

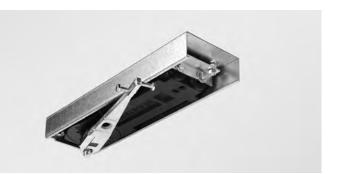
Overhead Concealed Door Closer

DORMA RTS88 OVERHEAD CONCEALED DOOR CLOSER

Invisible door control — Dependable and easy to install

Architects are often challenged to design buildings that are both beautiful and functional, down to the last detail. The DORMA RTS88 overhead concealed door closer offers the perfect solution for those who prefer the aesthetic advantages of a concealed door closer.

The RTS88 is designed to give lasting, dependable service where surface applied units and other types of closers are not suitable, or would interfere with the architectural design. The RTS88 may be easily installed in wood, aluminum, or hollow metal doors and frames, for single and double-acting doors. Contractors appreciate the RTS88 closer, because the majority of door and frame preparation is done prior to installation of the unit, resulting in less on-site machining. The RTS88 is also an excellent replacement closer for problem entrances encountering vandalism of surface applied closers.



The RTS88 Series overhead concealed door closer has a compact body size which fits into a $1-3/4" \times 4"$ header for aluminum frames and is also easily adaptable to wood and hollow metal frame configurations.

Openings fitted with the RTS88 are capable of 90° or 105° maximum opening door swing, trim conditions permitting. Sweep and latch closing speeds are controlled by two noncritical temperature compensating valves to insure constant closing speeds even under the most extreme temperature conditions. A built-in pressure relief valve protects the closer from abuse due to forced closing. A cushion at 90° or 105°, depending on the model selected, helps protect the door, frame, and adjoining structure.

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DORMA USA quality and environmental management systems in Reamstown, PA and Steeleville, IL are certified to ISO 9001:2008 and ISO 14001:2004.





Intertek

CONTENTS

NOTE: Always use an auxiliary stop in conjunction with RTS88 installations.

The RTS88 may be used on doors weighing up to a maximum of 250 lb (interior) or 200 lb (exterior), including all hardware. The closer may be used on exterior doors up to a maximum 3'-6" width and interior doors up to a maximum 4' width.

A complete line of accessories is available for wood, aluminum, and hollow metal applications, both single and double-acting center hung doors, and hinged or offset pivoted single-acting doors.

Other accessories include cover plates for wood, aluminum, and hollow metal frames, and extended spindles for increased clearances at the top of the door. Optional hold open units are available, effective at either 90° or 105°.

Specifications—DORMA RTS88 Series overhead concealed door closer for both single and double-acting doors. The RTS88 will consist of a steel cam, rollers, and springs housed in a compact cast iron body. Closers will be capable of being installed in minimum $1-3/4" \times 4"$ headers. RTS88 will have maximum door opening to 90° or 105°, trim conditions permitting. Sweep and latch speed will be controlled by two noncritical adjustment valves from 90° or 105° to closed. Built-in pressure relief valve will protect the closer from abuse caused by forced closing. A cushion at 90° or 105° will be provided to help

protect the door and frame. The RTS88 closer will be available with hold open at 90° or 105°, or without hold open. The RTS BFI and BFE are available with 105° hold open only. Optional extended spindle will be available in 3/16" integral length or 1-3/16" add-on length. Accessories will be available for single and double-acting doors as well as independently hung installations for wood, aluminum, and hollow metal doors and frames.

Technical Details

- Compact closer body is designed to fit into headers as small as $1-3/4" \times 4"$.
- Closer body is non-handed.
- One closer for both single-acting or double-acting doors.
- Accommodates maximum door weight of 250 lb (interior) or 200 lb (exterior), including all hardware.
- A pressure relief valve protects closer from damage caused by forced closing.
- An integral cushion limits door swing to 90° or 105°. An auxiliary stop must always be installed in conjunction with RTS88.
- A mechanical backcheck slows down the door prior to contact with the cushion.
- Closing speeds are controlled by two non-critical adjustment valves.
 Sweep area is from 105° to 20°. Latch area is from 20° to 0°.
- Thermostatic valves insure constant closing speeds under varying temperatures.
- The standard RTS88 is furnished without hold open. Optional single point mechanical hold open is available at 90° or 105°.
- The RTS88 BFI and RTS 88 BFE are available in 105° NHO and 105° HO only.



The RTS88 BFI meets the 5 lb maximum opening force requirement for interior 3'-0" wide center hung single or double-acting doors.

Both the RTS88 BFI and RTS88 BFE are suited for easy retrofit of Jackson, Rixson 608, and similar style closers. The RTS88 BFI and RTS88 BFE are available in 105° NHO and 105° HO only.

Cover Plate Finishes (Steel or Wood Frame) Standard Sprayed Finishes

Aluminum: 689. Bronze: 691 (Dull), 690 (Statuary), or 695 (Dark Duranodic). Gold: 696. Black: 693.

Optional Plated Finishes

Brass: 605 (Bright) or 606 (Satin). Bright Bronze: 611 (Bright), 612 (Satin), or 613 (Oxidized Satin Oil Rubbed). Nickel: 618 (Bright) or 619 (Satin). Chrome: 625 (Bright) or 626 (Satin).

Cover Plate Finishes (Aluminum Frame) Standard Sprayed Finishes

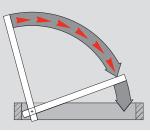
Aluminum: 689. Bronze: 695 (Dark Duranodic). Black: 693.

Warranty¹: For details, refer to **Limited Warranty Policy** in the current DORMA Price List.

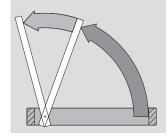
- Details of DORMA's Limited Warranty Policy may be found in the Limited Warranty Policy section of our current price list. Expressly excluded is warranty for improper installation or misuse of the product. Overtravel or shock loading of the cushion bumper in the RTS88 closer, at the limit of door travel, constitutes misuse and/or improper installation. Always use an auxiliary stop with RTS88 closer installations.
- The RTS88 offers a cast-iron body along with heavy-duty ball bearings at the spindle.
- Steel cam and roller assembly is coupled to dual steel pistons.
- Mounting brackets are available to install closer into aluminum or wood headers.
- Packages are available for side load, end load, and offset slide arm applications. For independently hung doors with 8812 slide arm, the maximum degree of opening and hold open angle may vary slightly.
- No. 8532 steel header mounting channel is specifically designed to install the RTS series closer into open-throat steel header sections. Normally, the mounting channel is installed in the header prior to shipment to the job site.
- No. 8521E add-on spindle extension is available for special applications where additional clearance is required between the closer body and the door.
- Cover plates are available for virtually any type header material.
- No. 8820J conversion bracket is available for replacement of existing overhead concealed closers with the RTS88.

