

Overhead door holders/stops

Overhead door controls

The best door control device is one that operates overhead, with an arm functioning from the jamb to the top of the door. When the door stopping or hold-open does not exceed 110°, this device is by far the most efficient. The overhead holder and stop is out of the way, in contrast with floor or wall-mounted stops, which can be a stumbling hazard and are vulnerable to damage by accident and vandalism. Glynn-Johnson overhead holders and stops should always be used on doors furnished with door closers, as closers are not door stops and should not be expected to perform that function. Glynn-Johnson overhead stops are designed to protect door closers from violent openings.

Selecting degree of hold-open or stop

Glynn-Johnson overhead holders are designed to function effectively from 85° to 110°. When conditions permit, we recommend the minimum degree of hold-open be set at 95° to put the door knob, pull and panic hardware beyond the flow of traffic. When selecting the degree of hold-open for doors opening back-to-back, or against a wall, please note all Glynn-Johnson overhead holders have shock absorbers which 'give' approximately 5° – 7° beyond the hold-open or initial stop point. The concept of dead stop templating means that the degree of opening be set 5°–7° less than the point of required dead stop to accommodate the compression of the shock absorber.

Butt/offset pivots ^{1 2}				
Concealed series				
Size	100	410	500	Door opening
1	101	411		18" - 23"
2	102	412		23 1/16" - 27"
3	103	413		27 1/16" - 33"
4	104	414		33 1/16" - 39"
5	105	415		39 1/16" - 45"
6	106	-		45 1/16" - 54"
7			510	24" - 48"
8			550	24" - 48"

Door and frame reinforcement

Glynn-Johnson overhead holders and stops are fabricated from top quality brass, steel and stainless steel materials, and are designed to function even under constant heavy-duty abuse. Therefore, it is essential that all doors and frames be adequately reinforced to provide proper anchorage for the overhead stop. For metal doors and frames, we recommend reinforcement be a minimum of 3/16" thick, 1 1/2" wide and 12" long to effectively distribute the load. For wood doors and frames, we stress the importance of making them strong enough to provide proper anchorage for the door holders. For reinforcement details, refer to individual templates for each overhead stop.

Definition of "door opening"

Glynn-Johnson defines the terms "door opening" as the actual width of the door opening, from jamb to jamb, not just the width of the door. For example, if you have a 45" opening it would require a size 5 holder if the door is hung on butts or offset pivots. Regardless of the style or series of holders, Glynn-Johnson has standardized the size of holders and stops for all openings, combining the size in the model number. The third digit in all models designates the size. If any further information is required on sizing a holder or stop, contact customer care or your Allegion consultant.

Surface series				
70	79	81	90	450
-	-	-	-	451
702	792	-	902	452
703	793	813	903	453
704	794	814	904	454
705	795	815	905	455
706	796 ³	816	906	-

¹ Refer to individual catalog pages for further details and for information on center hung applications.
² These sizes not available for use with offset pivots.
³ 796 unit may be templated for use on doors wider than 54". Contact factory with specific information on door frame construction.

Installation methods

Door mounting hardware

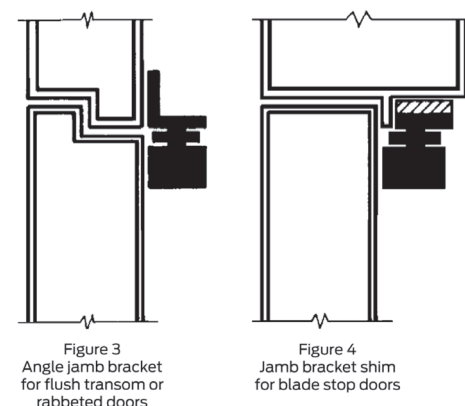
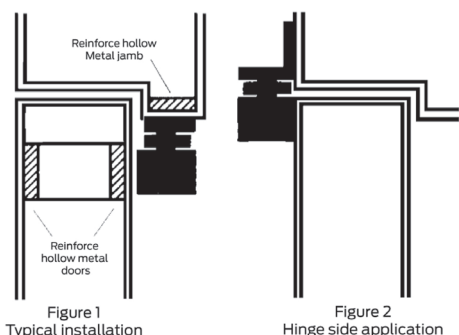
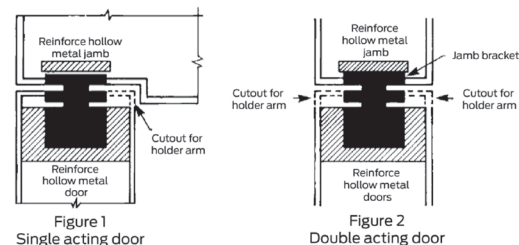
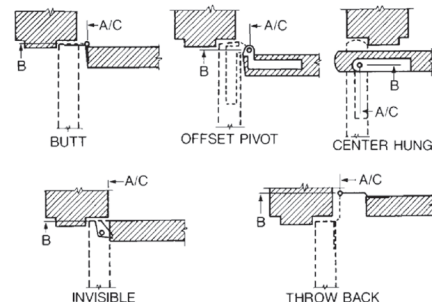
Mounting templates for all series holders show various types of hinging methods as well as various degrees of opening. To accommodate the overhead stop to the various mounting methods requires a simple shifting of dimensions A and B. To be assured that reinforcement and mortising are in the proper location, be sure to secure the proper templates from your Glynn-Johnson dealer. These templates include all necessary information for reinforcing door and frame, complete installation instructions for the various mounting methods and the degree of opening required.

