

# TECHNICAL DATA SHEET

## DOORS

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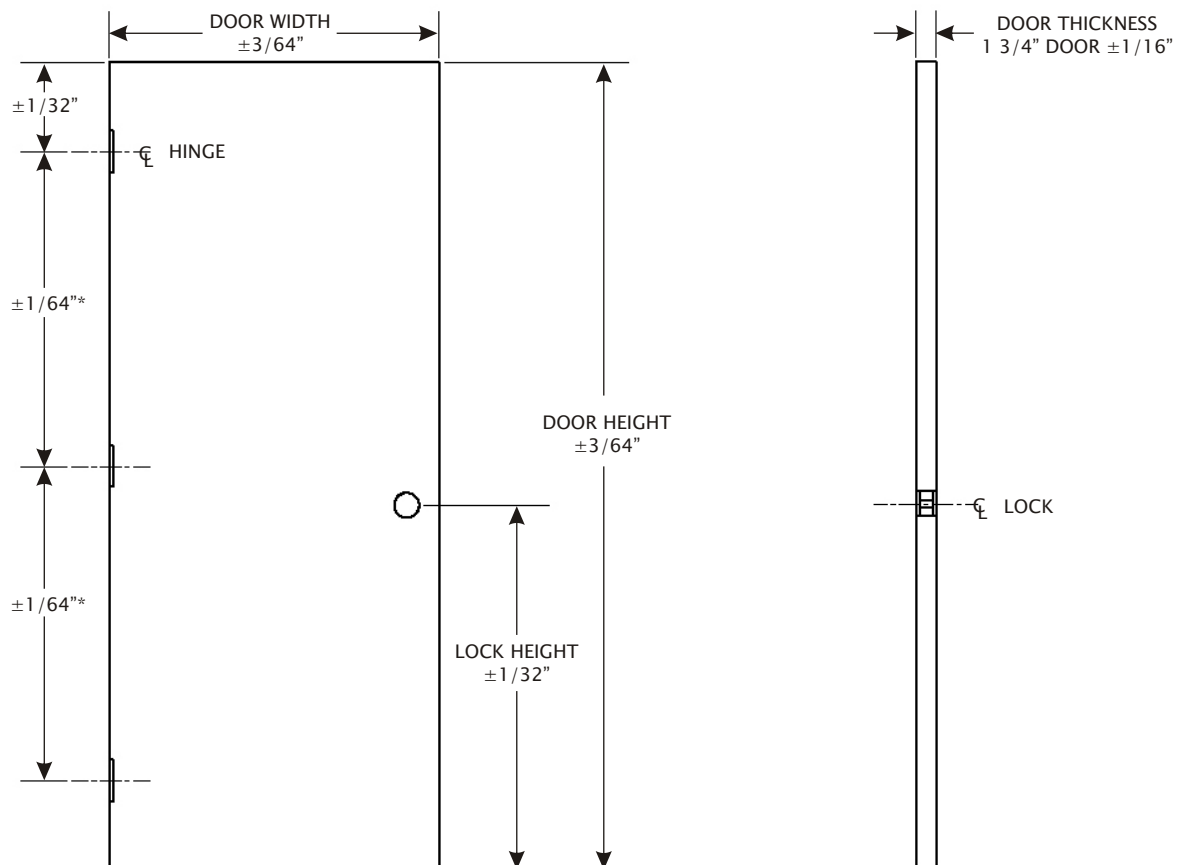
|                                                 |        |
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### DOOR TOLERANCES

It is the intention of this publication to furnish users and prospective users of standard steel doors and frames with practical information regarding manufacturing tolerances.

The information contained herein pertains to doors and frames manufactured in accordance with "Recommended Specifications – Standard Steel Doors and Frames" SDI-100, published by the Steel Door Institute.



#### FLATNESS

Measuring at points between the face of the door and a straight-edge laid from corner to corner the surface cannot vary more than  $\pm 3/32"$ . (Both diagonals to be checked on both faces.)

#### SQUARENESS

Measuring diagonally from corner to corner across the face of a door, the two dimensions shall not vary more than  $\pm 1/16"$ .

\* TOLERANCES BETWEEN HINGE CENTERLINES ARE NON-ACCUMULATIVE.

# TECHNICAL DATA SHEET

**DS-101-1**

## SWINGERDOR 1 3/4"

1. Doors shall be manufactured by Mesker Door Incorporated and designated as SwingerDor 1 3/4".

N( ) 420-20 gauge 1 3/4 SwingerDor

N( ) 418-18 gauge 1 3/4 SwingerDor

N( ) 416-16 gauge 1 3/4 SwingerDor

( ) = Core designation: "P" – Polystyrene, "H" – Honeycomb, "F" – Fiberboard, or "U" – Urethane.

2. Core material shall be Polystyrene, Honeycomb, Fiberboard or Urethane as called for on plans.

3. Doors shall be full flush constructed of two face sheets of 16, 18 or 20 gauge cold rolled steel and A60, stretcher-levelled quality of flatness or A60 galvanized steel.

4. Doors shall have neat hemmed vertical edge seams mechanically interlocked for maximum structural integrity. Seamless doors available when required by filling or welding edge or seam. (Designated by an "S" in the above nomenclature.)

5. Doors shall have 7 gauge steel hinge reinforcements with 3 projection welds above and 3 below each hinge mortise. The top hinge reinforcement shall extend to the top of the door and have 3 additional projection welds on the extended leg.

6. Doors shall have a box type closer reinforcement factory installed to reinforce both sides of doors.

7. Doors shall have 16 gauge top and bottom channels welded to door skins on 2" centers.

8. Doors shall be mortised and adequately reinforced for all hardware. Mortised hardware reinforcements shall be drilled and tapped at the factory. Surface applied hardware shall be field drilled by others.

LABEL SWINGERDORS 1 3/4" – 16, 18 OR 20 GAUGE..

SWINGERDORS ARE AVAILABLE WITH UL, WHI AND FACTORY MUTUAL LABELS AS SHOWN BELOW:

| CORE MATERIAL           | POLYSTYRENE                | HONEYCOMB                  | URETHANE      | FIBERBOARD                 |
|-------------------------|----------------------------|----------------------------|---------------|----------------------------|
| GAUGE                   | 16, 18 & 20 GAUGE          | 16, 18 & 20 GAUGE          | 16 & 18 GAUGE | 16 & 18 GAUGE              |
| LABEL                   | A, B & C                   | A, B, C, D & E             | NOT RATED     | A, B, C, D & E             |
| HEAT RISE RATING        | NONE                       | NONE                       | N/A           | 250° PYRODOR               |
| MAXIMUM SIZES AVAILABLE | SINGLE: 4080<br>PAIR: 8080 | SINGLE: 4080<br>PAIR: 8080 | N/A           | SINGLE: 4072<br>PAIR: 8072 |

NOTE: 20 gauge not available in doors larger than 3'6" width and 7'2" length.

**SWINGERDOR**  
**January 2007**



**MESKER**  
[www.meskerdoor.com](http://www.meskerdoor.com)  
256-851-6670, 256-852-5846

# TECHNICAL DATA SHEET

**DS-101-2**

## GENERAL INFORMATION

1. Rating "A" label – 3 hour, "B" label – 1 ½ hour, "C" label – ¾ hour, "D" label – 1 ½ hour and "E" label – ¾ hour.
2. Glass permitted. "B" label – 100 square inches per leaf maximum. Dimensions may not exceed 12" in width or 33" in length. "C" label – 1296 square inches per light, neither dimension may exceed 54". "E" label – 1296 square inches per light, neither dimension may exceed 54". (No glass is permitted in "A" and "D" label doors except 100 square inches in "A" label doors with special glass and glazing.)
3. Temperature rise doors: 250° temperature rise rating not applicable on "C" and "E" label doors due to large glass areas.
4. Fire exit device labels must be attached to door when used with labeled and listed fire exit hardware.
5. All doors listed in pairs can be used with single point lock and automatic flush bolts or vertical rod and mortise panic devices with flush bolts on inactive.

## ENGINEERING DATA – CORE MATERIALS

| CORE MATERIALS                                 | POLYSTYRENE  | HONEYCOMB    | URETHANE     | FIBERBOARD   |
|------------------------------------------------|--------------|--------------|--------------|--------------|
| PHYSICAL PROPERTIES<br>DENSITY                 | 1.4 PCF      | 1.2 PCF      | 2.05 PCF     | 17.0 PCF     |
| COMP. STRENGTH                                 | 23 PSI       | 30 PSI       | 27 PSI       | 100 PSI      |
| COEF. OF EXP./°F                               | <1 1/2%/VOL. | N/A          | N/A          | 2% WGT.      |
| SOUND TRANSMISSION (STC)<br>20 GA. FACE SHEETS | 25           | 30           | N/A          | 29           |
| 18 GA. FACE SHEETS                             | 27           | 31           | 29           | 32           |
| THERMAL PROPERTIES<br>"R" FACTOR               | .22          | 1.0          | .14          | .51          |
| "U" FACTOR                                     | .20          | .41          | .075         | .28          |
| FIRE HAZARD CLASS.<br>FUEL CONTRIBUTED         | 0            | N/A          | N/A          | 30           |
| SMOKE DEVELOPED                                | 50-85        | N/A          | N/A          | 0            |
| SERVICE TEMPERATURE<br>RANGE                   | -65° – 190°F | -65° – 200°F | -65° – 200°F | -50° – 250°F |

## STANDARD HARDWARE PREPARATIONS

Lock Preparation – Government 161 cylindrical lock (2 3/4 backset) reinforced as in detail G1, DS-113. Government 86 mortise lock (2 3/4 backset) reinforced as in detail G2, DS-113.

Hinge Preparations – 4 1/2" x 4 1/2" standard weight template hinges, 1 1/2" pair on 6'8", 7'0" and 7'2" doors, 2 pair on 7'10" and 8'0" doors.

Surface Mounted Hardware – Doors are factory reinforced for surface mounted hardware when specified. Mounting holes are drilled and tapped in field by others.

Universal Handing – Swingerdoors will fit both right and left hand openings due to the double hole pattern and reversible hinge filler.

Pairs of Doors – Pairs of doors may be supplied with astragals when specified. See DS-157 for details.

Packaging – Each door is packed in individual corrugated cardboard cartons clearly identified as to its contents.

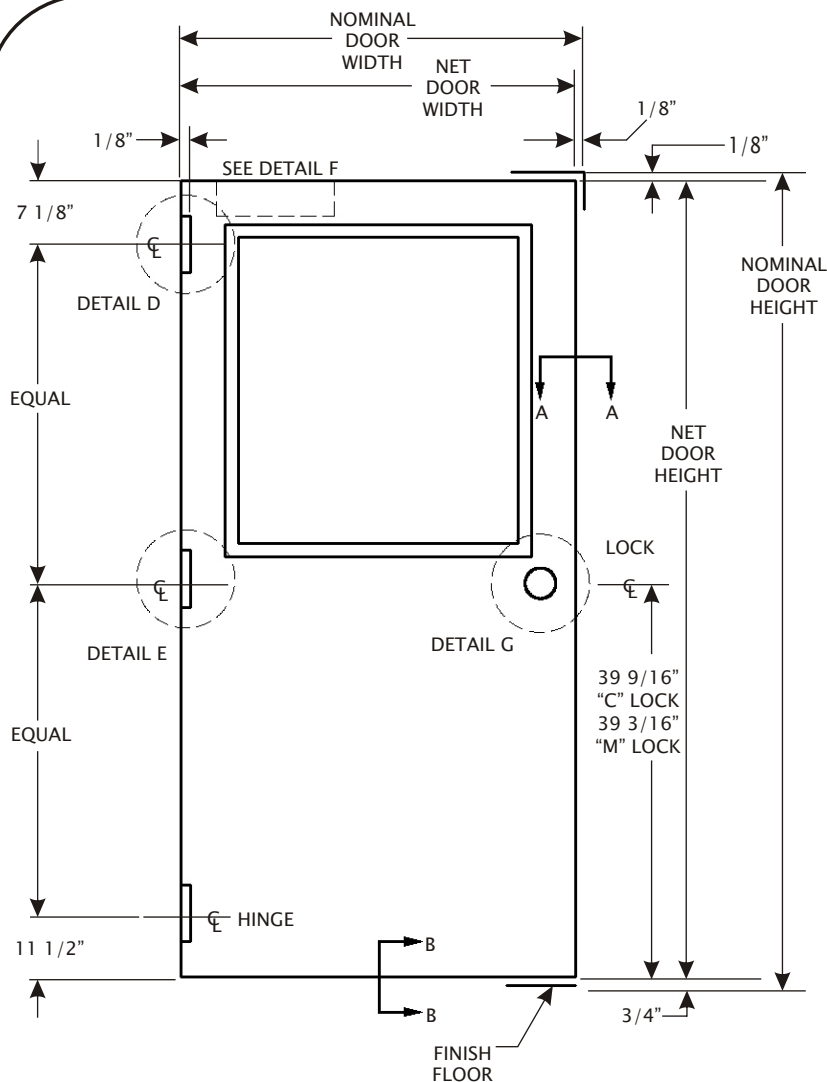
**SWINGERDOR**  
**January 2007**



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www.meskerdoor.com  
256-851-6670, 256-852-5846

# TECHNICAL DATA SHEET

**DS-101-3**

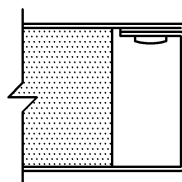


## STANDARD DOOR WIDTHS

| NOMINAL DOOR WIDTHS | NET DOOR WIDTHS |
|---------------------|-----------------|
| 2'-0"               | 23 3/4"         |
| 2'-4"               | 27 3/4"         |
| 2'-6"               | 29 3/4"         |
| 2'-8"               | 31 3/4"         |
| 3'-0"               | 35 3/4"         |
| 3'-4"               | 39 3/4"         |
| 3'-6"               | 41 3/4"         |
| 3'-8"               | 43 3/4"         |
| 3'-10"              | 45 3/4"         |
| 4'-0"               | 47 3/4"         |

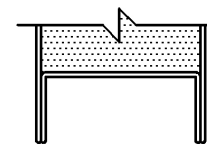
## STANDARD DOOR HEIGHTS

| NOMINAL DOOR HEIGHTS | NET DOOR HEIGHTS |
|----------------------|------------------|
| 6'-8"                | 79 1/8"          |
| 7'-0"                | 83 1/8"          |
| 7'-2"                | 85 1/8"          |
| 7'-10"               | 93 1/8"          |
| 8'-0"                | 95 1/8"          |



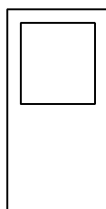
SECTION A-A

MECHANICALLY INTERLOCKED HEMMED SQUARE EDGE

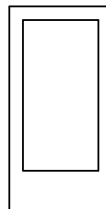


SECTION B-B

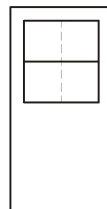
16 GAUGE TOP AND BOTTOM CHANNEL



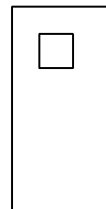
G



FG



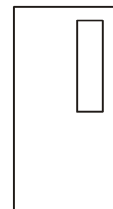
G2-G4



V



L



N

**SWINGER DOOR**  
January 2007



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256-851-6670, 256-852-5846

## SIX PANEL DOORS

### 1 3/4"

1. Doors shall be manufactured by Mesker Door Incorporated and designed as Six Panel Door 1 3/4".

N( ) 418 – 18 gauge 1 3/4 Six Panel

N( ) 420 – 20 gauge 1 3/4 Six Panel

( )=Core designation – "P" – Polystyrene

2. Core material shall be Polystyrene.

3. Doors shall be full flush constructed of two face sheets of 18 or 20 gauge A60 galvanized steel, stretcher-levelled quality of flatness.

