



Overhead Concealed
Door Closer

DORMA RTS88

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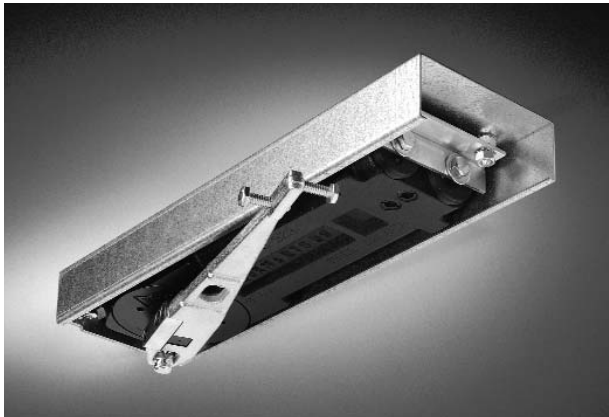
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ISO 9001:2000



The quality management system at the Reamstown, PA facility is certified to ISO-9001.*

*DORMA Door Controls Inc., dba: DORMA Architectural Hardware



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. It can 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.

The RTS88 Series overhead concealed door closer has a compact body size which fits into a 1-3/4" x 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 positive stop at 90° or 105°, depending on the model selected, combined with a mechanical backcheck, hinder the forceful or abusive opening of the door and help protect the door, frame, and adjoining structure.

Always use an auxiliary stop in conjunction with RTS88 installations.

The RTS88 is capable of accommodating doors weighing up to a maximum of 250 pounds. The closer can handle 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" x 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 mechanical backcheck combined with a positive stop at 90° or 105° will be provided to 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.

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:

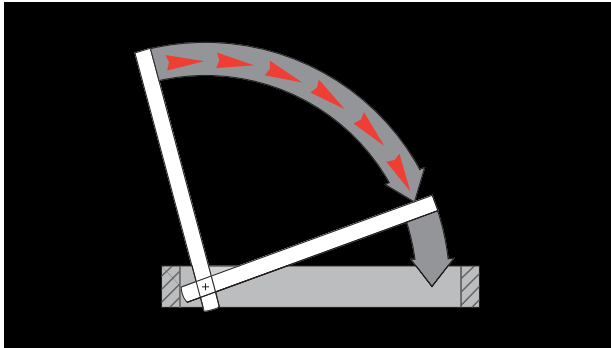
Brass: 605 (Bright) or 606 (Satin).
Bright Bronze: 611 (Bright), 612 (Satin), or 613 (Oxidized Satin Oil Rubbed).
Nickel: 618 (Bright) or 619 (Satin).
Chrome: 625 (Bright) or 626 (Satin).

Cover Plate Finishes (Aluminum Frame):

Standard Sprayed Finishes:

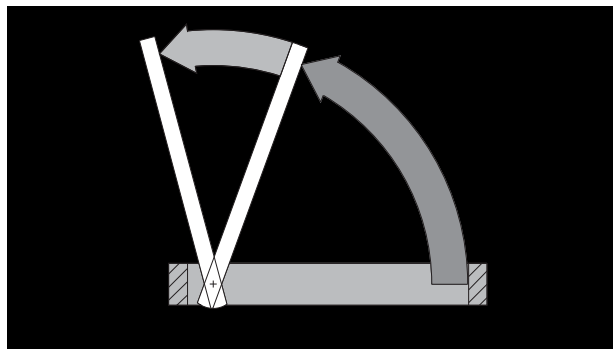
Aluminum: 689.
Bronze: 695 (Dark Duranodic).
Black: 693.

Warranty: 10 Years.



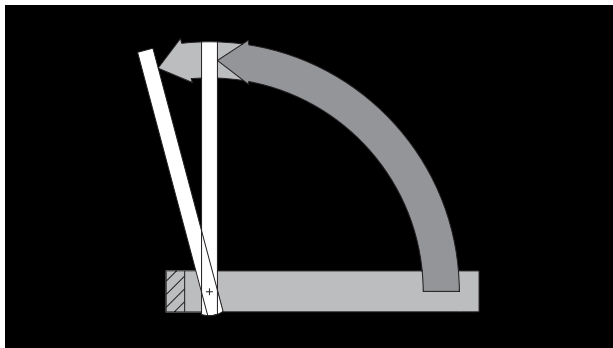
Dual Speed Closing

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 down the door prior to contact with the positive stop.



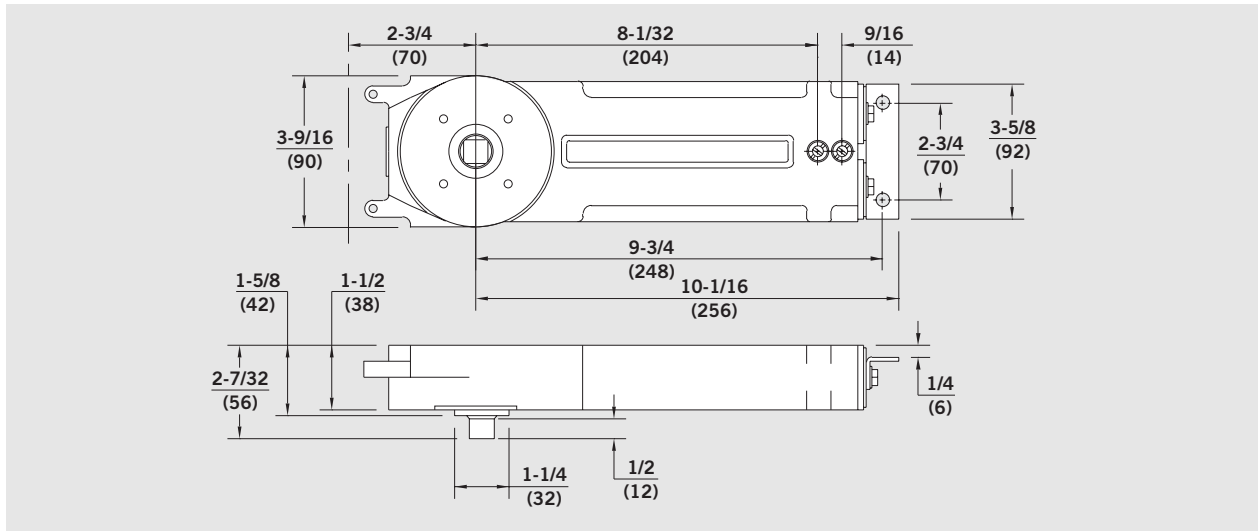
Positive Stop

An integral positive stop is available at 90° or 105°.

The RTS88 BFI and RTS88 BFE will meet barrier-free requirements on 3'-0" wide center hung single or double-acting doors. The RTS88 BFI meets the 5 lb maximum opening force requirement for interior barrier-free openings. The RTS88 BFE meets the 8.5 lb maximum opening force requirement for exterior barrier-free openings. They 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.

Technical Details

- Compact closer body is designed to fit into headers as small as 1-3/4" x 4".
- Closer body is non-handed.
- One closer for both single-acting or double-acting doors.
- Accommodates a maximum door weight of 250 lb.
- A pressure relief valve protects closer from damage caused by forced closing.
- An integral positive stop limits door swing to 90° or 105°. An auxiliary stop should always be installed in conjunction with RTS88.
- A mechanical backcheck slows down the door prior to contact with the positive stop.
- 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 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.
- The RTS88 is manufactured to conform with the requirements of ANSI A156.4.





Size Selector Chart RTS88 Series


Maximum Door Width		Closer Size
Interior	Exterior	
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° deadstop or deadstop/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.

Size Selector Chart RTS88 BFI/BFE

Door Width		Barrier-Free Closer
Interior	Exterior	
3'-0" 	—	RTS88 BFI *
—	3'-0" 	RTS88 BFE *

 - Meets 5 lb interior or 8.5 lb exterior maximum opening force on 3'-0" wide center hung doors.

* Available for 105° dead stop or dead stop/hold open only.

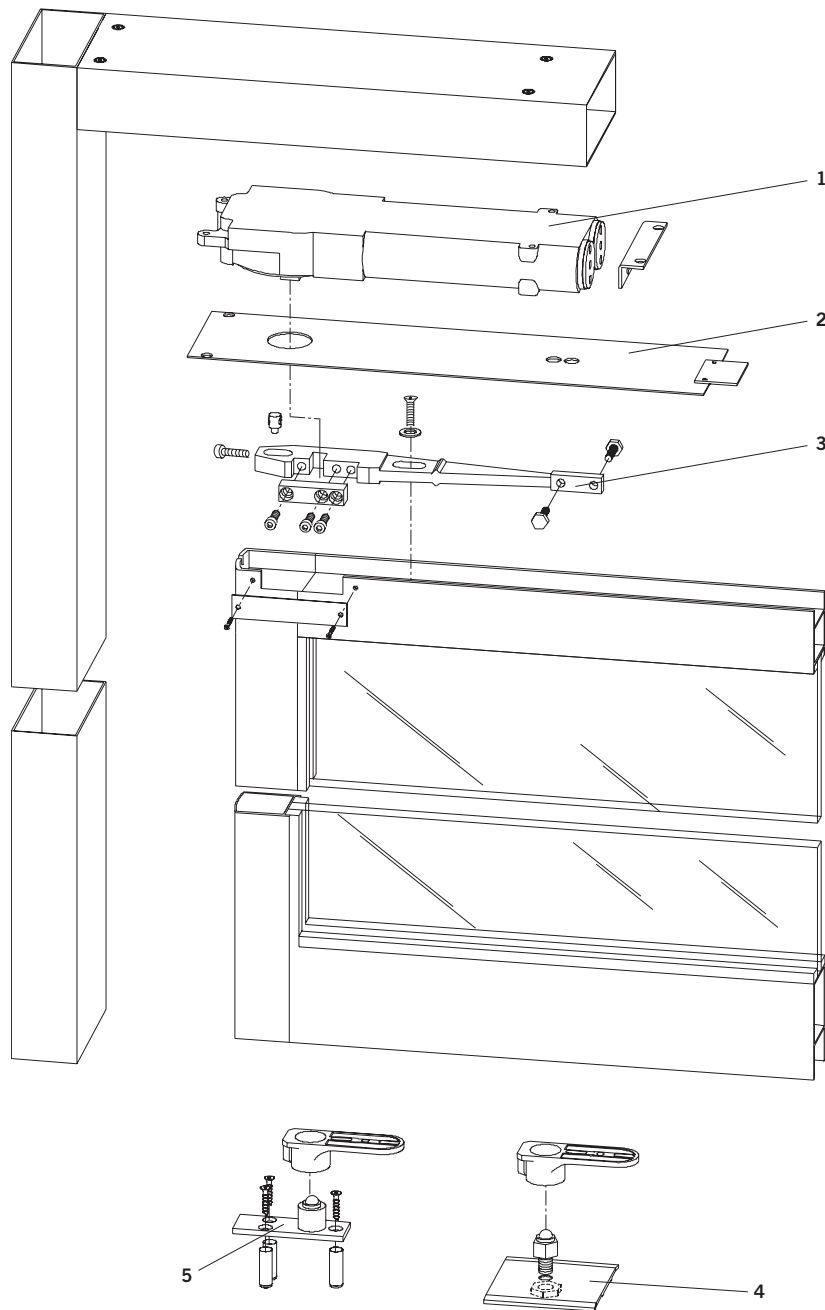
Note: Although DORMA RTS88 BFI/BFE Series closers comply with barrier-free opening force restrictions, adequate control can not be guaranteed during compliance of these restrictions.

Comparison Chart RTS88 Series

DORMA	JACKSON	RIXSON	LCN	Dor-O-Matic
RTS88 Side Load	101-BE	608SL	6030CP	12000, 22000 13000, 23000 14000, 24000
	101-BF			
	101-GE			
	101-PV			
	101-U			
	101-V			
	101-S			
RTS88 End Load	101-AP	608EL	6030CP	12000 13000 14000
	101-AE			
	101-PE			
	101-P			
	101-PA			
	101-T			
RTS88 Offset Slide Arm	201-A4	0608	2030	22500
	201-P	0700		23500 24500

Since no products are exactly alike, the data on this chart represents our judgement 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.

