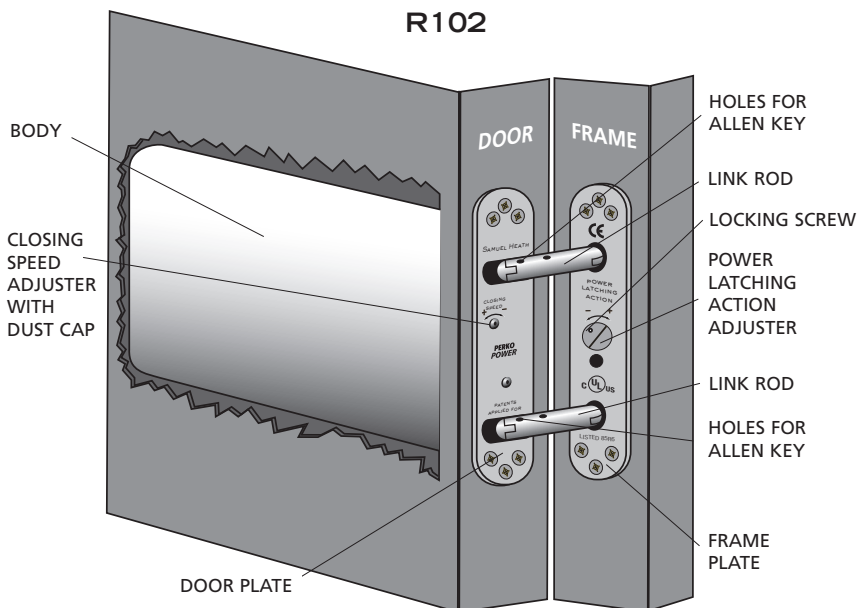


PERKOPOWER

The Third Generation Concealed Door Closer

R102



IMPORTANT NOTICE - FOR FIRE DOOR INSTALLATIONS REFER TO ITEM 1 IN FITTING INSTRUCTIONS

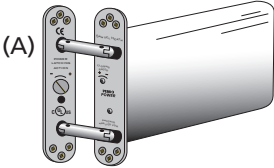
- CE marked and adjustable to conform to power size 3 of Controlled Door Closing Device. BS EN1154: 1997 (Test door 132lbs).
- UL Approved to UL 10B, UL 10C and UL 228. ADA Compliant.
- 1 Hour Fire Test BS EN1634-1: 2000.
- Adjustable speed control.
- Adjustable power latching action.
- 1¹/₂ pairs of hinges should be used in conjunction with this closer on all doors.
- Suitable for doors opening to a maximum of 105°. A door stop should be fitted.
- Maximum door weight 175lbs, width 36".
- Suitable for latched and unlatched doors.
- Should **NOT** be used with rising butt hinges or concealed mortice hinges.

PLEASE READ FITTING INSTRUCTIONS THOROUGHLY BEFORE INSTALLATION.

PERKOPOWER

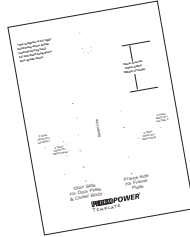
The Third Generation Concealed Door Closer

PARTS LIST



(A) Door Closer - x 1

(B)



(B) Template - x 1

(C)



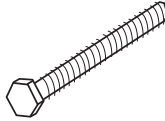
(C) Allen Keys - x 2

(D)



(D) Screws - x 12

(E)



(E) Extractor Bolt - x 1

(F)



(F) Allen Key for Adjuster Screw (Locking) x 1

CHECK ALL COMPONENT PARTS AGAINST PARTS LIST.

TOOLS REQUIRED

- Screwdriver (Plain Slotted)
- Screwdriver (Phillips)
- Wood Chisel 1" x 7"
- Solid Centre Auger Bit or Spade Bits 11/16" Ø and 11/8" Ø
- Bradawl
- Power Drill
- Tape Measure
- Pencil
- Adjustable Spanner
- Ruler

The use of a Souber morticer is suggested for multiple on site installations.