4. Doors shall have neat hemmed vertical edge seams mechanically interlocked for maximum structural integrity. Seamless doors available when required by filling edge or seam. (Designated by an "S" in the above nomenclature.)

5. Doors shall have 3/16" steel hinge reinforcements with 3 projection welds above and 3 below each hinge mortise. The top hinge reinforcement shall extend to the top of the door and have 3 additional projection welds on the extended leg.

6. Doors shall have a box type closer reinforcement factory installed to reinforce both sides of doors.

7. Doors shall have 16 gauge top and bottom channels welded to door skins on 2" centers.

8. Doors shall be mortised and adequately reinforced for all hardware. Mortised hardware reinforcements shall be drilled and tapped at the factory. Surface applied hardware shall be field drilled by others.

9. Doors shall be bonderized and phosphatized inside and out and receive a factory coat of prime paint.

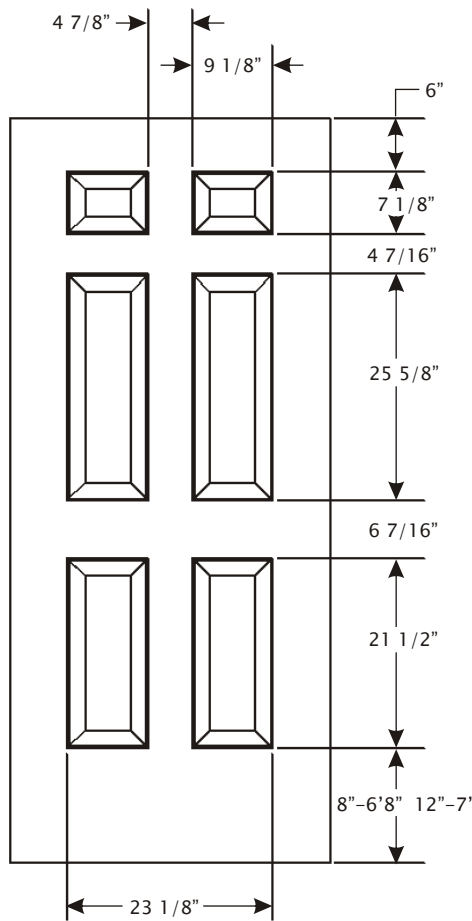
LABEL SIX PANEL DOORS 1 3/4" – 18 OR 20 GAUGE.  
SIX PANEL DOORS ARE AVAILABLE WITH UL, WHI AND  
FACTORY MUTUAL LABELS AS SHOWN BELOW:

|                            |                            |
|----------------------------|----------------------------|
| CORE MATERIAL              | POLYSTYRENE                |
| GAUGE                      | 18 GAUGE                   |
| LABEL                      | A, B & C                   |
| MAXIMUM SIZES<br>AVAILABLE | SINGLE: 3870<br>PAIR: 7740 |



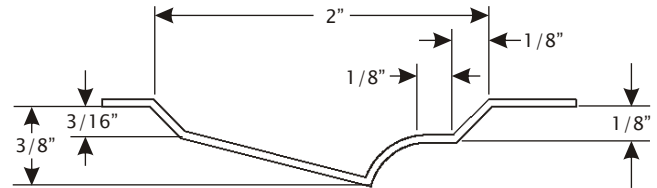
# TECHNICAL DATA SHEET

**DS-102-2**

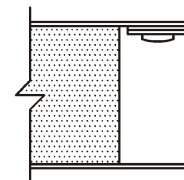


| STANDARD DOOR WIDTHS |                 |
|----------------------|-----------------|
| NOMINAL DOOR WIDTHS  | NET DOOR WIDTHS |
| 2'-8"                | 31 3/4"         |
| 3'-0"                | 35 3/4"         |

| STANDARD DOOR HEIGHTS |                  |
|-----------------------|------------------|
| NOMINAL DOOR HEIGHTS  | NET DOOR HEIGHTS |
| 6'-8"                 | 79 1/8"          |
| 7'-0"                 | 83 1/8"          |

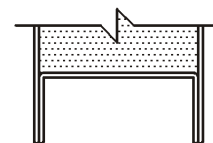


EMBOSS DETAIL



SECTION A-A

MECHANICALLY  
INTERLOCKED  
HEMMED SQUARE  
EDGE



SECTION B-B

16 GAUGE TOP  
AND BOTTOM  
CHANNEL

All the great construction features of our SwingerDor plus strong rigid six panel design constructed from 18 or 20 gauge galvanized steel.

- Prime painted
- Closer reinforcement standard
- Solid polycore fully bonded to face sheets
- UL label available
- 2'8" to 3'0" widths and 6'8" to 7'0" heights

Contact factory for doors over 3'0".

**SIX PANEL DOOR**

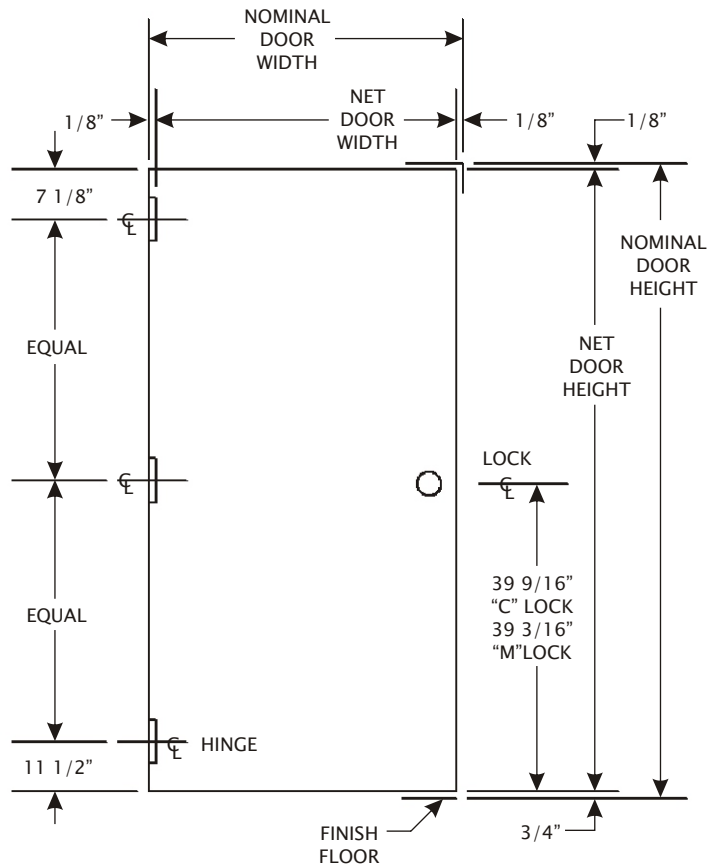
**January 2007**



**MESKER**

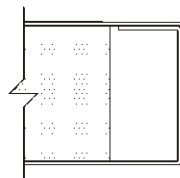
[www.meskerdoor.com](http://www.meskerdoor.com)  
256-851-6670, 256-852-5846

### 14 GAUGE DOOR



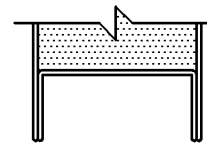
| STANDARD DOOR WIDTHS |                 |
|----------------------|-----------------|
| NOMINAL DOOR WIDTHS  | NET DOOR WIDTHS |
| 2'-0"                | 23 3/4"         |
| 2'-4"                | 27 3/4"         |
| 2'-6"                | 29 3/4"         |
| 2'-8"                | 31 3/4"         |
| 3'-0"                | 35 3/4"         |
| 3'-4"                | 39 3/4"         |
| 3'-6"                | 41 3/4"         |
| 3'-8"                | 43 3/4"         |
| 3'-10"               | 45 3/4"         |
| 4'-0"                | 47 3/4"         |

| STANDARD DOOR HEIGHTS |                  |
|-----------------------|------------------|
| NOMINAL DOOR HEIGHTS  | NET DOOR HEIGHTS |
| 6'-8"                 | 79 1/8"          |
| 7'-0"                 | 83 1/8"          |
| 7'-2"                 | 85 1/8"          |
| 7'-10"                | 93 1/8"          |
| 8'-0"                 | 95 1/8"          |



SECTION A-A

MECHANICALLY  
INTERLOCKED  
SQUARE EDGE



SECTION B-B

16 GAUGE TOP  
AND BOTTOM  
CHANNEL

## BULLET RESISTANT DOORS 1 3/4"

1. Doors shall be manufactured by Mesker Door Incorporated and designated as Bullet Resistant Level III.

BR ( ) 414 - 14 GAUGE 1 3/4" BULLET RESISTANT

( )=Core designation - "P" - Polystyrene

2. Core material shall be Polystyrene as called for on Plans.
3. Doors shall be seamless constructed of two face sheets and 1 inner sheet of 14 gauge cold rolled steel, stretcher-levelled quality of flatness.
4. Doors shall have a box type closer reinforcement factory installed to reinforce both sides of doors.
5. Doors shall have 16 gauge top and bottom channels welded to door skins on 4" centers.
6. Doors shall be mortised and adequately reinforced for all hardware. Mortised hardware reinforcements shall be drilled and tapped at the factory. Surface applied hardware shall be field drilled by others.
7. This door must be purchased with bullet resistant frame.
8. Doors shall be bonderized and phosphatized inside and out and receive a factory coat of prime paint.



# TECHNICAL DATA SHEET

**DS-104-2**

## BULLET RESISTANT DOOR – 14 GAUGE ENGINEERING DATA – CORE MATERIALS

| CORE MATERIALS                                 | POLYSTYRENE  | HONEYCOMB    |
|------------------------------------------------|--------------|--------------|
| PHYSICAL PROPERTIES<br>DENSITY                 | 1.4 PCF      | 1.2 PCF      |
| COMP. STRENGTH                                 | 23 PSI       | 30 PSI       |
| COEF. OF EXP./°F                               | <1 1/2%/VOL. | N/A          |
| SOUND TRANSMISSION (STC)<br>20 GA. FACE SHEETS | 25           | 30           |
| 18 GA. FACE SHEETS                             | 27           | 31           |
| THERMAL PROPERTIES<br>"R" FACTOR               | .22          | 1.0          |
| "U" FACTOR                                     | .20          | .41          |
| FIRE HAZARD CLASS.<br>FUEL CONTRIBUTED         | 0            | N/A          |
| SMOKE DEVELOPED                                | 50-85        | N/A          |
| SERVICE TEMPERATURE<br>RANGE                   | -65° – 165°F | -65° – 200°F |

### STANDARD HARDWARE PREPARATIONS

Lock Preparation – Government 161 cylindrical lock (2 3/4 backset) reinforced as in detail G1, DS-113. Government 86 mortise lock (2 3/4 backset) reinforced as in detail G2, DS-113.

Hinge Preparations – 4 1/2" x 4 1/2" standard weight template hinges, 1 1/2" pair on 6'8", 7'0" and 7'2" doors, 2 pair on 7'10" and 8'0" doors.

Surface Mounted Hardware – Doors are factory reinforced for surface mounted hardware when specified. Mounting holes are drilled and tapped in field by others.

Universal Handing – Bullet Doors will fit both right and left hand openings due to the double hole pattern and reversible hinge filler plate.

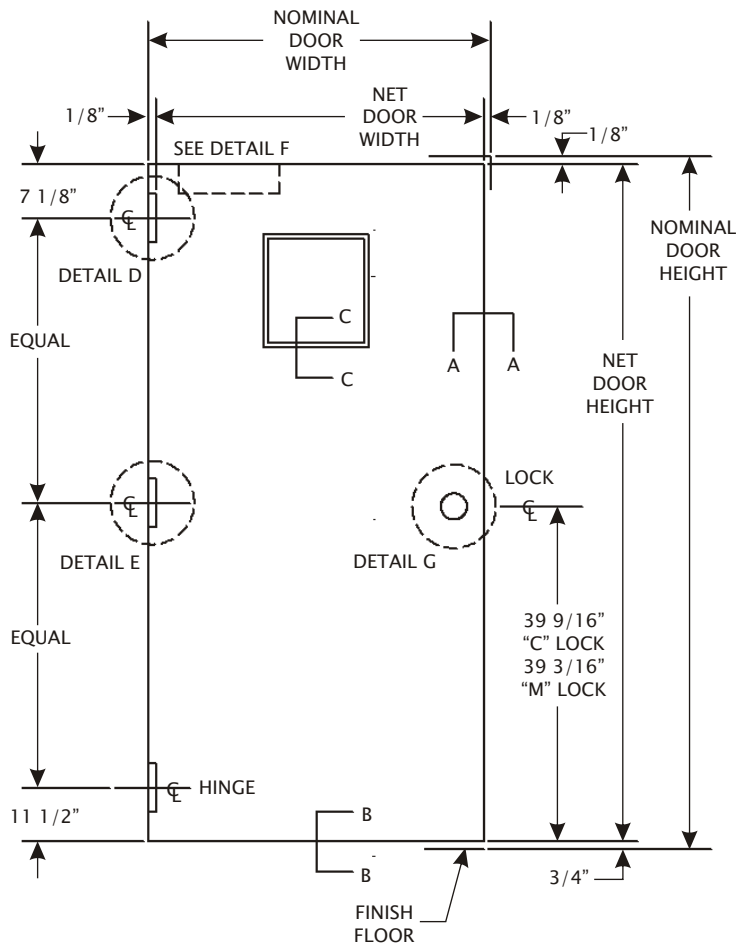
Pairs of Doors – Pairs of doors may be supplied with astragals when specified. See DS-157 for details.

Packaging – Each door is packed in individual corrugated cardboard cartons clearly identified as to its contents.