Side Load — Double or Single-Acting Aluminum Door and Frame



Package RTS-01/RTS-02

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: RTS-01

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

Components: RTS-02

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

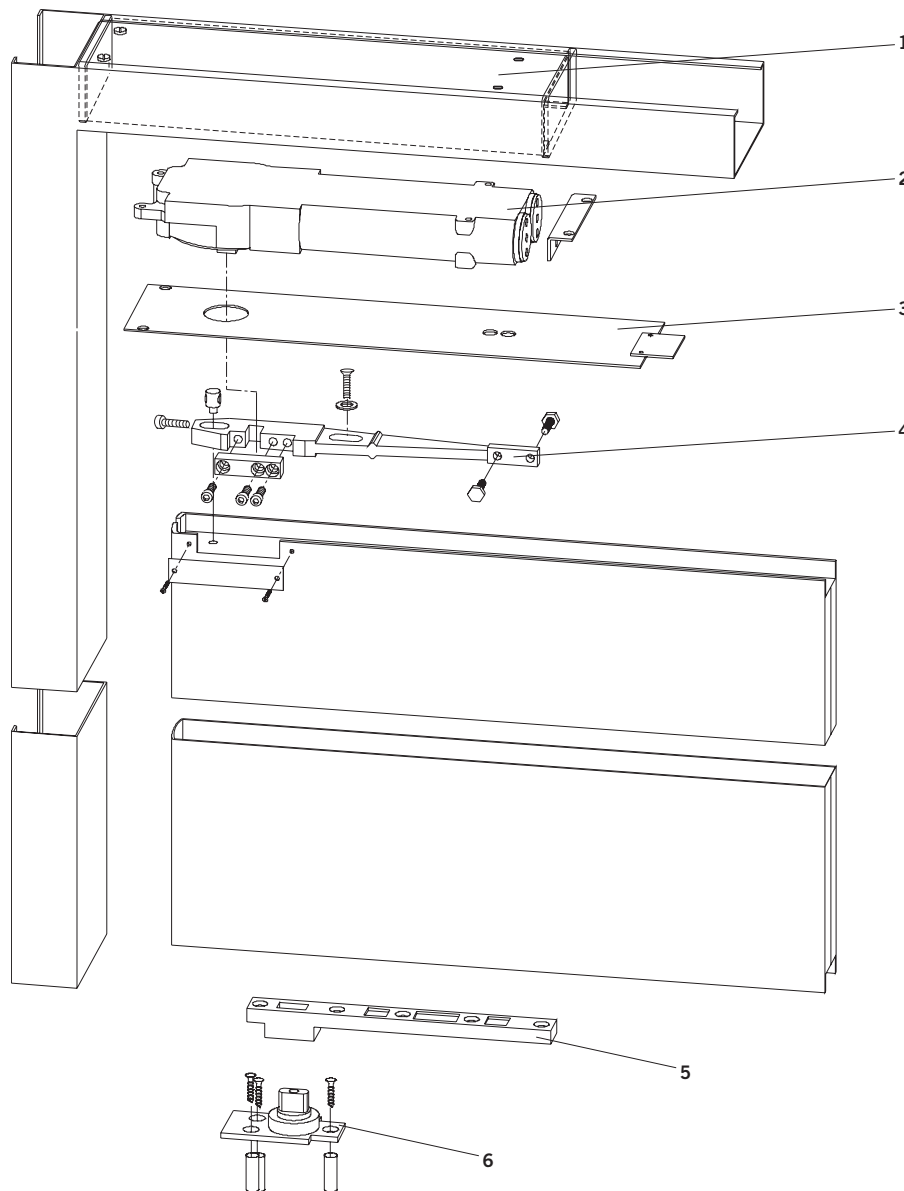
Side Load — Double or Single-Acting Steel Door and Frame

Package RTS-03

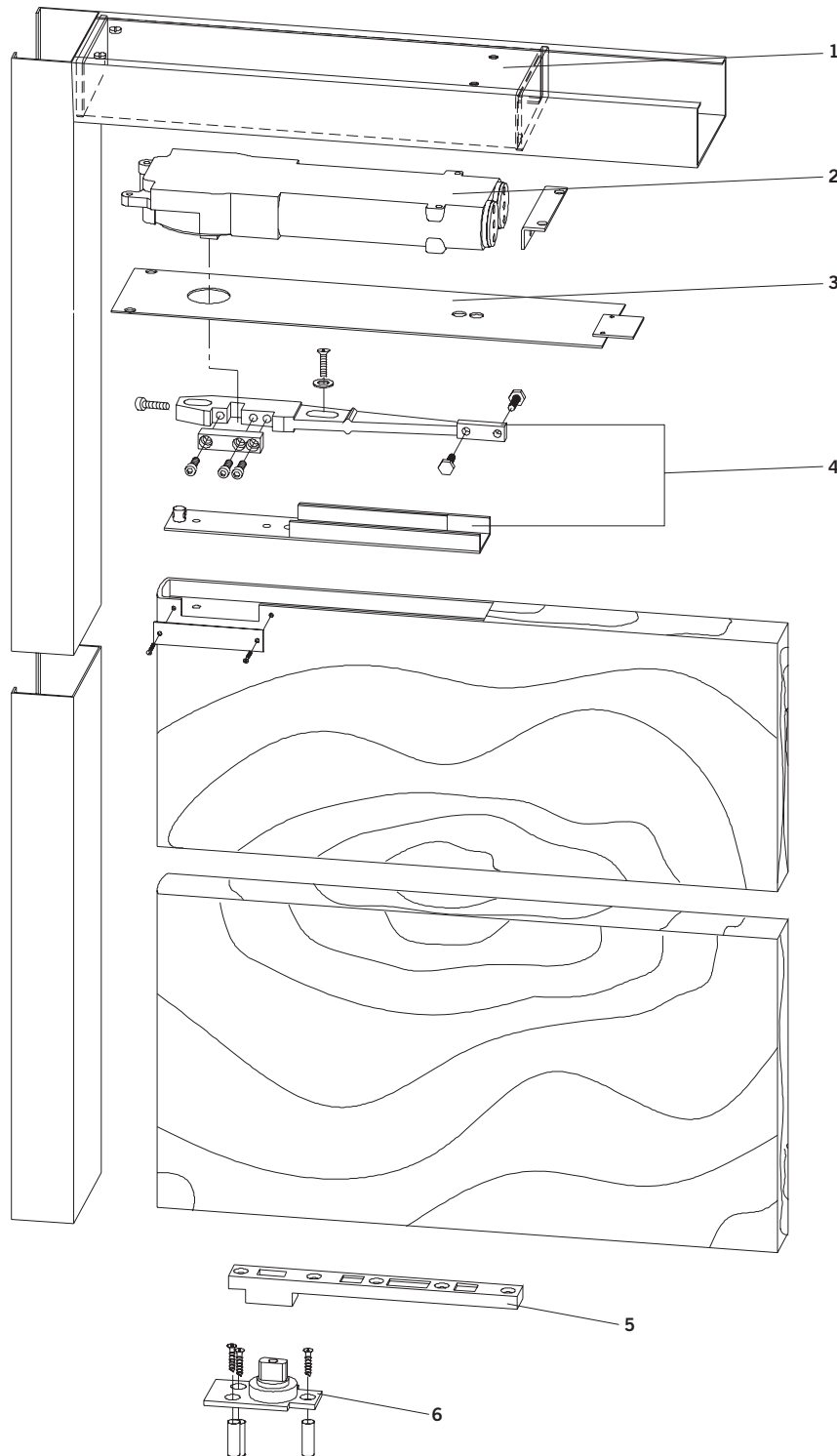
Package RTS-03 contains all of the components required to install an RTS closer in a steel header.

Components: RTS-03

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 RTS-04

Package RTS-04 contains the No. 8832 side load arm with channel which was designed specifically for wood door installations.

Components: RTS-04

- 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

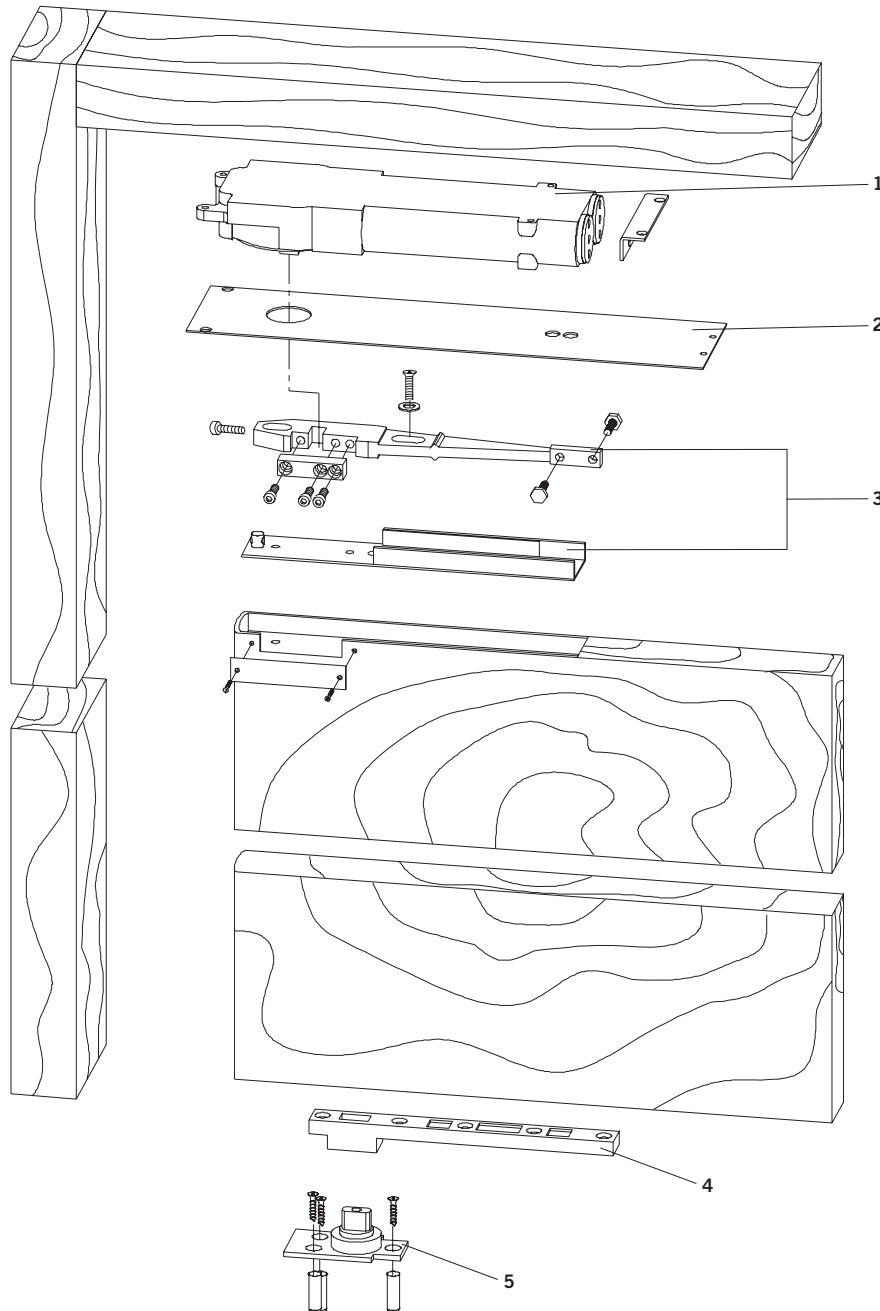
Side Load — Double or Single-Acting Wood Door and Frame

Package RTS-05

Package RTS-05 contains special brackets and screws for installing the RTS closer in wood headers.

Components: RTS-05

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



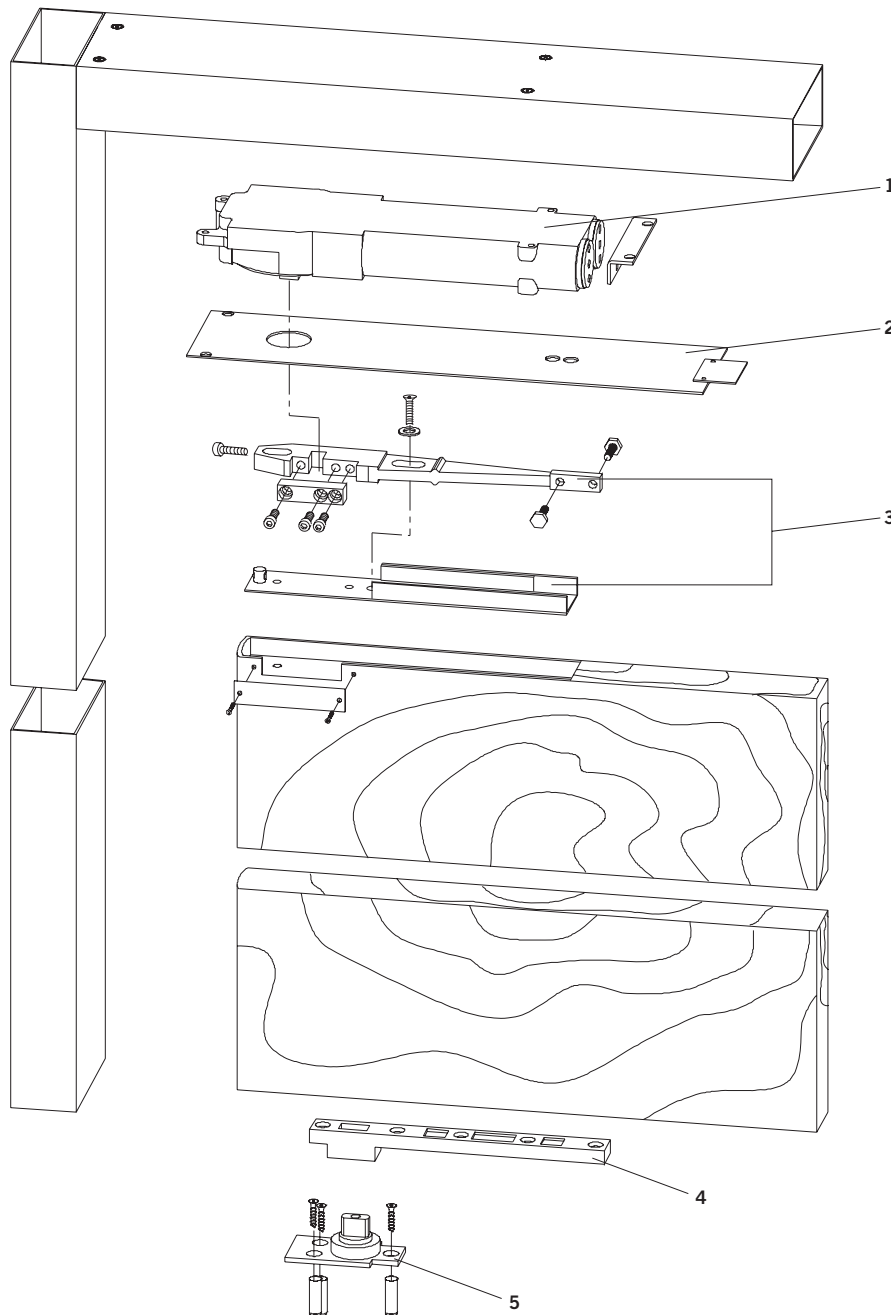
Side Load — Double or Single-Acting Wood Door and Aluminum Frame

