Power Operators

Requirements

- All Operators To Be Electrically Powered
- Operators To Be Aluminum (BHMA 689) Finish

Approved Manufacturers

-Besam No Substitution
**Besam’s Swingmaster**

Sturdy gears and heavy assemblies assure quality and durability in constant traffic, and extreme weather conditions, year after year.

The product of 16 years of research, **Swingmaster**, is designed to provide maximum performance in virtually any operating environment.

**The Electra 150**

Functions reliably as a pedestrian operator, or as a low energy operator for ADA compliance.

**Besam’s Automatic Fire Door**

Complete, UL listed accessory package, designed to be used with ‘A’ or ‘B’ labeled fire doors, in corridors, or other areas requiring the protection and convenience of power-operated fire doors. Product performance and reliability are accomplished with Besam’s **Swingmaster** or **Electra** operator. The package is specifically designed to work with the F-50 latch retracting system.

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**Technical Data**

- **Power Supply:** 120V, 20amp, 60 Hz

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Swingmaster MP and 400 Concealed Unit

Swingmaster MP, 450 and Electra 150 Surface Mounted Unit

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The Swingmaster 405 and 455 series are heavy-duty operators which contain a low energy spring, clutch and special speed control to meet ADA and handicap standards.

Visa/VisaWorx® U.S. patents: 4,467,253; 4,590,410; 4,560,912; 4,888,532; 5,276,391

Canadian patents: 1,167,649; 1,167,925;

Swingmaster® U.S. patent # 6,303,270

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Visit our website at www.besam.com. For one hour turn-around of any Besam three-part specification or standard drawing, please call 1-800-725-9920 and ask for the Besam Design Hotline, or see us in Sweets CD.
Door Control/Door Protection

Requirements

Kickplates
- All Kickplates To Be Stainless Steel 16g (.050)
- All Kickplates To Be 8” High X 2” Less Than Door Width
- All Doors With Door Closers To Have Kickplates Installed On Push Side Of Door

Stops
- Use Wall Stops Wherever Possible
- Use Overhead Stops Where Wall Stops Cannot Be Used

Approved Manufacturers

Trimco
Ives Manufacturing
Glynn-Johnson
Rockwood Manufacturing
Architectural Door Trim

Series 8400 Door Protection Plates

**Features:**

- Door Protection Plates are fabricated from the finest architectural aluminum, brass, bronze and stainless steel, or 1/8" thick clear acrylic plastic or black or brown high impact polyethylene.
- All aluminum, brass, bronze and stainless steel Door Protection Plates meet ANSI A156.6 requirements for 0.050" thickness.
- Optional Beveling — For beveling of top and two sides of plates suffix with B3E, and for beveling of four sides suffix with B4E.
- Standard Beveling — Plastic plates are beveled on all four sides.
- Each plate is packaged carefully wrapped in strong craft paper with 6 x 6 x 6" oval head, undercut sheet metal screws plated to match, for easy installation on hollow metal, laminate, or wood doors. All plates are packaged in heavy duty corrugated cardboard; larger plates are enclosed in a wooden frame.

<table>
<thead>
<tr>
<th>Prod. No.</th>
<th>Plate Description</th>
<th>Size Ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td>8400</td>
<td>Mop Plates</td>
<td>4' to 6' high, 22' to 42' wide</td>
</tr>
<tr>
<td>8400</td>
<td>Kick Plates, Stretcher Plates</td>
<td>6' to 8' high, 22' to 42' wide</td>
</tr>
<tr>
<td>8400</td>
<td>Kick Plates</td>
<td>6' to 24' high, 22' to 42' wide</td>
</tr>
<tr>
<td>8400</td>
<td>Armor Plates</td>
<td>26' to 48' high, 22' to 48' wide</td>
</tr>
</tbody>
</table>

- Use No. 8401 Kickplate Gasket Tape as a buffer between brass kickplates and metal doors to help prevent tampering which may result from electrolytic action. One package provides enough double-sided adhesive-backed foam tape for the perimeter of an 8' x 34' plate.

