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Why steel?

We think you will like the answer.

Strength

Steel's natural strength outperforms its alternatives in security, fire rating, sound reduction, vandal resistance, sanitation, and demanding environments. Even with special cores and other techniques, nothing matches the performance and longevity of hollow metal.

Value

Steel has a low lifetime cost of ownership and provides the best long-term value in the door and frame industry. Compared to wood, aluminum, and fiberglass, hollow metal is sturdier, lasts longer, and requires the fewest repairs. Properly installed and maintained hollow metal doors often last 30+ years and can be inexpensively repaired while less durable wood and aluminum doors must be replaced.

Versatility

Today's steel doors offer a breadth of aesthetic options. Whether you are looking for a modern stainless appearance, a vibrant colored finish, or even a faux finish, steel's versatility allows it to satisfy the aesthetic requirements of most projects without sacrificing its performance and longevity.

Republic doors and frames

Republic Doors and Frames has a long history as a leading manufacturer of commercial steel doors and frames. We are committed to providing the best products in the industry and supporting our customers where it matters most.



National and local support

In addition to Republic's primary manufacturing facility in Tennessee, Republic offers four local service centers to reduce freight costs and bring you services closer to home.



Customer support

Republic's dedicated Customer Care, Technical Service and nationwide sales teams will ensure you are covered, every step of the way.



Ease of ordering

Configure, price and quote solutions and place orders online through the Overtur Estimate and Order (OEO) application.



Lead time and delivery

Republic publishes weekly lead time schedules based on current demand forecast and capacity levels to provide an estimate of when you can expect your order.



Education and training

Republic enlists the best trainers in the industry to lead classes and webinars that ensure attendees are informed, up to date and ready to apply their skills in a business where expertise is key.



Full portfolio and custom solutions

Republic offers a portfolio full of industry-standard offerings, windstorm solutions and custom paint finishes.

Republic Locations



Main factory

Republic Doors and Frames operates a main factory, boasting over 300,000 sq ft in McKenzie, TN. This facility includes most of our Customer Care, Operations, and Engineering teams. The McKenzie plant supplies a complete portfolio of doors and frames with a full set of service capabilities to meet your project's security, safety, and design requirements.

Regional Centers

In addition to the McKenzie facility, Republic operates various regional service centers across the Southeast to serve local clients with prompt service and dedicated support. Republic's Regional Centers are stocked with a wide variety of Doors and Frames for your regional market needs. The experienced staff at these centers have onsite modification capabilities to pull from existing stock and quickly fulfill orders.

Each center has stock and capabilities tailored to regional market preferences.

- Dallas Regional Manufacturing Center offers custom frame manufacturing
- Houston Regional Service Center carries a broad range of hardware locations in frame stock to support
 the competitive landscape
- Atlanta Regional Service Center installs conduit in frames
- Orlando Regional Service Center stocks mainly Steelcraft hardware locations and an assortment of
 Hurricane products

All orders can be picked up at the service center or shipped directly to your site, resulting in lower freight costs. Each center is backed by the factory in McKenzie to ensure that all the known, trusted Republic benefits are available to you.

Visit <u>www.republicdoor.com</u> for details and a full list of capabilities by regional center.

Standard door specifications



For complete steel door construction specifications refer to ANSI / SDI A250.8 (Formerly SDI 100). Selection of the appropriate steel door should be based on the following criteria:

- 1. Frequency of use (low, moderate, high)
- 2. Subjection to and degree of possible abuse
- 3. Hardware requirements
- 4. ADA requirements

- 5. Fire code(s) regulations
- 6. Sound retardation and/or insulation requirements
- 7. Design and appearance
- 8. Conformance to local building codes

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 | Series |
|-----|--|-------|--------------|--|
| I | Physical performance level C (1 3/4" and 1 3/8") Standard duty Minimum gage = 20 | 1 | Full flush | DP/DL 420, DE820/18 DP/DL 420, DE820/18 |
| | Physical performance level B (13/4" Only) | 1 | Full flush | DP 418, DL 418, DE 418 |
| П | Heavy duty Minimum gage = 18 | 2 | Seamless | DP 418, DL 418, DE 418 |
| III | Physical performance level A (1 3/4" Only) Extra-heavy duty | 1 | Full flush | DL 416, DE 416 |
| | Minimum gage = 16 | 2 | Seamless | DL 416, DE 416 |
| IV | Physical performance level A (1 3/4" Only) Extra-heavy duty | 1 | Full flush | DE 414 |
| | Minimum gage = 14 | 2 | Seamless | DE 414 |

Hardware locations



| Locations | RDF | 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:

| RDF | 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.