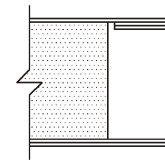
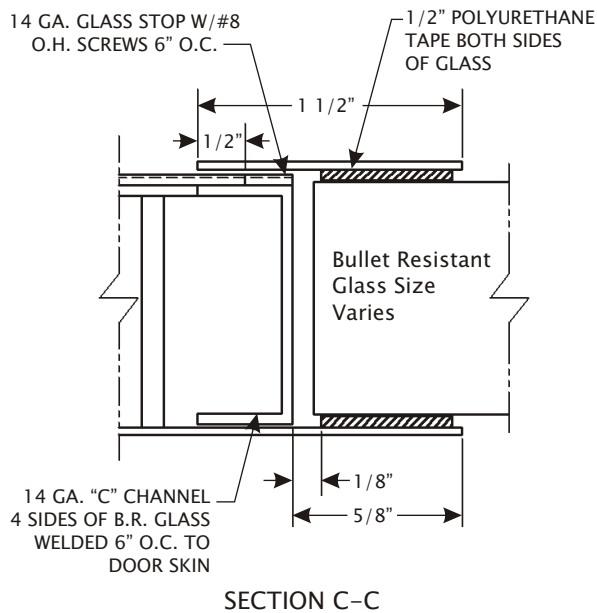
# TECHNICAL DATA SHEET

**DS-104-3**



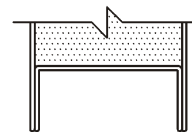
| STANDARD DOOR WIDTHS |                 |
|----------------------|-----------------|
| NOMINAL DOOR WIDTHS  | NET DOOR WIDTHS |
| 2'-0"                | 23 3/4"         |
| 2'-4"                | 27 3/4"         |
| 2'-6"                | 29 3/4"         |
| 2'-8"                | 31 3/4"         |
| 3'-0"                | 35 3/4"         |
| 3'-4"                | 39 3/4"         |
| 3'-6"                | 41 3/4"         |
| 3'-8"                | 43 3/4"         |
| 3'-10"               | 45 3/4"         |
| 4'-0"                | 47 3/4"         |

| STANDARD DOOR HEIGHTS |                  |
|-----------------------|------------------|
| NOMINAL DOOR HEIGHTS  | NET DOOR HEIGHTS |
| 6'-8"                 | 79 1/8"          |
| 7'-0"                 | 83 1/8"          |
| 7'-2"                 | 85 1/8"          |
| 7'-10"                | 93 1/8"          |
| 8'-0"                 | 95 1/8"          |



SECTION A-A

THE WRAP AROUND FACE SHEETS ARE BACKED BY A HEAVY CONTINUOUS CHANNEL ON THE VERTICAL EDGES. THE SEAMLESS EDGES ARE WELDED AND FILLED.



SECTION B-B

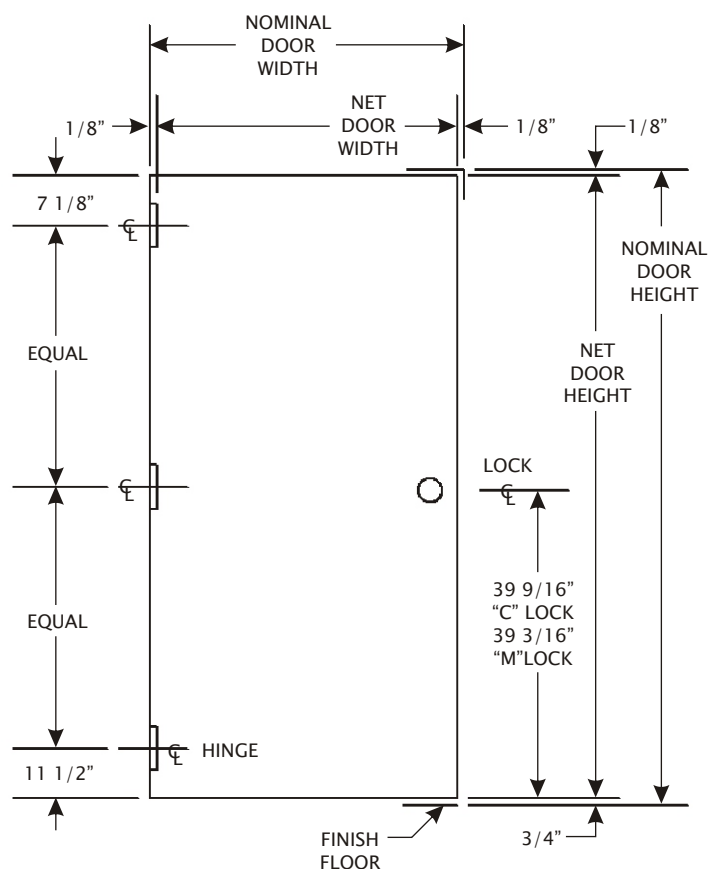
16 GAUGE TOP AND BOTTOM CHANNEL

**BULLET RESISTANT**  
**January 2007**



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### STIFFADOR DOOR CONSTRUCTION

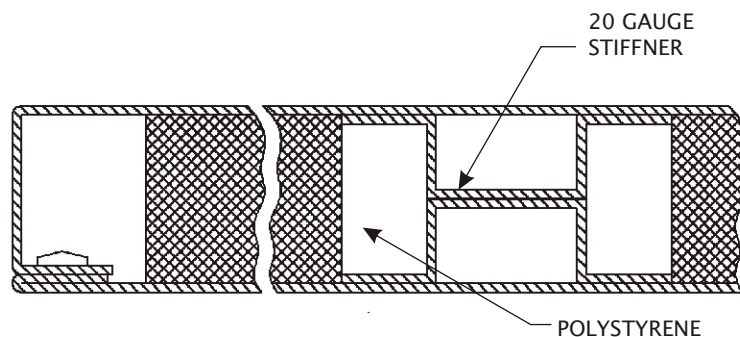


#### STANDARD DOOR WIDTHS

| NOMINAL DOOR WIDTHS | NET DOOR WIDTHS |
|---------------------|-----------------|
| 2'-0"               | 23 3/4"         |
| 2'-4"               | 27 3/4"         |
| 2'-6"               | 29 3/4"         |
| 2'-8"               | 31 3/4"         |
| 3'-0"               | 35 3/4"         |
| 3'-4"               | 39 3/4"         |
| 3'-6"               | 41 3/4"         |
| 3'-8"               | 43 3/4"         |
| 3'-10"              | 45 3/4"         |
| 4'-0"               | 47 3/4"         |

#### STANDARD DOOR HEIGHTS

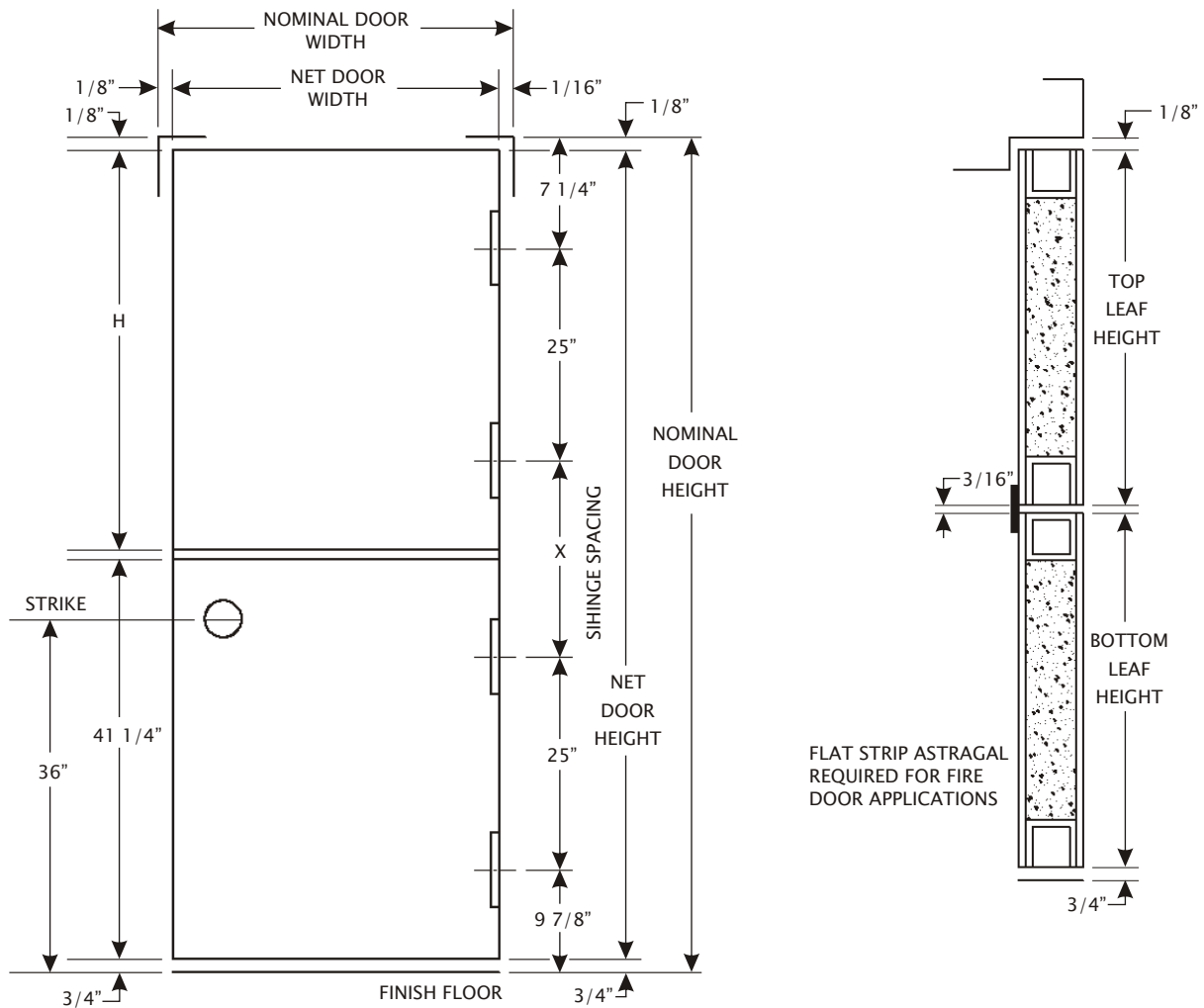
| NOMINAL DOOR HEIGHTS | NET DOOR HEIGHTS |
|----------------------|------------------|
| 6'-8"                | 79 1/8"          |
| 7'-0"                | 83 1/8"          |
| 7'-2"                | 85 1/8"          |
| 7'-10"               | 93 1/8"          |
| 8'-0"                | 95 1/8"          |



VERTICAL EDGE SEAMS WELDED,  
FILLED AND GROUND SMOOTH  
ONLY ON REQUEST

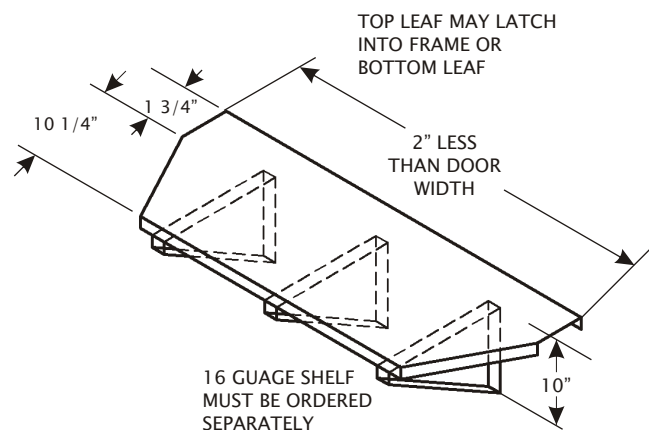
**DS-106**

# DUTCH DOORS



| "X" AND "H" VARY WITH DOOR HEIGHT |             |         |
|-----------------------------------|-------------|---------|
| DOOR HEIGHT                       | H           | X       |
| 6'-8"                             | 3'-1 11/16" | 12 7/8" |
| 7'-0"                             | 3'-5 11/16" | 16 7/8" |
| 7'-2"                             | 3'-7 11/16" | 18 7/8" |

Flat strip astragal A2 latching for top leaf.

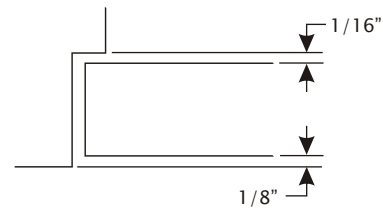
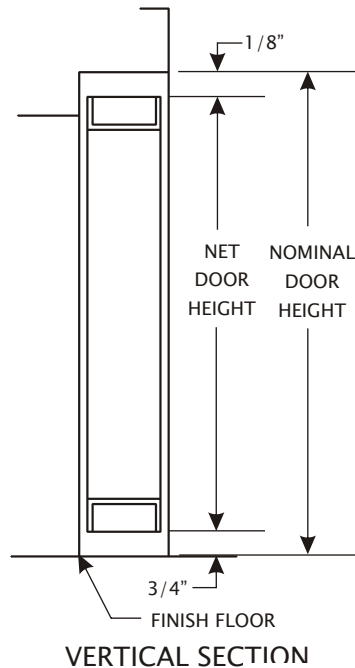


**DUTCH DOORS**  
**January 2007**

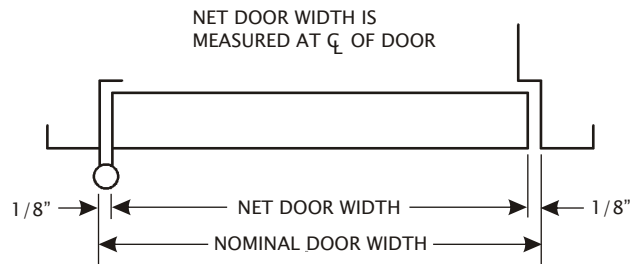


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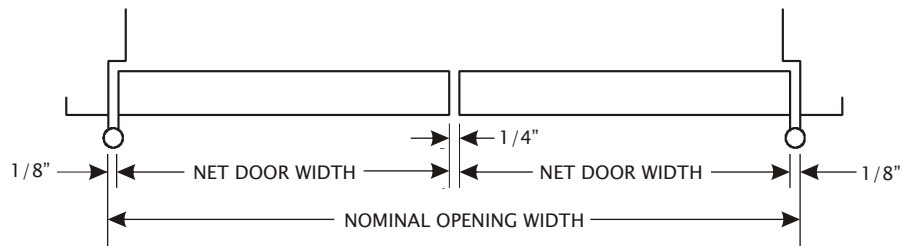
## STANDARD CLEARANCES SINGLE AND DOUBLE SWING DOORS