- Armor Plates — Protect inner half of doors from abuse by hard carts, trucks and rough usage.
- Usually applied to push side of single doors and both sides of double acting doors.
- Standard heights are 36", 40" or 42" by door width, with allowance for stop bead when applicable.

![Mop Plates](image1.png)  ![Kick Plates](image2.png)  ![Stretcher Plates](image3.png)  ![Armor Plates](image4.png)
Wall Bumpers

**WS406CVX & WS407CVX**

**WS406CCV & WS407CCV**

- Constructed in sturdy yet economical wrought base of brass, aluminum or stainless steel construction.
- Feature concealed tamper-proof mounting.
- Shipped factory preassembled backplate to reduce installation cost.
- Easy installation by inserting screwdriver through small hole in rubber.
- The WS406CVX unit is designed with a convex rubber bumper, packed with wood screw and plastic anchor.
- The WS406CCV unit is designed with a concave rubber bumper, which avoids damage to locks with projecting buttons, packed with wood screw and plastic anchor.
- The WS407CVX unit is designed with a convex rubber bumper packed with screw and drywall anchor.
- The WS407CCV unit is designed with a concave rubber bumper which avoids damage to locks with projecting buttons and is packed with screw and drywall anchor.

<table>
<thead>
<tr>
<th>Product No.</th>
<th>Mounting Hardware</th>
<th>Base Diameter</th>
<th>Base Thickness</th>
<th>Overall Projection</th>
</tr>
</thead>
<tbody>
<tr>
<td>WS406CVX</td>
<td>Wood screw, plastic anchor</td>
<td>2-1/2&quot;</td>
<td>3/8&quot;</td>
<td>1&quot;</td>
</tr>
<tr>
<td>WS406CCV</td>
<td>Wood screw, plastic anchor</td>
<td>2-1/2&quot;</td>
<td>3/8&quot;</td>
<td>1&quot;</td>
</tr>
<tr>
<td>WS407CVX</td>
<td>Screw, Drywall Anchor</td>
<td>2-1/2&quot;</td>
<td>3/8&quot;</td>
<td>1&quot;</td>
</tr>
<tr>
<td>WS407CCV</td>
<td>Screw, Drywall Anchor</td>
<td>2-1/2&quot;</td>
<td>3/8&quot;</td>
<td>1&quot;</td>
</tr>
</tbody>
</table>
Floor Stops – Dome

FS438 Dome Stop
- For doors with threshold or undercut dooers.
- Heavy-Duty Cast Dome Stops constructed of brass, bronze or aluminum.
- Gray, non-marring rubber bumper.
- Packed with wood screw and plastic anchor, specify Tamplin (TPN) or lead expansion shield (LS), if required.
- Meets ANSI/A3A 156.6, L12141 for brass or bronze, L32141 for aluminum.

<table>
<thead>
<tr>
<th>Product No.</th>
<th>Overall Height</th>
<th>Base Height</th>
<th>Base Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS438</td>
<td>1&quot;</td>
<td>3/16&quot;</td>
<td>1-3/4&quot; x 2&quot; Out</td>
</tr>
</tbody>
</table>

FS437 Riser
- Extruded aluminum, mill finish.
- For conversion of FS438 Dome Stop to carpet installation.
- Packed with wood screws, lead shield and stud.
- Specify Tamplin (TPN) if required.
- Available in 1/4", 1/2", 3/4" and 1" models.

<table>
<thead>
<tr>
<th>Product No.</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS437</td>
<td>1&quot; x 1-3/16&quot; Out</td>
</tr>
</tbody>
</table>

How to Order:

Model:
- 436 Dome Stop Only
- 437 Riser Only
- 430 x 437 Dome Stop & Riser

Riser Size:
- Blank: No riser
- 1/4" for 1/4"
- 1/2" for 1/2"
- 3/4" for 3/4"
- 1" for 1"

Finish:

Mounting:
- Blank: Standard
- TPN: Tamplin
- LS: Lead Expansion Shield
**Architectural Door Trim**

**8200 Series Push Plates and 8300 Series Pull Plates**
- Made from the finest architectural aluminum, brass, bronze and stainless steel.
- For Push Plate sizes other than listed, contact our Customer Service Department or your local sales representative.
- All aluminum, brass, bronze and stainless steel Push Plates meet ANSI A156.6 requirements for .050" thickness.
- Each Push Plate is packaged individually wrapped with mounting screws.
- For special mounting methods other than standard, see page C10.

