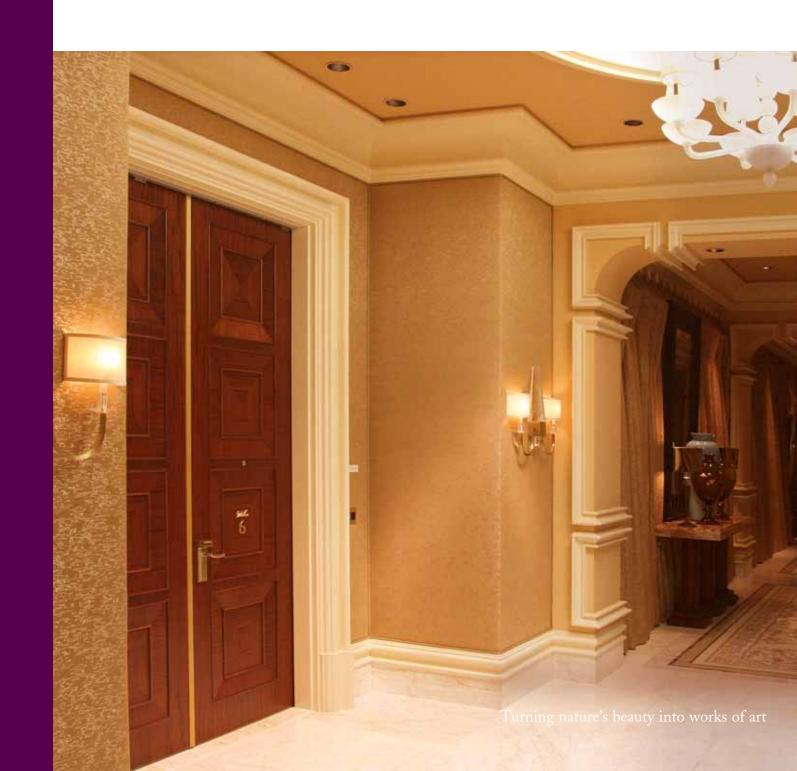
# STILE & RAIL DOORS



Eggers stile & rail doors set the standard for architectural entryways. Our doors make a strong and lasting impression while surpassing every expectation of quality and value.



## TRUE STILE & RAIL DOORS

Eggers doors are expertly manufactured for lasting service and impressive aesthetics. By creating our own veneer faces and components, including louvers, we're able to offer our customers greater quality control and compatibility.

At Eggers, we can create and match a variety of custom architectural designs, ranging from the most contemporary styles to historical renovations. Many of our configurations are available with up to 90-minute fire ratings.



	EN	GINEERING SPI	ECIFICATIONS	NON-RA	ATED STILE & RAIL DOORS	
Size	4' x 11' - Single	8' x 11' - Pai	rs			
Thickness	1-3/4", 1-3/8" and 2-1/4"					
Face Veneers	Cherry White Maple	Mahogany White Oak	Natural Birch PG Poplar	Red Oak PS Birch	Walnut White Birch Others available upon request	
Doors	Pressed Panel (Standard)  1-3/4" thick doors – 1-1/8" panels with 5/8" tongue  2-1/4" thick doors – 1-1/8" panels with 5/8" tongue  2" radius with a 2 degree bevel  Max. panel size is 36" x 92"  Min. panel size is 7" x 7"  Rim Banded Panel (Optional)  3-ply, 1/32" face, lumber-banded particleboard or MDF core, mitered corners, compatible with face species  1-3/8" thick doors – 1-1/8" thick standard  1-3/4" thick doors – 1-1/8" thick standard, 1-1/2", 1-5/8" optional  2-1/4" thick doors – 1-1/2" thick standard, 1-5/8" optional  Min. panel size is 4-1/2" x 4-1/2"  Flat Panels (Optional)  5/8" standard thickness  Min. panel size is 4-1/2" x 4-1/2"					
Dimension	Stile Face Top Rail Face Bottom Rail Face Cross Rail Face Mullion Face	Standa 6"1 6" 10" <sup>2</sup> 5" 5"	Minimum if Specified  5" if over 1' 9" wide¹ or 2-1/2" if under 1' 9" v  5"  8"  2-1/2"  2-1/2"		•	
Machining	Mortise for appropriate hardware  No preparation for surface-mounted hardware					
Factory Finish	UV-cured, primed and painted as specified					
Details	Standard sticking — Custom sticking witl Radiused head door	h factory approval	Wood preservative Grillwork with factory approval Dutch doors or acoustical doors		ketch face panels anel matching standard: per AWS/WDMA	
Warranty	Interior: Life of original installation					
Standards	WDMA I.S. 6A-01; AWS Section 9 Edition 1					

