Total Door SYSTEMS™

Global Leader in Integrated Access Technology™

Installation Training Seminar

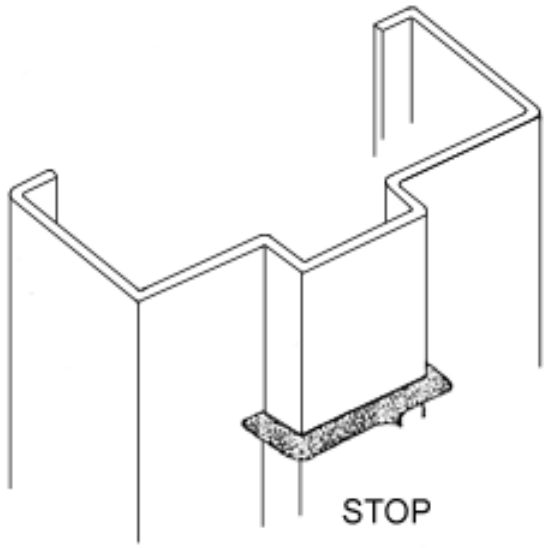
Test Your Awareness

First read the sentence enclosed in the box below

**FINISHED FILES ARE THE RE-
SULT OF YEARS OF SCIENTIF-
IC STUDY COMBINED WITH THE
EXPERIENCE OF MANY YEARS.**

Now count the F's in the sentence. Count them only once and do not go back and count them again.

Frames

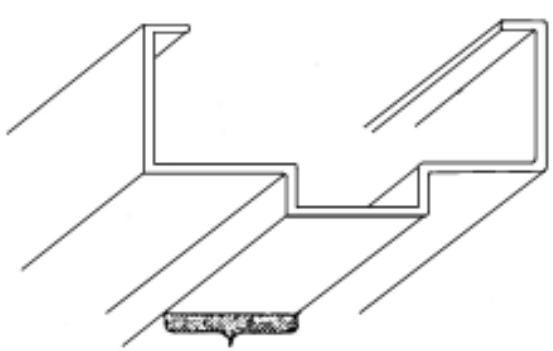


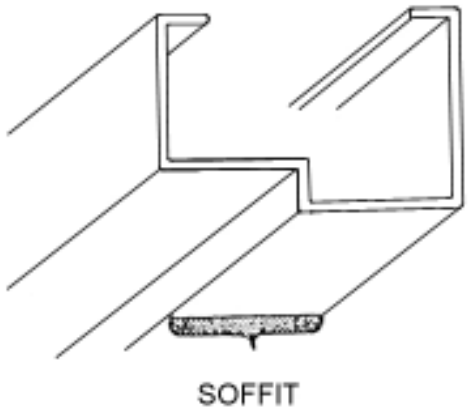
Stop

The ñstopò is the part of the frame against which the door closes and gets its name from wood frames which often utilized an applied strip to stop the door from swinging throughout the opening. In a steel frame, this is an integrally formed part of the frame.

Soffit

The ñsoffitò is the underside surface of the stop on the head. When using the word ñsoffitò in conjunction with hollow metal, reference is made to the head member only.



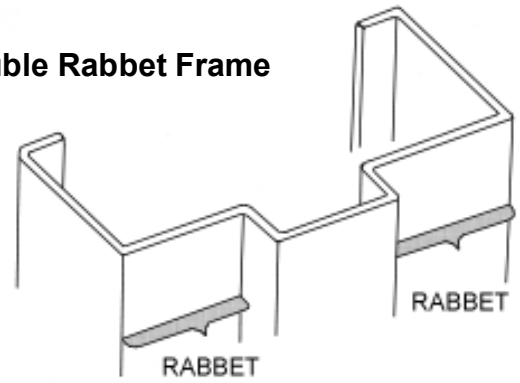


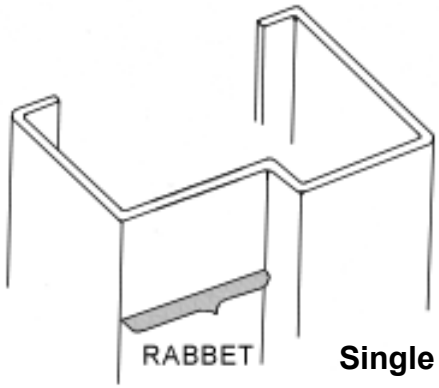
Frames

Rabbet

The **“rabbet”** is the part of the frame that is recessed to receive the door. The rabbet dimension will vary according to the thickness of the door used with the frame. Ceco produces double rabbet frames are formed so one rabbet can be prepared to a 1 3/4òthick door of the opposite rabbet prepared to a 1 3/8òthick door. Small jamb depths are available as single rabbet frames and formed so the rabbet dimension will be correct for the door thickness to be used.

Double Rabbet Frame

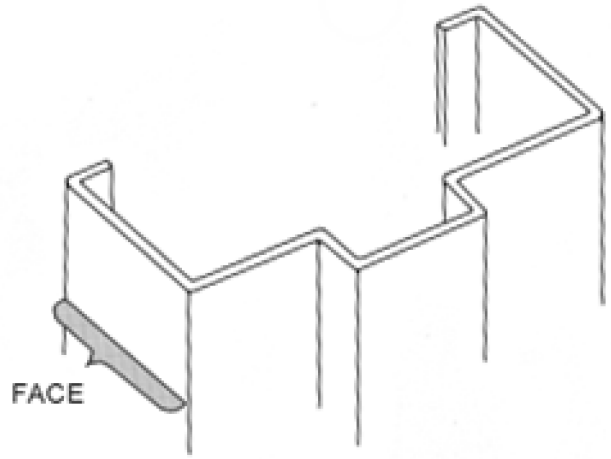




Single Rabbet Frame

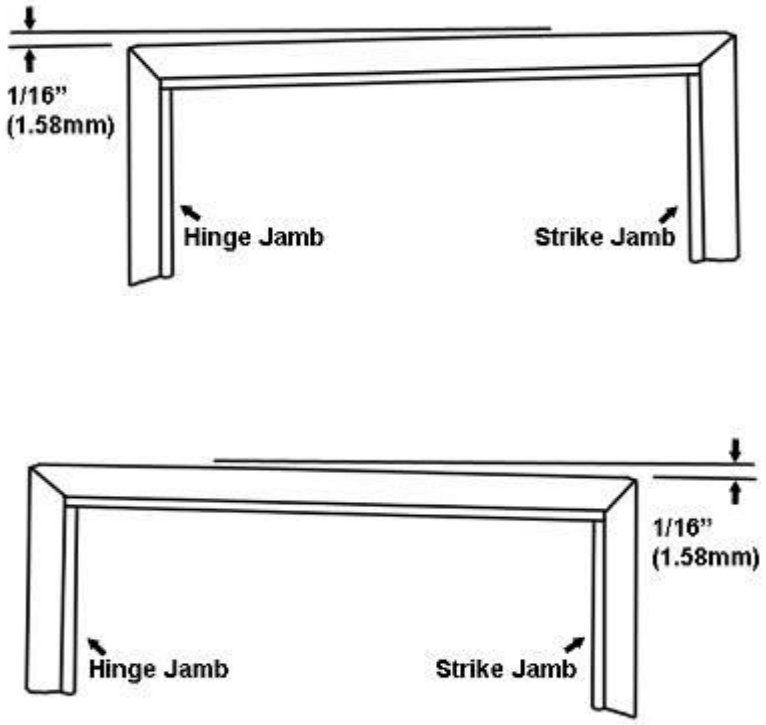
Face

The ñfaceòis the surface of the frame parallel to the face of the wall, and is normally considered the trim.

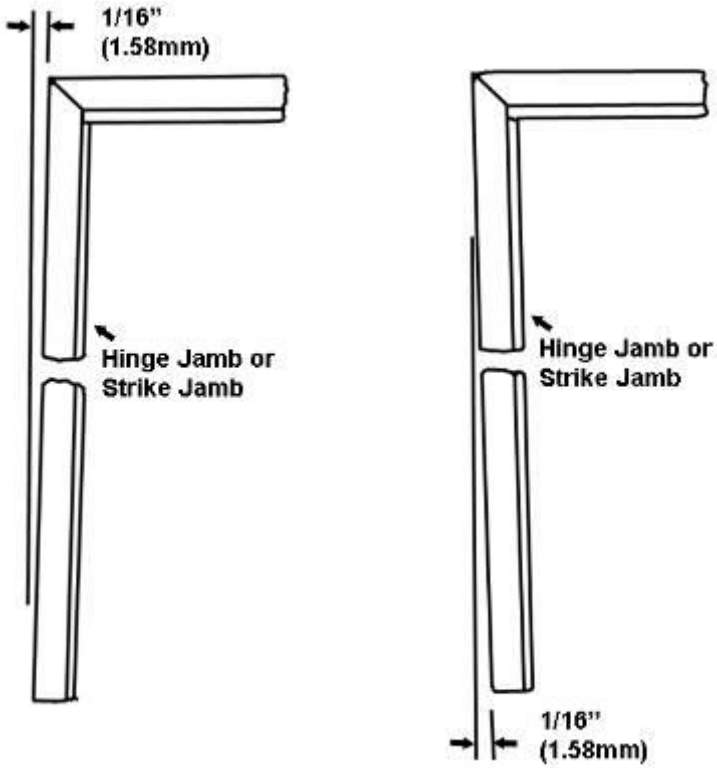


Frames

Out of Square



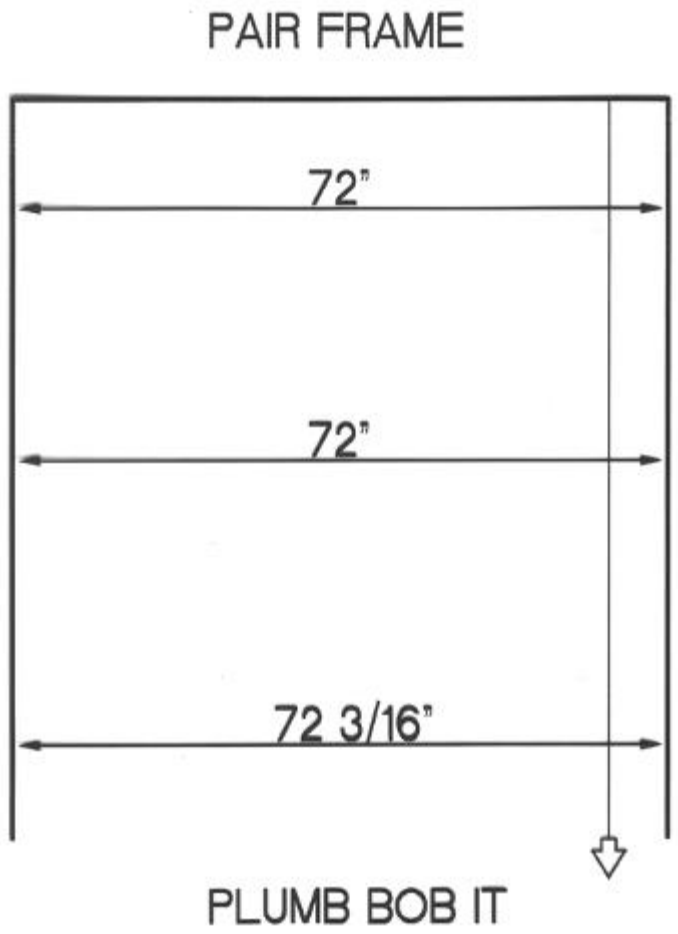
Out of Plumb

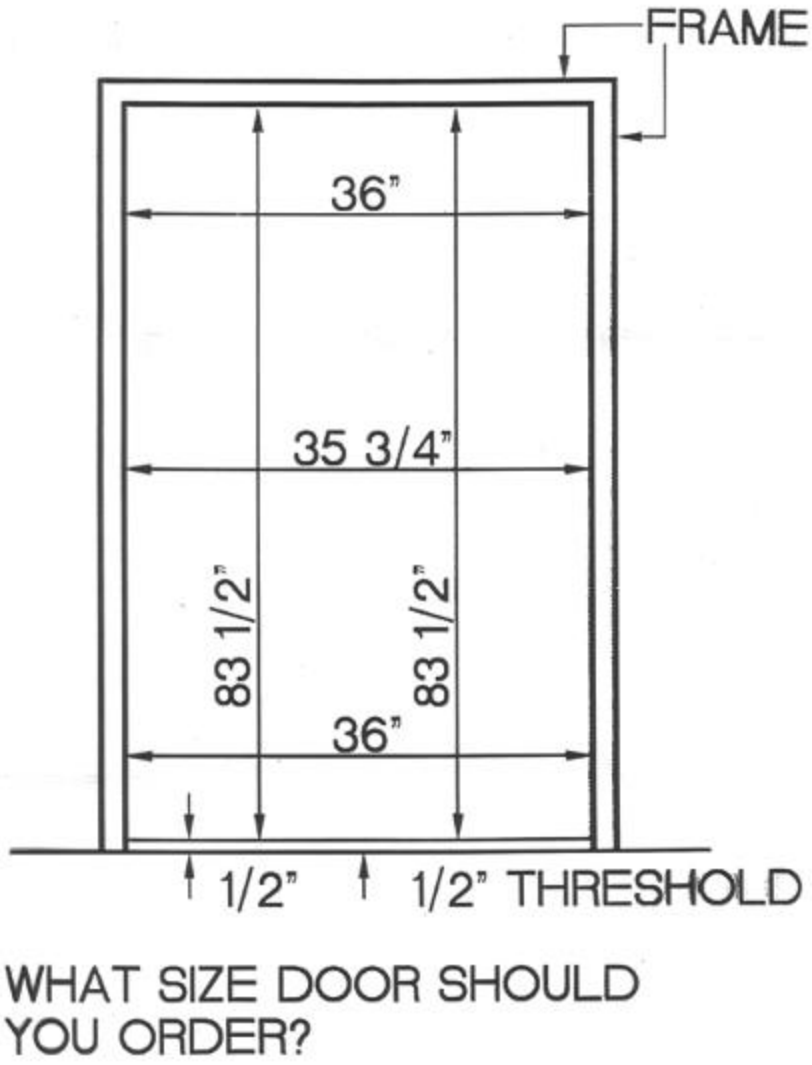


This measurement is set by the Door & Hardware Industry.

Frames

Frame measurements are crucial when determining what door size to order.





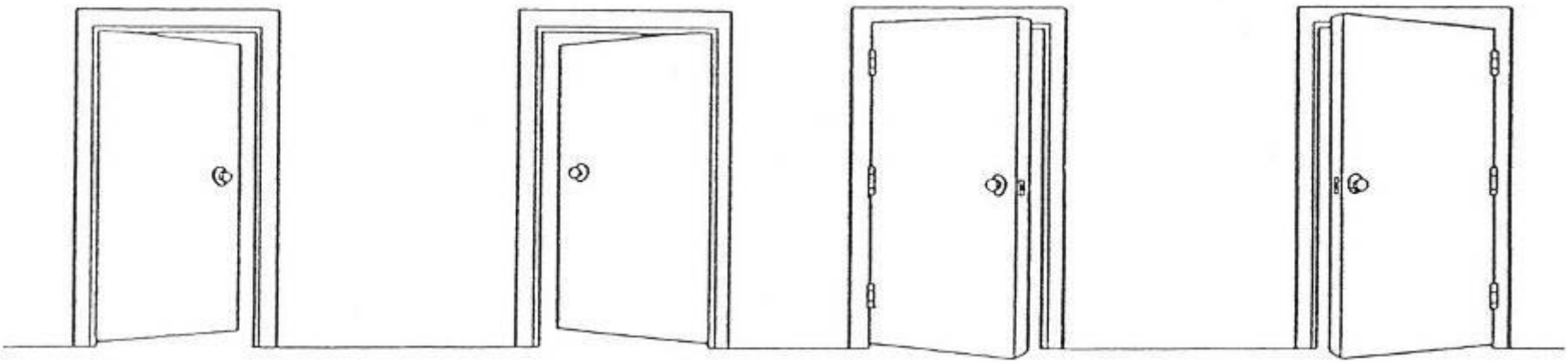
WHAT SIZE DOOR SHOULD YOU ORDER?

Door Handing

Doors swing in different directions and the way in which a door swings is called the ñhandòof the door.

To determine the hand and swing of a door, view the door from the **outside or keyed side**. The side the hinges are on is the hand of the door.

Viewed from outside



Left Hand
(LH)

Right Hand
(RH)

Left Hand Reverse
(LHR)

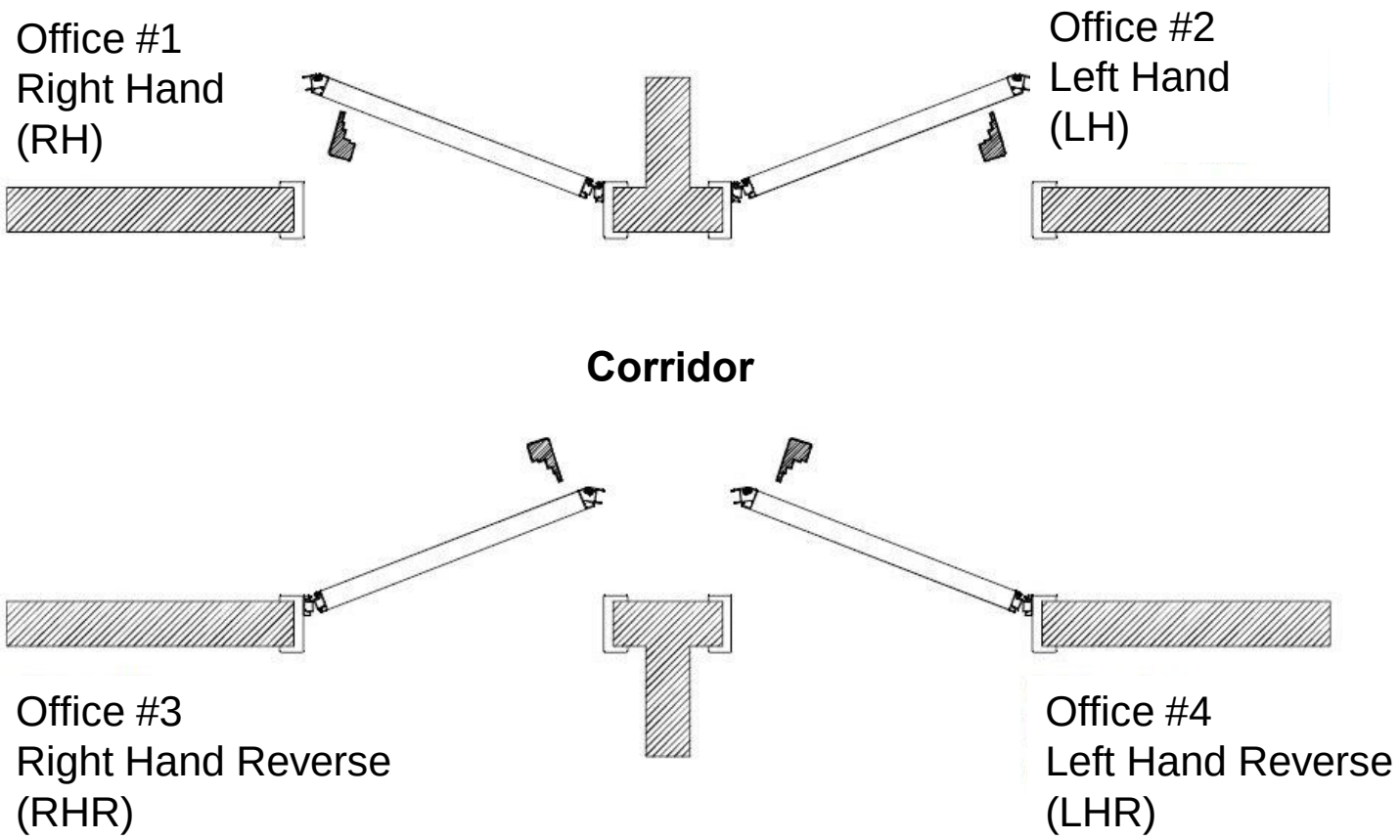
Right Hand Reverse
(RHR)

If the door swings **away** from the viewer, the hand is a regular hand, ie., left hand (LH) or right hand (RH).

If the door swings **towards** the viewer, the door is reverse swing, ie., left hand reverse (LHR) or right hand reverse swing (RHR).

Door Handing

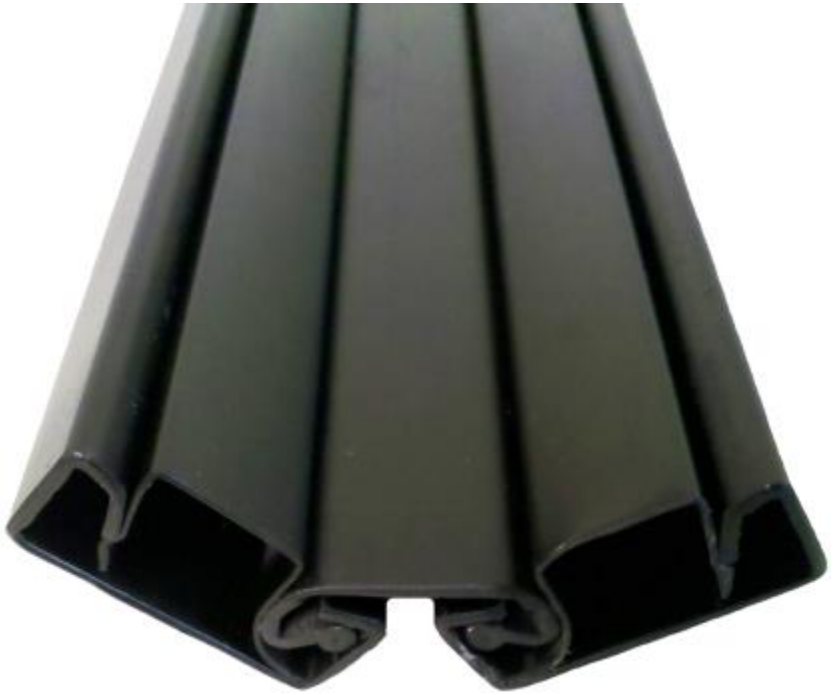
Normally the outside of a door is the side from which it may be opened by a key ï or the **“key side”.** The hardware, therefore, effects the hand of the door. To visualize this, examine the layout below of a possible door arrangement from a corridor to four separate offices. The corridor would be the outside because it is the key side.

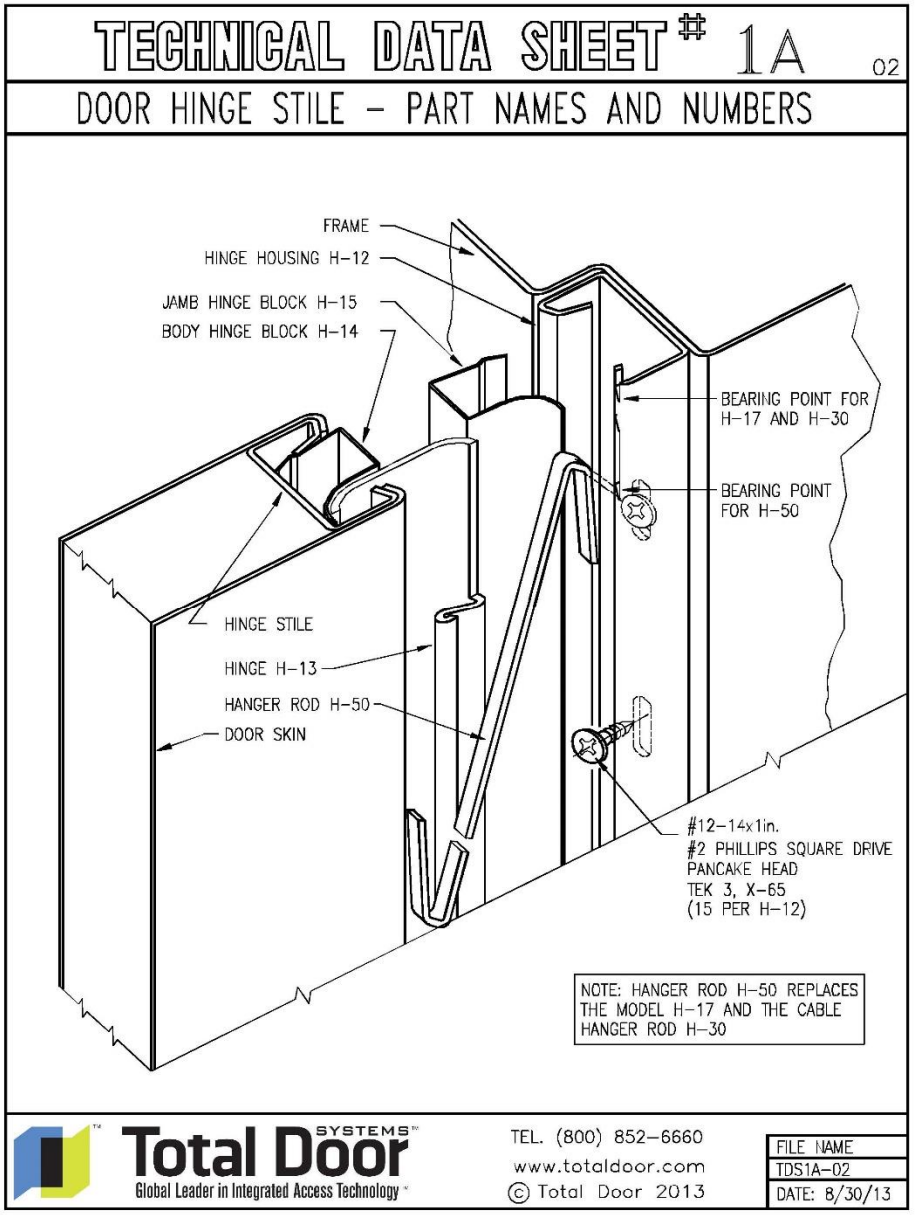


Hinge Side

Hinge side components:

- H-12 Hinge Housing
- H-15 Jamb Hinge Block
- H-14 Body Hinge Block
- B-14 Hinge Stile (built in the door body)
- H-13 Hinge
- H-50 Hanger Rod





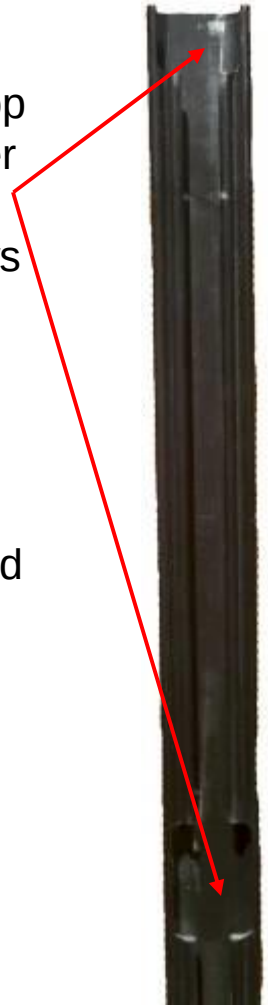
Hinge Side

Hanger rod notch:

- Upper notch is for the older H-17 and H-30 hanger rods (pre 1999 to early 2000)
- The lower notch is for the newer H-50

The hanger rod notch is in the same location on every door. No mater what year it was built.

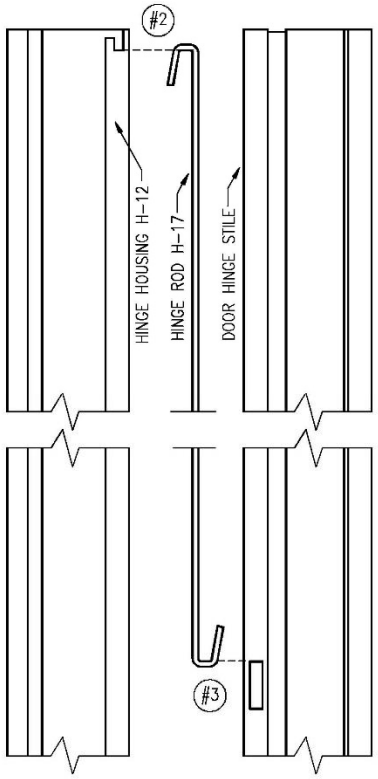
The H-13 is always punched out at the top and where the hanger rod hooks into the door body. This allows for clearance for the hanger rod when the door is opened and closed. (pre 1999 to early 2000, milled area is different based on which hanger rod is used)



Hinge Side

TECHNICAL DATA SHEET # 40

H-17 HANGER ROD INSTALLATION INSTRUCTIONS

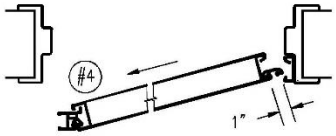


NOTE: IF REPLACING H-17 WITH H-50 HINGE HOUSING H-12 AND HINGE H-13 MUST BE REPLACED

HANGER ROD INSTALLATION

#1 DO NOT OPEN UP THE HOOK

OPENING UP HANGER ROD WILL CAUSE FAILURE.



#2 ENGAGE THE HANGER ROD IN THE SLOT IN THE HINGE HOUSING H-12 WITH THE DOOR IN POSITION AS SHOWN

#3 TILT THE TOP OF THE DOOR AWAY FROM THE HINGE JAMB TO RAISE THE HINGE STILE. THEN ENGAGE THE HANGER ROD IN THE HINGE STILE WITHOUT OPENING THE HOOK ANGLE. DO NOT ALLOW THE END OF THE HOOK TO TOUCH THE TOP OF THE SLOT IN THE HINGE STILE OR HANGER ROD BREAKAGE MAY OCCUR.

#4 WHEN DOING THE ABOVE DO NOT PULL DOOR AWAY FROM THE JAMB BY MORE THAN 6". THIS CAN CAUSE HANGER ROD FAILURE.

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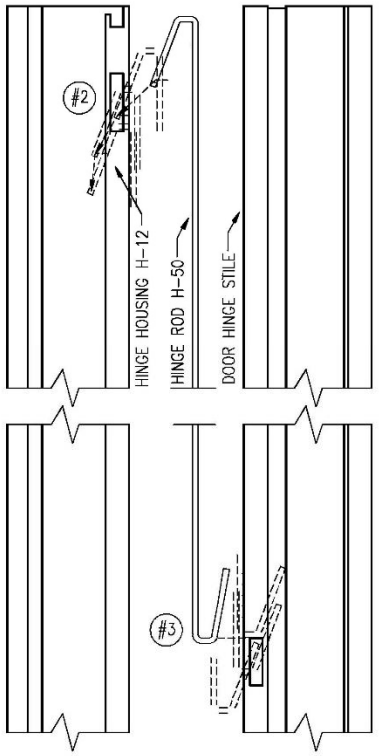
FILE NAME
TDS40
DATE 8/30/13

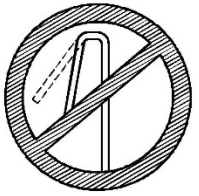
TECHNICAL DATA SHEET # 40B

H-50 HANGER ROD INSTALLATION INSTRUCTIONS



HANGER ROD INSTALLATION

#1 DO NOT OPEN UP THE HOOK



OPENING UP HANGER ROD WILL CAUSE FAILURE.

#2 ENGAGE THE HANGER ROD IN THE SLOT IN THE HINGE HOUSING H-12 WITH THE DOOR IN POSITION AS SHOWN

#3 TILT THE TOP OF THE DOOR AWAY FROM THE HINGE JAMB TO RAISE THE HINGE STILE. THEN ENGAGE THE HANGER ROD IN THE HINGE STILE WITHOUT OPENING THE HOOK ANGLE. DO NOT ALLOW THE END OF THE HOOK TO TOUCH THE TOP OF THE SLOT IN THE HINGE STILE OR HANGER ROD BREAKAGE MAY OCCUR.

