

SOUNDWOOD ACOUSTICAL PRODUCTS

Eggers Industries melds technology with style to produce beautiful,
high-performing acoustical doors and frames.



Eggers Industries

Soundwood™

ACOUSTICAL WOOD PRODUCTS BY EGGERS



Turning nature's beauty into works of art

SOUNDWOOD ACOUSTICAL PRODUCTS

Eggers' sound control openings have the highest STC ratings in the industry, made of solid wood and wood composite based materials. Our capabilities allow combinations of acoustical performance and other special functionalities to meet design requirements and building codes. Eggers' STC doors and frames are found in airports, healthcare, and hospitality facilities, government and municipal buildings as well as educational institutions. Typical applications of our acoustical doors and frames include performance venues, conference rooms, lecture halls, auditoriums, and classrooms.

Our acoustical products include doors and frames that have been evaluated for sound transmission at a qualified testing laboratory using ASTM standard test method E-90-XX (where XX refers to the year). To ensure applicable data, make certain the products you are specifying reference an acceptable revision date of the test method. Products tested with old standards may not provide the same level of performance as those tested with newer versions.



Acoustical Performance Testing Methods

There are two ways to test and report the acoustical performance of doors. The first is as a fixed panel. This is done by fully sealing the door to frame perimeter and eliminating any sound leaks around the door perimeter. This type of test is helpful in determining the performance of the basic construction, but does not represent an operational application.

The second method is to test an operable assembly. In this case, the door is installed in a frame, including hinging and latching hardware as well as a gasketing system. In addition to including all of the required components of an operable assembly, the test method requires the door be operated normally through five open/close cycles, without subsequent adjustments, prior to running the acoustic test. This

test method provides more useful performance values than an inoperable test. When comparing STC ratings, be sure that the ratings represent operable doors. While Eggers conducts research and development tests of many of our constructions as sealed panels, the advertised STC numbers are always for operable assemblies.

Eggers has generally limited the variables tested to the door construction, application and the gasketing system. With a few notable exceptions shown on our product matrix, we have limited our testing to readily available hardware and gasketing materials, ADA approved thresholds (where applicable), and steel frames. A special note regarding frames is appropriate here. Where steel frames are used in testing, they are normally fully grouted with

cement. This is a standard method of installation at testing laboratories and is done to insure the resulting STC rating represents only the doors and gasketing system. This is not meant to restrict the openings in which acoustic doors are used. In many circumstances, existing frames or installation conditions may prevent the use of a solid filled frame. Where other types of fill are used, an acoustic consultant should be employed to determine if the alternate fill will maintain the desired acoustic performance for the opening. As long as the framing provides an acoustic performance equal or greater than the door rating, the advertised STC will be maintained.

The relevance chart below is given as a general guideline of the effect various STC ratings have on speech being heard through the door.

Advantages of Eggers Acoustic Doors

Eggers has conducted acoustic tests on all of our standard door constructions. In many cases where the acoustics properties need to be known, but are not the primary objective, gasketing a standard door construction may be all that is required. When the project design requires acoustic performance above and beyond the standard doors, Eggers has designed and tested a full line of specialty constructions. Benefits offered by this broad range of products include:

- STC ratings ranging from 38 through 52
- Applications that include single swing, standard swing pairs, doors and transoms and dutch doors
- Acoustic rating for both flush doors and stile and rail doors.
- Applications without lites, with small lites (100 sq. in.), medium sized lites (400 sq. in.), large lites (1296 sq. in.) and even full lites
- Applications with 20-minute, 45-minute, 60-minute, and 90-minute fire ratings
- Applications that provide x-ray protection as well as acoustical performance
- Applications tested in wood frames
- Applications for airport housing noise abatement programs

STC Rating	Speech heard through the door
30	Loud speech can be understood fairly well
35	Loud speech audible but not understandable
40	Loud speech audible as a murmur
45	Loud speech barely audible
50	Loud speech not audible

Specialized Constructions

A variety of components are used to provide the performance range of our acoustic products, alone or in combination with applicable fire, bullet-resistance, and X-ray protection. These components make 4' x 8' the practical maximum door dimension. Contact the technical department for applications requiring larger doors.

