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Stiles is a national leader in fire ratings and maintains a vast portfolio of options to the architect and builder.

Stiles offers built-to-order fire doors and frames in a large selection of sizes and configurations, providing an affordable alternative to generic fire doors and frames. We have conducted many tests in cooperation with our customers to meet specific requirements.

- Extensive Fire Label Portfolio
- UL and ITS/WH Certified
- UL10B, UL10C Positive Pressure, UL1784 Smoke
- UBC 7.2 (Positive Pressure)
- ASTM E-152
- NFPA 252 & 257
- CAN / ULS S104
- Up to 3 HR fire ratings
- Wood veneer available on select fire rated doors

Built to Order.™



Steel Door + Window Systems

Find specific door data sheets online at: www.stilesdoor.com



Fire Rated Steel Single Doors

	Descriptio		Fire R	Rating		Material Door Core						Construction											
	Door Type	Max. Opening Size (in.)	Single or Pair	3/4 Hour	1 Hour	1-1/2 Hour	3 Hour	18 Gauge	16 Gauge	14 Gauge	Steel Stiffened Core	Honeycomb Core	Temperature Rise Core	Polystyrene Core	Edge Welded	Open Seam	Astragal Required	Cladding	Glass Size per Mfgr.	3-3/8" Min. Stiles & Rail (3/4 HR)	6" Min. Stile & Rail (1, 1-1/2, & 3 HR)	10" Min. Bottom Rail	Max. 24 X 24 Listed Louver
		48 X 96	S					•								•		•					
	et i	51 X 108	S	•		•	•	•		•			•		•	•		•					
	Flush	51 X 120	S	•	•	•	•	•	•	•	•		•		•	•		•					
		60 X 144	S			•		•		•			-			•							
	Dutch Flush	48 X 90	S	•	•	•	•	•	•	•	•	•		•	•	•	•	•					
	10.	48 x 96	S		•	•	•	•	•	•	•		•	•	•	•			•	•	-		
	Vision Lite	51 X 120	S		•	•	•	•	•	•	•				•	•		•	•	•	•		
П		48 X 96	S		•	•		•	•	•	•	•	-	•	•	•		•	•	•	-		
	Half Glass	51 X 120	S		•	•		•	•	•	•				•	•		•	•	•	•		
	Sound Control	51 X 120	S	•	•	•	•	•	•	•					•	•		•	•	•	•		
	1	48 X 96	S			•	-	•		•		•	-	•	•	•		•		•	-		
	Laminate	51 X 120	S		•	•	•	•	•	•			•		•	•			•	•	•		
	Full Glass	51 X 120	S	•	•	•		•	•	•					•	•		•	•	•	-	•	
П	T Di	51 X 108	S		•	•	•	•	•	•	-		-		•	•		•	•		-	_	
Ш	Temp Rise	60 X 144	S	•	•	•		•	•	•	•				•	•							
=	Louver	51 X 120	S	•	•	•		•	•	•	•				•	•		•				•	-
	Stainless	48 X 96 304 SS	S	•	-	•	•		•		-	•			•	•			•	•	•	•	
	Steel	51 X 120 430 SS	S	•	•	Ŀ	•	•	•	•	•		•		•	•			•	•	•	_	
	Bullet / Security	51 X 120	S	•	•	•	•		•	•	•				•	•		•	•	•	•	•	
П	Deceased	48 X 96	S	•	•	•	•	Ŀ	•	_	-	_	-	_	•	_		_	•	_	•	•	
	Recessed Panic	51 X 108	S	_	•	-	-	_	•	_	•		-		-	_		•	•	_	•	-	
		51 X 120	S			•	•			•	•				•				•		•		

NOTE: Above door data varies depending on specific design criteria. All Stiles Fire Rated assemblies are built-to-order to your exact specifications. For assistance with design, labeling requirements and multiple integrated features, contact factory. HPL available on all products. Wood veneer available up to 3/4 HR.