 $<sup>\</sup>textbf{1} \ \text{Requiring 1" from edge of face of stile to edge of lock cutout on prefit door.} \ \textbf{2} \ \text{Meets ADA minimum requirements}.$ 

Positive Pressure (UBC 7-2-1) and smoke control (UBC 7-2-2) for non-rated and rated doors — Eggers' complete line of fire-rated 5-ply architectural stile & rail doors comply with the requirements of UBC 7-2-1 (1997) positive pressure and UBC 7-2-2 (1997) smoke control. Positive pressure openings in accordance with UBC 7-2-1 can be accomplished in two basic ways:

<u>Category "A" Doors</u>: This category includes doors evaluated with no additional edge sealing required by the manufacturer or licensed machine operator.

<u>Category "B" Doors</u>: This category includes doors evaluated with no additional edge sealing applied to the frame. The intumescent may be either surface applied or recessed into the frame.

The new codes also require gasketing to meet the smoke control requirements of UBC 7-2-2 (1997). The gasketing completely conceals the intumescent on the frame. Smoke control can be accomplished as follows:

Category "H" Gasketing: This category includes doors evaluated with a smoke gasketing applied to the frame. On 20-minute doors, Category H smoke control can be accomplished with Category B edge sealing, but on 45-, 60- and 90-minute doors, Category H is used in conjunction with Category A or B.

	ENGINEERING S	SPECIFICATIONS	20-MINUTE STILE & RAIL DOORS			
Sizes	Max. 4' x 10' - Single Max. 8' x 10' - Pairs		Double egress available			
Thickness	1-3/4" and 2-1/4"					
Face Veneers	Cherry Mahogany White Maple White Oak	Natural Birch PG Poplar	Red Oak Walnut White Birch PS Birch Others available upon request			
Pairs	20-minute negative pressure pairs require fire retardant meeting edges or metal t-astragal Double egress with label available					
Panels	Min. size: 7" x 7" (standard pressed) 4-1/2" x 4-1/2" (optional rim banded) Min. thickness: 1-1/8" raised or 5/8" flat panel					
Dimension	Stile Face 6 Top Rail Face 6 Bottom Rail Face 1 Cross Rail 5 Mullion Face 5	0"2 	Minimum if Specified  5"  8-3/4" <sup>3</sup> 3"  3"			
Approved Hardware Cylindrical Lock	Per NFPA 80 and UL approvals Min. 1/2" latch throw on singles; 5/8" on pairs					
Max. Backset	5"					
Lock Sets	UL listed and approved mortise or cylindrical locks for wood doors					
Concealed Vertical Rods	UL listed and approved concealed vertical rods without metal channel min. stile width 6" next to panels and 7" next to lite opening					
Hinges	Min. 4-1/2" x 4-1/2" x .134" steel per NFPA 80; three each to 90" high; additional hinge for each 30" or portion UL listed mortise, surface or spring pivots or hinges per NFPA 80 pivots require intermediate pivot					
Automatic Flush Bolts	UL listed for use in wood doors – top flush bolt only in doors with hose stream Some flush bolts may require end caps for warranty					
Door Viewers	Listed viewer requiring max. 1" diameter hole — must be located in a mullion, crossrail or min. 1" thick panel and be a min. of 12" from other hardware					
Closers	UL listed mortise closer arms with mortise not to exceed 1-9/32" W x 1-1/2" D x 23-5/8" L					
<b>Lites⁴</b> 1/4" Wire Glass	Min. 5" stiles and min. 1-1/2" from adjacent hardware cutouts Factory glazing — max. 1296 sq. in. visible glass; max. width 26"; max. height 54" True divided lites — total opening max. 35-7/8" x 89-5/8"					
1/4" Clear Glass	Min. 1-1/2" from adjacent hardware cutouts Max. 87-9/16" high visible glass True divided lites - total opening max. 35-7/8" x 89-5/8"					
Factory Finish	UV-cured, primed or painted as spe	cified				
Details	Standard sticking – see website Custom sticking with factory approv Radiused head doors	Wood preservative val Grillwork with factory Dutch doors or acou				
Warranty	Interior: Life of original installation					
Standards	WDMA I.S. 6A-01; AWS Section 9 Edition 1; UL10B, UL10C, NFPA 80, UBC 7-2-1997					
	1					

#### Suggested Specs for Non-Rated/20-Minute Doors

- Stiles, rails and mullions are to have a 1/16" face veneer before sanding.
- Stiles, rails and mullions to be assembled with dowels and glued under pressure.