(Available from Souber Tools)

www.morticer.com

A DBB morticer, a long shaft and WB25, WB27, and WB29 cutters will be required

**Eye Protectors,
Ear Defenders
and a Face Mask are
recommended during
installation of Perkopower.**

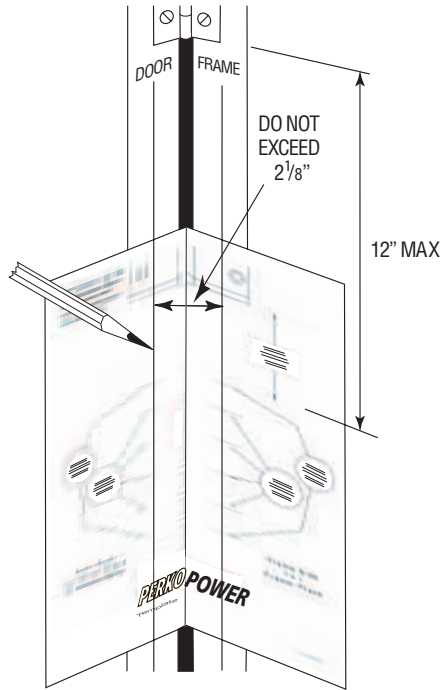
1 IMPORTANT NOTICE

DOOR CLOSERS FITTED TO A FIRE DOOR.

- Perkopower, conforms to Power Size 3 of Controlled Door Closing Device Standard BS EN1154:1997 when the power latching action is set to maximum.
- Turn adjuster screw fully to positive (+) as explained in 9.
- Closer must be fitted no more than 30" from floor and within 12" of a hinge.
- Closer and plates should be bedded in Alfacyrl FR Intumescent Acrylic Mastic available from Samuel Heath.

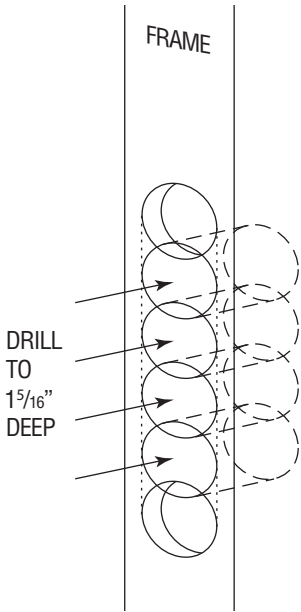
2 TEMPLATE POSITIONING

- Ensure door is plumb, hinges are free, and that timber is sound.
- Take template provided and fold along center line. Open door to maximum of 105°.
- Secure template to door edge and frame edge within 12" of a hinge ensuring the center line is central in the gap between door and frame.
- Draw a vertical line at the center point of the door edge on the template. **NB This line must not exceed 1 1/4" from template center line.**



- Repeat on frame edge.
- The maximum distance between these 2 vertical lines must not exceed 2 1/8" when door is opened to its maximum of 105°.
- At each point on the template where the vertical lines cross the horizontal dotted lines mark through the template using a bradawl into the door edge and frame edge to establish drilling points. Remove template RETAIN FOR REFERENCE.
- Note: Door can now be removed from frame to assist drilling if preferred.

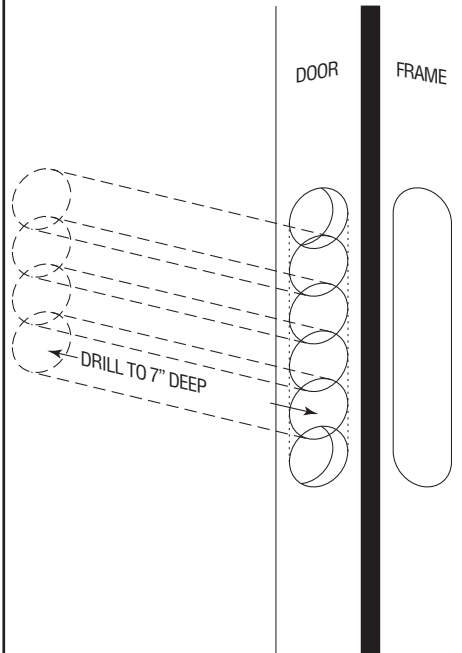
3 FRAME PREPARATION FOR FRAME PLATE



NB To ensure correct operation of closer there must be a $\frac{1}{8}$ " gap between the two fixing plates when the door is in the closed position.

