

## GENERAL FRAME INFORMATION:

Steelcraft framing systems are designed to fit virtually all construction requirements for commercial and institutional building applications. Their construction, durability and flexibility have been proven throughout the world in both operation and physical testing of all types.

The **F, FN, FE, DE and MU Series** frames are designed for installation as part of the wall framing sequence, and installed in interior and exterior applications. When installed, this frame series will either wrap or butt up against the wall construction. Anchoring will be either into the masonry wall, or to the stud wall framing systems.

The **DW and K Series** frames are designed for interior application and for installation in rough openings after the wall is erected and finished. They can be installed in minutes and can be relocated without damage to the frame. When installed, this frame series will wrap the wall construction. Anchorage will be compression fit to the stud systems.

## SIZES AND PERFORMANCE:

All framing systems are manufactured and supplied to meet the dimensional standards and performance levels as published in ANSI A250.8-2003 (commonly referred to as SDI 100).

Special size products are available to meet the unique construction, performance and aesthetic requirements of the Architectural community. Contact Steelcraft for those requirements.

## USAGE AND APPLICATION:

To help simplify the use, selection and specification of Steelcraft framing systems, the following guidelines for base material selection can be used:

**Material Gage** – the following material thicknesses are available:

- **16 gage** [0.053" (1.3mm)] – for Heavy Duty Commercial and Institutional applications with high use.
- **14 gage** [0.067" (1.7mm)] – for Extra Heavy Duty Commercial and Institutional applications with the potential of very high use.
- **12 gage** [0.093" (2.3mm)] – for Maximum Duty Commercial and Institutional applications with extremely high use.

**Material Selection** – in addition to the thickness of base material, the following base material types of metal are available:

- Commercial quality cold rolled steel conforming to ASTM specifications A1008, A568 and A569 is commonly used on interior openings.
- Galvannealed Steel conforming to ASTM specification A653 is recommended for use on exterior openings or for interior locations where high humidity is present.

## STEEL FRAMES:

Three sided steel frames are furnished in three pieces (two jambs and a head) which are anchored to the wall systems. The most common 3-sided frame components are:

1. **Hinge Jamb** – vertical frame member on which the door is hinged. [For double doors (pairs), there are two hinge jambs and no strike jamb].
2. **Strike Jamb** – vertical frame member into which the door latches. [For double doors (pairs), there is no strike jamb, but there are two hinge jambs].
3. **Head** – horizontal frame member which connects the jambs.

## HOW THEY ARE SUPPLIED:

The connecting corners of the 3-piece frame include precision factory die miters with interlocking tabs and corner clips. The corner miters are specially designed to insure a tight closed corner connection when assembled and installed properly. There are two methods of furnishing 3-sided frames to the jobsite:

- **Knock Down (KD)** – Frames are supplied in 3 pieces for assembly prior to installation at the jobsite by the installing contractor. This is an economical method of supplying the frames, and at the jobsite, there is less space consumed in staging the products, easier jobsite movement of material, and, usually less damage to the frame prior to installation.
- **Set-Up and Welded** – Prior to arriving at the jobsite, the 3-sided frame (with factory miters) is assembled (at the distributor's fabrication location, or by Steelcraft). The miters are welded (in accordance with ANSI A250.8-2003), finished and supplied to the jobsite ready for installation. **Welded frames are shipped to the jobsite with temporary shipping bars attached. The temporary shipping bars must be removed prior to installation. When installing frames, the temporary shipping bars must not be used as spreader bars or installation bracing.**

## JOBSITE STORAGE:

Frames shall be stored under cover on 4" (101.6mm) wood sills, on the floor, in a manner to avoid contact with moisture, and to prevent rust and damage. Only use vented plastic or canvas. The use of no-vented materials, create a humidity chamber, which promotes blistering and corrosion. Assembled frames shall be stored in a vertical position, five (5) units maximum in a stack. Provide a 1/4" (6.3mm) space between the frames to provide air circulation.

## INSTALLATION:

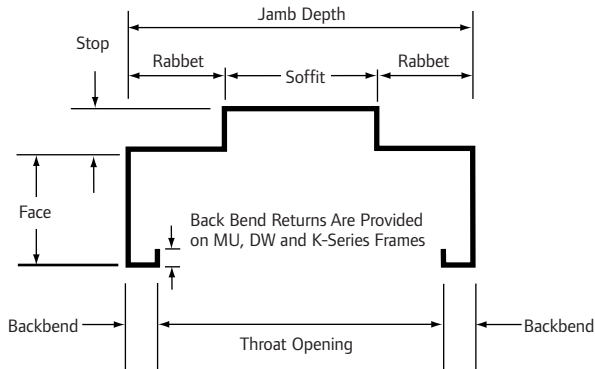
Proper frame installation is critical for reliable door and hardware functionality. To insure proper fit, function and reliability, install all frames in accordance with ANSI A250.11 and HMMA 840.

