

Fire resistance certification (WHI)

Putting emphasis on its customers' satisfaction, Métalec is continually developing new fire rated products to meet the constant growing demand of the market.

Among its vast range of products, Métalec manufactures fire rated steel doors and frames according to your needs.

- Métalec's steel doors and frames are approved by the Warnock Hersey (ITS) laboratory highly recognized in the industry;
- The steel doors and frames have been verified, inspected and approved in conformance with:
 - CAN/ULC-S104-M80
 - UBC7-2(1994)
 - UL10(b)
 - NFPA252
 - NFPA80
 - ASTM E152 (Standard methods of fire tests of door assemblies)

A regular verification is made at the factory by a WHI laboratory inspector during the manufacturing.

Métalec has a full range of fire listed products with Warnock Hersey and are available with the following fire ratings:

- 20 min. (D)
- 45 min. (C)
- 90 min. (B)
- 180 min. (A)

See the Fire Labelling Guide tables at the end of this brochure.

FIRE LABELLING GUIDE

Fire rated DOORS

Maximum rating (hours)	Door types			Maximum door size (inside of frames)	Steel thickness (gauge)	Door core	Glazed openings (maximum surface)
	Single	Double					
		Regular	Double egress				
3	X	-	-	1067 mm x 2286 mm (42" x 90")	20-18-16	Honeycomb	n/a
3	X	-	-	1067 mm x 2388 mm (42" x 94")	20-18-16*	Honeycomb	n/a
3	X	-	-	1067 mm x 2134 mm (42" x 84" (120") with transom)	20-18-16	Honeycomb	n/a
3	-	X	-	2134 mm x 2286 mm (84" x 90")	20-18-16	Honeycomb	n/a
3	X	-	-	1220 mm x 2134 mm (48" x 84")	16	Vertical stiffeners (wool)	n/a
3	-	X	-	2440 mm x 2134 mm (96" x 84")	16	Vertical stiffeners (wool)	n/a
3	X	-	-	1220 mm x 2134 mm (48" x 84")	18-16-14	STC-36 to STC-44	n/a
3	-	X	-	2440 mm x 2134 mm (96" x 84")	18-16-14	STC-36 to STC-44	n/a
3**	X	-	-	1220 mm x 2440 mm (48" x 96")	20-18-16	PCR	n/a
3**	-	X	-	2440 mm x 2440 mm (96" x 96")	20-18-16	PCR	n/a
1 1/2	X	-	-	1220 mm x 2440 mm (48" x 96")	16-14	Vertical stiffeners (PCR or fiberglass)	0.065 m ² (100 po ²)
1 1/2	-	X	-	2440 mm x 2440 mm (96" x 96")	16-14	Vertical stiffeners (PCR or fiberglass)	0.065 m ² (100 po ²)
1 1/2	X	-	-	1220 mm x 2440 mm (48" x 96")	20-18-16	Honeycomb or PCR	0.065 m ² (100 po ²)
1 1/2	-	X	X	2440 mm x 2440 mm (96" x 96")	20-18-16	Honeycomb or PCR	0.065 m ² (100 po ²)
1 1/2	X	-	-	915 mm x 2134 mm (36" x 84")	14	Honeycomb	0.065 m ² (100 po ²)
1 1/2	-	X	-	2134 mm x 2134 mm (84" x 84")	14	Honeycomb	0.065 m ² (100 po ²)
1 1/2**	X	-	-	915 mm x 2134 mm (36" x 84")	20-18-16	Polystyrene or polyisocyanurate	0.065 m ² (100 po ²)
3/4	X	-	-	1220 mm x 2440 mm (48" x 96")	20-18-16	Honeycomb	0.84 m ² (1296 po ^{2***})
3/4	-	X	X	2440 mm x 2440 mm (96" x 96")	20-18-16	Honeycomb	0.84 m ² (1296 po ^{2***})
3/4	X	-	-	1220 mm x 2440 mm (48" x 96")	14	Honeycomb	0.84 m ² (1296 po ^{2***})
3/4	-	X	-	2440 mm x 2440 mm (96" x 96")	14	Honeycomb	0.84 m ² (1296 po ^{2***})

* Stainless steel ** Positive pressure

*** Maximum exposed wired glass area is 1296 sq. In. (0,84 m²) per opening. Ex. 36" x 36" (915 mm x 915 mm) and must not exceed either 54" (1372 mm) in height or 54" (1372 mm) in width.