Guaranteed STC Ratings

The STC rating of acoustic doors depends on two things: the components used (doors and gasketing) and their installation. While Eggers does not perform installation, we are still able to guarantee our doors meet the advertised STC ratings when properly installed using the door construction, hardware, seals, and where applicable, the lites described in our STC Product Offering Matrix. This guarantee is given with confidence because of the stringent tests we conduct on all acoustic assemblies. The Eggers name alone is your assurance of the highest standards possible.

While we encourage use of these tested assemblies, we also recognize the need for substitutions such as a different type of glazing or alternate gasketing. In such cases where there is no test report for the final assembly, Eggers will provide the same door construction used for the tested assembly, but without a "guaranteed" STC rating. This allows for increased design flexibility starting with a proven door construction. We recommend the use of an acoustic consultant to review the final assembly whenever substitutions are made.

As stated above, the final performance depends heavily on the installation. The best acoustic doors will fail

to meet expectations if they are improperly installed. Acoustic applications are special, they generally involve close tolerances that require square and plumb openings. The acoustic assemblies have been designed such that the seals are uniform between the door and the fixed elements of the opening. Do not expect an acoustic door to compensate for poor frame installation. It is better to fix the opening before installing the door. Likewise, insuring properly installed and adjusted gasketing will avoid remedial work. Extra time spent ensuring a good installation will pay off in superior quality sound control.

When gasketing an acoustic opening, a good analogy is to think about sealing out sound like you would seal out light in a dark room. Wherever light can leak through the opening, so will sound. A simple field test after the assembly is fully installed is to close the door, turn out the lights on one side of the door and, after allowing your eyes to adjust to the darkness, inspect the seals for light leaking through the assembly. To further aid in this test, have someone shine a bright light around the perimeter on the opposite side as you inspect for leaks. Preventing or solving installation issues will address over 95% of unsatisfactory acoustic assemblies.