Technical Details

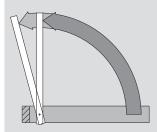
Dual Speed Closing—Sweep and latch closing speeds are controlled by two non-critical adjustment valves. Sweep area is from 105° to 20°. Latch area is from 20° to 0°.



Backcheck—A mechanical backcheck slows the door prior to contact with the cushion.



Cushion—An integral cushion is available at 90° or 105°. Always use an auxiliary stop in conjunction with RTS88 installations.



Comparison Chart RTS88 Series

DORMA RTS88 RTS88 RTS88 Side Load End Load Offset Slide Arm 101-BE, 101-BF 101-AP, 101-AE 201-A4 Jackson 3-5/8 101-GE, 101-PV 101-PE, 101-P 201-P (92) 101-U. 101-V 101-PA. 101-T 101-S Rixson 608SI 608EL 0608 700 0700 800 LCN 6030CP 6030CP 2030 Dor-O-Matic 12000, 22000 12000 22500 13000, 23000 13000 23500 1/4 14000, 24000 14000 24500 (6)

Since no products are exactly alike, the data on this chart represents our judgment of which products are most similar. Information has been obtained from trade sources. It is not guaranteed nor represented that any specific product exactly equals any other product.

Size Selector Chart RTS88 BFI/BFE

Door Width				
Interior	Exterior	Lightest Opening Force		
3'-0" ل	—	RTS88 BFI*		
—	3'-0"	RTS88 BFE*		

the RTS88 BFI meets 5 lb interior maximum opening force on 3'-0" wide center hung doors. The RTS88 BFE has the lightest exterior maximum opening force (8.5 lb) on 3'-0" wide center hung doors.

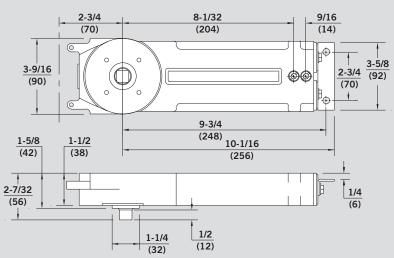
Available for 105° cushion only or cushion/hold open only.

REDUCED OPENING FORCE INSTALLATIONS CAUTION:

Manual door closers, including closers certified to meet ANSI/BHMA A156.4, when installed and adjusted to conform to ADA or other reduced opening force requirements, may not provide sufficient power to reliably close and latch a door.

Refer to catalog for Low Energy Operator to meet reduced opening force requirements without affecting closing power.

RTS88 Closer Dimensions



Size Selec	tor Chart	RTS88	Series
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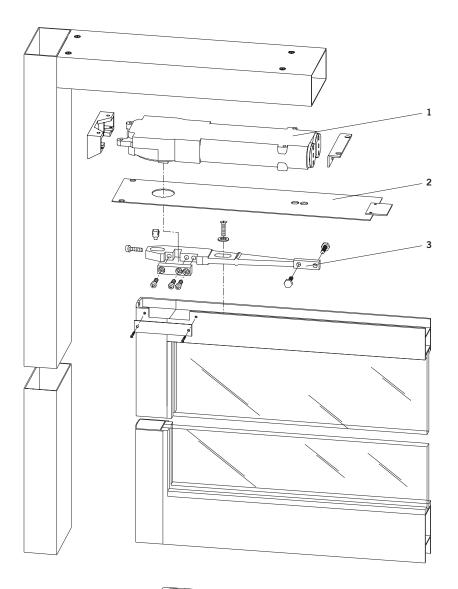
Maximum Door Width				
Interior	Exterior	Closer Size		
to 3'-0"	to 2'-6"	2*		
over 3'-0" to 3'-6"	over 2'-6" to 3'-0"	3		
over 3'-6" to 4'-0"	over 3'-0" to 3'-6"	4		

* Size (2) is available for 90° cushion or cushion/hold open only. For 105° applications, substitute the RTS88 BFE for the door ranges shown.

Note:

The listed door widths and recommended sizes are for average conditions. In the case of tall or heavy doors or where doors are subject to wind or draft conditions, the larger closer should be selected and used in conjunction with an auxiliary stop.

Aluminum Door and Frame





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Package RTS01/RTS02

Side load doors are installed by placing the door on the bottom pivot with the door in the closed position. The top of the door has a notch on the interior side which allows access to the clamping block.

Components: RTS01

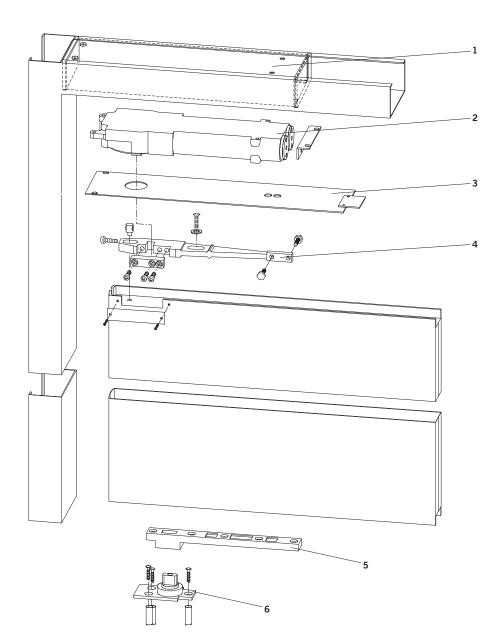
- 1. RTS Series closer
- 2. No. 8563 cover plate (optional)
- 3. No. 8831 top arm
- 4. No. 8572 threshold pivot

Components: RTS02

- 1. RTS Series closer
- 2. No. 8563 cover plate (optional)
- 3. No. 8831 top arm
- 5. No. 8570 floor pivot

SIDE LOAD - DOUBLE OR SINGLE-ACTING

Steel Door and Frame



Package RTS03

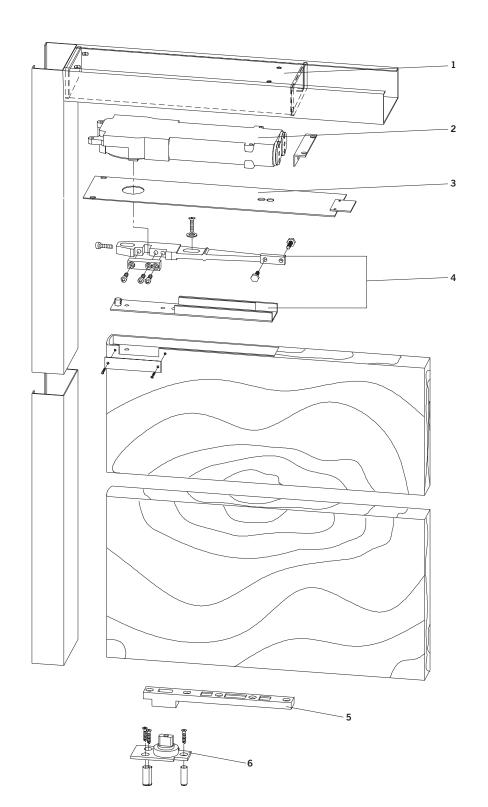
Package RTSO3 contains all of the components required to install an RTS closer in a steel header.