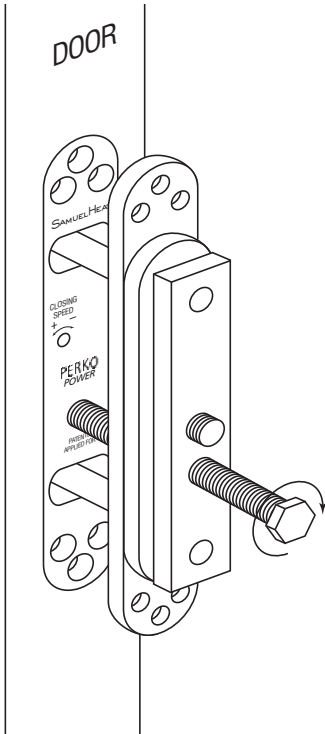
- Drill 4 x $1\frac{1}{8}$ " \varnothing holes $1\frac{5}{16}$ " deep to accept frame plate assembly as indicated on template.
- Drill 2 x $1\frac{1}{8}$ " \varnothing holes to accept frame plate ends. **Depth must cater for $\frac{1}{8}$ " gap between plates when fitted.**
- Remove excess timber between drilled holes to accommodate frame plate.

4 DOOR PREPARATION FOR BODY & DOOR PLATE



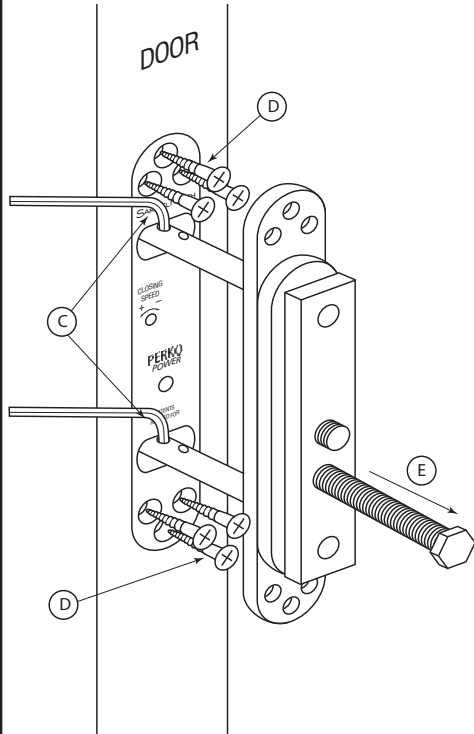
- Drill 4 x $1\frac{1}{16}$ " \varnothing x 7" deep holes to accept closer body as indicated on the template.
- Drill 2 x $1\frac{1}{8}$ " \varnothing holes to accept door plate ends. **Depth must cater for $\frac{1}{8}$ " gap between plates when fitted.**
- Remove excess timber between drilled holes to accept the closer body and door plate.

5 INSTALLING CLOSER



- Insert closer body into door.
- Insert extractor bolt (E) into position and rotate clockwise until holes in link rods appear.
- Generally for thicker doors expose both holes on each rod.