HEAD AND JAMB CLEARANCES



HORIZONTAL SECTION  
SINGLE SWING DOORS



HORIZONTAL SECTION  
DOUBLE SWING DOORS

# TECHNICAL DATA SHEET **DS-108-1**

## 4 1/2" HINGE AND STRIKE COMPARISON – 1 3/4"

| MANUF.    | A                                                                      | B                                      | C                                                                                              | D                                                                                                                                                                       | E                  | F      | G     | H     | J     |
|-----------|------------------------------------------------------------------------|----------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--------|-------|-------|-------|
| AMWELD    | 6'8"<br>6'10"<br>7'0"<br>7'2"<br>7'4"<br>7'6"<br>7'8"<br>7'10"<br>8'0" | C4 =<br>39 9/16",<br>MB =<br>39 3/16"  | 9 5/8"<br>7 5/8"<br>9 5/8"<br>11 5/8"<br>9 5/8"<br>11 5/8"<br>9 11/16"<br>7 9/16"<br>9 9/16"   | 2 @ 29 15/16"<br>2 @ 31 15/16"<br>2 @ 31 15/16"<br>2 @ 31 15/16"<br>2 @ 33 15/16"<br>2 @ 33 15/16"<br>3 @ 23 5/16"<br>3 @ 25 5/16"<br>3 @ 25 5/16"                      | 9 5/8"<br>(7 3/8") | 5/16"  | 3/16" | 1/16" | 1/8"  |
| BENCHMARK | 6'8"<br>6'10"<br>7'0"<br>7'2"<br>7'4"<br>7'6"<br>7'8"<br>7'10"<br>8'0" | C4 =<br>39 9/16",<br>MB =<br>39 3/16"  | 11 1/2"<br>13 1/2"<br>11 1/2"<br>13 1/2"<br>11 1/2"<br>13 1/2"<br>7 1/2"<br>9 1/2"<br>11 1/2"  | 2 @ 30 1/4"<br>2 @ 30 1/4"<br>2 @ 32 1/4"<br>2 @ 32 1/4"<br>2 @ 34 1/4"<br>2 @ 34 1/4"<br>3 @ 25 1/2"<br>3 @ 25 1/2"<br>3 @ 25 1/2"                                     | 7 1/8"<br>(4 7/8") | 11/32" | 1/4"  | 1/8"  | 3/32" |
| CECO      | 6'8"<br>6'10"<br>7'0"<br>7'2"<br>7'4"<br>7'6"<br>7'8"<br>7'10"<br>8'0" | C4 =<br>41 1/16",<br>MB =<br>40 11/16" | 8 1/4"                                                                                         | 2 @ 31"<br>2 @ 32"<br>2 @ 33"<br>2 @ 34"<br>2 @ 35"<br>2 @ 36"<br>3 @ 24 21/32"<br>3 @ 25 21/64"<br>3 @ 26"                                                             | 8 7/8"<br>(6 5/8") | 5/16"  | 1/4"  | 1/8"  | 1/16" |
| CURRIES   | 6'8"<br>6'10"<br>7'0"<br>7'2"<br>7'4"<br>7'6"<br>7'8"<br>7'10"<br>8'0" | C4 =<br>39 1/4",<br>MB =<br>38 7/8"    | 11 1/2"                                                                                        | 2 @ 30 1/4"<br>2 @ 31 1/4"<br>2 @ 32 1/4"<br>2 @ 33 1/4"<br>2 @ 34 1/4"<br>2 @ 35 1/4"<br>3 @ 24 1/8"<br>3 @ 24 7/8"<br>3 @ 25 1/2"                                     | 7 1/8"<br>(4 7/8") | 5/16"  | 1/4"  | 1/8"  | 1/16" |
| DEANSTEEL | 6'8"<br>6'10"<br>7'0"<br>7'2"<br>7'4"<br>7'6"<br>7'8"<br>7'10"<br>8'0" | C4 =<br>39 9/16",<br>MB =<br>39 3/16"  | 11 1/2"                                                                                        | 2 @ 30 1/4"<br>2 @ 31 1/4"<br>2 @ 32 1/4"<br>2 @ 33 1/4"<br>2 @ 34 1/4"<br>2 @ 35 1/4"<br>24 1/8", 24 1/4", 24 1/8"<br>24 7/8", 24 3/4", 24 7/8"<br>3 @ 25 1/2"         | 7 1/8"<br>(4 7/8") | 5/16"  | 1/4"  | 1/8"  | 1/16" |
| KEWANEE   | 6'8"<br>6'10"<br>7'0"<br>7'2"<br>7'4"<br>7'6"<br>7'8"<br>7'10"<br>8'0" | C4 =<br>39 9/16",<br>MB =<br>39 3/16"  | 9 1/2"                                                                                         | 2 @ 30 1/16"<br>2 @ 31 1/16"<br>2 @ 32 1/16"<br>2 @ 33 1/16"<br>2 @ 34 1/16"<br>2 @ 35 1/16"<br>24 1/16", 24", 24 1/16"<br>24 11/16", 24 3/4", 24 11/16"<br>3 @ 25 3/8" | 9 1/2"<br>(7 1/4") | 3/8"   | 1/4"  | 1/16" | 1/8"  |
| MESKER    | 6'8"<br>6'10"<br>7'0"<br>7'2"<br>7'4"<br>7'6"<br>7'8"<br>7'10"<br>8'0" | C4 =<br>39 9/16",<br>MB =<br>39 3/16"  | 11 1/2"<br>11 1/2"<br>11 1/2"<br>11 1/2"<br>11 1/2"<br>11 1/2"<br>10 1/2"<br>9 1/2"<br>11 1/2" | 2 @ 30 1/4"<br>2 @ 31 1/4"<br>2 @ 32 1/4"<br>2 @ 33 1/4"<br>3 @ 34 1/4"<br>3 @ 35 1/4"<br>3 @ 24 1/2"<br>3 @ 25 1/2"<br>3 @ 25 1/2"                                     | 7 1/8"<br>(4 7/8") | 5/16"  | 1/4"  | 1/8"  | 1/16" |

January 2007



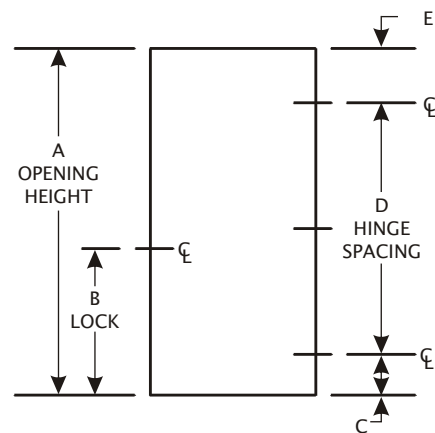
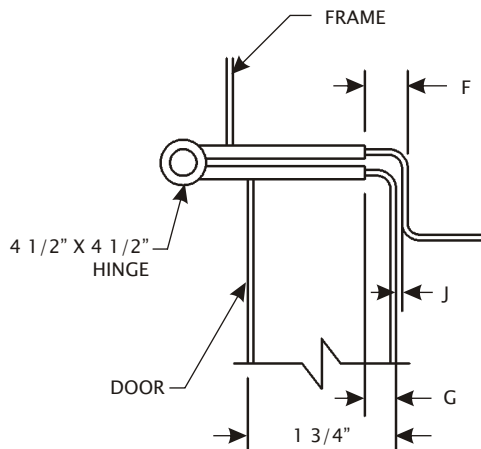
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256-851-6670, 256-852-5846

# TECHNICAL DATA SHEET

**DS-108-2**

## 4 1/2" HINGE AND STRIKE COMPARISON – 1 3/4" Continued

| MANUF.     | A                                                                      | B                                     | C                                                                                                 | D                                                                                                                                                                                                                          | E                                                                                        | F     | G     | H     | J     |
|------------|------------------------------------------------------------------------|---------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------|-------|-------|-------|
| PIONEER    | 6'8"<br>6'10"<br>7'0"<br>7'2"<br>7'4"<br>7'6"<br>7'8"<br>7'10"<br>8'0" | C4 =<br>37 1/4",<br>MB =<br>36 7/8"   | 11 1/2"<br>11 1/2"<br>11 1/2"<br>11 1/2"<br>11 1/2"<br>11 1/2"<br>11 7/16"<br>11 9/16"<br>11 1/2" | 2 @ 30 1/4"<br>2 @ 31 1/4"<br>2 @ 32 1/4"<br>2 @ 33 1/4"<br>2 @ 34 1/4"<br>3 @ 23 1/2"<br>3 @ 24 3/16"<br>3 @ 24 13/16"<br>3 @ 25 1/2"                                                                                     | 7 1/8"<br>(4 7/8")                                                                       | 5/16" | 7/32" | 3/32" | 3/32" |
| REPUBLIC   | 6'8"<br>6'10"<br>7'0"<br>7'2"<br>7'4"<br>7'6"<br>7'8"<br>7'10"<br>8'0" | C4 =<br>39 9/16",<br>MB =<br>39 3/16" | 9 5/8"<br>11 1/2"<br>11 5/8"<br>11 5/8"<br>11 1/2"<br>11 5/8"<br>11 3/8"<br>11 1/2"               | 2 @ 29 15/16" (7 3/8")<br>2 @ 31 1/4" (4 7/8")<br>2 @ 29 15/16" (9 3/8")<br>2 @ 30 15/16" (9 3/8")<br>3 @ 34 1/4" (4 7/8")<br>3 @ 35 1/4" (4 7/8")<br>3 @ 24 1/8" (4 7/8")<br>3 @ 24 7/8" (4 7/8")<br>3 @ 25 1/2" (4 7/8") | 9 5/8"<br>7 1/8"<br>11 5/8"<br>11 5/8"<br>7 1/8"<br>7 1/8"<br>7 1/8"<br>7 1/8"<br>7 1/8" | 5/16" | 1/4"  | 1/8"  | 1/16" |
| STEELCRAFT | 6'8"<br>6'10"<br>7'0"<br>7'2"<br>7'4"<br>7'6"<br>7'8"<br>7'10"<br>8'0" | C4 =<br>39 9/16",<br>MB =<br>39 3/16" | 9 5/8"                                                                                            | 2 @ 29 15/16"<br>2 @ 30 15/16"<br>2 @ 31 15/16"<br>2 @ 32 15/16"<br>2 @ 33 15/16"<br>2 @ 34 15/16"<br>3 @ 23 61/64"<br>3 @ 24 5/8"<br>3 @ 25 19/64"                                                                        | 9 5/8"<br>(7 3/8")                                                                       | 5/16" | 1/4"  | 1/8"  | 1/16" |



January 2007



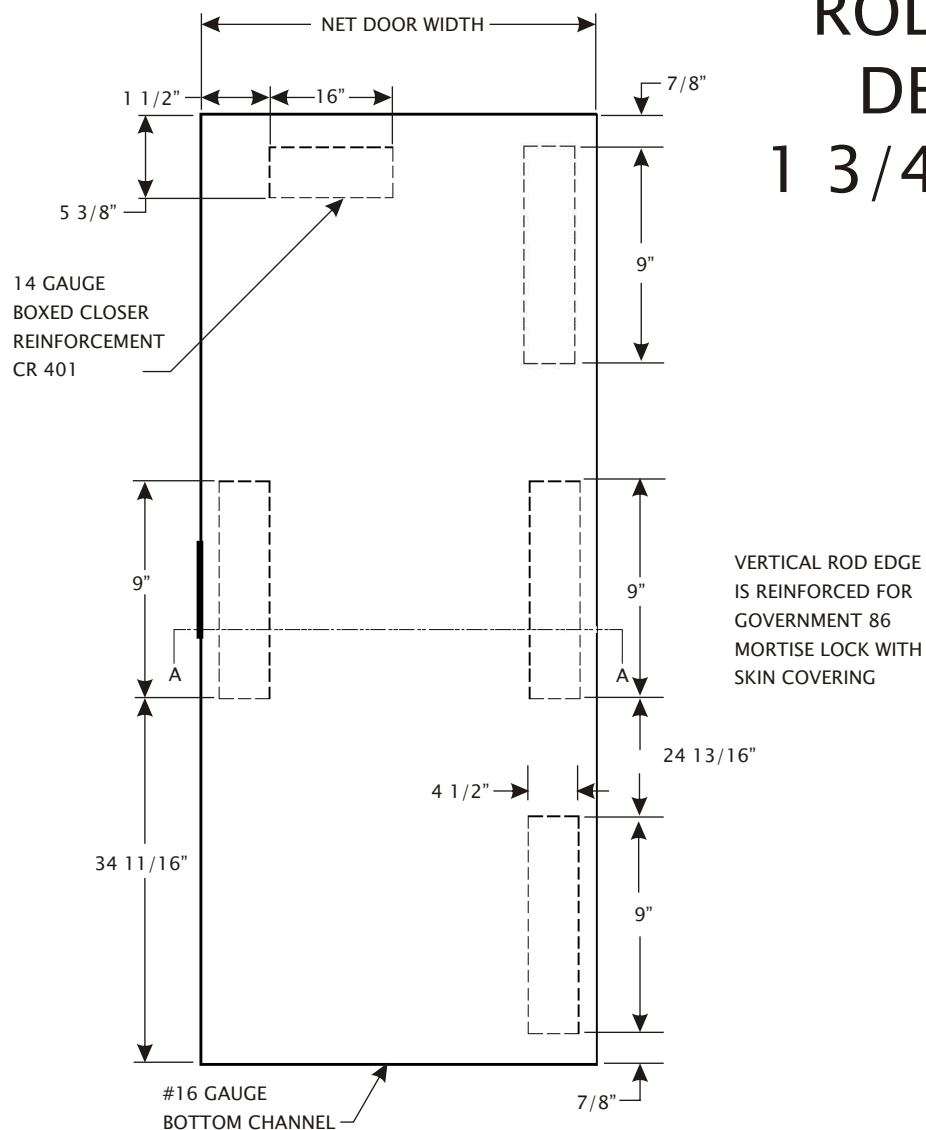
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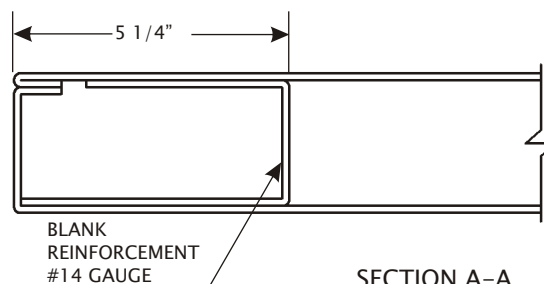
# TECHNICAL DATA SHEET