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Standard door features

Cores available











Honeycomb (standard)

Polystyrene

Mineral fiberboard

Polyurethane

Steel stiffened

Standard construction



Flush Top Channel and Visible Seam.



Doors have provisions for $4 \frac{1}{2}$ " full mortise Heavy Weight or Standard Weight hinges with 1/4" hinge backset.



DL Series (shown)





lock front

(1¹/₄" x 8").



Continuous 16 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

DL Series (shown)

front (1¹/₄"x 8"). Lever Lock Prep-161 DT

Continuous 14 gage steel

provisions for government

series 86 mortise lockset

integral mortise lock

reinforcement with

and ANSI A115.1 lock

(Modified 161 Prep) Conforms with ANSI 115.18 161 Lever lock specs. WARNING:

Use Rose Trim with a minimum diameter of 3⁵/₁₆" to cover prep.

DL Series (shown)



For 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

Door thickness:

- 1³/₄" (Standard)
- 1³/₈" (Polystyrene only)

Gages:

20, 18, 16 and 14 (Steel stiffened . not available in 20 ga.)

Material:

CRS (standard) A60 and G90 •

Door edges:

- Visible seam (Standard)
- Seamless bondo
- Seamless welded

Sizes:

- From 1'0 x 1'0 to 4'0 x 10'0 (all cores)
- Steel stiffened core available up to 4'10 x 10'0

Fire ratings:

20 minutes through 3 hours (see fire section for options)

SDI levels:

1-4

Physical performance:

Level A – 1 million cycles (all cores)

Embossed doors

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.









1-Panel

2-Panel arch

6-Panel

SDI Levels 1-3

Steel door performance with decorative designs

- 6 panel options
 - 1³/8" thick
 - 8 foot with elongated panels
 - STC 40 (STC hardware available)
- 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

4-Panel sunburst kit (includes glass)

High definition embossments 1-Panel, 2-Panel and 2-Panel arch top





* Due to availability, certain sizes, patterns may require minimum quantity purchases.

Universal frames

Typical frame profiles

Republic offers a complete line of single return frames. Frames are available in 16, 14 or 12 gage steel; cold rolled or A60 galvannealed. 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.



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

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

Drywall frames

Typical frame profiles

Republic offers a complete line of double return frames available in 16 and 14 gage cold rolled or A60 galvannealed 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 wall construction







Typical sill and wall anchors

Pressure anchor





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

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.

Ful side lights Partial side lights Borrowed lights Image: Contract of the second second

Options available

Corner conditions:

 KD mitered, saw mitered, notched, square cut, face welded or full profile welded

Profiles available:

Universal and 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)

Republic offers up to eight levels of bullet resistant door and frame protection, ranging from 9mm handguns (Level 1) up to 7.62mm military assault rifles (Level 8). All bullet resistant doors are tested and labeled in accordance with UL752 and constructed per SDI Level 4. They also come standard with polystyrene or mineral wool core for interior or exterior applications. These assemblies are designed for installations such as public utility and military buildings, cashier islands and currency exchanges, cellular tower units and any other security location requiring bullet resistance.

Republic's bullet resistant systems offer various levels or protection defined by UL72 standard ratings. These levels of security have been established by UL (Underwriters Laboratory), the primary testing organization for materials used in these systems. Each of the 8 levels shown here have been tested and found effective at stopping a variety of projectiles, especially ones most typically used during an armed robbery. Although the UL72 ratings extend to Level 8, most banks, credit unions, and convenience stores are typically protected in Levels 1-3.

