

GENERAL DOOR INFORMATION:

Steelcraft full flush doors are designed for virtually all construction requirements in commercial building applications. Their construction, durability and flexibility have been proven throughout the world in both operation and physical testing of all types.

FULL FLUSH DOOR CONSTRUCTION

- **Laminated (L and SL):**

Honeycomb core doors are designed for installation in all types of building construction, for both interior and exterior applications. The continuously bonded cores and full height mechanically interlocked edge seams provide attractive, flat and very durable doors to the commercial construction industry. Many options are available in this product series including edge construction, GrainTech® wood grain embossment, core variations.

- **Steel Stiffened (B Series):**

These internally steel stiffened core doors are designed for installation in all types of building construction, for both interior and exterior applications. The internal steel stiffeners are welded to the face sheets. The full height mechanically interlocked edge seams provide attractive and very durable doors to the commercial construction industry. Edge construction options are available.

- **Embossed (CE Series):**

The 6 and 8 panel embossed doors, with a polystyrene core, are designed for installation in all types of building construction for both interior and exterior applications. The crisp and deeply embossed panels create the appearance of hand carved doors. The continuously bonded cores and full height mechanically interlocked edge seams provide attractive, flat and very durable doors to the commercial construction industry.

- **Temperature Rise (T Series):** T Series doors are equipped with a mineral core and are designed for use in locations requiring a temperature rise rating. The use of this door series is usually dictated by the local building code. Steelcraft T Series doors carry a 250° F (121° C) temperature rise Listing. Edge construction options are available.

STILE AND RAIL:

The **A Series** doors are specifically designed for entrances and applications requiring full glass designs. They are an attractive and very durable alternative to both aluminum entrance doors and full flush steel doors prepared for large installed lights.

SIZES AND PERFORMANCE

All doors are manufactured and supplied to meet the dimensional standards and performance levels as published in ANSI A250.8-2003 (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 door products, the following guidelines for base material selection can be used:

Material Gage – the following base material thickness values were taken from the Underwriters Laboratories, Inc. publication for gage number and equivalent thickness and describe the sheet steel products available from Steelcraft:

- **20 Gage [0.032" (0.8mm)]** for Light Commercial applications with minimal use and abuse.
- **18 Gage [0.042" (1.0mm)]** for Heavy Commercial and Institutional applications with high use.
- **16 Gage [0.053" (1.3mm)]** for Extra Heavy Commercial and Institutional applications having the potential of very high use.
- **14 Gage [0.067" (1.7mm)]** for Extra Heavy 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 from Steelcraft:

- **Cold Rolled Steel (CRS)** - conforming to ASTM A1008 and ASTM A568 recommended for interior opening with normal humidity exposure.
- **Hot-Dip Galvannealed Steel** - conforming to ASTM A924 and ASTM A653 recommended for exterior opening or interior openings with high humidity.

NOTE: For recommendations on material and door types, refer to the product specification charts located in the **Selection and Usage Section** of this manual.

INSTALLATION

Installation of all Steelcraft frames and doors shall conform to the published Steelcraft installation instructions, ANSI A250.11-2001 (formerly SDI 105) *Recommended Erection Instructions for Steel Frames and HMMA 840*.

All Fire Rated doors must be installed and maintained in accordance with the National Fire Protection Association Pamphlet 80, and/or the local *Authority Having Jurisdiction*.

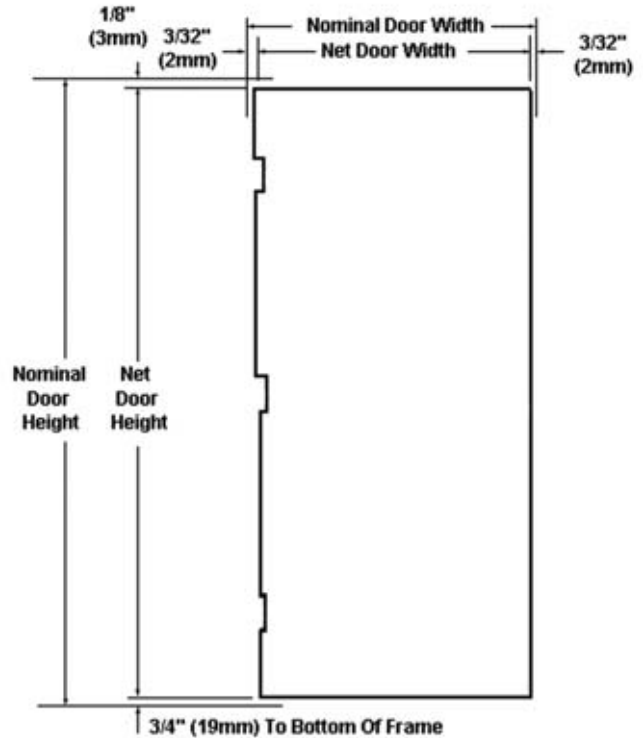
JOB SITE STORAGE:

Store doors under cover, in a dry area and in an upright position. All ferrous metal products should be stored where they will not be exposed to, or come in contact with water. This is particularly true of products such as doors, which have large flat surfaces on which water may collect if they are stacked horizontally. Only use vented plastic or canvas. The use of no-vented materials, create a humidity chamber, which promotes blistering and corrosion.