Components: RTS03

- 1. No. 8532 closer mounting channel
- 2. RTS Series closer
- 3. No. 8575 cover plate
- 4. No. 8831 top arm
- 5. No. 7421 bottom arm
- 6. No. 7471K floor bearing

SIDE LOAD - DOUBLE OR SINGLE-ACTING

Wood Door and Steel Frame



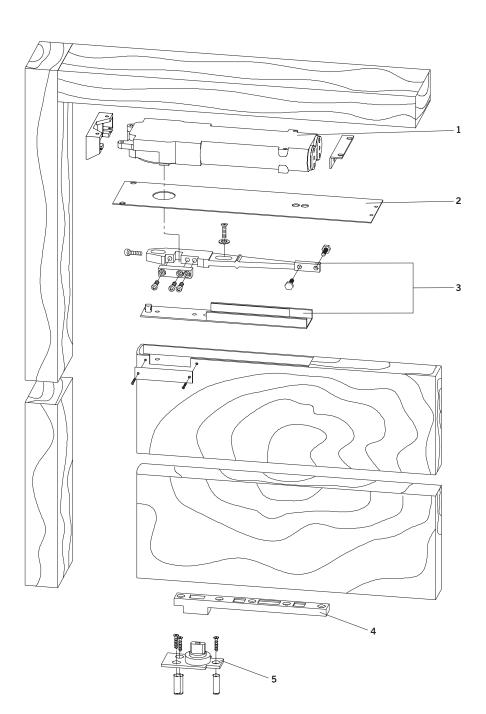
Package RTS04

Package RTS04 contains the No. 8832 side load arm with channel which was designed specifically for wood door installations.

Components: RTS04

- 1. 8532 closer mounting channel
- 2. RTS Series closer
- 3. No. 8575 cover plate
- 4. No. 8832 top arm with channel
- 5. No. 7421 bottom arm
- 6. No. 7471K floor bearing

Wood Door and Frame



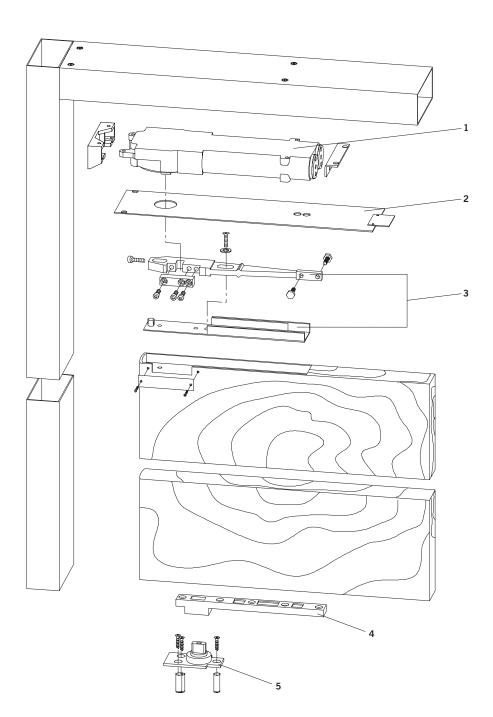
Package RTS05

Package RTS05 contains special brackets and screws for installing the RTS closer in wood headers.

Components: RTS05

- 1. RTS Series closer
- 2. No. 8561 cover plate
- 3. No. 8832 top arm with channel
- 4. No. 7421 bottom arm
- 5. No. 7471K floor bearing

Wood Door and Aluminum Frame



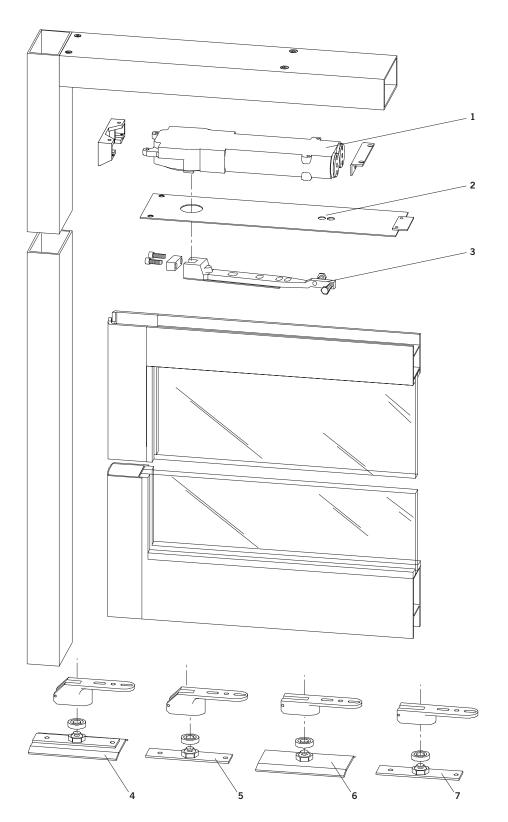
Package RTS06

Package RTS06 contains the No. 8832 side load arm with channel which was designed specifically for wood door installations.

Components: RTS06

- 1. RTS Series closer
- 2. No. 8563 cover plate (optional)
- 3. 8832 top arm with channel
- 4. No. 7421 bottom arm
- 5. No. 7471K floor bearing

Aluminum Door and Frame — 1" Top Rail



Package RTS07–RTS10

Packages RTS07 through RTS10 are designed for top door rails with 1st deep channels. The door is installed by rotating the closer spindle 90°, then sliding the door into place, perpendicular to the frame.