Steel Door + Window Systems

FIRE RATED

Fire Rated Steel Door Pairs

Find specific door data sheets online at: www.stilesdoor.com

	Description / S	Size		Fire Rating Material							Door Core						Construction								
	Door Type	Max. Opening Size (in.)	Single or Pair	3/4 Hour	1 Hour	1-1/2 Hour	3 Hour	18 Gauge	16 Gauge	14 Gauge	Steel Stiffened Core	Honeycomb Core	Temperature Rise Core	Polystyrene Core	Edge Welded	Open Seam	Astragal Required	Cladding	Glass Size per Glass Mfgr.	3-3/8" Min. Stile & Rail (3/4 HR)	6" Min. Stile & Rail (1, 1-1/2, & 3 HR)	10" Min. Bottom Rail	Max. 24 X 24 Listed Louver		
		96 X 96	PR	•	•		-	•	_			•		•		•		•							
		102 X 108	PR	•	•	•	•		•	•	•		•		•			•							
	Flush (Pair)	102 X 120	PR	•	•	•		•		•						•		•							
		120 X 144	PR	•	•	•		•	•	•	•		•		•	•	•								
		96 X 96	PR	•	•	•	•	•	•	•	•	•	•	•	•	•		•							
	Double Egress	102 X 108	PR	•	•	•	•	•	•	•	•		•		•	•		•							
		102 X 120	PR	•		•		•		•	•					•		•							
	V6 1 12	96 X 96	PR	•	•	•	•	•		•	•			•		•		•	-	•	-				
	Vision Lite	102 X 120	PR			•		•			•					•			•	•	•				
	Half Glass	96 X 96	PR	_		•		•		•	•	•		•		•		•	_		•				
		102 X 120	PR	•	•	•		•		•	•					•		•	•	•					
	Sound Control	102 X 120	PR	•	•	•	•	•	•	•					•	•		•	•	•	•				
		96 X 96	PR	•		•		•		•		•		•		•		•	-	•	•				
	Laminate	102 X 120	PR	•	•	•	•	•	•	•			•		•	•			•		•				
	Full Glass	102 X 120	PR		•	•		•	•	•					•	•		•	-	•	•	•			
ПΠ	Temperature	102 X 108	PR	•	•	•	•		•	•	•		•		•			•	•		•				
ШШ	Rise	120 X 144	PR	•	•	•		•	•	•	•				•	•	•								
		96 X 96	PR	•	•	•		•	•	•	•	•		•	•	•		•							
= =	Louver	102 X 120	PR	•	•	•		•	•	•	•				•	•		•				•			
	Stainless Steel	84 X 86 304 S/S	PR		•	•	•		•		•				•	•	•		•	•	•	•			
	Stairliess Steel	102 X 120 430 S/S	PR		•	•	•	•	•	•	-		•		•	•			•	•	•	•			
	Bullet / Security	102 X 120	PR	•	•	•	•		•	•	•				•	•		•	•	٠	•	•			
		96 X 96	PR	•	•	•		•		•	•	•		•		•		•	-	•	-	•			
	Recessed Panic	102 X 108	PR	•	•	•	•	•	•	•	•		•		•	•		•	•	•	•	•			
		102 X 120	PR																	•	•				

NOTE: Above door data varies depending on specific design criteria. All Stiles Fire Rated assemblies are built-to-order to your exact specifications. For assistance with design, labeling requirements and multiple integrated features, contact factory. HPL available on all products. Wood veneer available up to 3/4 HR.