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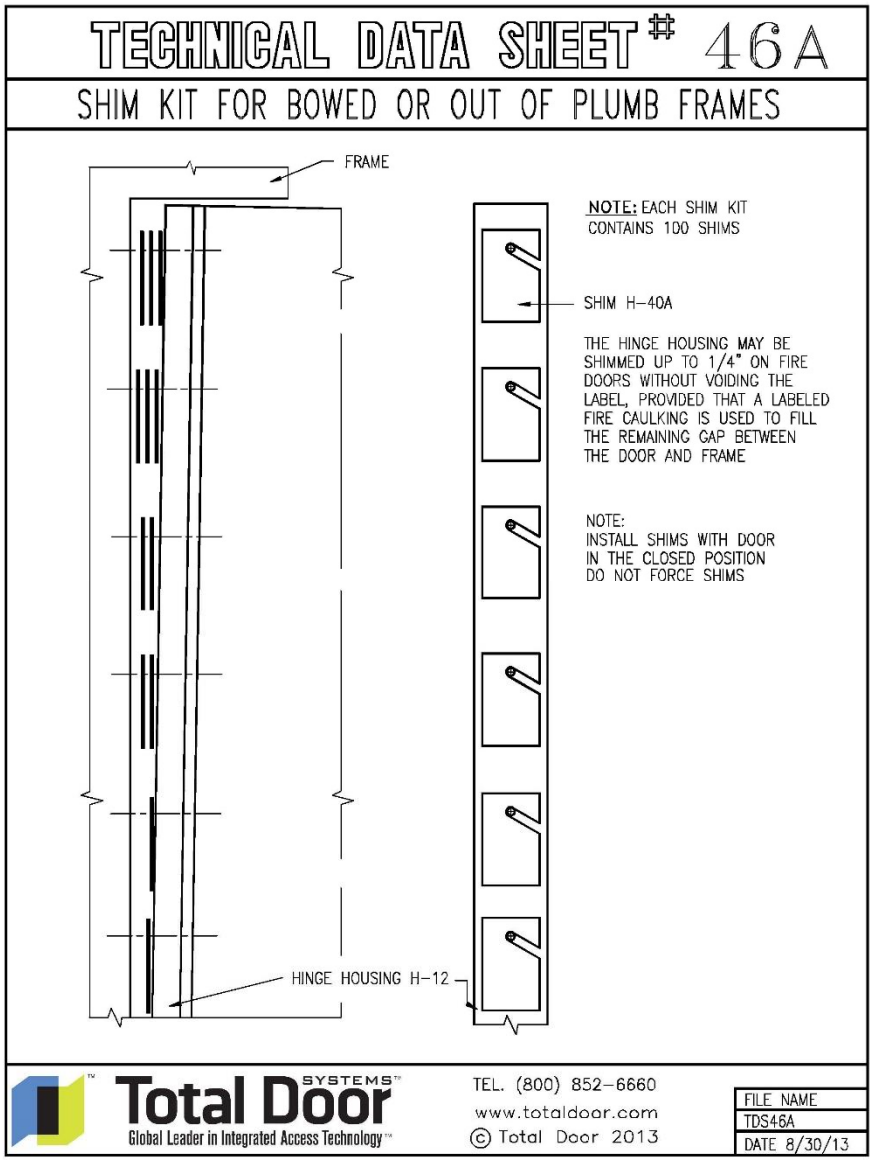
FILE NAME
TDS40B
DATE 8/30/13

Hinge Side



Installation starts on the hinge side.

Now that the frames are in place and determined that they are square and plumb, hanging the doors can begin.

There may be times when shims will be needed. There is no pattern to shimming. You could have 1 at the bottom, 3 in the middle and 0 at the top. No matter what, the hinge housing (H-12) needs to be plumb.

No less than 15 screws are to be used when installing the H-12.

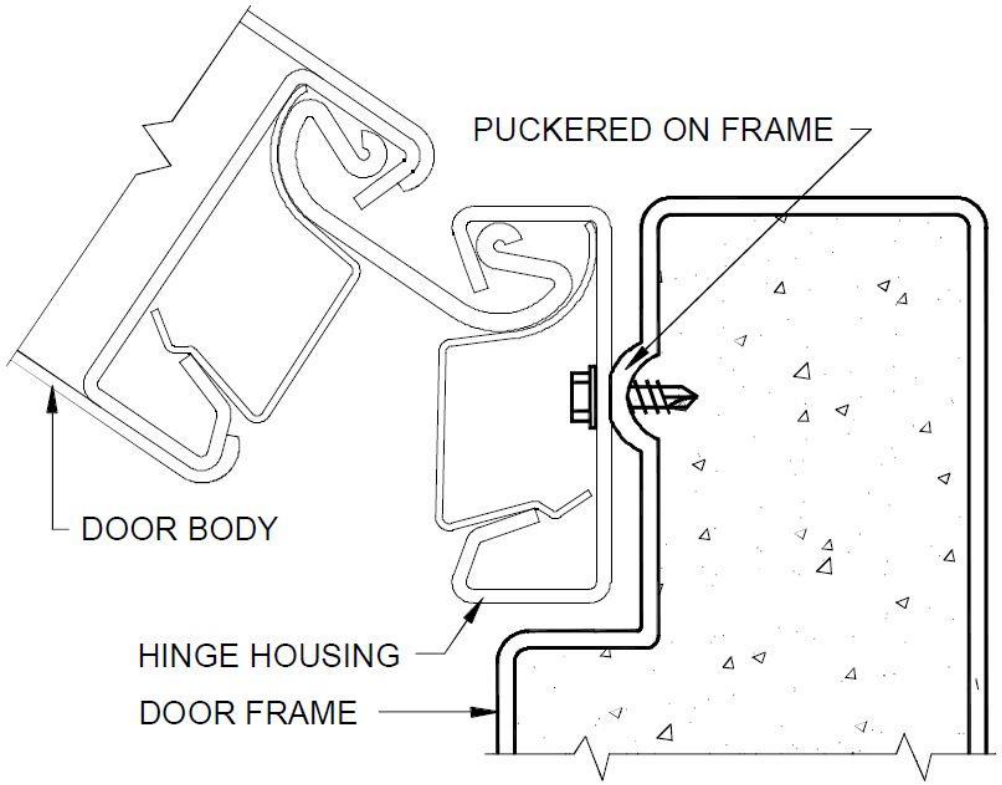
***1/4" max shimming on fire rated doors without voiding the fire label, providing a labeled fire caulk is used to fill the gap between the door and frame.**

Hinge Side

Masonry Openings

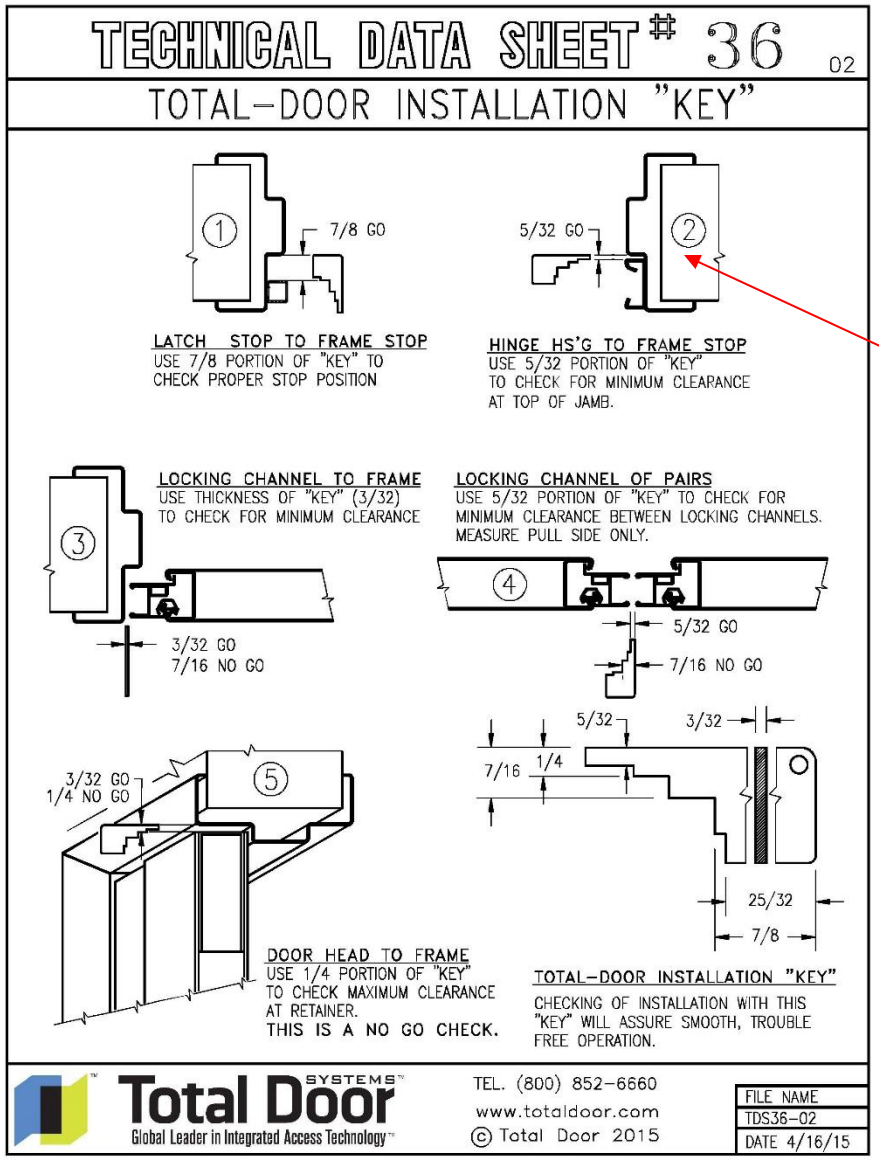
When installing doors in a grouted frame, use a **1/8” masonry drill bit** to pilot holes for installation screws. Tapcons are to be used as well for concrete openings with proper head clearance. Which can be supplied by Total Door Systems.

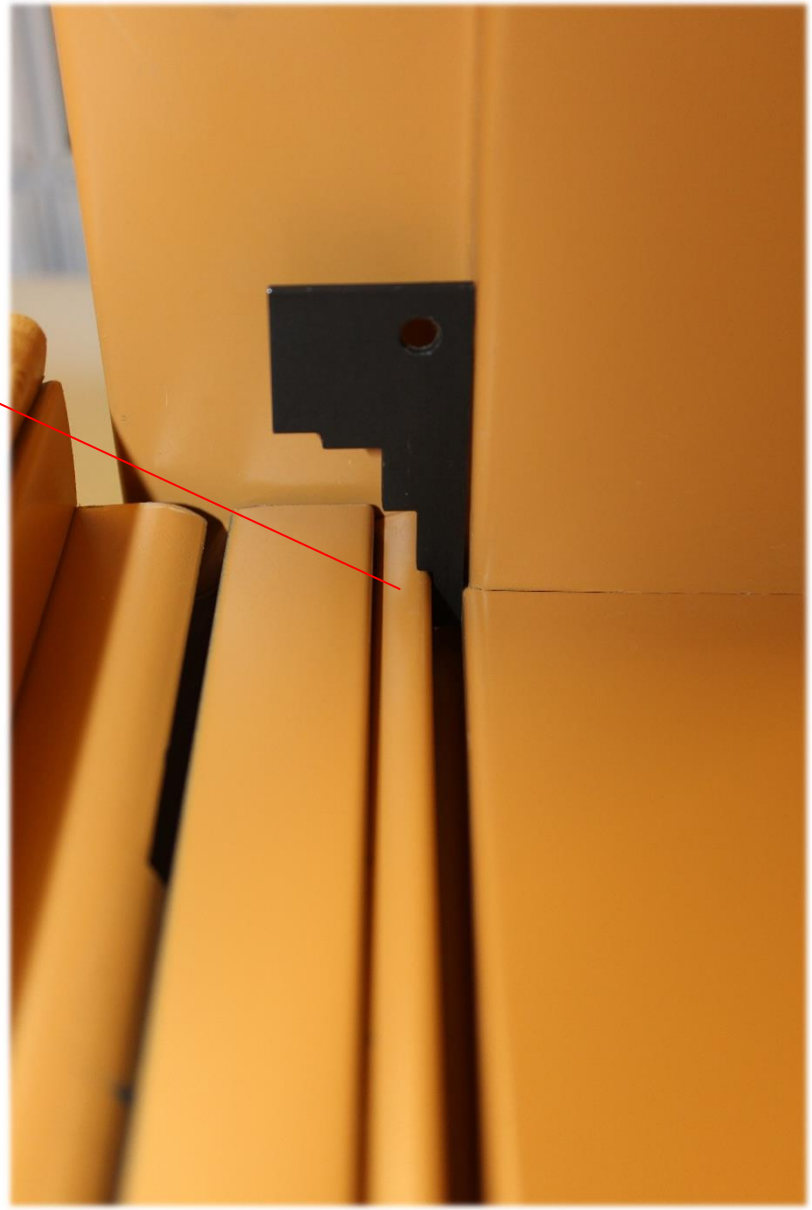
Do not use explosive fasteners to anchor hinge housing to a fully grouted frame ï impact causes concrete to pucker at fastener.



Hinge Side

Having the correct tolerances ensures the door will operate properly.





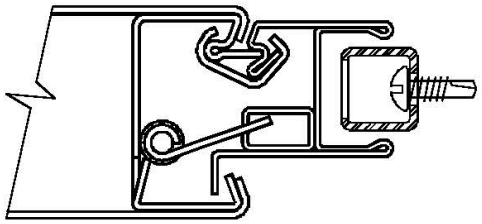
Advantages:

- Hanger rod carries the weight of the door allowing for hinge to rotate freely.
- Offers opportunity to plane door with the frame for a better fit.
- Reduces air leakage.
- Retrofit over reinforced hinge mortise.
- Mounts to any surface.
- Dual pivot-point, semi-wide throw hinge allows the door to open a full 180° and gives clear width.

Latch Side

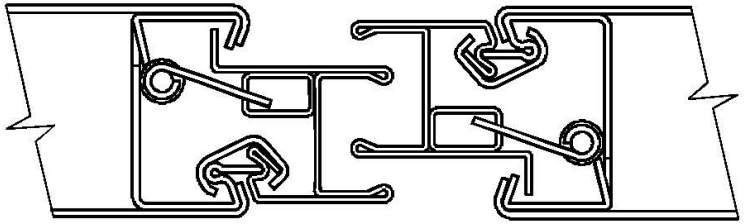
Latch side components:

- L-11 Locking Channel
- L-127 Clip
- Y-13 Helper Spring
- B-15 Latch Stile (built in door body)
- R-12SA Retainer Assembly

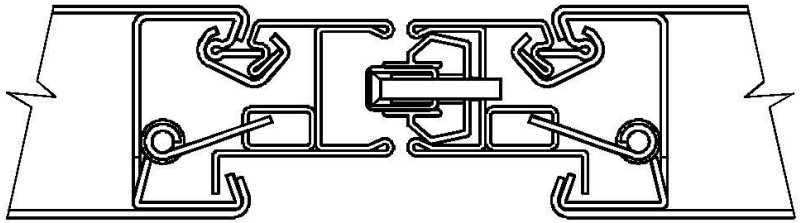


Single doors have a latch stop that gets fastened to the jamb

Double Egress rotate into one another with ¼" min. overlap



Pairs have an adjustable tongue on the RH/LR leaf

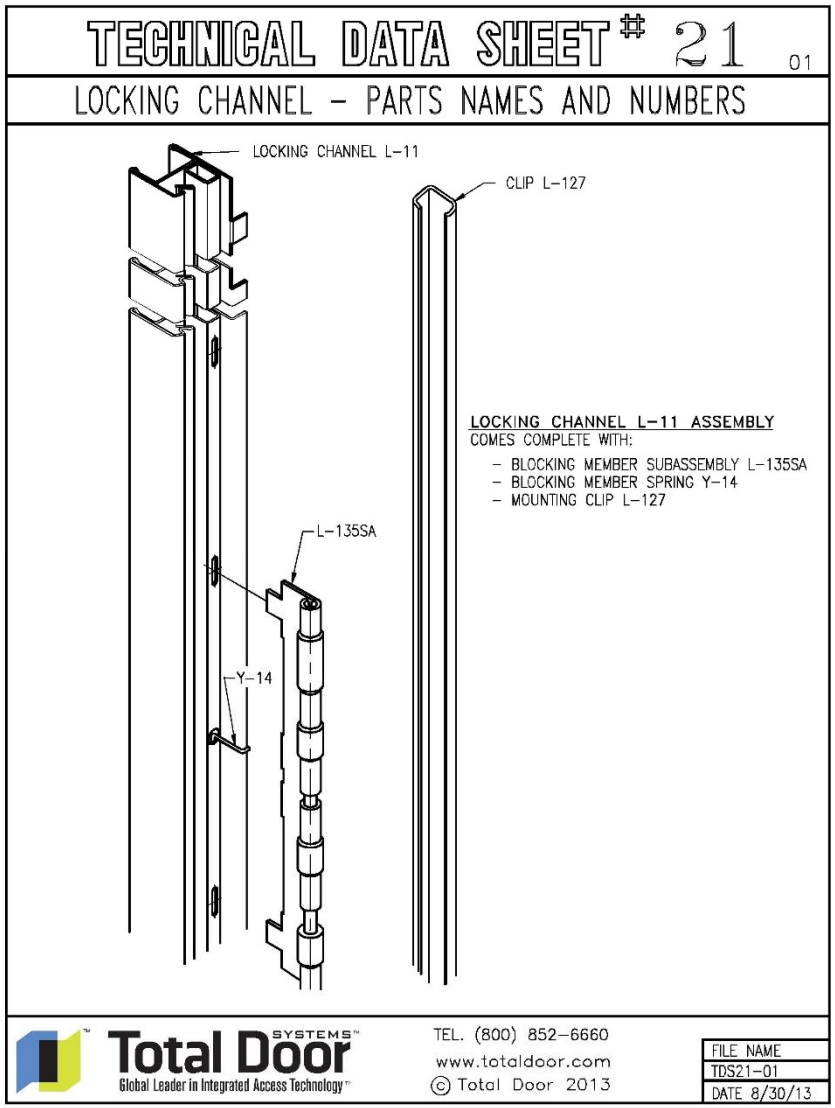


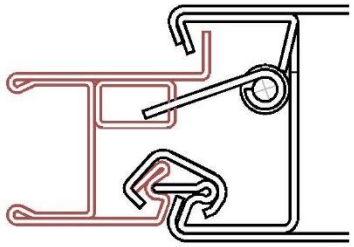
Latch Side

Locking channel is held on the door body with the clip (L-127).

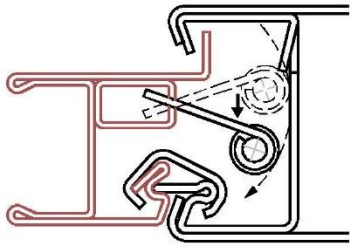
The blocking member subassembly (L-135SA) does need to be installed correctly.

The round portion points opposite the flange of the locking channel.

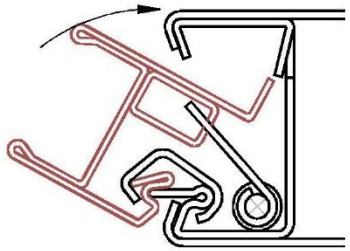




Door closed



Actuator moves blocking member to new position

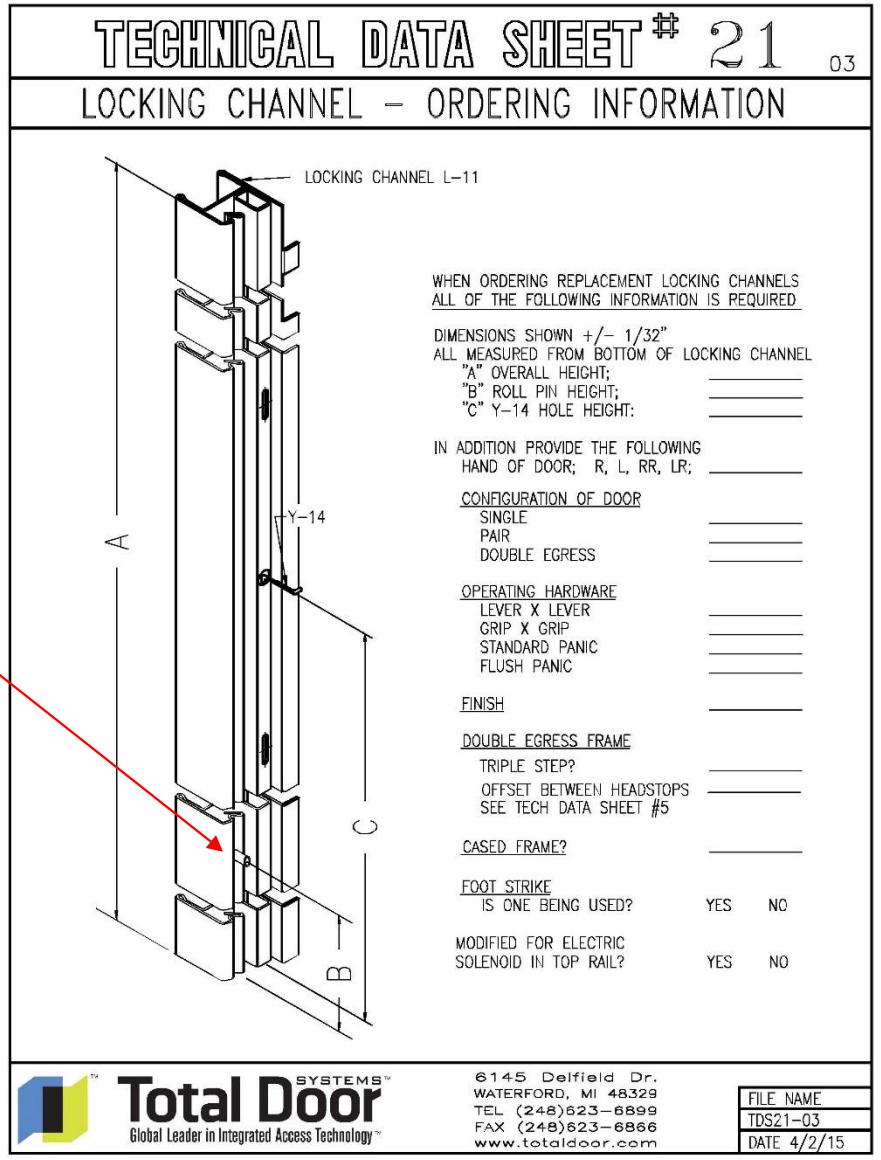


Door open

Latch Side

A roll pin on the locking channel (L-11), prevents the clip from falling out the bottom of the door. It also aligns with a corresponding notch in the door body. (always at the bottom location of the door)

The roll pin is 3ò on center from the bottom. If that measurement is less than 3ò the door has been cut down in the field.



TECHNICAL DATA SHEET # 21 03

LOCKING CHANNEL – ORDERING INFORMATION

WHEN ORDERING REPLACEMENT LOCKING CHANNELS
ALL OF THE FOLLOWING INFORMATION IS REQUIRED

DIMENSIONS SHOWN +/– 1/32"
ALL MEASURED FROM BOTTOM OF LOCKING CHANNEL
"A" OVERALL HEIGHT; _____
"B" ROLL PIN HEIGHT; _____
"C" Y–14 HOLE HEIGHT: _____

IN ADDITION PROVIDE THE FOLLOWING
HAND OF DOOR; R, L, RR, LR; _____

CONFIGURATION OF DOOR
SINGLE _____
PAIR _____
DOUBLE EGRESS _____

OPERATING HARDWARE
LEVER X LEVER _____
GRIP X GRIP _____
STANDARD PANIC _____
FLUSH PANIC _____

FINISH _____

DOUBLE EGRESS FRAME
TRIPLE STEP? _____
OFFSET BETWEEN HEADSTOPS _____
SEE TECH DATA SHEET #5

CASED FRAME? _____

FOOT STRIKE
IS ONE BEING USED? YES NO

MODIFIED FOR ELECTRIC
SOLENOID IN TOP RAIL? YES NO

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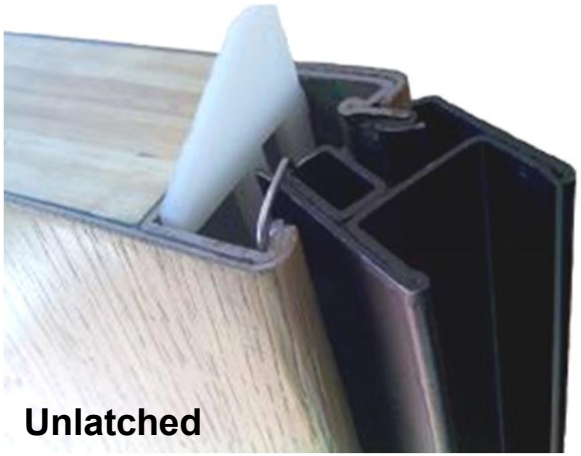
FILE NAME
TDS21-03
DATE 4/2/15

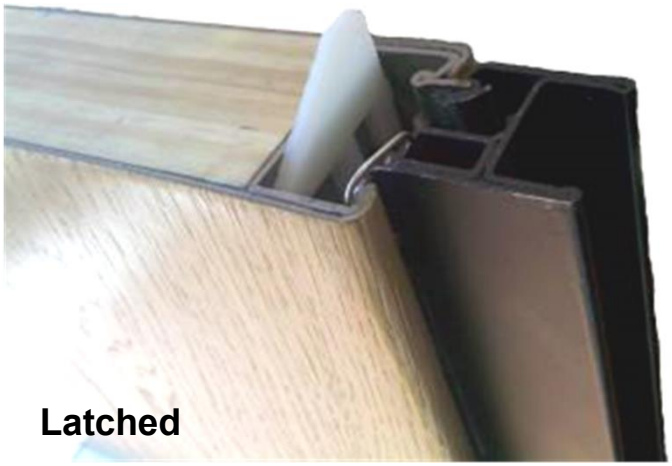
Latch Side

Helper Spring

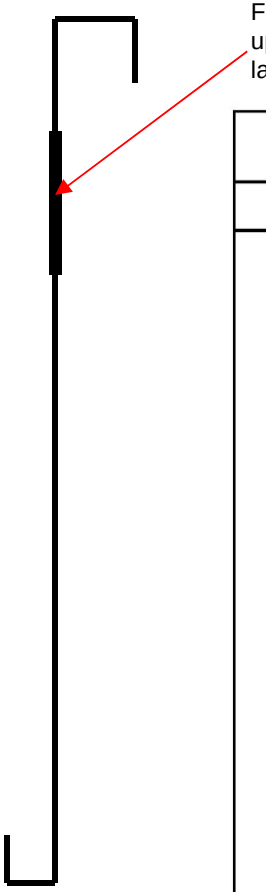
- Assist the locking channel to the unlatched position
- Install and rotate to 90° on all hardware and up to 180° max only on flush panic. Pre set from the factory.



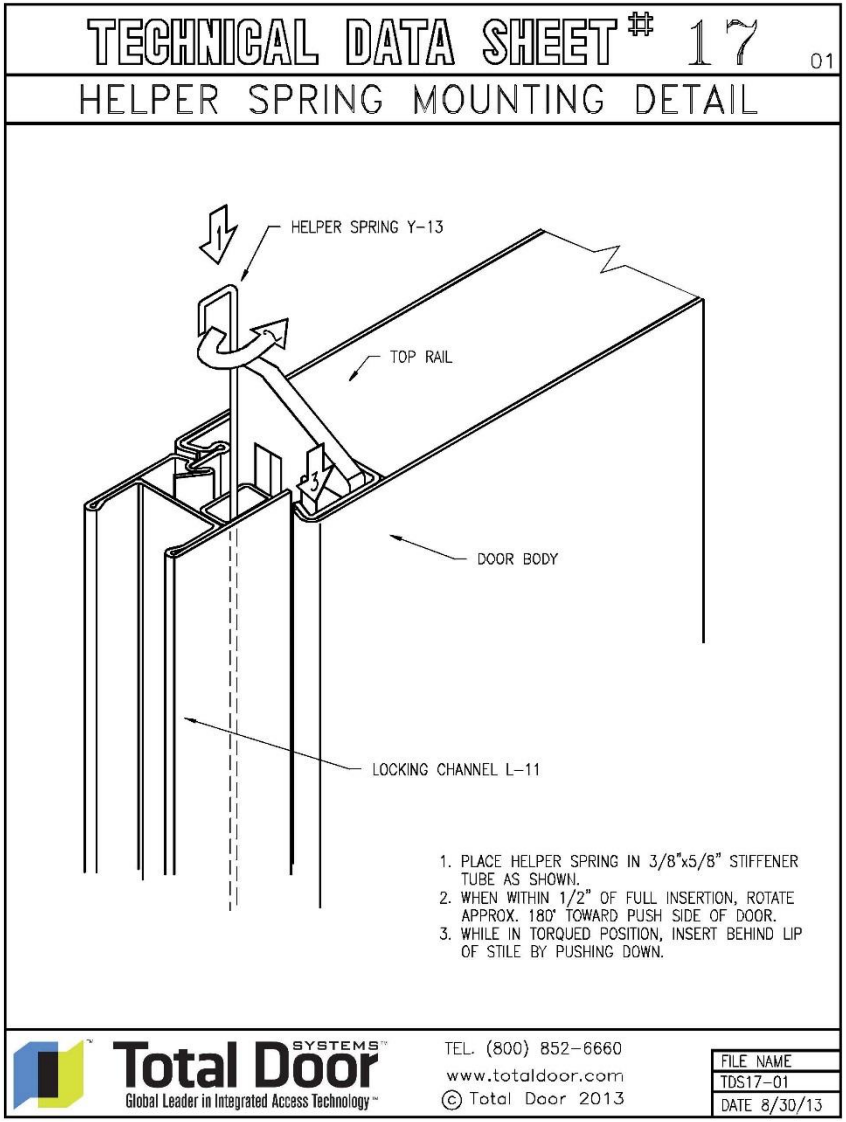
Unlatched



Latched



Foam tape to keep spring from creeping up and to cut down on noise of the latching channel rotating.

