

FLUSH DOORS

Eggers' 5-ply flush doors are the very embodiment of form marrying function - extraordinary beauty and exceptional durability. We are able to produce a variety of custom architectural designs to suit all styles and needs.



Eggers Industries



Turning nature's beauty into works of art

5-PLY FLUSH DOORS

Eggers employs the highest level of artistic craftsmanship alongside hot press technology and bonded cores to produce the most elegant, high-performing doors. Our 5-ply flush doors can be specified to your needs – lead-lined, bullet-resistant, acoustical, non-rated and fire-rated through 90-minute.

Let Eggers' unique offerings set your project apart. Create a stunning first impression by utilizing our precise sketch face capabilities; add to the beauty of your project by using our striking Vinterio veneer face option; or create a streamlined modern design by specifying our beadless lite flush door on your next project.

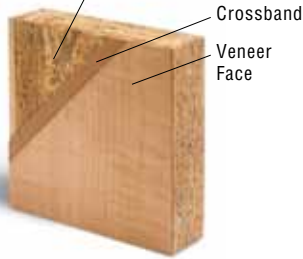
Whatever the impression you want to make, the combination of your creativity and Eggers' craftsmanship will bring your vision to reality.



SPECIALTY DOOR OFFERINGS

5-Ply SCL

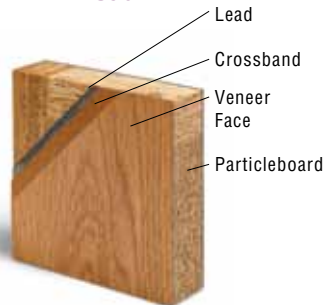
SCL (Structural Composite Lumber)



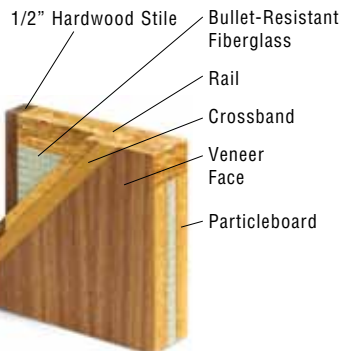
Specially Designed Acoustic Doors (except STC 29-32)



Lead



Bullet-Resistant



Acoustical Doors

Eggers' acoustical doors have the highest STC ratings in the industry. Our capabilities allow you to combine the privacy of acoustical performance with other special functionality to meet the design requirements and building codes for your project. Eggers' offerings include, but are not limited to:

- Acoustical designs with fire ratings up to 90-minute.
- STC ratings up to 51 for flush doors.
- STC ratings up to 41 for stile & rail doors.
- Veneer, MDO or plastic laminate faces.
- A variety of gasket system options with or without raised thresholds and automatic door bottoms.
- Complete gasket system and installation instructions provided with STC doors.
- Combined STC and LEED™/FSC offerings.
- Sound Groups 5, 6 and 8 also provide x-ray shielding.

Lead-Shielded Doors

Our lead-shielded doors are ideal for use in x-ray rooms and radiation treatment facilities. Manufactured under strict quality control, Eggers' lead-shielded doors provide the highest radiation protection.

- Standard offerings in 1/32", 1/16" or 1/8" total lead thickness. Higher thicknesses per engineering review.
- Balanced at one half total thickness per side.
- Available in 20-, 45- and 60-minute fire ratings.
- Lite cutouts and factory glazing available.
- Singles available up to 4' x 10' and pairs available up to 8' x 10', with a maximum individual door weight of 500 lbs.

Bullet-Resistant Doors

Eggers' bullet-resistant doors offer the aesthetic quality of wood while providing the highest rated protection available. Bullet-resistant doors help ensure safety from direct arm fire in government and other public facilities.

- Available in resistance levels 1-8, per UL 752.
- All protection ratings are eligible for a UL 20-minute fire label.
- Glazing available in doors, up to the required ballistics rating.
- Veneer, MDO or plastic laminate faces.

