

# Republic

DOORS AND FRAMES



Commercial



Educational



Health Care



Hotel/Motel



Industrial



Institutional

# Standard Door Specifications

## Door Styles



<p>For complete steel door construction specifications refer to ANSI/SDI-100. Selection of the appropriate steel door should be based on the following criteria:</p>	<ol style="list-style-type: none"> <li>1. Frequency of use (low, moderate, high)</li> <li>2. Subjection to and degree of possible abuse</li> <li>3. Hardware requirements</li> <li>4. ADA requirements</li> <li>5. Fire code(s) regulations</li> <li>6. Sound retardation and/or insulation requirements</li> <li>7. Design and appearance</li> <li>8. Conformance to local building codes</li> </ol>
--	---

## Republic Finish Paint Colors



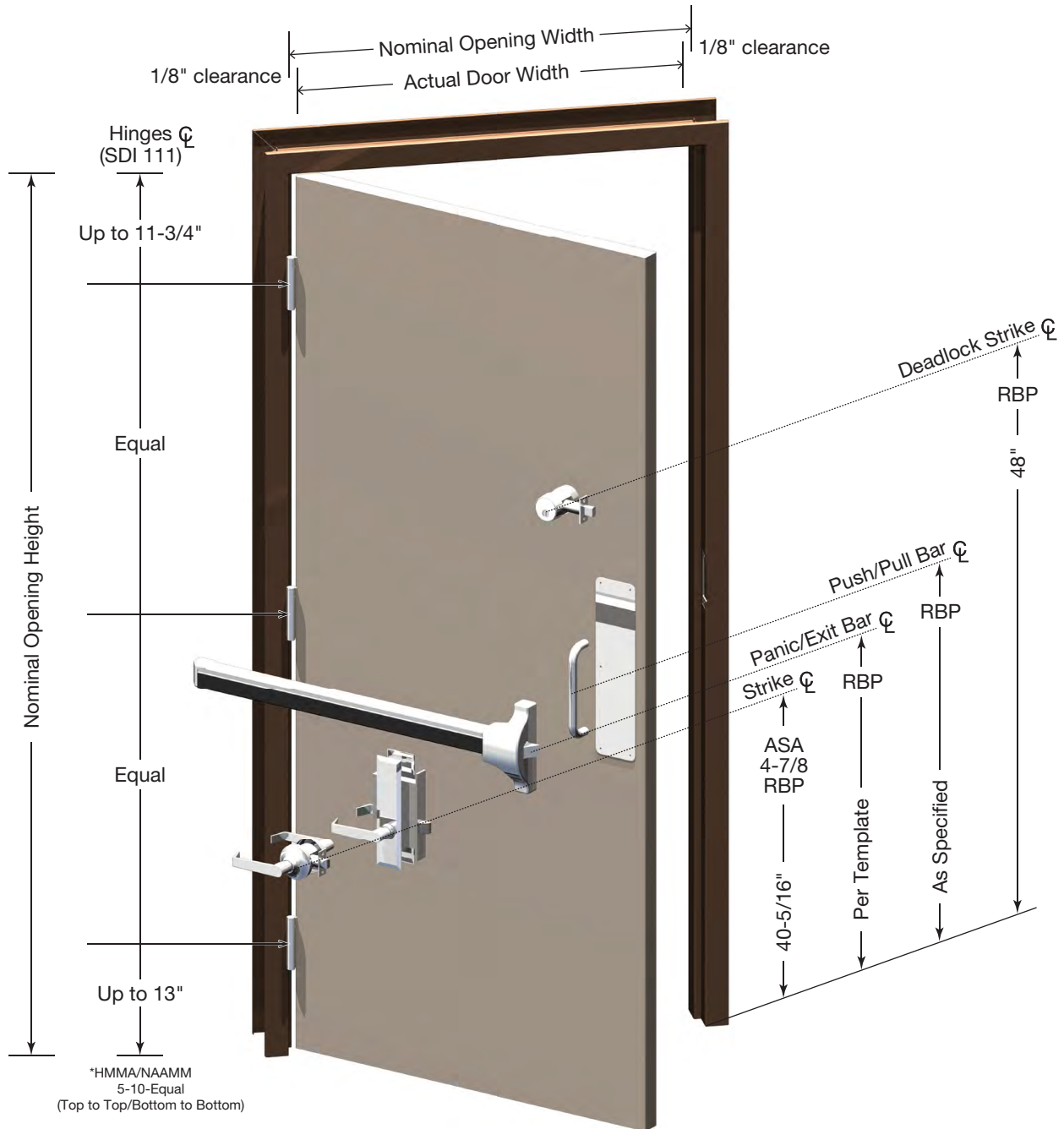
*Due to variations in printing processes, actual colors may vary slightly from those pictured. Other colors available upon request.*

## SDI Classifications

Grade	Model	Construction	RBP Series
<b>I</b> Physical Performance Level C (1-3/4" and 1-3/8") Standard Duty Minimum Gage = 20	1	Full Flush	DM/DL 420, DE820/18 DM/DL 420, DE820/18
<b>II</b> Physical Performance Level B (1-3/4" Only) Heavy Duty Minimum Gage = 18	1	Full Flush	DM 418, DL 418, DE 418
	2	Seamless	DM 418, DL 418, DE 418
<b>III</b> Physical Performance Level A (1-3/4" Only) Extra-Heavy Duty Minimum Gage = 16	1	Full Flush	DL 416, DE 416
	2	Seamless	DL 416, DE 416
<b>IV</b> Physical Performance Level A (1-3/4" Only) Extra-Heavy Duty Minimum Gage = 14	1	Full Flush	DE 414
	2	Seamless	DE 414



# Hardware Locations



Locations	RBP	SDI	ADA	HMMA	NAAMM
Deadbolt Strike	48"	48"	48"		
Deadbolt Cyl				46"	46"
Strike	40-5/16"	38" - 42"		38"	38"
Panic/Exit Bar	Per Template			38"	38"
Push/Pull Bar	As Specified			42"	42"

