

JAMISON



SOUND REDUCTION DOORS

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

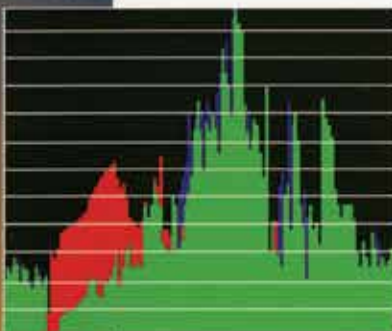
... anywhere noise containment or sound isolation is essential.

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



Jamison - A Complete Package

Jamison supplies the door, frame, sealing systems, hardware, and any specified custom-designed electric, hydraulic, and pneumatic power operators.

Panels: Jamison steel door panels have a fire-resistant core of barrier materials and energy-absorbent acoustical insulation. The panel thickness and composition determine the Sound Transmission Class (STC) ratings per ASTM E-413.

Frames: Frames are made with heavy, structural steel channels or angles, which are pre-straightened and assembled to a diagonal tolerance of $\pm 1/16"$.



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

Transmission Loss in dB Hertz - 1/3 Octave Bands

STC	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	Test Report Number	STC
45	30	34	40	39	42	41	42	43	45	45	46	49	50	47	45	44	45	45	RAL TL91-9	45
49	38	40	39	40	41	44	44	45	45	47	49	52	52	53	55	56	52	46	RAL TL91-4	49
50	31	33	40	41	42	44	44	46	50	50	51	50	53	55	56	58	60	61	RAL TL85-321	50
52	34	36	39	43	44	46	46	48	50	51	50	51	54	55	57	58	59	56	RAL TL85-62	52
53	36	37	40	43	45	46	48	50	52	54	53	54	56	57	58	59	60	59	RAL TL85-64	53
54	39	40	41	44	46	48	49	51	53	54	54	54	56	57	58	60	61	61	RAL TL85-65	54
55	39	40	45	44	47	52	53	53	53	55	55	54	56	58	58	61	62	61	RAL TL85-182	55
57	39	42	45	46	48	53	52	55	57	58	57	56	58	60	60	62	63	62	RAL TL85-180	57
59	44*	42*	48*	50*	55*	55*	58*	58*	57	56	56	57	59	62	65	67	68	66	RAL TL86-323	59
60	44*	52*	48*	51*	57*	56*	58*	59*	58*	57	57	59	60	63	66	68	69	68	RAL TL86-320	60
62	44*	50*	49*	51*	56*	57*	61*	60*	59	60	60	61	61	65	67	69	69	69	RAL TL86-322	62
51SL	38	41	37	44	46	44	46	49	49	49	50	52	53	52	53	56	54	50	RAL TL85-320	51SL
52SL	38	39	38	43	43	42	46	50	51	52	52	53	53	54	57	57	54	48	RAL TL85-319	52SL
53SL	43	42	41	46	47	45	48	51	51	54	53	53	53	55	58	60	58	53	RAL TL85-317	53SL

*Door performance equaled 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



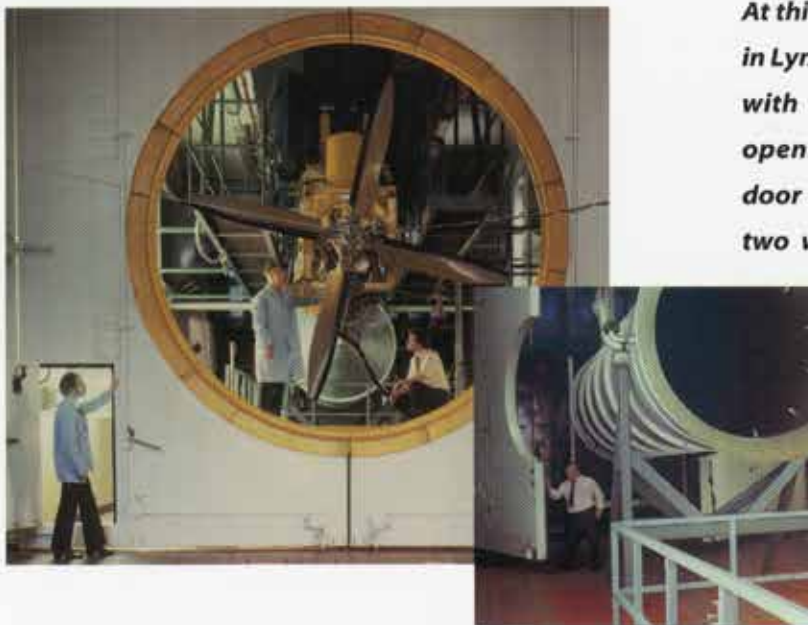
*Jamison STC 59
double-swinging
jet engine door*