Concealed

Concealed overhead door holder installation requires that the jamb bracket be mortised flush with the bottom of the jamb. The arm and channel must be mortised into the door so the arm is flush with top of the door. A cutout made for the arm on the stop side of single acting doors as in the sketch. Double acting doors require a cutout for the arm on both sides of the door as shown in the sketch. Hollow metal doors must be reinforced at the top of the door to provide necessary strength for the channel. Hollow metal frames must be reinforced in the jamb to provide strength for the jamb bracket. Strength of wood frame and door must be adequate for the holder specified. Accurate template drawings for each holder give complete reinforcement and mortising specifications. They are readily available from your Allegion consultant.

Surface type

Surface mounted overhead door holder installation does not require mortising of jamb or door. The jamb bracket is surface mounted on the stop of the frame. The channel is also surface mounted on the face of the door. Hollow metal doors and jambs must be reinforced to provide necessary strength for the holder specified. Strength of wood doors and jambs must also be adequate for the holder. A typical surface mounted installation is shown in Figure 1 where jamb bracket is fastened to the stop. Angle jamb brackets are available for hinge side mounting (Figure 2) and for use with rabbeted doors or flush transom installations (Figure 3). Jamb brackets with special shims for use on jambs with blade stops are also available (Figure 4). Advise stop height and the appropriate shim kit will be provided.



70 & 79 Series surface overhead door holders/stops



70 Series heavy-duty 79 Series extra heavy-duty

Glynn-Johnson offers a complete line of overhead holders and stops, providing solutions for the most complex door control problems. Glynn-Johnson 70 Series and 79 Series surface-mounted holders and stops are designed to meet the demands of high-traffic industrial applications. These units are simple to install.

Compatible with a variety of door closers, these models come with templates to 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:

- 70H Series hold-open model – heavy-duty
- 70S Series stop-only model – heavy-duty
- 79H Series hold-open model – extra heavy-duty
- 79S Series stop-only model – extra heavy-duty

Five sizes:

- Simple
- Standardized
- Each model is available in five sizes

Three options:

- J—Angle jamb bracket
- SB—Sex bolt mounting
- SOC—Pin-in-socket security screws

Unmatched convenience:

- Non-handed
- Single-acting doors
- Interior/exterior applications
- Durable
- Easy to install
- Improved corrosion resistance
- Function conversion kits available

Materials and finishes

Glynn-Johnson 70 and 79 Series models are constructed primarily of brass and 300 Series stainless steel substrates, with several components fabricated of steel treated to resist corrosion. Models in the 70 Series utilize a 1/2" diameter stainless steel bar, while the 79 Series uses a 3/4" stainless steel bar.

The bar is always provided in US32D. The spring, washer and nut are provided in a clear zinc finish. The door bracket, jamb bracket and hook (for hold-open units) are available in the following finishes: US3, US4, US10, US10B, US26, US26D, SP4, SP10, SP28, SP313 and SPBLK.

Models

Glynn-Johnson 70 and 79 Series holders and stops offer rugged durability and ease of installation. The surface-applied door and jamb brackets provide reliable door control, yet require minimal door and frame preparation.