6

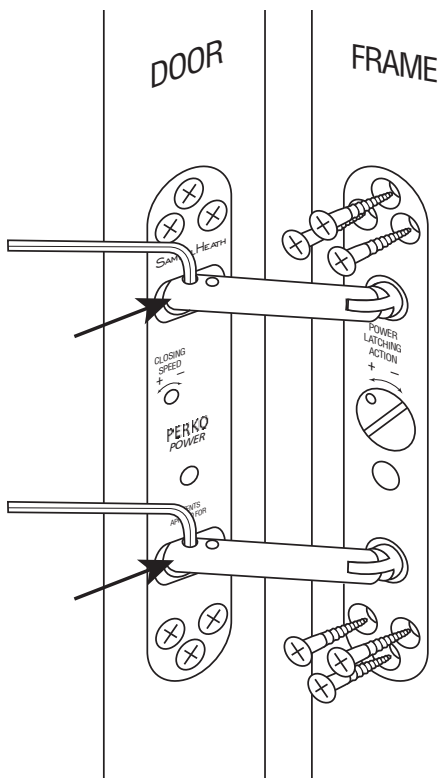


- Insert the allen keys (C) through both top and bottom link rod holes.

Both allen keys must be correctly located.

- Remove extractor bolt.
- Secure door plate to door with six screws (D).

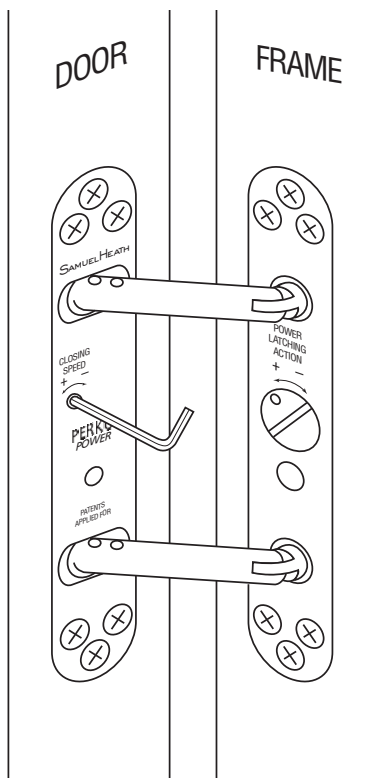
7



- With closer now held open by allen keys, if necessary firmly push both link rods across door plate and offer frame plate into frame void. Secure with six screws (D).
- Open door slightly and remove allen keys.
- Installation is now complete.

8

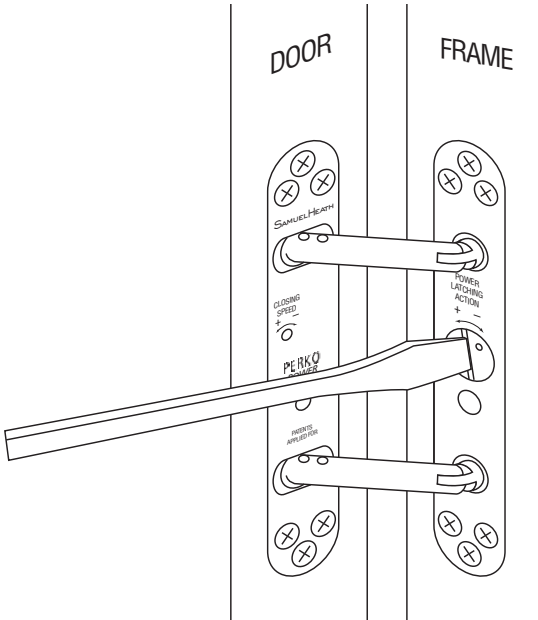
ADJUSTMENT - CLOSING SPEED



- Remove dust cap.
 - use one of the allen keys (C) to adjust closing speed.
 - Positive (+) increases door speed.
- Negative (-) reduces door speed, as indicated on door plate.

9 ADJUSTMENT

- POWER LATCHING ACTION



- The power latching action can be adjusted using a plain flat ended screwdriver.
 - Loosen locking screw using allen key (F) to allow the adjuster screw to turn.
 - Positive (+) increases the angle at which latching action engages.
- Negative (-) decreases angle at which the latching action engages.
- Re-tighten locking screw when correct power latching action achieved.