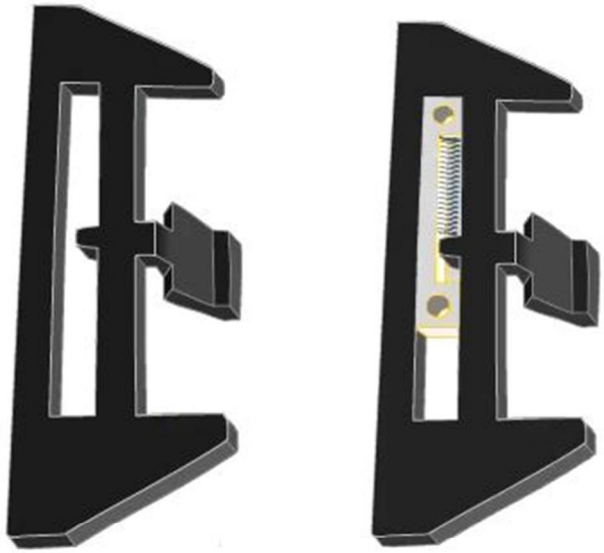


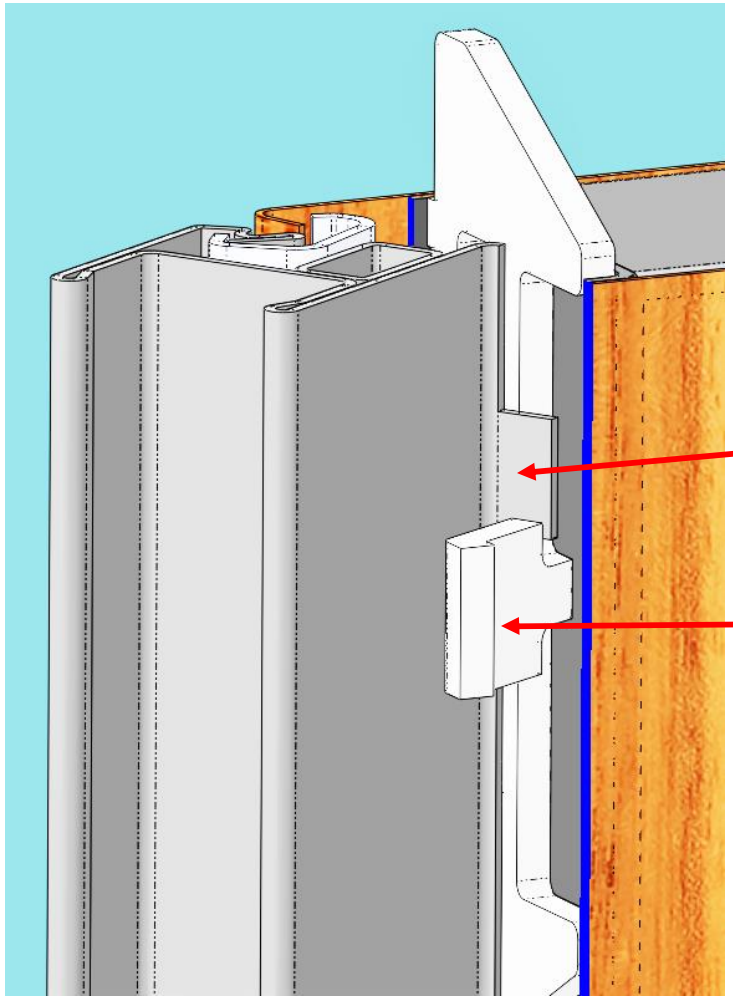
Latch Side

Retainer

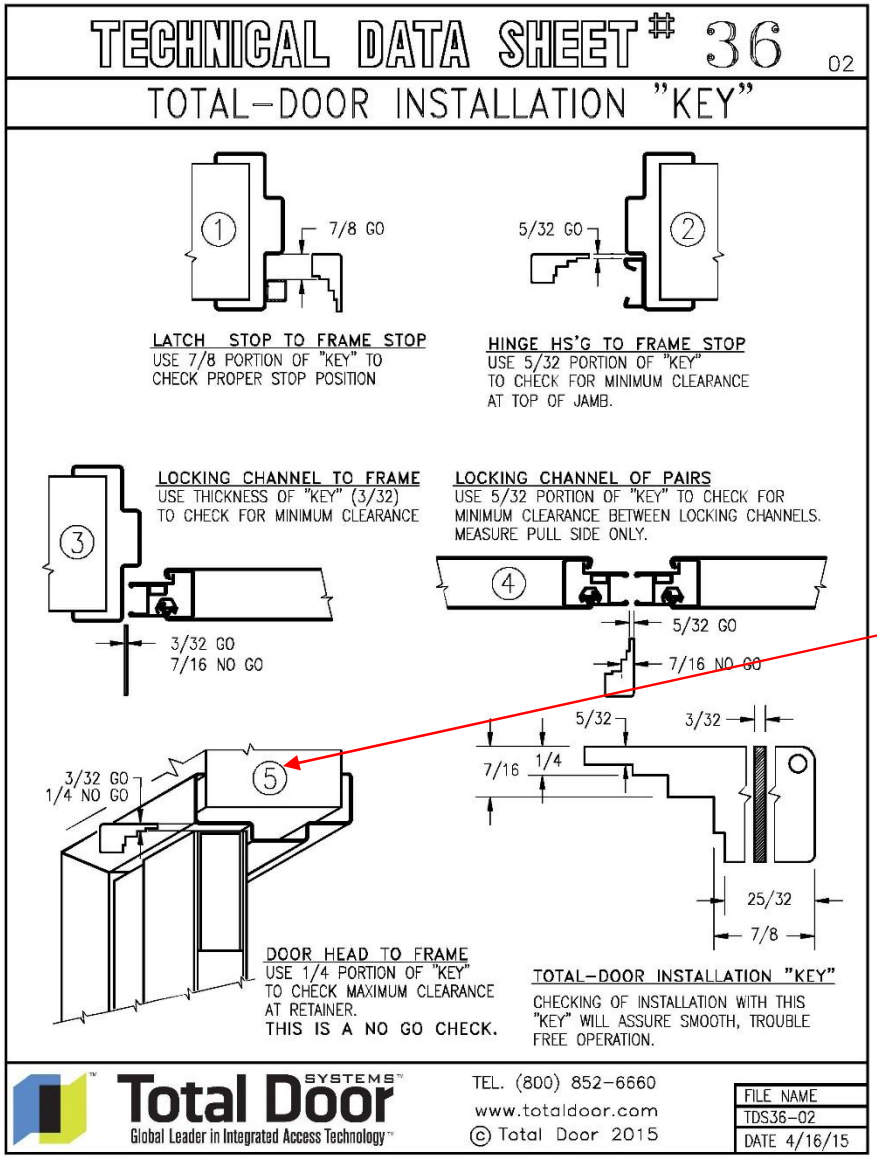
- Retains the locking channel in the unlatched position.
- Tab on the locking channel engages on the tab on the retainer.

Retainer Assembly
R12SA





Latch Side


TECHNICAL DATA SHEET # 36 02
TOTAL-DOOR INSTALLATION "KEY"
1
7/8 GO
LATCH STOP TO FRAME STOP
USE 7/8 PORTION OF "KEY" TO CHECK PROPER STOP POSITION
5/32 GO
2
HINGE HS'G TO FRAME STOP
USE 5/32 PORTION OF "KEY" TO CHECK FOR MINIMUM CLEARANCE AT TOP OF JAMB.
3
LOCKING CHANNEL TO FRAME
USE THICKNESS OF "KEY" (3/32) TO CHECK FOR MINIMUM CLEARANCE
3/32 GO
7/16 NO GO
LOCKING CHANNEL OF PAIRS
USE 5/32 PORTION OF "KEY" TO CHECK FOR MINIMUM CLEARANCE BETWEEN LOCKING CHANNELS. MEASURE PULL SIDE ONLY.
4
5/32 GO
7/16 NO GO
5/32
3/32
7/16
1/4
25/32
7/8
3/32 GO
1/4 NO GO
5
DOOR HEAD TO FRAME
USE 1/4 PORTION OF "KEY" TO CHECK MAXIMUM CLEARANCE AT RETAINER.
THIS IS A NO GO CHECK.
TOTAL-DOOR INSTALLATION "KEY"
CHECKING OF INSTALLATION WITH THIS "KEY" WILL ASSURE SMOOTH, TROUBLE FREE OPERATION.
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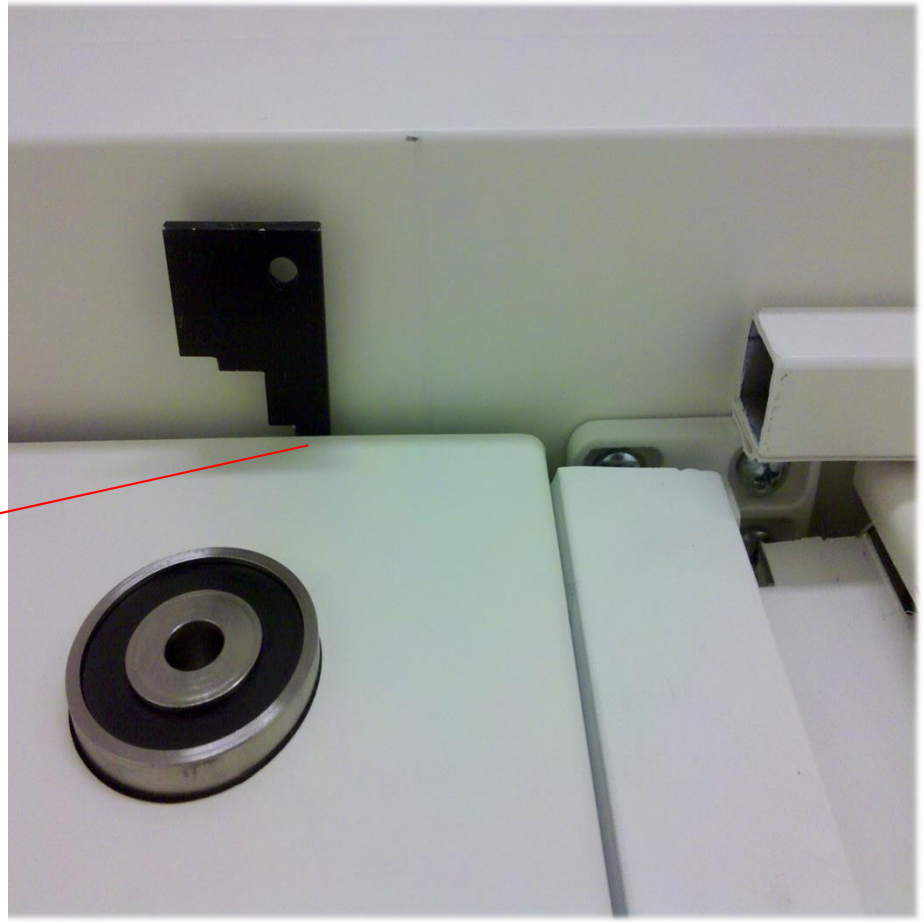
FILE NAME
TDS36-02
DATE 4/16/15



Advantages:

- Continuous latching channel provides exceptional security compared to typical single latch bolt door strike.
- Eliminates vertical rods, floor hardware, coordinators, astragals and flush bolts on pairs and double egress doors.
- Reduces air leakage.
- Less moving parts.
- Allows for less flex in the door body.

Mechanisms

Total Doors mechanism types.

Levers

Standard Panic

Flush Panic

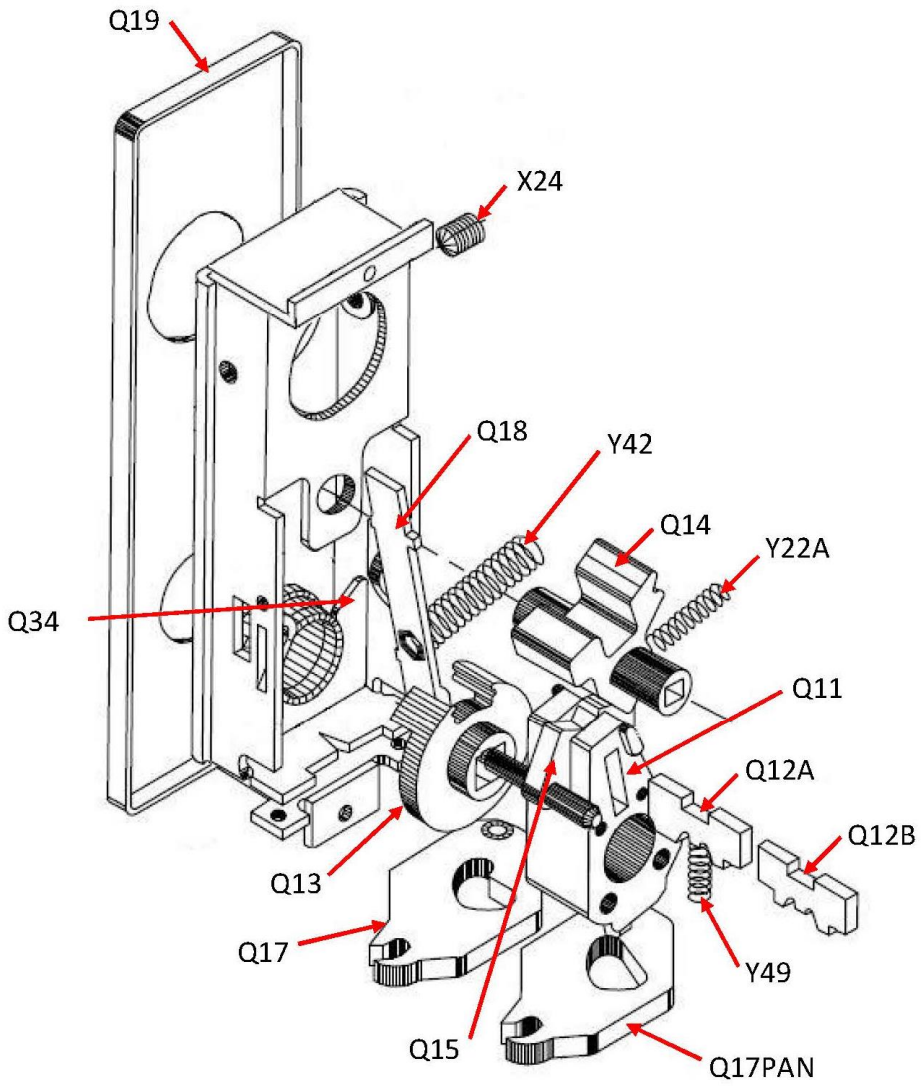
Push/Pull Trim

Mechanisms

Lever Mechanism

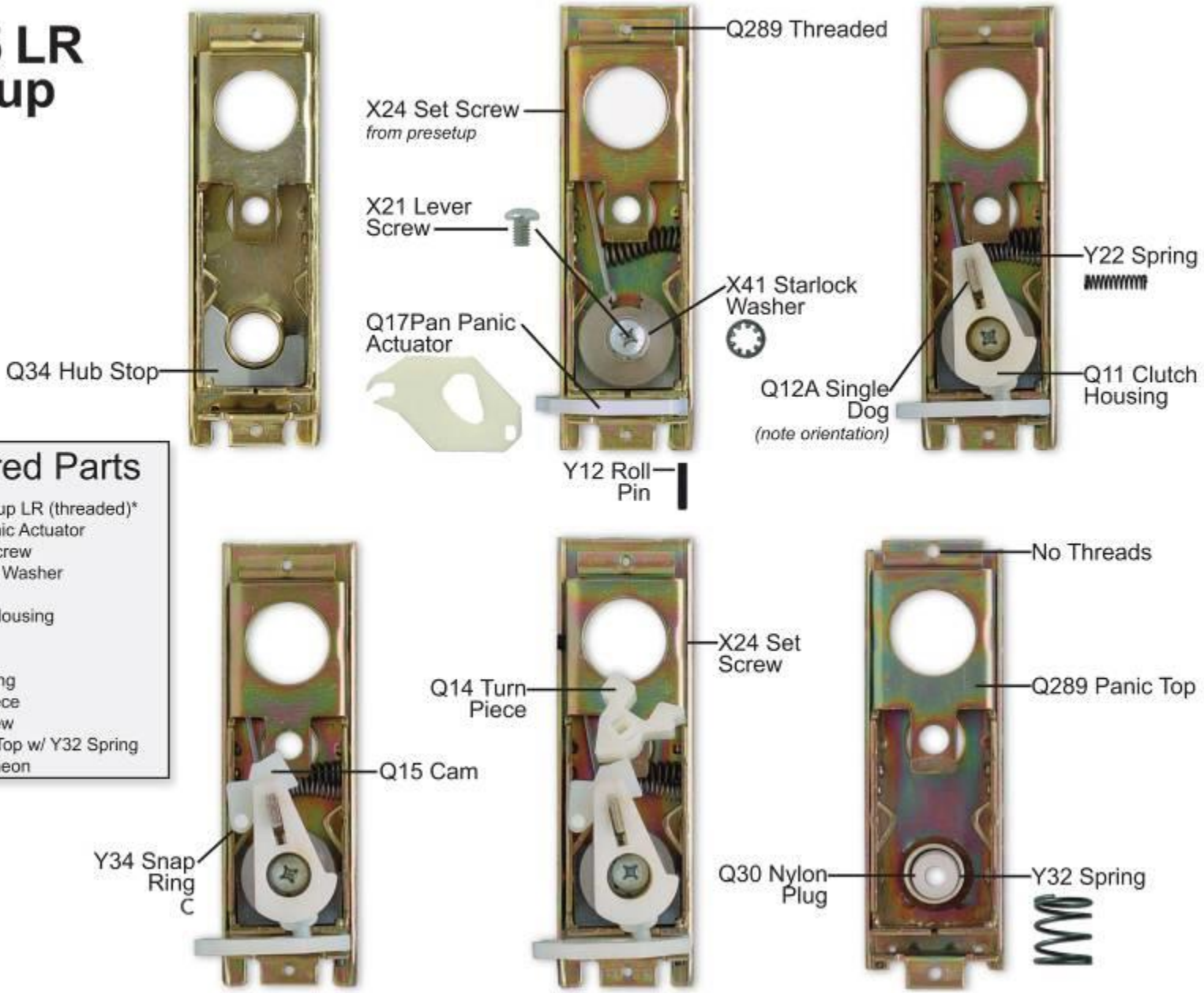
- Installed at the factory requiring little or no field labor.
- Three-hour fire rating and ADA compliant.

Mechanisms



PART NAME	PART NUMBER
Actuator ï Lever Actuator ï Panic	Q-17 Q-17 PAN
Cam	Q-15
Clutch Housing	Q-11
Dog ï Single Dog ï Double	Q-12A Q-12B
Dog spring	Y-49
Escutcheon	Q-19
Hub	Q-13
Hub Stop	Q-34
Lever Spring	Y-42
Pan Head Screw	X-21
Plastic Plug	Q-30
Plug Retainer	Y-104
Roll Pin	Y-12
Set Screw	X-24
Spring ï handed	Y-22A
Lever Spring	Q-18
Star lock Washer	X-41
Turnpiece Hub	Q-14

LP05 LR Setup



Required Parts

1 - Q289 Presetup LR (threaded)*
1 - Q17PAN Panic Actuator
1 - X21 Lever Screw
1 - X41 Starlock Washer
1 - Y12 Roll Pin
1 - Q11 Clutch Housing
1 - Y22 Spring
1 - Q15 Cam
1 - Y34 Snap Ring
1 - Q14 Turn Piece
2 - X24 Set Screw
1 - Q289 Panic Top w/ Y32 Spring
1 - LCO Escutcheon

Mechanisms

Push/Pull Mechanism Assembly

- Installed at the factory requiring no field labor.
- Three-hour fire rating and ADA compliant.

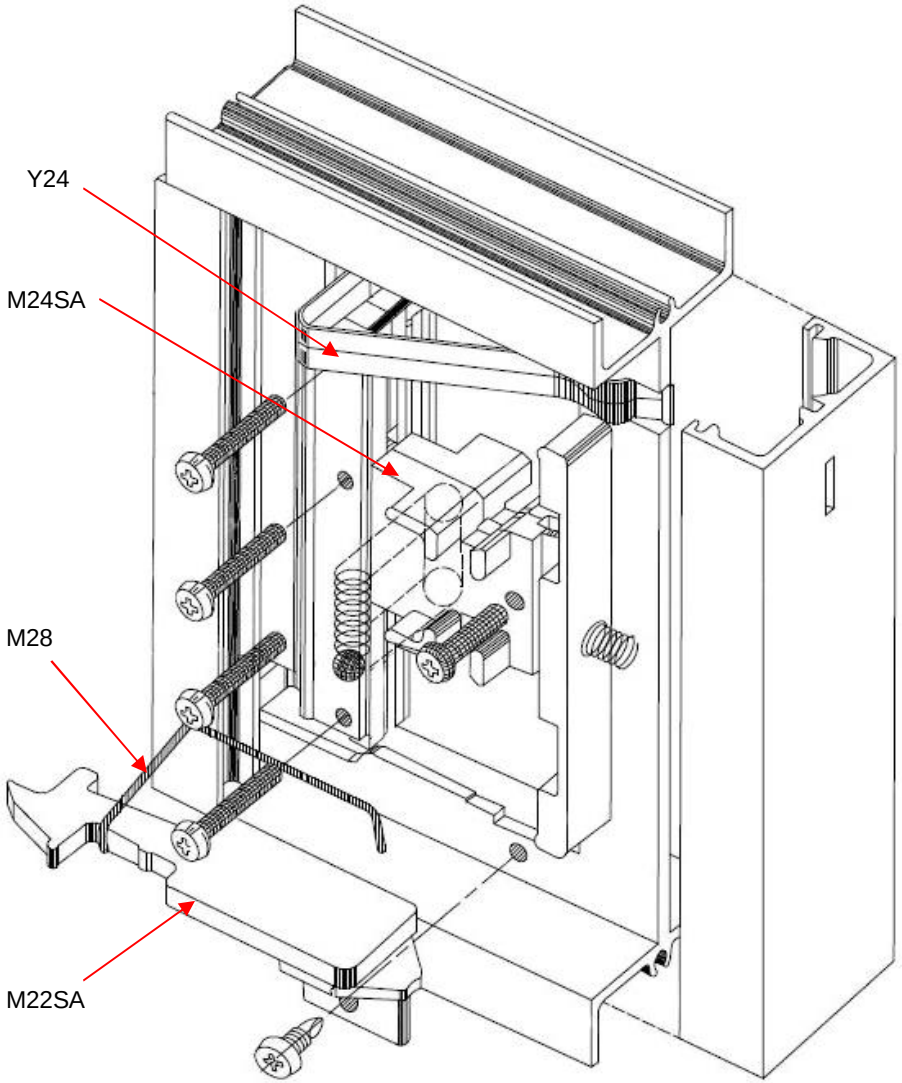
M33

M32

M35

M52

Push/Pull Mechanism Assembly



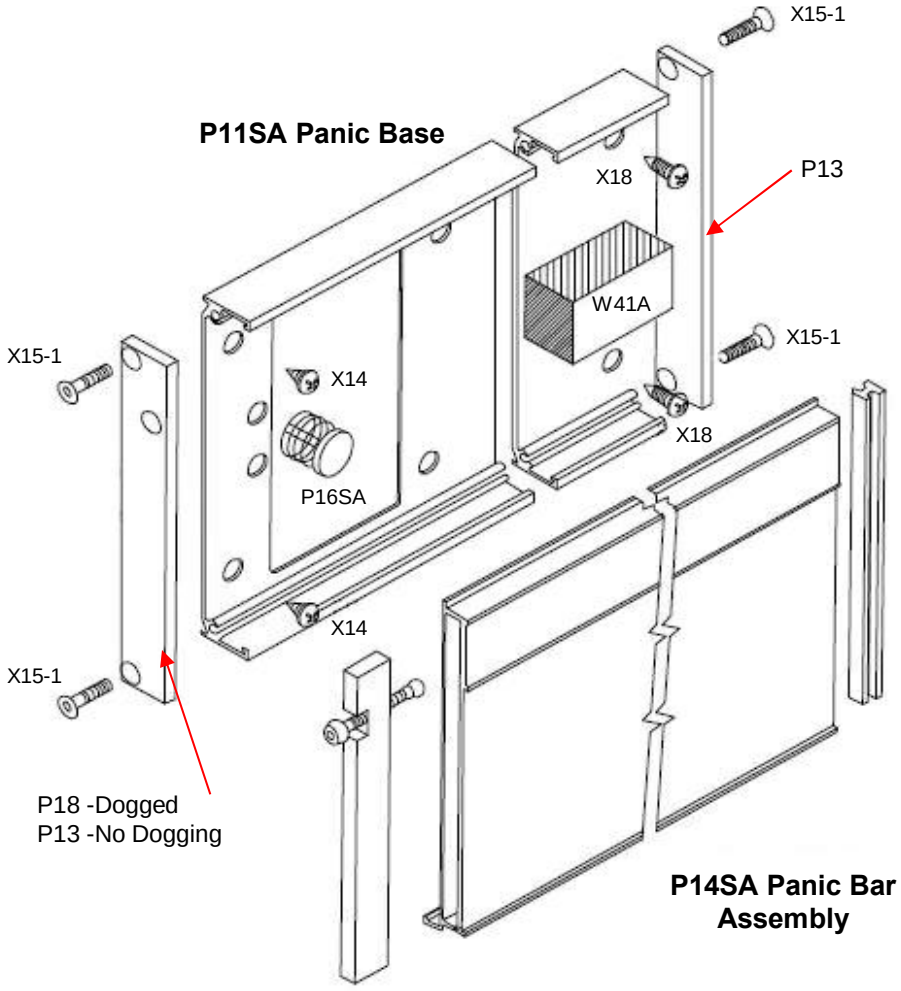
PART NAME	PART NUMBER
Actuator Assembly	M22SA
Slide Block Assembly - (includes screws, slide blocks, springs, ball bearing & locking bar)	M24SA
Puller Rod	M28
Face Spring	Y24

Panics

Standard Panic

1-5/16òprojection allows a 32òclear width in a 36òopening. Comes in a standard 24òwidth. A smaller version (SP14) of our surface exit device is available for non-rated applications.

Standard Panic



PART NAME	PART NUMBER
Panic Bar Assembly	P14SA
Panic Base	P11SA
Panic Button Assembly	P16SA
Base End Plate includes screws	P13
Base End Plate ï Dogging includes screws	P18
Screws for base end plate	X15-1
Screws for Panic Base latch side (2 ea.)	X14
Screws for Panic Base mid & hinge side (4 ea.)	X18
Panic Foam	W41A

Panics

Standard Panic

Adjusting the panic button P-16

The panic button is able to be adjusted for proper door function. If the panic button is adjusted too long, the door will not latch. If the panic button is adjusted too short, the door will have difficulty opening.

Panic Dogging, What is that?

A non-fire rated panic bar may have what is know as a dog down feature. This allows the door to be put into the unlatched allowing the latching channel to rotate freely. This is accomplished by inserting a special key (also known as a dog down key) and turning the key to secure the panic bar in an unlatched position. This allows the door to open by either pulling on the mechanism or pushing on the door without touching the panic bar. When the door needs to be latched again, use the key to release the panic bar and the door will then latch. When the panic is in this position, it would then be necessary to use a key on the outside of the door to enter, or operate the bar on the inside to egress out.

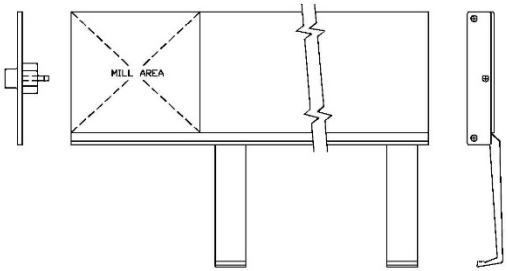
Panics

Flush Panic

Our Flush Panic fire exit device offers the smallest projection in the industry at a mere 1/8ò with the door in the open position.

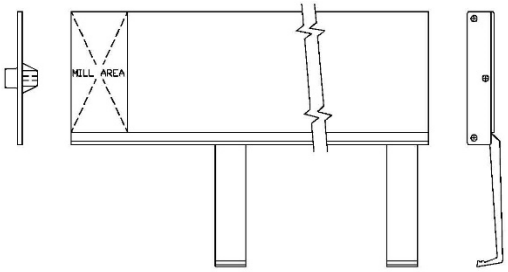
Flush Panic

Flush Panic end cap with actuator
PF201SA-L-GR/PEO



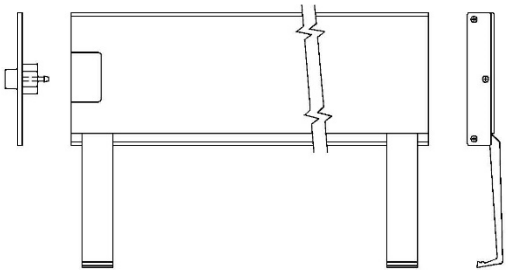
Flush Panic bar with Grip - PF204SA-GR

Flush Panic end cap with actuator
PF201SA-L-GR/PEO



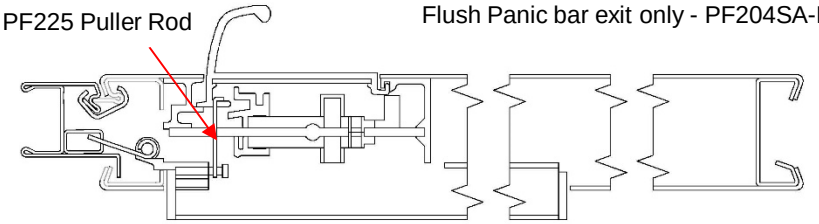
Flush Panic bar with Lever - PF204SA-LEV

Flush Panic end cap with actuator
PF201SA-L-GR/PEO

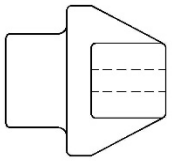


Flush Panic bar exit only - PF204SA-PEO

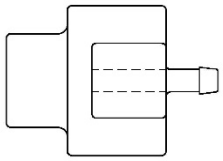
PF225 Puller Rod



PART NAME	PART NUMBER
End Cap w/ actuator Latch Side -Includes Screws	PF201SA=L
End Cap Hinge Side -Includes Screws	PF201SA=H
Panic Par ï PEO	PF204SA-PEO
Panic Bar ï Grip	PF204SA-Grip
Panic Bar ï Lever	PF204SA-Lev
Actuator for Grip -Includes Screws	PF221BSA
Actuator for Lever -Includes Screws	PF221B-1SA
Puller Rod -Grip Only	PF225
Face Spring -Grip Only	PFY24
End Cap Button	Y96



Flush Panic Actuator
Lever
PF221B-1SA



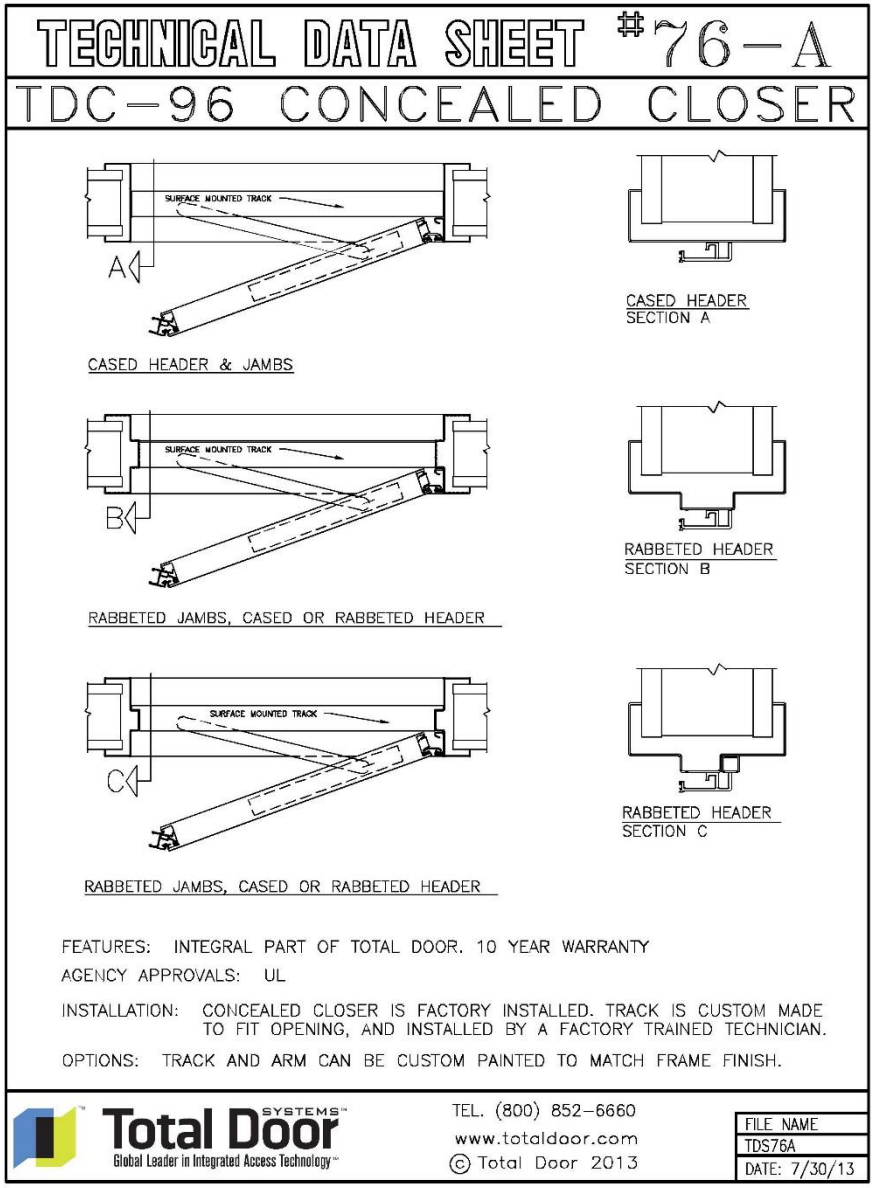
Flush Panic Actuator
Grip/PEO
PF221BSA

Closers

TDC 96

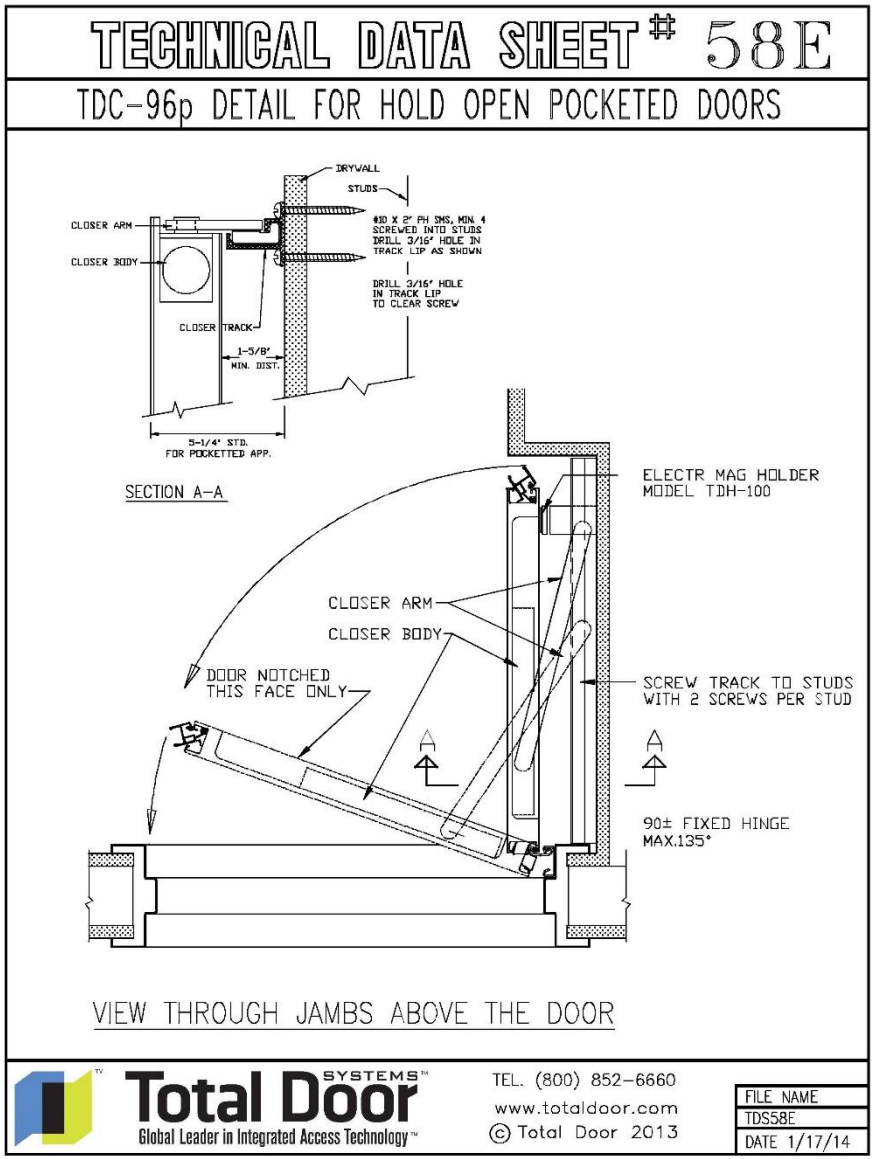
The TDC96 is a concealed closer that utilizes a track instead of a compound arm which results in high latching pressure and at the same time allows for easing opening.