#### Lite Bead Compatibility for Non-Rated/ 20-Minute Doors

- 20-minute doors come standard with Pyroswiss glass.
- The raised panel thickness is 1-1/8".

#### Suggested Specs for 45- and 60-Minute Doors

- Stiles, rails and mullions are 1-3/4" thick, 5-ply with 1/16" face veneer before sanding.
- Stiles, rails and mullions are to be assembled with dowels and glued under pressure.
- Lites over 100 sq. in. must use Firelite Plus glass and will not have the temperature rise rating on the label.

#### Lite Bead Compatibility for 45- and 60-Minute Doors

- The lite beads on 45- and 60-minute doors do not match lite beads in 20-minute and non-label doors.
- The profile of lite beads in 20-minute and non-label doors may be changed by specifying a 5/8" square bead to match the 45- and 60-minute lite bead.
- The profile of the 45- and 60-minute lite bead cannot be changed.

#### **Suggested Specs for 90-Minute Doors**

- Stiles, rails and mullions are 2-1/4" thick, 5-ply with 1/16" face veneer.
- Stiles, rails and mullions are to be assembled with dowels and glued under pressure.
- Lites over 100 sq. in. must use Firelite Plus glass and will not have the temperature rise rating on the label.

#### **Lite Bead Compatibility for 90-Minute Doors**

- The lite beads on the 90-minute doors do not match the beads on non-rated, 20-, 45- and 60-minute doors.
- The profile on the 45- through 90-minute lite bead cannot be changed.

#### Note Regarding ADA

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

#### **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 projects. Eggers' offerings include, but are not limited to:

- Acoustical designs fire-rated up to 90-minute.
- STC ratings up to 40 for stile & rail doors.
- Lite openings up to 1,296 sq. in.
- Veneer or hardboard 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.

#### **Door Patterns**

Please contact Eggers or go to the Eggers' website, www.eggersindustries.com, to view all door patterns.



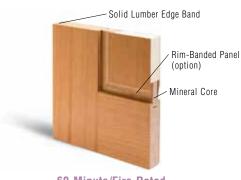
Non-Rated/20-Minute
Pressed Panel Standard Construction