Components: RTS07

- 1. RTS Series closer
- 2. No. 8563 cover plate (optional)
- 3. No. 8835 top arm
- 4. No. 8857 tall threshold pivot

Components: RTS08

- 1. RTS Series closer
- 2. No. 8563 cover plate (optional)
- 3. No. 8835 top arm
- 5. No. 8853 tall floor pivot

Components: RTS09

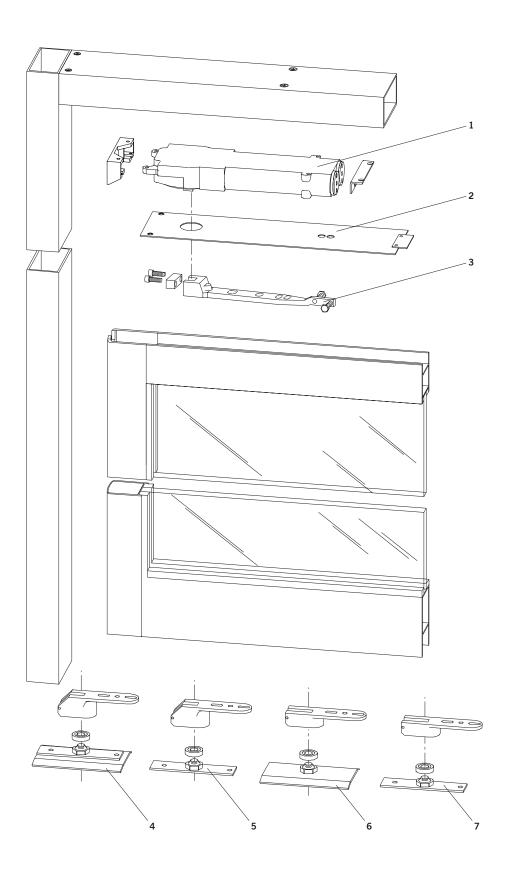
- 1. RTS Series closer
- 2. No. 8563 cover plate (optional)
- 3. No. 8835 top arm
- 6. No. 8855 short threshold pivot

Components: RTS10

- 1. RTS Series closer
- 2. No. 8563 cover plate (optional)
- 3. No. 8835 top arm
- 7. No. 8852 short floor pivot

Note:

Aluminum Door and Frame — 7/8" Top Rail



Package RTS11–RTS14

Packages RTS11 through RTS14 are designed for top door rails with 7/8" deep channels. The door is installed by rotating the closer spindle 90°, then sliding the door into place, perpendicular to the frame.

Components: RTS11

- 1. RTS Series closer
- 2. No. 8563 cover plate (optional)
- 3. No. 8836 top arm
- 4. No. 8857 tall threshold pivot

Components: RTS12

- 1. RTS Series closer
- 2. No. 8563 cover plate (optional)
- 3. No. 8836 top arm
- 5. No. 8853 tall floor pivot

Components: RTS13

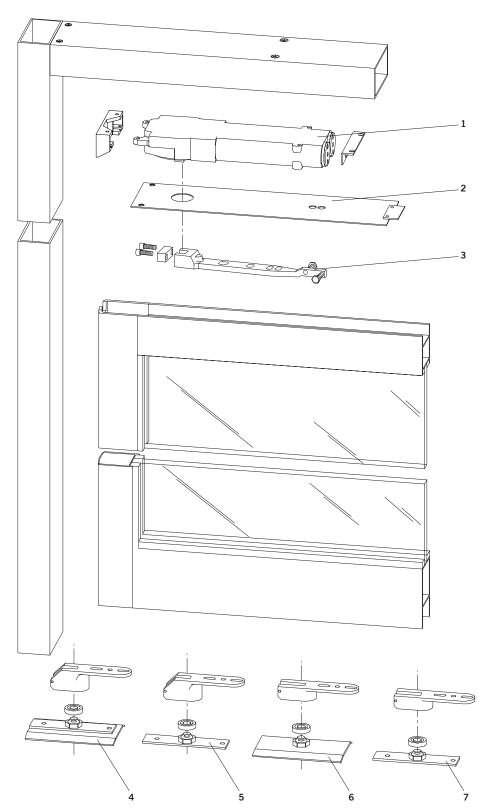
- 1. RTS Series closer
- 2. No. 8563 cover plate (optional)
- 3. No. 8836 top arm
- 6. No. 8855 short threshold pivot

Components: RTS14

- 1. RTS Series closer
- 2. No. 8563 cover plate (optional)
- 3. No. 8836 top arm
- 7. No. 8852 short floor pivot

Note:

Aluminum Door and Frame — 3/4" Top Rail



Package RTS15–RTS18

Packages RTS15 through RTS18 are designed for top door rails with 3/4" deep channels. The door is installed by rotating the closer spindle 90°, then sliding the door into place, perpendicular to the frame.

Components: RTS15

- 1. RTS Series closer
- 2. No. 8563 cover plate (optional)
- 3. No. 8838 top arm
- 4. No. 8857 tall threshold pivot

Components: RTS16

- 1. RTS Series closer
- 2. No. 8563 cover plate (optional)
- 3. No. 8838 top arm
- 5. No. 8853 tall floor pivot

Components: RTS17

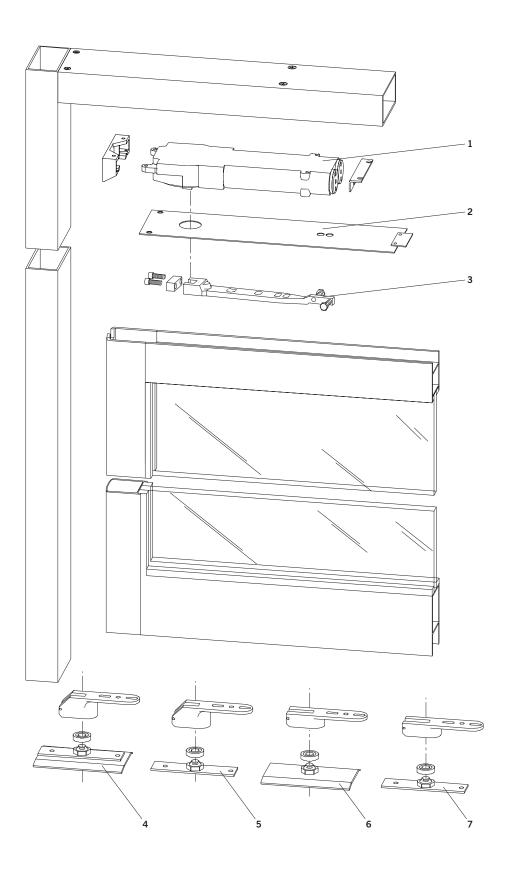
- 1. RTS Series closer
- 2. No. 8563 cover plate (optional)
- 3. No. 8838 top arm
- 6. No. 8855 short threshold pivot

Components: RTS18

- 1. RTS Series closer
- 2. No. 8563 cover plate (optional)
- 3. No. 8838 top arm
- 7. No. 8852 short floor pivot

Note:

Aluminum Door and Frame — 5/8" Top Rail



Package RTS19–RTS22

Packages RTS19 through RTS22 are designed for top door rails with 5/8" deep channels. The door is installed by rotating the closer spindle 90°, then sliding the door into place, perpendicular to the frame.