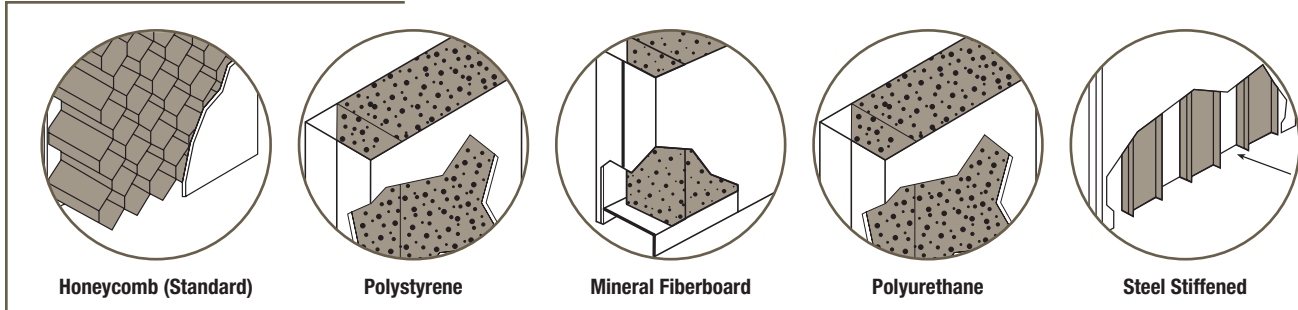
**References:**

- RBP Republic Doors and Frames
- SDI Steel Door Institute
- ADA Americans with Disabilities Act
- HMMA Hollow Metal Manufacturer's Association
- NAAMM National Association of Architectural Metal Manufacturers

*NOTE: When Government Series 86 lock is used (ANSI A115.1) dimension to center of lock is 3/8" less.*

## Standard Door Features

### Cores Available



### Standard Construction

<p>Flush Top Channel and Visible Seam.</p> <p>Inverted Bottom Channel (Approximate depth 9/16")</p>	<p>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").</p>		<p>Continuous 14 gage steel integral mortise lock reinforcement with provisions for government series 86 mortise lockset and ANSI A115.1 lock front (1-1/4" x 8").</p> <p><i>DM Series Only.</i></p>	
<p>Doors have provisions for 4-1/2" full mortise Heavy Weight or Standard Weight hinges with 1/4" hinge backset. Doors are not handed and use hinge fillers.</p>	<p>Continuous 14 gage steel integral lock channel reinforcement with provisions for government series 160 or 161 cylindrical locksets (2-3/4" backset) and ANSI A115.2 lock front (1-1/8" x 2-1/4").</p>		<p>Lever Lock Prep—161 DT (Modified 161 Prep) Conforms with ANSI 115.18 161 Lever lock specs.</p> <p><b>WARNING:</b> Use Rose Trim with a minimum diameter of 3-5/16" to cover prep.</p>	

*Door(s) over 3'6" in width, 7'6" in height, or 250 lbs. — Republic recommends additional hinge(s) or continuous hinge application.*

### Options Available

<p><b>Door Thickness:</b> 1-3/4" (Standard) 1-3/8" (Honeycomb &amp; Styrene) 2" &amp; 2-1/4" (Steel Stiffened)</p> <p><b>Gages: 20, 18, 16 and 14</b> (Steel Stiffened not available in 20 ga.)</p> <p><b>Material:</b> CRS (Standard) A60 &amp; G90</p>	<p><b>Door Edges:</b> Visible Seam (Standard) Seamless Bondo Seamless Welded</p> <p><b>Sizes:</b> From 1'0" x 1'0" to 4'0" x 10'0" (All Cores) Steel Stiffened Core available up to 5'0" x 10'0"</p>	<p><b>Fire Ratings:</b> 20 minutes through 3 hours (see fire section for options)</p> <p><b>SDI Levels: 1-4</b></p> <p><b>Physical Performance:</b> Level A – 1 million cycles (All Cores)</p>
--	--	--



# Embossed Doors



1-Panel



2-Panel



2-Panel Arch



4-Panel



6-Panel



8-Panel

Republic's complete line of commercial hollow metal embossed panel doors provide a wide range of design flexibility for your architectural needs. Whether you select a traditional design or a HD design door, you will be adding a beautiful entrance to any architectural opening with rich, distinctive panel embossments.

## SDI Levels 1-3

- Steel Door Performance with Decorative Designs
- 6 Panel Options
  - 1-3/8" thick
  - 8 foot with elongated panels
  - STC 40 (STC hardware included)
- High Definition designs  
(1 Panel, 2 Panel, and 2 Panel Arch Top)

## Designs Available with Glass Kits

(Consult factory for more designs)



2-Panel w/HG Kit



(includes glass)