Package RTS-06

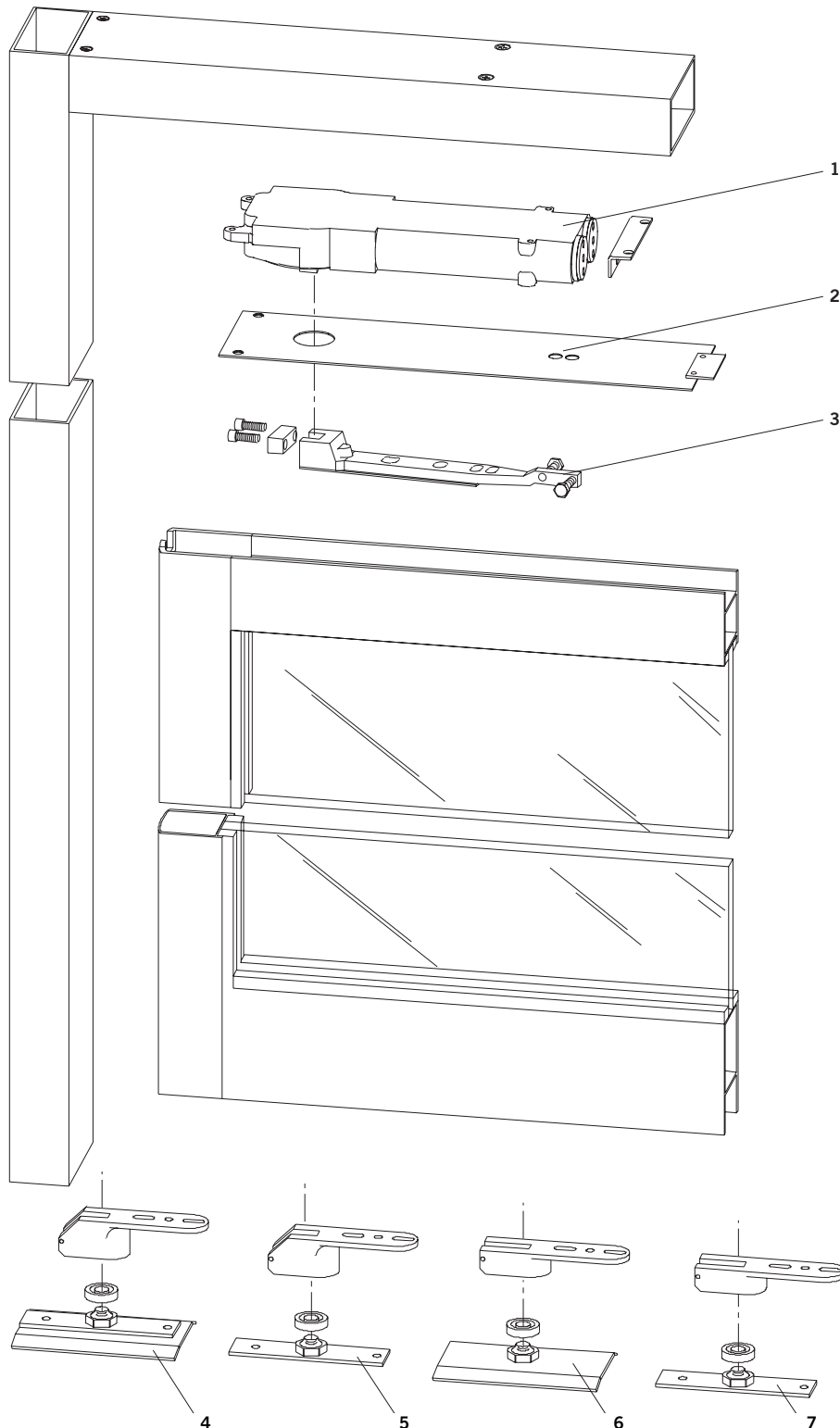
Package RTS-06 contains the No. 8832 side load arm with channel which was designed specifically for wood door installations.

Components: RTS-06

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



End Load — Double or Single-Acting Aluminum Door and Frame — 1" Top Rail



Packages RTS-07–RTS-10

Packages RTS-07 through RTS-10 are designed for top door rails with 1" deep channels. The door is installed by rotating the closer spindle 90°, then sliding the door into place, perpendicular to the frame.

Components: RTS-07

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

Components: RTS-08

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

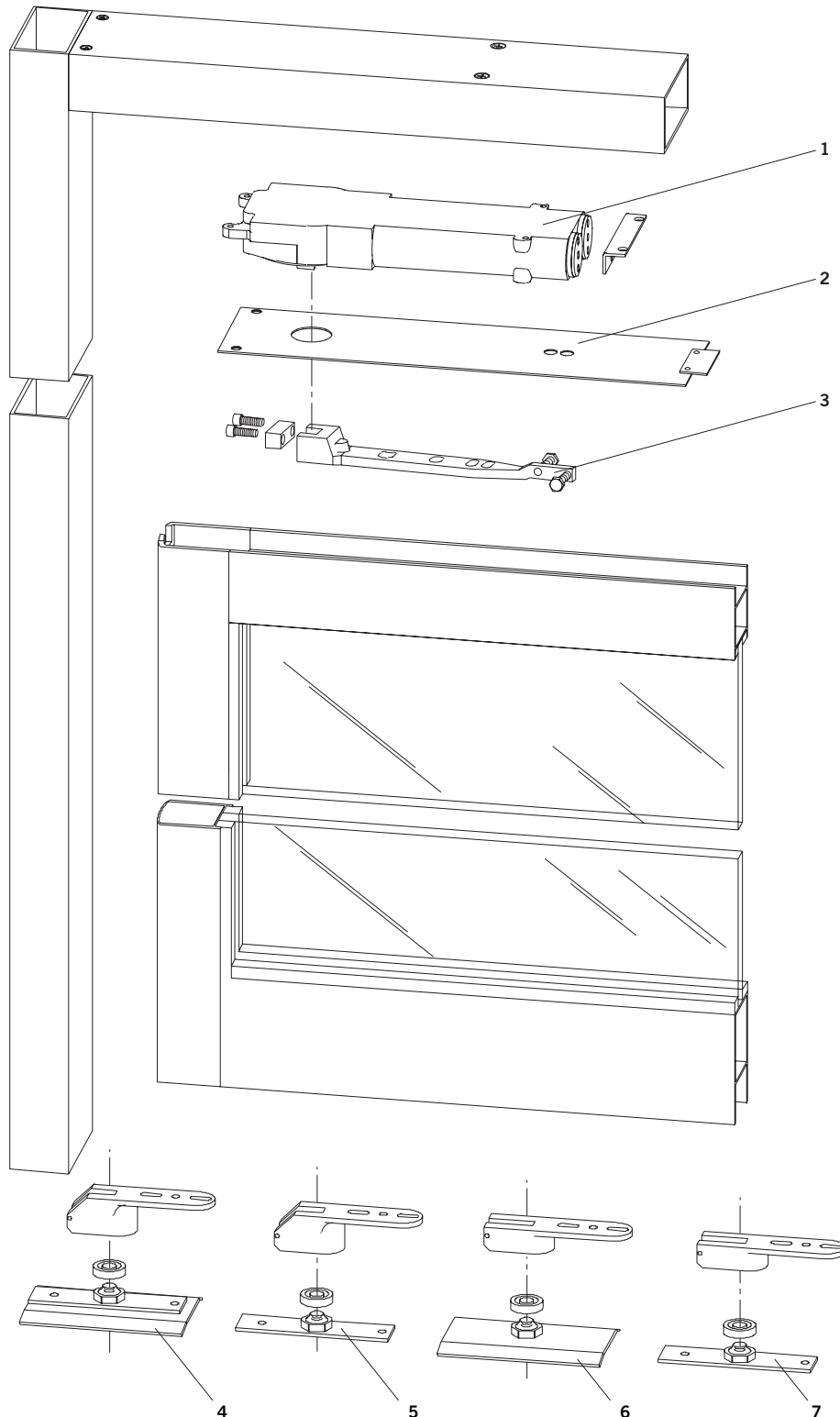
Components: RTS-09

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

Components: RTS-10

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

End Load — Double or Single-Acting Aluminum Door and Frame — 7/8" Top Rail



Packages RTS-11–RTS-14

Packages RTS-11 through RTS-14 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: RTS-11

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

Components: RTS-12

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

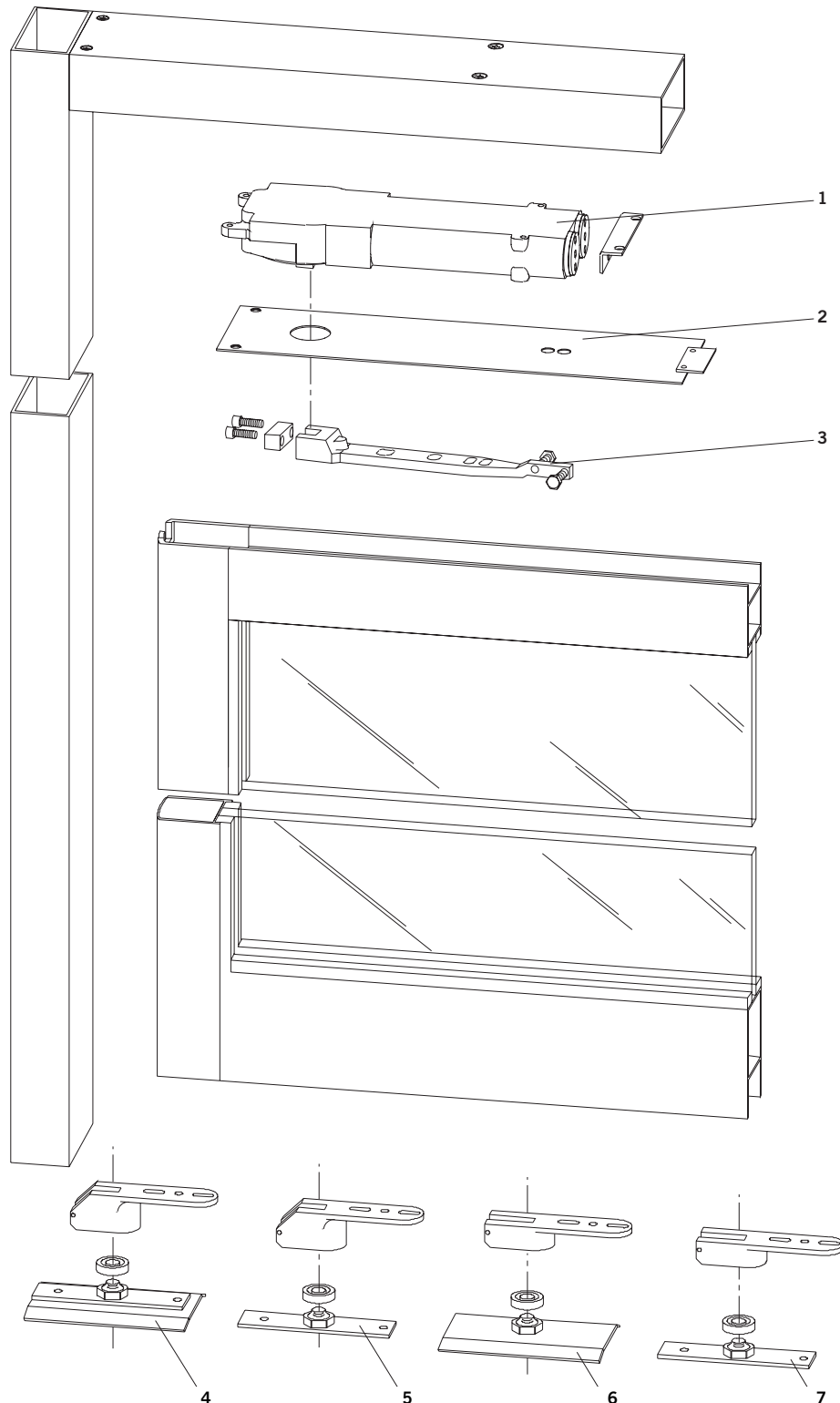
Components: RTS-13

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

Components: RTS-14

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

End Load — Double or Single-Acting Aluminum Door and Frame — 3/4" Top Rail



Packages RTS-15–RTS-18

Packages RTS-15 through RTS-18 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: RTS-15

