

Machining Specifications - Daybar Industries Limited

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Page 1

FIRE LABELLING GUIDE

HOLLOW METAL FIRE DOORS

Maximum Rating	Maximum Size Up to	Minimum Thickness Face Skins	SWING			LATCHSETS				VISION PANELS	
			Single	Pairs		Cylindrical		Mortise	Fire Exit Hardware	Up to	
				Regular	Double Egress	5" Backset	2 3/4" Backset			1296 sq. in.	100 sq. in.
3 Hour	4'0" x 10'0" *	16, 18 gauge	X	X				*	*		X
	4'0" x 8'0" **	18, 16, gauge	X	X			X	X	X (concealed)		X
1 1/2 Hour	4'0" x 8'0" **	16, 18, gauge	X1	X1		X	X1	X1	X1		X1
	4'0" x 7'2" **	16, 18 gauge	X	X	X		X	X	X (concealed)		X
	3'0" x 7'0" flush or embossed	20, 22 gauge	X	X			X	X	X		X
	4'0" x 9'0" *1	16, 18 gauge	X			X	X	X	X		X
3/4 Hour	4'0" x 8'0" **	16, 18, gauge	X1	X		X	X1	X1	X1	X1	
	4'0" x 7'2" **	16, 18 gauge	X	X	X		X	X	X (concealed)	X	
	3'0" x 7'0" Flush or Embossed	20, 22 gauge	X	X			X	X	X	X	
	4'0" x 9'0" *1	16, 18 gauge	X			X	X	X	X	X	

* - 3 Point Concealed Latch in Singles and Active Leaf in Pairs
2 Point Concealed Latch in Inactive Leaf of Pairs

** - Steel Stiffened or Paper Honeycomb Positive or Negative Pressure

*1 - Latch having a 3/4" throw bolt required on doors over 8'0" in height

X1 - Alternate Cores: Polystyrene, Polyurethane Insulation (See Drawing #23).

Note: Flush bolts not permitted on insulated pairs

Dutch Door - up to 4'0 x 8'0 - up to 1-1/2 hour fire rating - no shelf required

1 - 1/2 hour listed louvre:

Max louvre per door - 4 sq. feet Max. (2) louvres

allowed. Max single louvre size - 24" x 24"

(no louvre w/glass cutouts-5-3/4" min. rail, bottom and sides)

FIRE LABELLING LIMITATIONS FOR METAL DOORS

- Approved cores for labelled doors are as follows:
 - Pre-expanded honeycomb core filling all door voids to a maximum 3 hr. rating.
 - Steel stiffened with 20 ga. .030 (.91) stiffeners at 3" - 90 O.C. from either edge of door to 6" - 152 O.C. in between with honeycomb core between stiffeners filling all voids for a maximum 3 hr.
 - Steel stiffened and honeycomb core to be laminated to face sheets of door.
 - Steel stiffened doors to have minimum 18 ga. .045 (1.2) face sheets and be lockseam construction.
 - Lockseams to be tackwelded above and below each hinge reinforcing and at 14" in between hinges and on lockside of door.
- Labelled double egress doors to be minimum 18 ga. .045 (1.2) face sheets with either pre-expanded honeycomb core filling all voids or steel stiffened core as per the above noted steel stiffened construction with lockseams tackwelded above and below each hinge reinforcing and directly opposite each hinge on lockside of doors.
- Labelled standard pair of doors and double egress pair of doors are permitted without an astragal provided each door is prepared for vertical rod panic hardware, 8'0" x 7'2" (2438 x 2184) maximum opening size.
- Labelled standard pair of doors are permitted with single point latch for the active leaf and surface or mortise flush bolts or vertical rod panic hardware with an astragal for the inactive leaf.
- All fire rated screens and windows must have 1/8" (3) x 5/16" (11) mineral board strip at bottom of all glass lites.

NOTE: Labelled doors over 8'0" height require the following hardware preparations:

- a) 2 pair heavy-duty hinges per leaf.
- b) 3 point concealed latch, factory-installed, in single doors and active leaf in pairs of doors.
- c) 2 point concealed latch, factory-installed, in inactive leaf in pairs of doors.
- d) "Z" Astragal, factory-installed.

FIRE LABELLING METAL DOORS WITH GLASS LIGHTS

Pursuant to Fire Label requirements, all Fire Labelled Metal Products with Glass Lights must have a continuous mineral board strip at the bottom on the Glass Light. The size will be 1/8" x 5/16" (4 x 8). Any other type of installation will void the Label.