**How to Order**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>260</td>
<td>Push Plate</td>
</tr>
<tr>
<td>380</td>
<td>Pull Plate, less pull</td>
</tr>
</tbody>
</table>

**Hole Spacing:**
- For 3 x 12" (5)
- For 3 x 16" (6)
- For 5 x 16" (8)
- For 6 x 16" (9)

**Finishes:**
- US3, US4, US5 (3 x 12, 3-1/2 x 15 only)

**Size:**
- 3 x 12, 3-1/2 x 15, 4 x 16, 6 x 16, 8 x 16

**Options:**
- Blank: No cutout
- CFC: Cylinder cutout
- CTC: Thumbturn cutout

**Mounting Type:**
- Blank: Standard
- C: Concealed pull (Pull Plate Only)
Architectural Door Trim

8300 Series Pull Plates

- Made from the finest architectural aluminum, brass, bronze and stainless steel.
- For Pull Plate sizes other than listed, contact our Customer Service Department or your local sales representative.
- All aluminum, brass, bronze and stainless steel Pull Plates meet ANSI A156.6 requirements for .050" thickness.
- Each Pull Plate is packaged individually wrapped with mounting screws.
- Pulls are centered on plates up to 4" wide and offset 2" from edge of plates wider than 4".
- For special mounting methods other than standard, see pages C10 and C11.

How to Order

Pull Style:
- 02 for 8102
- 03 for 8103
- 05 for 8105

Pull Center to Center:
- 6 for 6" (not available on 8303)
- 8 for 8" (not available on 8303)
- 10 for 10"

Finishes:

Size:
- 3-1/2" x 12", 4" x 16", 6" x 16"

Options: (Handling needed for 86 x 18", LH or RH)
- Blank  No cutout
- CPC  Cylinder cutout
- CTC  Thumbturn cutout

Mounting:
- Blank  Standard
- F  Concealed pull wood doors or push plate
- H  Concealed pull metal door (not available 8305)
- I  Concealed pull wood door (not available 8305)
- J  Back to back pull (not available 8305)
Manual Flush Bolts - Metal Doors

FB458, FB458N and FBD458N
Series for Metal Doors

- When the active door is opened, the lever can be moved to the ‘up’ position, retracting the bolt and allowing the inactive leaf to be opened. When the inactive leaf is closed, the lever can be moved to the ‘down’ position, projecting the bolt into the strike and securely locking the inactive leaf.
- Simplified installation in metal frames. Round bolt head requires only a punched hole. Use of strike optional. Special design of guide and flat sided bolt tip to prevent bolt rotation.
- FB458 UL Listed for Fire Doors.
- FB458N and FB458N not UL Listed for Fire Doors.
- FBD458N features 1/4" radius corners on body.
- Non-handed.

- Bolt tip is 1/2" diameter.
- Bolts have 3/4" throw with a bolt backset of 3/4".
- Standard Rod Length is 12", which is measured from the center of the flush bolt body to the bolt tip.
- Meets ANSI/BS1016, LR425.
- Optional Dust Proof Strikes—DP1 or DP2, prevents dirt build-up assuring full engagement of bottom bolt.
- Optional Rod Lengths available for FB458: 6', 9', 18' and 24'.
- Optional Rod Lengths available for FB458N and FBD458N: 6', 9', 18', 24', 30', 36' and 48'.

Dimensions:
- Body Size: 1" Wide x 6-3/4" Long x 1-1/8" Deep
- Guide Size: 1" Wide x 2" Long x 3/8" Thick
- Strike Size: 15/16" Wide x 2-1/4" Long x 5/64" Thick
- Rod: 1/4-20 Threaded Rod
Manual Flush Bolts - Wood Doors

FB358 Series for Wood Doors

- When the active door is opened, the lever can be moved to the 'up' position, retracting the bolt and allowing the inactive leaf to be opened. When the inactive leaf is closed, the lever can be moved to the 'down' position, projecting the bolt into the strike and severely locking the inactive leaf.
- Reduces installation costs; requires only simple router mortise at top and bottom corners of doors.
- Door strength and rigidity maintained by tying door faces to reinforcing extensions on guide with machine screws and bearing washers.