On this application, the closer track acts as the head stop as well.



TDC 96p

On a pocket application, the track is attached to the wall at the back of the pocket. This would be used in a cross corridor where the door is held open and flush with the walls of the corridor.

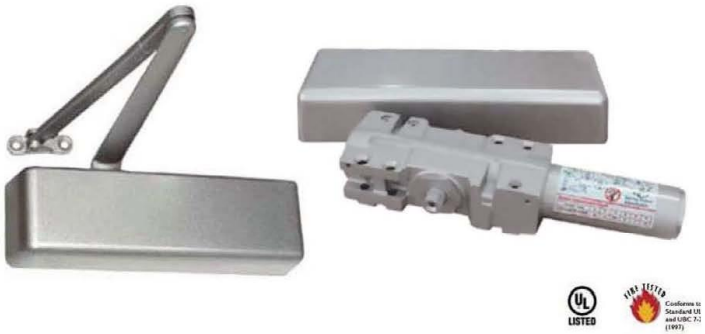


Closers

TDC 5051

Great use on exterior doors in school applications.

TDC 5051 Door Closer

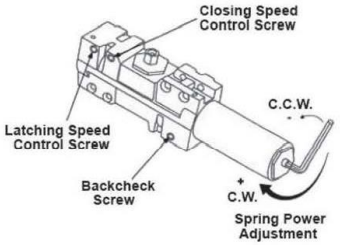


TDC 5051

- For Heavy-Duty doors
- Universal application
- Adjustable power to sizes 1 through 6
- Standard adjustable back-check function
- Full plastic standard cover
- Aluminum finish
- Meets ANSI A156.26 Grade 1

Power Adjusting Chart

Closer Power Size	1	2	3	4	5	6
Clockwise Turns	-6	-3	set	3	7	12



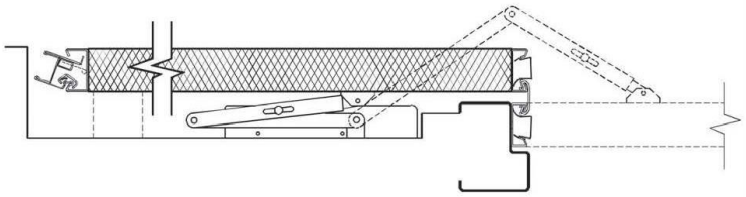
Total Door SYSTEMS
Global Leader in Integrated Access Technology

Closers

TDC 8907

180° hold open application. Great use on fire/smoke doors for an elevator shaft.

TDC 8907 Pocket Door Closer



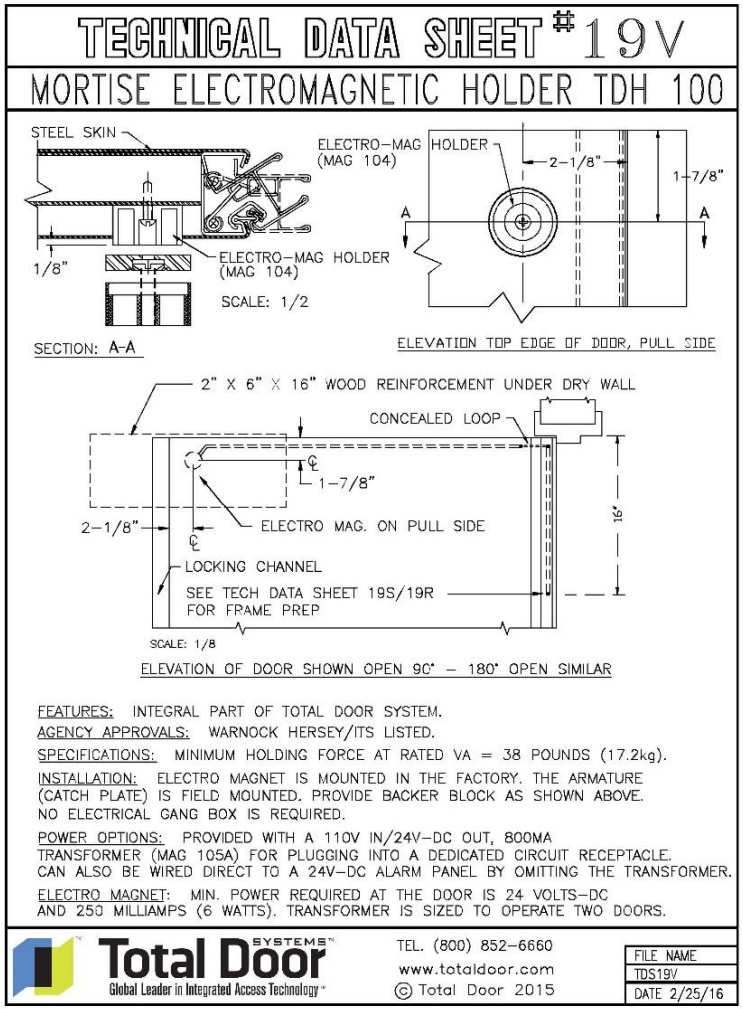
TDC 8907

- For 180° Pocket Application
- Universal application
- Standard adjustable back-check function
- Full plastic standard cover
- Aluminum finish
- Meets ANSI A156.26 Grade 1

Total Door SYSTEMS
Global Leader in Integrated Access Technology

TDH 100 Mag Holder

The TDH 100 Mag Holder moves the electronics from a potential problem area in the wall space to a completely integrated component of the door itself.



TECHNICAL DATA SHEET #19V

MORTISE ELECTROMAGNETIC HOLDER TDH 100

STEEL SKIN

ELECTRO-MAG (MAG 104) HOLDER

2-1/8"

1-7/8"

A

A

1/8"

ELECTRO-MAG HOLDER (MAG 104)

SCALE: 1/2

SECTION: A-A

ELEVATION TOP EDGE OF DOOR, PULL SIDE

2" X 6" X 16" WOOD REINFORCEMENT UNDER DRY WALL

CONCEALED LOOP

℄

1-7/8"

2-1/8"

℄

ELECTRO MAG. ON PULL SIDE

16"

LOCKING CHANNEL

SEE TECH DATA SHEET 19S/19R FOR FRAME PREP

SCALE: 1/8

ELEVATION OF DOOR SHOWN OPEN 90° – 180° OPEN SIMILAR

FEATURES: INTEGRAL PART OF TOTAL DOOR SYSTEM.

AGENCY APPROVALS: WARNOCK HERSEY/ITS LISTED.

SPECIFICATIONS: MINIMUM HOLDING FORCE AT RATED VA = 38 POUNDS (17.2kg).

INSTALLATION: ELECTRO MAGNET IS MOUNTED IN THE FACTORY. THE ARMATURE (CATCH PLATE) IS FIELD MOUNTED. PROVIDE BACKER BLOCK AS SHOWN ABOVE. NO ELECTRICAL GANG BOX IS REQUIRED.

POWER OPTIONS: PROVIDED WITH A 110V IN/24V-DC OUT, 800MA TRANSFORMER (MAG 105A) FOR PLUGGING INTO A DEDICATED CIRCUIT RECEPTACLE. CAN ALSO BE WIRED DIRECT TO A 24V-DC ALARM PANEL BY OMITTING THE TRANSFORMER.

ELECTRO MAGNET: MIN. POWER REQUIRED AT THE DOOR IS 24 VOLTS-DC AND 250 MILLIAMPS (6 WATTS). TRANSFORMER IS SIZED TO OPERATE TWO DOORS.

Total Door SYSTEMS™ Global Leader in Integrated Access Technology™

TEL. (800) 852-6660

www.totaldoor.com

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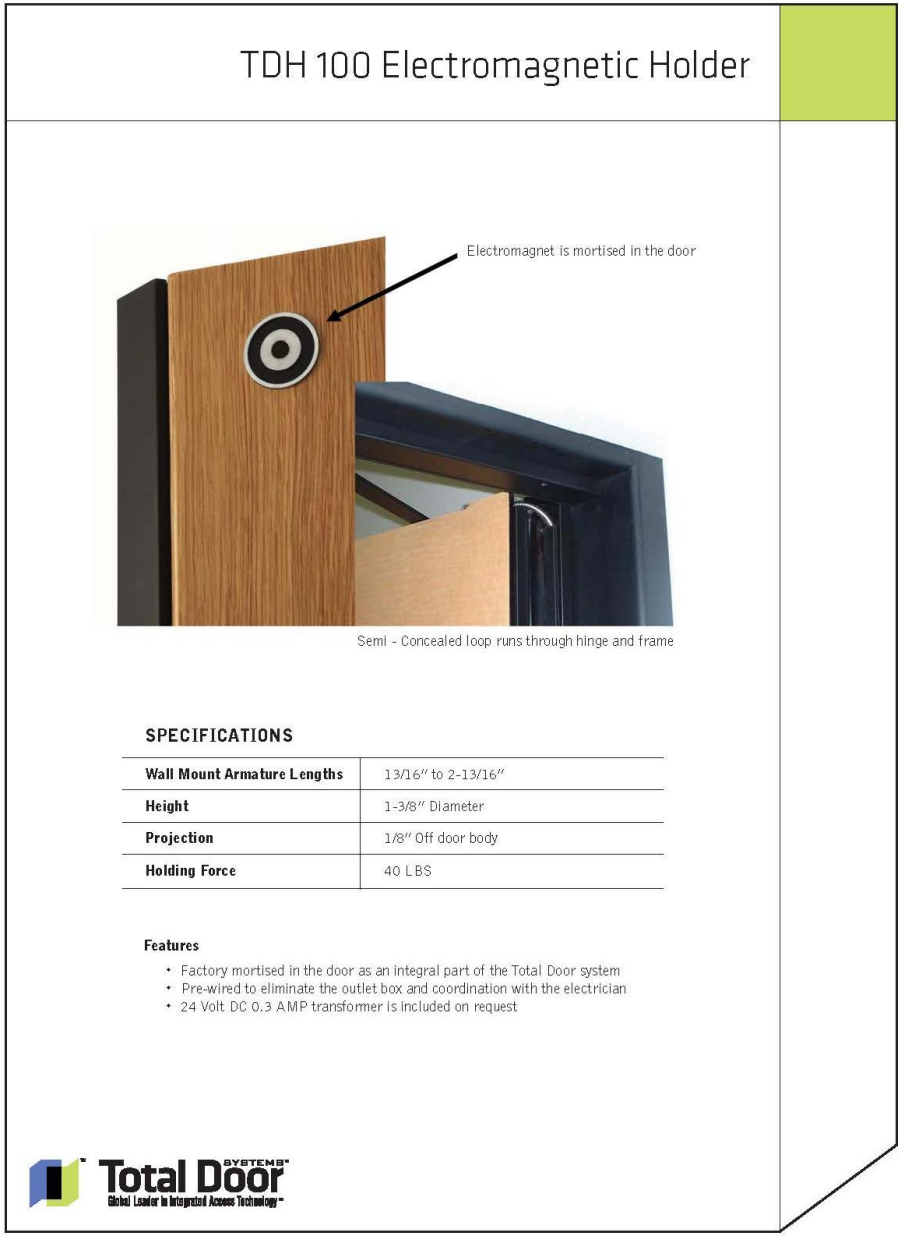
FILE NAME TDS19V

DATE 2/25/16



TDH 100 Electromagnetic Holder

Semi - Concealed loop runs through hinge and frame

SPECIFICATIONS

Wall Mount Armature Lengths	13/16" to 2-13/16"
Height	1-3/8" Diameter
Projection	1/8" Off door body
Holding Force	40 LBS

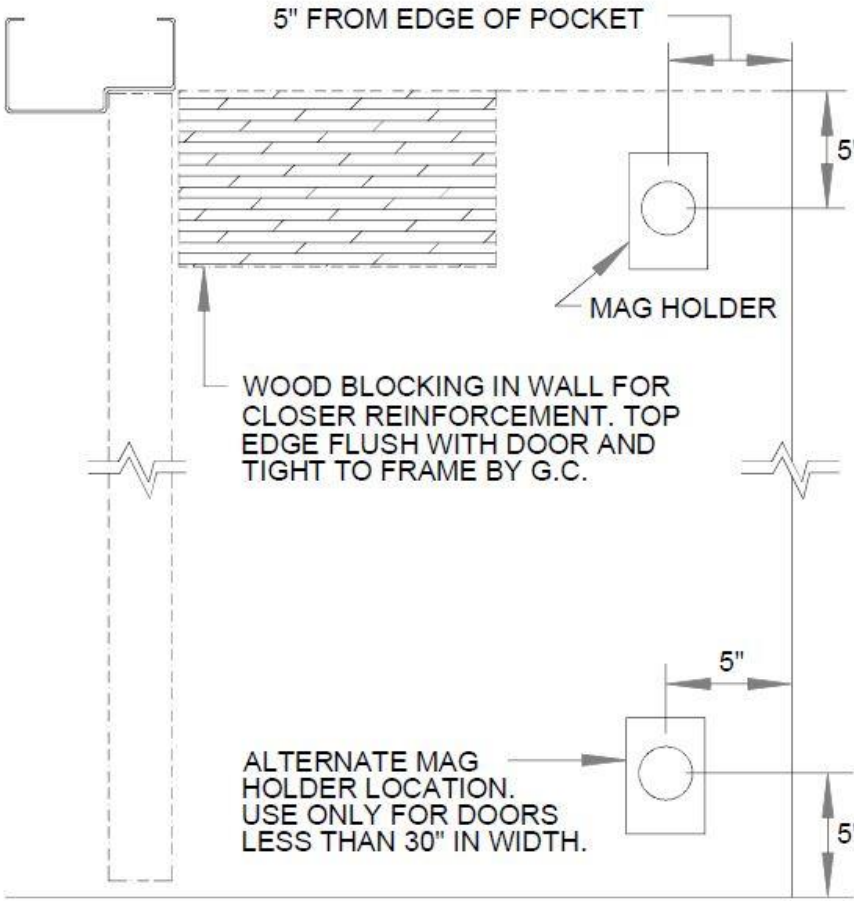
Features

- Factory mortised in the door as an integral part of the Total Door system
- Pre-wired to eliminate the outlet box and coordination with the electrician
- 24 Volt DC 0.3 AMP transformer is included on request

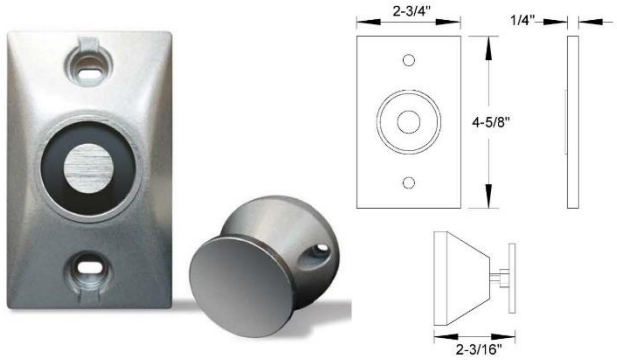
Total Door SYSTEMS™ Global Leader in Integrated Access Technology™

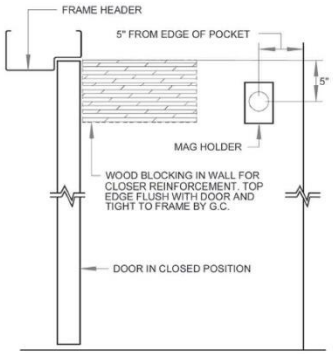
TDH 200 Mag Holder

The TDH 200 Mag Holder is surface applied allowing for alternative mounting locations.



TDH 200 Electromagnetic Holder





Features

- U.L. listed
- 35 lb holding force
- Dual voltage (24/120V) capability
- Low current draw allows savings on power supplies and backup batteries
- Optional extension rods available for deeper door to wall conditions
- Low residual magnetism allows easy release of door
- Can be manually pulled from hold open position
- Powder Coated Silver

Total Door SYSTEMS
Global Leader in Integrated Access Technology

Total Door SYSTEMS™
Global Leader in Integrated Access Technology™

ATTENTION
DOOR INSTALLER(S)

INSTALLATION MUST BE PERFORMED BY FACTORY TRAINED INSTALLER(S)
INCORRECT INSTALLATION AND/OR NON FACTORY TRAINED INSTALLER(S) WILL VOID WARRANTY

IF YOU HAVE ANY QUESTIONS OR CONCERNS CONTACT:
TOTAL DOOR SYSTEMS
6145 DELFIELD DRIVE
WATERFORD, MI 48329
PHONE: (248) 623-6899 OR EMAIL: service@totaldoor.com
FAX: (248) 623-6866

Door care

Order arrival

- All shipments are FOB.
- Unload pallet with extended forks the long way on the pallet.
- Inspect the pallet for any freight damage.
- Check plastic for tears, punctures and/or brakes.
- Check to make sure that the cones are attached and pointing upwards.
- Look over the packing list on the pallet.
- Check that boxes/components are with the order.
- Unpack pallet and inspect doors.
- Sign Bill of Lading.

Report any damages and/or missing components immediately.

Installation Information

- Total Door Pre-Installation checklist
- Total Door Installation Instructions
- Latch Stop
- Pair of Doors
- Double Egress Doors
- Removable Mullion
- Lever Mechanism Trim
- Push-Pull Mechanism and Trim

Installation

TOTAL DOOR SYSTEMS A100a Order Form

Rcv. Date: Due Date:

Order No.: 21670 **Distributor: Allied Products Group, Inc.**

No.	Qty	Cfg	From	To	Size	Under Cut	Series	Frame	Fire	Vert	Bot Cap	Top Cap	Gasket	Sweep	Mech. Ht	Misc
		Bldr's Width	Hnd	Elev	Glaze	Skin	Function	Elec	Kick	Mop	Pull		Push		Ins	Closer
1	1	PR			6'-0 x 7'-0	0 3/4	20	HM	sB	BL	NA	NA	SB	N/A	39 9/16	90FIXD 90 Degree Rigidized TDH-200 24/120 Volt Mag Holder/628 Finish
Leaf 1		3'-0 1/8	LR	F		PRIME	GFP01	N/A	N/A N/A	N/A N/A	M32 628		FP 628			TDC-96p ALUM 90
Leaf 2		3'-0 1/8	RR	F		PRIME	GFP01	N/A	N/A N/A	N/A N/A	M32 628		FP 628			TDC-96p ALUM 90

Site Grand Central Station Comments
PO Arch Type
Door No. A3001

No.	Qty	Cfg	From	To	Size	Under Cut	Series	Frame	Fire	Vert	Bot Cap	Top Cap	Gasket	Sweep	Mech. Ht	Misc
2	1	PR			6'-0 x 7'-0	0 3/4	20	HM	sC	BL	NA	NA	SB	N/A	39 9/16	90FIXD 90 Degree Rigidized TDH-200 24/120 Volt Mag Holder/628 Finish
Leaf 1		3'-0 1/8	LR	F		PRIME	GFP01	N/A	N/A N/A	N/A N/A	M32 628		FP 628			TDC-96p N/A 90
Leaf 2		3'-0 1/8	RR	F		PRIME	GFP01	N/A	N/A N/A	N/A N/A	M32 628		FP 628			TDC-96p N/A 90

Site Grand Central Station Comments
PO Arch Type
Door No. A3002

No.	Qty	Cfg	From	To	Size	Under Cut	Series	Frame	Fire	Vert	Bot Cap	Top Cap	Gasket	Sweep	Mech. Ht	Misc
3	1	PR			6'-0 x 7'-0	0 3/4	20	HM	s20	BL	NA	NA	SB	N/A	39 9/16	90FIXD 90 Degree Rigidized TDH-200 24/120 Volt Mag Holder/628 Finish
Leaf 1		3'-0 1/8	LR	F		PRIME	GFP01	N/A	N/A N/A	N/A N/A	M32 628		FP 628			TDC-96p N/A 90
Leaf 2		3'-0 1/8	RR	F		PRIME	GFP01	N/A	N/A N/A	N/A N/A	M32 628		FP 628			TDC-96p N/A 90

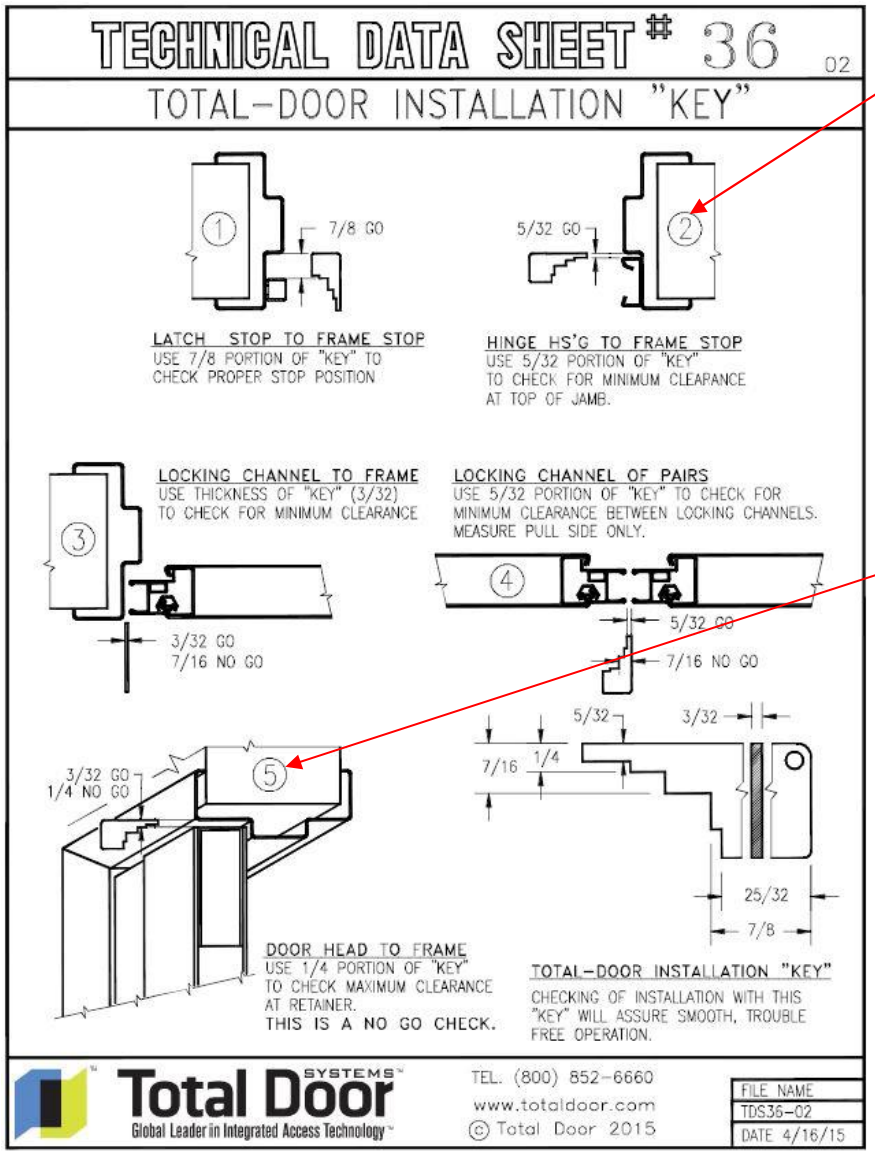
Site Grand Central Station Comments
PO Arch Type
Door No. A3003

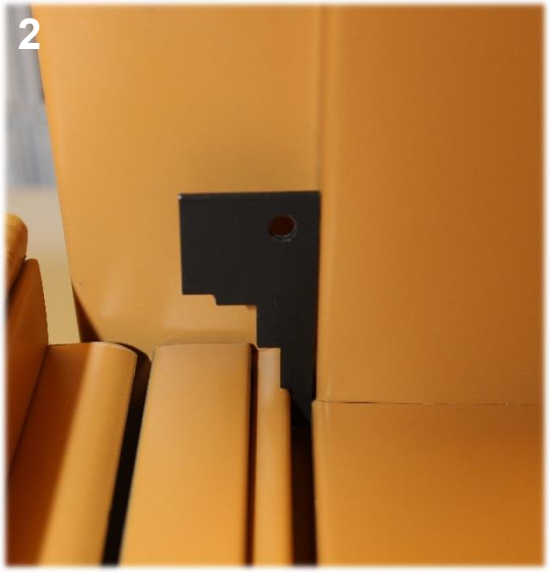
Door Locations

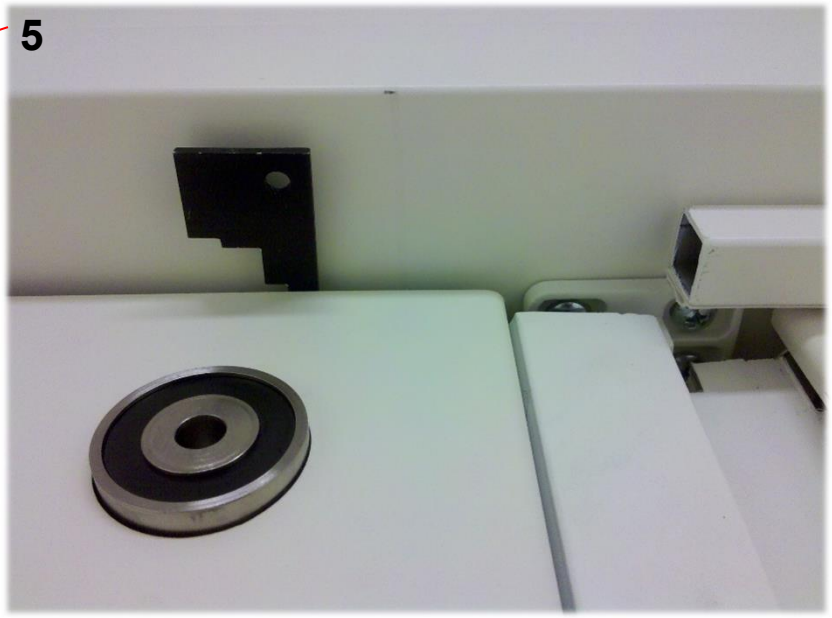
Before installing doors, check for the door number on the A100 order form.

Cross check that number with the sticker on the top of the door to make sure you have the correct door for each opening.