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

Components: RTS-16

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

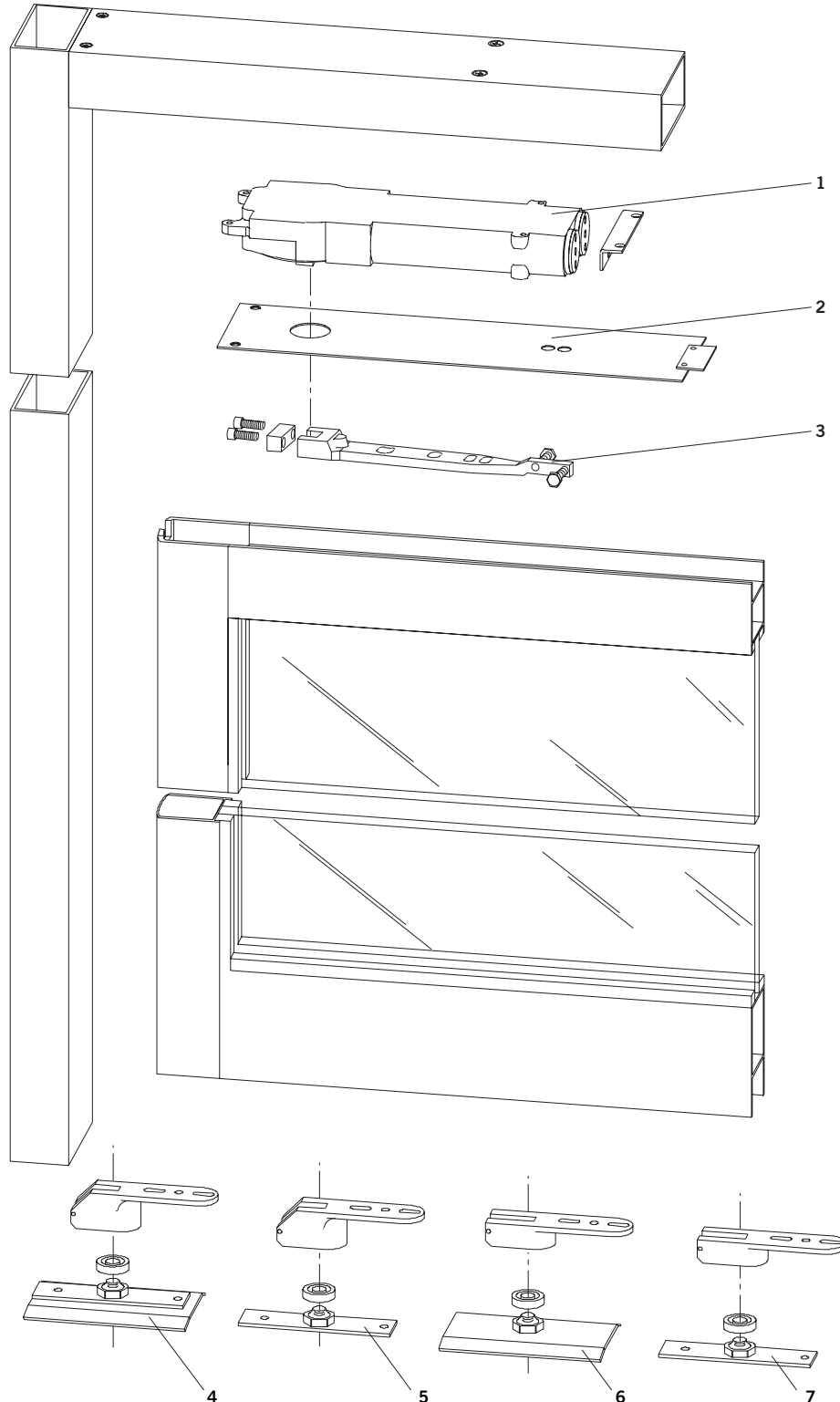
Components: RTS-17

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

Components: RTS-18

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

End Load — Double or Single-Acting Aluminum Door and Frame — 5/8" Top Rail



Packages RTS-19–RTS-22

Packages RTS-19 through RTS-22 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: RTS-19

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

Components: RTS-20

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

Components: RTS-21

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

Components: RTS-22

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

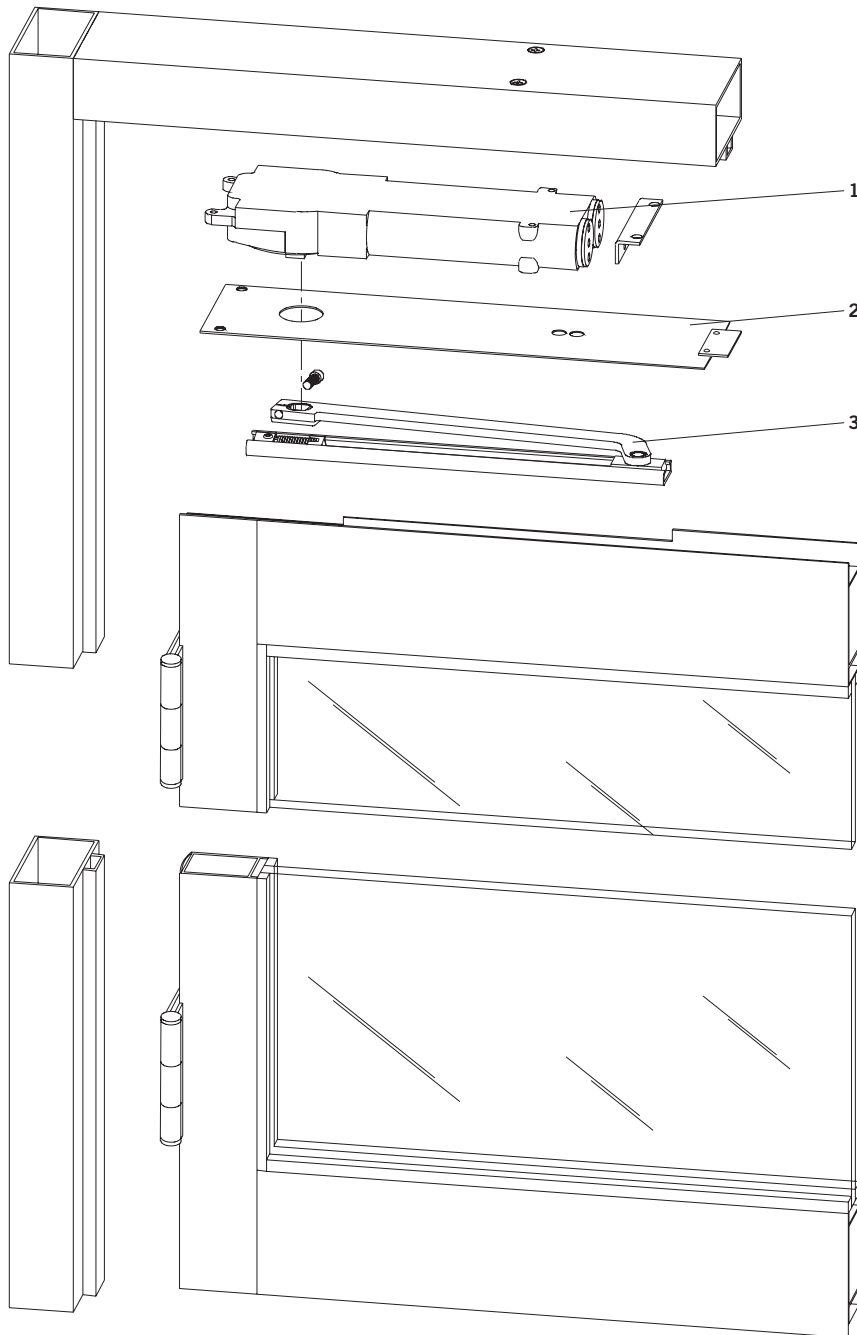
Offset Slide Arm — Single-Acting Aluminum Door and Frame — Hinges

Package RTS-25

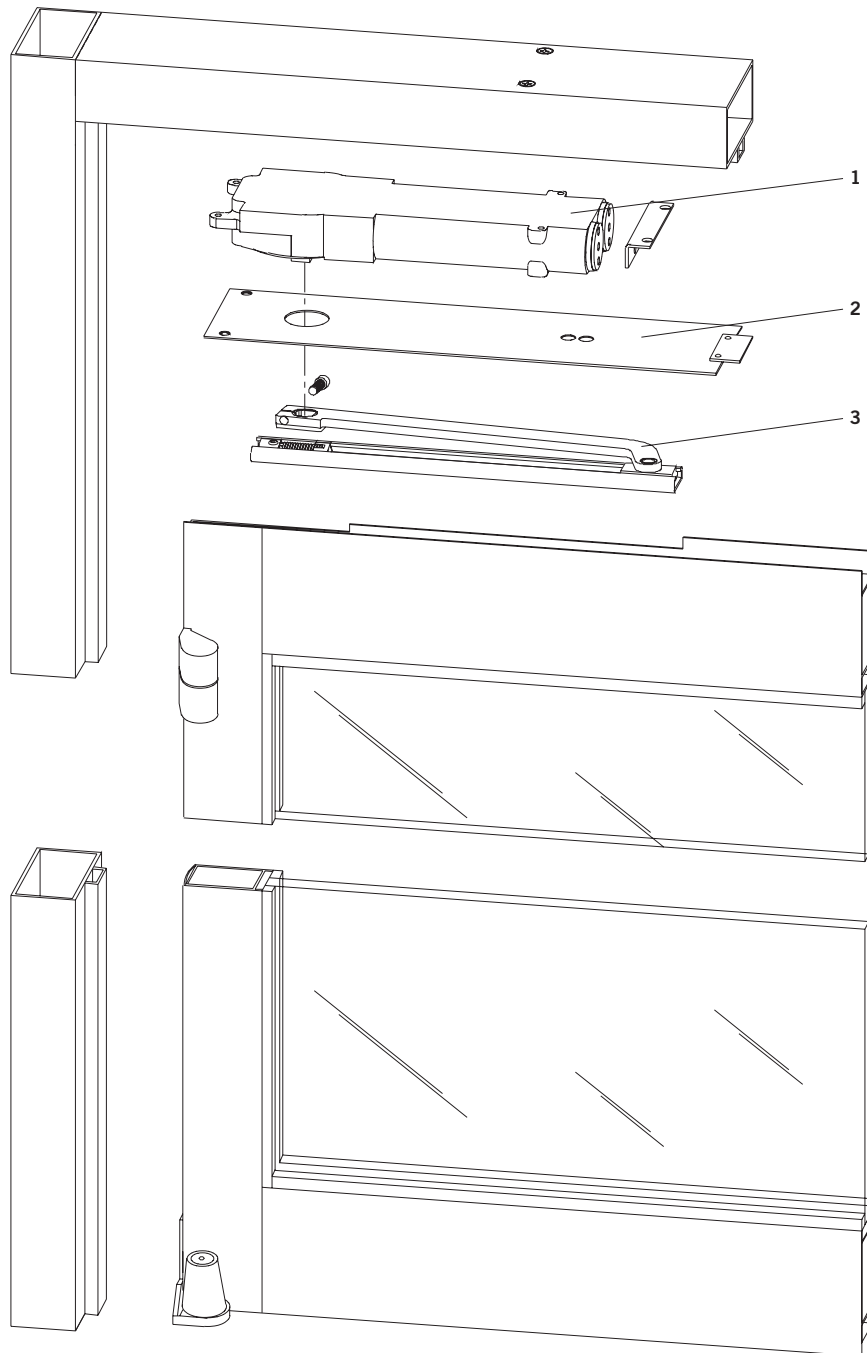
Package RTS-25 is templated specifically for aluminum doors hung on 4-1/2" wide hinges.

Components: RTS-25

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



Offset Slide Arm — Single-Acting Aluminum Door and Frame — Pivots



Package RTS-26

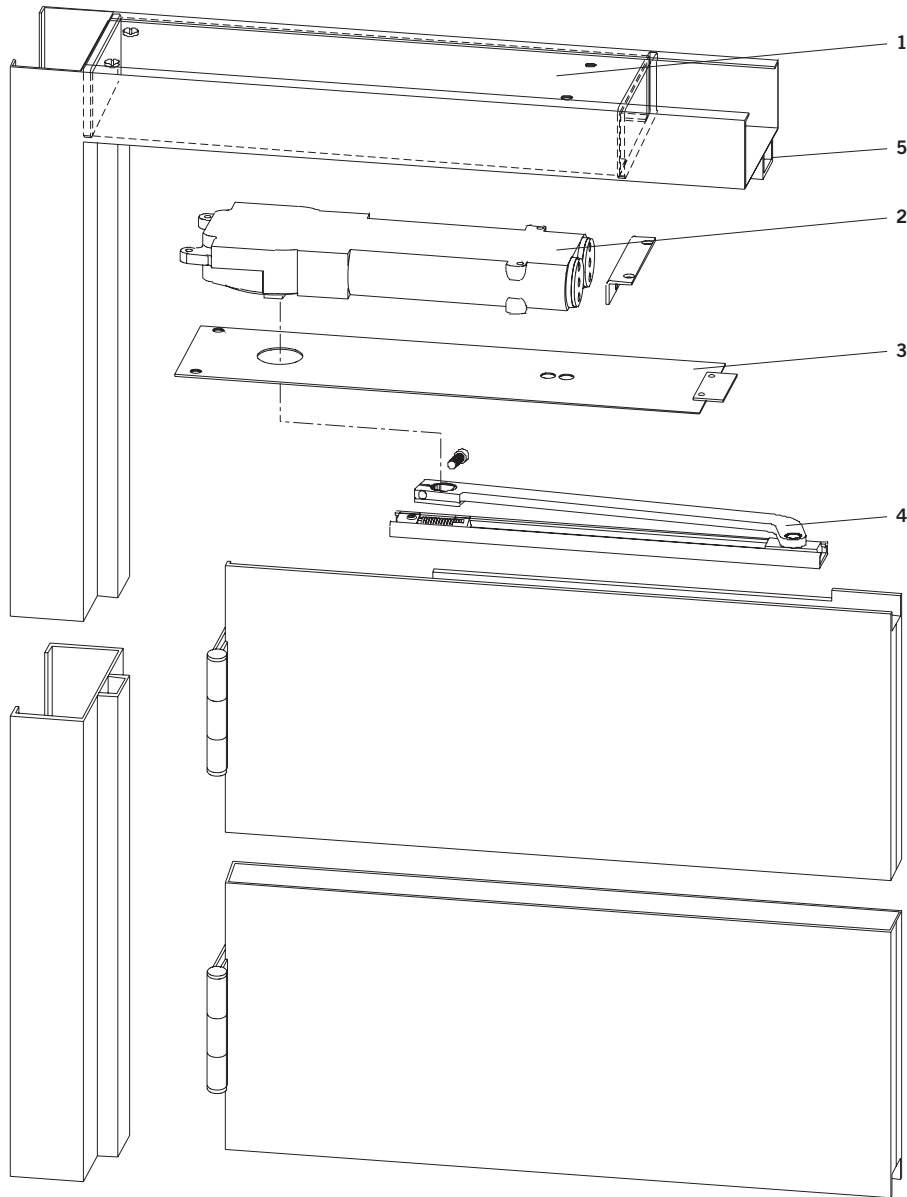
Package RTS-26 contains 08079050 bracket required for proper templating when doors are hung on 3/4" offset pivots.