ENGINEERING SPECIFICATIONS			20-MINUTE FIRE DOOR DATA
	20-Minute Single	20-Minute Pairs	Non-Rated
Max. Size	4' x 10'	8' x 10' parallel and dbl. egress	4' x 10' (per leaf)
Thickness	1-3/4" - 2-1/4"		
Core	Particleboard, UF-free particleboard, FSC particleboard, stave, FSC stave, structural composite lumber (SCL) and agrifiber		
Max. Door & Transom Non-Rabbetted	4' x 14' (with transom bar) 4' x 12' (without transom bar)	4' x 14' (with transom bar) 4' x 12' parallel swing only (without transom bar)	4' x 14' with or without a transom bar or rabbeted
Stiles	Veneered structural composite lumber, solid lumber edges available upon request		
Rails	No-Rail construction is standard for SCL; 1-1/8" for all other core types (multiple-ply optional)		
Reinforcements	Blocking for screw attached surface hardware required for agrifiber; not required for extra heavy duty applications for SCL and stave core or heavy duty applications with particleboard		
Faces	All available domestic and foreign veneers, medium density overlay (MDO), and high pressure laminates and vinyl		
Crossbands	1/11" high density fiberboard		
Lites	Up to 1296 sq. in. standard, SCL, and stave core available with 2868 sq. in. Beadless lite construction available--requires maximum 6" top rail and factory glazing. Factory glazing recommended to comply with new NFPA standards.		Size restricted only by min. margins Beadless lite construction available--requires maximum 6" top rail and factory glazing
Louvers	Metal louvers up to 576 sq. in. where allowed by code		Wood or metal
Latching Hardware	Cylinders, mortised, unit, or card locks; 5" backset and deadbolts available		Most available latching hardware
Hinges	Per NFPA #80 - butts, pocket pivots, continuous hinges, pivots (electrical options available)		
Flushbolts	N/A	Automatic corner or extension bolts up to 36"	Corner or extension bolts up to 48"
Fire Exit Hardware	Rim, surface and concealed vertical rod (full or top rod only), and fire exit hardware		
Closers, Stops, Holders	Listed surface hardware or concealed hardware having mortise up to 23-3/4" x 1-1/2" x 1-3/8"		Listed surface hardware or concealed hardware having mortise 1-3/8" wide
Drop Seals	Listed and approved surface, semi-mortised or mortised		
Special Details	Machining for hardware; installation of lites and louvers; sketch faces; applied moulding; beadless lite construction; kickplates; solid wood grillwork and divided lites; reveals; raceways		
Finish	UV-cured, primed, painted (MDO only), sealer, full sealer, catalyzed polyurethane, and opaque varnish		
Warranty	Life of installation (interior); 2 yrs. (SCL exterior)		
Standards	WDMA I.S. 1A, AWS Section 9 Edition 1, NFPA 252, UL 10B, UL 10C, NFPA 80		

For test methods, see engineering specifications for full-lite doors.