FB358
Top or Bottom Bolts

- UL Listed for Fire Doors
- Non-tampered
- Bolts have 3/4" throw with a 7/8" vertical adjustment.
- Meets ANSI A156.16, LF1351.
- Optional Dust Proof Strikers—DP1 or DP2, prevents dirt build-up assuring full engagement of bottom bolt.
- Not available for rabatted door installations.

Dimensions:
Body Size: 1" Wide x 6-3/4" Long x 1-3/8" Deep
Guide Size: 1" Wide x 2-1/2" Long x 5/64" Thick
Strike Size: 13/16" Wide x 2-1/4" Long x 5/64" Thick
Constant Latching Flush Bolts - Metal Doors

FB50 Series for Metal Doors

- Constant Latching—Inactive door remains latched until the active door is opened, releasing the automatic bottom bolt and then the top bolt can be manually released. Inactive door will relatch automatically.
- UL Listed for Fire Doors.
- Fits standard ANSI A155.4 Door and Frame Preparations.
- Non-handed.
- Models with Auxiliary Fire Latch Eliminates the Bottom bolt and is UL Listed for Fire Doors.
- Finished Cover Plates permit finish changes in stock or at job site.
- Bolts have 3/4" throw with a 7/8" vertical adjustment.
- Meets ANSI A156.3 Type 27.
- Standard Rod Length is 12", which is measured from the center of the flush bolt body to the bolt tip.
- Optional Dust Proof Striker—DP1 or DP2, prevents dirt build-up assuring full engagement of bottom bolt.
- Optional rod lengths available for non-fire rated openings—18", 24", 36" and 48".

FB51P Pair
Top and Bottom Bolts
FB51P combines FB51T constant latching top bolt with FB31B automatic bottom bolt. Non-handed.

FB52
Top Bolt with Auxiliary Fire Latch
FB52 combination includes FB51T Top Bolt with auxiliary fire latch. Provides a fire-listed application without a bottom bolt—meaning no floor prep for strike. The auxiliary fire latch, mounted in the door edge, releases under extremely high temperatures to keep the doors in alignment during a fire.

FB53
Top Bolt with Auxiliary Fire Latch and Retract Plate
FB53 used to update existing flush bolt installations with auxiliary fire latch eliminating bottom bolt and floor strike. FB53 consists of FB51T top bolt, auxiliary fire latch and filler plate to cover existing cutout when bottom bolt is removed.

FB51T
Top Bolt Only

Dimensions:
- Body Size: 1" Wide x 6-3/4" Long x 2" Deep
- Guide Size: 1" Wide x 1-27/32" Long x 11/16" High x 3/32" Thick
- Strike Size: 15-1/16" Width x 2-1/4" Long x 1/16" Thick
- Reb Plate Size: 1-1/4" Wide x 1-1/16" Long x 3/32" Thick
- Auxiliary Fire Latch Size: 1" Wide x 1-3/4" Long x 3-1/4" Deep

UL Listed 3 hours on 8'0" x 10'0" Opening.
Constant Latching Flush Bolts - Wood Doors

FB60 Series for Wood Doors

- Constant Latching—inactive door remains latched until the active door is opened, releasing the automatic bottom bolt and then the top bolt can be manually released. Inactive door will relatch automatically.
- Low Actuation Forces
- UL Listed for Fire Doors
- Non-handed
- Models with Auxiliary Fire Latch eliminates the Bottom bolt and is UL Listed for Fire Doors.
- Finished Cover Plates permit finish changes in stock or at job site.
- Bolts have 3/4" throw with a 7/8" vertical adjustment.
- Meets ANSI A156.3 Type 27.
- Optional Dust Proof Strikes—DP1 or DP2, prevents dirt build-up assuring full engagement of bottom bolt.