## PROFILE TERMINOLOGY:

The frame profile has specific terminology related to each surface. Their jamb depth describes the frame size required.

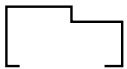
It is critical that the throat opening of the frame be compatible with the wall to which it will be attached.

## Double Rabbet: Standard Profile



## PROFILE VARIATIONS:

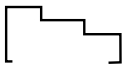
Steel frames are supplied standard as double rabbet. To accommodate various application needs, the frame profile (in any frame series) can change. Some of the typical variations are as follows:



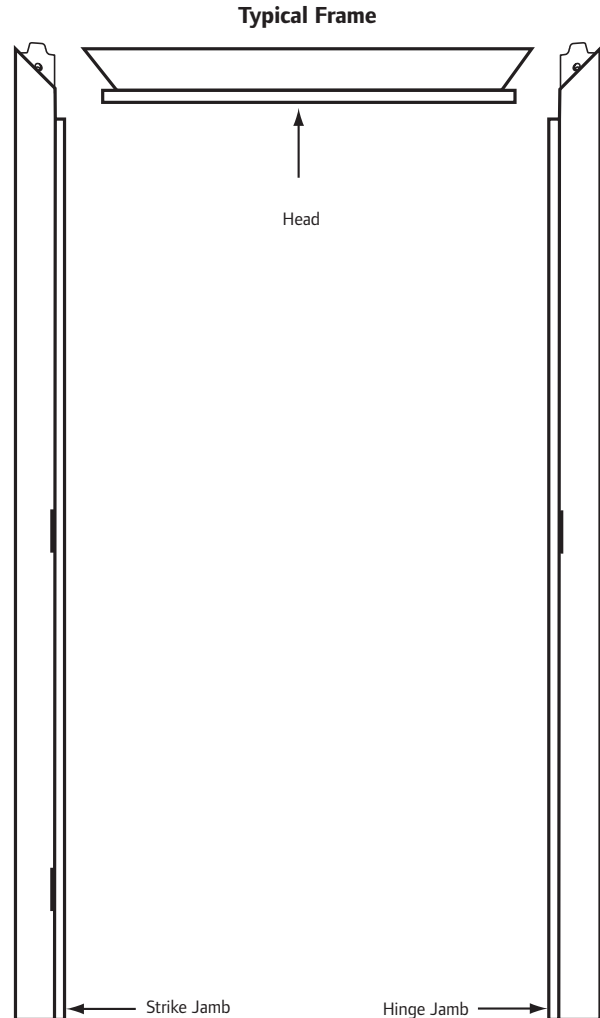
**Single Rabbet** – Jamb depths below 4-3/4" (121mm) are single rabbet due to the dimensional limitations of the profile. Some specifications will require single rabbet profiles on frames over 4-3/4" (121mm) in jamb depth. Profile as shown will vary on MU, DW and K-Series frames, refer to the appropriate data sheets.



**Cased Open** – Used for double acting doors (swinging in both directions), sliding doors, bi-fold doors or frames used to close-off an opening in a wall when a door is not required.



**Double Egress** – This is a frame specifically designed for cross corridor applications where traffic control is required. **This frame is not available in the Drywall Series (DW and K) or Multi-Use Series (MU).**



## ANCHORS:

Frames must be anchored to the applicable wall construction. Wall construction at door openings must be of sufficient construction to support commercial or institutional grade steel doors and frames. Refer to the appropriate frame data sheets since anchor types will vary with frame constructions and noted in this manual. Basic guidelines is as follows:

### FLUSH FRAMES:

- Base anchors – one located at the bottom of each jamb
- Jamb anchors – Locate anchors near each hinge location in both hinge and strike jambs. Transom frames require additional anchors above the top hinge.
- Head anchors – For wide frame openings usually over 60" in width, an anchor located in the center of the frame head is recommended.

### DRYWALL FRAMES:

- Base anchors – two (2) located at the bottom of each jamb.
- Jamb anchors – Drywall frame include an adjustable compression anchor near the top of each jamb.