STC RATING BY DOOR TYPE AND ATTRIBUTES

Door Type & Swing	STC Rating	Door (Panel) Thickness	Available Fire Rating	Gasket System	Glazing System	Glazing Type	Glazing Area (Sq In)	Weight (Sq Ft)	Test Reports	Core Type
Flush Single Swing	52	1-3/4"	NR	S or T	NA	---	---	12.0	C5765.03	SG14
	51	1-3/4"	NR	S, T, or U	NA	---	---	12.0	C5765.03	SG14
	51	2 1/4"	20	A	NA	---	---	15.8	TL94-37	SG6
	50	1-3/4"	NR	S, T, or U	NA	---	---	12.0	C5765.03	SG14
	50	1-3/4"	NR	S or T	Bead: 110	1-1/8" Non-Rated IGU	100 (max)	12.0	C5765.04	SG14
	49	1-3/4"	NR	U	NA	---	---	12.0	C5765.03	SG14
	49	1-3/4"	NR	U	Bead: 110	1-1/8" Non-Rated IGU	100 (max)	12.0	C7672.01A	SG14
	49	1-3/4"	NR	S or T	NA	---	---	10.5	"E1460.03-113-11-R0 C7672.03A"	SG16A
	48	1-3/4"	NR	S, T, or U	NA	---	---	10.5	"E1460.03-113-11-R0 C7672.03B"	SG16A
	48	1-3/4"	NR	U	Bead: 110	1-1/8" Non-Rated IGU	100 (max)	12.0	C7672.01A	SG14
	48	1-3/4"	20	A	NA	---	---	13.7	TL97-320	SG5
	48	2-1/4"	NR	A	Bead: 110	1-1/8" Non-Rated IGU	400 (max)	15.8	TL95-350	SG6
	47	1-3/4"	NR	S, T, or U	NA	---	---	10.5	"E1460.03-113-11-R0 C7672.03A"	SG16
	47	1-3/4"	NR	U	Bead: 110	1-1/8" Non-Rated IGU	100 (max)	12.0	C7672.01A	SG14
	47	2 1/4"	20	A	VP:110-D2	Pyroswiss / 1/2" Laminated	400 (max)	15.8	TL95-351	SG6
	47	1-3/4"	60-45	A	NA	NA	NA	15.7	TL03-023	SG8
	47	1-3/4"	60-45	S, T, or U	VP:110-D2	Firelite Plus (center) & 1/4" laminated (outer)	100 (max)	15.4	"E1460.05-113-11-R0 C7672.02K-113-17-R0"	SG8
	46	1-3/4"	NR	S, T, or U	NA	---	---	10.5	"1460.03-113-11-R0 C7672.03A"	SG16
	46	1-3/4"	NR	U	Bead: 110	1-1/8" Non-Rated IGU	100 (max)	12.0	C7672.01A	SG14
	45	1-3/4"	20	A	NA	---	---	7.7	TL94-220	SG4
	44	1-3/4"	20	I	NA	---	---	7.7	TL10-134	SG4 (4)
	43	1-3/4"	NR	P	NA	---	---	7.9	100534284CRT-001k	SG4
	43	1-3/4"	20	A	VP:110-D2	Pyroswiss (center) & 1/4" tempered (outer)	100 (max)	7.7	TL03-020	SG4
	43	1-3/4"	NR	A	Bead: 110	1-1/8" Non-Rated IGU	100 (max)	7.7	TL03-019	SG4
	43	1-3/4"	NR	A	Bead: 110	1-1/8" Non-Rated IGU	400 (max)	13.6	TL03-022	SG5
	42	1-3/4"	20	U	NA	---	---	7.1	C5765.01	SG3
	42	1-3/4"	20	P	NA	---	---	7.1	100534284CRT-001j	SG3
	42	1-3/4"	NR	A	Bead: 107	1/2" Laminated	400 (max)	7.7	TL03-021	SG4
	42	1-3/4"	60-45	S	VP:110-D2	Firelite Plus (center) & 1/4" laminated (outer)	100 (max)	13.6	"E1460.06-113-11-R0 C7672.02M-113-17-R0"	SG13
	42	1-3/4"	60-45	T	VP:110-D2	Firelite Plus (center) & 1/4" laminated (outer)	100 (max)	13.6	"E1460.06-113-11-R0 C7672.02M-113-17-R0"	SG13