Components: RTS19

- 1. RTS Series closer
- 2. No. 8563 cover plate (optional)
- 3. No. 8837 top arm
- 4. No. 8857 tall threshold pivot

Components: RTS20

- 1. RTS Series closer
- 2. No. 8563 cover plate (optional)
- 3. No. 8837 top arm
- 5. No. 8853 tall floor pivot

Components: RTS21

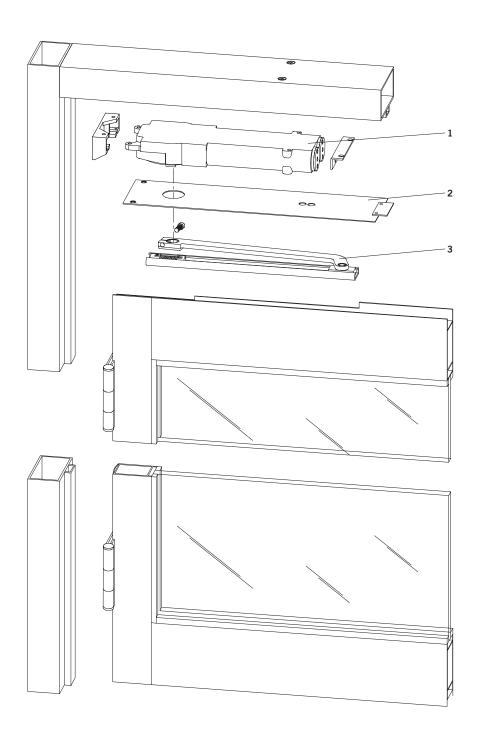
- 1. RTS Series closer
- 2. No. 8563 cover plate (optional)
- 3. No. 8837 top arm
- 6. No. 8855 short threshold pivot

Components: RTS22

- 1. RTS Series closer
- 2. No. 8563 cover plate (optional)
- 3. No. 8837 top arm
- 7. No. 8852 short floor pivot

Note:

Aluminum Door and Frame — Hinges



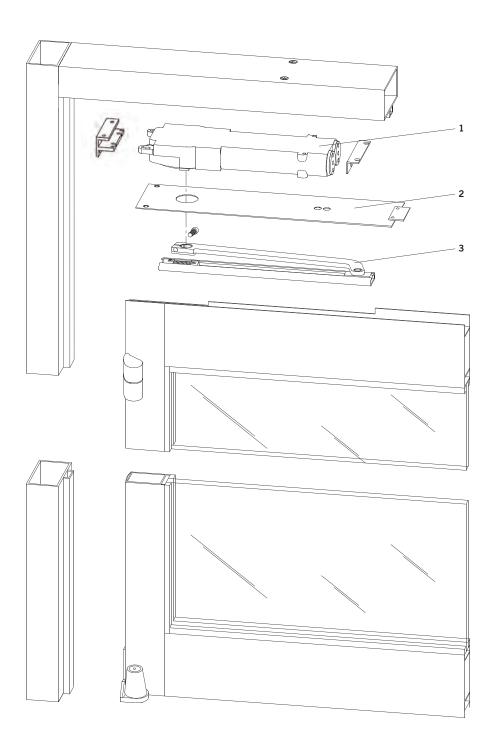
Package RTS25

Package RTS25 is templated specifically for aluminum doors hung on 4-1/2" wide hinges.

Components: RTS25

- 1. RTS Series closer
- 2. No. 8563 cover plate (optional)
- 3. No. 8812 slide arm

Aluminum Door and Frame — Aluminum Store Front Pivots



Package RTS26

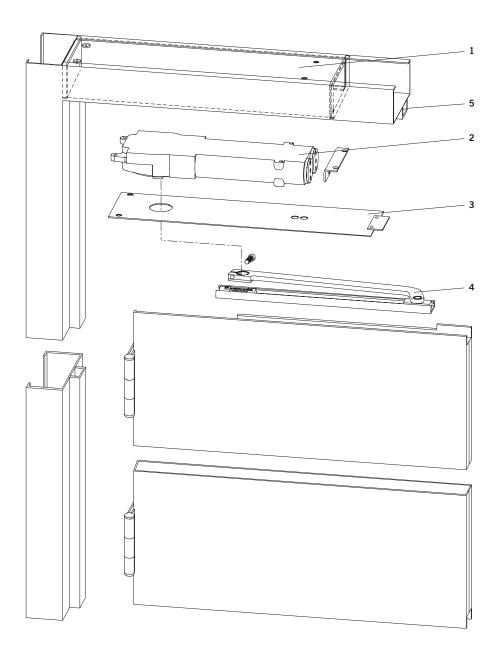
Package RTS26 contains 08079050 bracket required for proper templating when doors are hung on aluminum store front pivots.

Components: RTS26

- 1. RTS Series closer
- 2. No. 8563 cover plate (optional)
- 3. No. 8812 slide arm

Pivots shown are typical aluminum store front pivots.

Steel Door and Frame — Hinges/Pivots



Package RTS27

Package RTS27 contains the components necessary for installing the RTS Series closer in a steel header. Templating is provided for both 4-1/2" wide butt hinges and 3/4" offset pivots.

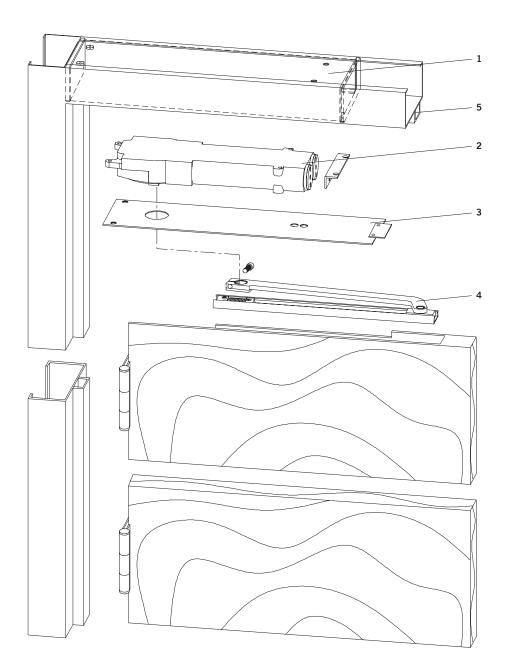
Components: RTS27

- 1. No. 8532 closer mounting channel
- 2. RTS Series closer
- 3. No. 8575 cover plate
- 4. No. 8812 slide arm
- 5. No. 8511 offset slide arm cover (optional)

When using DORMA pivots or pivots by others, use an intermediate pivot at the top of the door in place of a full mortise top pivot. A full mortise top pivot occupies the same space in the frame as the RTS88 closer. See DORMA LM Series pivots.