Non-Rated/20-Minute Flat Panel



Non-Rated/20-Minute Rim-Banded Panel Optional



60-Minute/Fire-Rated Positive Pressure

## ENGINEERING SPECIFICATIONS<sup>6</sup>

## 45- & 60-MINUTE STILE & RAIL DOORS\*\*

	ENGINEERING SPECIF	TOATIONS 40-	43- & 00-WINDIE STILL & HAIL DOORS				
	45-Minute C Single	45-Minute C Pairs¹	60-Minute B Single	60-Minute B Pairs <sup>1</sup>			
Max. Size	4' x 9'	8' x 8' Std. & Dbl. Egress	4' x 9'	8' x 8' Std. & Dbl. Egress			
Thickness	1-3/4"						
Stile Face	Std. 6" Min. 6" with mortise lock 5" with cylinder lock 2-3/4" backset						
Top Rail Face	Std. 6"	6" Min. 5"					
Crossrail Face	Std. 5"	Min. 3"					
Bottom Rail Face	Std. 10"8	Min. 8-3/4"10					
Mullion Face	Std. 5" Min. 3"						
Panels	Thickness: 1-11/16" Max. size: 36" x 92" Min. size: 7" x 7"						
Rabbeted Transom <sup>2,3</sup>	Max. 3' x 3' Transom Max. 3' x 9' Frame	N/A	Max. 3' x 3' Transom Max. 3' x 9' Frame	N/A			
Straight Cut Transom	Max. 4' x 4' when used with a transom bar						
Face Veneers	Cherry Mahogar White Maple White Oa	ny Natural Birch ak PG Poplar	Red Oak Walnut PS Birch Others av	White Birch ailable upon request			
Lock Sets	UL listed and approved mortise or cylindrical locks for wood covered composite doors						
Hinges	Min. 4-1/2" x 4-1/2" x .134" steel per NFPA 80; three each to 90" high; additional hinge for each 30" or portion UL listed mortise, surface or spring pivots or hinges per NFPA 80 pivots require intermediate pivots						
Closers	UL listed mortise closer arms with mortise not to exceed 1-9/32" W x 1-1/2" D x 23-5/8" L						
Dead Bolts	With single point latching mechanism – min. 6" above latch						
Fire Exit Hardware	Listed and approved fire exit hardware, no prep for surface-mounted — UL listed and approved concealed vertical rods (CVR) available without metal edges (CVR not available on single door doors)						
Top and Bottom Bolts <sup>9</sup>	N/A	Listed surface, automatic or manual bolts up to 24" with 28 ga. liner	N/A	Listed surface, automatic or manual bolts up to 24" with 28 ga. liner			
Pivots	In doors 4' x 8' or smaller — UL listed and approved pivots for wood composite doors						
Astragal/Edge Set	N/A	Pairs with metal edge standard <sup>1</sup>	N/A	Pairs with metal edge standard <sup>1</sup>			
Louver⁵	Max. 24" x 24" UL listed fusible link louver Not allowed in doors with lite openings or fire exit hardware						
Details	Sketch face panels, applied moulding and grillwork with factory approval – panel matching standard is per AWS/WDMA Acoustical doors for 60-minute B pairs (see website for more details)						
Factory Finish	UV-cured, primed or painted as specified – interior only						
Warranty	Five Year – not suitable for exterior installations						
Standards	WDMA I.S. 6A-01, AWS Section 9 Edition 1; UBC 7-2-1997, UL10B, UL10C, NFPA80						
	L						

<sup>\*\*1</sup> Pairs with steel astragal set at meeting edges and single point latching mechanism at active leaf are available at additional cost. 2 Stanley #1697 spring boilts for transom installation. 3 Meeting edges of rabbeted door transom from while, high-density mineral boards. May be wood veneer wrapped. 4 Minimum 3\* margins from edge of like opening to adjacent outouts for hardware or door edges. 5 Minimum 10\* margins from edge of lower opening to bottom of door. 6 Fire doors will be manufactured and labeled in accordance with procedures and product approvals established by and between Eggers Industries and Underwriter's Laboratories. Construction details may change without notice. 7 60-minute doors with more than 100 sq. in. of visible glass will not have a temperature rise rating on the label. 8 Meets ADA minimum requirements. 9 Some flush boths require end caps for warranty. 10 Minimum on prefit door.

