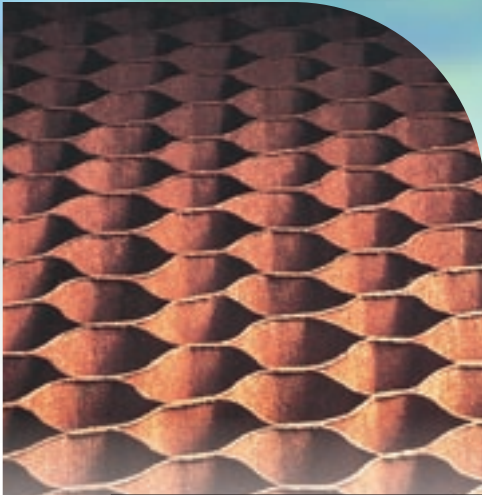


# Designed and Manufactured to Last – Right to the Core



## Honeycomb

*Steelcraft was the first to introduce honeycomb in standard metal doors (1957). With its unique properties, the honeycomb core enhances the structural integrity of the door while significantly reducing its weight. Honeycomb cores have significantly changed the hollow metal door industry.*

## Features

- High strength to weight ratio
- Uniform crushing strength
- Excellent impact resistance
- High shear strength
- Extreme durability
- Resists decay and pest destruction
- Insulation properties
- Available with wide range of fire ratings
- Versatility – permits modifications
- Uniform thickness ensures flat surface for lites, louvers, hardware, etc.

## Unique Operations

Steelcraft uses a kraft honeycomb material as the standard core for all flush (L-Series) doors. The honeycomb is subjected to several unique operations that enhance the characteristics of the core. If any of these operations are eliminated, the strength and durability of the core is compromised. The unique operations are as follows:

### SANDING

Sanding ensures the honeycomb is the proper thickness to fit within the door panels. The sanding also increases the surface area to which the contact adhesive can be applied, therefore improving the lamination.

### EXPANDING

Expanding the honeycomb ensures that the cell structure is at its optimum size. Honeycomb strength is determined by the cell size and structure.

### RESIN IMPREGNATION

The kraft honeycomb material is impregnated with a phenolic resin. The phenolic resin enhances the honeycomb by making the material resistant to decay, insects and vermin. The resin also makes the honeycomb resistant to moisture. The amount of the impregnation is controlled to prevent a brittle condition.

### CURING

The honeycomb must be fully cured to ensure the strength, moisture, decay, vermin resistance and bonding strength are achieved.

### ADHESIVES

Contact adhesives are used to bond the impregnated honeycomb to the door panels. Since contact adhesives are designed to adhere to one another, the contact adhesive is applied to both door panels and to both faces of the honeycomb. By coating all surfaces in their entirety a true bond is achieved across the width and height of the door.

### BONDING

A true bond is further ensured by passing the door and honeycomb assembly through a pinch roller process that exerts 500 pounds pressure per square inch.

## Optional Cores

The honeycomb core door mounted in a frame that has been fully weather-stripped will provide an efficient insulating assembly in 95% of all weather conditions. For the other 5%, Steelcraft provides two alternate cores, polystyrene and polyurethane, that are bonded into place using the same contact adhesives used with the honeycomb core.

### POLYSTYRENE

Polystyrene solid core doors mounted in a frame that has been fully weather-stripped will provide an efficient insulating assembly for extreme weather conditions. The tested U-factor of the assembly is .23.

### POLYURETHANE

Polyurethane solid core doors mounted in a frame that has been fully weather-stripped are designed to provide efficient insulating assembly for arctic weather conditions. The calculated U-factor of the door is .09.

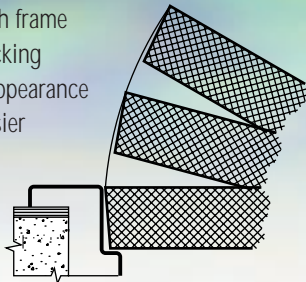
## Baked-On Prime Paint

All Steelcraft doors are supplied with a baked-on prime paint finish in accordance with ANSI A250.10. Before applying the primer, the doors are thoroughly cleaned and phosphatized to ensure proper paint adhesion. The primer is an attractive, environmentally friendly, neutral beige color and is suitable for field-applied finish paints.

# Steelcraft Design Features

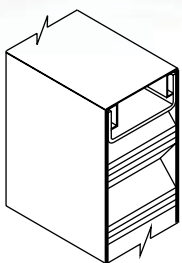
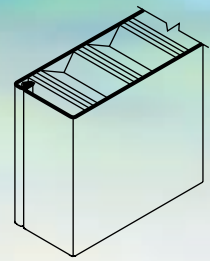
## ARCHITECTURAL BEVELED EDGE:

- Ensures easy operation with frame
- Eliminates binding and sticking
- Allows tighter fit for neat appearance
- Makes field installation easier



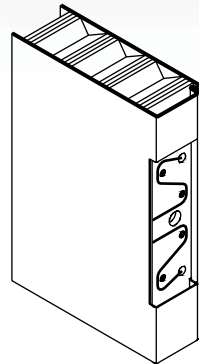
## VERTICAL SEAM:

- Continuous mechanical interlock for maximum rigidity
- Epoxy applied to inside of seam for additional strength and moisture barrier
- Hinge and lock edge seams are symmetrical



## HEAVY GAGE END CHANNELS:

14 gage (1.7mm) top and bottom reinforcing channels are standard in Steelcraft doors. The 14 gage (1.7mm) far exceeds the industry standard of 18 gage (1mm). The heavy channels are projection welded to both door panels. The door is stable and the door top and/or bottom are protected from abuse.