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 fan jet engines can be tested, (right).

OTHER INDUSTRIAL APPLICATIONS



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



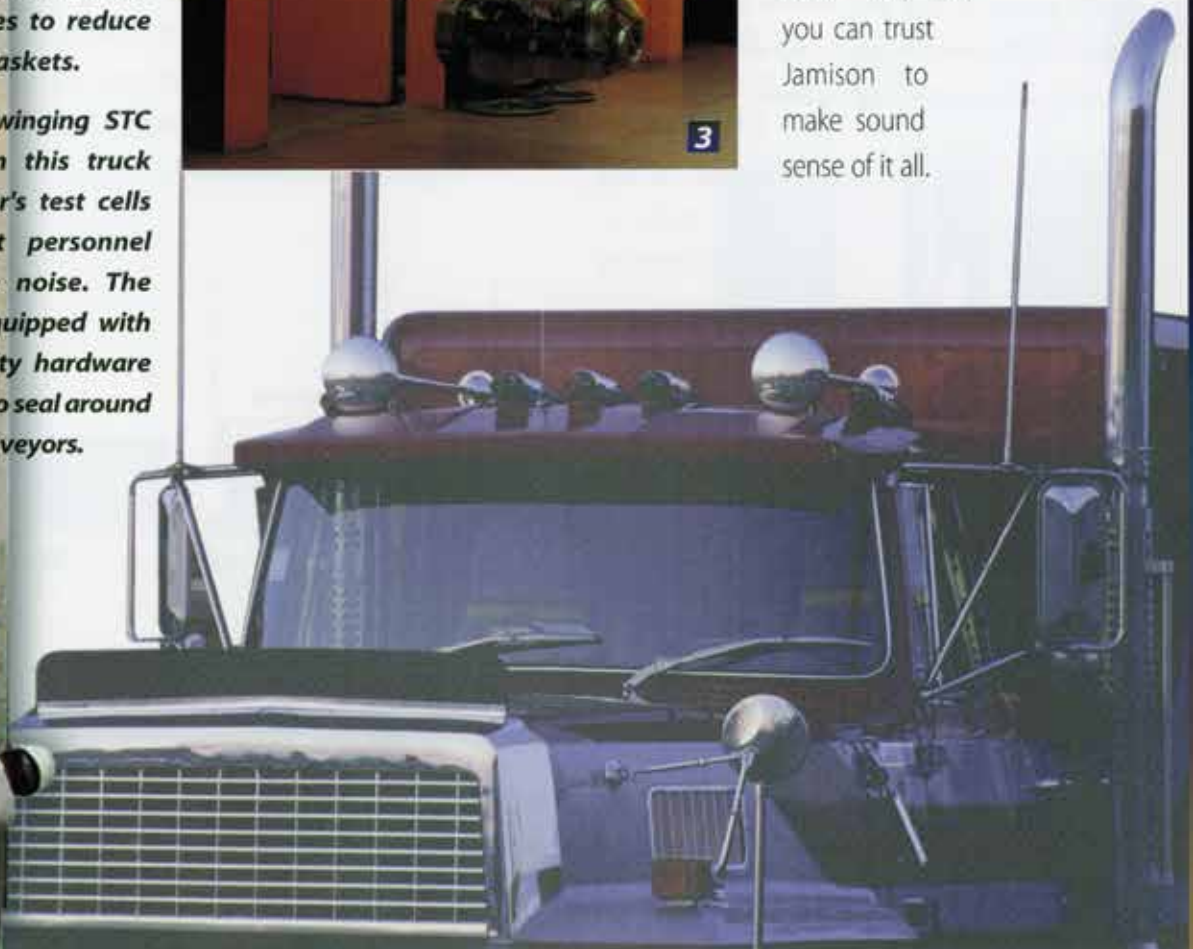
2 This 12' x 10' Jamison STC 49 double-swinging door on a small engine test cell is equipped with self-raising hinges to reduce wear of sill gaskets.