4-Panel Sunburst Kit



Cross Buck w/HG Kit

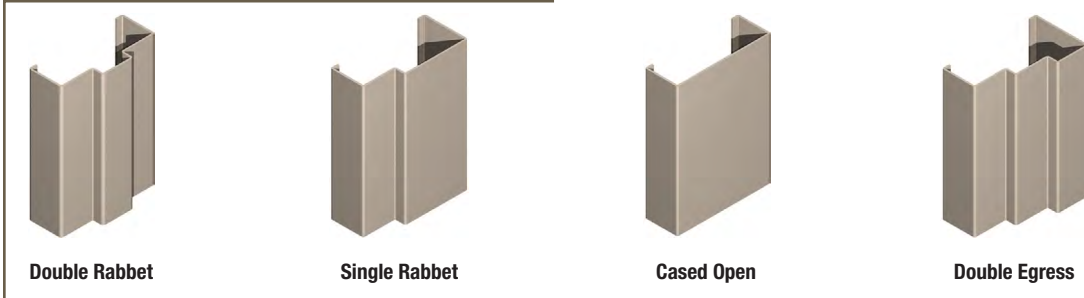


## High Definition Embossments

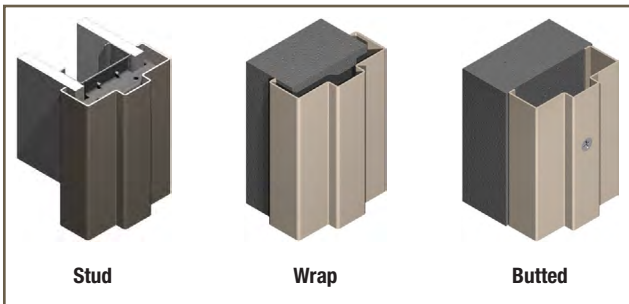
1-Panel, 2-Panel  
and 2-Panel Arch Top



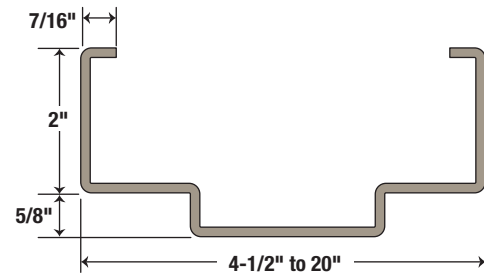
### Typical Frame Profiles



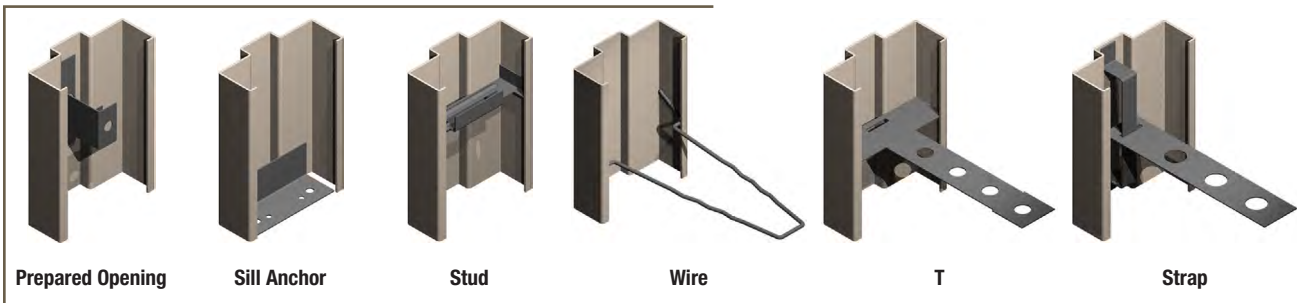
### Typical Wall Construction



Republic offers a complete line of single return frames. Frames are available in 16, 14 or 12 gage steel; cold rolled or A60 galvanized. Frames (16 and 14 gage) are manufactured with die-cut, mitered, tab and slot design for easier assembly and interlocking corners. Our frames are available as knock down units or welded.



### Typical Sill and Wall Anchors



Frames are manufactured for various wall conditions, from new construction to existing. Conformance to SDI standards, and ANSI A250.8.

### Options Available

- Corner Conditions:**  
 KD Mitered, Saw Mitered, Notched,  
 Square Cut, Face Welded or  
 Full Profile Welded
- Frame Details:**  
 3" to 20" (Single Rabbet)  
 4-1/2" to 20" (Double Rabbet)  
 4-3/4" to 20" (Double Egress)

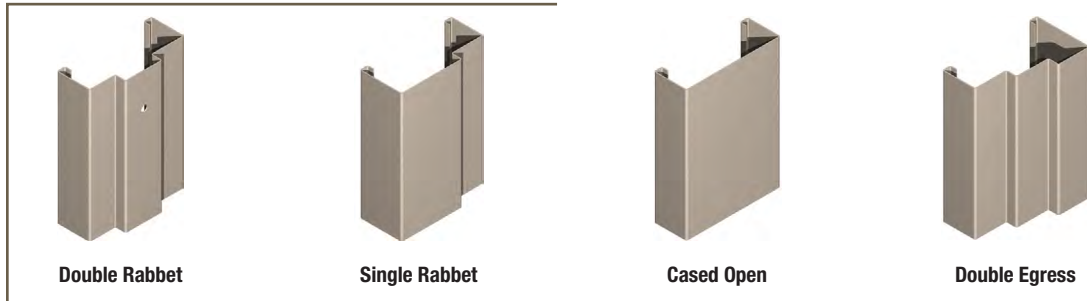
- Gages: 16, 14 and 12**  
 (KD mitered not available on 12 gage)
- Material:**  
 CRS (Standard), A60 and G90

- Fire Ratings:**  
 20 minutes through 3 hours  
*(see fire section for options)*
- Available as:**  
 3-Sided Frames  
 Stick Sections  
 Elevations



# Drywall Frames

## Typical Frame Profiles



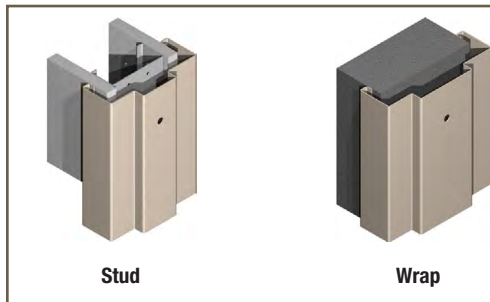
Double Rabbet

Single Rabbet

Cased Open

Double Egress

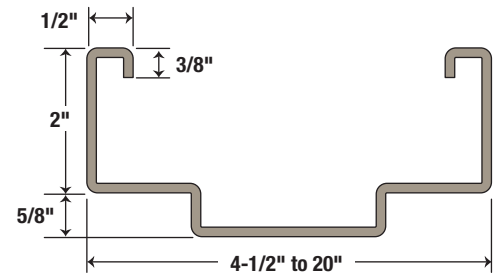
## Typical Wall Construction



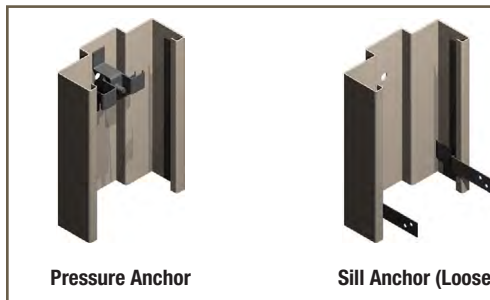
Stud

Wrap

Republic offers a complete line of double return frames available in 16 and 14 gage cold rolled or A60 galvanized steel. Frames are knock-down construction and are designed to be installed in standard or non-standard wall sizes over pre-finished or unfinished drywall.