FIRE RATED

Fire Rated Steel Single Frames

Find specific door data sheets online at: www.stilesdoor.com

Description / Size					Fire Rating									Materials & Const.							Limitations						
1	Frame Dimension	Max. Door Size (in.)	Single or Pair	Max. Overall Width	Max. Overall height	Max Panel Width	Max. Panel Height	20 Minute	3/4 Hour	1 Hour	1-1/2 Hour	3 Hour	16 Gauge	14 Gauge	12 Gauge	Welded	Stainless Steel	Seal-Tek™ Profile	Min. Throat Size	Max. Throat Size	Min. Face Width	Max. Face Width	Max Head Height	Max. Sill Height			
	Cingle Erame	51 X 120	S					-	•	-	•	-	•	-	•	-	•	-	2	13	11/8	6	6				
	Single Frame	60 X 144	S					•	•	•	•	•	•	•	•	•	•	•	2	13	11/8	6	6				
	Dutch	48 X 90	S					•	•	•	•	•	•	•	•	•	•		2	13	11/8	6	6				
	Sound Control	51 X 120	S					•	•	•	•	•	•	•	•	•	•		2	13	11/8	6	6				
	Smoke Profile	51 X 120	S					•	•	•	•	•	•	•	•	•	•		2	13	11/8	6	6				
	Multi Opening	51 X 120	S					•	•	•	•	•	•	•	•	•	•	•	2	13	11/8	6	6				
	Transom (Flush Panel)	48 X 120	S			48	54	•	•	•	•		•	•	•	•	•	•	31/2	13	11/8	4	4				
	Transom	48 X 120	S			48	54	•	•	•	•		•	•	•	•	•	•	31/2	13	11/8	4	4				
	StileLite™ Wall Systems	Pyrobel Glass								•				•		•	•		31/2	13	1%	4	4				
	Sidelite	51 X 120	S	174	122	48	48	•	•	•	•		•	•	•	•	•	•	31/2	13	11/8	4	4	12			
	Sidelite	51 X 120	S	174	144	48	48	•	•	•	•		•	•	•	•	•	•	31/2	13	11/8	4	4	12			
	Window			174	144	48	48	•	•	•	•		•	•	•	•	•		31/2	13	11/8	4	4	12			
	Picture Window					48	48	•	•	•	•		•	•	•	•	•		31/2	13	11/8	4	4	12			

NOTE: Above frame data varies depending on specific design criteria.

All Stiles Fire Rated assemblies are built-to-order to your exact specifications.

For assistance with design, labeling requirements and multiple integrated features, contact factory.





Find specific door data sheets online at: www.stilesdoor.com

Description / Size				Fire Rating								Materials & Const.							Limitations					
	ame ension	Max. Door Size (in.)	Single or Pair	Max. Overall Width	Max. Overall height	Max Panel Width	Max. Panel Height	20 Minute	3/4 Hour	1 Hour	1-1/2 Hour	3 Hour	16 Gauge	14 Gauge	12 Gauge	Welded	Stainless Steel	Seal-Tek™ Profile	Min. Throat Size	Max. Throat Size	Min. Face Width	Max. Face Width	Max Head Height	Max. Sill Height
	Pair	102 X 120	PR					•	•	-	•	-	╚	•	•	-	•	•	2	13	11/8	6	6	
	Frame	120 X 144	PR					•	•	-	•		•	-	•	•	•	•	2	13	11/8	6	6	
	Double Egress	102 X 120	PR					•	•	•	•	•	•	•	•	•	•		2	13	11/8	6	6	
	Sound Control	102 X 120	PR					-	•	•	•	•	•	•	•	•	•		2	13	11/8	6	6	
	Smoke Profile	120 X 120	PR					-	•	•	•	•	•	•	•	•	•		2	13	11/8	6	6	
	Multiple Opening	102 X 120	PR	174	122			-	•	•	•	•	•	•	•	•	•	-	2	13	11/8	6	6	
	Transom Flush Panel	96 X 120	PR			96	54	•	•	•	•		•	•	•	•	•	•	31/2	13	11/8	4	4	
	Transom	96 X 120	PR			96	54	•	•	•	•		•	•	•	•	•	•	3½	13	11/8	4	4	
	Sidelite	102 X 120	PR	174	122	48	48	-	•	-	•		•	•	•	•	•	-	31/2	13	11/8	4	4	12
	Sidelite	120 X 120	PR	174	144	48	48	•	•	•	•		•	•	•	•	•	•	3½	13	11/8	4	4	12

NOTE: Above frame data varies depending on specific design criteria.

All Stiles Fire Rated assemblies are built-to-order to your exact specifications.

For assistance with design, labeling requirements and multiple integrated features, contact factory.



Fire Rated Glazing Criteria

After extensive and persistent testing over the last 3 decades, Stiles has become a ground-breaking industry leader in developing technology for 20, 45, 60, 90 minute, and 3 hour fire rated doors, windows, sidelites, and storefront systems. We also offer a unique 60-minute Transparent Wall System. This section has been developed to assist the architect, designer, and building owner in the creation of large, inspiring window systems for buildings where fire rated criteria is required.

Because of our extensive testing, Stiles offers you the flexibility of installing virtually any glass manufacturer's fire rated glass into our products. Therefore, we are no longer required to test glass products from each individual manufacturer.

