamb - STC 51 Door

Trailing Edge - STC 53 Door

Leading Edge - STC 51 Door

Vertical Sliding Doors
The Jamison vertical sliding door uses the same effective panels and seals as Jamison horizontal sliding doors. Although laboratory limitations prevent testing of a vertical door, the similarity of components suggests that comparable performance ratings would be achieved.
STC Ratings

The following graphs represent sound transmission loss values at 18 standard frequencies. The precision of the transmission loss data is within the limits set by ASTM E-90.
<table>
<thead>
<tr>
<th>Theatre/Performing Arts</th>
<th>Television/Broadcast Stations</th>
<th>Industrial Sound</th>
<th>Vehicle Testing</th>
<th>Jet Engine Cells</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old Globe Theatre</td>
<td>ABC - Washington News Bureau</td>
<td>IBM</td>
<td>John Deere</td>
<td>Pratt &amp; Whitney</td>
</tr>
<tr>
<td>Loews Anatole Hotel</td>
<td>KOCO-TV, Oklahoma City</td>
<td>General Electric Company</td>
<td>Bell Helicopter Textron</td>
<td>General Electric Company</td>
</tr>
<tr>
<td>City University of New York</td>
<td>WLS-TV - ABC, Chicago</td>
<td>Jacobsen Manufacturing Co.</td>
<td>Goodyear Tire and Rubber Company</td>
<td>China Airways</td>
</tr>
<tr>
<td>University of Alaska</td>
<td>QVC Studio</td>
<td>M &amp; M Mars Inc.</td>
<td></td>
<td>People's Republic of China</td>
</tr>
<tr>
<td>University of Georgia</td>
<td>Fox TV</td>
<td>McDonnell Douglas</td>
<td></td>
<td>TWA</td>
</tr>
<tr>
<td>CMU Purnell Center</td>
<td></td>
<td>Vibro Acoustics Test Facility</td>
<td></td>
<td>United Airlines</td>
</tr>
<tr>
<td>Act Theater</td>
<td></td>
<td></td>
<td></td>
<td>Aircraft Acoustical</td>
</tr>
<tr>
<td>FCCJ Performing Visual Center</td>
<td>WABC Studios, New York</td>
<td></td>
<td></td>
<td>Oman Military</td>
</tr>
<tr>
<td>University of North Texas</td>
<td>WBZ-TV, Boston</td>
<td>General Mills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orpheum Theatre</td>
<td>WHNT-TV, Huntsville</td>
<td>Carrier Corporation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newberry Opera House</td>
<td>Duke City Studio</td>
<td>Bendix Corporation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ingersoll-Rand Company</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wyle Laboratories</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marriott's Frenchman's Reef</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>NASA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tulsa Technology Center</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Millville Municipal Airport</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Maimar NAS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lemoore NAS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>NASA Patuxent River</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ARNOLD AFB</td>
</tr>
</tbody>
</table>

**JAMISON**

JAMISON DOOR COMPANY
55 J.V. JAMISON DRIVE • P.O. BOX 70
HAGERSTOWN, MD 21741-0070
TOLL-FREE 1-800-532-3667
301-733-3100 • FAX 301-791-7339
WWW.JAMISON-DOOR.COM
EMAIL: SALES@JAMISON-DOOR.COM