Components: RTS-26

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

Pivots shown are typical aluminum store front pivots. 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.

Offset Slide Arm — Single-Acting Steel Door and Frame — Hinges/Pivots



Package RTS-27

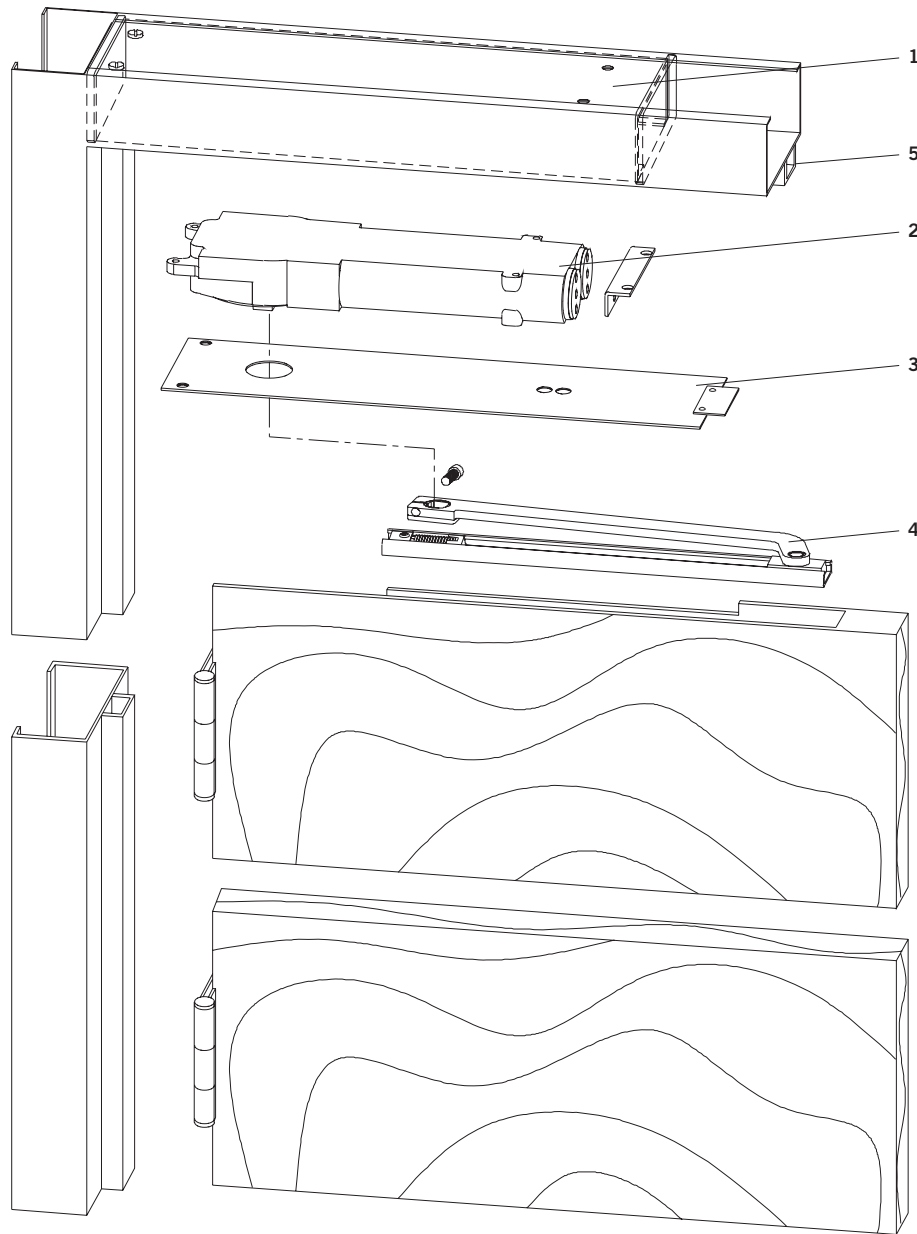
Package RTS-27 contains the components necessary for installing the RTS Series closer in a steel header. Templating is provided for both 4-1/2" wide butt hinges and 3/4" offset pivots.

Components: RTS-27

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.

Offset Slide Arm — Single-Acting Wood Door and Steel Frame — Hinges/Pivots



Package RTS-28

Package RTS-28 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: RTS-28

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.

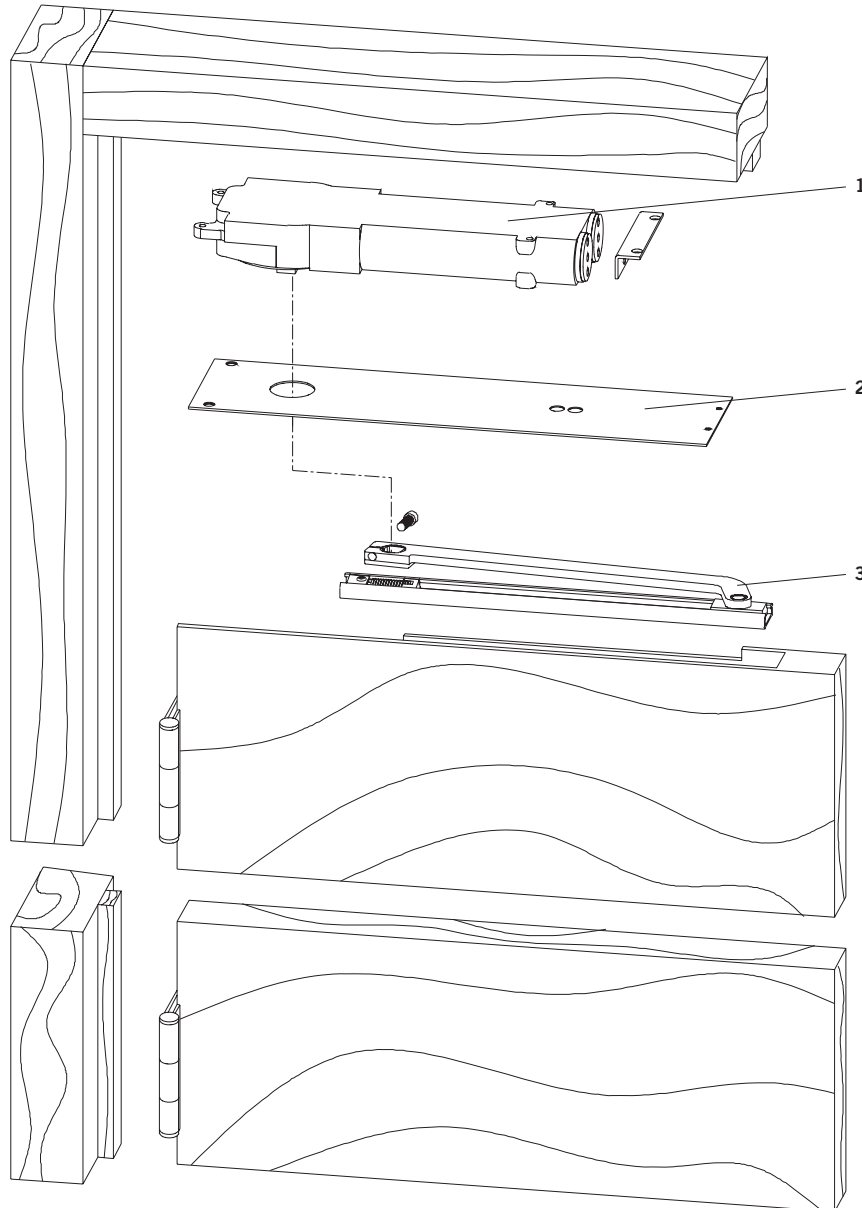
Offset Slide Arm — Single-Acting Wood Door and Frame — Hinges/Pivots

Package RTS-29

Package RTS-29 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: RTS-29

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.

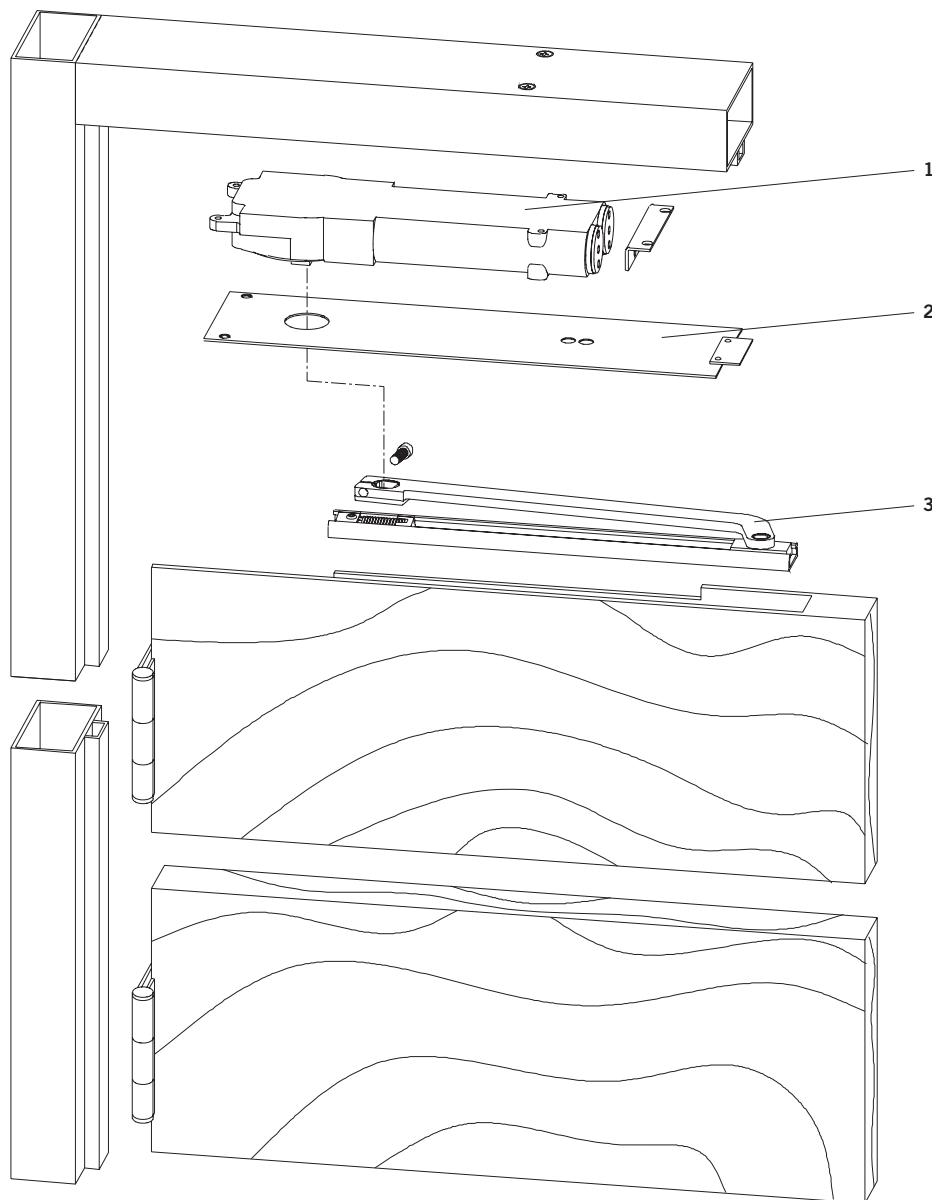
Offset Slide Arm — Single-Acting Wood Door and Aluminum Frame — Hinges

Package RTS-30

Package RTS-30 is templated specifically for doors hung on 4-1/2" wide hinges.