There are two primary parameters to comply with when designing fire rated doors, sidelites, and windows:

1. The maximum overall door and frame sizes that can be fire rated by Stiles are as follows:

a) Frames: 174" X 144"b) Single Doors: 51" X 120"c) Door Pairs: 102" X 120"

d) Transparent Wall System: No Size Limit

2. The maximum clear view glass area that can be fire rated at each individual glass opening

See fire rating charts for specific information

This Fire Rated Glazing Criteria has been compiled in part by specifications directly from various glass manufacturers. Stiles assumes no responsibility for the accuracy of glass information provided by others. It is recommended that the application of specific glass products be obtained directly from individual manufacturers. All glass must be installed in accordance with manufacturer's installation instructions. As always, our experienced engineers are available to assist you at any time.

Fire Rated Glass & Glazing Criteria for Doors

Glass Type	Thickness	Max Width	Max Height	Max Sq In	GLASS BRAND
3/4 Hour Fire Rated Doors with Gla	SS				
Wire Glass	.25"	30"	90"	2,019	Multiple
Wire Glass (Glazed with intumescent tape)	.25"	34"	84"	2,856	Multiple
Ceramic Glass	.187	36"	89"	3,205	FireLite [®]
Laminated Glass	.625" - 1.37"	87.625"	87.625"	3,855	Pyrobel [®]
Gel-Filled Glass	.75"	124.25"	124.25"	4,952	SuperLite [®]
1 Hour Fire Rated Doors with Glass					
Ceramic Glass	.187	36"	89"	3,204	FireLite [®]
Laminated Glass	1" - 1.875"	87.625"	87.625"	3,855	Pyrobel [®]
Gel-Filled Glass	1.125"	124.25"	124.25"	4,952	SuperLite [®]
1-1/2 Hour Fire Rated Doors with G	lass				
Ceramic Glass	.187"	36"	56.5"	2,034	FireLite [®]
Laminated Glass	1.375" - 2.125"	36"	61"	2,196	Pyrobel [®]
Gel-Filled Glass	1.5"	124"	124"	4,876	SuperLite [®]
3 Hour Doors with Glass					
Ceramic Glass	.187"	12"	33"	100	FireLite [®]

NOTE: The information in the above chart represents generalized guidelines in effect at time of publication of this guide. Consult factory for specific requirements and updates.



Fire Rated Glazing Criteria

Fire Rated Glass & Glazing Criteria for Windows and Sidelites

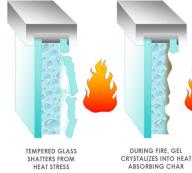
20 Minute & 3/4 Hour Windows and Sidelites											
GLASS TYPE	THICKNESS	MAX WIDTH	MAX HEIGHT	MAX SQ IN	GLASS BRAND						
Wire Glass	.25″	54"	54"	1,296	Multiple Brands						
Wire Glass (Glazed with intumescent tape)	.25″	106"	106"	4,704	Multiple Brands						
Ceramic Glass	.187"	106.5"	106.5"	6,396	FireLite®						
3/4 Hour Windows and Sidelites											
Wire Glass	.25″	54"	54"	1,296	Multiple Brands						
Wire Glass (Glazed with intumescent tape)	.25″	106"	106"	4,704	Multiple Brands						
Ceramic Glass	.187"	95″	95″	3,325	FireLite®						
Laminated Glass	.625" - 1.37"	96"	96"	3,154	Pyrobel®						
Gel-Filled Glass	.75″	124.25"	124.25"	4,952	SuperLite®						
1 Hour Windows and Sidelites											
Ceramic Glass	.187"	95″	95″	3,325	FireLite®						
Laminated Glass	1" - 1.875"	93″	93″	3,855	Pyrobel®						
Gel-Filled Glass	1.125"	124.25"	124.25"	4,952	SuperLite®						
1-1/2 Hour Windows and Sidelites											
Ceramic Glass	.187"	56.5"	56.5"	2,627	FireLite®						
Laminated Glass	1.375" - 2.125"	83.5"	83.5"	3,463	Pyrobel®						
Gel-Filled Glass	1.5"	124"	124"	4,876	SuperLite®						

Gel Filled Glass

© Stiles Custom Metal, Inc.

HOW GEL-FILLED GLASS WORKS

SEMI SOLID GEL





Wire Glass

Wire glass is a fire-rated and impact safety-rated glazing material. It is listed for use in doors, sidelites, transoms and borrowed lites with various fire ratings.