Check correct tolerances





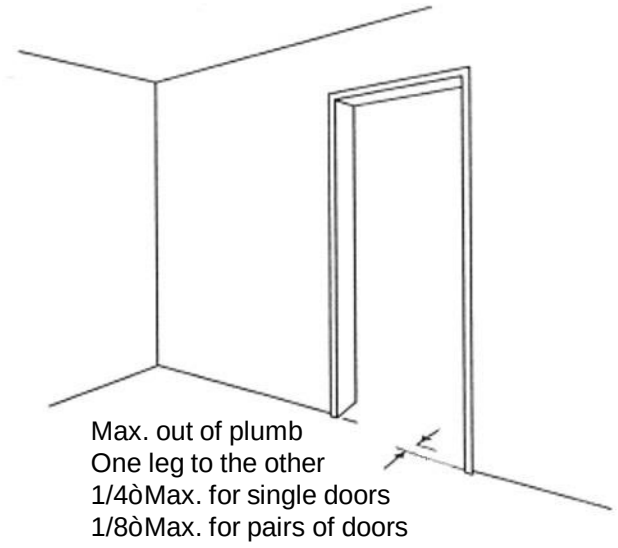


Installation

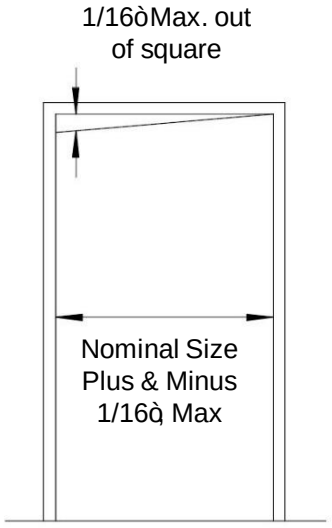
Total Door® Pre-Installation Check List

- **A TOTAL DOOR® should never be installed in a frame that is not within stated tolerances.**
- **A TOTAL DOOR® installed incorrectly or in a frame that is not within stated tolerances becomes the installer's responsibility. It is not covered by the Total Door® Performance Warranty.**
- **Thus, it is especially important in both replacement/renovation projects and new construction that frames be checked for size, straightness, and plumbness.**
- **Field adjustments, including re-setting the frame, should be complete prior to installation of TOTAL DOOR®.**

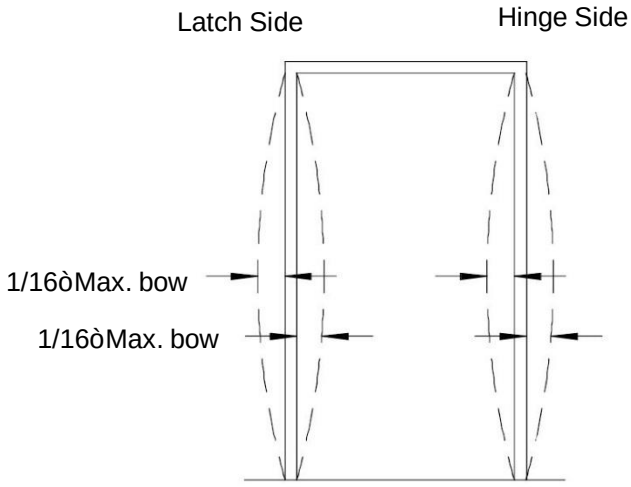
TOTAL DOOR SYSTEMS® Dimensional Tolerances:
(Note: These tolerances should never be exceeded)



PLUMBNESS



SIZE LIMITATIONS

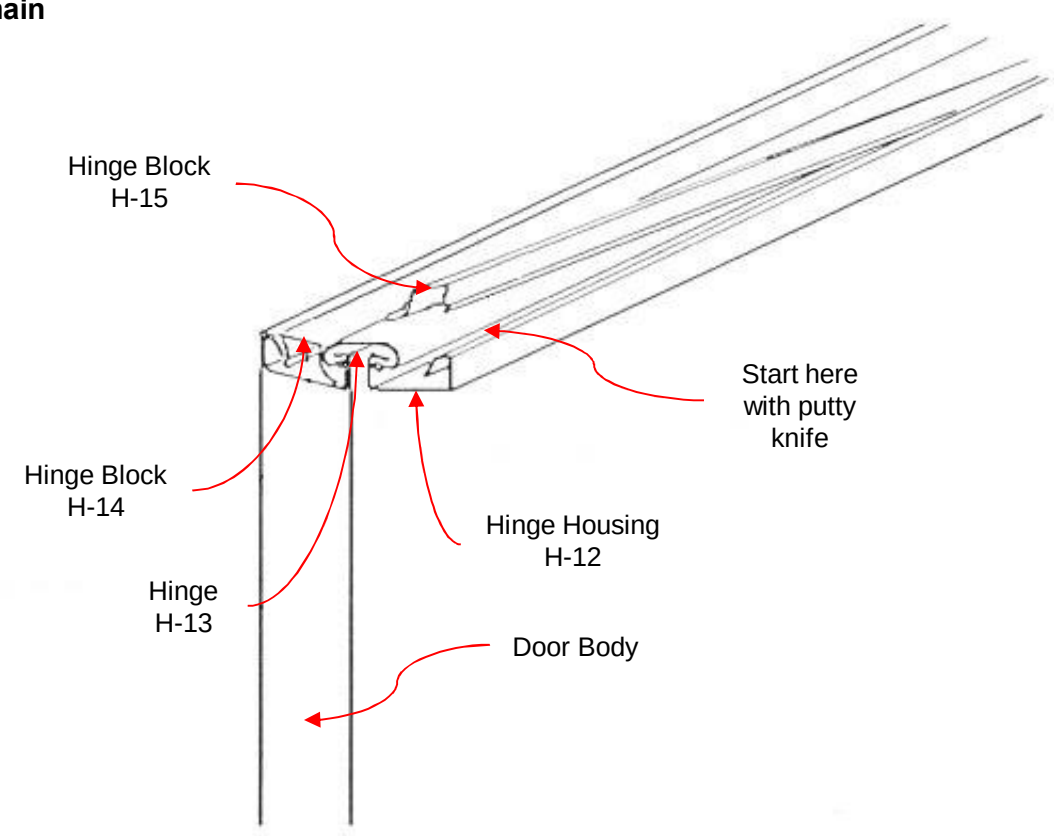


STRAIGHTNESS

Total Door® Installation Instructions

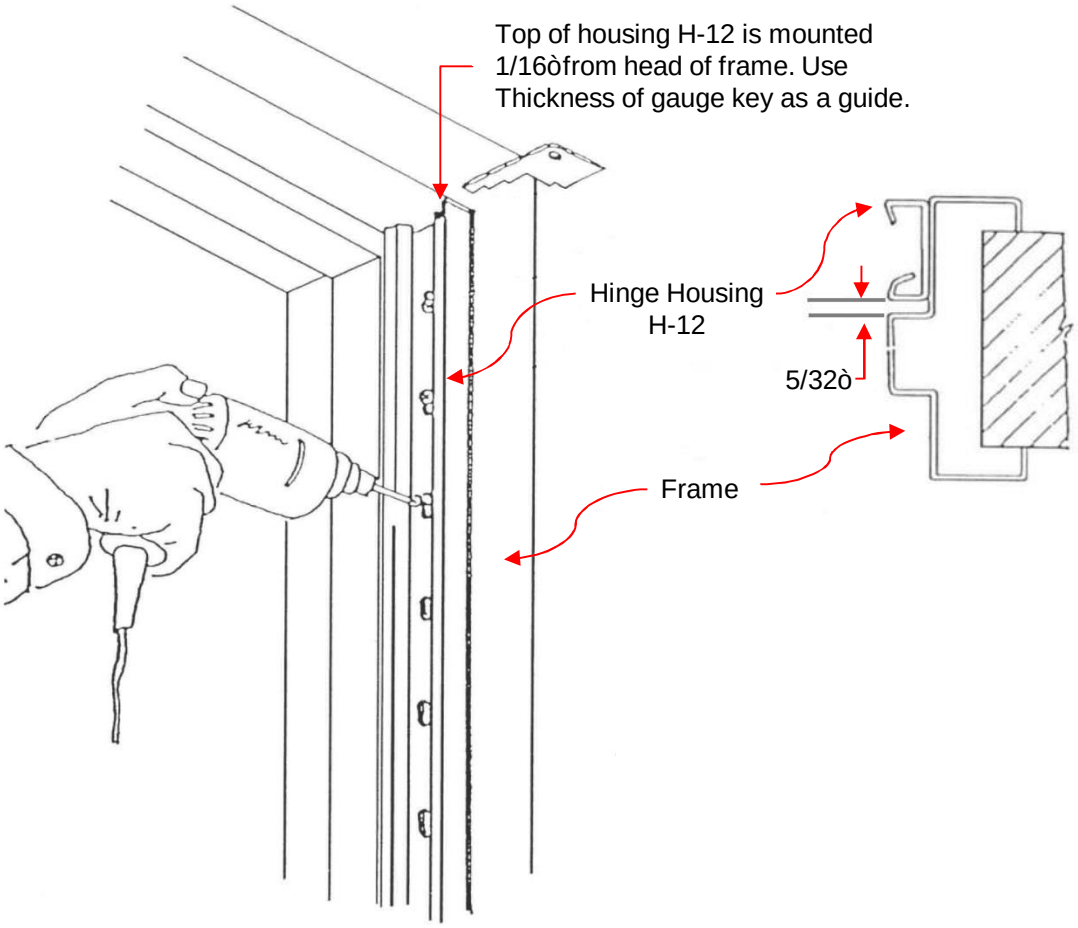
HINGE SIDE

1. **Pry out hinge block H-15.**
2. **Hinge housing H-12 may now be removed.**
3. **Make certain hinge block H-14 and hinge H-13 remain securely seated in door stile.**

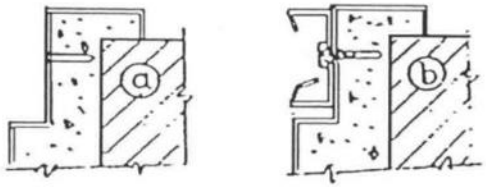


NOTE:
Use putty knife only to begin removal of hinge block H-15. Use prying action of fingers along full length "ROLL" out the H-15. Do not strip out or rip out the H-15, as this will deform the member.

Installation



NOTE: Some frames, especially old grouted frames, have mortar so hard that the Tek screw alone is not sufficient to securely mount a TOTAL DOOR.

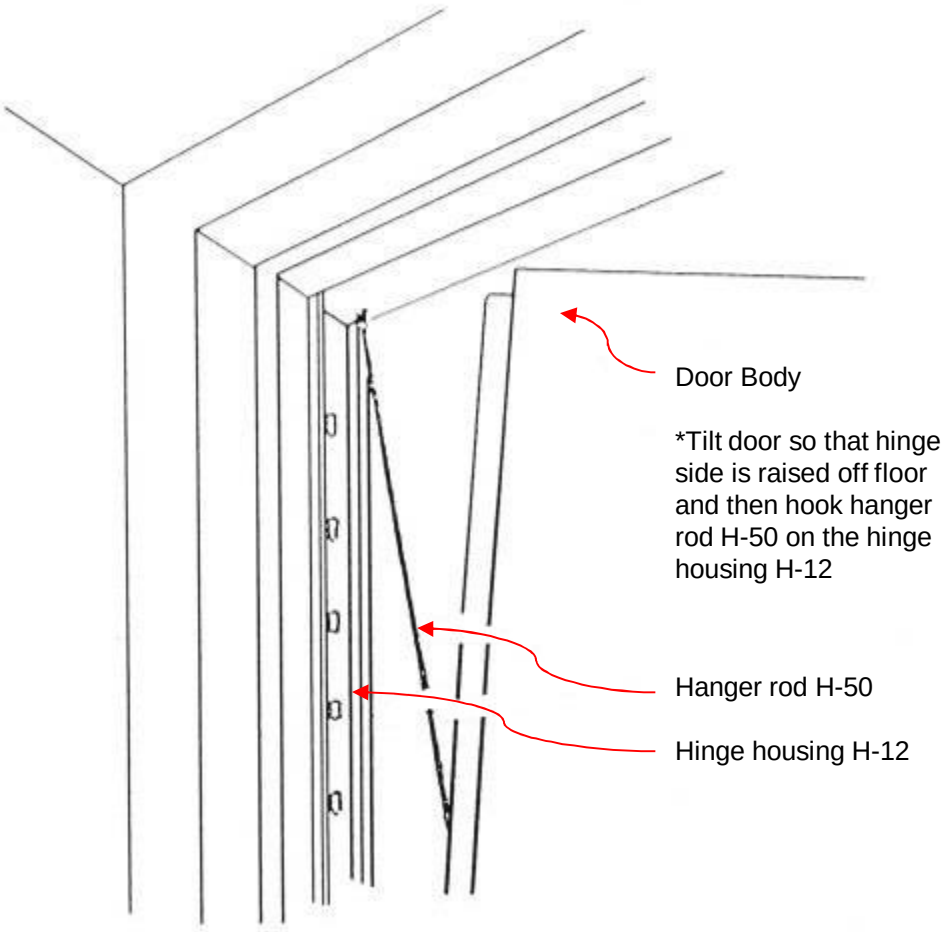


4. **Place hinge housing H-12, flat against jamb and 1/16” from frame head, with notch on the pull side. Allow 5/32” clearance between H-12 and rabbet (In a cased opening, H-12 may be flush to 1/16” from edge of jamb on pull side). Use installation key, which is provided, to insure proper tolerances.**
5. **Hold hinge housing H-12, in position and install 3 #10 Tek (X-65) screws, one at the top ROUND hole, one in the middle slot, and one at the bottom slot. The Tek screws, which are installed in the middle and bottom slots, should be at the bottom portion of those slots.**

We have found the following procedure for installation to be fast, secure, and economical.
a) Use a 1/8” masonry drill bit to drill holes 3/4" deep.
b) Install the 3 #10 Tek (X-65) screws supplied with the door.

Installation

6. **Stand door up. Place it at approximately 30° angle to the door jamb at the hinge housing H-12.**
7. **Tilt hinge side of door upwards* to facilitate seating the top hook of the hanger rod in the rectangular slot in the top of the hinge housing H-12.**
8. **Insert lower hook of stainless steel hanger rod in the rectangular notch on the pull side of the door stile about 24" from the top of the door. The door is now suspended from the frame by the hanger rod.**

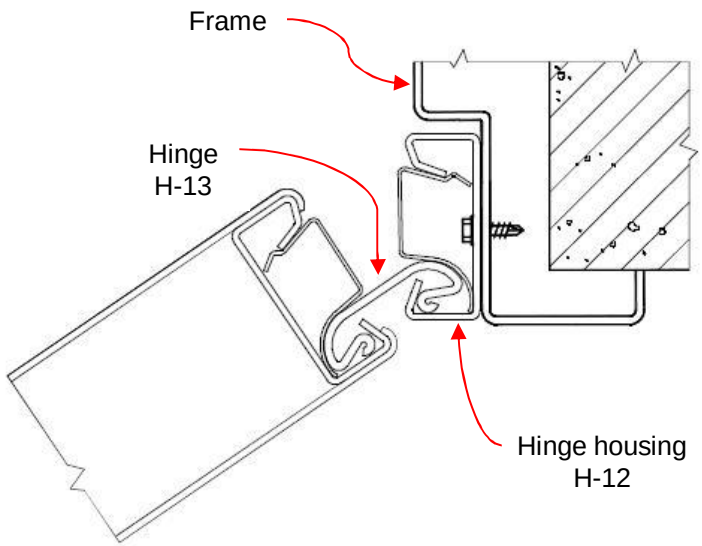


*When tilting the door, the space between the top of the door and the jamb, SHOULD NOT exceed 6ò

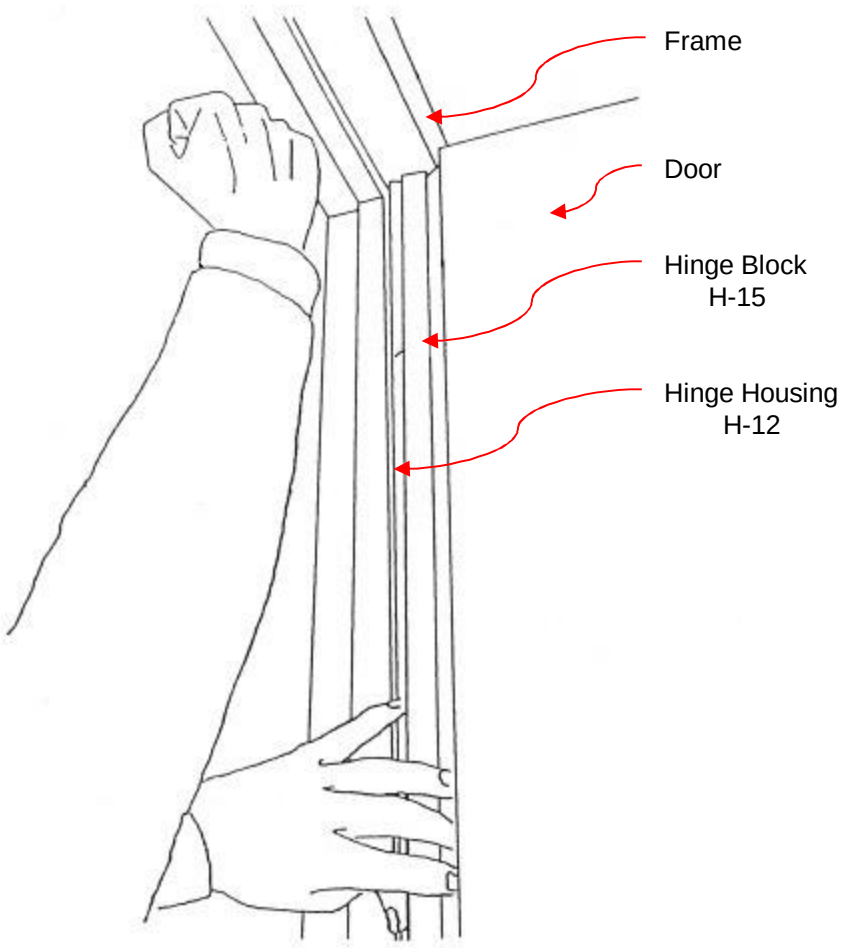
This can cause hanger rod failure

Note: See Technical Data Sheet #40B for installation of H-50

9. **Lift the latch side of the door so that the hinge side is vertical and parallel to the hinge housing H-12.**
10. **Move the door towards the hinge housing H-12 mounted on the jamb and engage the bulb of the hinge H-13 inside the near lip of the hinge housing H-12**



11. **Assure the bulb of the hinge H-13 remains securely seated inside the lip of the hinge housing H-12 by opening the door to its maximum open position. Use the short sections of hinge block material supplied with your parts and snap them into place. This secures the door in the frame while allowing the door to be adjusted either up or down. If there is an adjustment to be made to allow the door to fit in the opening, remove the top screw from the round hole and loosen the middle and bottom screws. Slide the hinge housing as required and re-secure the top screw in the new hole. Tighten middle and bottom screws. Once the door is in the proper location in the opening, install the remaining 12 Tek screws in the remaining slots for a total of 15. Take out the short sections of hinge block material used for adjusting and snap the hinge block H-15 into place along the full length of the door— starting at the top without deforming the hinge block (if more than hand force is required, use only a rubber mallet, do not use a hammer or other hard object). The door is now installed.**



Installation

Installing Latch stop

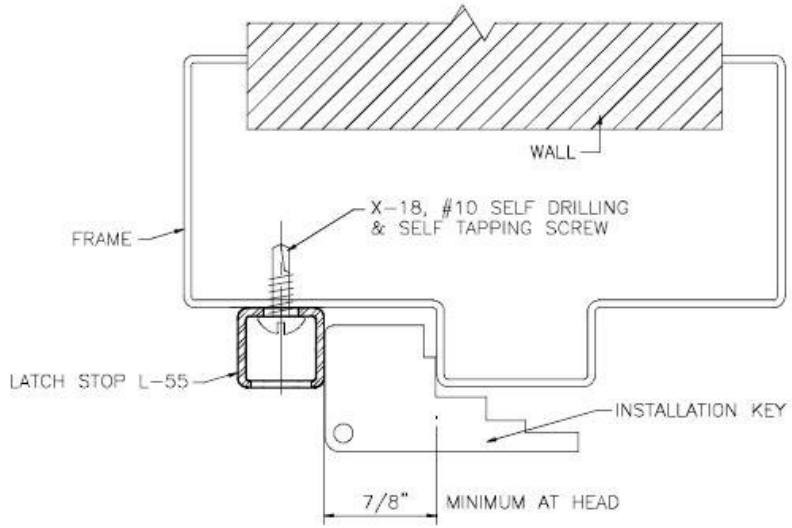
Single doors need a latch stop installed on the opposite side of the frame opening.

Make sure you install the top screw first, keeping with the 7/8òminimum clearance at the head.

TECHNICAL DATA SHEET # 1D 02

ONE PIECE LATCH STOP L–55

NOTE: FAILURE TO FOLLOW THESE INSTRUCTIONS WILL RESULT IN DOORS NOT LATCHING, NOT LOCKING, OR BEING DIFFICULT TO OPEN OR CLOSE



LATCH STOP L–55, INSTALLATION PROCEDURE

1. Install top screw of latch stop L–55, with the back side 7/8" from the frame rabbet. Use the installation key provided to insure correct tolerances.
2. Depress the retainer on the top of the door and rotate the locking channel L–11 to the locked position. Close the door firmly against the latch stop L–55. Press the L–55 against the locking channel L–11 and scribe a line on the jamb the length of the L–55 on the rabbet side.
3. With the L–55 on the scribed line, install the bottom and middle screws.
4. Test the door for proper operation. If the door operates smoothly and easily, install the balance of the screws and nylon hole plugs.

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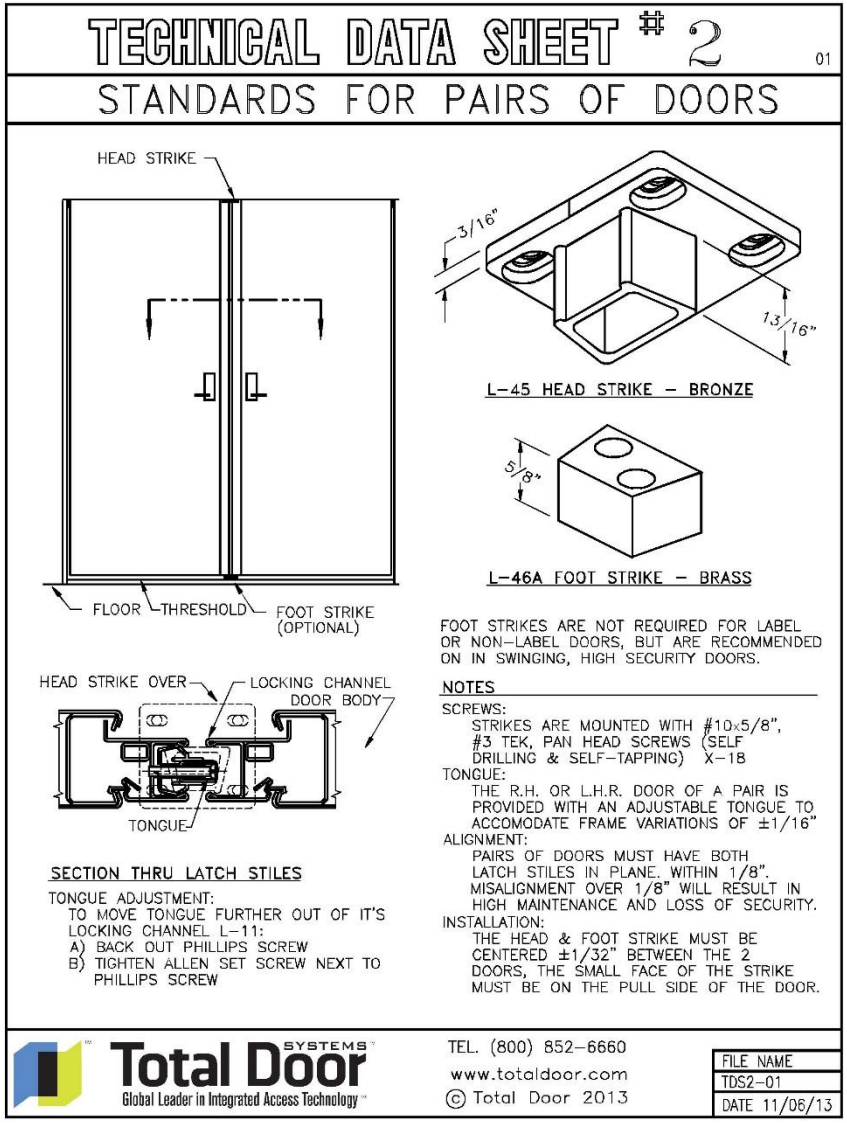
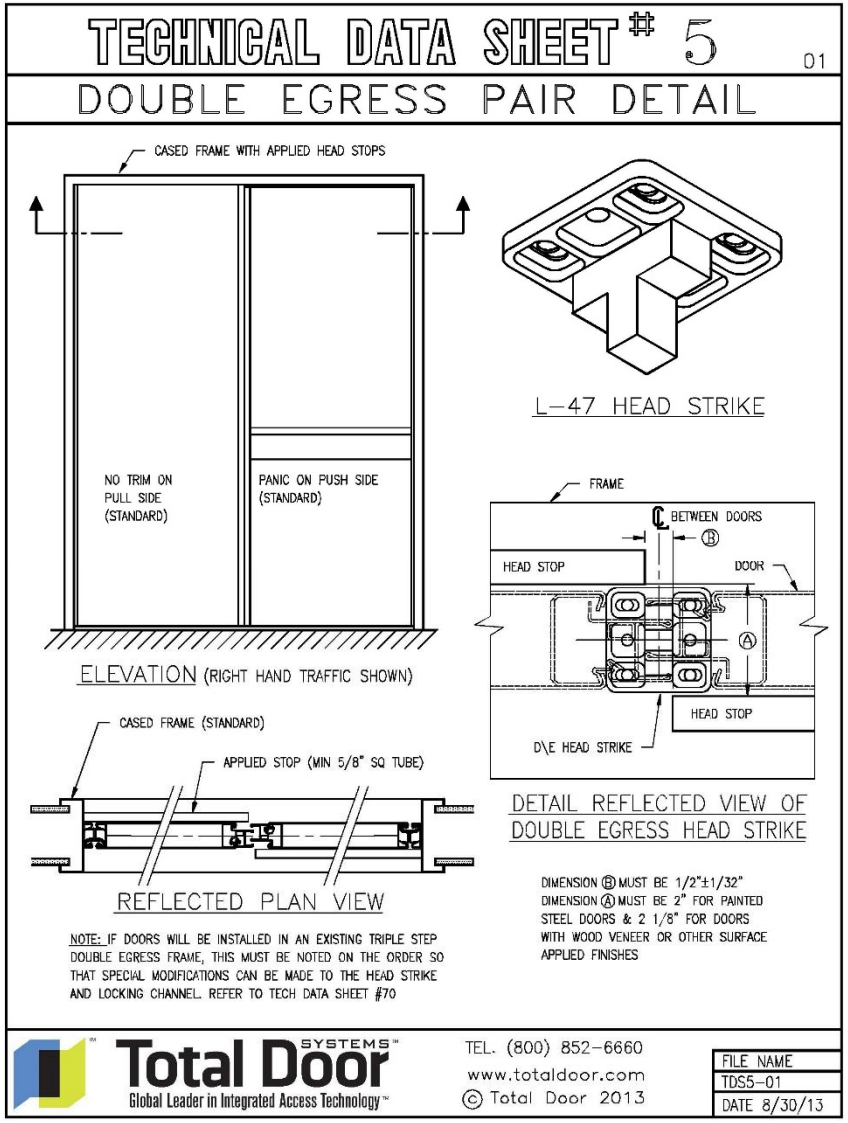
FILE NAME TDS1D–02
DATE 3/18/15

Head Strikes



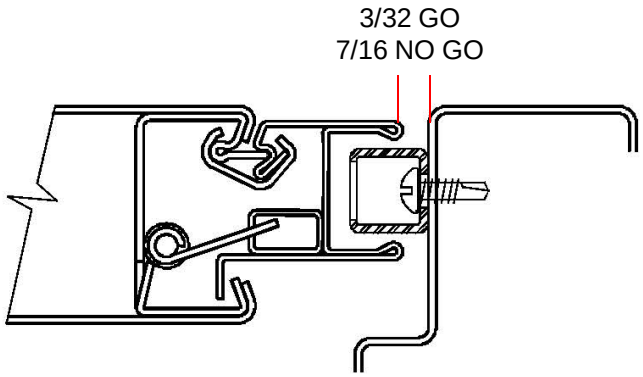
Standard Pair



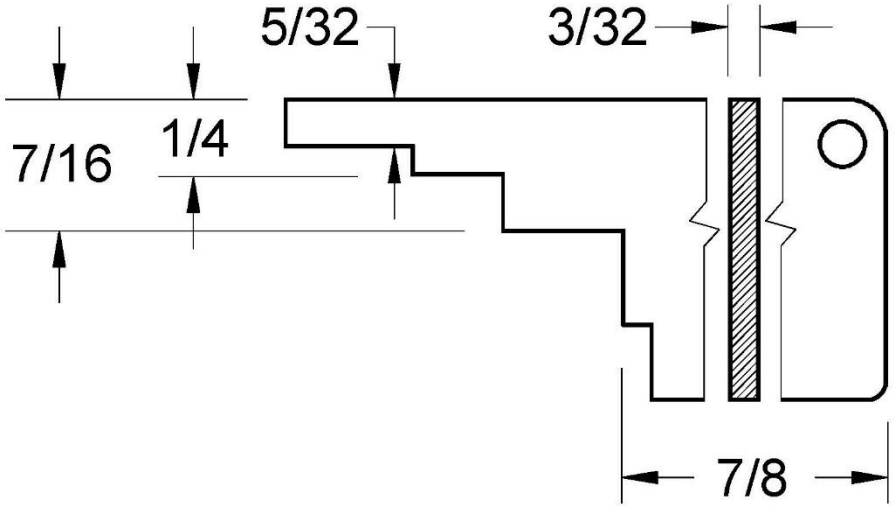
Double Egress Pair

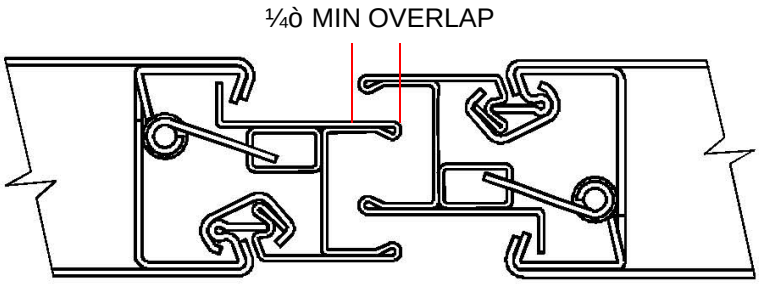
Locking channel tolerance

Refer to Tech Data Sheet 36, Installation ñKeyò

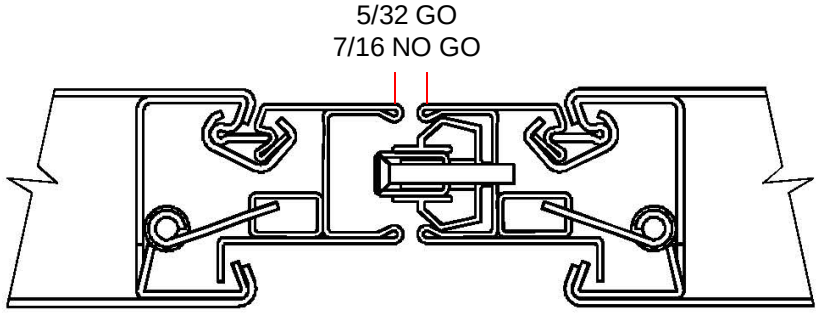


Single





Double Egress Pair



Standard Pair

Inspection Form

This form may be obtained on our website or by calling the service department.

Total Door SYSTEMS™
Global Leader in Integrated Access Technology™

Inspection Form

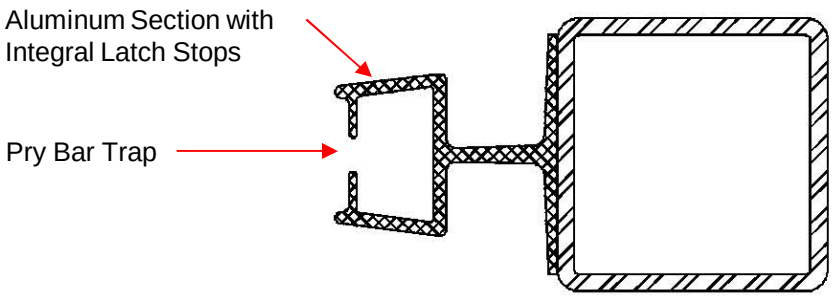
Job Name: _____ **Date:** _____

Job Location: _____

Inspected By: _____
Certified Installer / Project Manager

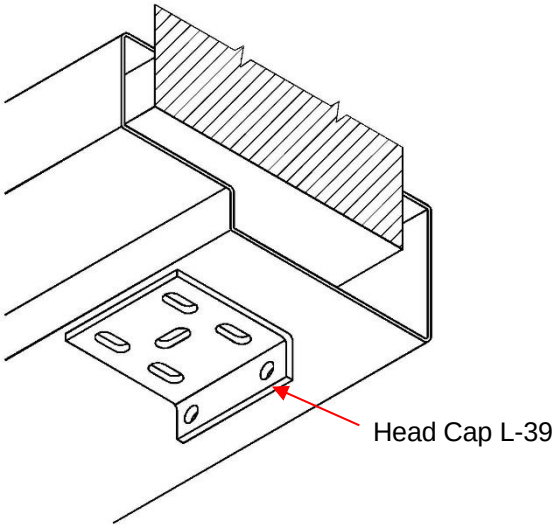
Door number:										
General:										
Configuration – SG PR DE MUL										
Handing – LH RH LR RR										
Electric – EUNL ESAF ESEC EPAN										
Comments:										
Frames:										
Anchored Securely										
Grouted										
Plumb										
Within Tolerance										
Mortised Hinge										
Hinge Filler Plates										
Comments:										
Tolerances:										
At Retainer Correct										
At Locking Channel Correct										
At Hinge Housing Correct										
Head Strike – PR DE										
Centered										
Orientation Correct										
Latch Stop L55										
In Plane with L11										
Buttons Applied										
Comments:										
General:										
Closer Properly Adjusted										
Quiet Hinge										
Doors Swing Freely										
Doors in Plane										
H12 Properly Fastened (15 minimum)										
Doors Properly Shimmed										
Screws Between Shims										
Door Latches Properly										
Adjustable Tongue Correct (Pair only)										
Panic Properly Adjusted										
Lever / Grip Secure										
Application Appropriate										
Comments:										

Removable Mullion Installation Instructions

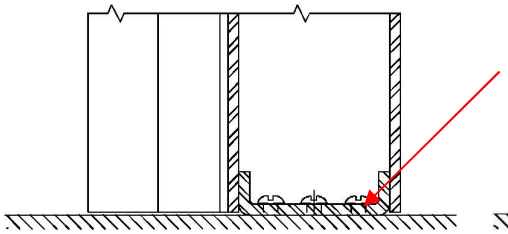


Removable Mullion – L-38SA

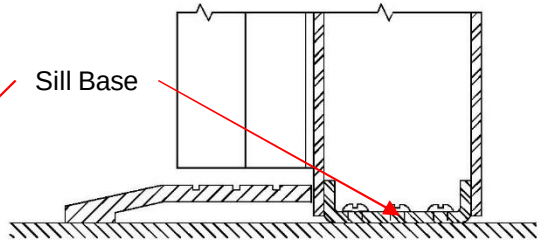
1. **Place open side of L-39, 1/8" back from the edge of stop on soffit at the exact centerline of the opening between the two leafs. Attach L-39 using one screw in slot.**



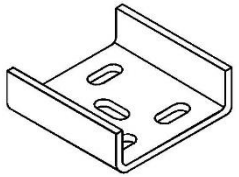
2. **Attach sill base L-40 to the floor at exact centerline and plumb as above, using appropriate screws.**



A. If floor is concrete or tile, install L-40.



B. If threshold is used, it must be notched to allow L-40 to be installed directly on floor. The aluminum latch stop section must be notched as well to sit on top of threshold.