ENGINEERING SPECIFICATIONS				45-, 60- & 90-MINUTE FIRE DOOR DATA		
	45-Minute C Single	45-Minute C Pairs ^{1,2}	60-Minute B Single	60-Minute B Pairs ^{1,2}	90-Minute B Single	90-Minute B Pairs ^{1,2}
Max. Size	4' x 10'	Dbl. egress: 8' x 8' 1or2 lvs. active: 8'x9'	4' x 9'	Dbl. egress: 8' x 8' 1or2 lvs. active: 8'x9'	4' x 10'	8' x 8' Surface vtcl rods: 8'x 9'
Thickness	1-3/4" - 2-1/4"					
Max. Door & Transom Non-Rabbetted ³	4' x 11' (max. transom size 4' x 4') ³ - doors and transoms must be separated by horizontal transom bar Transoms over pairs must be separated by vertical and horizontal transom bars					
Max. Door & Transom Rabbetted ⁴	3'6" x 10'	N/A	3'6" x 10'	N/A	3'6" x 10'	N/A
Stiles	Veneered laminated edges, solid lumber outerply edges available upon request					
Rails	Top rail min. 1/2" mill option - bottom rail min. 1-1/2" mill option					
Reinforcements	Optional 5" x full core width top and bottom reinforcing, 5" x 10" standard latchcase and bolt reinforcing, or blocking as specified					
Faces	All available domestic and foreign veneers - medium density overlays (MDO) over standard hardwood veneers, HPL in .050 and .062					
Crossbands	Min. 1/16" high density fiberboard					
Vision Panels ^{6,7} Veneered Wood Bead	Up to 1296 sq. in./max 36" wide, max. 54" high ⁵ - special construction glass can be up to 1714 sq. in./max. 36" wide, max. 86-1/2" high. Factory glazing recommended to comply with new NFPA 80 standards.		Up to 1296 sq. in. max. ^{5,6} Factory glazing recommended to comply with new NFPA 80 standards.	Up to 1296 sq. in./max 36" wide, max. 54" high ⁵ . Factory glazing recommended to comply with new NFPA 80 standards.		
Louvers	Up to 24" x 24" ⁹ (not available in doors used as means of egress)					
Latching Hardware	Cylinders, mortised, unit, or card locks; 5" backset and deadbolts available					
Hinges	Per NFPA #80 - butts, continuous hinges, pivots (electrical options available)					
Top & Bottom Bolts	N/A	Listed surface, manual extension (max. 24") & automatic bolts	N/A	Listed surface, manual extension (max. 24") & automatic bolts	N/A	Listed surface, extension (max. 24") & automatic bolts
Fire Exit Hardware	Listed and approved fire exit hardware, reinforced blocking options available for screw mounting (min. #10 x 1-1/2" sheet metal screws) No prep for surface mounted, no metal edges on 2 leaf active up to 8' x 9' (LBR available)					
Closers, Stops, Holders	Listed surface mounted closers, concealed closers, and stops not exceeding 23-3/4" x 1-1/2" deep x 1-3/8" wide					
Drop Seals	Listed and approved					
Special Details	Cut for lite and louver openings ⁵ ; install glazing and metal louvers ⁹ ; applied moldings per approvals; stile & rail sketch faces for applied moldings; wood veneer wrapped metal edges and rabbets; kickplates up to 48"; solid wood grillwork; reveals up to 3/8" wide and 3/8" deep					
Finish	UV-cured, primed, painted (MDO only), sealer, full sealer, catalyzed polyurethane, and opaque varnish					
Warranty	Life of installation - not suitable for exterior installations					
Standards	WDMA I.S. 1A, AWS Section 9 Edition 1, NFPA 252, UL 10B, UL 10C, NFPA 80					

1 Does not require metal meeting edges up to 8' x 9', with special construction. Concealed vertical rods not available in HPL. **2** One or two lead active doors can have metal edges or astragals if required. **3** Opening must be separated by non-removable minimum 2" transom bar. Springbolts required for transom installation. **4** The exposed meeting edge of the rabbetted door and transom is a white density mineral board. May be wood veneer wrapped. Springbolts required for transom installation. **5** Minimum 6" margins edge of lite opening to adjacent cutouts for hardware and door edges. Warranty exclusions applicable. 3" minimum lock-to-lite margin with special reinforced construction in 45-minute doors. **6** Lites over 100 sq. in. require Firelite glass. Doors do not qualify for temperature rise rating. **7** Veneer wrap available for metal vision panels. **8** Doors will be manufactured and labeled in accordance with procedures and products approvals established by and between Eggers Industries, Warnock Hersey or Underwriters Laboratories. **9** Minimum 10" margins from edge of louver opening to bottom of door. **10** Divided lite bars for plastic laminate face doors will be painted.

For test methods, see engineering specifications for full-lite doors.