Glynn-Johnson 70 Series hold-open and stop-only models provide heavy-duty door protection. The 79 Series models incorporate the basic characteristics of the 70 Series, but can protect extremely heavy or large doors subject to violent use or abusive conditions (i.e., vault doors, cell doors, oversized plant entry doors).

70H and 79H Series hold-open models

(Suffix H) Hold-open models in both series provide a selective hold-open function with easy-to-adjust tension. A simple 90° rotation of the roller mechanism disables the hold-open function, allowing the unit to serve as a shock-absorbing stop. The hold-open function provides 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.

Both series provide a durable hold-open mechanism that can be turned off, allowing the unit to function as a shock-absorbing stop. The hold-open tension is simply adjusted incrementally for increased or decreased holding power by turning the nut at the end of the bar. While both series are designed for demanding applications, the 79 Series is recommended for extremely heavy or wide doors subject to violent or abusive conditions.

70S and 79S Series stop-only models

(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.

Application information

UL classification

The 70 and 79 Series stop-only models are classified by Underwriters Laboratories (UL) as Miscellaneous fire door accessories. This classification applies to use on either hollow metal fire doors or wood fire doors. These units may be used on doors of any rating. As a reminder, the miscellaneous fire door accessories (GVUX) section is defined by UL as: "Miscellaneous fire door accessories are intended for installation with classified fire doors and/or listed fire door frame as identified in the individual listings. The accessories have been investigated to determine that when installed in accordance with the manufacturer's instructions, the accessories do not adversely affect the fire rating at the fire door and/or fire door frame."

Dead-stop templating

Dead-stop templating is recommended for applications where a wall or similar obstruction is placed at an opening angle of 110° or less (i.e., doors that open back-to-back). Dead-stop templating can be applied to hold-open and stop-only models. The dead-stop position is the point at which the shock-absorbing spring is fully compressed. Therefore, when dead-stop templating is used, the initial degree of opening will be 5° to 7° less than the dead-stop opening.

Example: If the holder is templated to a 100° dead stop, the door will hold open at an angle between 93° and 95° but no further than 100°.

Options

Suffix J (angle jamb bracket)

An angle jamb bracket is available to convert standard models to flush transom mounting. If ordered with unit add suffix J. If needed separately, order either 70J or 79J by finish needed.

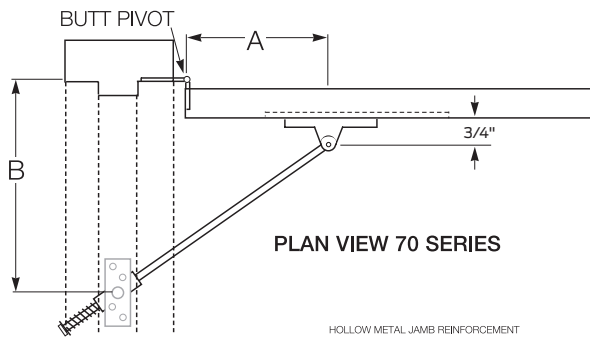
Suffix SB (sex bolt mounting)

A package of 4 sex bolts provided with the 79 Series and a package of 2 sex bolts provided with the 70 Series.

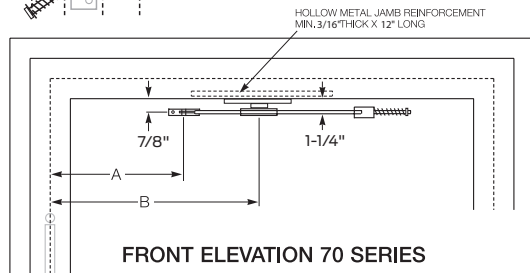
Suffix SOC (pin-in-socket security screw)

A screw package with pin-in-socket screw for mounting both the door bracket and jamb bracket is provided instead of the standard screw package.