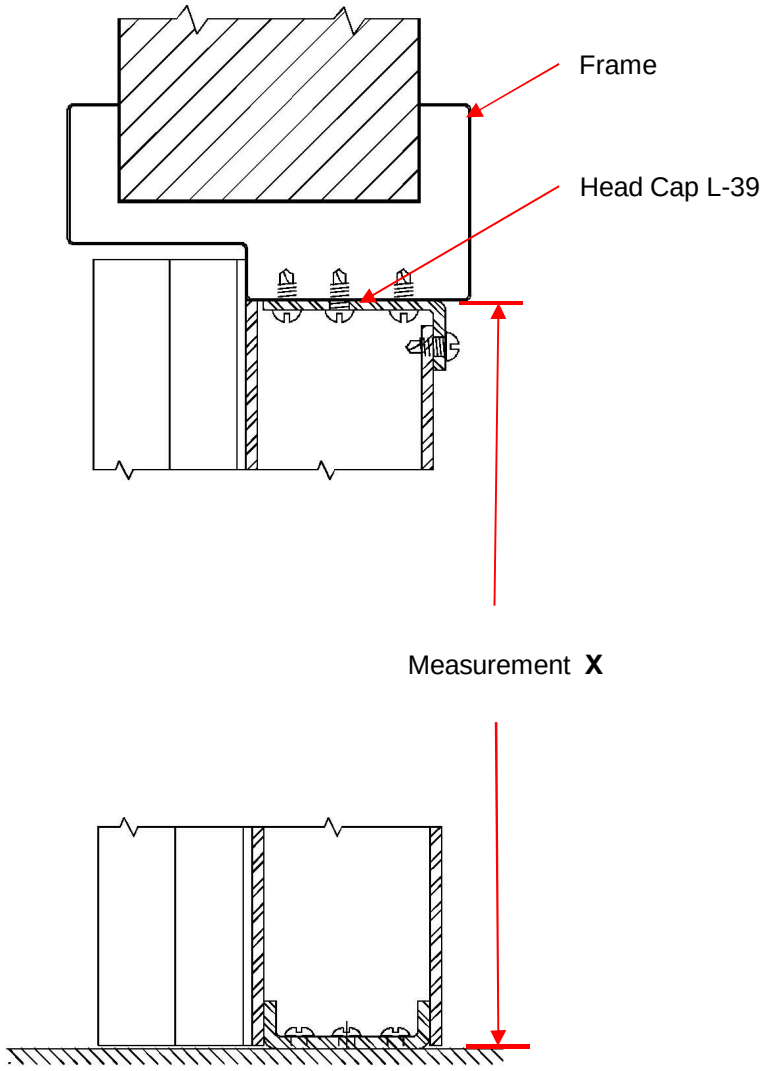
3. **Measure distance from underside of soffit to the floor (measurement X). Cut bottom end of the center mullion.**

   IMPORTANT! The mullion must always be cut at the bottom.

4. **Place the bottom end of mullion over the sill base L-40. Be sure mullion is forced down to the floor. Swing the top end of mullion into the head cap L-39. Be sure mullion is forced tightly against stop in head cap L-39 and check fit.**

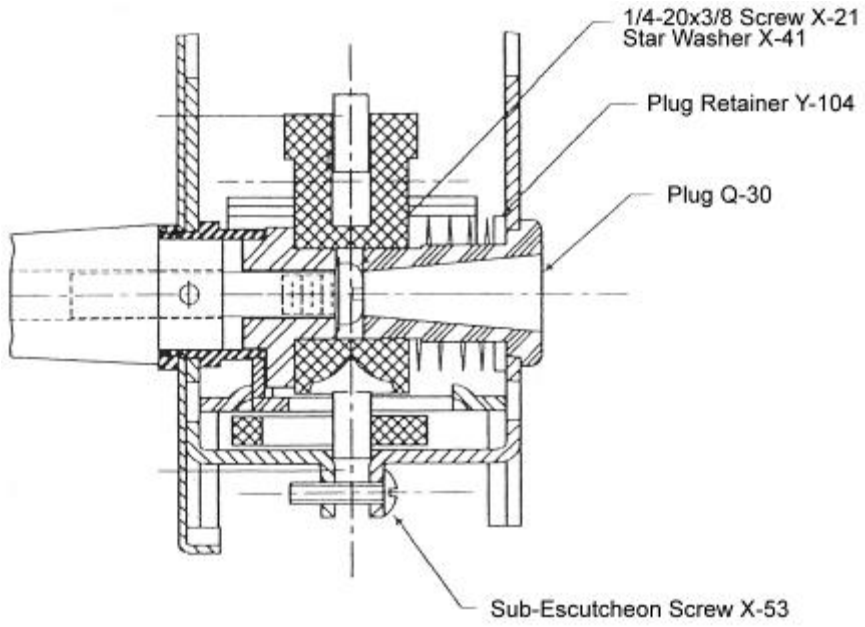
5. **Holding the mullion against the stop in head cap L-39, line up holes on the head cap and steel tube and install 1 screw at the back. Test operation of both doors simultaneously while holding the mullion in position. If mullion is in correct location, remove mullion and install remaining screws on the head cap L-39.**

6. **Set the mullion back in place and insert the two set screws at the back of the head cap L-39 and tighten securely.**



Installation of Levers on Panic Doors **Production dates after 1/12/03**

1. **Remove hinge end cap on panic and slide panic bar 6" toward hinge side of door. Refer to Tech Data Sheet 1F.**
2. **Seat lever into escutcheon.**
3. **Insert Phillips Head screwdriver through plug Q-30 and tighten screw to the lever spindle. Screw must be set tightly to avoid loosening.**
4. **Slide panic bar into position and check operations. Reinstall end cap.**

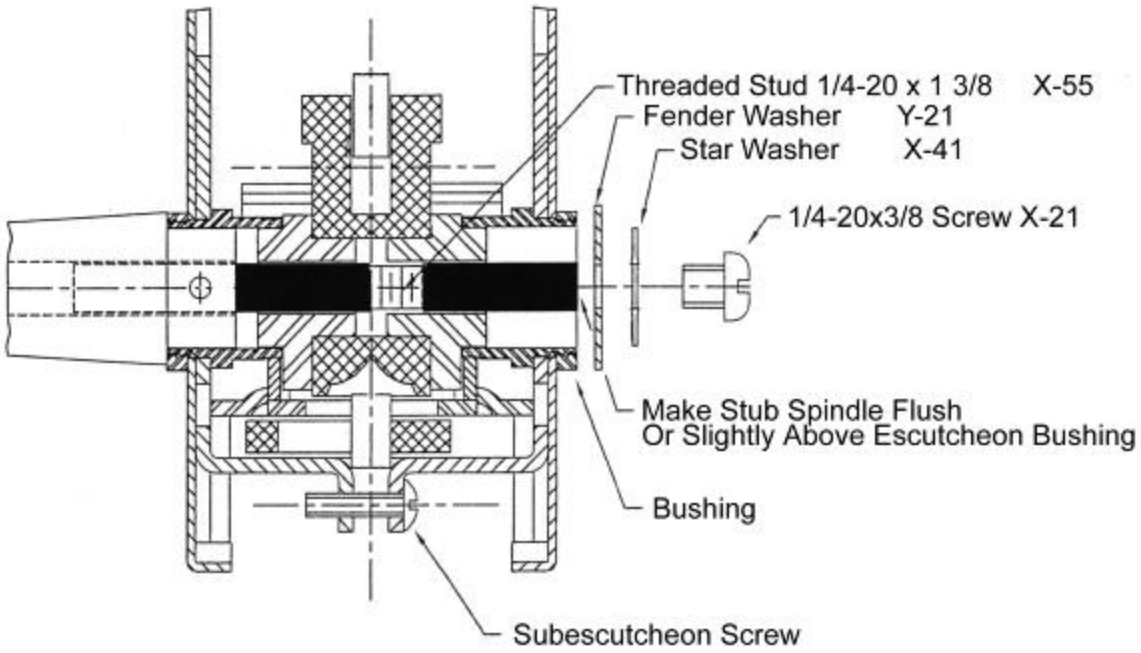


Cylinder Installation

1. **Remove the hinge side panic end plate and slide the panic bar back to access the mechanism. Hold hand over panic as you slide bar back to catch the panic button, which will pop out.**
2. **Loosen top screw in the mechanism housing, approximately six (6) turns and then loosen the bottom screw approximately one and one half (1-1/2) turns.**
3. **Tilt the top of the pull side lever mechanism outwards so that the cylinder setscrews on the side of the mechanism can be loosened.**
4. **Screw cylinder into lever mechanism. Make certain that cam leg points toward top of mechanism when key is removed. Tighten setscrews firmly against cylinder.**
5. **Re-tighten top and bottom screws in mechanism.**
6. **Slide panic bar back into position after replacing the panic button assembly and replace the hinge side panic end plate.**

Installation of Levers on Panic Doors **Production dates before 1/13/03**

1. **Remove hinge end cap on panic and slide panic bar 6" toward hinge side of door. Refer to Tech Data Sheet 1F.**
2. **Remove screw and washers from trim set.**
3. **Install spindle into hubs – seat lever or knob fully into escutcheon.**
4. **Check stub spindle and adjust if necessary so that end of spindle is flush or slightly above inner escutcheon bushing. If lower than escutcheon bushing, remove from trim side and back off stub spindle, then reinstall.**



5. **Install star washer and screw as shown. NOTE: Screw must be set tightly to avoid loosening – if after tightening there is no end play in lever, remove lever and back off stub spindle 1/4 or 1/2 turn and reinstall.**
6. **Slide panic bar into position and check operation. Reinstall end cap.**

Lever Handle and/or Cylinder Installation

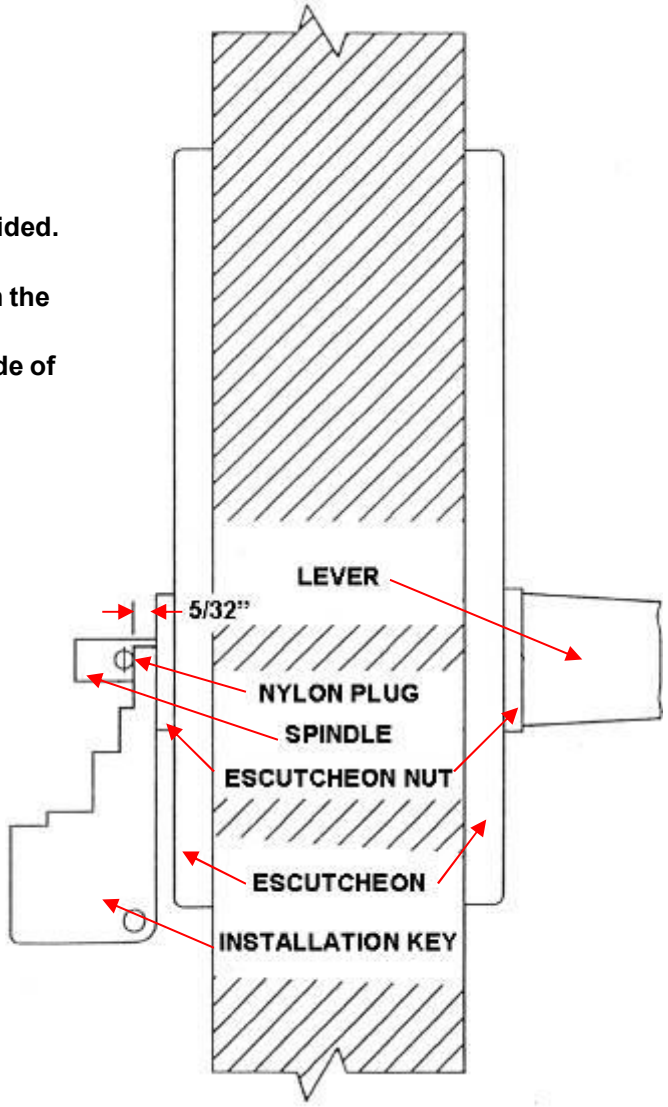
The lock mechanism with escutcheons are installed at the factory. The lever handles are shipped in a separate container with the door. Customers cylinders may be factory or field installed. Any mortise cylinder (not longer than 1-3/8" nor shorter than 1-1/8" with standard cam) may be used. See Tech Data Sheet #25 REV 05.

Cylinder Installation

1. Loosen setscrew and remove inside lever. Then remove outside lever.
2. Remove escutcheon nut from escutcheon plate on the non-secure side with tool provided. Then remove the escutcheon plate.
3. Loosen top screw in the mechanism housing, approximately six (6) turns, then loosen the bottom screw approximately one and one half turns (1-1/2) turns.
4. Tilt the top of the lever mechanism outwards so that the cylinder set screws on the side of the mechanism can be loosened.
5. Screw cylinder into lever mechanism. Make certain that cam leg points toward top of mechanism when key is removed. Tighten setscrews firmly against cylinder.
6. Re-tighten top and bottom screws in mechanism.
7. Re-install escutcheon plate and levers.

Levers Installation

1. Install the outer lever complete with swivel spindle. Make certain that the swivel spindle is adjusted so that the distance from the nylon plug to the face of the escutcheon nut is 5/32". The nylon plug must be horizontally positioned to receive the lever setscrew.
2. Install the inner lever and tighten the setscrew firmly. The setscrew must seat into the nylon plug.
3. Test operation of levers.



Lock Replacement

1. **Remove existing lock**
   - A. **Loosen setscrew on lever. Remove both lever handles.**
   - B. **Use spanner wrench to remove escutcheon nuts. Remove both escutcheons.**
   - C. **Remove the two screws located at the top and the bottom of the lock unit and remove lock.**

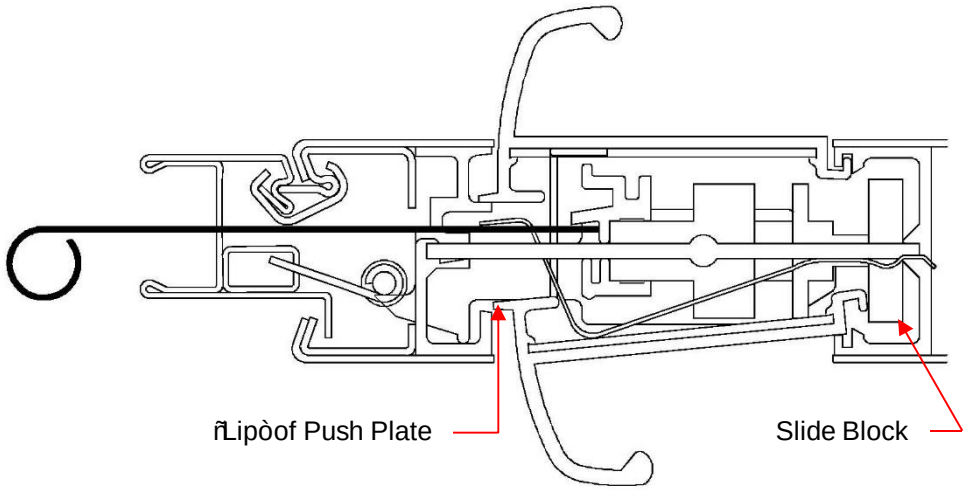
2. **Install new lock**
   - A. **Remove top and bottom screws from the new lock mechanism. Separate the two halves of the lock carefully so that all parts stay in place.**
   - B. **With the locking channel in the open position, insert the half of the lock containing the Actuator (Part # Q-17, see Parts Section 1-3) on the pull side of the door. Make sure that the actuator grips the Flipper (Part #L-135SA, shown on Tech Data Sheet # 21) as it is installed. Once the first half of the lock is in place and the actuator is seated on the flipper, install the second half of the lock. Once seated, secure the top and bottom screw.**

3. **Reinstall escutcheon plates and levers. Follow the instructions provided on the previous page.**

Removal of Grips (Factory Installed)

NOTE: The push side must be removed first.

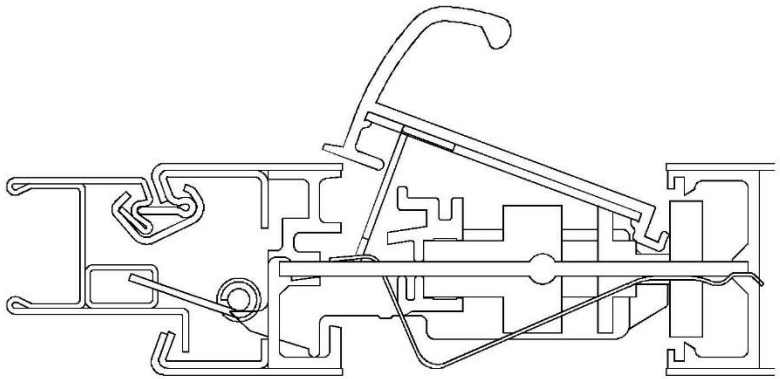
1. **Open door and depress retainer R-12 located at top of door on latch side (this action releases a tab holding the locking channel L-11 in the unlatched position) and rotate locking channel L-11 to latched position (in plane with door body).**
2. **In base of locking channel, at grip height, locate the hole (approximately 1/8" in diameter) for access wire.**
3. **Take access wire tool Y-39A and place long end into hole in locking channel. Feel for corresponding hole in door stile.**



4. **When wire is through both holes, it meets the slide block member of the mechanism. Push access wire toward hinge side of door, pushing the slide block to rear of mechanism.**
5. **Grasp Push-Side grip in one hand while holding access wire fully depressed with other hand. Push the hinge side of the grip inward at the same time pulling the entire grip out of mechanism cutout.**
6. **The grip will come free on latch side. Pull grip out of door.**
7. **To remove Pull-Side grip, return locking channel L-11 to the unlatched position. Use access wire to lift puller-rod free of actuator arm, M22.**
8. **Remove Pull-Side grip in same manner as Push-Side.**

Installation of Grips

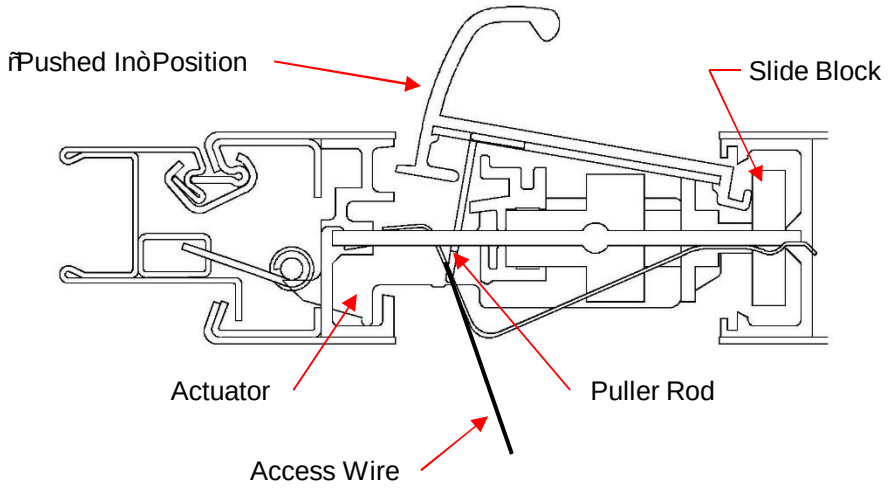
The Pull Plate is distinguished by having a Puller Rod, which attaches to the Actuator in the mechanism. The Pull Plate must be installed before the Push Plate.



1. **Place the Pull Plate in the mechanism as shown.**

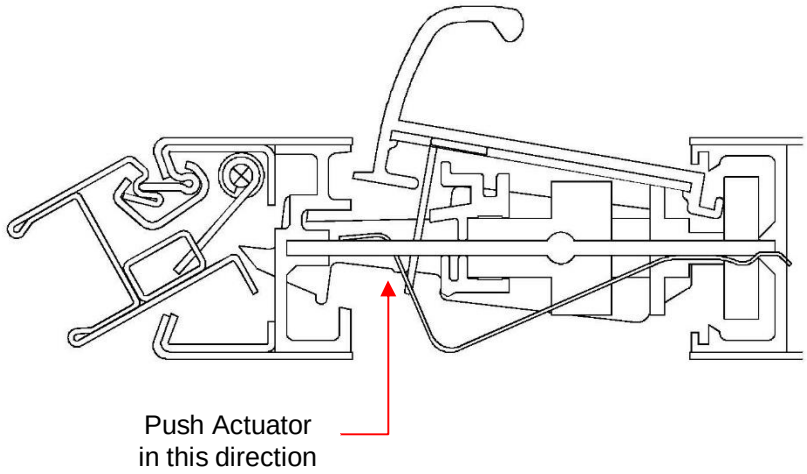
2. **Push the Pull Plate against the Slide Block and slide both toward the hinge side of the door (in direction of the arrow) until further motion is impossible. Using the access wire provided, reach through the mechanism from the Push Side and pull up the Puller Rod over the Actuator.**

NOTE: During this operation, the Pull Plate must be held in the "pushed in" position.

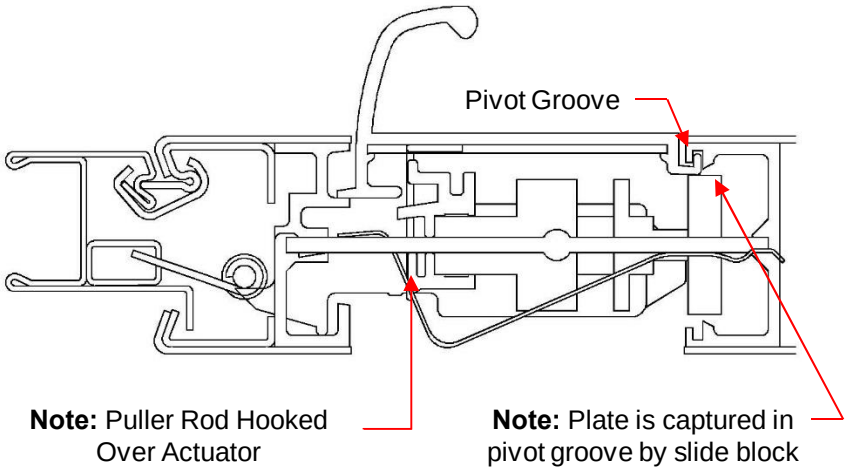


Installation

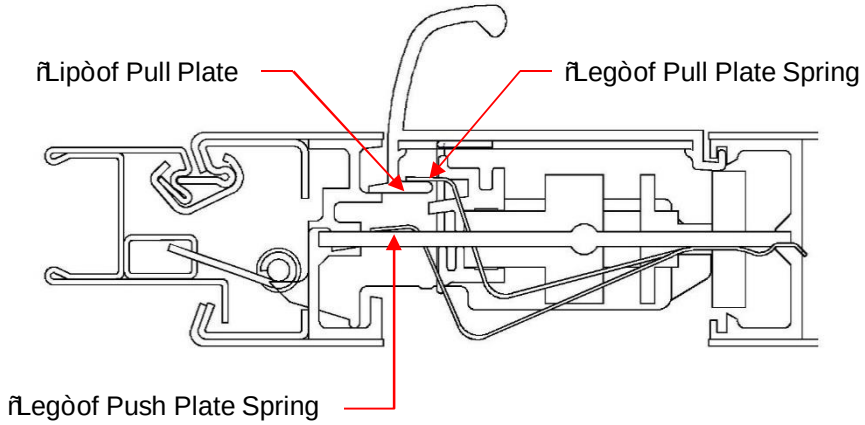
3. **Push the Actuator, allowing the Puller Rod to snap over the Actuator. Remove access wire.**



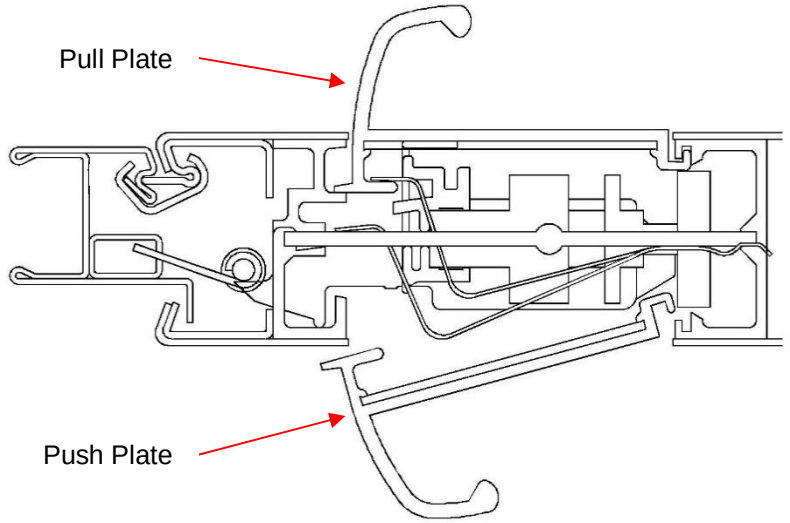
4. **Return Actuator to position shown. Keeping the Slide Block in the full "pushed in" position from the push side, seat the Pull Plate in the pivot groove. Holding the Pull Plate in the seated position, allow the Slide Block to return, thereby capturing the Pull Plate in the pivot position.**



5. **Install the two Plate Springs in the mechanism. Hook the leg of the spring that is closest to the center of the mechanism under the lip of the Pull Plate. Hook the other spring (for Push Plate) over the Pull Plate side of the mechanism web. Test the operation of the Pull Plate by opening and closing. Check cylinder or turn piece operation, if applicable.**

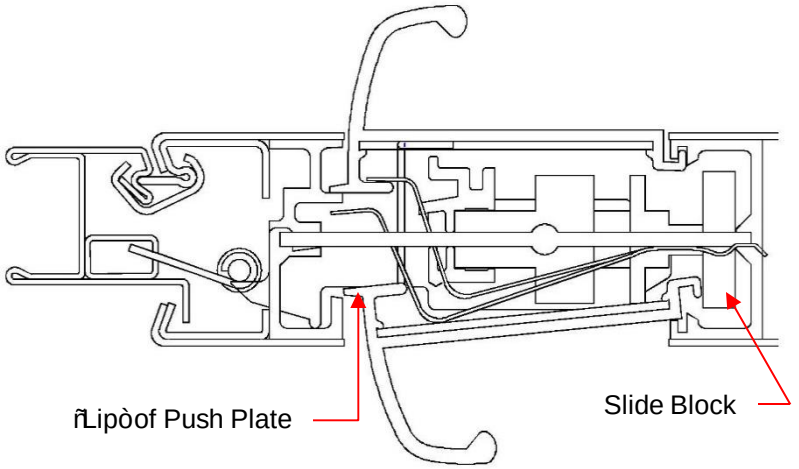


6. **Place Push Plate in mechanism as shown.**

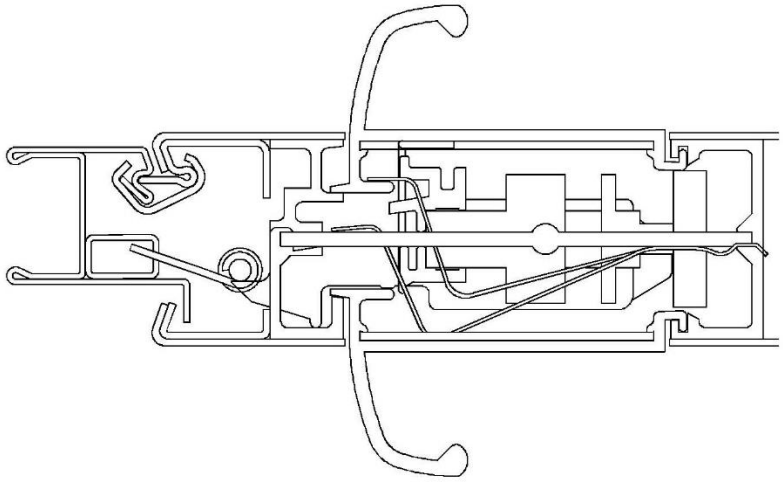


Installation

7. **Slide Push Plate from hinge side and seat Push Plate in pivot groove.**



8. **Wiggle both Pull and Push Plates until Slide Block returns, capturing both plates.**

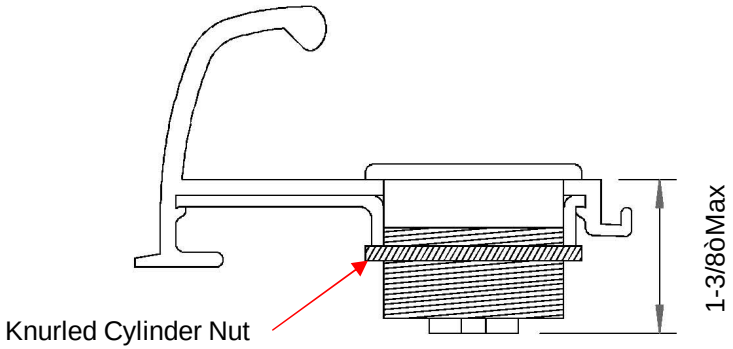


Push-Pull Grips/Cylinders (May be Factory Installed)

When cylinders are not factory installed, TOTAL DOOR SYSTEMS® provides one each knurled cylinder nut and one each blocking ring for each cylinder type grip.

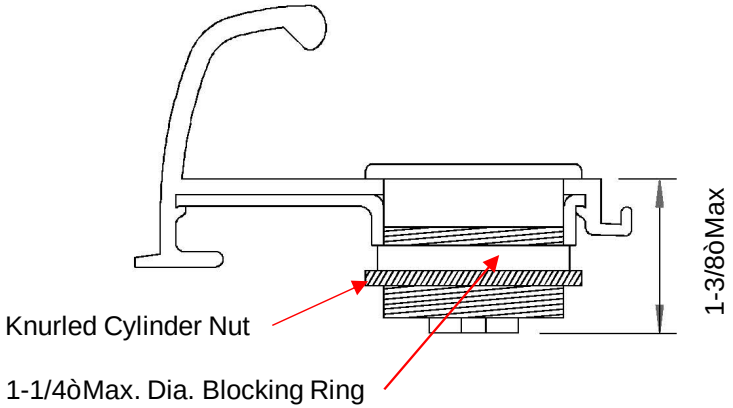
Preferred Installation

The TOTAL DOOR® is designed to work with all cylinder up to 1-3/8òlong, without collars or blocking rings under the head.