FB61P Pair
Top and Bottom Bolts
FB61P combines FB61T constant latching top bolt with FB41B bottom bolt.

FB62
Top Bolt with Auxiliary Fire Latch
FB62 combination includes FB61T top bolt with Auxiliary Fire Latch. Provides a fire-listed application without a bottom bolt—meaning no floor prep for strike. The Auxiliary Fire Latch, mounted in the door edge, releases under extremely high temperatures to keep the doors in alignment during a fire.

- UL Listed 90 minutes on 0’0” x 0’0” Opening
- UL Listed 20 minutes on 8’0” x 8’0” Opening

FB61T
Top Bolt Only

Dimensions:
- Body Size: 1” Wide x 6-1/2’ Long x 2” Deep
- Guide Size: 1” Wide x 6’ Long x 1/8” Thick
- Strike Size: 10’16” Wide x 2-1/4’ Long x 1/16” Thick
- Rub Plate Size: 1-1/4” Wide x 1-11/16” Long x 3/64” Thick
- Auxiliary Fire Latch Size: 1” Wide x 1-3/4” Long x 3-1/4” Deep
Coordinators - Bar Coordinators and Filler Bars

COR Series Bar Coordinators

- The COR Series Coordinators are designed for use on pairs of doors when one door needs to close before the other.
- All COR units function easily. The active door lever, located nearest to the active stop, holds the active door open until the trigger mechanism is released by the closing of the inactive leaf.
- All COR units are equipped with an override feature which allows the active door to close under extreme pressure.
- All COR units are compatible with Flush Bolts.
- The COR Series is available in five sizes for variable door opening widths.
- The COR Series does not cover the entire length of the stop, so a filler bar can be provided to maintain architecturally clean lines.
- Made ASME/ANSI A156R1. Type 314.
- UL Listed for installation on labeled frame.
- Optional Filler Bar: FL20, FL32 and FL44, available to maintain clean line.
- Optional Mounting Brackets available: MB1, MB2, MB1F, MB1F, MB3F, MB1V, MB2, and MB3V for other stop applied hardware.

<table>
<thead>
<tr>
<th>Coordinator Number</th>
<th>Length of Channel</th>
<th>For Opening Widths</th>
</tr>
</thead>
<tbody>
<tr>
<td>COR22</td>
<td>32&quot;</td>
<td>34&quot; - 52&quot;</td>
</tr>
<tr>
<td>COR42</td>
<td>42&quot;</td>
<td>52&quot; - 72&quot;</td>
</tr>
<tr>
<td>COR62</td>
<td>62&quot;</td>
<td>62&quot; - 82&quot;</td>
</tr>
<tr>
<td>COR80</td>
<td>80&quot;</td>
<td>70&quot; - 100&quot;</td>
</tr>
<tr>
<td>COR122</td>
<td>122&quot;</td>
<td>84&quot; - 112&quot;</td>
</tr>
</tbody>
</table>

Dimensions: 1-5/8" Wide x 5/8" Deep x Ordered Length

FL Series Filler Bars

- The FL Filler Bars are available in three sizes for variable frame openings.
- FL Filler Bars are field sized to frame opening.

<table>
<thead>
<tr>
<th>Filler Bar Number</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>FL20</td>
<td>20&quot;</td>
</tr>
<tr>
<td>FL32</td>
<td>32&quot;</td>
</tr>
<tr>
<td>FL44</td>
<td>44&quot;</td>
</tr>
</tbody>
</table>

Dimensions: 1-5/8" Wide x 5/8" Deep x Ordered Length
Dust Proof Strikes

DP1 and DP2 Dust Proof Strikes

- Designed for use with the bottom bolt of all flush bolts.
- Spring-loaded plunger returns to floor or threshold level anytime flush bolt is retracted, eliminating need to clean standard floor strikes.
- Meets ANSI/BHMA 156.16, NL4011

**Dimensions:**
- DP1 Face Plate: 1-7/16” Diameter
- DP2 Face Plate: 1-5/8” Wide x 3-1/2” Long x 1/8” Thick
- DP1 and DP2 Body: 1-3/16” Diameter x 1-7/8” Deep
90 Series Surface Overhead Door Holders/Stops

90 Series Heavy-Duty

Glynn-Johnson 90 series holders and stops are the most rugged models available for heavy-duty applications. The channel is surface-mounted to the door, most often with set screws, and the jamb bracket is surface mounted to the jamb, requiring minimal door and frame preparation.