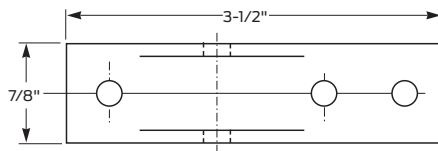
70 & 79 Series surface overhead door holders/stops



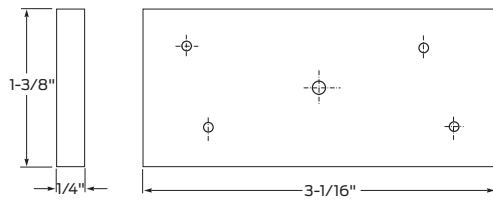
PLAN VIEW 70 SERIES



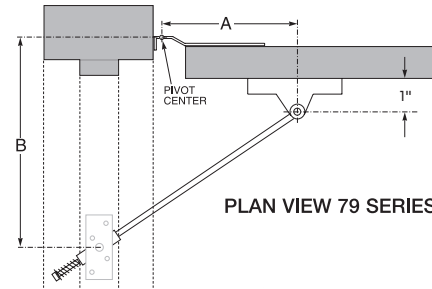
FRONT ELEVATION 70 SERIES



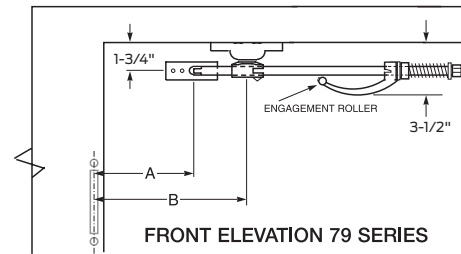
DOOR BRACKET 70 SERIES



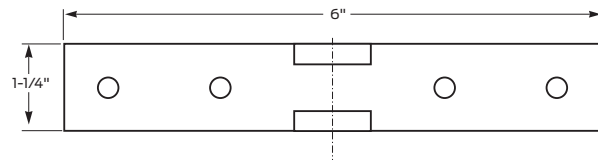
JAMB BRACKET 70 SERIES



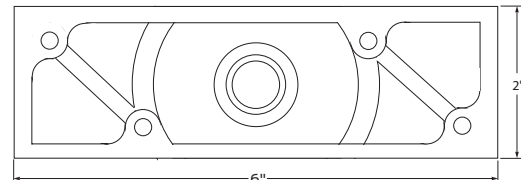
PLAN VIEW 79 SERIES



FRONT ELEVATION 79 SERIES



DOOR BRACKET 79 SERIES



JAMB BRACKET 79 SERIES

70 and 79 Series sizing chart

Butt/offset pivots

Size	Door opening	Stop only	Hold open
1	-	-	-
2	23 1/16" - 27"	702S/792S	702H/792H
3	27 1/16" - 33"	703S/793S	703H/793H
4	33 1/16" - 39"	704S/794S	704H/794H
5	39 1/16" - 45"	705S/795S	705H/795H
6	45 1/16" - 51"	706S/796S	706H/796H

Note: This chart illustrates the most common types of hinging and door opening sizes.
For unusual door details, contact Glynn-Johnson for availability.

Center hung

Door opening	Stop only	Hold open
-	-	-
27 1/16" - 33"	702S/792S	702H/792H
33 1/16" - 39"	703S/793S	703H/793H
39 1/16" - 45"	704S/794S	704H/794H
45 1/16" - 51"	705S/795S	705H/795H
51 1/16" - 59"	706S/796S	706H/796H

BHMA/ANSI, A156.8 & Fed. spec. cross reference

G-J model	BHMA	Fed. spec.
702H/706H	C08511	G-J 70
702S/706S	C08541	G-J 70
792H/796H	C08511	G-J 70
792S/796H	C08541	G-J 70

The template information on this page is for reference only and is not intended to serve as an installation template.
For complete dimensional information, refer to Glynn-Johnson template book.



How to order

		70		4		S	—	US3	—	SB-1
Overhead Series:										
	70	Heavy-duty								
	79	Extra heavy-duty								
Size (door opening using butt or offset pivots):										
	2	(23 1/16"–27")								
	3	(27 1/16"–33")								
	4	(33 1/16"–39")								
	5	(39 1/16"–45")								
	6	(45 1/16"–54")								
Function:										
	H	Hold-open								
	S	Stop-only								
Finishes:										
	US3	Polished brass								
	US4	Satin brass								
	US10	Satin bronze								
	US10B	Oil rubbed bronze								
	US26	Polished chrome								
	US26D	Satin chrome								
	SP4	Powder coat brass								
	SP10	Powder coat bronze								
	SP28	Powder coat aluminum								
	SP313	Powder coat dark bronze								
	SPBLK	Powder coat black								
Options:										
	J	Angle jamb bracket								
	SB-1	Sex bolts for door bracket, doors up to 2"								
	SB-2	Sex bolts for door bracket, doors from 2" to 3"								
	SOC	Pin-in-socket security screws								