ENGINEERING SPECIFICATIONS®			90-MINUTI	90-MINUTE STILE & RAIL DOORS**			
	90-Minute B Single	90-Minute B Single	90-Minute B-Pairs <sup>1</sup>	90-Minute B-Single	90-Minute B-Pairs¹		
Max. Size	3'6" x 8'	4' x 7'	7' x 8'	4' x 9' 4' x 10' <sup>11</sup>	8' x 8' Std. & Dbl. Egress 8" x 10' <sup>11</sup>		
Thickness		1-3/4"		2-1/4"			
Stile Face	Minimum 5" (4-1/2" with su back set cylinder lock)	rface exit hardware; 6" with n	Min. 6" with mortise lock; 5" with 2-3/4" backset cylinder lock				
Top Rail Face	Minimum 5"			Minimum 5"			
Crossrail Face	Minimum 5"			Minimum 3"			
Bottom Rail Face	Minimum 6"		Minimum 8-3/4" <sup>9</sup>				
Mullion Face	Minimum 5"			Minimum 3"			
Panels	Raised Panel: 1-1/2" thick Flat Panel: 5/8" thick Max. size: 32" x 85" Min. size: 6" x 6"	Raised Panel: 1-5/8" thick Flat Panel: 7/8" thick Max. size: 38" x 73" Min. size: 6" x 6"	Raised Panel: 1-5/8" thick Flat Panel: 7/8" thick Max. size: 32" x 85" Min. size: 6" x 6"	Raised Panel: 1-3/4" thick Flat Panel: 1-3/16" thick Max. size: 38-1/8" x 80" Min. size: 6" x 6"			
Rabbeted Transom <sup>2,3</sup>	N/A			Max. 3' x 3' Transom Max. 3" x 9' Frame	N/A		
Straight Cut Transom	N/A			Max. 4' x 4' when used with a transom bar			
Face Veneers	Cherry Mahogany Natural Birch Red Oak Walnut White Birch White Maple White Oak PG Poplar PS Birch Others available upon request						
Lock Sets	UL listed and approved mortise or cylinder locks for wood covered composite doors <sup>10</sup>						
Hinges	Min. 4-1/2" x 4-1/2" x .134" steel per NFPA 80; three each to 90" high; additional hinge for each 30" or portion UL listed mortise, surface or spring pivots or hinges per NFPA 80 pivots require intermediate pivots						
Closers	Surface closers and listed m 17-5/16"L x 1-1/4"W x 1-1/		Surface closers and listed mortise closer arms with mortise not to exceed 23-5/8"L x 1-9/32"W x 1-1/2"D				
Dead Bolts	N/A			With single point latching mechanism - minimum 6" above latch			
Fire Exit Hardware	Mortise rim or surface only,	no prep for surface mounted.	UL listed and approved fire exit hardware, no prep for surface mounted - concealed vertical rods (CVR) available without metal edges (CVR not available on single doors)				
Top and Bottom Bolts <sup>8</sup>	N/A	N/A	Listed surface or mortise automatic only <sup>10</sup>	N/A	Listed surface or mortise automatic only <sup>10</sup>		
Pivots	In doors 4' x 8' or smaller - UL listed and approved pivots for wood composite doors						
Astragal/Edge Set	N/A		Factory supplied machine astragal and edge set standard <sup>1</sup>	N/A	Factory supplied machine astragal and edge set standard <sup>1</sup>		
Louver⁵	N/A						
Details	Sketch face panels, applied moulding and grillwork with factory approval - panel matching is standard per AWS/WDMA Acoustical doors for 90-minute B single and pairs (see website for more details)						
Factory Finish	UV-cured, primed or painted as specified - interior only						
Warranty	Five Year - not suitable for exterior installations						
Standards	NFPA 80, UL10B and UL10C			WDMA I.S. 6A-01; AWS Section 9 Edition 1; UBC 7-2-1997, UL10B, UL10C, NFPA 80			

<sup>\*\*1</sup> Pairs with steel astragal set at meeting edges and single point latching mechanism at active leaf are available at additional cost. 2 Starley #1697 spring boils for transom installation. 3 Meeting edges of rabbeted door transom from while, high-density mineral boards. May be wood veneer wrapped. 4 Minimum 3" margins from edge of like opening to adjacent culouds for hardware or door edges. 5 Minimum 10" margins from edge of louver opening to bottom of door. 6 Fire doors will be manufactured and labeled in accordance with procedures and product approvals established by and between Eggers Industries and Underwriter's Laboratories. Construction details may change without notice. 7 60-minute doors with more than 100 sq. in. of visible glass will not have a temperature rise rating on the label. 8 Meets ADA minimum requirements. 9 Some flush bolts require end caps for warranty. 10 Minimum on prefit door. 11 Contact the factory for construction details.

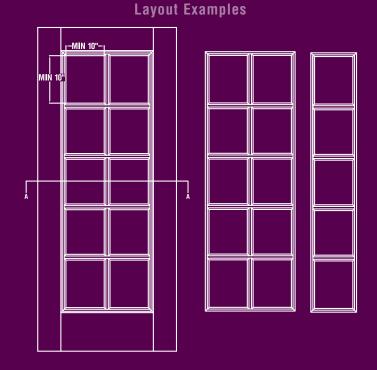
## REMOVABLE TRUE-DIVIDED LITE GRILLWORK

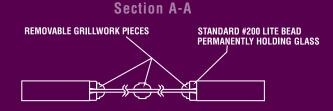
Removable true-divided lite grillwork is a new and innovative offering from Eggers Industries. It's a cost-effective and practical alternative to traditional true-divided lites. The grillwork provides a high-end appearance without the need for high maintenance. It easily snaps in and out of door lite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



#### **Grillwork Specifications**

- 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 any 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 is 80" high x 40" wide.







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

Two Rivers Division One Eggers Drive Two Rivers, WI 54241 Phone: 920.793.1351 Fax: 920.793.2958

www.eggersindustries.com

#### Flush

Neenah Division 164 North Lake Street Neenah, WI 54956 Phone: 920.722.6444 Fax: 920.722.0357

email: sales@eggersindustries.com

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