Note:

Wood Door and Steel Frame — Hinges/Pivots



Package RTS28

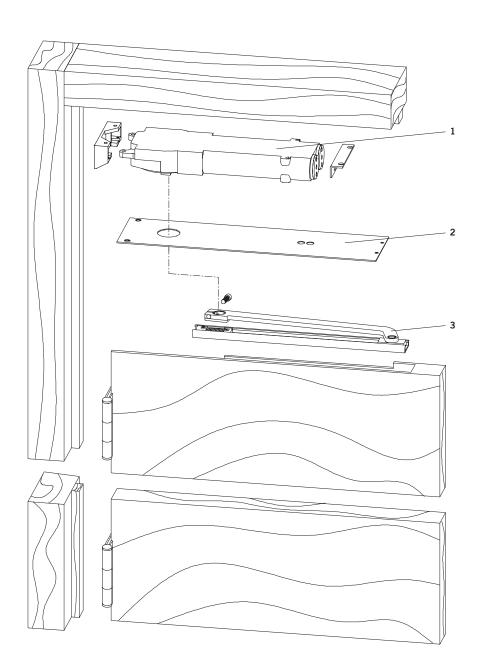
Package RTS28 contains the components necessary for installing the RTS Series closer in a steel header. Templating is provided for both 4-1/2" wide butt hinges and 3/4" offset pivots.

Components: RTS28

- 1. No. 8532 closer mounting channel
- 2. RTS Series closer
- 3. No. 8575 cover plate
- 4. No. 8812 slide arm
- 5. No. 8511 offset slide arm cover (optional)

When using DORMA pivots or pivots by others, use an intermediate pivot at the top of the door in place of a full mortise top pivot. A full mortise top pivot occupies the same space in the frame as the RTS88 closer. See DORMA LM Series pivots.

Wood Door and Frame — Hinges/Pivots



Package RTS29

Package RTS29 contains special brackets and screws for installing the RTS Series closer in wood headers. Templating is provided for both 4-1/2" wide butt hinges and 3/4" offset pivots.

Components: RTS29

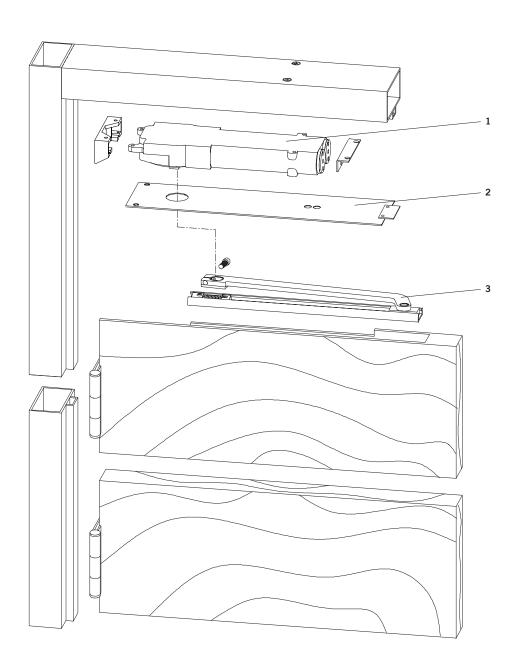
1. RTS Series closer

2. No. 8561 cover plate

3. No. 8812 slide arm

When using DORMA pivots or pivots by others, use an intermediate pivot at the top of the door in place of a full mortise top pivot. A full mortise top pivot occupies the same space in the frame as the RTS88 closer. See DORMA LM Series pivots.

Wood Door and Aluminum Frame — Hinges



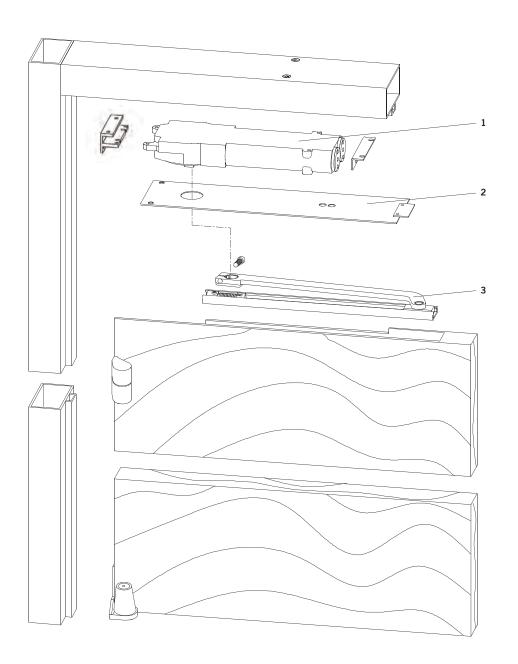
Package RTS30

Package RTS30 is templated specifically for doors hung on 4-1/2" wide hinges.

Components: RTS30

- 1. RTS Series closer
- 2. No. 8563 cover plate
- (optional)
- 3. No. 8812 slide arm

Wood Door and Aluminum Frame — Pivots



Package RTS31

Package RTS31 contains 08079050 bracket required for proper templating when doors are hung on 3/4" offset pivots.

Components: RTS31

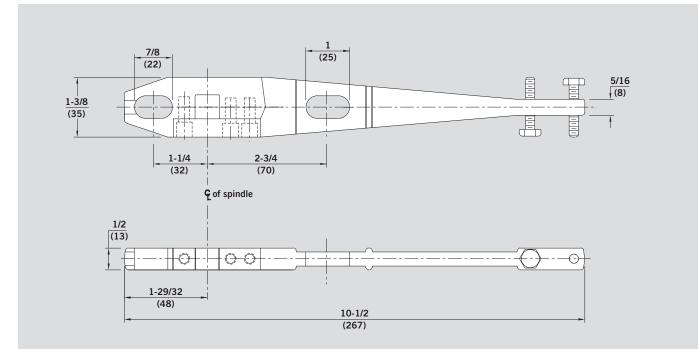
- 1. RTS Series closer
- 2. No. 8563 cover plate (optional)
- 3. No. 8812 slide arm

When using DORMA pivots or pivots by others, use an intermediate pivot at the top of the door in place of a full mortise top pivot. A full mortise top pivot occupies the same space in the frame as the RTS88 closer. See DORMA LM Series pivots.