Bullet resistant products



Republic'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

| Level | No. of shots | Ammunition | Grain | Minimum velocity |
|-----------------------|-----------------|--|-------|---------------------|
| 1 | 3 | 9mm full metal copper jacket | 124 | 1,256 fps |
| 2 | 3 | .357 magnum | 158 | 1,250 fps |
| 3 | 3 | .44 magnum lead semi-wad cutter gas checked | 240 | 1,350 fps |
| 4 | 1 | .30 caliber rifle lead core | 180 | 2,540 fps |
| 5 | 1 | 7.62mm rifle full metal jacket military ball | 150 | 2,750 fps |
| 6 | 5 | 9mm full metal jacket | 124 | 1,400 fps |
| 7 | 5 | 5.56mm rifle full metal jacket | 55 | 3,080 fps |
| 8 | 5 | 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 4'10 x 10'0 opening
- Paired Openings through 9'10 x 10'0*
 * Bullet resistant astragal is required
- Frame elevations available, consult Tech Support for details
- Glass kits available (glass by others) Consult Tech Support for details

For 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

Take 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.

Using the latest sound absorbing techniques and materials, Republic's engineering professionals have developed a superior sound transmission class (STC) rated assembly consisting of a noticeably lighter weight door (approximately 25% less than current market products) along with standard "rabbeted" hollow metal frames. These assemblies utilize 1 $^{3}/_{4}$ " (proprietary) sound-core doors, standard hollow metal frames and a low profile sealing system that is aesthetically pleasing to the eye and easier to install.

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)

- . Bulb deal Zero 870
 - 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
- 2. Perimeter deal (options)
 - Zero 8150
 - Zero 119W (only option for STC 52)
 - Pemko S773
 - Pemko S88
- 3. Door bottom Zero 367
- 4. Door sweep Zero 328
- 5. Hinges options
 - Zero Z955 4.5"
 - Zero Z953 5.0"

Tested per ASTM E90 and 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)

Consult Tech Support for details



ICC 500 FEMA 320/361 Tornado products

Tornadoes 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.

When a tornado threatens, individuals need to have a safe place to go and time to get there. Lives are saved when individuals receive and understand the warning, know what to do, and know the safest place to go.

Republic ICC 500 FEMA 320 and 361 doors are designed, tested, and certified per the tornado shelter construction guidelines developed by the Federal Emergency Management Agency. These guidelines include test requirements that simulate a 250 mile-per-hour ground speed tornado, including the impact force of building materials propelled at 100 miles-per-hour.



Features

- Single openings 3068 thru 4080
- Paired openings 6068 thru 8080
- Shutter Assemblies (flush) design
- Single openings 2843 thru 4080
- Paired openings 5443 thru 8080
- Fire rating available
- Tornado ADA compliant fire rated glass lights

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



Approved hardware applications

Exit devices

Von Duprin®

- 2 point latch WS 98/9927(F)
- 3 point latch WS 98/9957(F)

Lock / latch

Schlage® multipoint, lever with CVR

- 3 point LM/LMV9300
- Ives[®] SB 360 top and bottom surface bolts / inactive leaf

ICC500 2014 Minimum criteria for life safety

Hurricane rated products

Hurricanes 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 2020:

| HVHZ | Impact applications |
|-----------|--|
| FL1592.1 | Outswing door systems, sidelights, transoms 3070/6070 +/-60 psf, 4070 +/-50 PSF |
| FL3905.1 | Inswing single flush mortise 3070 +/-120 psf; +/-170 PSF with stainless steel strike |
| FL3905.2 | Outswing single flush mortise 3070 +/-120 psf; +/-170 PSF with stainless steel strike |
| FL4622.1 | Light system for use with storefront entrance systems +/-60 psf |
| FL12400.1 | Outswing double door systems with louvers 35.7" x 76", max 8080 60 PSF |
| FL12400.2 | Outswing double door systems Mortise, cylindrical, rim, SVR, CVR, 3-pt: 55-90 PSF |
| FL12400.3 | Outswing double glazed door systems Mortise, cylindrical, rim, SVR, CVR, 3-pt: 50-90 PSF |
| FL12400.4 | Outswing Single Flush Door Systems Mortise, cylindrical, rim, SVR, CVR, 3-pt: 55-100 PSF |
| FL12400.5 | Outswing single glazed door systems Mortise, cylindrical, rim, SVR, SVR, 3-pt: 50-100 PSF |
| FL12400.6 | Outswing single door systems with louvers 35.7" x 76" 4080 60 PSF |
| FL14022.1 | WS98/9927 single/double panic level E 150PSF 75 PSF with water infiltration |
| FL16740.1 | Outswing single/double flush with mortise Falcon MA Falcon MA 4080/8080 50 PSF |
| FL16740.2 | Outswing single/double flush with panic CVC exit Concealed cable 98/9949, 33/3549 4080/8080: 75 PSF |
| FL16740.3 | Outswing single/double flush with 3-pt LM9300 LM9300 Level E 107 PSF See Steelcraft (N/A Republic) |
| FL16740.4 | Outswing single/double glazed with Von Duprin exit SVR exit 98/9927 70 PSF, N6 light 6x30, 7870 max (HCA) |
| FL20736.1 | Outswing pair 8080 Positive Lok panic exit |
| FL20736.2 | Outswing single 4080 Positive Lok panic exit |
| E330 | Non-impact applications |
| FL10356.1 | Non-impact E330 - double flush inswing/outswing |
| FL10356.2 | Non-impact E330 - double louver inswing/outswing |
| FL10356.3 | Non-impact E330 - single louver inswing/outswing |
| FL10356.4 | Non-impact E330 - double glazed inswing/outswing |
| FL10356.5 | Non-impact E330 - single flush inswing/outswing |
| FL10356.6 | Non-impact E330 - single glazed inswing/outswing |
| FL34907.1 | Non-impact E330 - frame, sidelight and transom for 18 ga doors |

For more information go to **republicdoor.com**, HUR(I) DL/DE Series hurricane-rated doors.

Lead lined products

Lead lined doors and frames are the ideal application for medical facility use. Lead shields radiation emitted during standard patient scans, such as 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
- Steel stiffened core
- Glass kits available (consult tech support for details)
- Pairs of doors (lead lined astragal required)
- Sizes available: single through 4'10 x 10'0 and pairs through 9'8 x 10'0

Replacement doors

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.



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 selflatching, 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 and UL 10C meeting the requirements of NFPA 80, NFPA 252 and SDI 118.

Hollow metal door options

Ratings available:

20 minutes through 3 hours

Maximum sizes:

- Single: 4'10 x 10'0 and pairs 8'0 x 10'0
- Double egress pairs: 8'0 x 8'0

Cores:

- Honeycomb, Styrene, Steel stiffened,
- Mineral fiberboard (250° degree tr)

Designs:

- Flush, embossed, glass kits, louvers, dutch
- 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 and 1 per door)
 90 minutes (max)
- Dutch doors
- (Astragal and both leaves latch)
 90 minutes (max)

Specialty doors:

| FEMA and | |
|-----------------|--------------|
| hurricane doors | 3 hour (max) |

Hollow metal frame options

Ratings available:

- 20 Minutes through 3 hours
- Maximum sizes:
- Single 5'0 x 10'0 and pairs 8'0 x 10'0
- Double egress pairs 8'0 x 8'0

Corner conditions:

KD (knock down), face welded or full profile weld

3 hour (max)

90 minutes (max)

Frame types:

- 3-Sided universal (KD or welded)
- 3 Sided drywall (KD) frame elevations
 - (Welded and sizes vary by rating)
- Transom frames with panels
 (Welded and 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



Contact us

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About Allegion

Allegion (NYSE: ALLE) is a global pioneer in seamless access. We keep people and their assets safe, wherever they are, bringing together simple solutions, convenient access and advanced technology.

For more, visit **www.allegion.com**

KRYPTONITE = LCN = (SCHLAGE) = STEELCRAFT = VON DUPRIN