The Perkopower is protected by the following Patents and Applications.

CANADA	2365822 2436363
HONG KONG	1038953
JAPAN	2000-602490
SINGAPORE	82862
TAIWAN	156554
USA	6625847 2004/0111831
UK	1159503 02740038.1 0413132.2
AUSTRIA	1159503 02740038.1
BELGIUM	1159503 02740038.1
DENMARK	1159503 02740038.1
FRANCE	1159503 02740038.1
GERMANY	1159503 02740038.1
IRELAND	1159503 02740038.1
ITALY	1159503 02740038.1
LUXEMBOURG	02740038.1
NETHERLANDS	1159503 02740038.1
SPAIN	1159503 02740038.1
SWEDEN	1159503 02740038.1
SWITZERLAND	1159503 02740038.1
LIECHTENSTEIN	02740038.1

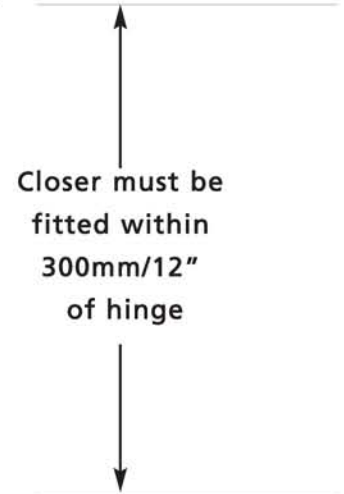
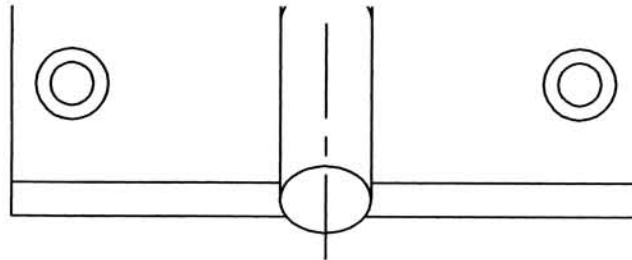
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New York N.Y. 10016
telephone: (212) 599 5177
fax: (212) 818 9552
e-mail: usa@samuel-heath.com

www.samuel-heath.com / www.perkopower.com

*This template is for right hand hung doors (when viewing closing face).
For left hand hung doors turn upside down.