Components: RTS-30

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



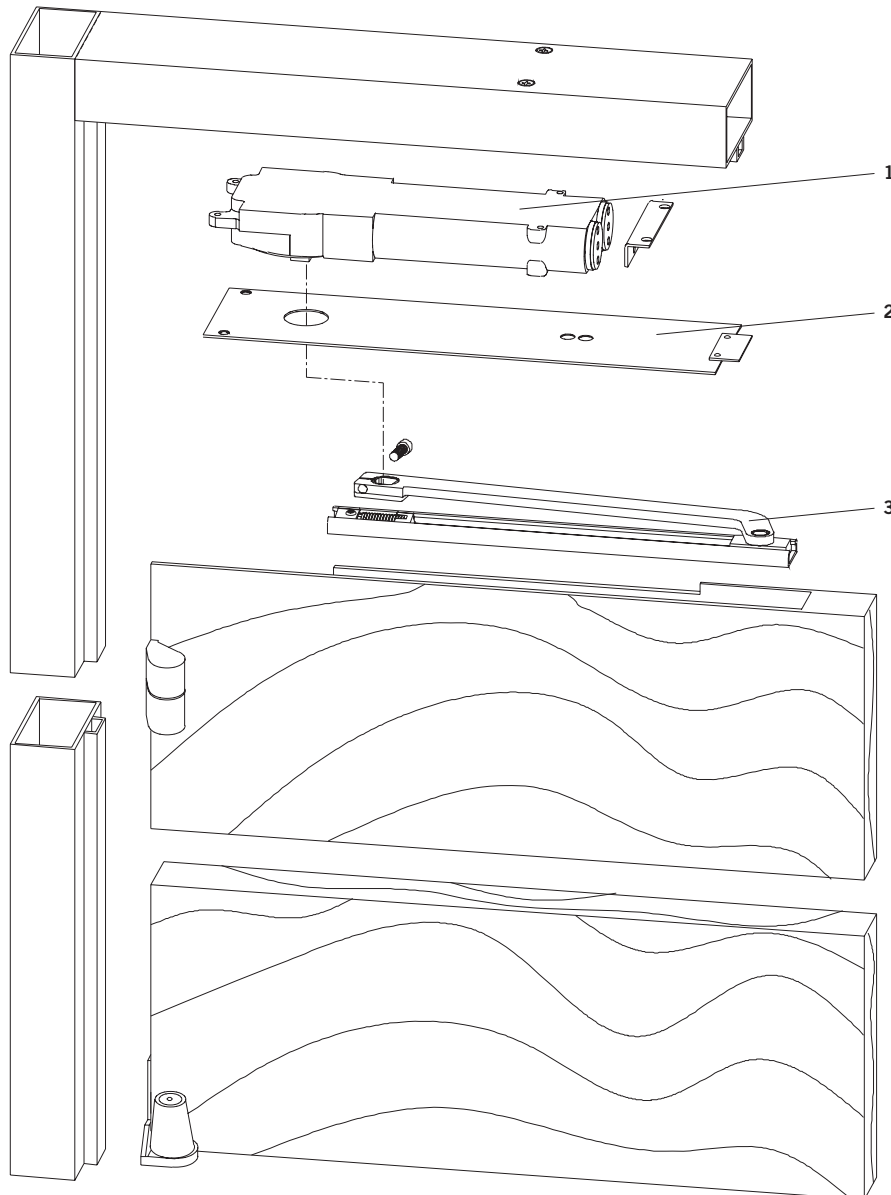
Offset Slide Arm — Single-acting Wood Door and Aluminum Frame — Pivots

Package RTS-31

Package RTS-31 contains 08079050 bracket required for proper templating when doors are hung on 3/4" offset pivots.

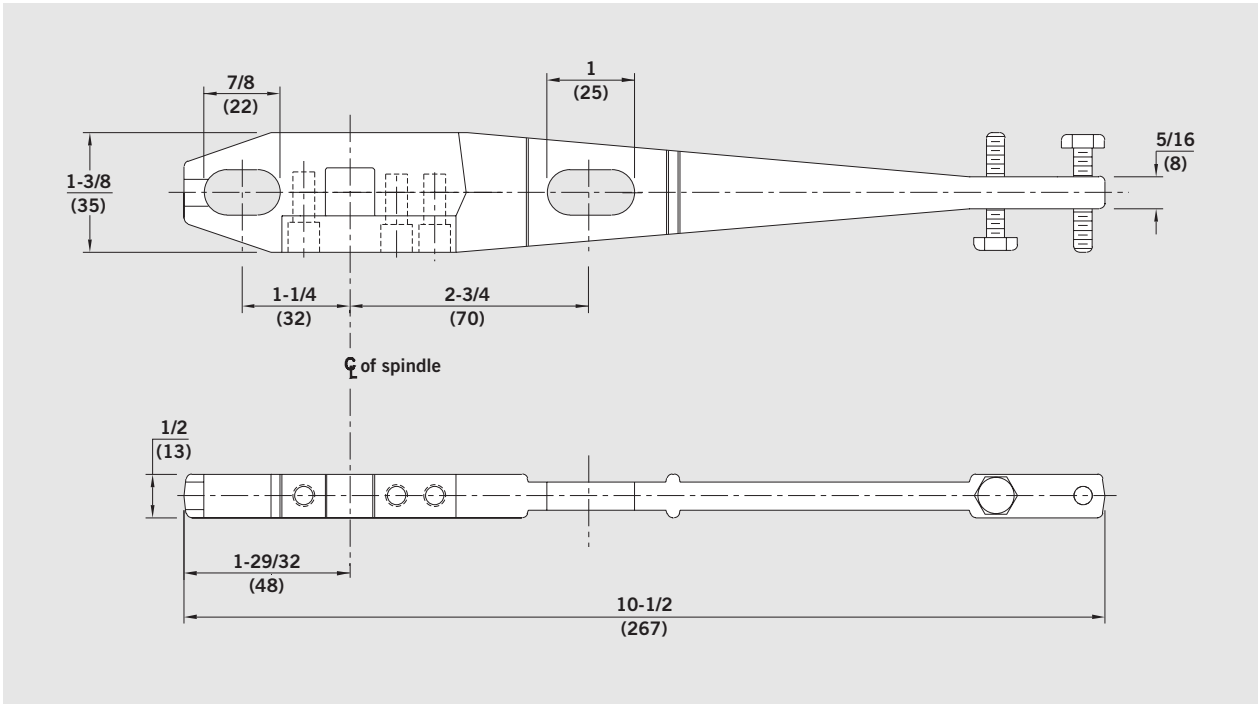
Components: RTS-31

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

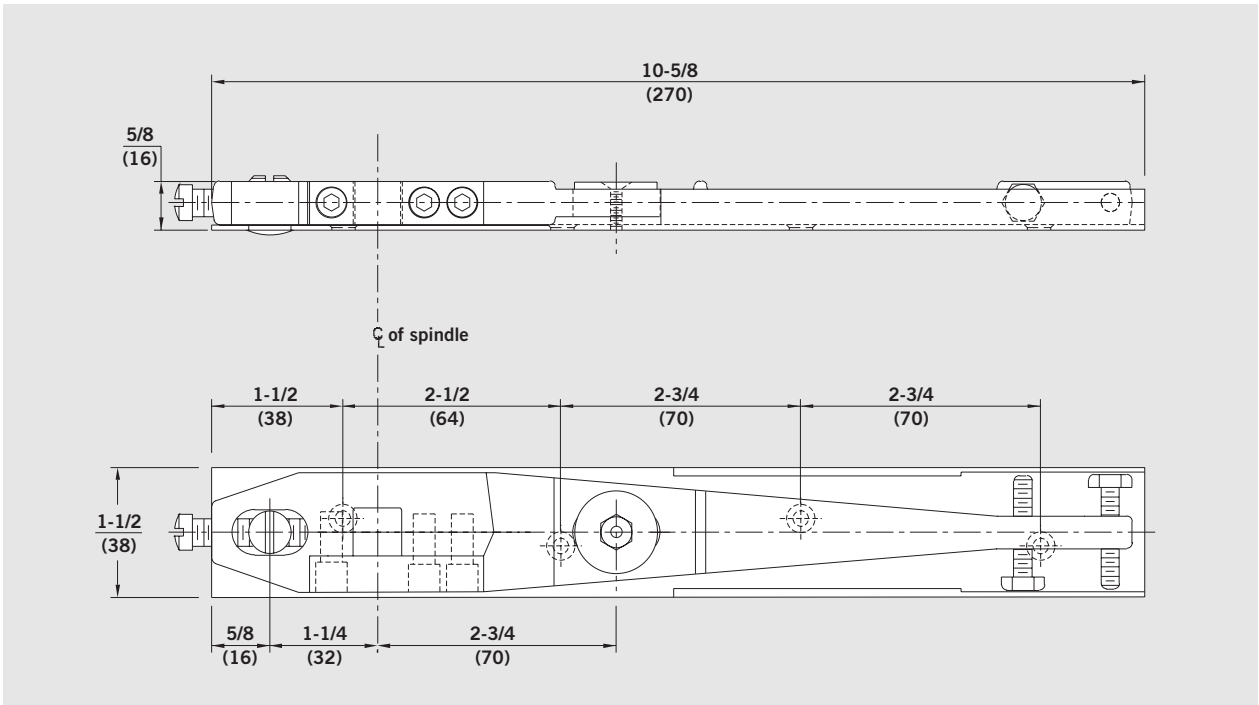


When using DORMA pivots or pivots by others, use an intermediate pivot at the top of the door in place of a full mortise top pivot. A full mortise top pivot occupies the same space in the frame as the RTS88 closer. See DORMA LM Series pivots.

Arms

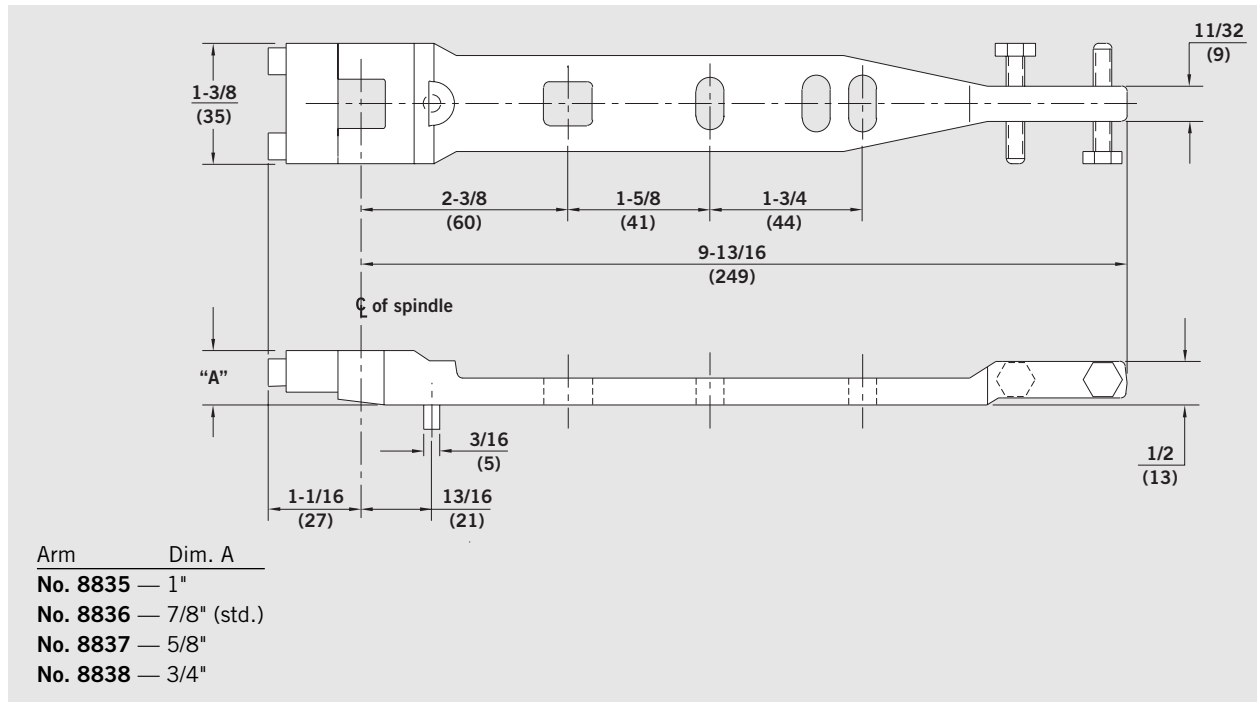


No. 8831 — Standard side load arm for aluminum or steel doors. Requires a minimum 1/2" top door rail channel depth.

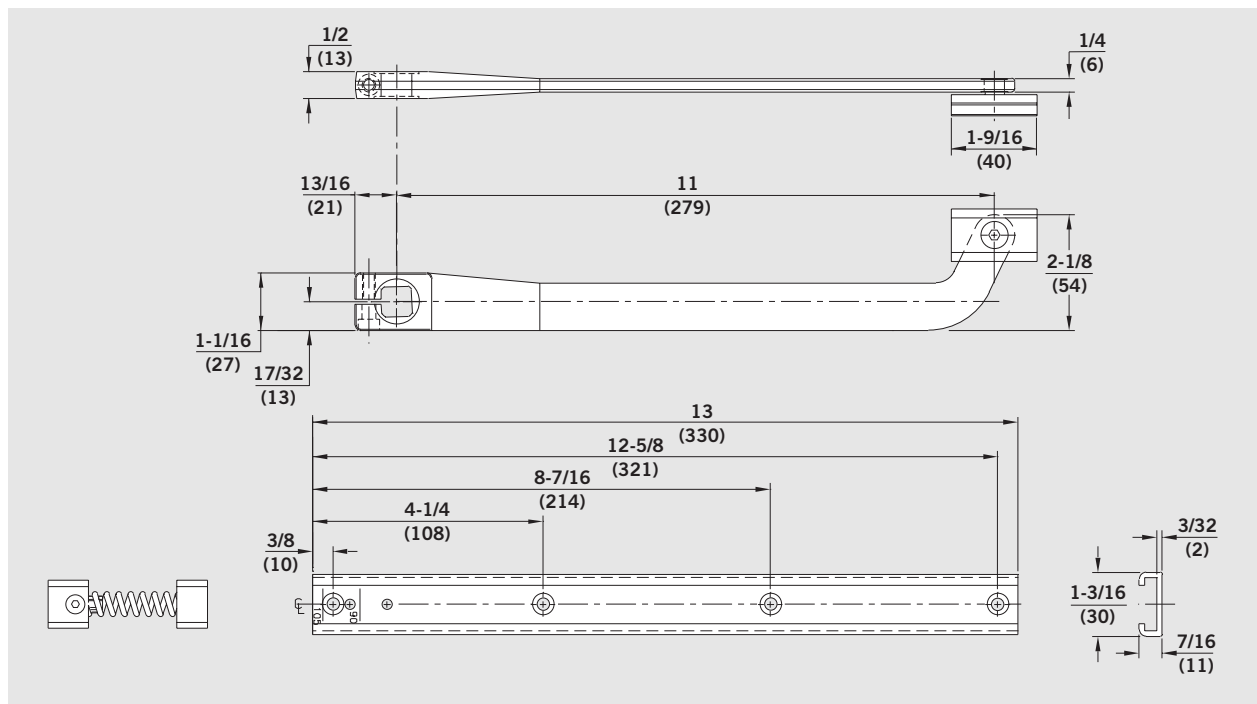


No. 8832 — Side load arm with channel for wood doors. Requires a 5/8" mortise depth.