Fire-Resist Laminated Glass

Clear laminated fire-resistant safety glass is made up of multiple layers of glass designed for integrity -only fire protection, and insulation against radiant heat transfer.



Ceramic Glass

Ceramic glass is a fire-rated and impact safety-rated glazing material. It is listed for use in doors, sidelites, and transoms with various fire ratings.

Stiles Custom Metal Inc 1885 Kinser Road Ceres CA USA 95307

T 209 538 3667

F 209 538 2776

E sales@stilesdoor.com

www.stilesdoor.com

TEMPERED GLASS



60 Minute - 250° Temperature Rise Hollow Metal Transparent Wall System

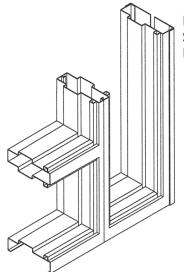
StileLite[™] is a temperature rise, fire rated framing system for 60-minute transparent walls, offering a narrow 1-7/8" profile for a floor to ceiling continuous glazed wall. The frame comes in preassembled modules which interlock to provide quicker and easier installations. And since it matches other standard hollow metal frames in looks, there will be no mismatching of frame types in the building.

60-Minute Rated doors glazed with Pyrobel® 60-25 from Interedge Technologies, a clear fire and safety rated glass with a maximum temperature rise of 450 degrees F, can be incorporated into the StileLite™ system. Doors are available as singles or pairs, and can be factory primed, finish painted with Tnemec paint, powder coated, or clad in stainless steel, all without affecting the fire rating.

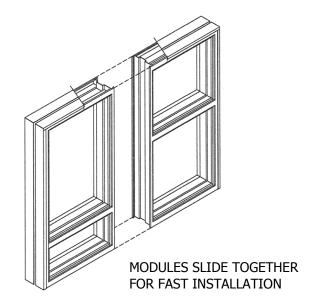
StileLite[™] 100 Features

- 60-minute, 250 degree temperature rise hollow metal transparent wall system
- Unlimited number of modules with each module up to 49-7/8" wide
- All frames 14 gauge steel
- Jamb size from 4-3/4" to 14" / Standard 5/8" high glass stops
- Opening size of each opening can be up to 4080 sq. in. while not exceeding 48" wide and 85" high
- Visible glass area of each opening can be up to 3,916 sq. in., not exceeding 46-3/4" x 83-3/4"
- Multiple Tnemec factory paint finishes and powder coating available
- Can be manufactured from cold-rolled, galvanized, or No. 4 stainless steel
- Doors up to 48" wide (96" pairs) x 108" high
- Finishing options for doors include: wood grain stainable steel, plastic laminate, factory-finished wood veneer, stainless steel, powder coating, and finish paint

NOTE: The **Stile**Lite⁻⁻ system complies with the following standards: UBC 7-1 (1997), ASTM E119 (2000), NFPA 251 (1999), UL 263 (1997), and CANULC S101 M89 (1989)

