



SONASHIELD™

ACOUSTIC-RATED DOORS

Sonashield acoustic doors provide superior sound control to meet the specialized design and performance requirements of varied building projects. Whether it be patients recovering in hospitals, weary travelers seeking a good night's sleep or ensuring students have less distractions while learning, Marshfield's acoustic-rated doors can contribute to the overall comfort and well-being of a building's environment and its occupants.

The acoustical quality of an area is dependant on a variety of factors including size of the space, wall and ceiling components, equipment and the ambient noise this equipment generates.

SonaShield doors are available in Operable Sound Transmission Class (STC) ratings from 21db through 47db. Choose from surface materials including veneer, high-pressure decorative laminate, high-impact and painted.



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SonaShield doors are ideal for:

Educational Facilities

- Music Rooms
- Theaters
- Band Rooms
- Gymnasiums
- Offices & Classrooms

Health Care Facilities

- Patient Rooms
- Exam Rooms
- Psychiatric Areas

Commercial Building Areas

- Boardrooms
- Human Resource Offices
- Performing Arts Centers
- Multi-Family Housing Entrance Doors
- Hotel Room Doors

Military

- Barracks
- Sensitive Compartmented Information Facilities (SCIF)
- Offices



All SonaShield doors are certified to SCS® Indoor Advantage Gold.



SonaShield doors with wood based particleboard core are certified by SCS® Global Services for Recycled Content.



The mark of responsible forestry
FSC Trademark License
Code FSC-C005458

Available upon request.

Acoustic Ratings: A Door's Role

Transmission of sound takes place both through air and through structures such as floors and walls. Acoustic doors are optimized to weaken airborne sound. Airborne sound travels through openings with very little loss. Openings that are surprisingly small can transmit virtually the same acoustic energy as large openings.

A door system's STC rating is only as good as the weakest link in the system. The gasket and perimeter sealing package that is incorporated into the opening is critical to maintaining a door system's STC rating. SonaShield acoustic doors are tested and rated with the gasket and seal packages as listed in their individual product data sheets.

Acoustic-Rated Doors with Fire-Ratings

Where fire performance is required in association with acoustic performance, certain models are available to meet fire ratings from 20 to 90 minute. Factory glazing of fire doors is also available. **Be sure to check out Marshfield's new STC-45, 45 minute offering!**

STC Rating	What can be heard.
25	Normal speech can be understood quite easily and distinctly through wall
30	Loud speech can be understood fairly well, normal speech heard but not understood
35	Loud speech audible but not intelligible
40	Onset of "privacy"
42	Loud speech audible as a murmur
45	Loud speech not audible; 90% of statistical population not annoyed
50	Very loud sounds such as musical instruments or a stereo can be faintly heard; 99% of population not annoyed.

Changes in STC Rating	Changes in Apparent Loudness
+/- 1 STC points	Imperceptible
+/- 2 STC points	Just perceptible
+/- 5 STC points	Clearly noticeable
+/- 10 STC points	Twice (or half) as loud

SonaShield™ Acoustic Rated Doors

Signature Series™ Wood Veneer Doors, Marquis Series™ HPDL,
DurableDoor™ Impact & Impressions™ Paintable Series Doors

	PRODUCT SPECIFICATIONS	INTERIOR USE ONLY
DIMENSIONS	Thickness	1-3/4"
	Maximum Size* *Some limitations apply by location	Singles and Pairs-Varies by STC Rating. Refer to Appendix M.
CONSTRUCTION	Surface Material	Wood Veneer, HPDL, High Impact, MDO. Some limitations apply.
	Crossbands	One Piece High Density Fiberboard (HDF)
	Vertical Edges**	- Veneer edge bands, hardwood outer, HPDL or impact resistant based on surface material and STC rating ** Fire-Rated doors will be constructed per label service listing and may deviate from above
	Horizontal Edges**	- Per manufacturers tested assembly - See Appendix M ** Fire-Rated doors will be constructed per label service listing and may deviate from above
	Face & Core Assembly Adhesive	WDMA Type 1
	Core Construction	Proprietary Acoustic Construction
	Lite Openings / Louvers	- Factory glazing recommended where allowed per tested assembly - Lite kit varies by STC rating - Louvers not allowed
	Distance from Lock & Lite Cutouts	3-1/4" minimum distance from adjacent lock and lite cutouts
	Details	Applied mouldings - varies by STC rating
	Machining	Machining preparation per hardware manufacturer's templates
	Factory Finish	- Clear/stain options available - Meets WDMA TR-8 and AWS System 9 - Prime/Opaque upon request - Sealing of top and bottom rails available
STC	Acoustic Rating* *Some limitations apply by location	See Appendix M
CREDITS & STANDARDS	Environmental Options	- CARB PH2 - FSC and NAUF - CARB ULEF options available. Some limitations apply.
	Environmental Product Declaration	Yes
	Quality Standards	- WDMA I.S.1A Architectural Wood Flush Doors (Standard Construction) - AWS available upon request
	WDMA Performance Duty Level	Varies by STC Rating - Contact factory
WT.	Door Weight	Varies - See Appendix M
	Warranty	Full; life of original installation. No exterior warranty.