Arms

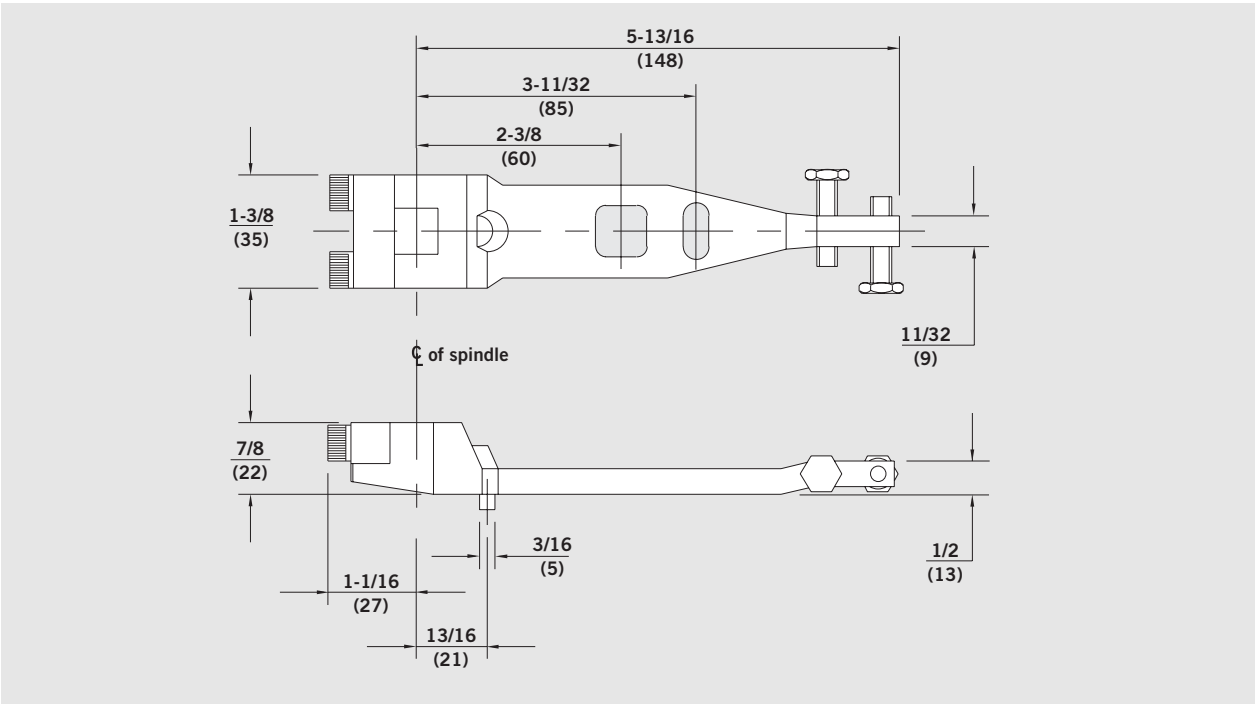


End load arms for aluminum or tempered glass doors. Specify arm as required by top door rail channel depth.

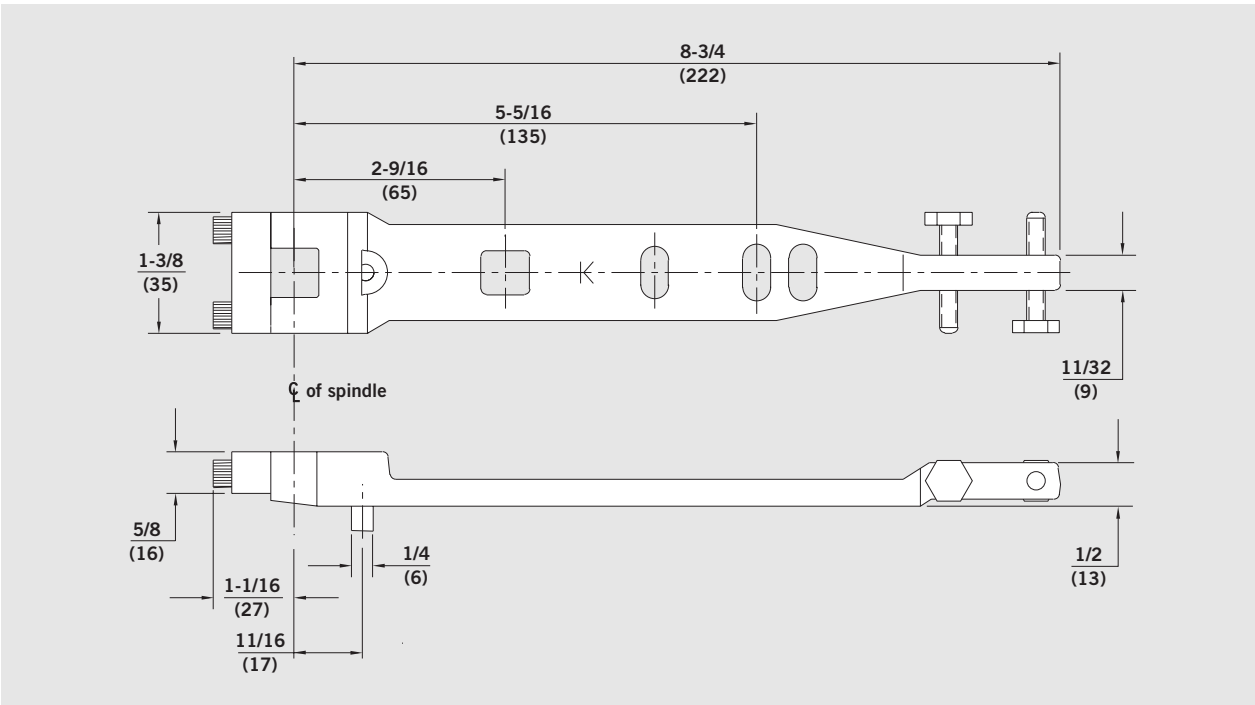


No. 8812 — Offset slide arm and channel for aluminum, steel or wood doors, hung on 3/4" offset pivots or 4-1/2" wide butt hinges. Requires a minimum 3/4" top door rail channel depth.

Arms

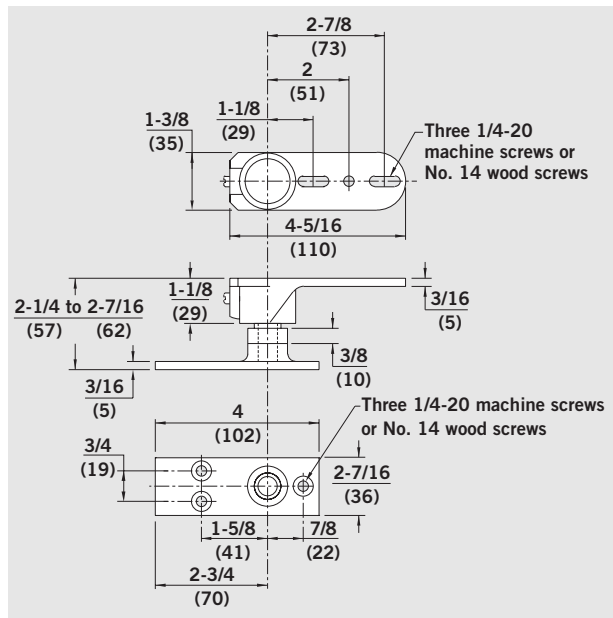


No. 8836 S — End load arm specifically designed for tempered glass doors with a short top rail (patch fitting). Requires a minimum 7/8" top door rail channel depth.

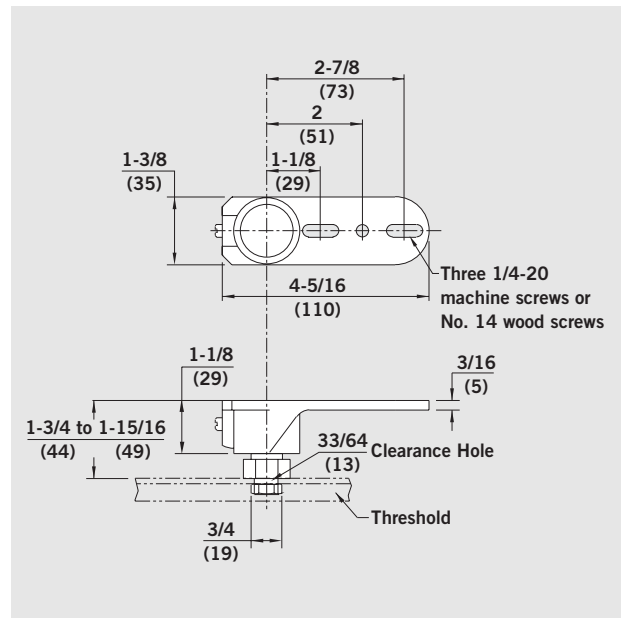


No. 8837 K — End load arm specifically designed to match templating of Kawneer end load arm.

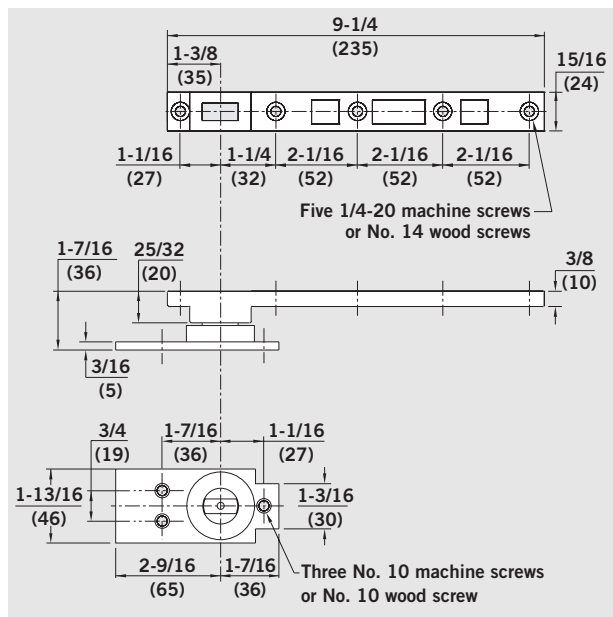
Pivots



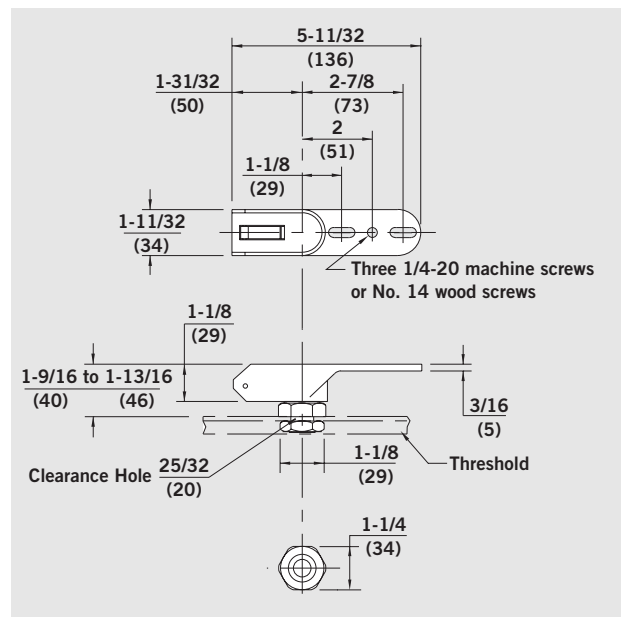
No. 8570 — Adjustable side load floor pivot set for bottom door rail channel depth of 1-15/16". Base can be shortened for 1-9/16" bottom door rail channel depth. Bottom door clearance is adjustable from 5/16" to 1/2". Maximum weight capacity is 200 lb.



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.

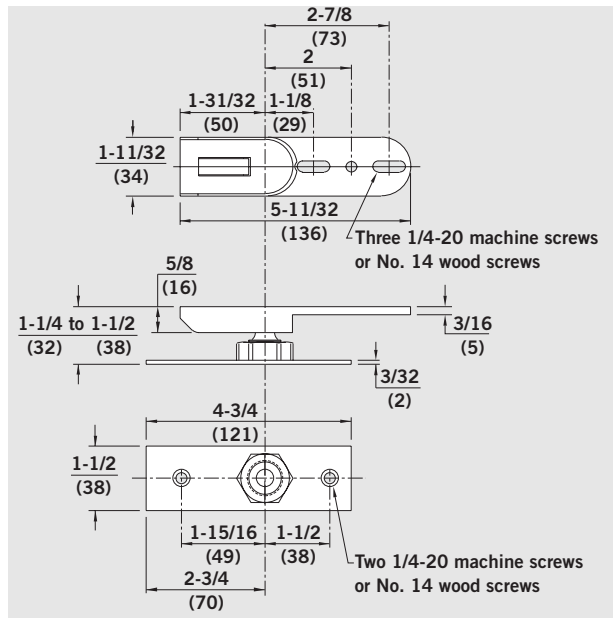


No. 7471K/7421 — Side load floor pivot set. Requires a 1-1/8" mortise depth. Provides a bottom door clearance of 5/16". Weight capacity when used with RTS Series closer is 250 lb. Recommended for wood doors or any door weighing in excess of 200 lb.