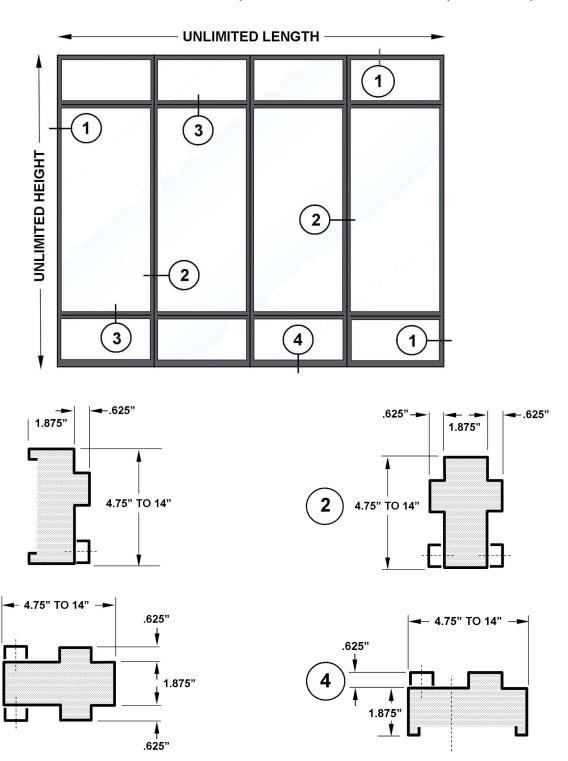


FRAMES CONSIST OF STANDARD HOLLOW METAL PROFILES





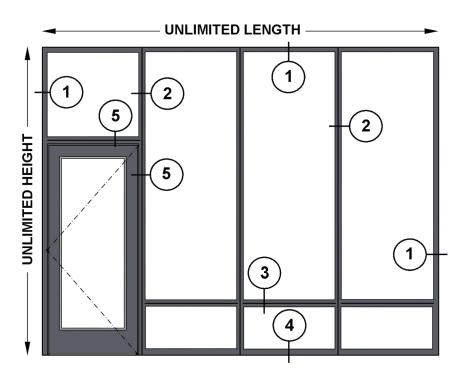
60 Minute - 250° Temperature Rise Hollow Metal Transparent Wall System

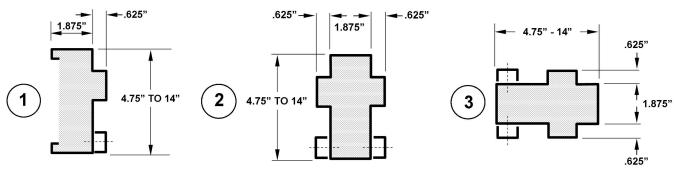


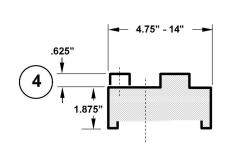
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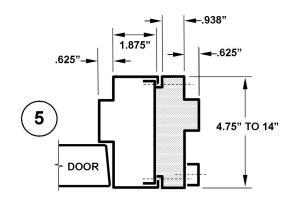


60 Minute - 250° Temperature Rise Hollow Metal Transparent Wall System



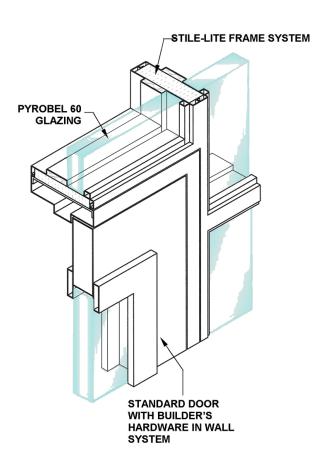


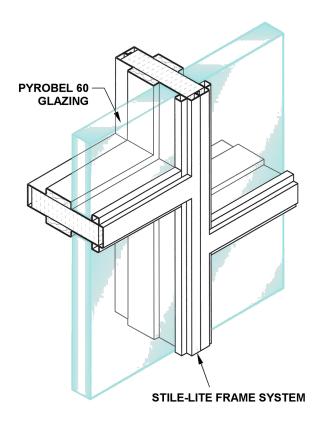






60 Minute - 250° Temperature Rise Hollow Metal Transparent Wall System with Standard Door & Frame









2 Hour - Temperature Rise Hollow Metal Transparent Wall System

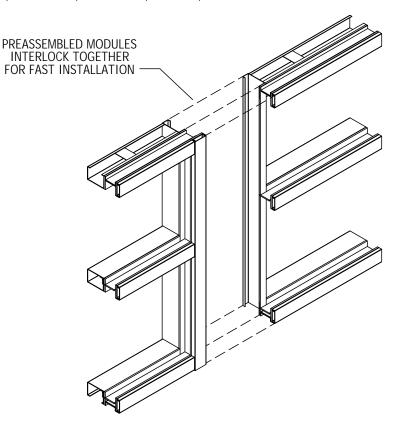
Stile-Lite 200 is a 250 degree temperature rise, fire rated framing system for 2 hour transparent walls tested to ASTM E119. The frames are manufactured in preassembled modules which interlock to provide quicker and easier installations. Any glazing manufacturer's tested and listed glass that meets the rating criteria can be installed into the Stile-Lite system.

Standard 1 3/4" thick fire rated doors can be installed into the Stile-Lite system. Doors are available as singles or pairs and can be prepped for any fire rated hardware. They can also be factrory primed, finish painted with Tnemec paint, powder coated or clad in stainless steel, all without compromising the fire rating.