## Typical Sill and Wall Anchors



Pressure Anchor

Sill Anchor (Loose)

Drywall frames are available for either 1 3/8 or 1 3/4 inch thick doors. They have precision mitered corners for a smooth attractive design.

## Options Available



### Corner Conditions:

- KD Mitered, Saw Mitered, Notched, Square Cut, Face Welded or Full Profile Welded

### Frame Details:

- 3" to 20" (Single Rabbet)
- 4-1/2" to 20" (Double Rabbet)
- 4-3/4" to 20" (Double Egress)

### Gages: 16 and 14

### Material:

- CRS (Standard), A60 and G90

### Fire Ratings:

- 20 minute through 90 minute (see fire section for options)

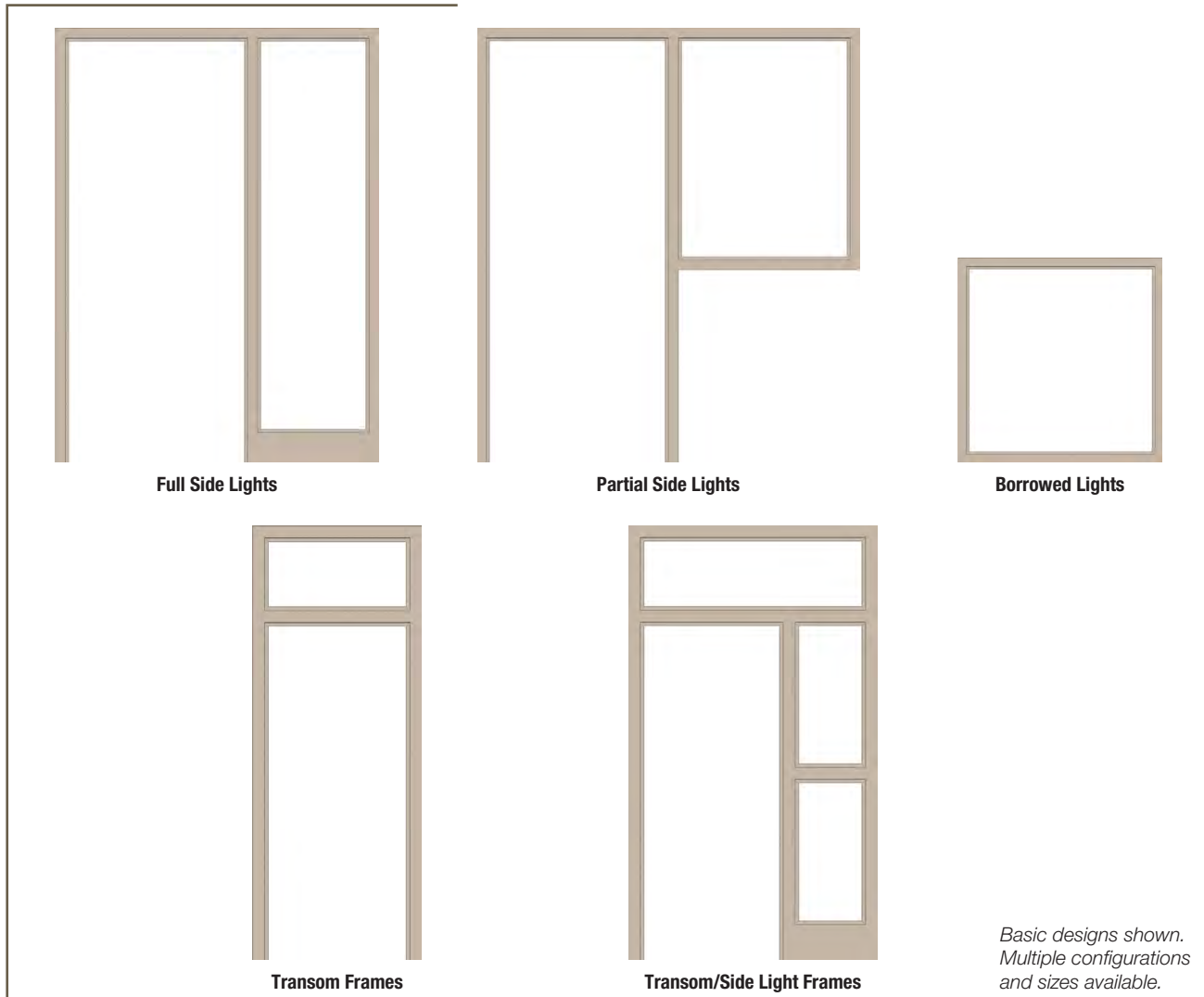
### Available as:

- 3-Sided Frames
- Stick Sections
- Elevations

# Frame Elevations

Republic's pre-engineered steel frame components provide unlimited flexibility for opening systems. Components are used to fabricate even the most complex entrance fronts, partitions, and window wall designs. The variety of jamb depths and sizes permit greater design freedom.