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.

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.

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-actuated 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.)

DOOR HARDWARE

Hinges

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



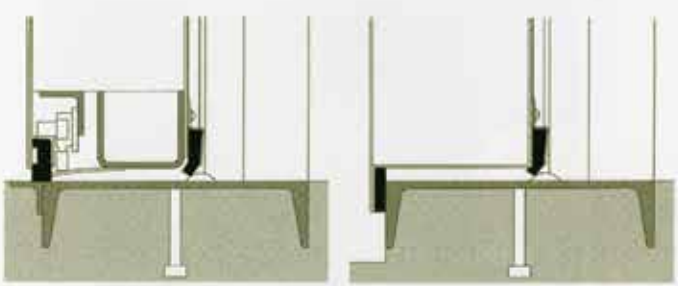
Heavy-duty, reinforced hinge specially designed for use on large single and double leaf doors.



Jamison model FSR hinge with bronze thrust bearing.

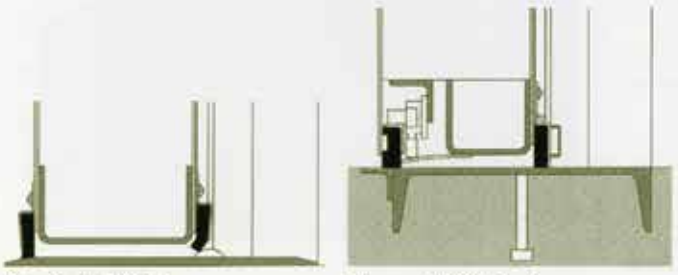
Gasketing

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.



Standard Channel Sill

High Sill



Beveled Sill Plate

Channel Sill, Flush

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.



Single Door Jamb Gasket Seals



Double Door Astragal Gasket Seals



HARDWARE & GASKETS

SLIDING DOORS

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.

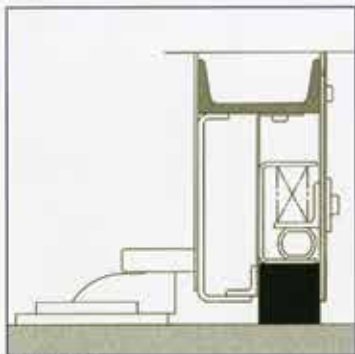
Electrical Power Operator

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.

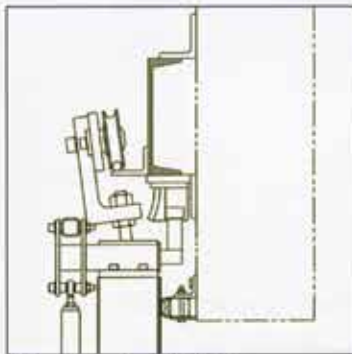


This power latching system drives the door leaf against gaskets to achieve a tight seal. A separate 120 volt power supply is needed.