Fire rated FRAMES

Ceramic glass

Maximum rating (hours)	Frame types	Maximum frame size	Steel thickness	Minimum wall thickness	Transom maximum dimensions	Maximum lateral dimensions
1 1/2	Single frame with transom	1219 mm x 3251 mm 48" x (128" H.t.) (Door 48" x 108")	16-14-12	90 mm (3 1/2" min.) 241 mm (9 1/2" max.)	1219 mm x 1219 mm 48" L x 48" H (2116 po. ca.)	n/a
1 1/2	Double frame with transom	2438 mm x 3251 mm 96" (H.t.) x (128" H.t.) (Door 96" x 108")	16-14-12	90 mm (3 1/2" min.) 241 mm (9 1/2" max.)	1219 mm x 1219 mm 48" L x 48" H (2116 po. ca.)	n/a
1 1/2	Sidelight frame	3911 mm x 3251 mm 154" (H.t.) x 128" (H.t.) (Single door 48" x 108") (Double door 96" x 108")	16-14-12	90 mm (3 1/2" min.) 241 mm (9 1/2" max.)	1219 mm x 1219 mm 48" L x 48" H (2116 po. ca.)	1219 mm x 2336 mm 48" L x 92" H (2116 po. ca.)
1 1/2	Window frame	3911 mm x 3251 mm 154"(H.t.) x 128" (H.t.)	16-14-12	90 mm (3 1/2" min.) 241 mm (9 1/2" max.)	n/a	1219 mm x 2336 mm 48" L x 92" H (2116 po. ca.)

NOTES:

- ZF120 satin steel
- ZF275 galvanized steel
- Welded assembly (splicing allowed but must be welded on site)
- 1 1/4" min. face profil (if door height is more than 96", 2" min. face profil)
- Ceramic glass approved 3/16", *Schott Pyran F*, or *FireLite*
- Maximum exposed ceramic glass area is 2116 sq. In. per opening.
- A glazed side section that extends to the floor must have a minimum baseprofile of a 4" face

Fire rated **FRAMES**

Steel panel or wired glass

Maximum rating (hours)	Frame types	Maximum frame size (inside of frames)	Steel thickness	Minimum wall thickness	Transom maximum dimensions	Maximum lateral dimensions
3*	Single frame with transom (with mullion)	1220 mm x 3048 mm 48" x 120" (Door 48" x 96")	16*-14*-12*	3 1/2" 89 mm min. 12" 304 mm max	Width 48" 1219 mm Height 32" 812 mm (Panel)	n/a
3*	Double frame with transom (with mullion)	2440 mm x 3048 mm 96" x 120" (Door 96" x 96")	16*-14*-12*	3 1/2" 89 mm min. 12" 304 mm max.	Width 96" 3048 mm Height 32" 812 mm (Panel)	n/a
3*	Single frame with transom (without mullion)	1066 mm x 3048 mm 42" x 120" (Door 42" x 84")	16-14	3 1/2" 89 mm min. 12" 304 mm max.	Width 42" 1066 mm Height 36" 914 mm	n/a
3*	Single frame	1220 mm x 2438 mm 48" x 96"	16*-14*-12*	3 1/2" 89 mm min. 12" 304 mm max.	n/a	n/a
3*	Double frame	2438 mm x 2438 mm 96" x 96"	16*-14*-12*	3 1/2" 89 mm min. 12" 304 mm max.	n/a	n/a
1 1/2	Double egress frame	2438 mm x 2438 mm 96" x 96"	16-14	3 1/2" 89 mm min. 12" 304 mm max.	n/a	n/a
1 1/2	Sidelight frame	3048 mm x 2184 mm 120"(H.T) x 86"(H.T.) (Single door 42" x 84") (Double door 84" x 84")	18-16-14	4 1/2" 114 mm min. 12" 304 mm max.	n/a	Steel panel Width 23 1/8" 584 mm Height 41 1/8" 1041 mm
1 1/2	Single frame	1066 mm x 2133 mm 42" x 84"	18-16-14	4 1/2" 114 mm min. 12" 304 mm max.	n/a	n/a
1 1/2	Double frame	2133 mm x 2133 mm 84" x 84"	18-16-14	4 1/2" 114 mm min. 12" 304 mm max.	n/a	n/a
3/4*	Single frame with transom (with mullion)	1220 mm x 2438 mm 48" x 120" (Door 48" x 96")	16*-14*-12*	3 1/2" 89 mm min. 12" 304 mm max.	Width 48" 1219 mm Height 32" 812 mm Panel or wired glass 1296 po. ca.**	n/a
3/4*	Double frame with transom (with mullion)	2438 mm x 3048 mm 96" x 120" (Door 96" x 96")	16*-14*-12*	3 1/2" 89 mm min. 12" 304 mm max.	Width 96" 3048 mm Height 32" 812 mm Panel or wired glass 1296 po. ca.** 83 612,7 mm ²	n/a
3/4*	Sidelight frame (or window)***	3048 mm x 2184 mm 120"(H.T) x 86"(H.T.) (Single door 42" x 84") (Double door 84" x 84")	18-16-14	4 1/2" 114 mm min. 12" 304 mm max.	n/a	Panel or wired glass (1296 po. ca.)** 83 612,7 mm ²

NOTES:

- ZF120 satin steel
- ZF275 galvanized steel
- (With mullion) = must be welded only
- A removable vertical post is allowed with a double frame
- 1 1/4" min. face profil
- Post or mullion face 1 3/4" min.

* ZF120 satin steel or ZF275 galvanized or stainless steel 304-#4 and 316-#4

** Maximum exposed wired glass area is 1296 sq. In. (0,84 m²) per opening. Ex. 36" x 36" (915 mm x 915 mm) and must not exceed either 54" (1372 mm) in height or 54" (1372 mm) in width.

*** Welded or knock down assembly