

**STEEL STIFFENED DOORS****TECHNICAL DATA  
SHEET No. 103**

Steel Stiffened Doors shall be as manufactured or furnished by Republic Doors and Frames, McKenzie, Tennessee 38201.

**Thickness** - 1-3/4" (14 gage = 1-13/16"  $\pm$  1/16")

**Actual Door Size** - Door undersized from nominal by 1/4" in width and 7/8" in height. Standard undercut is 3/4".

**Hinge Rail & Reinforcement** - Hinge edge is non-beveled and is reinforced with a continuous 16 or 10 gage steel channel projection welded at a maximum 5" on center.

**Lock Rail** - Lock edge is non-beveled and reinforced with a continuous 16 or 14 gage steel channel projection welded at a maximum 5" on center. (Option - Beveled 1/8" in 2")

**Top Channel** - Top Channel is a flush 16 or 14 gage channel, projection welded at a maximum 2-1/2" on center.

**Bottom Channel** - Bottom Channel is an inverted 16 gage steel channel, projection welded at a maximum 2-1/2" on center.

**Cores Available** - Steel Stiffened, with fiberglass batting/mineral wool between each stiffener "U" Factor = 0.61 "R" Factor = 1.65 per ASTM C1363 (optional - Polystyrene or polyurethane between stiffeners)

**Stiffener Gages & Size** - 20 gage standard (optional - 18 or 16 gage) - 4" wide

**Stiffener Spacing** - Maximum 6" apart (Varies according to door width)

**Stiffener Welding** - 5" maximum on centers. (Vertically)

**Face Skins** - 18, 16 or 14 gage (cold rolled steel or A60 galvanized) \*G90 Galvanized available in 16 or 14 gage only.

**Closer Reinforcement (Option)** - 14 gage standard / 12 gage optional. (18" x 6")

**Size Availability** - Minimum 2'0" x 2'0", Maximum 5'0" x 10'0" (Over 4'0" must be 16 or 14 gage)

**SDI 100 Level/Model** - Level 2 Models 1 or 2 (Heavy Duty minimum 18 gage, hollow steel)  
Level 3 Model 1 or 2 (Extra Heavy duty minimum 16 gage, hollow steel)  
Level 4 Models 1 or 2

**Label Range** - Consult Label Section for Fire Ratings.

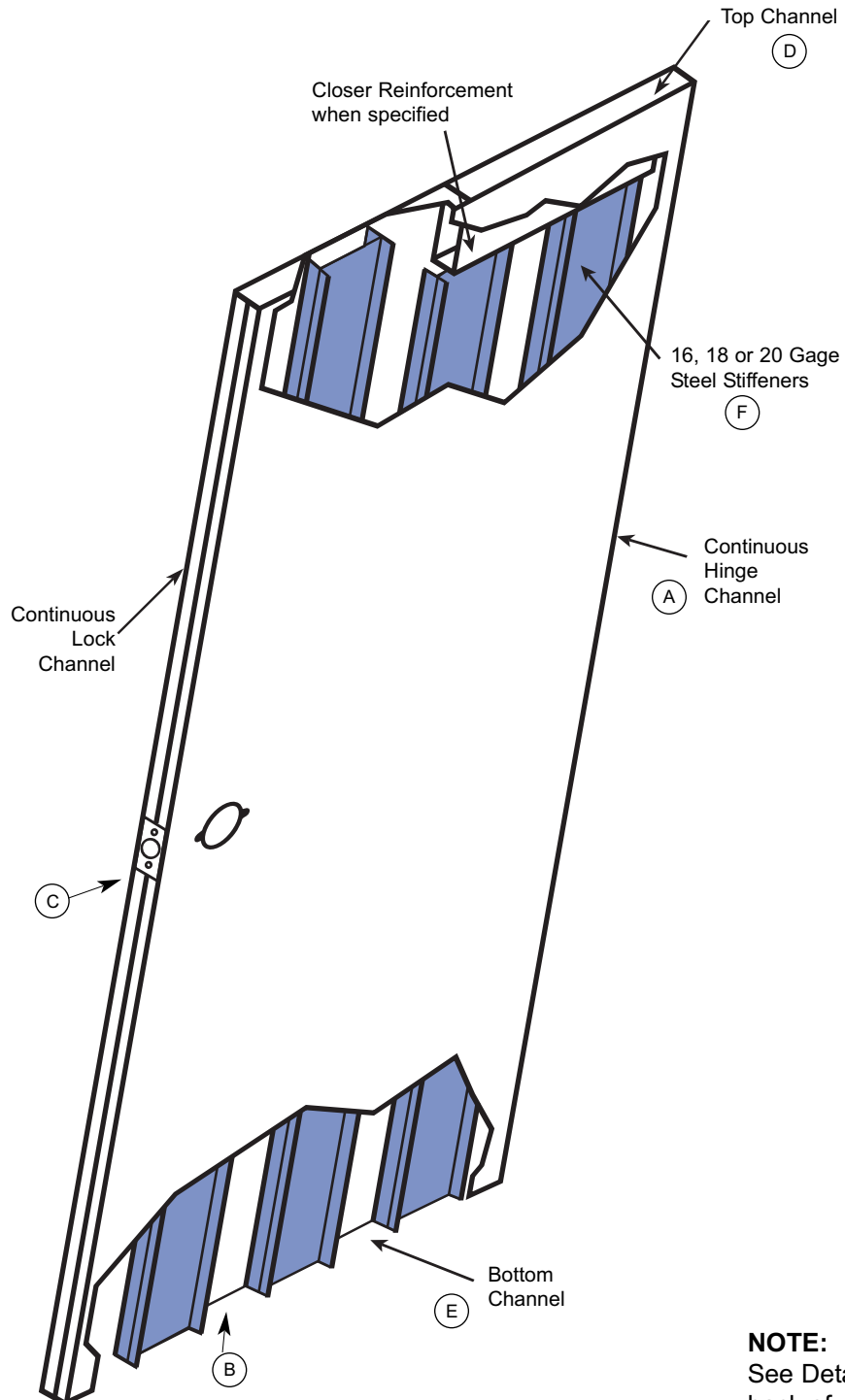
**Edge Seam Construction** - Visible seam (standard), continuously welded seamless or intermittently welded seamless available