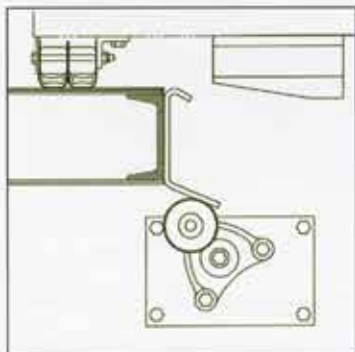
Typical Details



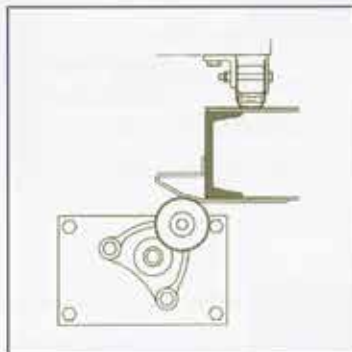
Sill Section



Head Jamb - STC 51 Door



Trailing Edge - STC 53 Door



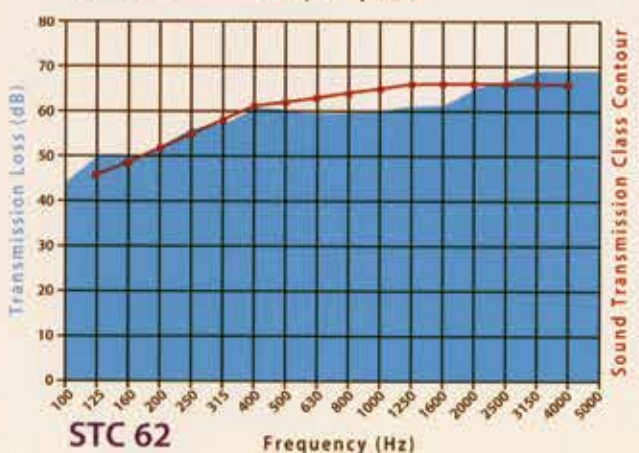
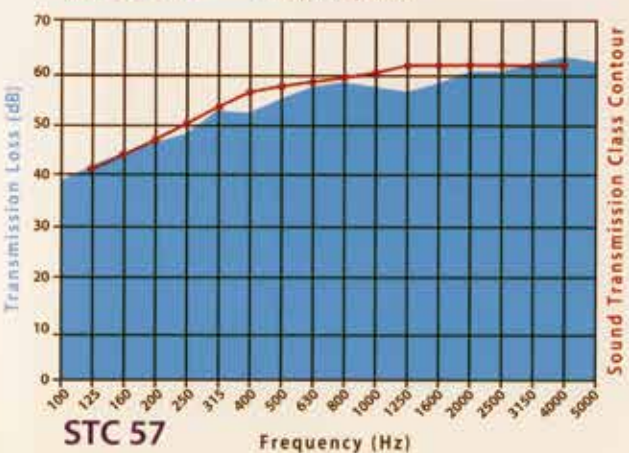
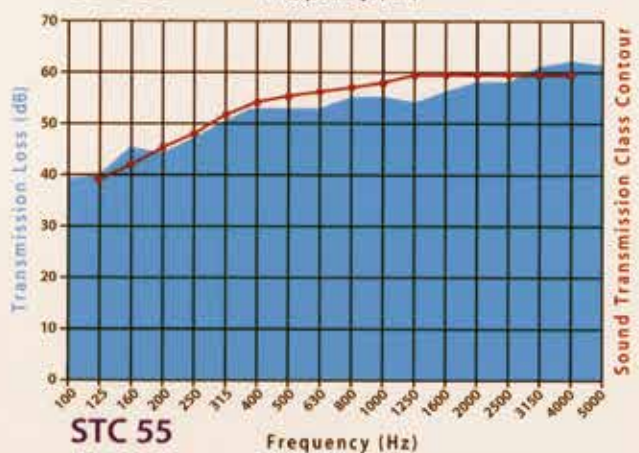