ENGINEERING SPECIFICATIONS				FULL-LITE DOORS	
Test Methods	UL 10-B, UL 10-C, NFPA 252 (Fire Tests), UBC 7-2 (1997)				
Maximum Size	Non-Rated: 20-Minute: 45-Minute:	<u>Single Swing</u> 4' x 10' 4' x 10' 4' x 10'	<u>Pairs</u> 8' x 10' 8' x 10' 8' x 9'	<u>Side Lites</u> 4' x 10' - -	<u>Thickness</u> 1-3/4" x 2-1/4" 1-3/4" x 2-1/4" 1-3/4" only
Face	Species: Laminates: Overlay:	All available domestic and exotic veneers - sketch face available High pressure laminates (specifier's choice) Medium Density (MDO)			
Rails	Non-Rated: 20-Minute: 45-Minute:	No rail required with structural composite lumber (SCL) - 1-1/8" mill option on stave core No rail required with structural composite lumber (SCL) - 1-1/8" mill option on stave core Top minimum 1/2" treated hardwood - bottom 1-1/2" treated hardwood			
Vertical Stiles	Non-Rated: 20-Minute: 45-Minute:	Matching or compatible to face veneer or mill option hardwood with veneered edges which match face veneer Matching or compatible lumber is standard; meeting edges of pairs may alternately require metal edges or fire retardant treated lumber Single - 1/4" outer-ply compatible to face veneer: reinforced inner-ply			
Core	Non-Rated: 20-Minute: 45-Minute:	Structural composite lumber (SCL) or stave core (non-certified or FSC) Structural composite lumber (SCL) or stave core (non-certified or FSC) Mineral core			
Face Construction	Non-Rated: 20-Minute: 45-Minute:	5-ply construction 5-ply construction Special reinforced construction			
Lites	Non-Rated: 20-Minute: 45-Minute:	Stock wood beads or special profiles per specifier's choice 1/4" clear glazing and wood beads standard, other glazing and vision panels optional; max. 2868 sq. in. of visible lite; max. 87-9/16" high 5/16" ceramic glazing and wood beads standard, other glazing and vision panels optional; 1714 sq. in. of visible lite; max. 86-1/2" high Factory glazing recommended on fire rated doors to comply with new NFPA standards.			
True-Divided Lites Bars	Non-Rated: 20-Minute:	1/2" bars 3/4" bars, cutout max. 89-5/8" in height x 35-7/8" in width - max. dimension of any single pane of glass is 54" (wire glass or clear fire-rated glass can be used)			
Grillwork & Beads	Non-Rated: 20-Minute: 45-Minute:	Grillwork or true-divided lites Grillwork or true-divided lites Solid wood bead and grillwork for Firelite Plus or 1/4" wired glass			
Finish	Finished: Unfinished:	UV-cured, primed/painted with opaque varnish (MDO only), full sealer, catalyzed conversion varnish, catalyzed polyurethane, Gardall Plus (semi-filled), Gardall Supreme (full-filled), Spar varnish (for exterior doors) Belt sanded (final sanding by field finisher)			
Machining	Prefit and mortised for appropriate hardware				
Matching	Pairs: Virtually unlimited in standard veneers - doors and transoms				
Warranty	Interior: Exterior: Side Lites:	Life of original installation - min. 1-1/2" lock to lite margin in non-rated and 20-minute doors/ min. 3" lock to lite margin in 45-minute doors. Warranty excludes lites not glazed by Eggers, including glass breakage and damage to the door Not available Same restrictions as doors			
Standards	WDMA I.S. 1A, AWS Section 9 Edition 1, NFPA 252, UL 10B, UL 10C, NFPA 80				

SUGGESTED SPECIFICATIONS FOR DOORS WITH LITE OPENINGS

Note Regarding ADA

The minimum bottom rail dimensions below are based on fire and/or warranty requirements. It is the specifier's responsibility to determine the code requirements of his/her application. Where ADA compliance is required, doors must be ordered with 10" bottom rails.

Removable True-Divided Lite Grillwork

Removable true-divided lite grillwork is an innovative offering from Eggers Industries. It's a cost effective and practical alternative to traditional true-divided lites. The grillwork provides a high-end appearance without the need for high maintenance. It easily snaps in and out of door lite openings for effortless cleaning.