Non-rated openings STC45 or lower available with Eggers acoustic wood frame
 FSC® certification is available where core type is PC, SCL, SLC, SG3, or SG11
 All acoustic doors are available as "No Added UF" and "Phase 2 Carb Compliant"

STC RATING BY DOOR TYPE AND ATTRIBUTES

Door Type & Swing	STC Rating	Door (Panel) Thickness	Available Fire Rating	Gasket System	Glazing System	Glazing Type	Glazing Area (Sq In)	Weight (Sq Ft)	Test Reports	Core Type
Flush Single Swing	41	1-3/4"	20	U	NA	---	---	7.1	C5765.01	SG3
	41	1-3/4"	20	P	NA	---	---	7.1	100534284CRT-001j	SG3
	41	1-3/4"	NR	B	Bead: 107	1/2" Laminated	400 (max)	6.5	TL03-012	SG3
	41	1-3/4"	NR	B	Bead: 110	1-1/8" Non-Rated IGU	400 (max)	6.5	TL03-013	SG3
	41	1-3/4"	20	A	VP:110-D2	Pyroswiss (center) & 1/4" tempered (outer)	400 (max)	7.7	TL95-348	SG4
	41	1-3/4"	60-45	S or T	NA	---	---	13.6	"E1460.06-113-11-RO C7672.02O-113-17-RO"	SG13
	41	1-3/4"	60-45	U	VP:110-D2	Firelite Plus (center) & 1/4" laminated (outer)	100 (max)	13.6	"E1460.06-113-11-RO C7672.02N-113-17-RO"	SG13
	40	1-3/4"	45	S or T	VP:110-D2	Firelite Plus (center) & 1/4" laminated (outer)	100 (max)	7.6	"E1460.04-113-11-RO C7672.02G-113-17-RO"	SG7
	40	1-3/4"	60-45	U	NA	---	---	13.6	"E1460.06-113-11-RO C7672.02P-113-17-RO"	SG13
	40	1-3/4"	20	U	NA	---	---	7.1	C5765.01	SG3
	40	1-3/4"	20	P	NA	---	---	7.1	100534284CRT-001j	SG3
	40	1-3/4"	NR	M	Bead: 110	1-1/8" Non-Rated IGU	1296 (max)	6.7	TL10-141	SG3
	40	1-3/4"	20	B	VP:110-D2	Pyroswiss (center) & 1/4" tempered (outer)	400 (max)	7.7	TL95-347	SG4
	40	1-3/4"	90-60-45	C	NA	---	---	7.6	TL06-051	SG9
	39	1-3/4"	45	S	NA	---	---	7.6	"E1460.04-113-11-RO C7672.02I-113-17-RO"	SG7
	39	1-3/4"	45	T	NA	---	---	7.6	"E1460.04-113-11-RO C7672.02I-113-17-RO"	SG7
	39	1-3/4"	45	U	VP:110-D2	Firelite Plus (center) & 1/4" laminated (outer)	100 (max)	7.6	"E1460.04-113-11-RO C7672.02H-113-17-RO"	SG7
	39	1-3/4"	20	U	NA	---	---	7.1	C5765.01	SG3
	39	1-3/4"	20	P	NA	---	---	7.1	100534284CRT-001j	SG3
	39	1-3/4"	90-60-45	I	NA	---	---	7.7	TL06-053	SG9
	38	1-3/4"	45	U	NA	---	---	7.6	"E1460.04-113-11-RO C7672.02J-113-17-RO"	SG7
	38	1-3/4"	20	U	NA	---	---	7.1	C5765.01	SG3
	38	1-3/4"	20	P	NA	---	---	7.1	100534284CRT-001j	SG3
	38	1-3/4"	NR	U	Bead: 107	1/2" Laminated	1296 (max)	6.7	C7672.01B	SG3
	37	1-3/4"	NR	U	Bead: 107	1/2" Laminated	1296 (max)	6.7	C7672.01B	SG3
	37	1-3/4"	20	U	NA	---	---	7.1	C5765.01	SG3
	37	1-3/4"	20	P	NA	---	---	7.1	100534284CRT-001j	SG3
	37	1-3/4"	NR	I	Bead: 110	1-1/8" Non-Rated IGU	Full Lite (min 47% of area)	5.9	TL05-052	SCL
	37	1-3/4"	60-45	I	VP: 115-L1	Firelite Plus / Leaded	100 (max)	10.3	TL05-126	SG13
	37	1-3/4"	20	I	Bead: 100	Firelite Plus	400 (max)	6.0	TL05-051	SG3
	36	1-3/4"	NR	U	Bead: 107	1/2" Laminated	1296 (max)	6.7	C7672.01B	SG3
	36	1-3/4"	20	U	NA	---	---	7.1	C5765.01	SG3
	36	1-3/4"	20	P	NA	---	---	7.1	100534284CRT-001j	SG3
	36	1-3/4"	20	P	NA	---	---	6.3	100534284CRT-001i	SG11

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STC RATING BY DOOR TYPE AND ATTRIBUTES