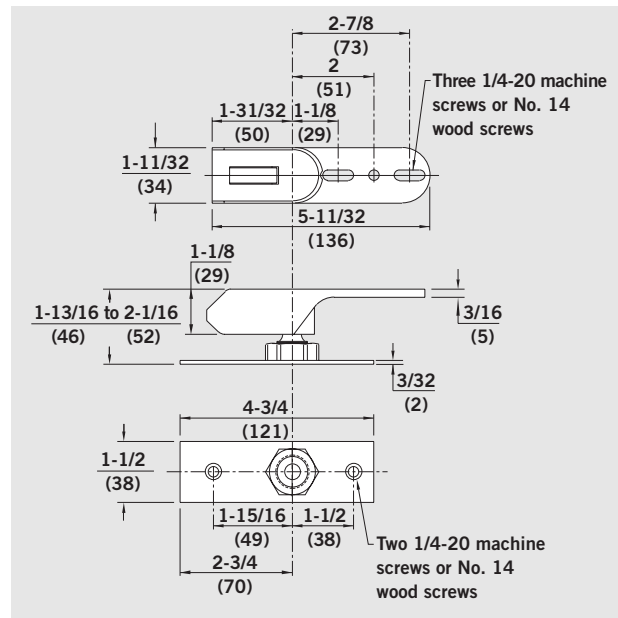


No. 8856 — Adjustable end load threshold pivot set for bottom door rail channel depth of 1-3/8". Bottom door clearance is adjustable from 3/16" to 7/16". Maximum weight capacity is 200 lb.

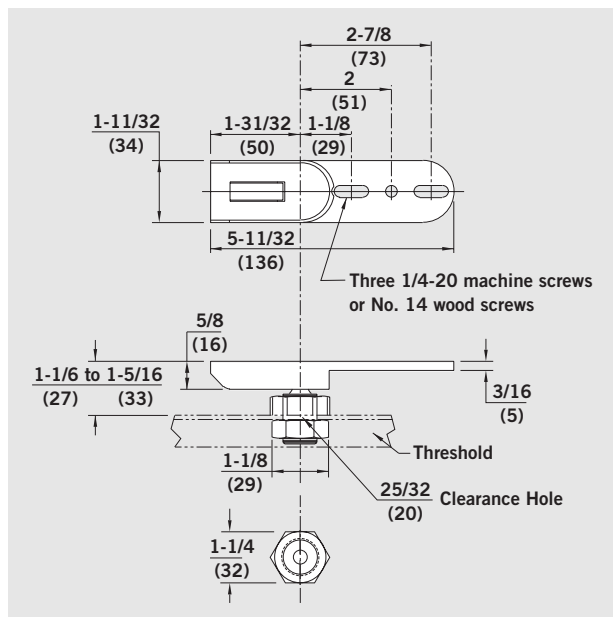
Pivots



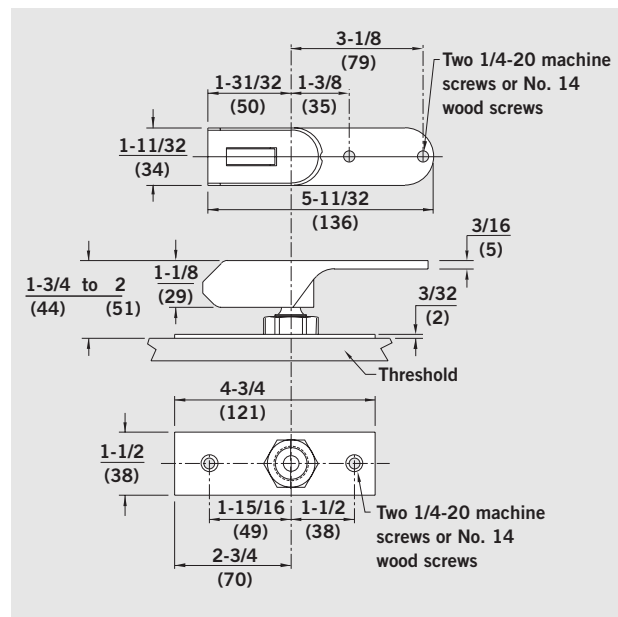
No. 8852 — Adjustable end load floor pivot set for bottom door rail channel depth of 7/8". Bottom door clearance is adjustable from 3/8" to 5/8". Maximum weight capacity is 200 lb.



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.

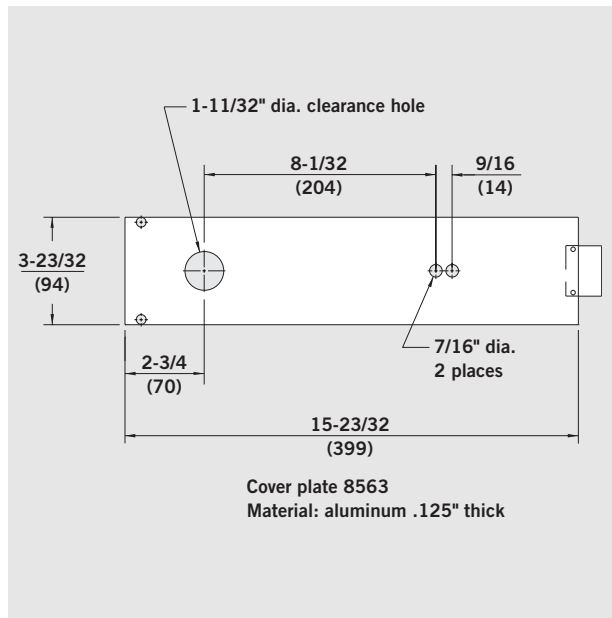


No. 8855 — Adjustable end load threshold pivot set for bottom door rail channel depth of 7/8". Bottom door clearance is adjustable from 3/16" to 7/16". Maximum weight capacity is 200 lb.

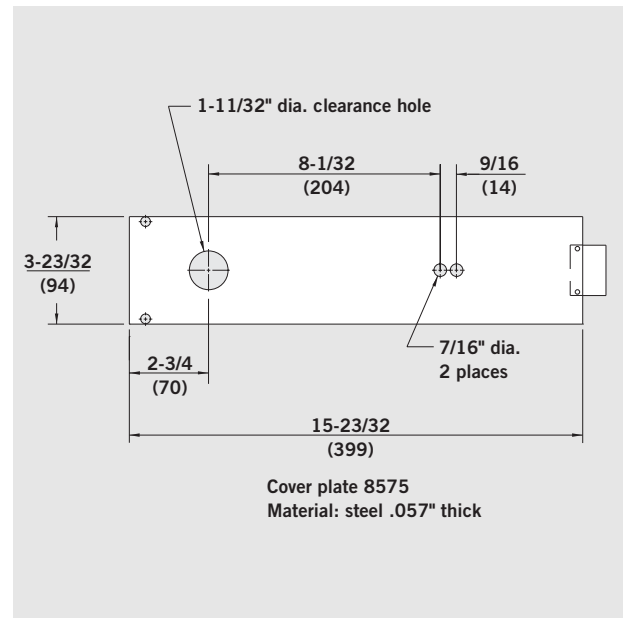


No. 8857 — Adjustable end load threshold pivot set for bottom door channel depth of 1-9/16". Bottom door clearance is adjustable from 3/16" to 7/16". Maximum weight capacity is 200 lb.

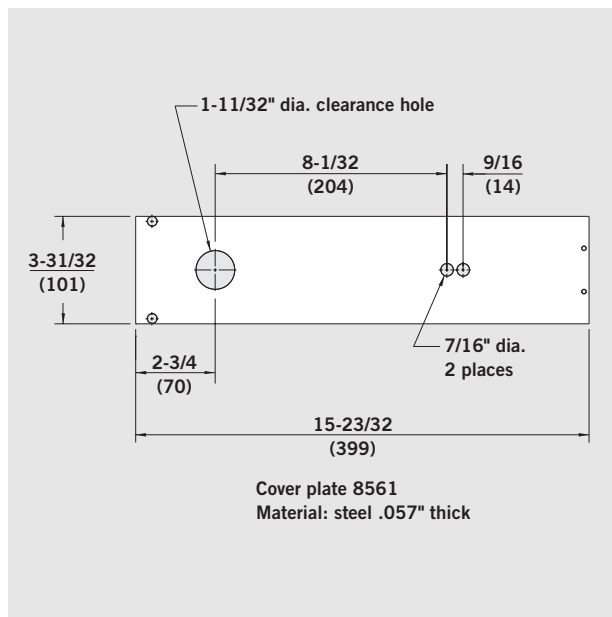
Cover Plates



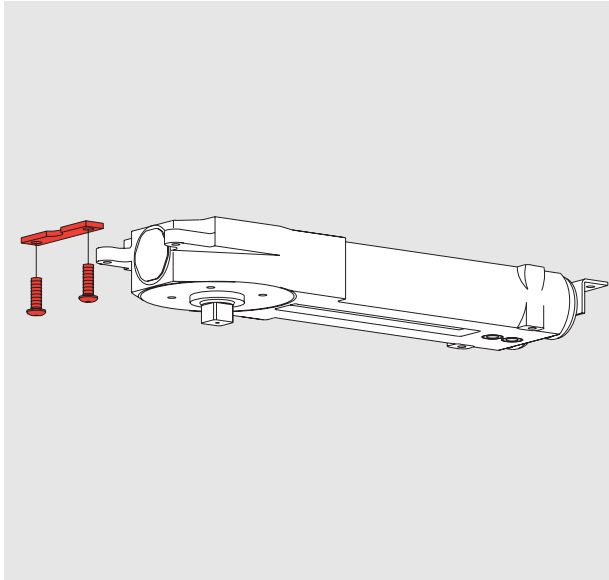
No. 8563 — Cover plate for RTS Series closer when installed in aluminum header.



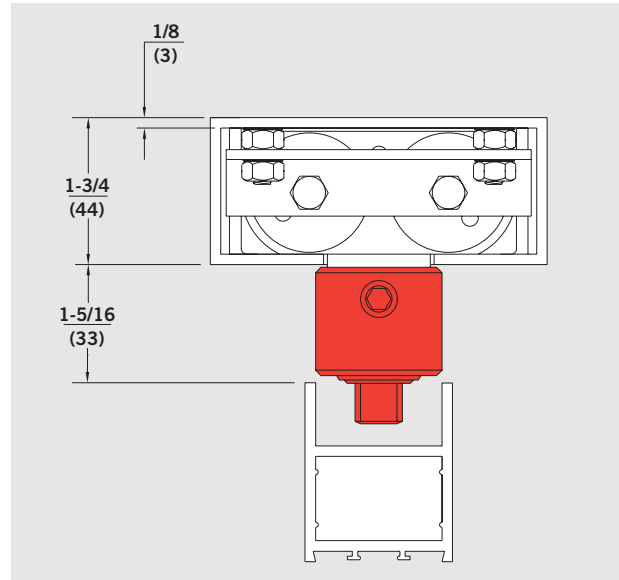
No. 8575 — Cover plate for RTS Series closer when installed in steel header.



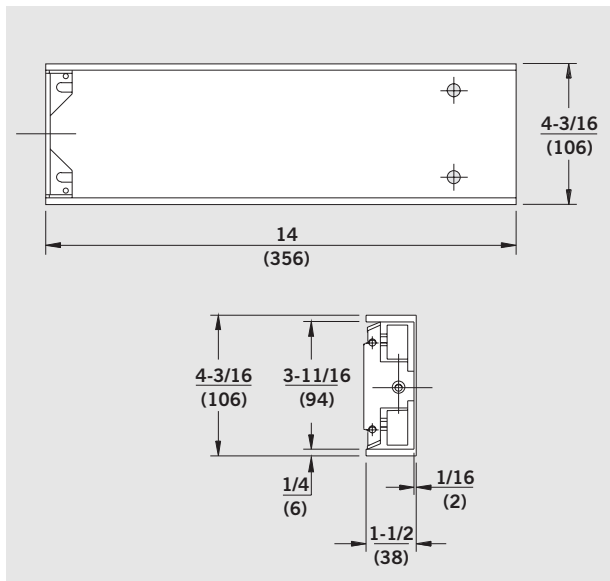
No. 8561 — Cover plate for RTS Series closer when installed in wood header.



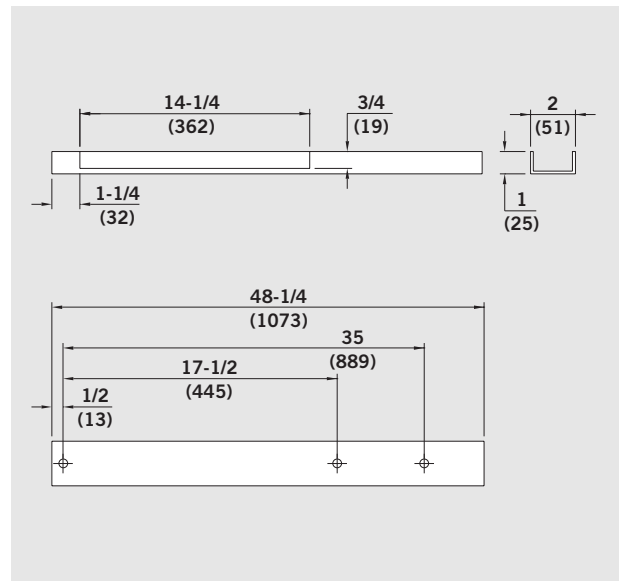
No. 8820J — Conversion bracket for replacement of existing overhead concealed closers. Utilizes existing side jamb mounting bracket to anchor RTS Series closer.



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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