## Example Elevations



## Options Available

**Corner Conditions:**

KD Mitered, Saw Mitered, Notched,  
Square Cut, Face Welded or  
Full Profile Welded

**Profiles Available:**

Universal & Drywall

**Frame Depths:**

3" to 20" (Single Rabbet)  
4-1/2" to 20" (Double Rabbet)

**Gages: 16, 14 and 12\***

\* Drywall not available in 12 gage  
\* Mullions not available in 12 gage

**Material:**

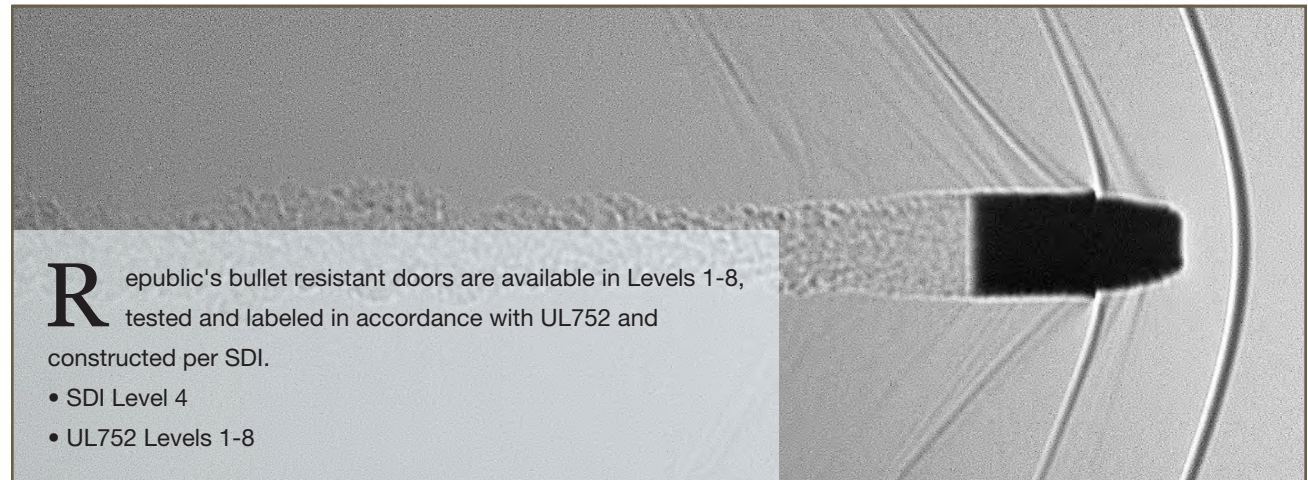
CRS (Standard), A60 and G90

**Fire Ratings:**

20 minutes through 90 minutes  
(see fire section for guidelines)



# Bullet Resistant Products



**R**epublic's bullet resistant doors are available in Levels 1-8, tested and labeled in accordance with UL752 and constructed per SDI.

- SDI Level 4
- UL752 Levels 1-8

## Protection Levels per UL752

Level	No. of Shots	Ammunition	Grain	Minimum Velocity
1	19	9mm Full Metal Copper Jacket	124	1,256 fps
2	3	.357 Magnum	158	1,250 fps
3	19	.44 Magnum Lead Semi-wad Cutter Gas Checked	240	1,350 fps
4	19	.30 Caliber Rifle Lead Core	180	2,540 fps
5	5	7.62mm Rifle Full Metal Jacket Military Ball	150	2,750 fps
6	5	9mm Full Metal Jacket	124	1,400 fps
7	12	5.56mm Rifle Full Metal Jacket	55	3,080 fps
8	12	7.62mm Rifle Full Metal Jacket Military Ball	150	2,750 fps
Supplementary shotgun	3	12 ga. Rifled Lead Slug	437	1,585 fps

## Features



- **Single Doors through 5'0 x 10'0 opening**
- **Paired Openings through 10'0 x 10'0\***  
*\* Bullet Resistant Astragal is required*
- **Frame Elevations Available**  
Consult Tech Support for details

- **Fire Rated up to 3 hours\*\***  
*\*\* See Fire Rated Section for details*
- **Glass Kits Available** (Glass by others)  
Consult Tech Support for details

*Door(s) over 3'6" in width, 7'6" in height, or 250 lbs. — Republic recommends additional hinge(s) or continuous hinge application.*

## Acoustical (STC) Rated Products

### Hardware Packages

#### STC Hardware Package

##### STC 40 through 47 (Singles)

1. Bulb Seal – Zero 485
2. Threshold Options – Zero
  - 564—1/4" to 3/8" bottom clearance
  - 566A—3/8" to 1/2" bottom clearance
  - 560—5/8" to 3/4" bottom clearance
3. Perimeter Seal (options)
  - Zero 8150
  - Zero 119W
  - Pemko S773
  - Pemko S88

#### STC Hardware Package

##### STC 48 through 52 (Singles)/STC 47 (Pairs)

1. Bulb Seal – Zero 870
2. Threshold (options) – Zero
  - 564—1/4" to 3/8" bottom clearance (only option for STC 52)
  - 566A—3/8" to 1/2" bottom clearance
  - 560—5/8" to 3/4" bottom clearance
3. Perimeter Seal (options)
  - Zero 8150
  - Zero 119W (only option for STC 52)
  - Pemko S773
  - Pemko S88
4. Door Bottom - Zero 367
5. Door Sweep – Zero 328
6. Hinges – Options
  - Zero Z955 – 4.5"
  - Zero Z953 – 5.0"

#### Tested per ASTM E90 & E413

##### Ratings Available

- Single Flush Doors STC 40 to STC 52
- Single 6-Panel Embossed Doors as STC 40
- Pairs of Flush Doors STC 47 (max)
- Glass Kits Available (STC ratings are affected)  
*(Glass by others)*