Stile-Lite Features:

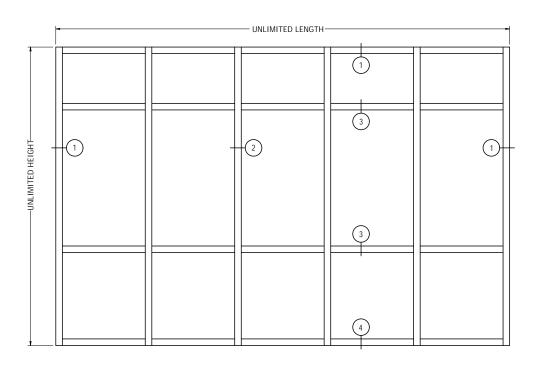
2 Hour 250 degree temerature rise hollow metal transparent wall system
Unlimited number of modules
All Frames are 14 gauge steel
Jamb sizes can vary up to 14"
Multiple Tnemec factory paint finishes and powder coat coatings available
Can be manufactured from cold roll, galvanized or #4 stainless steel.
Doors up to 48" wide (96" pairs) X 108" high
Finishing options for doors include plastic laminate, stainless steel, powder coating and finish paint.

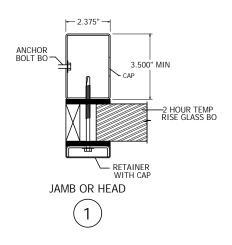
The Stile-Lite system complies with the following standards: UBC 7-1, ASTM E119, NFPA 251, NFPA 252, UL 263, CANULC S101 M89

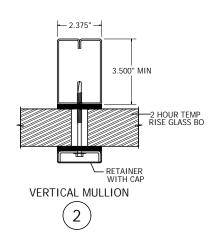


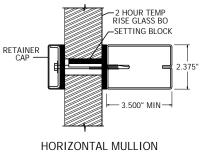


2 Hour - Temperature Rise Hollow Metal Transparent Wall System

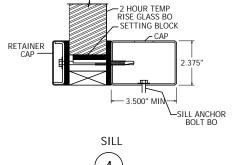








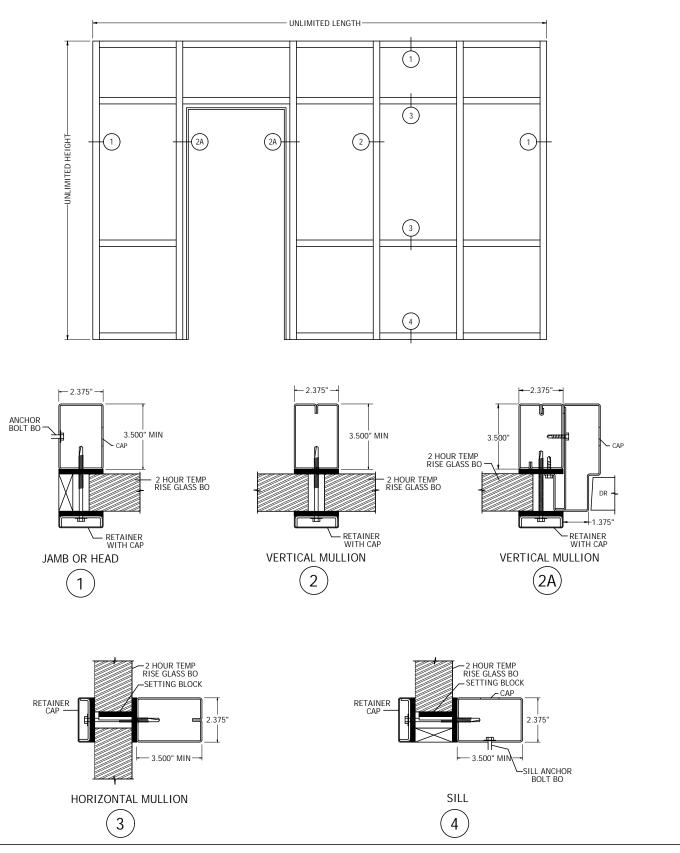
ONTAL MULLION



4



2 Hour - Temperature Rise Hollow Metal Transparent Wall System







2 Hour - Temperature Rise Hollow Metal Transparent Wall System