Door Type & Swing	STC Rating	Door (Panel) Thickness	Available Fire Rating	Gasket System	Glazing System	Glazing Type	Glazing Area (Sq In)	Weight (Sq Ft)	Test Reports	Core Type
Flush Single Swing	36	1-3/4"	60-45	I	NA	---	---	10.2	TL05-125	SG13
	36	1-3/4"	20	N	NA	---	---	7.1	100534284CRT-001f	SG3
	35	1-3/4"	20	M	NA	---	---	10.0	TL10-142	BR3
	35	1-3/4"	90-60-45	U	NA	---	---	7.2	A5305.02-113-11	GC
	35	1-3/4"	NR	I	Bead: 107	1/2" Laminated	1296 (min)	6.2	TL10-138	PC
	35	1-3/4"	NR	O	Bead: 110	1-1/8" Non-Rated IGU	400 (min)	7.3	TL10-144	SG11
	35	1-3/4"	20	I	NA	---	---	7.3	TL10-136	SG11
	35	1-3/4"	NR	I	NA	---	---	7.3	TL10-136	SG11
	35	1-3/4"	20	U	NA	---	---	7.3	TL10-136	SG11
	35	1-3/4"	NR	U	NA	---	---	7.3	TL10-136	SG11
	34	1-3/4"	NA	B	Bead: 107	1/2" Laminated	1296 (min)	6.2	TL10-138	PC
	34	1-3/4"	NA	I	LoPro IS	1/2" Laminated	400 (min)	6.1	TL10-135	PC
	33	1-3/4"	NA	I	Bead: 107	1/2" Laminated	400 (min)	6.1	TL10-133	PC
	33	1-3/4"	20	Q	NA	---	---	6.9	100534284CRT-001n	SCL
	32	1-3/4"	20	Q	NA	---	---	5.5	100534284CRT-001o 100534284CRT-001p	PC
	32	1-3/4"	20	I	NA	---	---	6.9	TL06-059	SCL
	32	1-3/4"	20	I	VP: Lo Pro IS	1" Rated IGU	400 (min)	6.9	TL06-059 & TL97-313	SCL
	32	1-3/4"	NR	I	Bead: 110	1-1/8" Non-Rated IGU	400 (min)	6.9	TL06-059 & TL03-013	SCL
	32	1-3/4"	NR	I	Bead: 107	1/2" Laminated	400 (min)	6.9	TL06-059 & TL03-012	SCL
	32	1-3/4"	20	N	NA	---	---	6.9	100534284CRT-001b	SCL
	31	1-3/4"	20	I	NA	---	---	5.8	TL06-058, TL10-129	PC
	31	1-3/4"	20	I	VP: Lo Pro IS	1" Rated IGU	400 (min)	5.8	TL06-058 & TL97-313	PC
	31	1-3/4"	NR	I	Bead: 110	1-1/8" Non-Rated IGU	400 (min)	5.8	TL06-058 & TL03-013	PC
	31	1-3/4"	NR	I	Bead: 107	1/2" Laminated	400 (min)	5.8	TL06-058 & TL03-012	PC
	31	1-3/4"	NR	N	NA	---	---	5.5	100534284CRT-001a	PC
	30	1-3/4"	20	I	NA	---	---	4.6	TL06-056	SLC
	30	1-3/4"	20	I	VP: Lo Pro IS	1" Rated IGU	400 (min)	4.6	TL06-056 & TL97-313	SLC
	30	1-3/4"	NR	I	Bead: 110	1-1/8" Non-Rated IGU	400 (min)	4.6	TL06-056 & TL03-013	SLC
	30	1-3/4"	NR	I	Bead: 107	1/2" Laminated	400 (min)	4.6	TL06-056 & TL03-012	SLC
	29	1-3/4"	90-60-45	I	NA	---	---	4.4	TL06-057	MC
	27	1-3/4"	20	I	NA	---	---	4.9	TL07-035	AGR
	27	1-3/4"	20	I	VP: Lo Pro IS	1" Rated IGU	400 (min)	4.9	TL07-035 & TL97-313	AGR
27	1-3/4"	NR	I	Bead: 110	1-1/8" Non-Rated IGU	400 (min)	4.9	TL07-035 & TL03-013	AGR	
27	1-3/4"	NR	I	Bead: 107	1/2" Laminated	400 (min)	4.9	TL07-035 & TL03-012	AGR	
Stylus	33	1-3/4"	20	I	NA	---	---	5.5	TL07-057	PC
	32	1-3/4"	20	I	NA	---	---	6.2	TL07-058	SCL
	31	1-3/4"	90-60-45	I	NA	---	---	4.3	TL07-059	MC

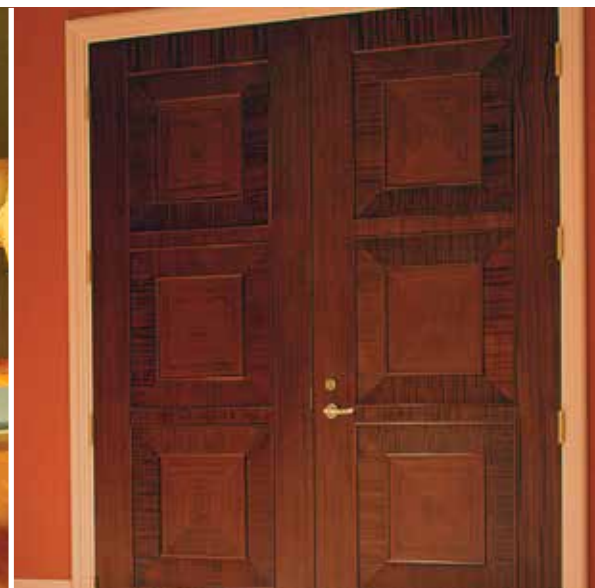
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STC RATING BY DOOR TYPE AND ATTRIBUTES