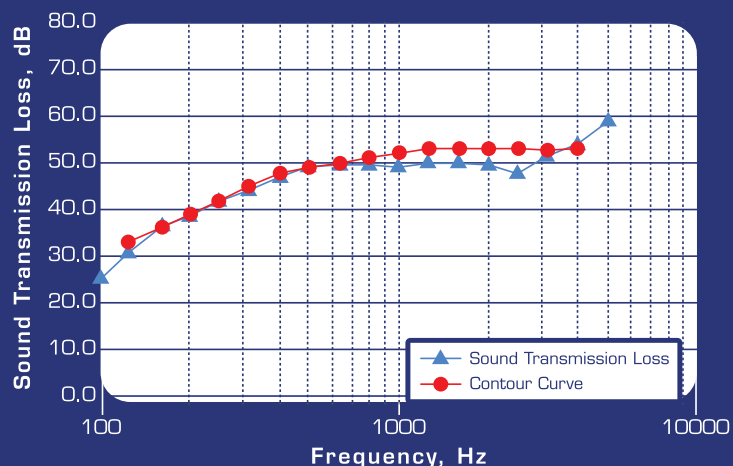
*Consult Tech Support for details*

*Door(s) over 3'6" in width, 7'6" in height, or 250 lbs. — Republic recommends additional hinge(s) application.*

**T**ake control of your environment and reduce unwanted noise with Republic's acoustical (STC rated) doors and frames. Acoustical performance of building products, components, and systems is an important consideration for engineers, specifiers, and building owners. This is especially true in highly populated cities, areas around highways, railroads, airports, and high density residential zones. The demand for efficient noise control in these areas is rising constantly.



### Sound Transmission Loss





# FEMA 320/361 Tornado Products

**T**ornadoes form quickly giving people little time to prepare. Tornado prepared rooms and buildings provide shelter. Republic's FEMA (Tornado) doors and frames are an important part of the equation for areas of refuge.



## Features

- Single Openings through 4'0" x 8'0"
- Paired Openings through 8'0" x 8'0"
- Fire rating up to 3 hours *(see fire rated section for details)*
- Flush design only
- 3 or 4 Sided Opening configuration

*Door(s) over 3'6" in width, 7'6" in height, or 250 lbs. (Republic recommends additional hinge(s) application).*

## Approved Hardware Applications



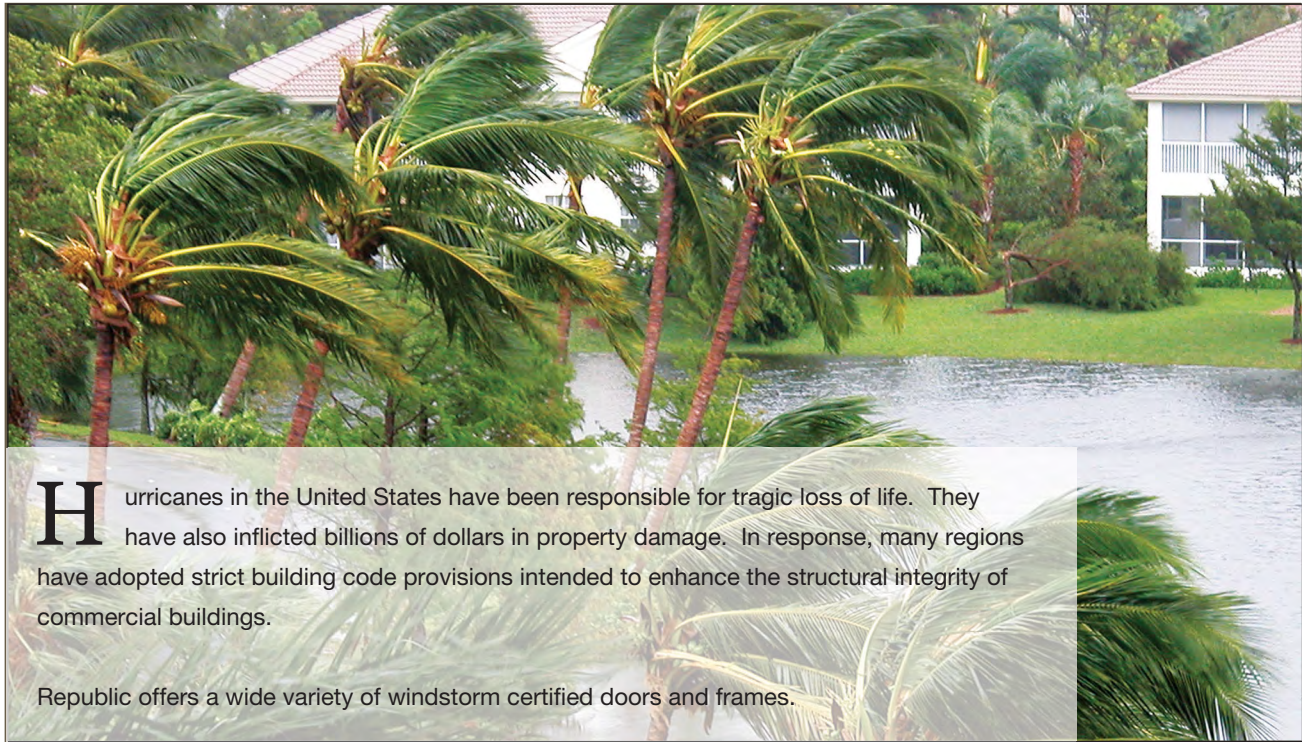
# FEMA

- |  |                                    |
|--|------------------------------------|
| • Medeco Maxum Deadbolts (x3) with Grade 1 Cylindrical or mortise lockset* |                                    |
| • Corbin Russwin FE6800*   | Concealed Rods                     |
| • Sargent FM7100*  | Concealed Rods                     |
| • Sargent FM8700   | Surface Rods                       |
| • Von Duprin WS9927  | Surface Rods                       |
| • Securitech 4340*   | Residential Multiple Deadbolt Lock |
| • Securitech 5000*   | Multiple Bolt Lockset              |
| • Securitech 7000  | Concealed Rods                     |
| • Securitech 8000  | Concealed Rods                     |

*\*Inswing or Outswing option (hardware specific)*



## Hurricane Rated Products



**H**urricanes in the United States have been responsible for tragic loss of life. They have also inflicted billions of dollars in property damage. In response, many regions have adopted strict building code provisions intended to enhance the structural integrity of commercial buildings.

Republic offers a wide variety of windstorm certified doors and frames.