Closer must be fitted within 300mm/12" of hinge

35mm MAX

Centre Line

2 Holes
28mm/1 1/8" Ø
x see Step 4

4 Holes
26mm/1 1/16" Ø
x 185mm/
7 5/16" Deep

2 Holes
28mm/1 1/8" Ø x
see Step 3

4 Holes
28mm/1 1/8" Ø
x 30mm Deep

DOOR SIDE
FOR DOOR PLATE
& CLOSER BODY

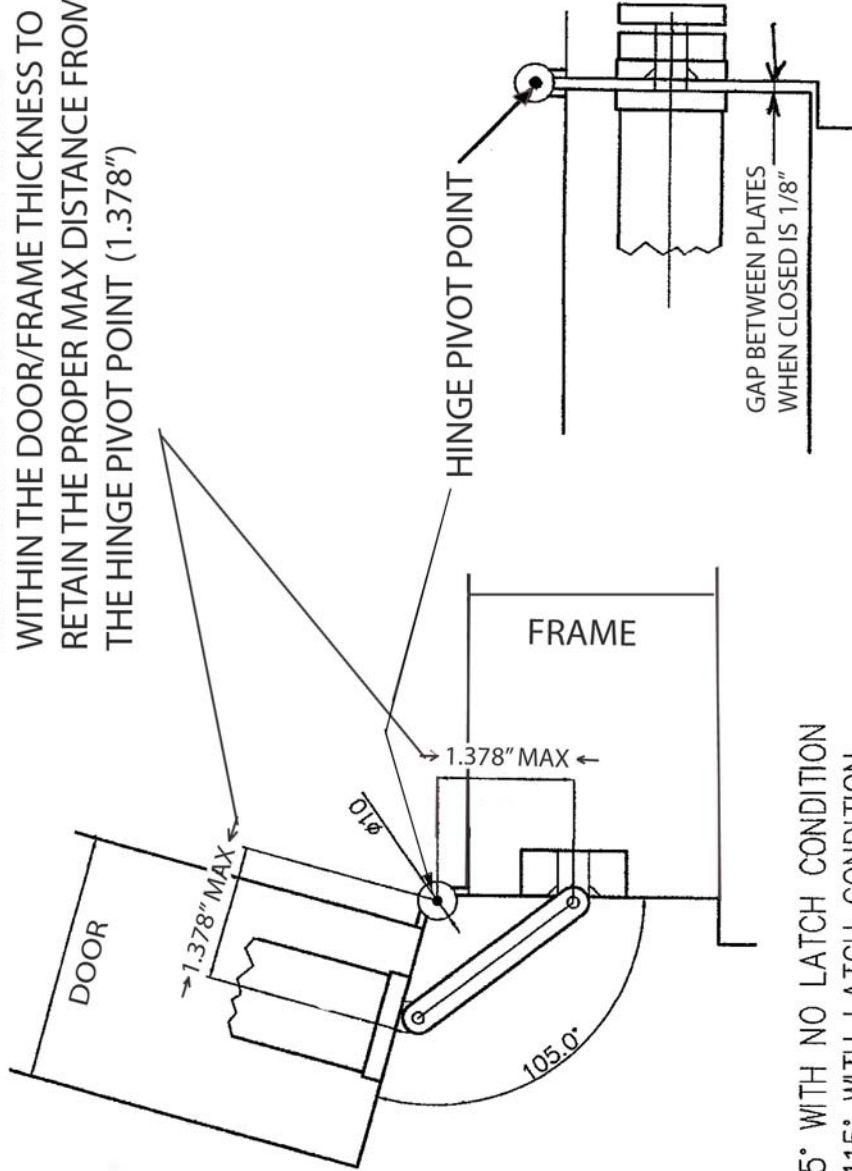
FRAME SIDE
FOR
FRAME PLATE

PERKOPower[®]