Door Type & Swing	STC Rating	Door (Panel) Thickness	Available Fire Rating	Gasket System	Glazing System	Glazing Type	Glazing Area (Sq In)	Weight (Sq Ft)	Test Reports	Core Type
Flush Active-Inactive Pairs ¹	49	1-3/4"	20	A	NA	---	---	13.7	TL98-238	SG5
	44	1-3/4"	20	A	NA	---	---	7.7	TL98-236	SG4
	41	1-3/4"	20	B	NA	---	---	7.7	TL98-233	SG4
Flush Active-Active Pairs ²	41	1-3/4"	20	K	NA	---	---	6.2	TL08-007	SG3
	40	1-3/4"	NR	K	Bead: 100	1/2" Laminated	400 (max)	6.3	TL08-009	SG3
	34	1-3/4"	45	K	VP: Lo-Pro IS	Superlite II-XL-45	Full Lite (min 47% of area)	6.5	TL11-111	MC
	31	1-3/4"	90-60-45	K	NA	---	---	7.2	TL11-110	GC
	31	1-3/4"	20	K	NA	---	---	6.4	TL11-112 TL11-113	SCL
Dutch Door	44	1-3/4"	20	A	NA	---	---	7.7	TL98-237	SG4
Door & Transom	44	1-3/4"	20	A	NA	---	---	7.7	TL98-237	SG4
Communicating	53	1-3/4"	20	B	NA	---	---	7.7	TL93-219	SG4
Stile & Rail Single Swing	40	1-3/4" (1-11/16")	NR	B	NA	---	---	8.3	TL99-120	SG12
	40	1-3/4" (1-11/16")	NR	A	Bead: 110	1-1/8" Non-Rated IGU	400 (max)	8.3	TL99-122	SG12
	39	1-3/4" (1-11/16")	NR	I	Bead: 110	1-1/8" Non-Rated IGU	1296 (max)	7.0	TL05-123	SG12
	38	1-3/4" (1-11/16")	NR	S or T	NA	---	---	7.6	"E1460.07-113-11-R0 C7672.02Q-113-17-R0"	SG12
	38	2 1/4" (1-7/8")	90-60-45	A	NA	---	---	12.5	TL97-321	MC
	37	1-3/4" (1-11/16")	NR	U	NA	---	---	7.6	"E1460.07-113-11-R0 C7672.02R-113-17-R0"	SG12
	37	2 1/4" (1-7/8")	90-60-45	B	NA	---	---	12.5	TL97-312	MC
	36	1-3/4" (1-3/4")	60-45	B	NA	---	---	9.7	TL97-317	MC
	33	1-3/4" (1-1/2")	20	B	NA	---	---	5.9	TL94-41	SCL
	33	2 1/4" (1-1/2")	20	B	NA	---	---	6.9	TL97-311	SCL
Stile & Rail Active-Active Pairs	37	1-3/4" (1-11/16")	NR	K	NA	---	---	7.9	TL11-109	SG12
	35	1-3/4" (1-3/4")	60-45	K	NA	---	---	10.2	TL11-108	MC
	32	1-3/4" (1-1/2")	20	K	NA	---	---	5.9	TL11-107	SCL

¹ Test was conducted as an active/inactive pair installation and requires Eggers' overlapping wood astragal.

² Test was conducted as an active/active pair with top latching surface hardware.