### Certifications for

**Florida Building Code 2010:**

FL15868  
FL15869  
FL15870  
FL15871

**Miami-Dade County NOA 2010:**

12-0601.21  
12-0604.12  
12-0604.13  
12-0604.14

**Texas Department of Insurance:**

DR551  
DR552  
DR553

### Hardware Applications

4.5" Hinges  
Rim Exit Device  
Surface Bolts / ASA / Astragal

Cylindrical Lock  
Card Lock

Mortise Lock  
Surface Vertical Rod

### Options Available

**Windload Ratings:**

Single Flush Door	+/- 114 psf
Single Embossed Door	+/- 80 psf
Single Glass Kit Door	+/- 50 psf
Single Louvered Door	+/- 70 psf
Paired Flush Doors	+/- 90 psf
Paired Glass Kit Doors	+/- 50 psf
Paired Louvered Doors	+/- 70 psf
Frame Elevations	+/- 50 psf

**Up To:**

**Maximum Door Sizes:**

Single Doors	4'0 x 8'0
Pair of Doors	8'0 x 8'0
Frame Elevations	12'8 x 10'4

**Frame Anchors:**

Masonry or Existing Opening

**Door Designs:**

Flush  
Embossed (2, 4, or 6 Panel)  
Glass Kits (up to Full Glass)  
*(Glass by others)*  
Louvers (up to Full Louver)

*Options vary by approval.  
For specific details, contact Tech Support  
or see Tech Data Sheets.*





## Lead Lined Products



**L**ead lined doors and frames are the ideal application for medical facility use. Lead is effective at scattering gamma rays and x-rays. The aesthetics of Republic's lead-lined products for radiology areas are consistent with other hollow metal openings.

## Features

- **1/16" Lead Lining (Standard)**
- **Other Lead Thicknesses available** (*Consult Tech Support for details*)
- **Steel Stiffened Core**
- **Glass Kits Available** (*Consult Tech Support for details*)
- **Pairs of Doors** (*Lead Lined Astragal required*)
- **Sizes Available: Single – through 5'0 x 10'0 & Pairs through 10'0 x 10'0**
- **Fire Rating through 90 Minutes**

## UNIFIT™

Republic's UNIFIT door is designed for quick and easy door replacement. Continuous hinge and lock channels inside the door edges provide the flexibility to conveniently locate hardware preps for the perfect retrofit solution.

*All UNIFIT Doors have a continuous hinge reinforcement channel.*



## Replacement Doors

- **Continuous 10 gage Hinge Channel**
- **Channel Depth - .190 – For use with heavy weight or standard weight hinges and hinge fillers**
- **Hinge Channel Locator – 3-5 Required**  
(*For manufacturing purposes only*)
- **No Cutouts or Holes for hinges**

**Lock Edge – No Cutouts in Edge or Faces**

**Door Gages – 20, 18, 16 Face Sheets**



# Fire Rated Products



The emphasis on life safety and property protection has never been greater than it is today. Doors play a very important role in the fire resistance of a building; they allow people to evacuate safely from a building by limiting the spread of fire and smoke to other areas.

**Fire doors provide the following functions:**

- Provide safe egress from a fire area
- Inhibit the fire from spreading
- Protect life and property by reducing smoke hazards
- Serve as a regular door pathway at all times

## Underwriters Laboratories and Intertek / Warnock Hersey Approved

Requirements: Doors must be self-latching, self-closing and use fire rated hardware.

Fire rated glass (supplied by others) must be used for the appropriate rating on doors and frames with glass.

Hollow Metal Doors\* and Frames\* tested in accordance with UBC 7-2, UL 10B & UL 10C meeting the requirements of NFPA 80, NFPA 252 & SDI 118.

### Hollow Metal Door Options

<ul style="list-style-type: none"> <li>• <b>Ratings Available:</b> 20 minutes through 3 hours</li> </ul>	
<ul style="list-style-type: none"> <li>• <b>Maximum Sizes:</b> Single: 5'0" x 10'0" &amp; Pairs - 8'0" x 10'0" Double Egress Pairs: 8'0" x 8'0"</li> </ul>	
<ul style="list-style-type: none"> <li>• <b>Cores:</b> Honeycomb, Styrene, Steel Stiffened, Mineral Fiberboard (250° Degree TR)</li> </ul>	
<ul style="list-style-type: none"> <li>• <b>Designs:</b> <b>Flush, Embossed, Glass Kits, Louvers, Dutch</b></li> </ul>	
Narrow and Vision Light Kits	3 hour (max)
Half Glass Kits	90 minutes (max)
Full Glass Kits	20 minutes (max)
Louvers—fusible link, (24" x 24" max & 1 per door)	90 minutes (max)
Dutch Doors (astragal & both leaves latch)	90 minutes (max)
<ul style="list-style-type: none"> <li>• <b>Specialty Doors</b></li> </ul>	
Bullet, FEMA, STC, & Hurricane Doors	3 hour (max)
Lead Lined	90 minutes (max)

### Hollow Metal Frame Options

<ul style="list-style-type: none"> <li>• <b>Ratings Available:</b> 20 minutes through 3 hours</li> </ul>	
<ul style="list-style-type: none"> <li>• <b>Maximum Sizes:</b> Single - 5'0" x 10'0" &amp; Pairs - 8'0" x 10'0" Double Egress Pairs - 8'0" x 8'0"</li> </ul>	
<ul style="list-style-type: none"> <li>• <b>Frame Depths:</b> 3" to 20" (3" to 4-1/2" - single rabbet profile)</li> </ul>	
<ul style="list-style-type: none"> <li>• <b>Corner Conditions:</b> KD (Knock Down), Face Welded or Full Profile Weld</li> </ul>	
<ul style="list-style-type: none"> <li>• <b>Frame Types:</b></li> </ul>	
3-Sided Universal (KD or welded)	3 hour (max)
3 Sided Drywall (KD)	90 minutes (max)
Frame Elevations (welded & sizes vary by rating)	90 minutes
Transom Frames w / Panels (welded & sizes vary by rating)	3 hour (max)

\* Doors and Frames may have certain fire rating restrictions based on various options, consult Tech Support or refer to Tech Data for specific details.