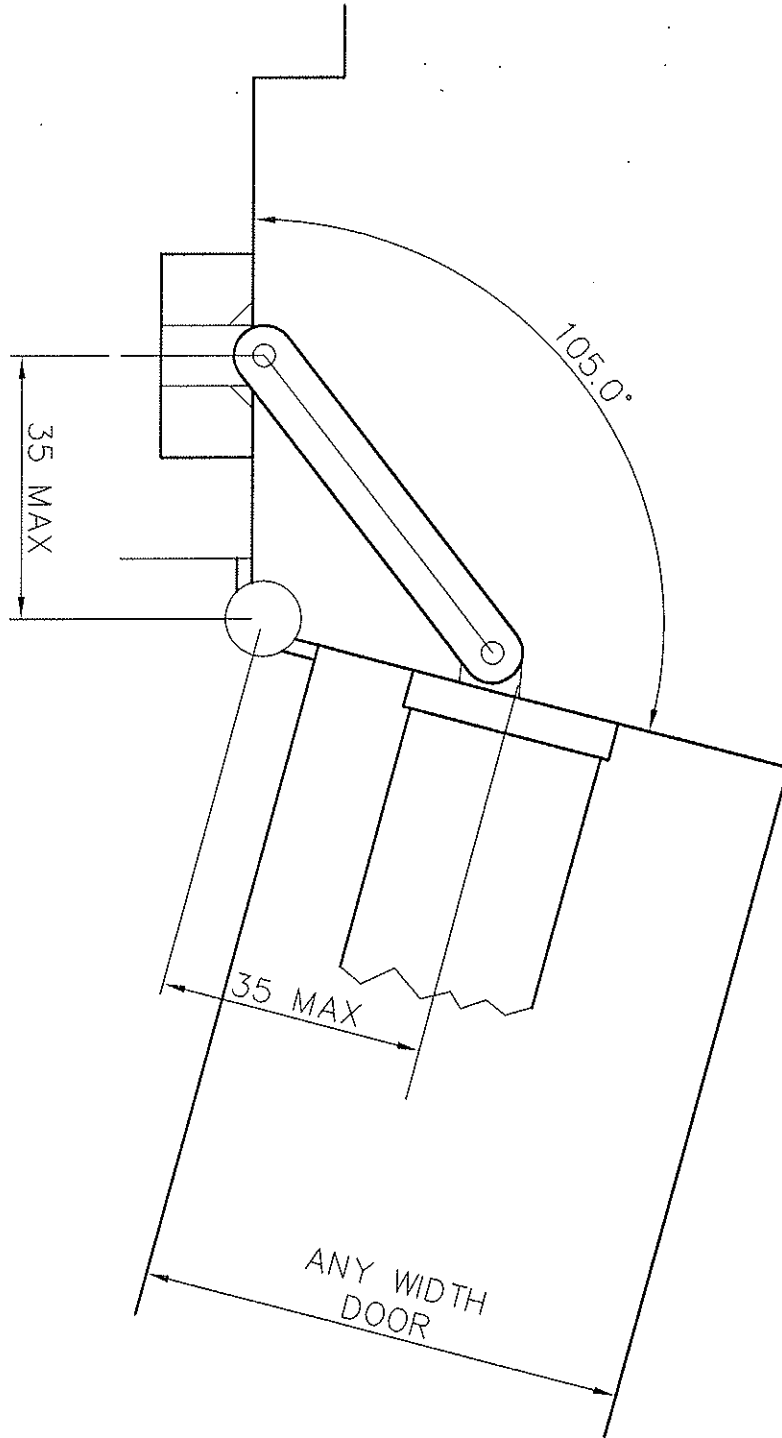
TEMPLATE

**SAMUEL HEATH
R102 CONCEALED CLOSER**

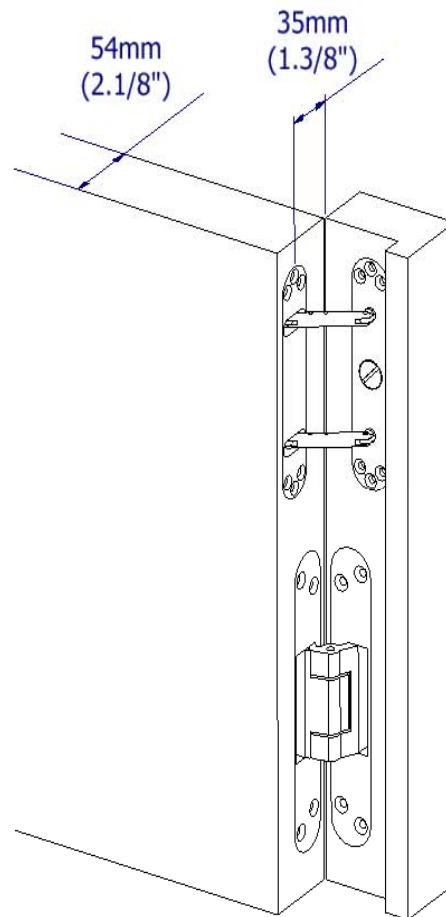
THE CLOSER MAY NEED TO BE OFFSET
WITHIN THE DOOR/FRAME THICKNESS TO
RETAIN THE PROPER MAX DISTANCE FROM
THE HINGE PIVOT POINT (1.378")



105° WITH NO LATCH CONDITION
115° WITH LATCH CONDITION



Use of R100/R102 with Concealed Hinges



Because of the geometry of concealed hinges, a distance of 35mm (1-3/8") is required from the centre of the closer to the theoretical pivot point of the hinge. To achieve this distance a minimum door width of 54mm (2-1/8") would be recommended with the closer offset.

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