**DS-110**

## VERTICAL ROD DOOR DETAILS 1 3/4" DOORS



VERTICAL ROD EDGE  
IS REINFORCED FOR  
GOVERNMENT 86  
MORTISE LOCK WITH  
SKIN COVERING



**January 2007**

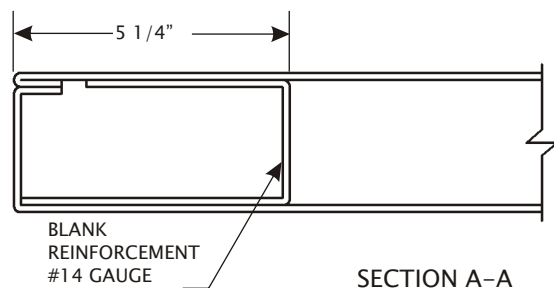
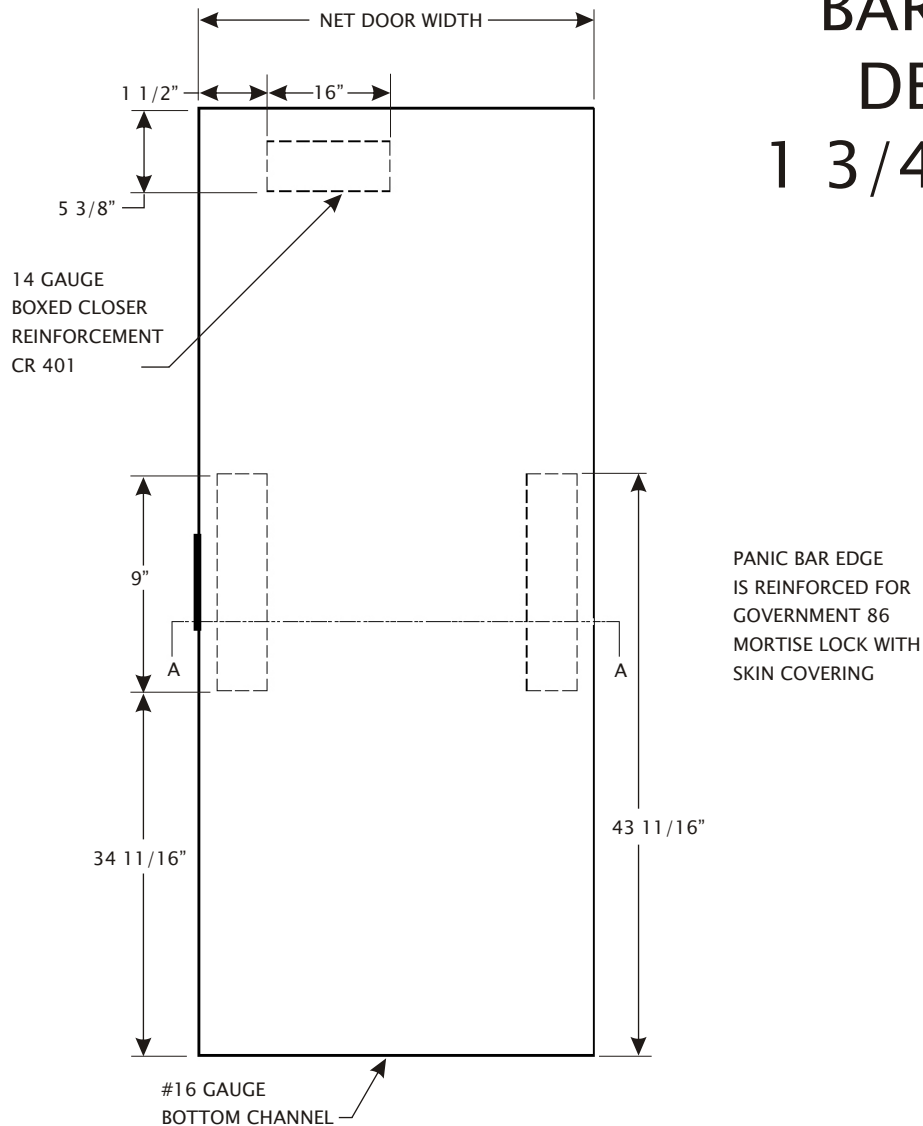


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256-851-6670, 256-852-5846

# TECHNICAL DATA SHEET **DS-110-A**

## PANIC BAR DOOR DETAILS 1 3/4" DOORS



January 2007



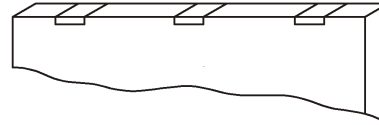
**MESKER**  
www.meskerdoor.com  
256-851-6670, 256-852-5846

# TECHNICAL DATA SHEET

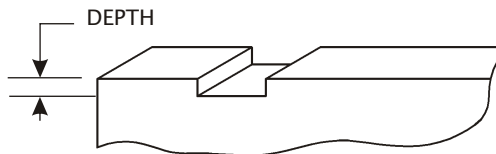
**DS-111R**

## INSTALLING HINGES IN A BLANK DOOR EDGE

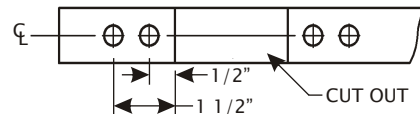
LAY OUT THE DESIRED HINGE LOCATION ON THE DOOR EDGE. USE A HG. BUTT TO INSURE PROPER CLEARANCE.



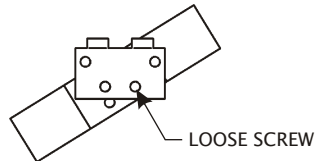
MAKE THE CUT-CUTS WITH A "JIG" SAW. GRIND OR FILE AS REQUIRED. ALL EDGES MUST BE FINISHED: ALSO ALLOW FOR HG. FILLER PLATE AT PROPER DEPTH (.180A FOR STD. WT. HINGE AND FILLER)



DRILL TWO 3/8" DIAMETER HOLES ABOVE AND BELOW EACH CUT-OUT. AS SHOWN.

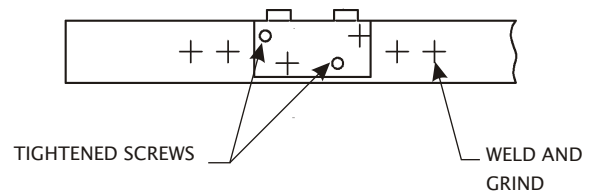


ATTACH A HINGE BUTT LEAF AND HG. FILLER PLATE TO THE REINFORCEMENT WITH ONE SCREW. TIGHTEN ONLY TWO THREADS SO THE REINFORCEMENT CAN BE PLACED INSIDE THE DOOR AND SLIPPED UP AND DOWN UNTIL IT IS POSITIONED.



NOTE: IF A MESKER HINGE REINFORCEMENT IS TO BE USED YOU MUST FIRST REMOVE THE WELD PROJECTIONS. (GRIND OR FILE.) THE HG. REINFORCEMENT MUST BE CENTERED IN DOOR, BETWEEN FACES.

INSTALL A SECOND SCREW AND TIGHTEN BOTH SCREWS. FIRMLY HOLD THE REINFORCEMENT AGAINST THE INSIDE SKIN OF THE DOOR EDGE. FULLY WELD (FILL) THE 3/8" DIAMETER HOLES. REMOVE THE HINGE BUTT. GRIND THE WELDS SMOOTH AND RE-PRIME.

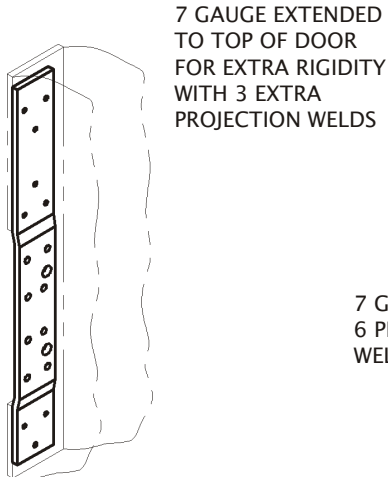


January 2007

**MESKER**

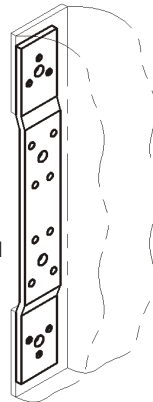
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### STANDARD HARDWARE PREPARATIONS



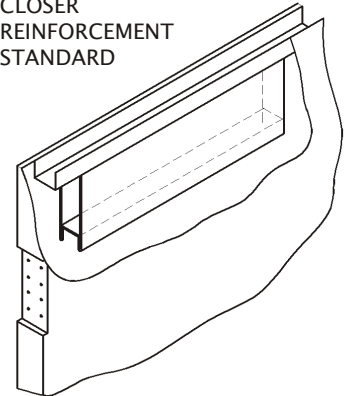
DETAIL D  
TOP HINGE  
REINFORCEMENT

7 GAUGE WITH  
6 PROJECTION  
WELDS



DETAIL E  
ALL OTHER HINGE  
REINFORCEMENT

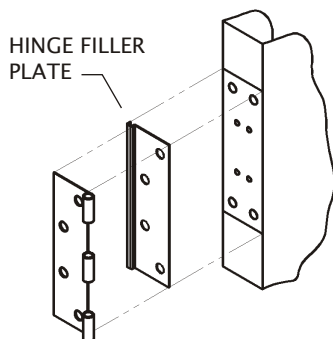
14 GAUGE BOX TYPE  
CLOSER  
REINFORCEMENT  
STANDARD



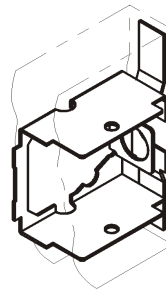
DETAIL F

14 GAUGE ONE  
PIECE REINF.  
CLEARANCED FOR  
THRU BOLTS

16 GAUGE ONE  
PIECE FORMED LOCK  
REINF. WITH EXTRUDED  
TAPPED HOLES TO  
EQUAL OR EXCEED  
14 GAUGE THICKNESS

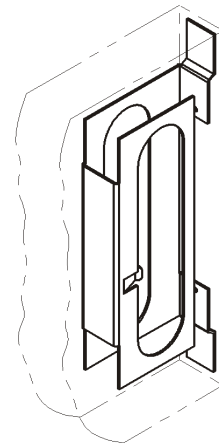


"UNIVERSAL HANDING"



DETAIL G1  
"CYLINDRICAL LOCK  
REINFORCEMENT"

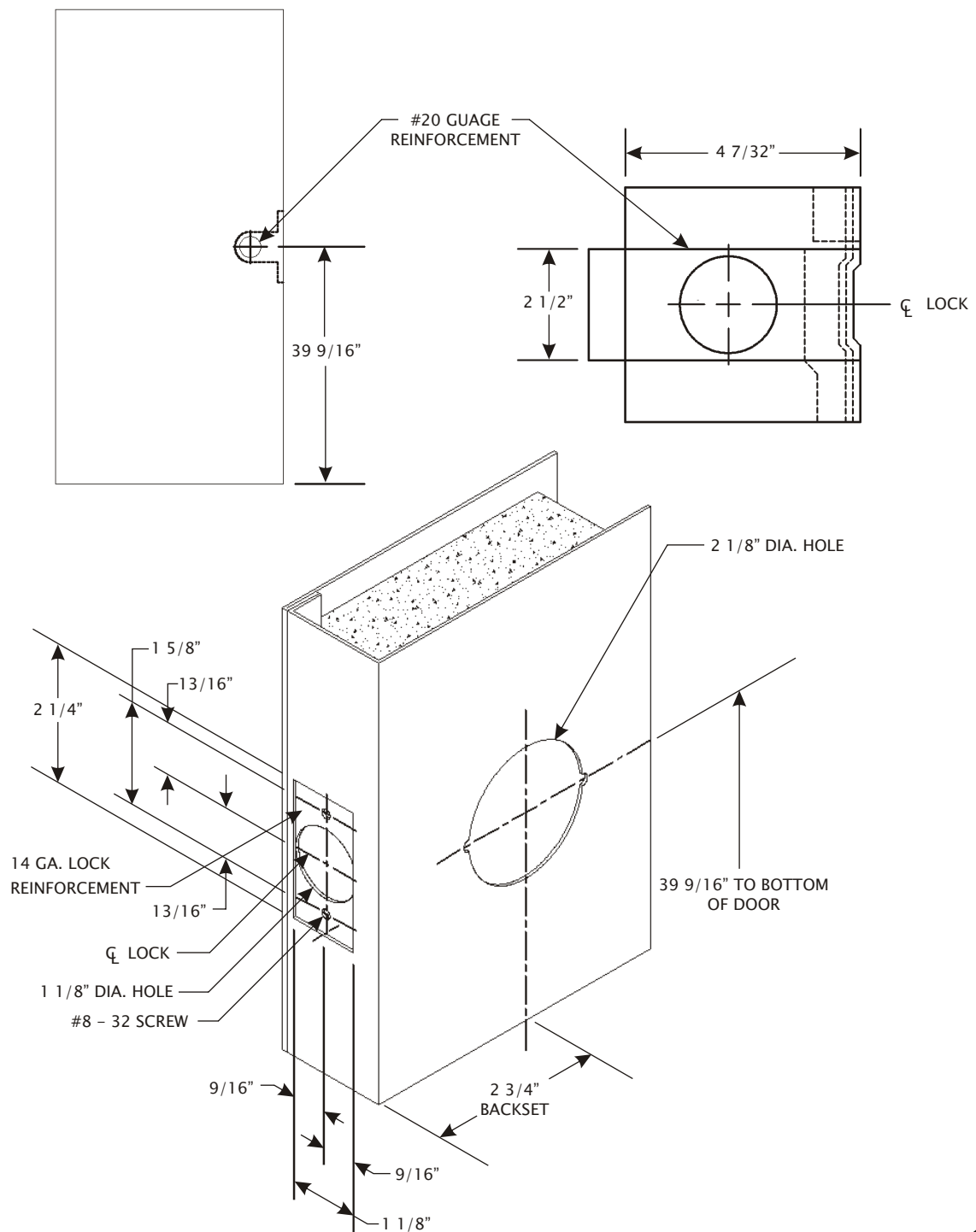
ONE PIECE 14 GAUGE  
LOCK REINFORCEMENT  
FOR GOVERNMENT  
86 TYPE MORTISE LOCK



DETAIL G2  
"MORTISE LOCK  
REINFORCEMENT"