These versatile units can be used in conjunction with most surface-applied door closer. The provided templates allow for variable mounting positions, ranging from 85° to 110° Hold-Open/Stop angle. These templates are designed for installation in almost all types of doors, including doors with conventional butt-type hinges or specialty hinges.

Four Models:
- 90H Series Hold-Open Model
- 90S Series Stop-Only Model
- 90F Series Friction Hold-Open Model
- 90SE Series Special Stop-Only Model

Five Sizes:
- Simple
- Standardized
- Each model is available in five sizes

Three Options:
- J-Angle Jamb Bracket
- SHBM—Blade Stop Shim Kits
- SOC—Pin-in-Socket Security Screw Package

Unmatched Convenience:
- Non-Handed
- Improved Compatibility with Door Closers
- Single-Acting Doors
- Interior/Exterior Applications
- Detachable
- Easy to Install
- Improved Corrosion Resistance
- Function Conversion Kits Available

Materials and Finishes:
In 90 series Stainless Steel, Brass and Steel substrates, these models are available in the largest selection of finishes in the industry. Stainless Steel models offer the highest resistance to corrosion. Available in the following finishes:

<table>
<thead>
<tr>
<th>Finish</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>US3</td>
<td>Polished Brass</td>
</tr>
<tr>
<td>US4</td>
<td>Satin Brass</td>
</tr>
<tr>
<td>US10</td>
<td>Satin Bronze</td>
</tr>
<tr>
<td>US10B</td>
<td>Oil Rubbed Bronze</td>
</tr>
<tr>
<td>US32</td>
<td>Polished Stainless Steel</td>
</tr>
<tr>
<td>US32D</td>
<td>Satin Stainless Steel</td>
</tr>
<tr>
<td>SP4</td>
<td>Powder Coat Brass</td>
</tr>
<tr>
<td>SP10</td>
<td>Powder Coat Bronze</td>
</tr>
<tr>
<td>SP29</td>
<td>Powder Coat Aluminum</td>
</tr>
<tr>
<td>SP313</td>
<td>Powder Coat Dark Bronze</td>
</tr>
<tr>
<td>SPBLK</td>
<td>Powder Coat Black</td>
</tr>
<tr>
<td>6S2</td>
<td>Chrome-like Coating</td>
</tr>
</tbody>
</table>

Models

Glynn-Johnson 90 series door holders and stops provide long-lasting protection for doors, frames and hardware. All models incorporate a heavy-duty channel with a new design and offset jamb bracket. This unique design allows for simple field modification of functions, should user requirements change.

90H Series Hold-Open
(Suffix H) Hold-Open models provide a convenient method of holding the door open at a predetermined position for short or long periods of time, permitting an unobstructed traffic flow through the opening. The Hold-Open function can easily be turned on or off by simply rotating the serrated knob on the bottom of the channel. This knob engages the Hold-Open mechanism, allowing the door to be held open at a predetermined position ranging from 85° to 110°. When the knob is flipped over, it acts as a stop and shock absorber.

The tension on the Hold-Open mechanism can be adjusted using a Phillips screwdriver to offset air currents or other exterior conditions. The Hold-Open tension adjustment is located on the top of the slider in the channel.

90S Series Stop-Only
(Suffix S) When the Hold-Open function is not a requirement, Stop-Only models provide a reliable method of door control. Stop-Only models provide the same shock-absorbing capability as Hold-Open models. The Stop-Only model may be used on fire doors.