- Glass is held permanently in place with our standard lite bead.
- Minimum visible glass in each lite opening is 100 sq. in. with minimum dimension of 10" x 10".
- Grillwork is not available in curved profile or layout.
- Grillwork is suitable only with 1/4" glass.
- Interior use only, not available for exterior doors.
- Not available in fire-rated doors.
- Grillwork will be the same specie as the lite beads.
- Maximum lite size 80" high x 40" wide.

Non-Rated Full-Lite Doors

- 1-1/2" minimum between lock and lite cutout.
- 3" minimum between multiple lite cutouts
- True-divided lites available.
- Grillwork available to achieve aesthetics of a French door.
- 5-ply construction, SCL or stave core.
- Stiles bonded to core and sanded as a single unit.
- Standard edge strip is minimum 1" veneered SCL, solid lumber outerply edge available upon request
- Glass can be factory glazed or field glazed with glass type specified.
- 5" minimum stiles and rails to meet warranty requirement.
- Beadless lite construction available

20-Minute Full-Lite Doors

- 20-minute door utilizes clear glass that is fire- and safety-rated.
- 20-minute fire rating with visible lite up to 2,868 sq. in. (87-9/16" maximum height x 36" maximum width).
- 1-1/2" minimum between lock and lite cutout.
- 3" minimum between multiple lite cutouts.
- Factory glazing recommended on fire rated doors to comply with new NFPA standards.
- True-divided lites available - maximum cutout of 35-7/8" wide by 89-5/8" high (various layouts available/maximum dimension of a single pane of glass is 54").
- Solid wood grillwork available to achieve aesthetics of a French door.
- 5" minimum stiles and rails.
- 5-ply construction, SCL or stave core.
- Stiles bonded to core and sanded as a single unit.
- Standard edge strip is minimum 1" veneered SCL, solid lumber outerply edge available upon request
- Glass to be safety- and fire-rated.
- Beadless lite construction available

45-Minute Full-Lite Doors

- 45-minute fire rating with visible lite up to 1,714 sq. in. using Firelite Plus (86-1/2" maximum height x 36" maximum width).
- 3" minimum between lock and lite cutout.
- 6" minimum between multiple lite cutouts.
- Solid wood grillwork available to achieve aesthetics of a French door.
- 6" minimum top rails and side stiles. 10" minimum bottom rail.
- Reinforced face construction.
- Stiles bonded to mineral core and sanded as a single unit.



MATCHING FACES



Balance Match

- Each panel face is assembled from veneer leaves of uniform width before edge trimming.
- Panels may contain an even or odd number of leaves and distribution may change from panel to panel within a sequence set.



Center Match

- Each panel face is assembled from an even number of veneer leaves of uniform width before edge trimming.
- There is a veneer joint in the center of the panel producing horizontal symmetry.



Running Match

- Each panel face is assembled from as many veneer leaves as necessary.
- Results in a non-symmetrical appearance with some veneer leaves of unequal width.
- Often the most economical method at the expense of aesthetics.



Book Match

- Veneer joints match, creating a symmetrical pattern. Yields maximum continuity of grain.
- Prominent characteristics will ascend or descend across the match.
- Because tight side and loose side faces alternate in adjacent leaves, they reflect light and accept stain differently and this may yield a noticeable color variation, termed "Barber Pole." Barber Pole is not considered a defect.
- This effect may be minimized through the use of proper finishing techniques.



Slip Match

- Adjoining leaves are slipped out in sequence with all the same-face sides being exposed.
- The joint may not be noticeable if grain is straight.
- Figure repeats but grain does not match at joints.
- Produces a uniform color because all faces have a similar light reflection.
- A leaning effect may occur if the specie used does not demonstrate a straight grain.



Diamond Match



Sunburst

For additional information, please refer to AWS Quality Standards Edition 1, Section 4.



**Stile & Rail Doors,
Door Frames, Plywood,
Veneered Components**

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Eggers releases regular product updates. Please visit www.eggiersindustries.com for the most current and accurate technical information. Specification details published online supercede those in print.

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