**DS-151-1**

# GOVERNMENT NO. 161 CYLINDRICAL (C4) LOCK PREPARATION -- 1 3/4" DOORS



# HARDWARE

## January 2007

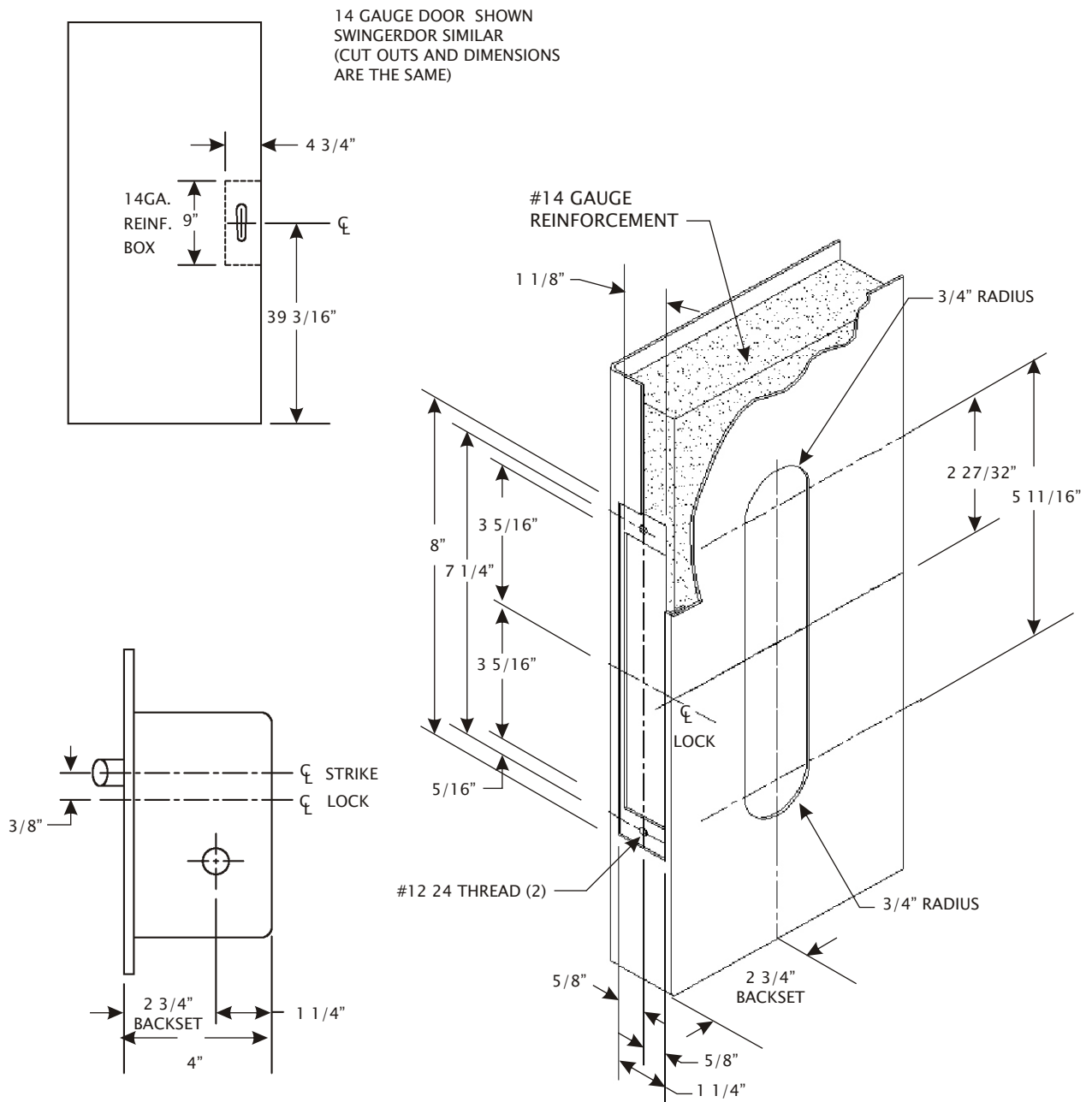


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# TECHNICAL DATA SHEET

DS-151-2

## ANSI/DHI A115.1 MORTISE LOCK (M) PREPARATION – 1 3/4" DOORS



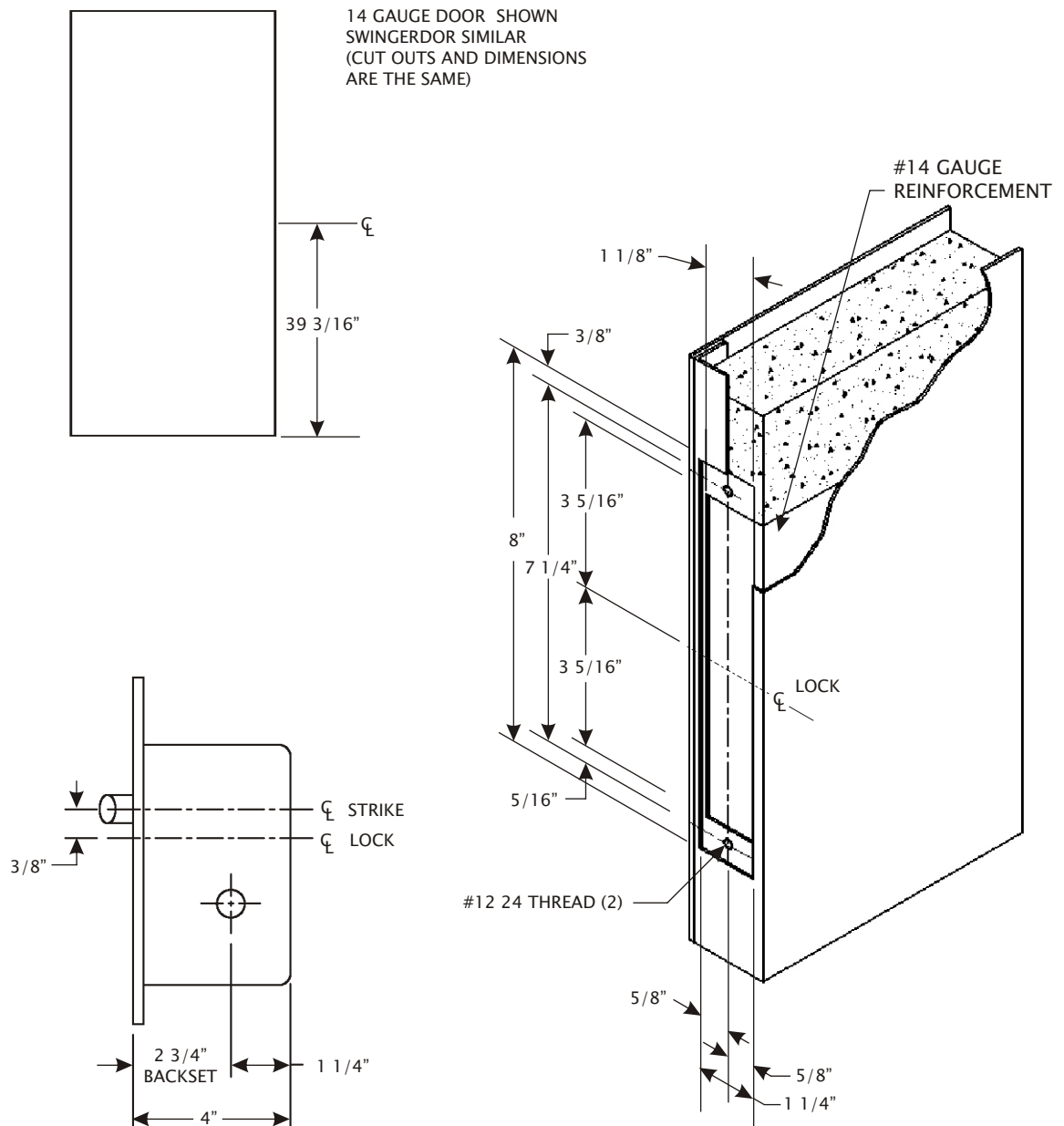
HARDWARE  
January 2007



**MESKER**  
www.meskerdoor.com  
256-851-6670, 256-852-5846

# TECHNICAL DATA SHEET **DS-151-3**

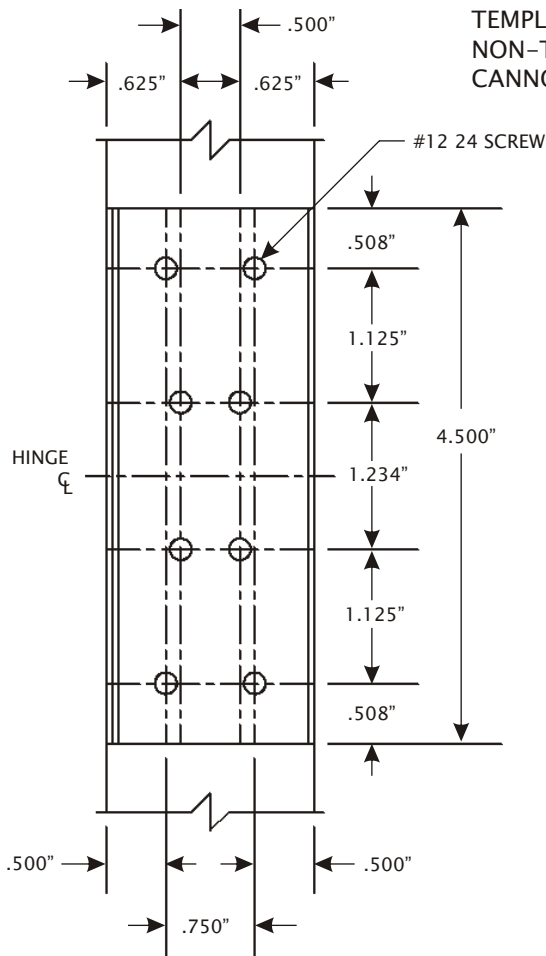
## GOVERNMENT 86 MORTISE LOCK (MB) PREPARATION – 1 3/4" DOORS



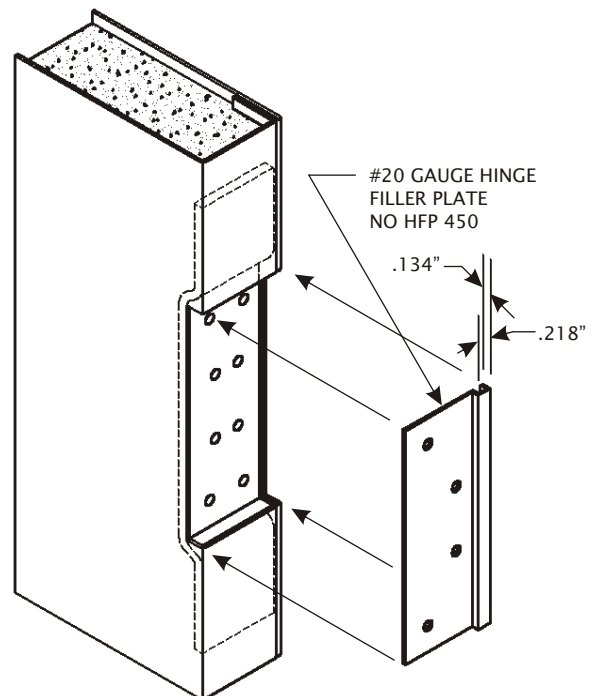
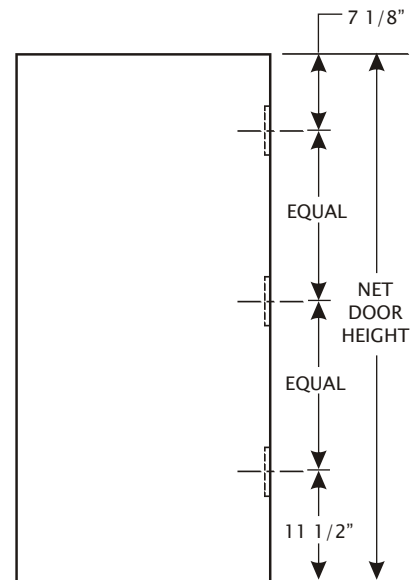
**DS-153**

# 4 1/2" HINGE PREPARATION 1 3/4" DOORS

HINGE PREPARATION  
WILL TAKE 4 1/2" HIGH  
TEMPLATE HINGES ONLY.  
NON-TEMPLATE HINGES  
CANNOT BE USED.



### 3/16" HINGE REINFORCEMENT



HINGES CAN BE ATTACHED ON EITHER  
SIDE OF THE DOOR REVERSIBLE FOR  
ANY HAND AND SWING REQUIRED.

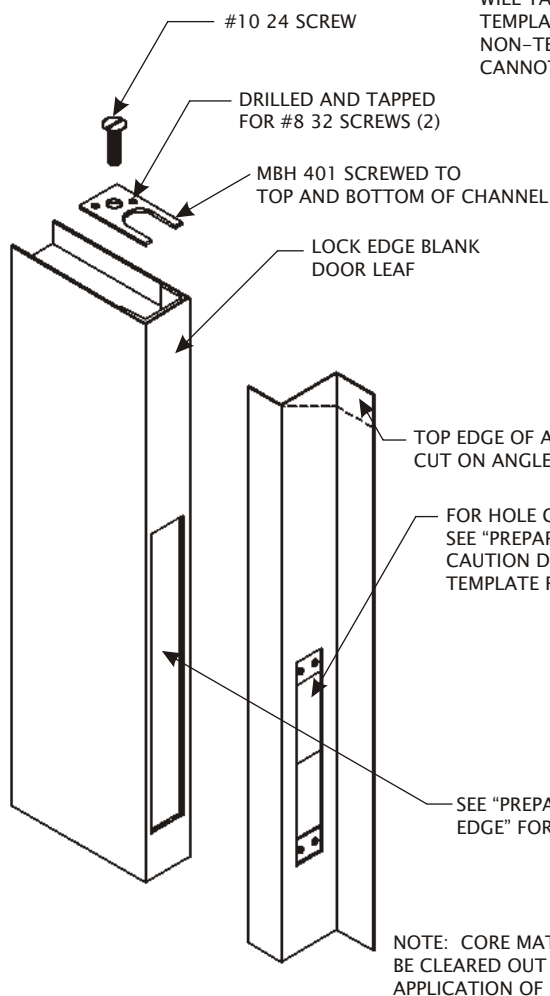
# HARDWARE

## January 2007

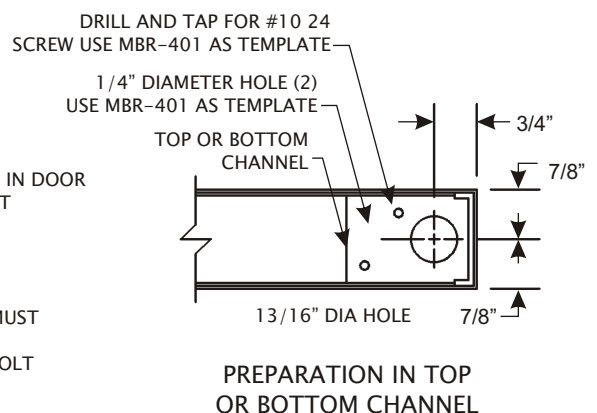
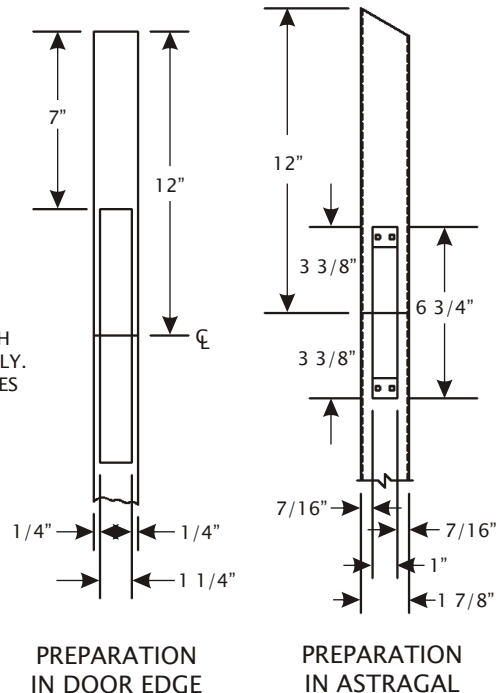