Place no more than 5 doors in a group, with all material on planking or blocking at least 4 in. (100 mm) off the ground, 2 in. (50 mm) off a paved area or the floor slab. Provide a least 1/4 in. (6.4 mm) space (wood strip) between all units to permit air circulation.

CONSTRUCTION NOTES:

- Doors** are 1-3/4" (45mm) thick.
- Hardware Preparations:** to meet specifications, doors can be prepared for all commercial mortised hardware, and can be factory reinforced for surface applied hardware applications.
- Top and bottom edges** of all doors are closed with 14 gage [0.067" (1.7mm)] welded channels. Exterior applications require the addition of top caps to protect against weather infiltration.
- Optional edge seams** are prepared prior to the application of factory, baked-on primer paint.
- Standard hardware preparations**, mortised and reinforced for the following:
 - Universal Hinge Preps:** 4-1/2" (114mm) patented preparation which allows for easy and quick field conversion from standard weight .134" (3.3mm) to heavy weight .180" (4.5mm) hinges.
 - Locks:** a multitude of standard lock preps are available. The most commonly used with a 4-7/8" (124mm) strike are 161, 61L and 86.
- Glass Lights with Dezigner® Trim:** for doors with glazed cutouts, see the **Lights and Lovers Section 4** of this Manual.
- Louvers:** for doors with attached louvers, see the **Lights and Lovers Section 4** of this Manual.



SINGLE DOOR APPLICATION:

Standard Operating Clearances (Installed in frame)

- Top (at the Head) = 1/8" (3mm) to bottom of head or transom panel;
- Hinge Side = 3/32" (2mm) to rabbet or jamb;
- Lock Side = 3/32" (2mm) to rabbet or jamb;
- Bottom (at the Floor) = 3/4" (19mm) to bottom of frame.

DOUBLE DOOR APPLICATION:

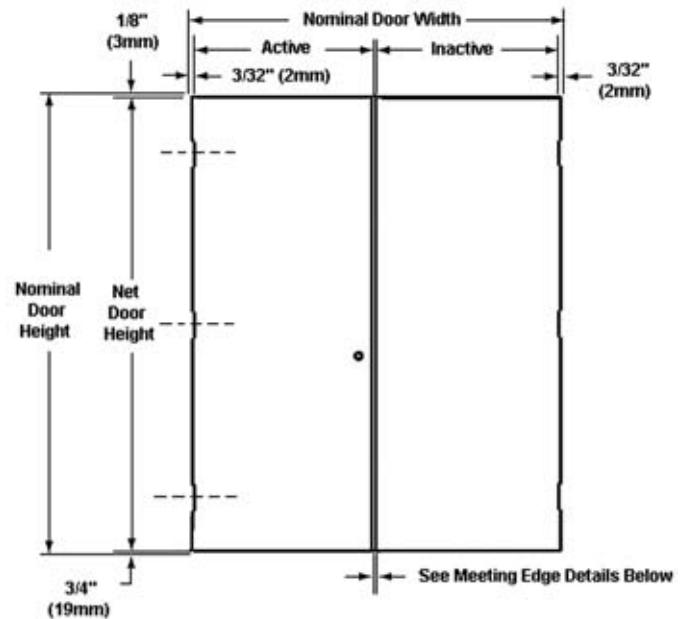
Both leaves of double door elevations employ the same construction features as single swing and could include an optional overlapping astragal.

Meeting Edges

- A 14 gage [0.067" (1.7mm)] "Z" astragal is furnished loose for installation in the field by others.
- Overlapping astragal kits are available to convert an active leaf to an inactive leaf.
- When an astragal is not used, the width of the inactive leaf is increased 3/32" (2mm) when specified.

Refer to section 3.3 for all standard astragal applications

Hardware Preparations: the inactive leaf can be prepared for hardware as specified.



Standard Operating Clearances (installed in frame)

- Head = 1/8" (3mm) to bottom of head or transom panel.
- Hinge Side = 3/32" (2mm) to rabbet on jamb.
- Meeting Edges = 3/32" (2mm) with or without astragal.
- For openings without an astragal, a wide inactive leaf is used.
- Bottom = 3/4" (19mm) to bottom of frame.

MEETING EDGE DETAILS:

Refer to section 3.3 for all standard astragal applications