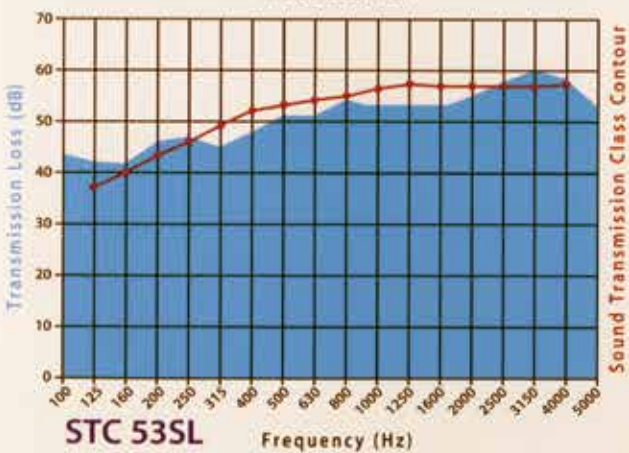
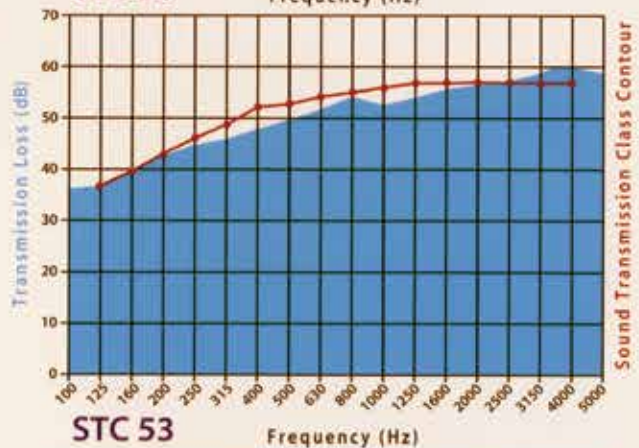
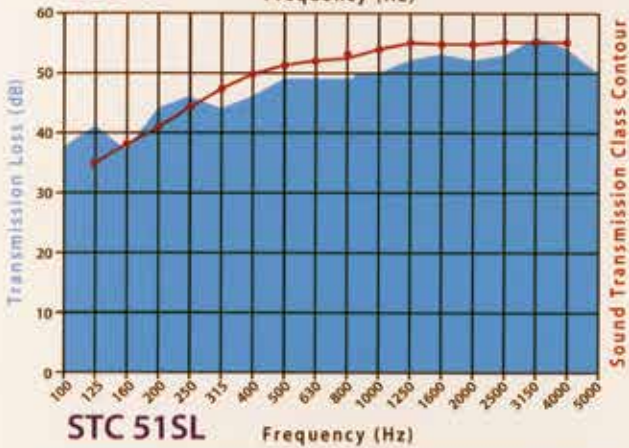
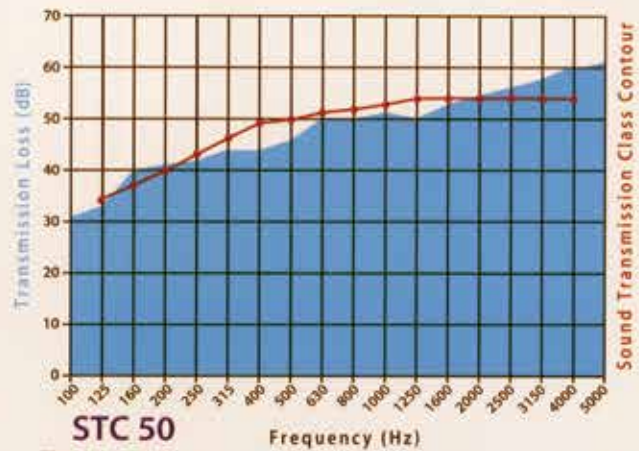
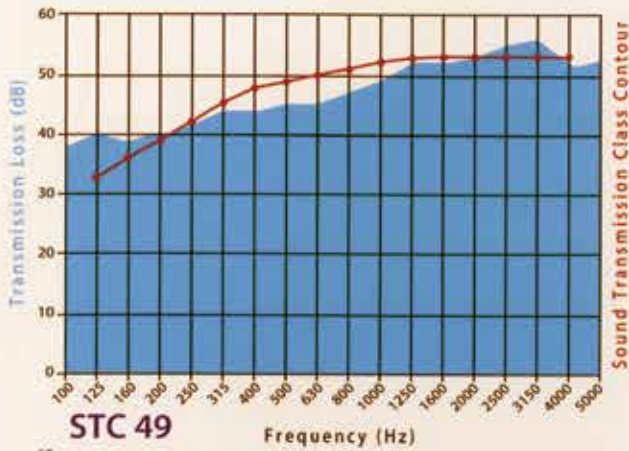
Leading Edge - STC 51 Door

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.