90F Series Friction Hold-Open
(Suffix F) Friction Hold-Open models are ideal for patient room doors, wardrobe and closet doors or similar applications where multiple Hold-Open positions are desired. The friction tension can be adjusted through the top of the channel using an Allen wrench. The friction tension adjustment is located on the top of the slider in the channel.
450 Series Surface Overhead Door Holders/Stops

450 Series Medium-Duty

Glynn-Johnson provides the most complete line of overhead holders and stops, offering solutions for the most demanding door control problems. These surface-mounted holders and stops offer the widest variety of functions, materials and finishes to fit all medium- to light-duty applications.

Glynn-Johnson 450 series holders and stops provide reliable and versatile surface-mounted overhead door control for all medium to light-duty applications. The visible components are available in a wide variety of architectural finishes to complement any design. The 450 series holders and stops are designed for installation in virtually all types of doors and frames including doors with conventional butt hinges, offset pivots, continuous hinges, swing clear hinges and many other specialty hinges. The templates provided allow the variable mounting positions, ranging from 85° - 110° of opening.

Four Models:
• 450H Series Hold-Open Model
• 450S Series Stop-Only Model
• 450F Series Friction Hold-Open Model
• 450SE Series Special Stop-Only Model

Five Sizes:
• Simple
• Standardized
• Each model is available in five sizes

Three Options:
• J-Angle Jamb Bracket
• SHM—Shim Kit
• SOC—Pin-in-Socket Security Screw Package

Unmatched Convenience:
• Non-Handed
• Improved Compatibility with Door Closers
• Improved Jamb Bracket Design
• Single Acting Doors
• Interior Applications
• Durable
• Easy to Install
• Improved Corrosion Resistance

Materials and Finishes:
In Brass, 300 series stainless steel or steel, these models offer the broadest range of finishes in the industry to complement any design. Brass and Stainless Steel offer the highest resistance to corrosion, while all these basic materials are suitable for normal interior use.

<table>
<thead>
<tr>
<th>Finish</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>US3</td>
<td>Polished Brass</td>
</tr>
<tr>
<td>US4</td>
<td>Satin Brass</td>
</tr>
<tr>
<td>US10</td>
<td>Satin Bronze</td>
</tr>
<tr>
<td>US10B</td>
<td>Oil Rubbed Bronze</td>
</tr>
<tr>
<td>US32</td>
<td>Polished Stainless Steel</td>
</tr>
<tr>
<td>US32D</td>
<td>Satin Stainless Steel</td>
</tr>
<tr>
<td>SP4</td>
<td>Powder Coat Brass</td>
</tr>
<tr>
<td>SP1D</td>
<td>Powder Coat Bronze</td>
</tr>
<tr>
<td>SP28</td>
<td>Powder Coat Aluminum</td>
</tr>
<tr>
<td>SP313</td>
<td>Powder Coat Dark Bronze</td>
</tr>
<tr>
<td>SP1LK</td>
<td>Powder Coat Black</td>
</tr>
<tr>
<td>652</td>
<td>Chrome-like Coating</td>
</tr>
</tbody>
</table>

Models

Glynn-Johnson 450 series holders and stops are designed for medium to light-duty applications. They're ideal for openings that are subject to normal activity, providing protection for the door, frame, hinges and surrounding walls or obstructions.

Designed for improved compatibility with most door closers, all models incorporate popular channel/scroll arm design and offset jamb brackets. The improved design makes it easier to change functions in the field, should user requirements change.

450H Series Hold-Open
(Suffix H) These models conveniently hold doors open at a predetermined position, permitting unobstructed traffic flow.

These models feature an adjustable automatic Hold-Open that is activated when the door is opened to a preset angle. The Hold-Open tension can be adjusted using an allen wrench through the end of the slider located in the channel at the top of the door. Each meets the 250,000 test cycles required for Grade 1 classification.

450S Series Stop-Only
(Suffix S) When the Hold-Open function is not required, the Stop-Only function provides the same effective door control without keeping the door held open. The Stop-Only model may be used on fire doors.

450F Series Friction Hold-Open
(Suffix F) Friction Hold-Open models provide an alternative holding method ideal for patient room doors, wardrobe or closet doors, or similar applications where multiple Hold-Open positions are desired. The friction tension can be adjusted using an allen wrench on the slider located in the channel at the top of the door.