ACOUSTICAL GASKETING AND UNDERCUTTING

Gasket System	Components	Required Undercut
A	Double row Pemko S-88 gasket, Pemko 434_ARL door bottom, Pemko 2005_AT threshold	1/2"
B	Double row Pemko S-88 gasket, Pemko 434_ARL door bottom	1/4"
C	Double row Pemko S-88 gasket, Pemko 234 door shoe, Pemko 2005_AT threshold	3/8"
I	Double row Pemko S-88 gasket, Pemko PDB411_AE door bottom	3/8" (1/4"-1/2")
K	Double row Pemko S-88 gasket and pad on frame, Pemko PDB411_AE door bottom, one row of Pemko S-1125 on each meeting edge	3/8" (1/4"-1/2")
M	Double row Pemko S-88 gasket, Pemko 234 door shoe, Pemko 151 flat threshold	3/8"
N	DHSI 105, DHSI AMDB3-3, & DP*	1/4"
O	Pemko 773, Pemko 234 door shoe, Flat smooth threshold	3/8"
P	DHSI 105, SA, CS, DP	3/8"
Q	DHSI 105, Pemko 2005_AT	3/8"
S	2008_APK Threshold, S44 and 312R	3/8"
T	2008_APK Threshold, S773 and S44	3/8"
U	Pemko PDB411_AE, S773, S44 and ACP112	3/8" (1/4"-1/2")

*DP375 is used for the Solid Wood Edge Option (SWE); DP250 is used for full width mortise or CS



SOUNDWOOD ACOUSTICAL WOOD FRAMES

Eggers' acoustical wood jambs allow the beauty of our doors to be accented with matching wood frames designed to create a cohesive look metal frames cannot match. Create a masterpiece, knowing Eggers will work diligently to make your acoustical door and frame a perfect match. Available with an STC sound test report up to an STC 45, Eggers' two piece acoustical frame is sold exclusively in combination with Eggers' acoustical doors.

Elegant

Eggers' acoustical frames are available in virtually any veneer and finish color and offers quality control

unparalleled in the acoustical wood door market. No longer is a metal frame with wood casing necessary for aesthetic appeal. Perfect for the grand entrance to a concert hall or the distinction of a boardroom, Eggers' acoustical wood frames complement our acoustical doors perfectly.

Functional

Eggers' STC doors and frames are found in healthcare and hospitality facilities, government and municipal buildings as well as educational institutions. Typical applications include performance venues, conference rooms, lecture halls, auditoriums, and classrooms.

Two Piece Acoustical Jamb Installation Instructions

Maximum Overall Opening	50-11/16" wide x 121-11/32" high (frame buck opening)
Maximum Door Opening	Single-4-0 x 10-0
Wall Depth	Minimum-4-7/8"
Wall Type	Wall must be constructed to meet the STC rating and lined with a wood stud for jamb attachment
Gasketing	Refer to gasketing installation instructions for the specific STC door rating selected from the STC Product Offerings chart

Note: Soundwood Acoustical Frames are veneer-wrapped and will maintain the opening rating with doors rated up to STC 45.

Door side of jamb is shimmed and installed first with #8 x 1-1/2" screws spaced a maximum of 4" from each end and 24" on center.

Stop side of jamb is then installed flush with the wall. Space in between the two jamb components is okay.

Attach stop side of jamb with #8 x 2" screws or 8d finishing nails spaced a maximum of 6" from the end and 24" on center. Fasteners can be located underneath the stop.

One #8 x 2" screw or 8d finish nail should be located at each hinge pocket and strike pocket on the door side of jamb before the hardware is installed.

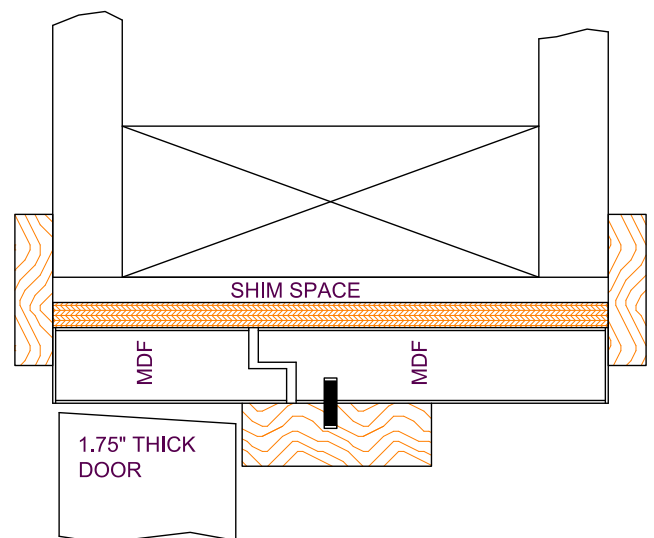
Shim space is a maximum of 1/4" and must be tightly filled with fiberglass insulation