# Door / Frame Handing Chart

How to determine hand of door and frame.

Hand all doors by standing outside or key side - facing

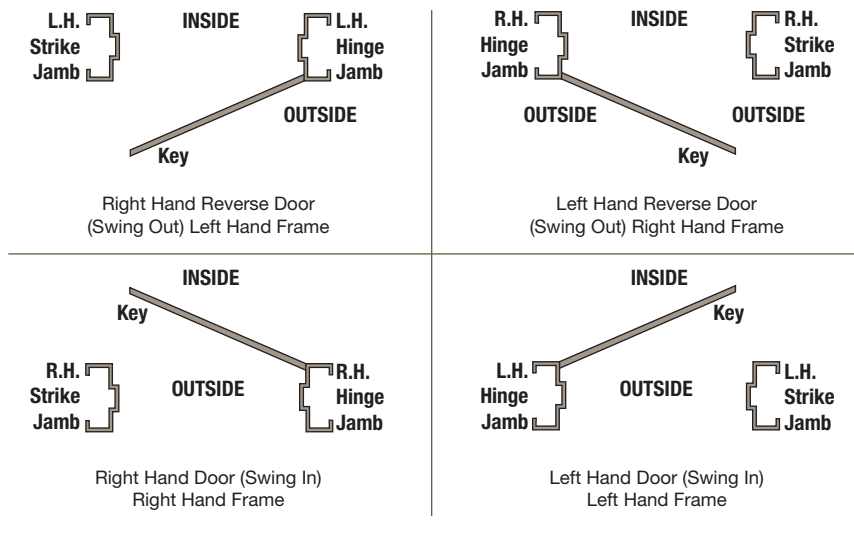
## Single Doors

When door leaves swing toward you and hinges are on right side of door:

- Door is Right Hand Reverse
- Frame is Left Hand

When door leaves swing to inside and hinges are on right side of door:

- Door is Right Hand
- Frame is Right Hand



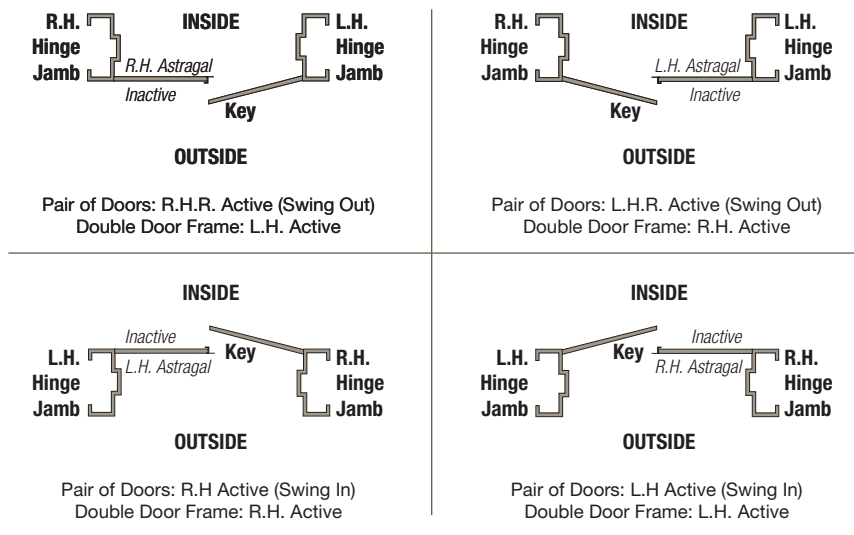
## Pair of Doors

When door leaves swing toward you and hinges are on right side of active leaf:

- Door is Right Hand Reverse Active
- Frame is Left Hand Active

When door leaves swing to inside and hinges are on right side of active leaf:

- Door is Right Hand Active
- Frame is Right Hand Active





155 Republic Drive | McKenzie TN | 38201

Republic Doors and Frames has a long history as one of the nation's leading manufacturers of commercial steel doors and frames. Republic's manufacturing and offices occupy 240,000 square feet on 33 acres in McKenzie, Tennessee, and is strategically located halfway between Memphis and Nashville approximately 25 miles north of Interstate 40 (I-40). Republic's doors and frames are marketed in all 50 states and in several foreign countries through a network of stocking distributors and company owned service centers.

Republic is committed to not only providing the best doors and frames in the industry but also to supporting its customers with dependable delivery and exceptional service.

## GENERAL WARRANTY

Seller warrants to Buyer that it will, at its option and in its sole discretion, repair or replace any goods of its manufacture determined to Seller's satisfaction to be defective in workmanship or material under normal use and service within one year from the date of shipment to such Buyer, provided that notice of such defect is given to Seller within such one year period. Seller makes no warranty with respect to items supplied to Buyer by Seller but manufactured by others, except to the extent of any warranty given to Seller by such others. In no case shall Seller be liable for consequential damages arising from breach of any of the foregoing warranties. SELLER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, BEYOND WHAT IS CONTAINED HEREIN. This Warranty is for Buyer's exclusive benefit and is not assignable or transferable, nor is Buyer permitted to present to its customer, or any third party, that it may rely on the Warranty.

Distributed By:



**Important Notice:** Our recommendations, if any, for the use of this product are based on tests believed to be reliable. The greatest care is exercised in the selection of our raw materials and in our manufacture. However, since the use of this product is beyond the control of the manufacturer, no guarantee or warranty, express or implied, is made as to such use, effects incidental to such use, handling or possession or the results to be obtained, whether in accordance with the directions or claimed so to be. The manufacturer expressly disclaims responsibility therefore. Furthermore, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing laws and/or patents covering any material or use. We reserve the right, without notice, to make changes in specifications, construction, design and details at any time in such manner as we may consider necessary or advisable. Corrections to reflect any such changes shall be included in subsequent printings of this publication.

Member:

