

FIRE DOOR CAPABILITY CHART - NEUTRAL PRESSURE



VT INDUSTRIES INC. 1000 INDUSTRIAL PARK
 ARCHITECTURAL WOOD DOORS P.O. BOX 490
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Fire Rating	VT Door Types		Maximum Size Single		Maximum Size Standard Pair		Maximum Size DE Pair		Max. Transom Size	Maximum Lite (1/4" wire glass)**			Maximum Louver (fusible link)			Hinges & Pivots	Locks	Fire Exit Devices	Closers	Viewer 2 per door max.	Flush Bolts	Auto Door Bottoms	Kick Plates
	5-Ply Wood	HPDL	Door Only	Door w/ Transom	W/ CVRED	W/out CVRED	W/ CVRED	W/out CVRED		W	L	Sq."	W	L	Sq."								
90-Minute Mineral Core	5511	1111	4-0 x 10-0	4-0 x 10-0	8-0 x 9-0	8-0 x 9-0	8-0 x 8-0	8-0 x 8-0	4-0 x 3-4	10"	33"	100	24"	24"	576	Per NFPA 80 Table 2A	Cylinder Mort. Unit & Cyl. Deadbolt	Rim, Surface, Mortise & CVRED	Surface	1" Dia.	Listed Auto or Manual, 24" max.	Mortised, Surface & Semi-mortised	PVC or Metal 48"
60-Minute Mineral Core	5511	1111	4-0 x 10-0	4-0 x 10-0	8-0 x 9-0	8-0 x 9-0	8-0 x 8-0	8-0 x 8-0	4-0 x 3-4	10"	33"	100	24"	24"	576	Per NFPA 80 Table 2A	Cylinder Mort. Unit & Cyl. Deadbolt	Rim, Surface, Mortise & CVRED	Surface	1" Dia.	Listed Auto or Manual, 24" max.	Mortised, Surface & Semi-mortised	PVC or Metal 48"
60-Minute Dutch	5511	1111	4-0 x 8-0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Per NFPA 80 Table 2A	Cylinder Mort. Unit & Cyl. Deadbolt	N/A	Surface	1" Dia.	N/A	Mortised, Surface & Semi-mortised	PVC or Metal 48"
45-Minute Mineral Core	5545	1345	4-0 x 10-0	4-0 x 10-0	8-0 x 9-0	8-0 x 9-0	8-0 x 8-0	8-0 x 8-0	4-0 x 3-4	30"	54"	1296	24"	24"	576	Per NFPA 80 Table 2A	Cylinder Mort. Unit & Cyl. Deadbolt	Rim, Surface, Mortise & CVRED	Surface	1" Dia.	Listed Auto or Manual, 24" max.	Mortised, Surface & Semi-mortised	PVC or Metal 48"
45-Minute Dutch	5511	1111	4-0 x 8-0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Per NFPA 80 Table 2A	Cylinder Mort. Unit & Cyl. Deadbolt	N/A	Surface	1" Dia.	N/A	Mortised, Surface & Semi-mortised	PVC or Metal 48"
20-Minute Particle Board	5502	101 303 404	4-0 x 10-0	4-0 x 10-0	8-0 x 9-0	8-0 x 10-0	8-0 x 9-0	8-0 x 10-0	8-0 x 3-4	30"	54"	1296	N/A	N/A	N/A	Per NFPA 80 Table 2A	Cylinder Mort. Unit & Cyl. Deadbolt	Rim, Surface, Mortise & CVRED	Surface or Mortised	1" Dia.	Listed Auto or Manual, 24" max.	Mortised, Surface & Semi-mortised	PVC or Metal 48"
20-Minute SCL (Timber strand)	5508	808	4-0 x 10-0	4-0 x 10-0	8-0 x 9-0	8-0 x 10-0	8-0 x 9-0	8-0 x 10-0	8-0 x 3-4	30"	54"	1296	N/A	N/A	N/A	Per NFPA 80 Table 2A	Cylinder Mort. Unit & Cyl. Deadbolt	Rim, Surface, Mortise & CVRED	Surface or Mortised	1" Dia.	Listed Auto or Manual, 24" max.	Mortised, Surface & Semi-mortised	PVC or Metal 48"
20-Minute Stave	5507	707	4-0 x 10-0	4-0 x 10-0	8-0 x 9-0	8-0 x 10-0	8-0 x 9-0	8-0 x 10-0	8-0 x 3-4	30"	54"	1296	N/A	N/A	N/A	Per NFPA 80 Table 2A	Cylinder Mort. Unit & Cyl. Deadbolt	Rim, Surface, Mortise & CVRED	Surface or Mortised	1" Dia.	Listed Auto or Manual, 24" max.	Mortised, Surface & Semi-mortised	PVC or Metal 48"
20-Minute Dutch	Same as 20-Minute	Same as 20-Minute	4-0 x 8-0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Per NFPA 80 Table 2A	Cylinder Mort. Unit & Cyl. Deadbolt	N/A	Surface or Mortised	1" Dia.	N/A	Mortised, Surface & Semi-mortised	PVC or Metal 48"
20-Minute STC 39	5540	1240	4-0 x 8-0	N/A	N/A	N/A	N/A	N/A	N/A	Non-rated STC doors available with 6"x36" (216 sq. in.) max. lite kit.			N/A	N/A	N/A	Per NFPA 80 Table 2A	Cylinder Mort. Unit & Cyl. Deadbolt	N/A	Surface	1" Dia.	N/A	Mortised, Surface & Semi-mortised	PVC or Metal 48"
20-Minute STC 45	5550	1250	4-0 x 8-0	N/A	N/A	N/A	N/A	N/A	N/A	20-Minute STC doors must use std. 110 vision panel. STC rating void.			N/A	N/A	N/A	Per NFPA 80 Table 2A	Cylinder Mort. Unit & Cyl. Deadbolt	N/A	Surface	1" Dia.	N/A	Mortised, Surface & Semi-mortised	PVC or Metal 48"

20-Minute Lead Lined	5515	1515	4-0 x 10-0	N/A	N/A	8-0 x 10-0	N/A	N/A	N/A	16"	16"	256	N/A	N/A	N/A	Per NFPA 80 Table 2A	Cylinder Mort. Unit & Cyl. Deadbolt	Rim, Mortised & Surface Vert. Rod	Surface	1" Dia.	Listed Auto or Manual, 12" max.	Mortised, Surface & Semi-mortised	PVC or Metal 48"
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*Larger lite sizes available with special glass & stops (all furnished by others).
 #VT1FP mouldings – 100 square inch maximum.

MISCELLANEOUS NOTES:

FIRE RATED TRANSOMS

1. Frame transom bar or astragal required if the meeting rails are square.
2. No transom bar or astragal required if meeting rails have 1/2" rabbet with G.P. FireStop™ material (2" meeting rails @ 20-minute and 5" @ 45- through 90-minute).
3. Springbolts for transoms & side panels shall be placed 3" (76 mm) from each corner with the minimum number centered on each side as follows:
 - Panels up to 18" (457 mm) in height - 2 spring bolts per side
 - Panels up to 36" (914 mm) in height - 3 spring bolts per side
 - Panels up to 48" (1219 mm) in height - 4 spring bolts per side
 - Side Panels over 48" (1219 mm) in height – 18" (457 mm) on center

MACHINING OF DUTCH DOORS

All preparations and requirements of the current edition of NFPA 80 shall be followed.

Hinges: Per NFPA 80, Table 2-8.1.1.

Cylindrical Locksets: One (maximum 2-1/8"/54 mm bore) per leaf to provide latching between top and bottom leaves, and between either top or bottom leaf into frame.

(Neutral Pressure) Maximum Opening Sizes For Fire Rated Pairs With Metal Edges

Hardware Prep	Standard Pair (Single Egress)				Double Egress Pair			
	20-Minute	45-Minute	60-Minute	90-Minute	20-Minute	45-Minute	60-Minute	90-Minute
3-Point Latching	8-0 x 8-0	8-0 x 8-0	8-0 x 8-0	8-0 x 8-0	8-0 x 8-0	6-0 x 7-0	6-0 x 7-0	6-0 x 7-0
Surface Vertical Rod Exit Device	8-0 x 10-0	8-0 x 9-0	8-0 x 9-0	8-0 x 9-0	8-0 x 10-0	8-0 x 8-0	8-0 x 8-0	8-0 x 8-0
Rim x Rim	N/A	8-0 x 8-0	8-0 x 8-0	8-0 x 8-0	N/A	N/A	N/A	N/A
Surface LBR	8-0 x 9-0	8-0 x 8-0	8-0 x 8-0	8-0 x 8-0	8-0 x 9-0	N/A	N/A	N/A
Concealed Vertical Rod	8-0 x 9-0	8-0 x 9-0	8-0 x 9-0	8-0 x 9-0	8-0 x 9-0	8-0 x 8-0	8-0 x 8-0	8-0 x 8-0
Concealed LBR	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

- Dimensions given are maximum opening sizes. Specific hardware requirements may affect opening size.
- Specific hardware may affect the amount of blocking needed.
- Specific hardware may require the use of intumescent.
- LBR devices require the use of thermal pins (door to floor/sill).
- All metal astragals and edge sets may be veneer wrapped. Please specify.

(Neutral Pressure) Maximum Opening Sizes For Fire Rated Pairs Without Metal Edges

Hardware Prep	Standard Pair (Single Egress)				Double Egress Pair			
	20-Minute	45-Minute	60-Minute	90-Minute	20-Minute	45-Minute	60-Minute	90-Minute
3-Point Latching	8-0 x 10-0	8-0 x 8-0	8-0 x 8-0	8-0 x 8-0	8-0 x 10-0	N/A	N/A	N/A
Surface Vertical Rod Exit Device	8-0 x 10-0	8-0 x 8-0	8-0 x 8-0	8-0 x 8-0	8-0 x 10-0	8-0 x 8-0	8-0 x 8-0	8-0 x 8-0
Rim x Rim	N/A	8-0 x 8-0	8-0 x 8-0	8-0 x 8-0	N/A	N/A	N/A	N/A
Surface LBR	8-0 x 9-0	8-0 x 8-0* Thermal Pin: door to door	8-0 x 8-0* Thermal Pin: door to door	8-0 x 8-0	8-0 x 9-0	N/A	N/A	N/A
Concealed Vertical Rod	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concealed LBR	8-0 x 9-0	8-0 x 8-0	8-0 x 8-0	8-0 x 8-0	8-0 x 9-0	8-0 x 8-0	8-0 x 8-0	8-0 x 8-0

- Dimensions given are maximum opening sizes. Specific hardware requirements may affect opening size.
- Specific hardware requirements may affect the amount of blocking needed.
- Specific hardware requirements may require the use of intumescent.
- LBR devices require the use of thermal pins applied door to floor/sill (unless noted otherwise).