**Universal Standard/Heavy Weight Hinge** - Hinge fillers are used, allowing for an easy modification from heavy weight to standard weight hinge prep.

**Handing Design** - Non-Handed standard (Handed optional)

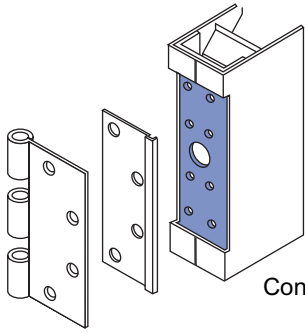
Revised 9/14

# STEEL STIFFENED DOOR CONSTRUCTION DETAILS



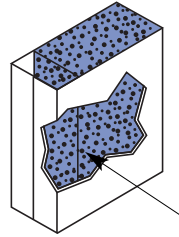
**NOTE:**  
See Details on  
back of page.

Revised 9/14

**A**

Continuous Hinge Channel

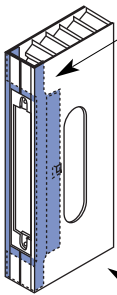
Shown: 4-1/12" or 5" full mortise template hinges on 1-3/4"

**B**

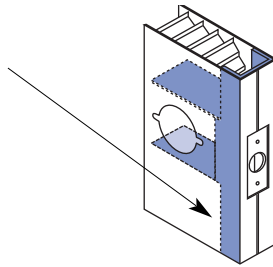
Fiber Glass Batts  
(Density 1.5  
R-Factor 1.65  
U-Factor 0.61)  
or Mineral Wool  
Per ASTM C1363

**C**

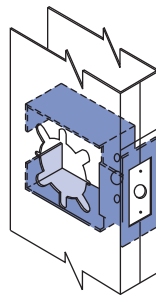
Continuous lock channel



16 gage mortise lock reinforcement with provisions for Gov't Series 86 mortise lockset and ANSI A115.1 lock front (1-1/4" x 8")



16 gage steel cylindrical lock reinforcement with provisions for Gov't Series 160 or 161 cylindrical lock sets (2-3/4" backset) and ANSI A115.2 lock front (1-1/8" x 2-1/4")



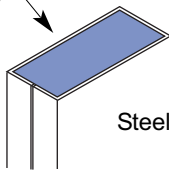
Lever Lock Prep - 161 DT (Modified 161 Prep) Conforms with the ANSI 115.18 161 lever lock specifications.

**WARNING:** Use rose trim with a minimum diameter of 3-5/16" to cover prep.

**D**

16 or 14 gage top channel (standard flush)

DOOR TOP



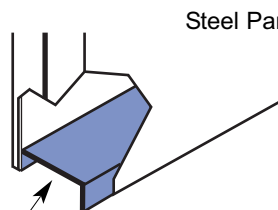
Steel Panel

When closer reinforcement requested 14 gage standard / 12 gage optional

**E**

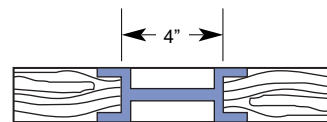
DOOR BOTTOM

Approximate depth 9/16"



Steel Panel

16 gage bottom channel (standard inverted)

**F**

20 gage (standard) Vertical Stiffener (4" wide) (optional- 18 or 16 gage)