Flat Stop

Minimum 5/8" thick x 1-1/2" wide. Flat stops are installed with a 1/8" x 7/16" HDF spline and #4 finish nails or 18 gage x 1-1/2" long brads spaced maximum 4" from each end and 16" on center.

Casing

Minimum 3/8" thick x 1-1/2" wide. Casing is installed with minimum #4 finish nails spaced maximum 4" from each end and 16" on center and staggered.



ACOUSTICS

ACOUSTICAL ARCHITECTURAL PLYWOOD



Plywood that looks beautiful and creates an environment that sounds great too. Eggers' acoustical plywood helps to reduce reverberation and noise pollution overall. Functionality and high-quality performance are matched with the beauty of an Eggers' plywood product.

SOUNDWOOD ACOUSTICAL PLYWOOD PANELS

Acoustical Performance Testing Methods

The Soundwood Ecoustics line of architectural plywood is tested differently from our acoustical door line. Two different values are captured:

- NRC–Noise Reduction Coefficient: a measure of how effective a material is at absorbing sound.
- SAA–Sound Absorption Average: the amount of sound absorbed by a surface finish.

There are two common mounting methods for plywood paneling, known as “A” mounting and “E” mounting. The “A” mounting is used to test wall panels. The “E” mounting is used to test ceiling panels and is typically given a three digit suffix, e.g. “E-400.” This represents the depth (in millimeters) of the sealed airspace behind the acoustical material tested. The “E” mounting method is typically used for acoustical ceiling tiles.

The ASTM C423 test standard is the standard test method for sound absorption and sound absorption coefficients by the reverberation room method.

All building materials have some acoustical properties that they will absorb, reflect, or transmit sound striking them. Conventionally speaking, acoustical materials are those materials designed and used for the purpose of absorbing sound that might otherwise be reflected. Sound absorption is defined as the incident sound that strikes a material and is not reflected back.

For the vast majority of conventional acoustical materials, the material thickness has the greatest impact on the material’s sound absorbing qualities. While the inherent composition of the acoustical material determines the material’s acoustical performance, other factors can improve or influence the acoustical performance. Incorporating an air space behind an acoustical ceiling or wall panel often serves to improve low frequency performance.



Installation Instructions

The manufacturers of the gasketing, door bottom, thresholds will generally provide a set of installation instructions with their components. In addition, Eggers has developed a set of installation instructions for each of the gasketing systems indicated in the product offering chart. This information is meant to augment those instructions.

Perimeter gasketing is intended to form a seal between the door leaf and the frame. Most of the systems used with Eggers doors include a double row of frame applied seals to accomplish this. If necessary due to installation clearances the seals allow a limited amount of re-positioning to assure adequate contact with the closed door.

Where used, raised thresholds should be adjusted and secured based on the position of the closed door. The threshold seal should make uniform contact with the

door surface. Avoid excessive force between the door and threshold as this can hold the door away from the frame seals.

Auto door bottoms should be properly sized to the door width. Avoid undersizing them as this will prevent a good seal and allow sound to “leak” past.

There are several glazing options within Eggers approvals. Eggers recommends factory glazing of acoustic doors, where our controlled environment and installers familiar with the process can ensure proper sealing.

Where doors are to be field glazed, a good seal must be made between all of the components, regardless of the glazing system used. The best way to do this is with a small bead of 100% pure silicone. The seal does not have to be thick, but it must be continuous.



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Door Frames, Plywood,
Veneered Components**

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**Flush Doors,
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Eggers releases regular product updates. Please visit www.eggersindustries.com for the most current and accurate technical information. Specification details published online supersede those in print.

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