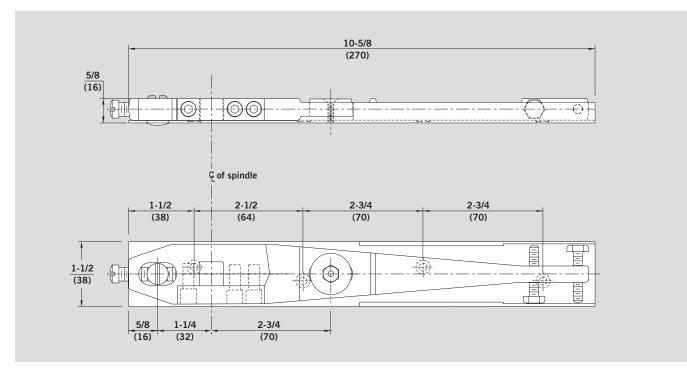
Note:

ACCESSORIES





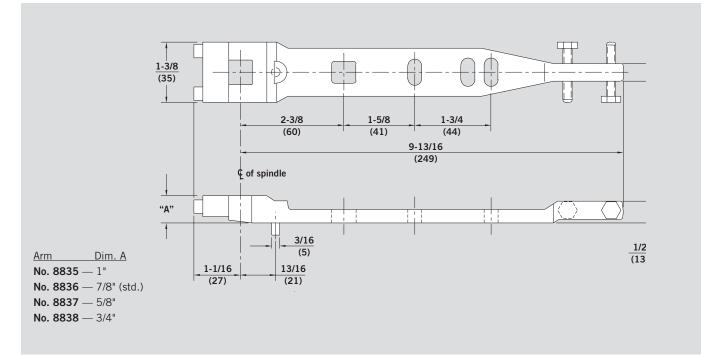
No. 8831 — Standard side load arm for aluminum or steel doors. Requires a minimum 1/2" top door rail channel depth.



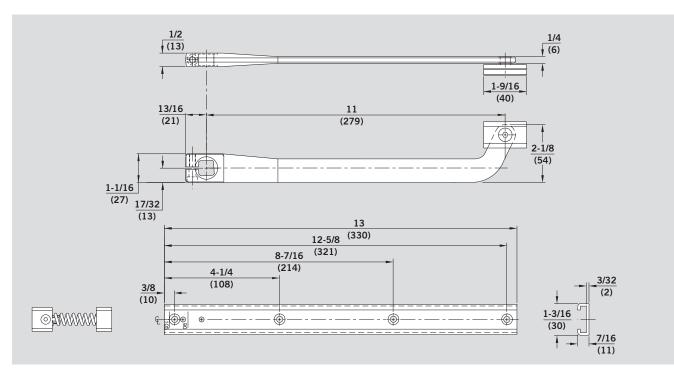
No. 8832 — Side load arm with channel for wood doors. Requires a 5/8" mortise depth.

ACCESSORIES

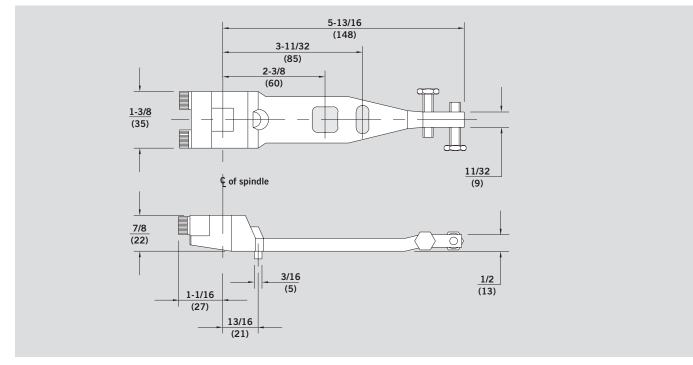
Arms



End load arms for aluminum or tempered glass doors. Specify arm as required by top door rail channel depth.

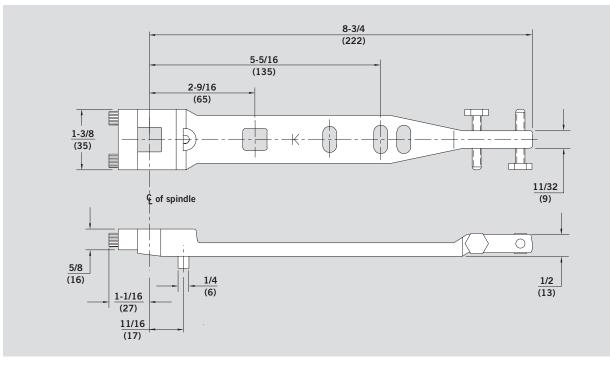


No. 8812 — Offset slide arm and channel for aluminum, steel, or wood doors, hung on 3/4" offset pivots or 4-1/2" wide butt hinges. Requires a minimum 3/4" top door rail channel depth.



Arms

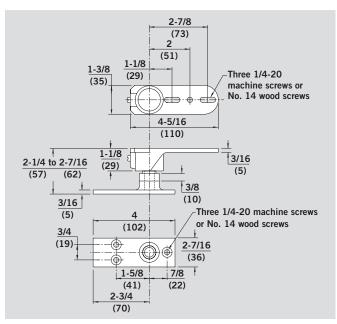
No. 8836S — End load arm specifically designed for tempered glass doors with a short top rail (patch fitting). Requires a minimum 7/8" top door rail channel depth.



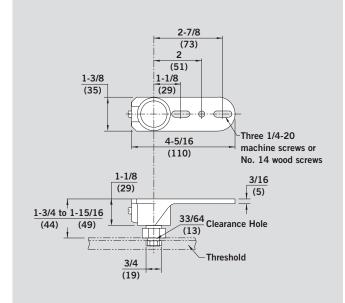
No. 8837K — End load arm specifically designed to match templating of Kawneer end load arm.