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### ANSI – 115.4 FLUSH BOLT PREPARATION WITH ASTRAGAL 1 3/4" DOORS



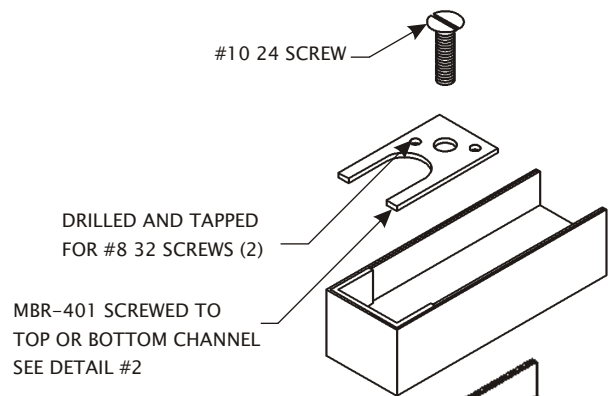
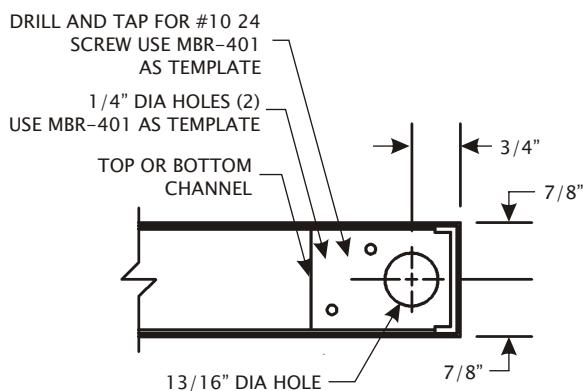
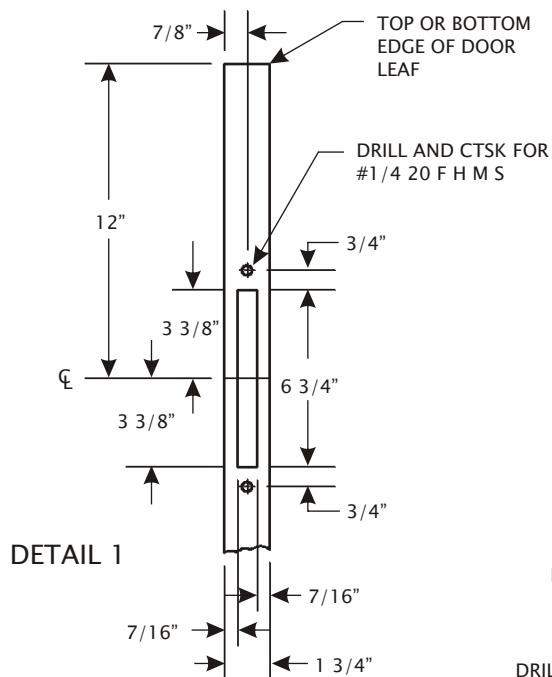
HINGE PREPARATION WILL TAKE 4 1/2" HIGH TEMPLATE HINGES ONLY. NON-TEMPLATE HINGES CANNOT BE USED.



# TECHNICAL DATA SHEET

**DS-155**

## ANSI - 115.4 FLUSH BOLT PREPARATION NO ASTRAGAL 1 3/4" DOORS



CORE MATERIAL MUST BE CLEARED OUT BEFORE APPLICATION OF FLUSH BOLT

MBR-001. SHOWN SCREWED IN PLACE

LOCK EDGE OF BLANK DOOR

DRILLED AND TAPPED FOR #8 32 SCREWS (2)

MBR-001

DRILLED AND TAPPED FOR #1/4 20 F H CTSK MACHINE SCREW

SWINGERDOOR NOTE: TO FULLY MORTISE FLUSH BOLT, MBR-001 MUST HAVE SPACER ATTACHED BEFORE SECURING TO DOOR SPACER THICKNESS VARIES WITH FACE SHEET GAUGE

DRILL AND CTSK FOR #1/4 20 F H M S SEE DETAIL #1 FOR LOCATION

**HARDWARE**  
**January 2007**

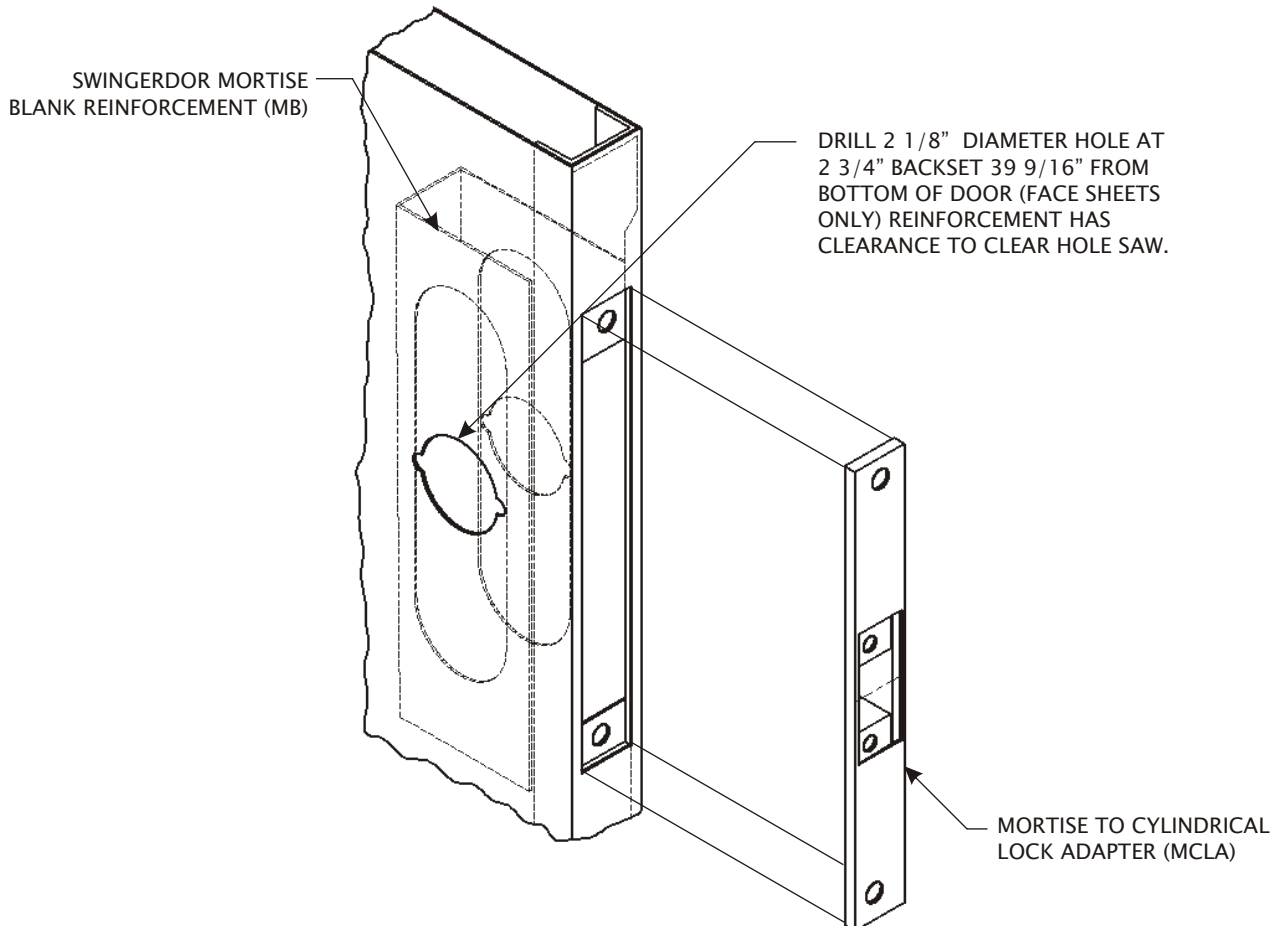


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256-851-6670, 256-852-5846

## MORTISE TO CYLINDRICAL LOCK ADAPTER (MCLA)

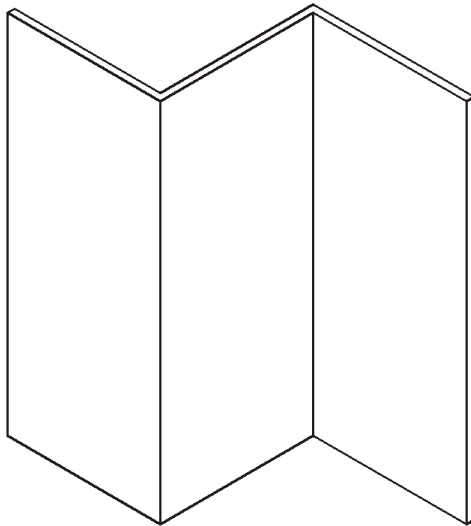
USE WITH "MB" LOCK PREPARATION ONLY

DOOR SUPPLIED WITH  
BLANK FACE SHEETS  
AND MORTISE LOCK EDGE  
CUTOUT (ANSI A115-1)

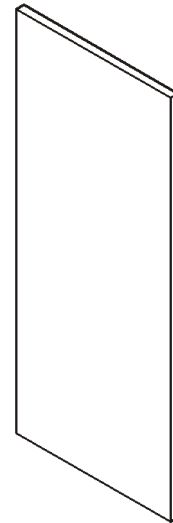


## ASTRAGALS

THIS DATA SHEET DETAILS THE TWO BASIC TYPES OF ASTRAGALS  
REQUIRED FOR PAIRS OF DOORS

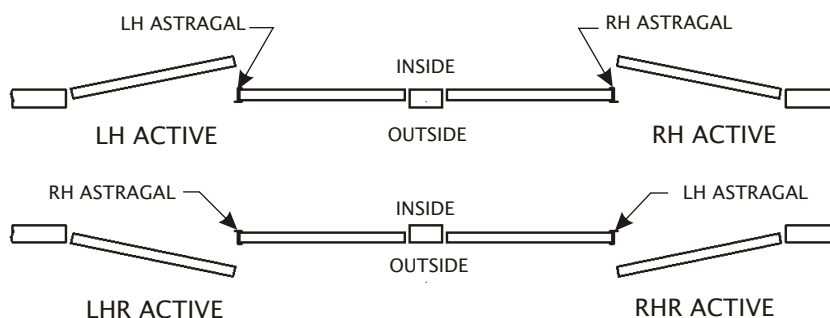
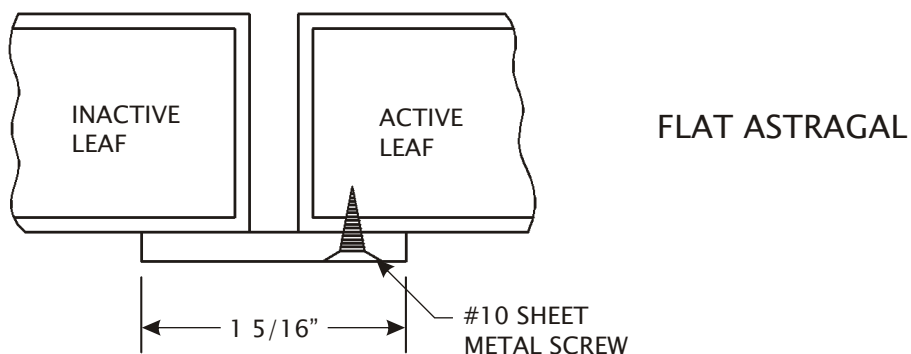
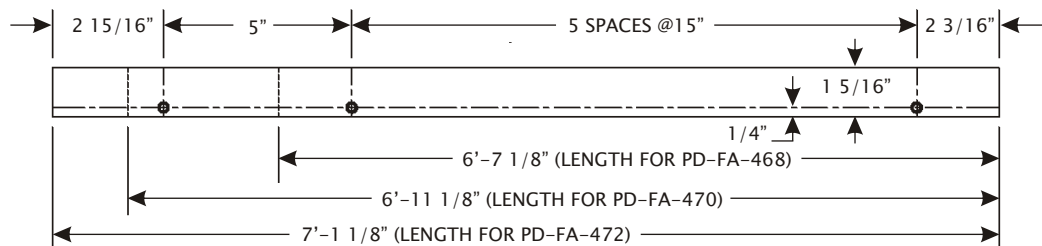