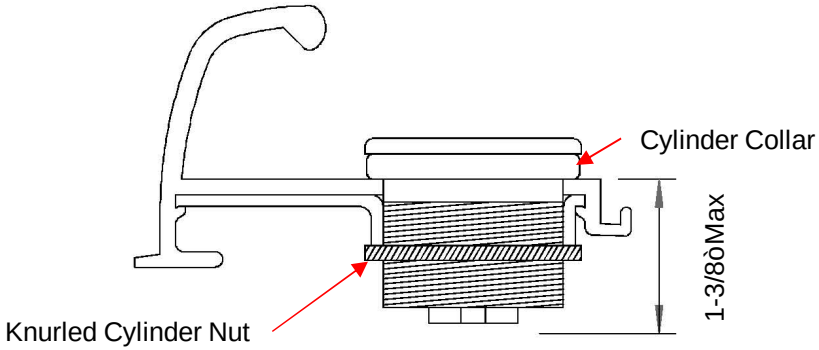
Cylinder Installed with Blocking Ring Under Knurled Nut

If the cylinder is not sufficiently threaded, use blocking rings under the knurled cylinder locking nut.



Cylinder Installed with Blocking Ring Under Head

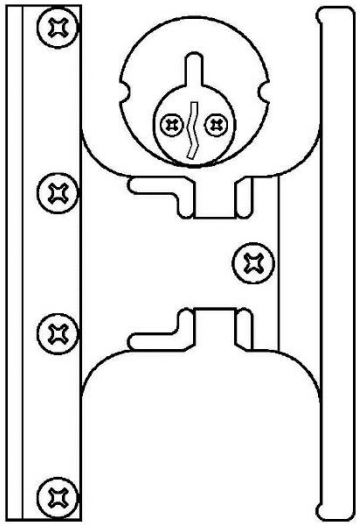
If the cylinder is more than 1-3/8òlong, use blocking rings under the head. Never use cylinder collars on TOTAL DOOR SYSTEMS® grips. Installation of the grips in the mechanism will be very difficult or impossible.



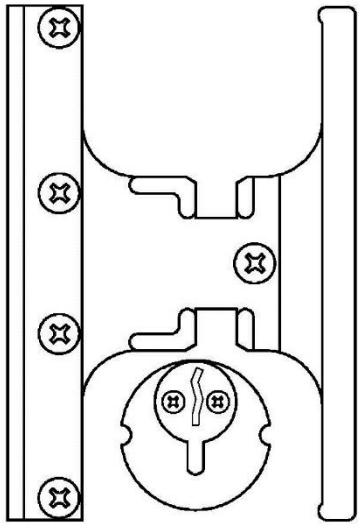
Proper Cylinder Cam and Orientation

Cylinder cam must be A/R cam.
(See Tech Data #25 REV05)

Orientation: Cam of cylinder must be closest to center of mechanism.



Cylinder on one side of door



Cylinder on bottom of one side if both sides have cylinders

With these simple steps you also may field inspect and ensure doors are functioning properly.

Electrical Door Functions.

Electrical Unlatching (E-UNL)- Power to the solenoid unlatched the door as long as the power is on. Power off allows the door to revert to its previous mode.

Used on doors with auto operator (Typical). No need to use trim for entry or exit.

Ex: key pad, card reader, or wheel chair access push pad.

Electric Safe Locking (E-SAF)- Power interruption, intentional or accidental, puts the mechanism into an **unlocked** mode.

Power out/ fire alarm, door unlocks for entry/exit. Not typically used on exterior exit.

Electric Remote Locking/Fail Secure (E-SEC)- Power interruption, intentional or accidental, puts the mechanism into a **locked** mode

Power out, door remains locked securing area. Used to keep exterior doors locked from outside entry due to power outage/fire.

Electric Panic (E-PAN)- Panic is locked by 24 volt D.C., 6.0 amp power source. Interruption of power **unlocks** the panic.

Door always locked with power on. Power off/fire alarm, door is unlocked. Ideal for nursing homes.

Electric Flush Panic / with Grip or Lever. Can also be used with Grip by Grip or as Flush Panic Exit Only (FPEO). (Functions available as EUNL. All electrical components are in top rail.)

Ohms

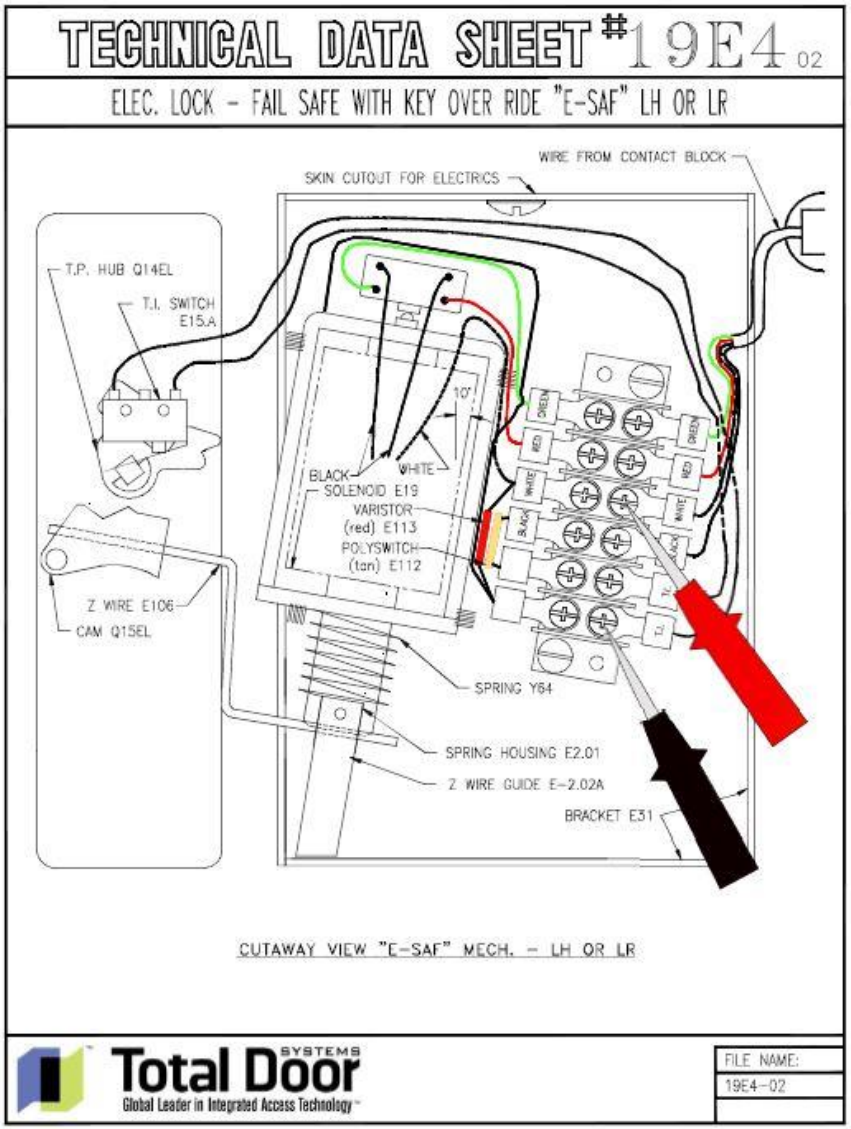
1. Disconnect Power
2. Connect the **BLACK** lead from the meter to the **BLACK** screw on the terminal strip.
3. Connect the **RED** lead from the meter to the **WHITE** screw on the terminal strip.
    a. The primary coil reading should be 4.5 ï 5.0 ohms +/- 10%.
    b. Depress the plunger to check the secondary coil:
    this reading should be 43 ï 50 ohms +/- 10%.

***** Values less than above, the solenoid should be replaced.

***** The above procedure applies for E-UNL, E-SEC or E-PAN.

***** For E-SAF refer to Tech Data Sheet 19E4 for Ohms reading.

Ohms


TECHNICAL DATA SHEET #19E4 02
ELEC. LOCK - FAIL SAFE WITH KEY OVER RIDE "E-SAF" LH OR LR
WIRE FROM CONTACT BLOCK
SKIN CUTOUT FOR ELECTRICS
T.P. HUB Q14EL
T.I. SWITCH E15A
10"
BLACK
WHITE
SOLENOID E19
VARISTOR (red) E113
POLYSWITCH (tan) E112
Z WIRE E106
CAM Q15EL
SPRING Y64
SPRING HOUSING E2.01
Z WIRE GUIDE E-2.02A
BRACKET E31
CUTAWAY VIEW "E-SAF" MECH. - LH OR LR
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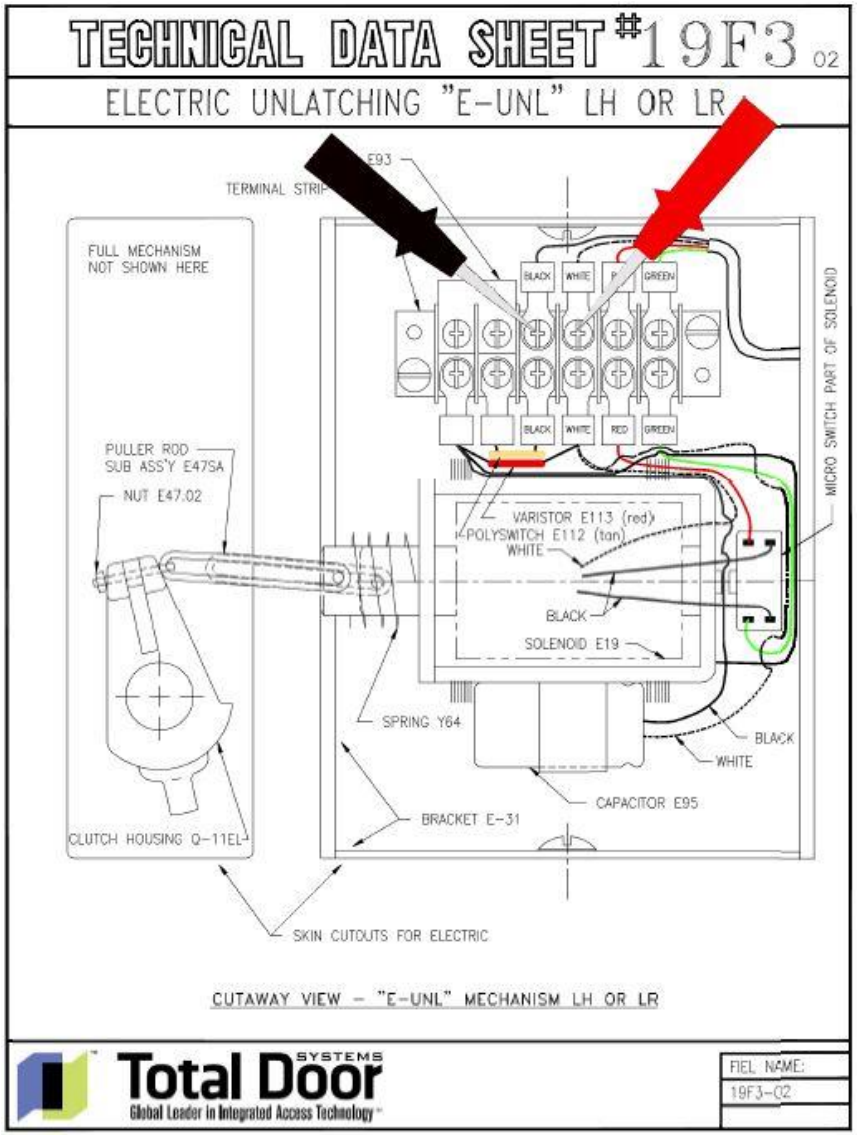
FILE NAME:
19E4-02


TECHNICAL DATA SHEET #19F3 02
ELECTRIC UNLATCHING "E-UNL" LH OR LR
E93
TERMINAL STRIP
FULL MECHANISM NOT SHOWN HERE
BLACK
WHITE
RED
GREEN
MICRO SWITCH PART OF SOLENOID
PULLER ROD SUB ASS'Y E47SA
NUT E47.02
VARISTOR E113 (red)
POLYSWITCH E112 (tan)
WHITE
BLACK
SOLENOID E19
SPRING Y64
BLACK
WHITE
CAPACITOR E95
BRACKET E-31
CLUTCH HOUSING Q-11EL
SKIN CUTOUTS FOR ELECTRIC
CUTAWAY VIEW - "E-UNL" MECHANISM LH OR LR
Total Door SYSTEMS
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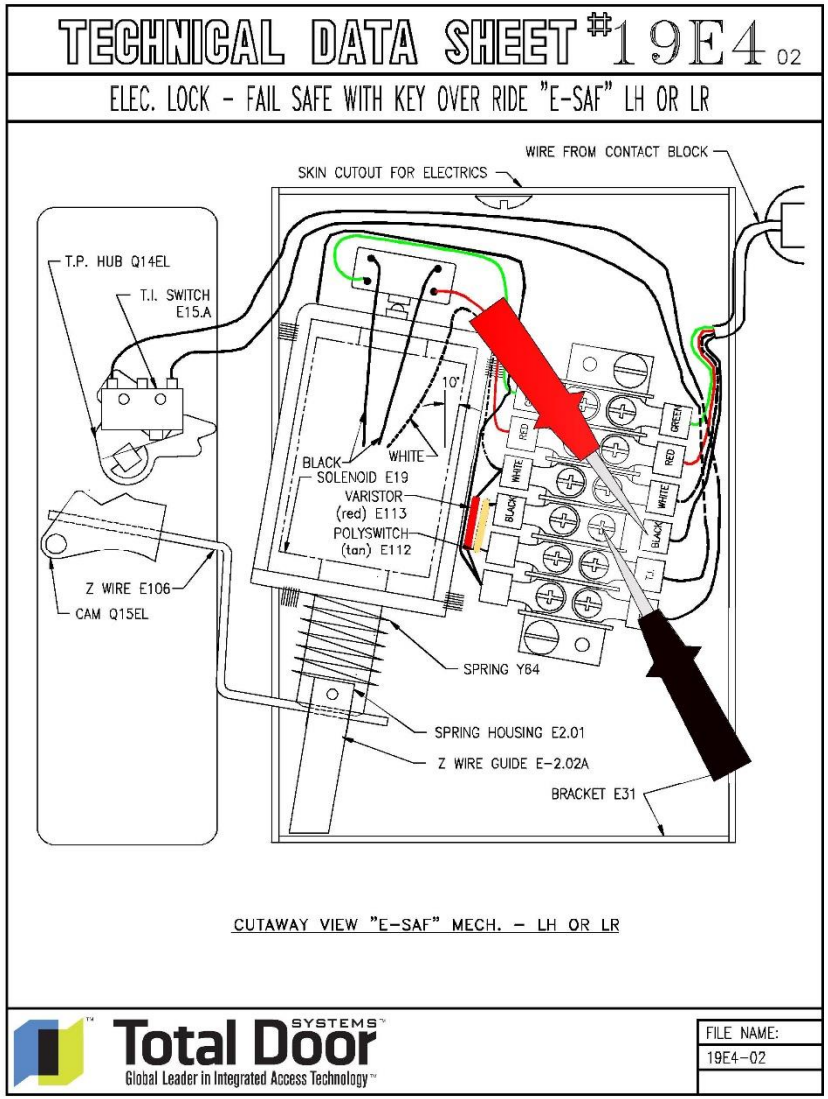
FIEL NAME:
19F3-02

Amps D.C.

1. Connect the **RED** lead from the meter to the disconnected **BLACK** wire at the terminal.
2. Connect the **BLACK** lead from the meter to the **BLACK** screw on the terminal strip.
   a. Read amps under load while preventing the plunger from seating.
   Minimum of 3 amps is required.
   b. The amperage reading when the plunger is seated is ½ amp.
   Check wiring to the door is values are less than noted above

* The above procedure applies for E-UNL, E-SAF, E-SEC or E-PAN.

Amps D.C.


TECHNICAL DATA SHEET #19E4 02
ELEC. LOCK - FAIL SAFE WITH KEY OVER RIDE "E-SAF" LH OR LR
WIRE FROM CONTACT BLOCK
SKIN CUTOUT FOR ELECTRICS
T.P. HUB Q14EL
T.I. SWITCH E15.A
10"
BLACK
WHITE
SOLENOID E19
VARISTOR (red) E113
POLYSWITCH (tan) E112
Z WIRE E106
CAM Q15EL
SPRING Y64
SPRING HOUSING E2.01
Z WIRE GUIDE E-2.02A
BRACKET E31
CUTAWAY VIEW "E-SAF" MECH. - LH OR LR
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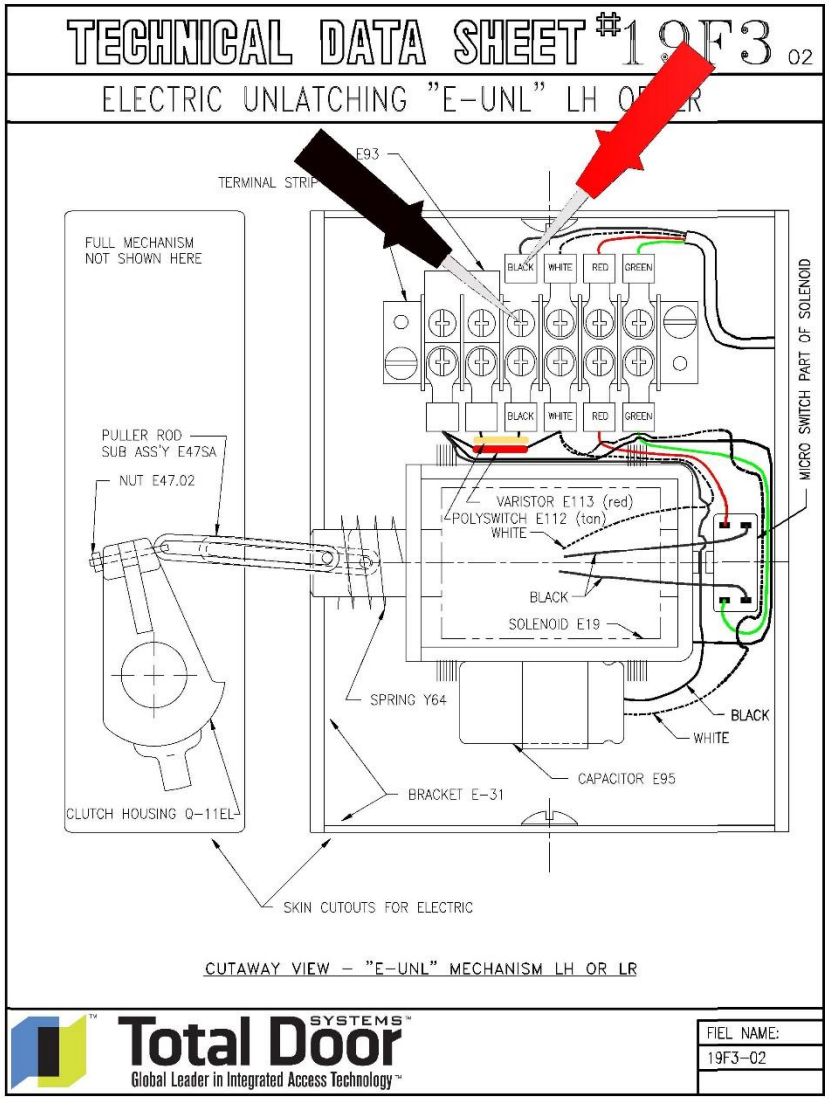
FILE NAME:
19E4-02


TECHNICAL DATA SHEET #19F3 02
ELECTRIC UNLATCHING "E-UNL" LH OR LR
E93
TERMINAL STRIP
FULL MECHANISM NOT SHOWN HERE
BLACK
WHITE
RED
GREEN
PULLER ROD SUB ASS'Y E47SA
NUT E47.02
VARISTOR E113 (red)
POLYSWITCH E112 (tan)
WHITE
BLACK
SOLENOID E19
MICRO SWITCH PART OF SOLENOID
SPRING Y64
BLACK
WHITE
CAPACITOR E95
BRACKET E-31
CLUTCH HOUSING Q-11EL
SKIN CUTOUTS FOR ELECTRIC
CUTAWAY VIEW - "E-UNL" MECHANISM LH OR LR
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FIEL NAME:
19F3-02

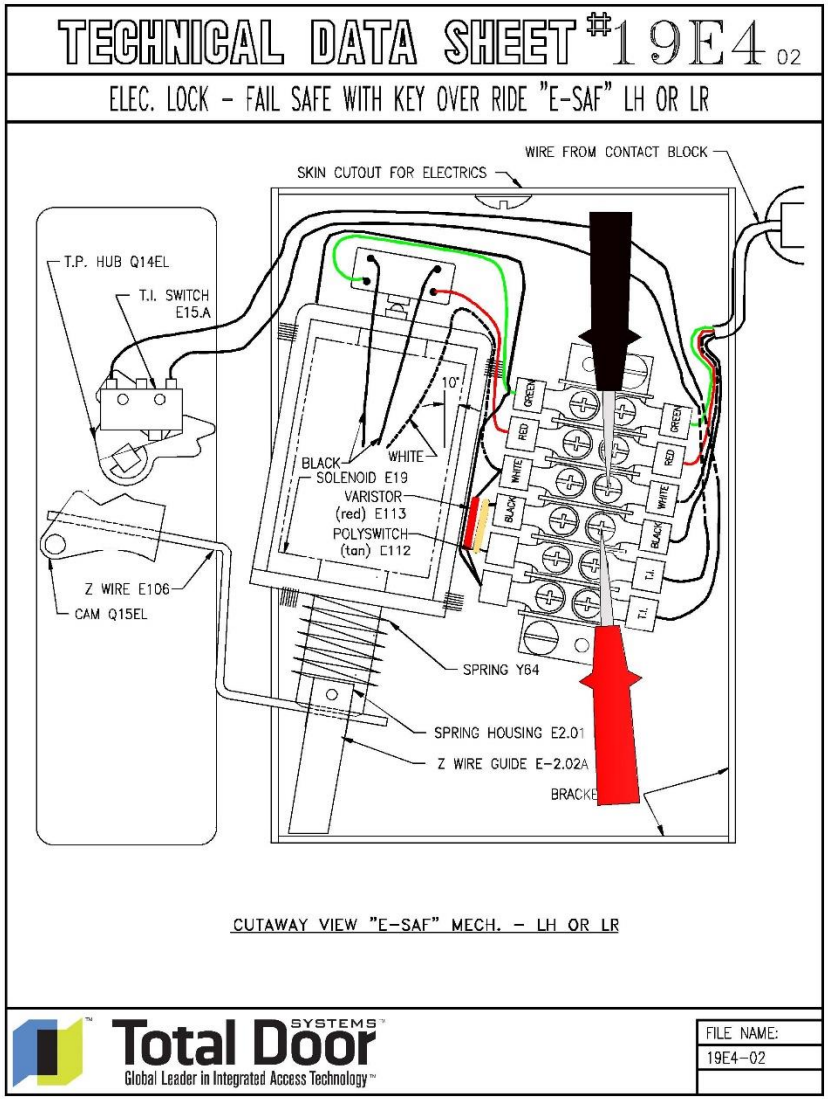
Volts D.C.

1. Connect the **RED** lead from the meter to the **BLACK** screw on the terminal strip.
2. Connect the **BLACK** lead from the meter to the **WHITE** screw on the terminal strip.
   a. Read voltage under load while preventing the plunger from seating.
   The voltage reading should be 22 ï 19 volts under load.

   If readings are under 19 volts, check wiring to the door.

* The above procedure applies for E-UNL, E-SAF, E-SEC or E-PAN.

Volts D.C.


TECHNICAL DATA SHEET #19E4 02
ELEC. LOCK - FAIL SAFE WITH KEY OVER RIDE "E-SAF" LH OR LR
WIRE FROM CONTACT BLOCK
SKIN CUTOUT FOR ELECTRICS
T.P. HUB Q14EL
T.I. SWITCH E15.A
10°
BLACK
WHITE
SOLENOID E19
VARISTOR (red) E113
POLYSWITCH (tan) E112
Z WIRE E106
CAM Q15EL
SPRING Y64
SPRING HOUSING E2.01
Z WIRE GUIDE E-2.02A
BRACKE
CUTAWAY VIEW "E-SAF" MECH. - LH OR LR
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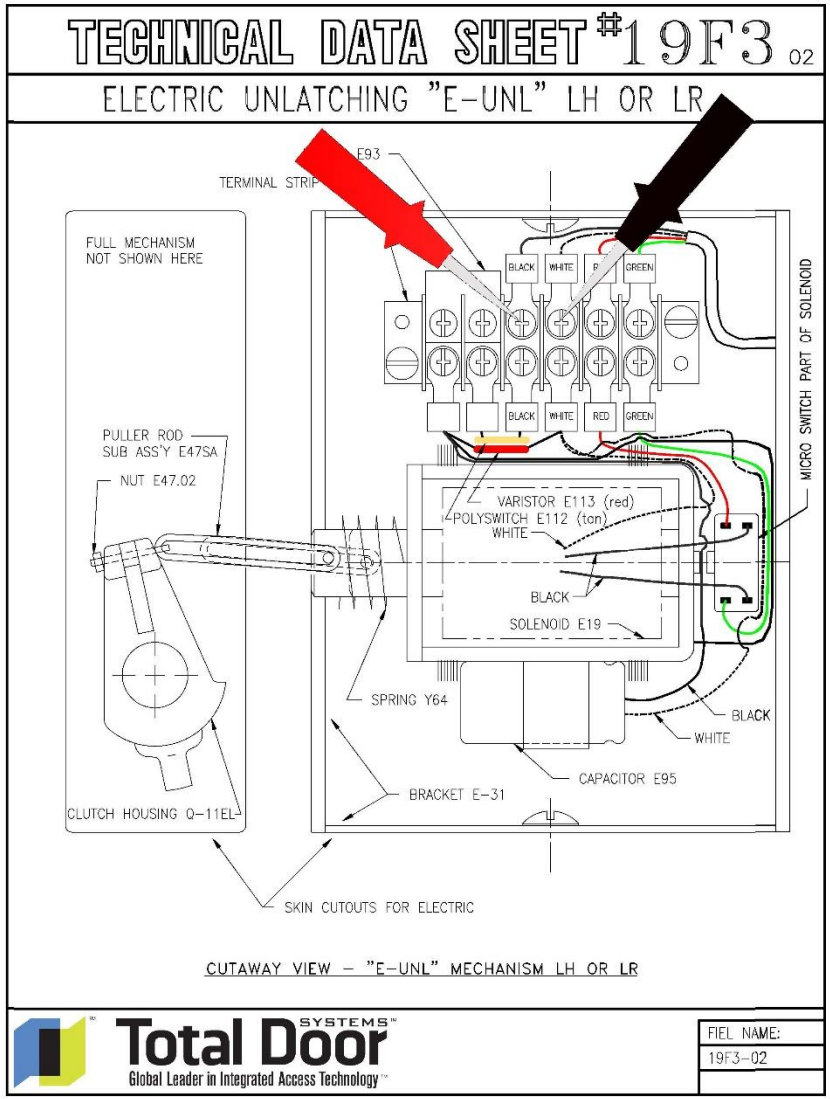
FILE NAME:
19E4-02


TECHNICAL DATA SHEET #19F3 02
ELECTRIC UNLATCHING "E-UNL" LH OR LR
E93
TERMINAL STRIP
FULL MECHANISM NOT SHOWN HERE
PULLER ROD SUB ASS'Y E47SA
NUT E47.02
VARISTOR E113 (red)
POLYSWITCH E112 (tan)
WHITE
BLACK
SOLENOID E19
SPRING Y64
BLACK
WHITE
CAPACITOR E95
BRACKET E-31
CLUTCH HOUSING Q-11EL
SKIN CUTOUTS FOR ELECTRIC
MICRO SWITCH PART OF SOLENOID
CUTAWAY VIEW - "E-UNL" MECHANISM LH OR LR
Total Door SYSTEMS
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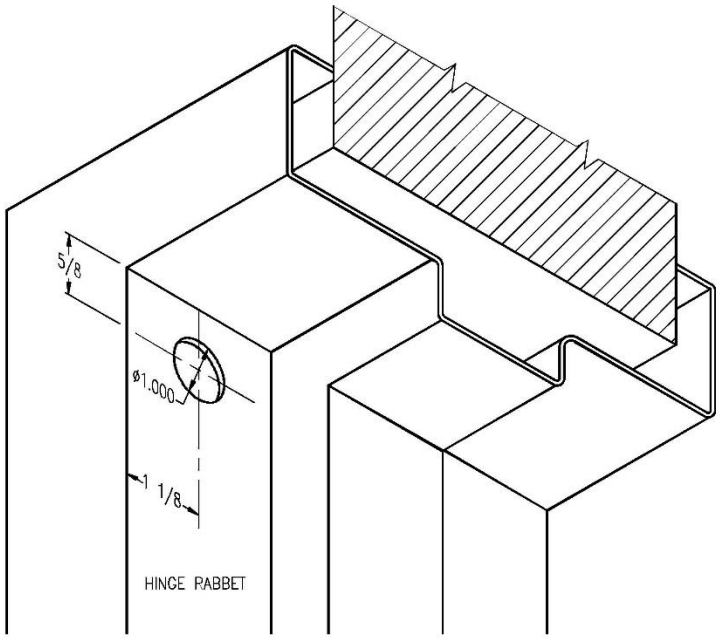
FIEL NAME:
19F3-02

Electrical Technical Data

TECHNICAL DATA SHEET # 19C

FRAME PREP. FOR ELECTRIC DOOR



LEFT REVERSE (L.R.) OR RIGHT HAND (R.) HINGE JAMB SHOWN ABOVE

HINGE JAMB HEAD DETAIL – PAIR OR SINGLE
FOR ELECTRIC DOOR WITH CURRENT TRANSFER BLOCK

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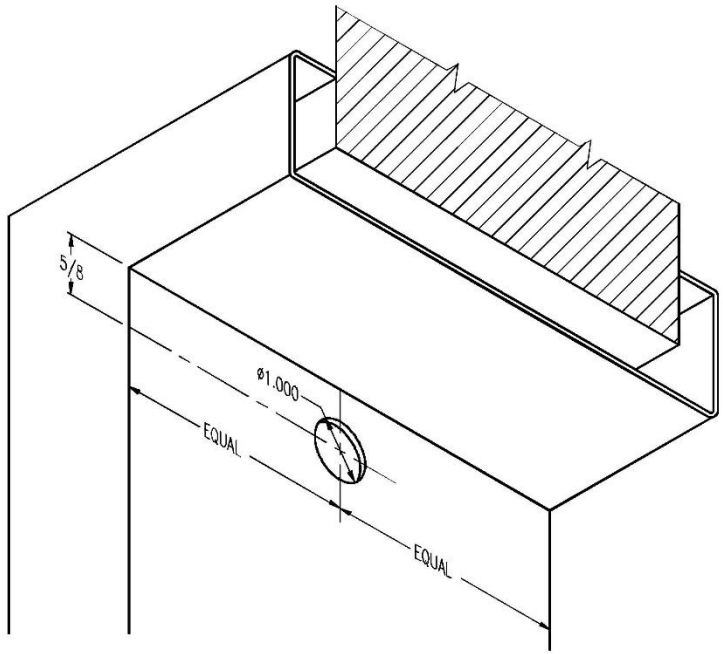
FILE NAME
TDS19C
DATE 8/02/13