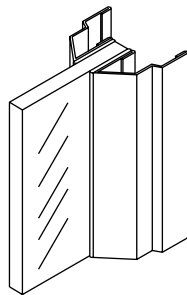


## UNIVERSAL HINGE REINFORCEMENT AND PLACEMENT:

The edge of Steelcraft doors is mortised and reinforced to accept the hinge leaf. The beveled edge and seam position the hinge so that filler plates are not required. The reinforcement is 7 gage (4.3mm) and is one of the strongest in the industry. It exceeds the industry standard of 10 gage (3.4mm) and is 28% thicker than the actual hinge. The preparation is designed to accept a standard weight or heavy weight hinge with a simple modification. The reinforcement is projection welded to the edge of the door.

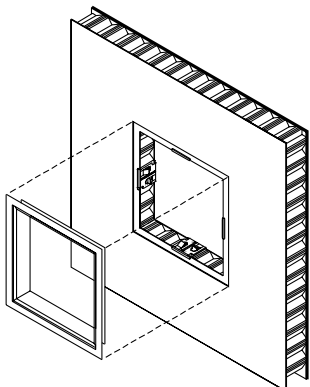
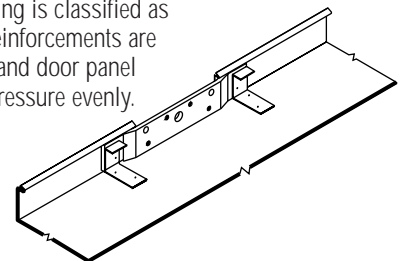
## RECESSED GLASS TRIM:

Steelcraft's DEZIGNER TRIM® is a steel recess mounted (flush design) type with mitered, reinforced corners and concealed fasteners. The recess mounted trim allows exit devices to be mounted without interference with the glass trim. It is designed to be used on label and non-label doors and will accept 1/4" (6 mm) or 1/2" (13 mm) thick glass (glass thickness must be specified).



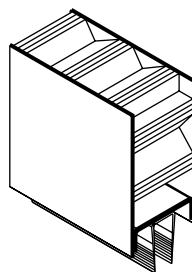
## HIGH FREQUENCY HINGE PREPARATION:

Additional strength can be added to the normal reinforcement when an opening is classified as high frequency. The added reinforcements are welded to the reinforcement and door panel distributing the torque and pressure evenly.



## DEZIGNER TRIM:

DEZIGNER TRIM has reinforced mitered corners, for a clean, neat and flush finish with the door face. That means less bulk, more strength and a sleeker look. Assembled by hand in our factory to spec, DEZIGNER TRIM has universal interior and exterior applications. Not only can you choose your own color palate, it's now available in our GRAIN-TECH stainable wood grain finish as well.



## FAS-SEAL™ DOOR BOTTOM:

The Fas-Seal concealed double sweep conforms to sill variances, provides effective seal, is fire rated and meets the requirements of NFPA 105 where smoke control door openings are required.

# L - Series

L20(.8mm) • L18(1mm) • L16(1.3mm) • L14(1.7mm)

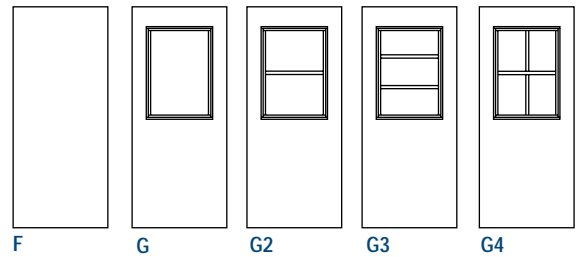
FULL FLUSH DOORS



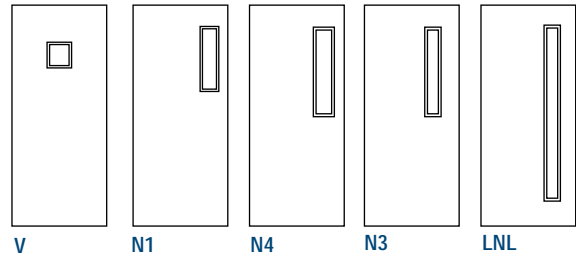
L-Series Door with Narrow Lite

Steelcraft L-Series doors are designed to meet architectural requirements for full flush doors. The L-Series door combines the strength and dimensional stability of steel with the structural integrity of the honeycomb core. The continuous bonding of core to metal provides an attractive, absolutely flat door, free of face welding marks. Tests have proven the L-Series door's high resistance to impact damage, low thermal conductivity and have validated the high STC ratings of this door.

### Full Flush and Half Glass Doors.



### Doors with Glass Lites.

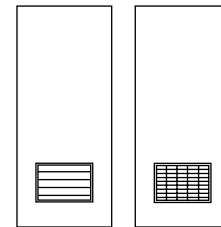


### Dutch Doors



Dutch

### Doors with Louvers or Grilles.



Louver

Grille

Width	Height			
	L20 B/L18, B/L16, B/L14, A16, AN16 1-3/4			CE20, CE18, CE16
	68			
	70	710	100	68
	72	80		70
2'0" (610mm)	■			
2'4" (711mm)	■			
2'6" (762mm)	■			
2'8" (813mm)	■			■
2'10" (864mm)	■			■
3'0" (914mm)	■	■	■	■
3'4" (1016mm)		■	■	■*
3'6" (1067mm)		■	■	■*
3'8" (1118mm)		■	■	
3'10" (1168mm)		■	■	
4'0" (1219mm)		■	■	

\*Not available in 20 gage

### Specifications

Door thickness:	1-3/4"	(45mm)
Standard heights:	6'8"-7'0"	(2032mm-2134mm)
	7'2"-7'10"	(2184mm-2388mm)
	8'0"-10'0"	(2438mm-3048mm)
Standard widths:	increments of 2" (50mm) from 1'6" (457mm) to 4'0" (1219mm)	