A TRADITION OF SERVICE AND SUPPORT FOR SOUND REDUCTION DOOR CLIENTS

THEATRE/PERFORMING ARTS

OLD GLOBE THEATRE
LOWES ANATOLE HOTEL
CITY UNIVERSITY OF NEW YORK
UNIVERSITY OF ALASKA
UNIVERSITY OF GEORGIA
CMU PURNELL CENTER
ACT THEATER
FCCJ PERFORMING VISUAL CENTER
UNIVERSITY OF NORTH TEXAS
ORPHEUM THEATER
NEWBERRY OPERA HOUSE

PEORIA CIVIC CENTER
UNIVERSITY OF MICHIGAN
COLBY COLLEGE THEATRE
ARIZONA STATE UNIVERSITY
KEENE STATE COLLEGE
PALM BEACH OCEAN STUDIO
HOLLYWOOD CENTER STUDIOS
UNIVERSITY OF NORTHERN IOWA
UNIVERSITY OF CINCINNATI
CITRUS COMMUNITY COLLEGE

MARYLAND CONCERT THEATRE
SEATTLE CIVIC CENTER
FRESNO CITY COLLEGE
INDIANA UNIVERSITY
I-LAN COUNTY CULTURAL CENTER
UNIVERSAL STUDIO
ELDORADO HOTEL CASINO
EDGEWOOD AUDITORIUM
SHENANDOAH UNIVERSITY
UNIVERSITY OF HOUSTON

TELEVISION/BROADCAST STATIONS

ABC - WASHINGTON NEWS BUREAU
KOCO-TV, OKLAHOMA CITY
WLS-TV - - ABC, CHICAGO
QVC STUDIO
Fox TV

WABC STUDIOS, NEW YORK
WBZ-TV, BOSTON
WHNT-TV, HUNTSVILLE
DUKE CITY STUDIO

KWGN-TV DENVER TECH. CENTER
WIXT-TV, SYRACUSE
BROADWAY STUDIOS
MICROSOFT BUILDING

INDUSTRIAL SOUND

IBM
GENERAL ELECTRIC COMPANY
JACOBSEN MANUFACTURING CO.
M & M MARS INC.
MCDONNELL DOUGLAS
VIBRO ACOUSTICS TEST FACILITY

GENERAL MILLS
CARRIER CORPORATION
BENDIX CORPORATION
INGERSOLL-RAND COMPANY
WYLE LABORATORIES
MARRIOTT'S FRENCHMAN'S REEF

ROCK ISLAND ARSENAL
STEEL COMPANY OF CANADA
BRANCH MOTOR EXPRESS
ROHM AND HAAS COMPANY
NSWCSS R & D FACILITY
MACK TRUCKS, INC.

VEHICLE TESTING

JOHN DEERE
BELL HELICOPTER TEXTRON
GOODYEAR TIRE AND RUBBER COMPANY

CUMMINS DIESEL
THE GENERAL TIRE AND RUBBER CO.

OUTBOARD MARINE CORPORATION
GENERAL MOTORS CORPORATION

JET ENGINE CELLS

PRATT & WHITNEY
GENERAL ELECTRIC COMPANY
CHINA AIRWAYS
PEOPLE'S REPUBLIC OF CHINA
TWA
UNITED AIRLINES
AIRCRAFT ACOUSTICAL
OMAN MILITARY

AVCO LYCOMING DIVISION
AER LINGUS (IRISH AIRLINES)
AIR INDIA
SINGAPORE AIRLINES LTD.
DELTA AIRLINES
TINKER AFB
MCAS CAMP PENDLETON
MCAS CHERRY POINT

NASA
TULSA TECHNOLOGY CENTER
MILLVILLE MUNICIPAL AIRPORT
MIRIMAR NAS
LEMOORE NAS
NAS PATUXENT RIVER
ARNOLD AFB

JAMISON

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