**'Z'**



**FLAT**

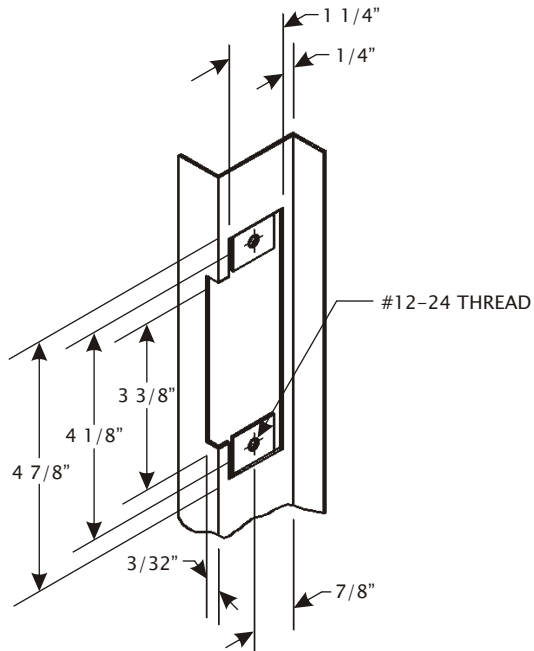
# TECHNICAL DATA SHEET **DS-157-2**



ASTRAGAL HANDING

# TECHNICAL DATA SHEET

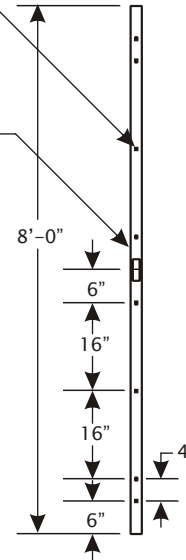
**DS-157-3**



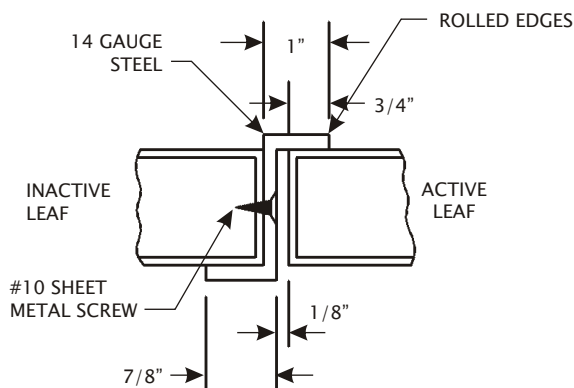
"U" STRIKE PREPARATION  
ANSI 115.1

COUNTERSUNK  
FOR #10 FLAT  
HEAD SCREW

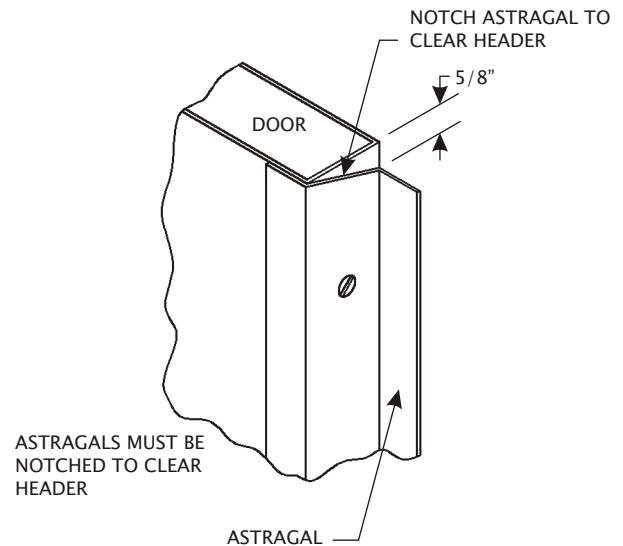
SEE STRIKE  
PREPARATION  
DETAIL



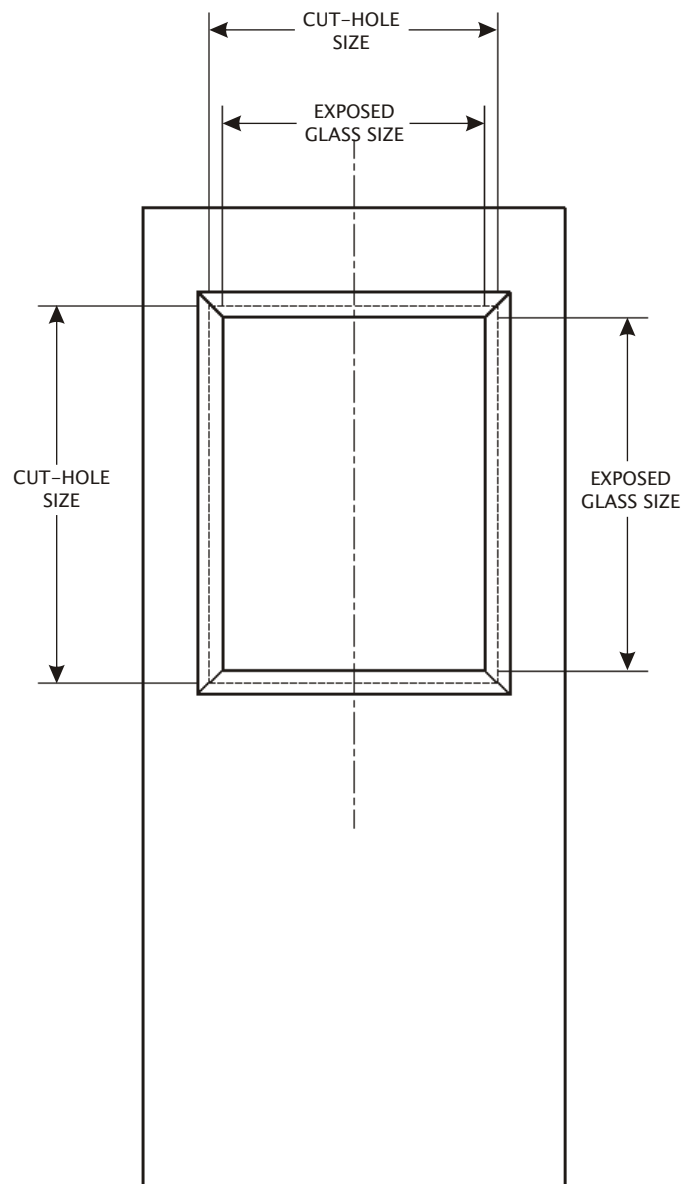
8'-0" ASTRAGAL CAN BE  
CUT TO LENGTH TO  
ACCOMMODATE 6'-8",  
7'-0" AND 7'-2" DOORS,  
REGARDLESS OF SWING  
OR HANDING.



'Z' ASTRAGAL 'AZ'



## GLASS LIGHT NOMENCLATURE



ALL DIMENSIONS FOR GLASS LIGHTS ARE BASED ON EXPOSED GLASS SIZE. THE CUT-HOLE SIZE IS DEPENDANT ON TYPE OF GLAZING BEAD USED. (ORDER EXPOSED GLASS SIZE.)

# TECHNICAL DATA SHEET

**DS-158-2**

## STANDARD DOOR RECOMMENDED GLASS SIZES

| DOOR<br>SIZE | V  |    | G  |    | FG |    | Narrow Lite     |   |
|--------------|----|----|----|----|----|----|-----------------|---|
|              | W  | H  | W  | H  | W  | H  | W               | H |
| 2068         | 10 | 10 | 10 | 26 | 10 | 56 | SPECIFY<br>SIZE |   |
| 2468         | 10 | 10 | 14 | 26 | 14 | 56 |                 |   |
| 2668         | 10 | 10 | 16 | 26 | 16 | 56 |                 |   |
| 2868         | 10 | 10 | 18 | 26 | 18 | 56 |                 |   |
| 3068         | 10 | 10 | 22 | 26 | 22 | 56 |                 |   |
| 3468         | 10 | 10 | 26 | 26 | 26 | 56 |                 |   |
| 3668         | 10 | 10 | 28 | 26 | 28 | 56 |                 |   |
| 3868         | 10 | 10 | 30 | 26 | 30 | 56 |                 |   |
| 4068         | 10 | 10 | 34 | 26 | 34 | 56 |                 |   |
| 2070         | 10 | 10 | 10 | 30 | 10 | 60 |                 |   |
| 2470         | 10 | 10 | 14 | 30 | 14 | 60 |                 |   |
| 2670         | 10 | 10 | 16 | 30 | 16 | 60 |                 |   |
| 2870         | 10 | 10 | 18 | 30 | 18 | 60 |                 |   |
| 3070         | 10 | 10 | 22 | 30 | 22 | 60 |                 |   |
| 3470         | 10 | 10 | 26 | 30 | 26 | 60 |                 |   |
| 3670         | 10 | 10 | 28 | 30 | 28 | 60 |                 |   |
| 3870         | 10 | 10 | 30 | 30 | 30 | 60 |                 |   |
| 4070         | 10 | 10 | 34 | 30 | 34 | 60 |                 |   |
| 2072         | 10 | 10 | 10 | 32 | 10 | 62 |                 |   |
| 2472         | 10 | 10 | 14 | 32 | 14 | 62 |                 |   |
| 2672         | 10 | 10 | 16 | 32 | 16 | 62 |                 |   |
| 2872         | 10 | 10 | 18 | 32 | 18 | 62 |                 |   |
| 3072         | 10 | 10 | 22 | 32 | 22 | 62 |                 |   |
| 3472         | 10 | 10 | 26 | 32 | 26 | 62 |                 |   |
| 3672         | 10 | 10 | 28 | 32 | 28 | 62 |                 |   |
| 3872         | 10 | 10 | 30 | 32 | 30 | 62 |                 |   |
| 4072         | 10 | 10 | 34 | 32 | 34 | 62 |                 |   |

W=WIDTH IN INCHES

H=HEIGHT IN INCHES

STANDARD LOCATIONS

V-63" CENTERLINE FROM DOOR BOTTOM

G & FG - 6" DOWN AND 6" IN FROM TOP ON LOCK SIDE

**January 2007**

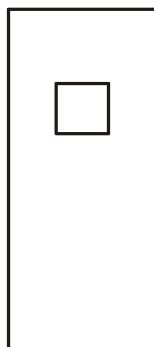


**MESKER**

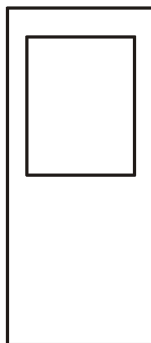
[www.meskerdoor.com](http://www.meskerdoor.com)  
256-851-6670, 256-852-5846

# TECHNICAL DATA SHEET

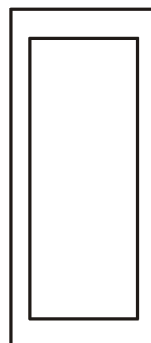
**DS-158-3**



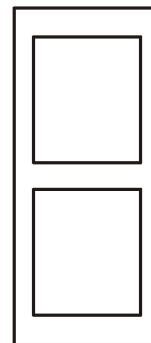
V



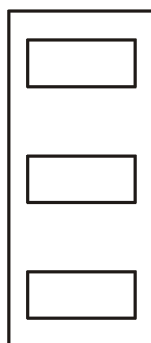
G



FG



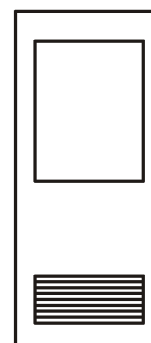
G2



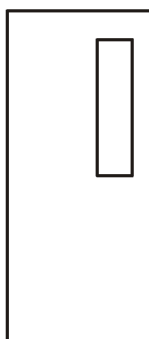
G3



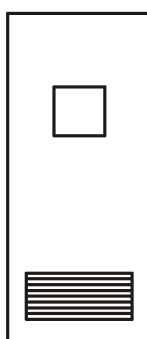
L



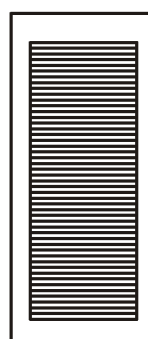
GL



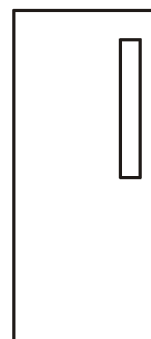
NARROW LITE  
SPECIFY SIZE



VL



FL



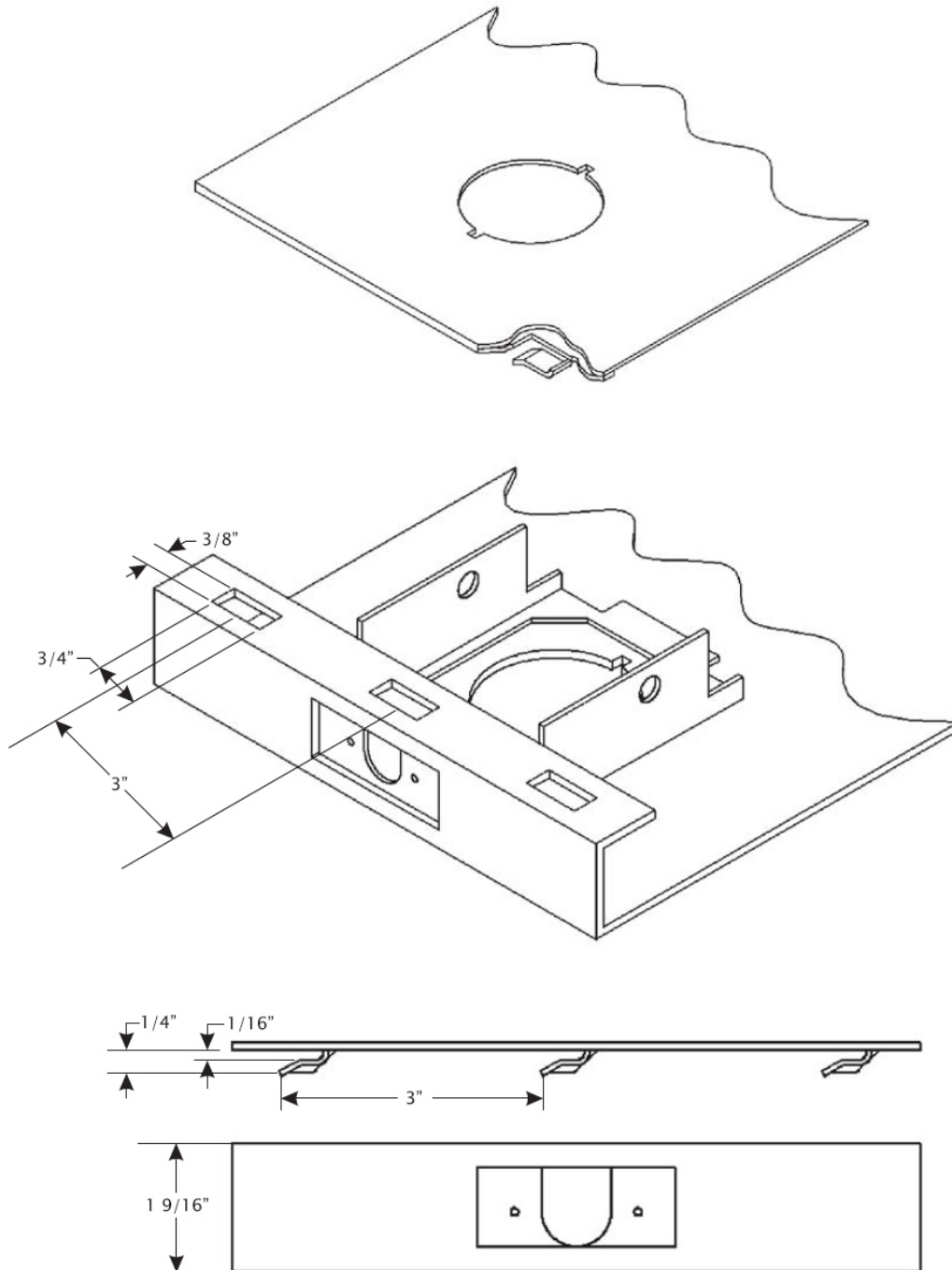
3x33

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## INTERLOCKING TAB SYSTEM



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