# HOLLOW METAL FRAMES

Standard & Custom Engineered Frames

## KDF & WF FRAME SERIES

MDI® HM Frames are available as:

12 Gauge Extra-Heavy Duty

14 Gauge Heavy Duty

16 Gauge Medium-Heavy Duty 18 Gauge Medium-Light Duty 22 Gauge Light Duty (Residential)

## A Complete line of Doors, Frames & Hardware



#### Frames Types Available:

- Welded
- Knock-down
- Adjustable knock-down
- Standard galvanized
- G90 galvanizedStainless steel
- STC (Acoustical)
- Lead-lined (x-ray)
- Bullet resistant
  - Blast resistant
- Borrowed-lite windows
- Side-lites & transoms
- Thermally broken
- Mullions & sticks
- Window wall systems
- Custom fabrication



Metropolitan Door Industries offers a full range of standard and custom hollow metal frames in various sizes and profiles. Steel frames are available for drywall or masonry applications, for new or existing construction in 12, 14, 16 and 18 gauge for commercial 1 3/4" (45 mm) thick doors and in 22 gauge for residential 1 3/8" (35 mm) thick doors. All standard frames are manufactured from commercial quality (A40 galv.) steel and are reinforced to receive architectural hardware in accordance to ANSI A115 standards. Frames are also available in stainless steel, lead-lined (X-ray) and G90 galvanized steel. Bullet resistant and blast resistant door & frame systems are available.

#### **General Specifications**

- Standard frames are available as welded (WF) or knock-down (KD).
- Hinge jambs are prepared and reinforced to receive 4 1/2" x 4 1/2" (114 mm x 114 mm) butt hinges.
- Hinge reinforcements can easily be field converted to accommodate heavy weight hinges.
- Strike jambs are prepared and reinforced to receive one standard 4 7/8" (124 mm) strike in accordance to ANSI A115.1.
- Hinge and strike jambs are supplied with appropriate wall anchors for installation.
- On welded frames, all welded joints are ground smooth and touchedup with primer paint to provide a seamless appearance.
- KD frames come standard with our TS (Tension screw) anchor.
- Stock WF frames come standard with DWZ (metal stud "Z") and MAS (Masonry Strap) anchors.



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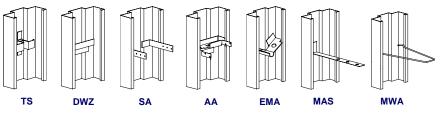
## MDI® Typical HM Frame Construction

- 12, 14 16, 18 or 22 gauge galvannealed (A40) steel.
- Knock-down (unassembled) or welded (assembled). R
- 10 gauge high frequency dual purpose hinge reinforcement with return bend for added strength and rigidity. Hinge reinforcements can be easily field converted to accommodate heavy weight hinges.
- D. 18 gauge ASA strike reinforcement with closed back.
- 18 gauge floor anchor. E.

#### Note:

- MDI® welded frames are offered as standard welded construction (WF) and as fully welded construction (FWF) as an option.
- Metropolitan supplies its welded frames with tempoary spreaders which are welded to the bottom of each jamb. These spreaders are not to be used for aligning the frame during installation. The sole pupose of the spreaders are to maintain proper alignment during shipment only.

#### Standard Wall Anchors



Please note that special purpose anchors such as EMAO, MTA, YS, combo anchors and custom engineered wall anchors are available. Please contact our customer service department for details.

### Fire Labeling

Metropolitan fire labeled steel frames are approved by both Intertek Testing Services (ITS/Warnock Hersey) and Underwriters Laboratories (UL) Fire Labeling programs.\* Fire labeled steel frames must be installed with an equivalent fire labeled door with approved fire listed hardware. Some restrictions do apply.

\* 22 gauge frames cannot be fire labeled.

## FIRE LABELING NOTICE \*

**Hospital Stops** 45° & 90° are available

Openings shown below with glass in our Fire Labeling Guide are provisioned for 1/4" thick wire glass. Larger glass openings are available with the use of a fire listed glazing product that meets CPSC CAT II. Some restrictions do apply. Contact our customer service department for details.

В

Α

Е



FRAME TYPE	MIN. GAUGE	MINIMUM THROAT OPENING	MAX. FRAME SIZE (Jamb Opening Size)		AVAILABLE FIRE	NOTES
			Single	Double	RATING	
Standard frames (3-Sided)	16	3 1/2" Double Rabbet 2 1/2" Single Rabbet	4'-0" x 10'-0"	8'-0" x 10'-0"	3 Hour 1 1/2 Hour 45 min.	For drywall or masonry openings. Available as knock-down or welded construction.
	18	4 5/8"	3'-0" x 7'-0"	6'-0" x 7'-0"		
Frames with center mullion	16	3 1/2" Double Rabbet 2 1/2" Single Rabbet	—	4'-0" x 8'-0"	3 Hour 1 1/2 Hour 45 min.	For drywall or masonry openings. Center mullion may be fixed or removable.
Dbl. egress frames	16	3 1/2"	_	8'-0" x 8'-0"	3 Hour 1 1/2 Hour 45 min.	For drywall or masonry openings.
Multi-opening frames	16	2 1/2"		12'-0" x 8'-0" with no individual opening exceeding 8'-0" x 8'-0"	1 1/2 Hour 45 min.	For drywall or masonry openings. Mullions may be fixed or removable.
Transom frame w/ & w/o transom bar	16	3"	4'-0" x 11'-2" transom panel height ≤ 4'-2"; door opening height ≤ 9'-0"	8'-0" x 11'-0" transom panel height ≤ 4'-0"; door opening height ≤ 9'-0"	1 1/2 Hour 45 min.	For drywall or masonry openings.
Glazed or paneled screens	16	3"	13'-6" x 12'-0" overall for masonry openings 11'-4" x 10'-0" overall for drywall openings Maximum door opening size: 8'-0" x 8'-0"		45 min.	Glazed opening area ≤ 1296 in² per glazed opening. Glazed width & height ≤ 4¹-6".
	16	4 7/8"	10'-2" x 10'-1" overall for drywall or masonry openings Maximum door opening size: 8'-0" x 8'-0"		1 1/2 Hour 45 min.	Transom panel size $\le$ 3'-5" x 2'-2". Side panel area $\le$ 2'-6" 1296 in <sup>2</sup> per side panel with width $\le$ 2'-6" & height $\le$ 4'-6".
Window Frames	16	3"	13'-6" x 12'-0" overall for masonry openings 11'-4" x 10'-0" overall for drywall openings		45 min.	Glazed opening area ≤ 1296 in² per glazed opening. Glazing width & height ≤ 4'-6".