ACCESSORIES

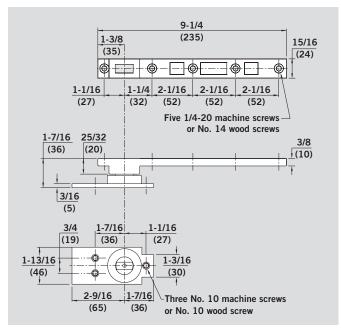
Pivots



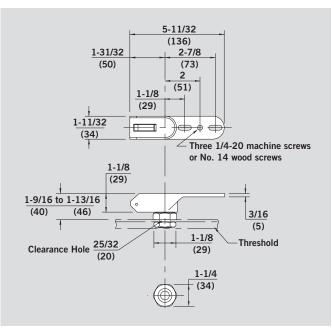
No. 8570 — Adjustable side load floor pivot set for bottom door rail channel depth of 1-15/16". Base can be shortened for 1-9/16" bottom door rail channel depth. Bottom door clearance is adjustable from 5/16" to 1/2". Maximum weight capacity is 200 lb.



No. 8572 — Adjustable side load threshold pivot set for bottom door rail channel depth of 1-9/16". Bottom door clearance is adjustable from 3/16" to 3/8". Maximum weight capacity is 200 lb.

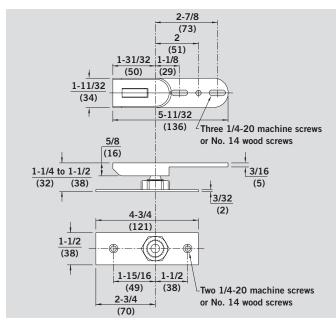


No. 7471K/7421 — Side load floor pivot set. Requires a 1-1/8" mortise depth. Provides a bottom door clearance of 5/16". Weight capacity when used with RTS Series closer is 250 lb. Recommended for wood doors or any door weighing in excess of 200 lb.

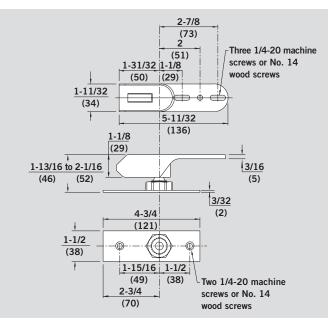


No. 8856 — Adjustable end load threshold pivot set for bottom door rail channel depth of 1-3/8". Bottom door clearance is adjustable from 3/16" to 7/16". Maximum weight capacity is 200 lb.

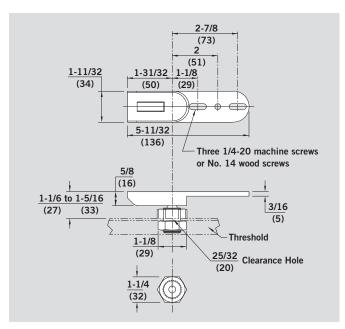
Pivots



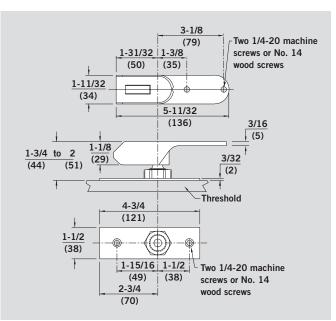
No. 8852 — Adjustable end load floor pivot set for bottom door rail channel depth of 7/8". Bottom door clearance is adjustable from 3/8" to 5/8". Maximum weight capacity is 200 lb.



No. 8853 — Adjustable end load floor pivot set for bottom door rail channel depth of 1-9/16". Bottom door clearance is adjustable from 1/4" to 1/2". Maximum weight capacity is 200 lb.



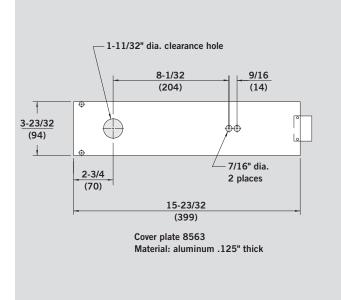
No. 8855 — Adjustable end load threshold pivot set for bottom door rail channel depth of 7/8". Bottom door clearance is adjustable from 3/16" to 7/16". Maximum weight capacity is 200 lb.

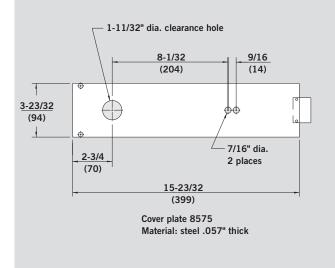


No. 8857 — Adjustable end load threshold pivot set for bottom door channel depth of 1-9/16". Bottom door clearance is adjustable from 3/16" to 7/16". Maximum weight capacity is 200 lb.

ACCESSORIES

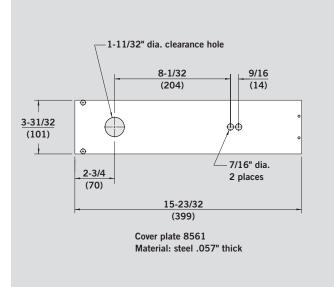
Cover Plates





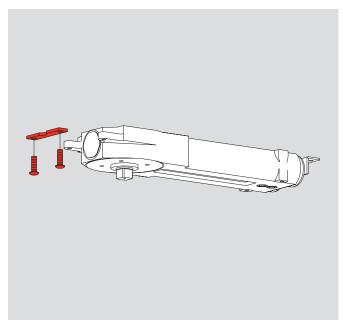
No. 8563 — Cover plate for RTS Series closer when installed in aluminum header.

No. 8575 — Cover plate for RTS Series closer when installed in steel header.



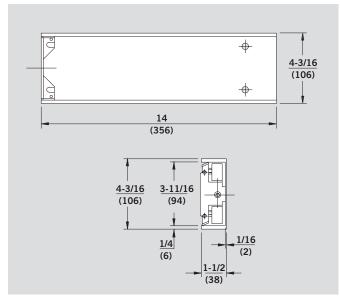
No. 8561 — Cover plate for RTS Series closer when installed in wood header.

Miscellaneous Accessories

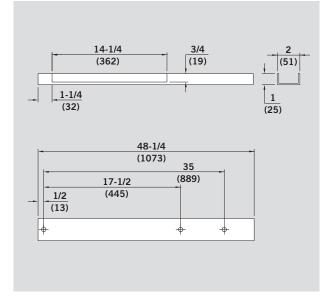


No. 8820J — Conversion bracket for replacement of existing overhead concealed closers. Utilizes existing side jamb mounting bracket to anchor RTS Series closer.

No. 8521E — Add-on spindle extension increases distance between closer and door by 1-3/16" (30 mm).



No. 8532 — Steel header mounting channel. Provides reinforcement required to install the RTS Series closer in an open-throat header.



No. 8511 — Offset slide arm cover. Conceals No. 8812 slide arm when door is in the closed position. The extruded aluminum cover is 48-1/4" long and is field-sized as required. Specify hand.



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