TECHNICAL DATA SHEET # 19D

D\E FRAME PREP. FOR ELECTRIC DOOR



HINGE JAMB HEAD DETAIL – DOUBLE EGRESS
FOR ELECTRIC DOOR WITH CURRENT TRANSFER BLOCK

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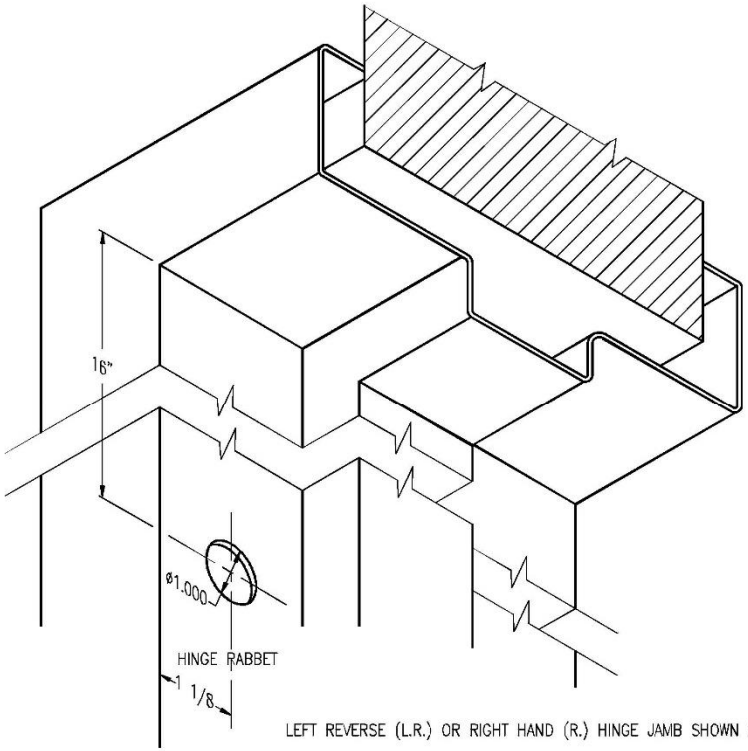
FILE NAME
TDS19D
DATE 8/02/13

Electrical Technical Data

TECHNICAL DATA SHEET #19R

FRAME PREP FOR CONCEALED LOOP



HINGE JAMB HEAD DETAIL – PAIR OR SINGLE
FOR ELECTRIC DOOR WITH CONCEALED LOOP

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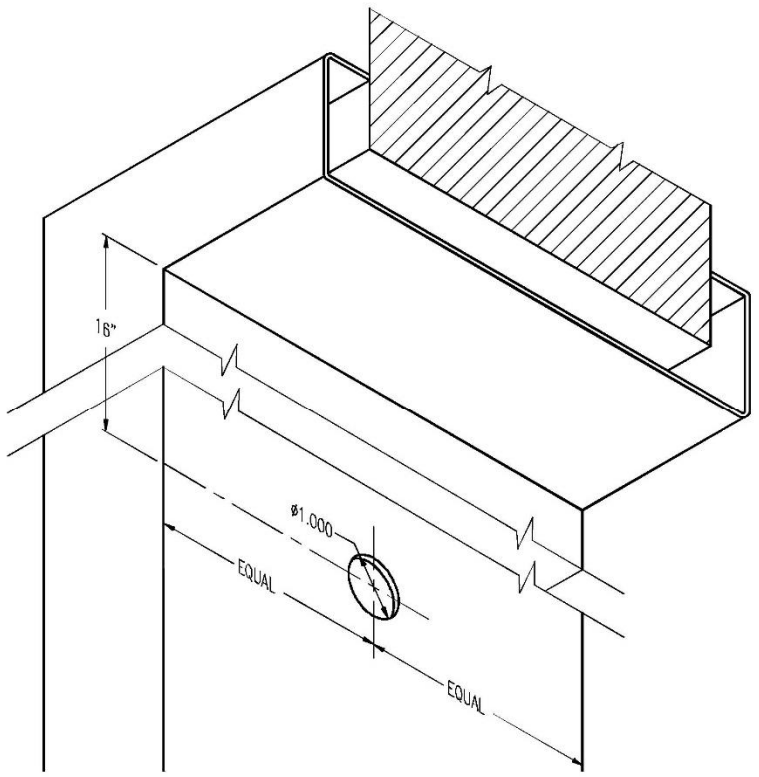
FILE NAME
TDS19R
DATE 8/02/13

TECHNICAL DATA SHEET #19S 01

D\E FRAME PREP. FOR CONCEALED LOOP



HINGE JAMB HEAD DETAIL – DOUBLE EGRESS
FOR ELECTRIC DOOR WITH CONCEALED LOOP

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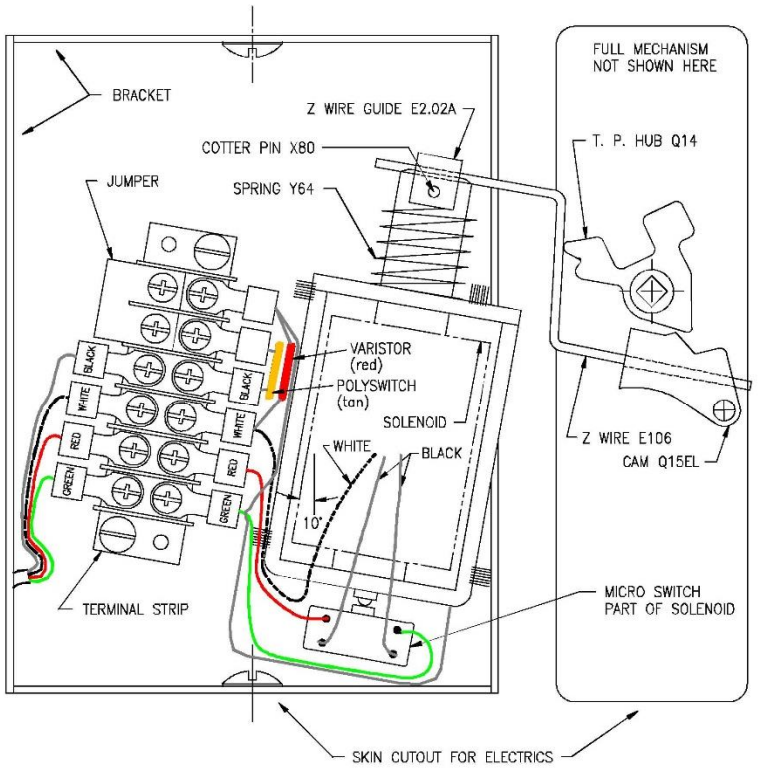
FILE NAME
TDS19S-01
DATE 8/02/13

Electrical Technical Data

TECHNICAL DATA SHEET #19E2 02

ELEC. LOCK - FAIL SECURE WITH OPTIONAL KEY OVER RIDE "E-SEC" RH OR RR



CUTAWAY VIEW "E-SEC" MECH. (E19SA=ESEC) - RH OR RR

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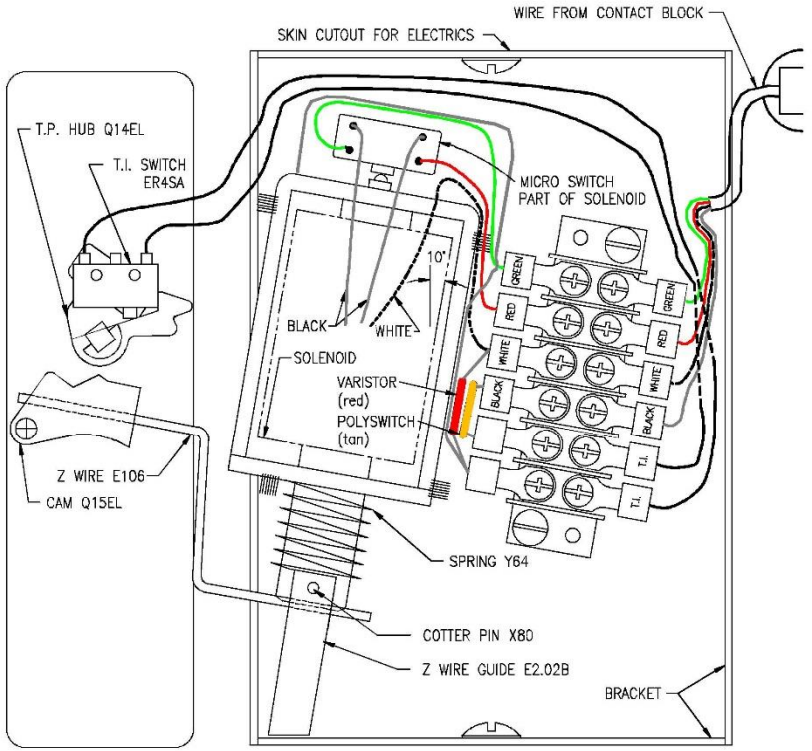
FILE NAME
TDS19E2-02
DATE 8/02/13

TECHNICAL DATA SHEET #19E4 02

ELEC. LOCK - FAIL SAFE WITH KEY OVER RIDE "E-SAF" LH OR LR



CUTAWAY VIEW "E-SAF" MECH. (E19SA=ESAF) - LH OR LR

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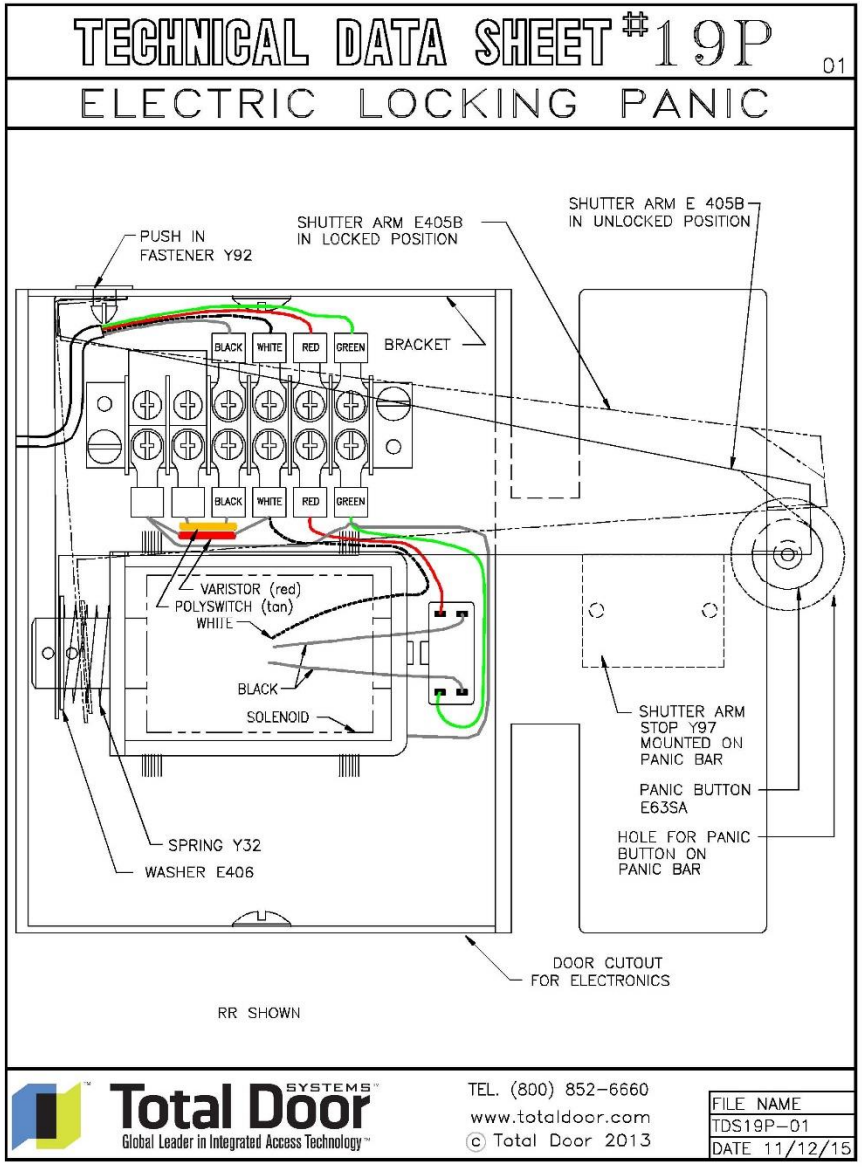
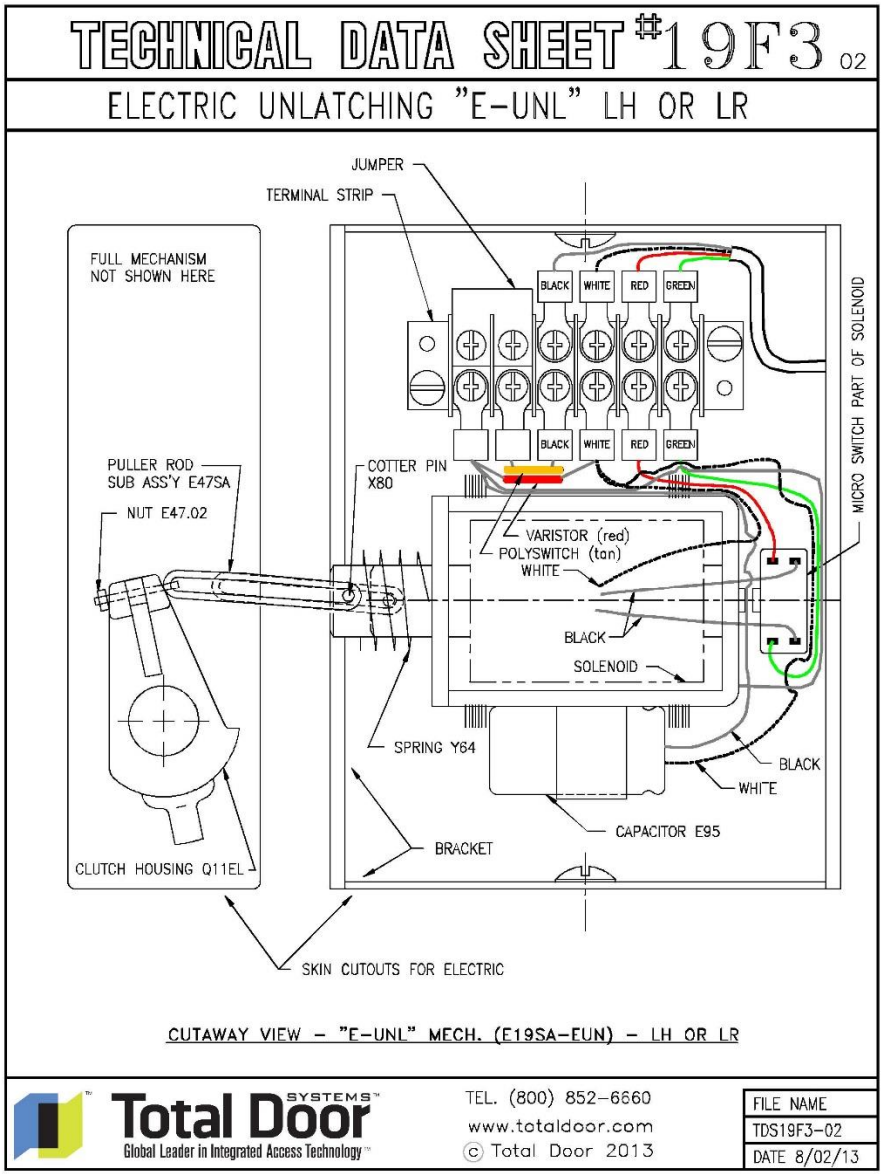
FILE NAME
TDS19E4-02
DATE 8/02/13

Electrical Technical Data

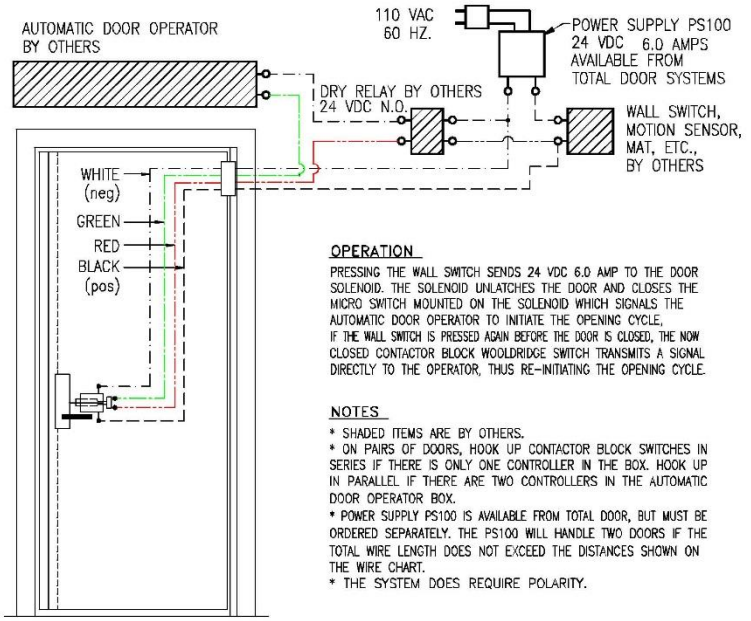




Electrical Technical Data

TECHNICAL DATA SHEET #19G 03

WIRING SCHEMATIC FOR E-UNL.



OPERATION

PRESSING THE WALL SWITCH SENDS 24 VDC 6.0 AMP TO THE DOOR SOLENOID. THE SOLENOID UNLATCHES THE DOOR AND CLOSES THE MICRO SWITCH MOUNTED ON THE SOLENOID WHICH SIGNALS THE AUTOMATIC DOOR OPERATOR TO INITIATE THE OPENING CYCLE. IF THE WALL SWITCH IS PRESSED AGAIN BEFORE THE DOOR IS CLOSED, THE NOW CLOSED CONTACTOR BLOCK WOOLDRIDGE SWITCH TRANSMITS A SIGNAL DIRECTLY TO THE OPERATOR, THUS RE-INITIATING THE OPENING CYCLE.

NOTES

* SHADED ITEMS ARE BY OTHERS.
* ON PAIRS OF DOORS, HOOK UP CONTACTOR BLOCK SWITCHES IN SERIES IF THERE IS ONLY ONE CONTROLLER IN THE BOX. HOOK UP IN PARALLEL IF THERE ARE TWO CONTROLLERS IN THE AUTOMATIC DOOR OPERATOR BOX.
* POWER SUPPLY PS100 IS AVAILABLE FROM TOTAL DOOR, BUT MUST BE ORDERED SEPARATELY. THE PS100 WILL HANDLE TWO DOORS IF THE TOTAL WIRE LENGTH DOES NOT EXCEED THE DISTANCES SHOWN ON THE WIRE CHART.
* THE SYSTEM DOES REQUIRE POLARITY.

CAUTION:

* CHANGING THE WIRING FROM THAT SHOWN IN THE SCHEMATIC ABOVE, WILL VOID THE LIMITED WARRANTY.

RECOMMENDED MAX. LENGTH OF WIRE CONNECTING THE POWER SUPPLY TO THE DOOR

WIRE GAUGE	2 CONDUCTOR CABLE LENGTH	SINGLE CONDUCTOR WIRE LENGTH
20	20'	40'
18	30'	60'
16	50'	100'
14	80'	160'
12	125'	250'

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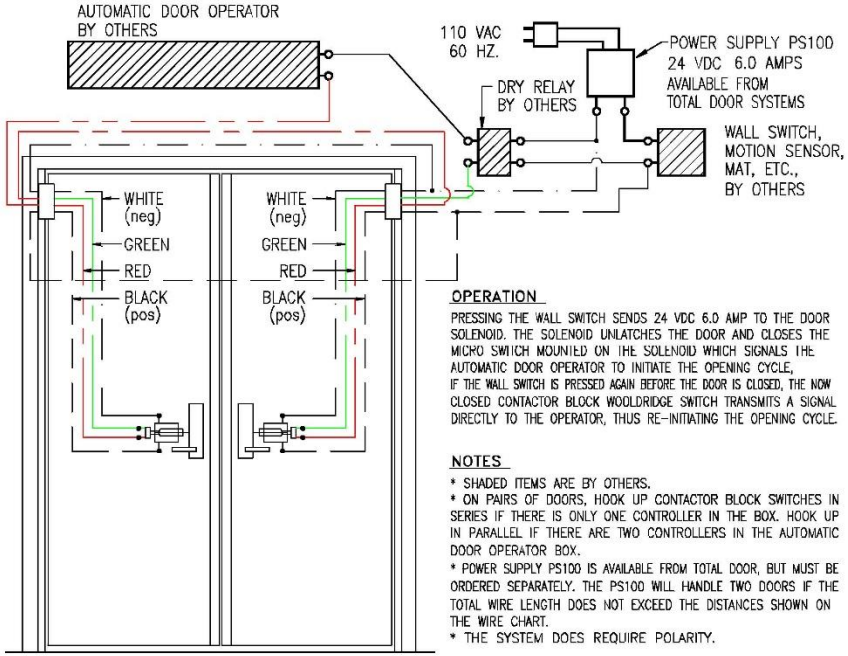
FILE NAME TDS19G-03
DATE 1/12/16

TECHNICAL DATA SHEET #19Q 03

WIRING SCHEMATIC FOR E-UNL. IN PAIRS



OPERATION

PRESSING THE WALL SWITCH SENDS 24 VDC 6.0 AMP TO THE DOOR SOLENOID. THE SOLENOID UNLATCHES THE DOOR AND CLOSES THE MICRO SWITCH MOUNTED ON THE SOLENOID WHICH SIGNALS THE AUTOMATIC DOOR OPERATOR TO INITIATE THE OPENING CYCLE. IF THE WALL SWITCH IS PRESSED AGAIN BEFORE THE DOOR IS CLOSED, THE NOW CLOSED CONTACTOR BLOCK WOOLDRIDGE SWITCH TRANSMITS A SIGNAL DIRECTLY TO THE OPERATOR, THUS RE-INITIATING THE OPENING CYCLE.

NOTES

* SHADED ITEMS ARE BY OTHERS.
* ON PAIRS OF DOORS, HOOK UP CONTACTOR BLOCK SWITCHES IN SERIES IF THERE IS ONLY ONE CONTROLLER IN THE BOX. HOOK UP IN PARALLEL IF THERE ARE TWO CONTROLLERS IN THE AUTOMATIC DOOR OPERATOR BOX.
* POWER SUPPLY PS100 IS AVAILABLE FROM TOTAL DOOR, BUT MUST BE ORDERED SEPARATELY. THE PS100 WILL HANDLE TWO DOORS IF THE TOTAL WIRE LENGTH DOES NOT EXCEED THE DISTANCES SHOWN ON THE WIRE CHART.
* THE SYSTEM DOES REQUIRE POLARITY.

CAUTION

* CHANGING THE WIRING FROM THAT SHOWN IN THE SCHEMATIC ABOVE WILL VOID THE LIMITED WARRANTY.

RECOMMENDED MAX. LENGTH OF WIRE CONNECTING THE POWER SUPPLY TO THE DOOR

WIRE GAUGE	2 CONDUCTOR CABLE LENGTH	SINGLE CONDUCTOR WIRE LENGTH
20	20'	40'
18	30'	60'
16	50'	100'
14	80'	160'
12	125'	250'

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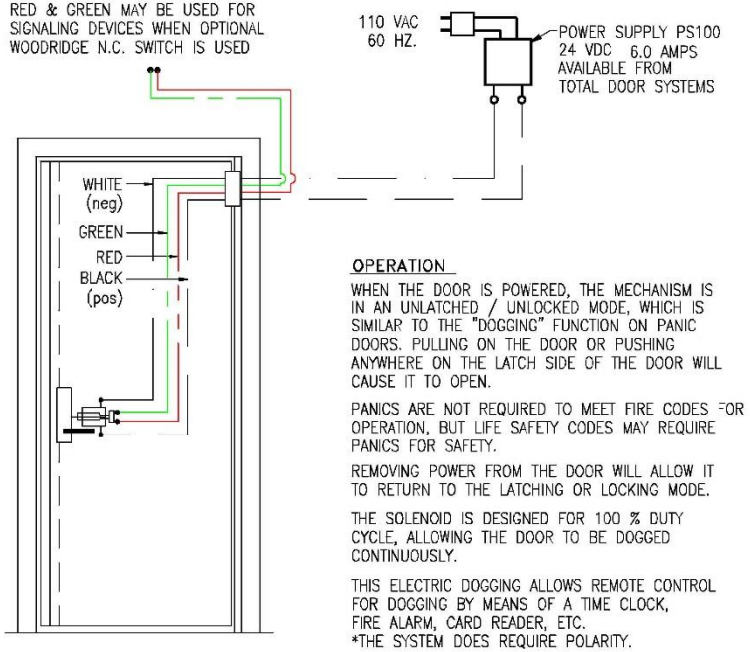
FILE NAME TDS19Q-03
DATE 1/12/16

Electrical Technical Data

TECHNICAL DATA SHEET #19HD

WIRING SCHEMATIC FOR E-UNL. USED FOR DOGGING



OPERATION

WHEN THE DOOR IS POWERED, THE MECHANISM IS IN AN UNLATCHED / UNLOCKED MODE, WHICH IS SIMILAR TO THE "DOGGING" FUNCTION ON PANIC DOORS. PULLING ON THE DOOR OR PUSHING ANYWHERE ON THE LATCH SIDE OF THE DOOR WILL CAUSE IT TO OPEN.

PANICS ARE NOT REQUIRED TO MEET FIRE CODES FOR OPERATION, BUT LIFE SAFETY CODES MAY REQUIRE PANICS FOR SAFETY.

REMOVING POWER FROM THE DOOR WILL ALLOW IT TO RETURN TO THE LATCHING OR LOCKING MODE.

THE SOLENOID IS DESIGNED FOR 100 % DUTY CYCLE, ALLOWING THE DOOR TO BE DOGGED CONTINUOUSLY.

THIS ELECTRIC DOGGING ALLOWS REMOTE CONTROL FOR DOGGING BY MEANS OF A TIME CLOCK, FIRE ALARM, CARD READER, ETC.
*THE SYSTEM DOES REQUIRE POLARITY.

CAUTION:

* CHANGING THE WIRING FROM THAT SHOWN IN THE SCHEMATIC ABOVE, WILL VOID THE LIMITED WARRANTY.

RECOMMENDED MAX. LENGTH OF WIRE CONNECTING THE POWER SUPPLY TO THE DOOR

WIRE GAUGE	2 CONDUCTOR CABLE LENGTH	SINGLE CONDUCTOR WIRE LENGTH
20	20'	40'
18	30'	60'
16	50'	100'
14	80'	160'
12	125'	250'

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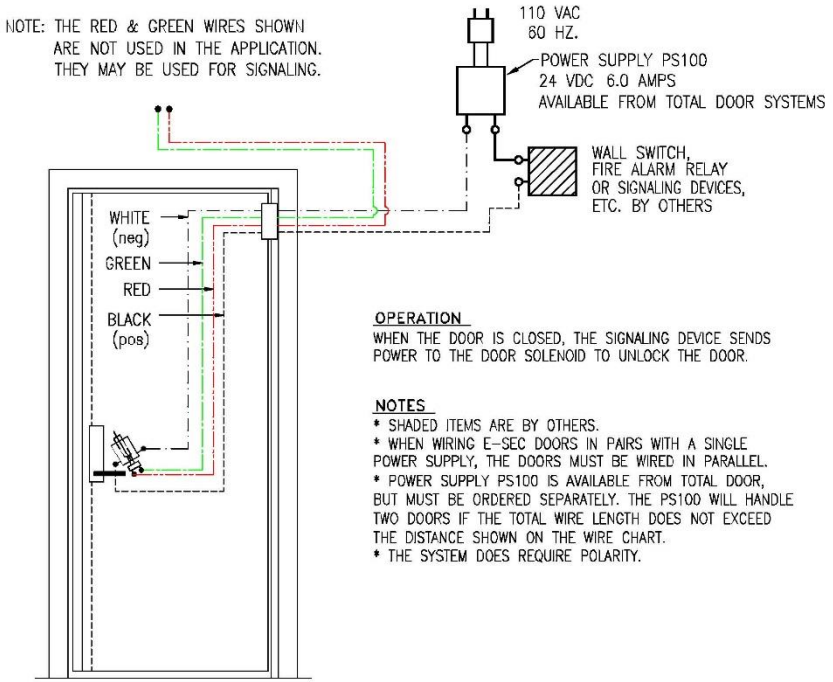
FILE NAME
TDS19HD
DATE 1/12/16

TECHNICAL DATA SHEET #19J 04

WIRING SCHEMATIC FOR E-SEC.



OPERATION

WHEN THE DOOR IS CLOSED, THE SIGNALING DEVICE SENDS POWER TO THE DOOR SOLENOID TO UNLOCK THE DOOR.

NOTES

* SHADED ITEMS ARE BY OTHERS.
* WHEN WIRING E-SEC DOORS IN PAIRS WITH A SINGLE POWER SUPPLY, THE DOORS MUST BE WIRED IN PARALLEL.
* POWER SUPPLY PS100 IS AVAILABLE FROM TOTAL DOOR, BUT MUST BE ORDERED SEPARATELY. THE PS100 WILL HANDLE TWO DOORS IF THE TOTAL WIRE LENGTH DOES NOT EXCEED THE DISTANCE SHOWN ON THE WIRE CHART.
* THE SYSTEM DOES REQUIRE POLARITY.

CAUTION

* CHANGING THE WIRING FROM THAT SHOWN IN THE SCHEMATIC ABOVE, WILL VOID THE LIMITED WARRANTY.

RECOMMENDED MAX. LENGTH OF WIRE CONNECTING THE POWER SUPPLY TO THE DOOR

WIRE GAUGE	2 CONDUCTOR CABLE LENGTH	SINGLE CONDUCTOR WIRE LENGTH
20	20'	40'
18	30'	60'
16	50'	100'
14	80'	160'
12	125'	250'

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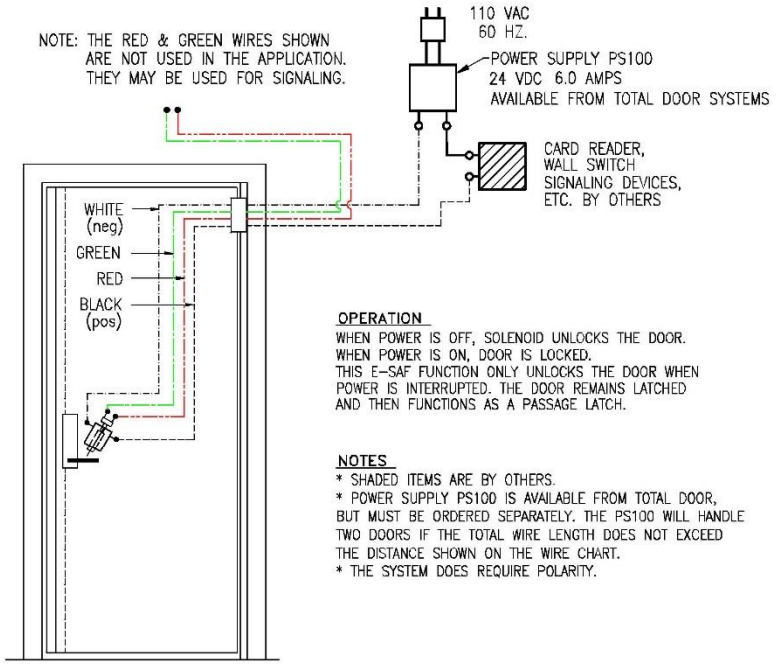
FILE NAME
TDS19J-04
DATE 1/12/16

Electrical Technical Data

TECHNICAL DATA SHEET #19K 03

WIRING SCHEMATIC FOR E-SAF.



OPERATION

WHEN POWER IS OFF, SOLENOID UNLOCKS THE DOOR.
WHEN POWER IS ON, DOOR IS LOCKED.
THIS E-SAF FUNCTION ONLY UNLOCKS THE DOOR WHEN POWER IS INTERRUPTED. THE DOOR REMAINS LATCHED AND THEN FUNCTIONS AS A PASSAGE LATCH.

NOTES

* SHADED ITEMS ARE BY OTHERS.
* POWER SUPPLY PS100 IS AVAILABLE FROM TOTAL DOOR, BUT MUST BE ORDERED SEPARATELY. THE PS100 WILL HANDLE TWO DOORS IF THE TOTAL WIRE LENGTH DOES NOT EXCEED THE DISTANCE SHOWN ON THE WIRE CHART.
* THE SYSTEM DOES REQUIRE POLARITY.

CAUTION

* CHANGING THE WIRING FROM THAT SHOWN IN THE SCHEMATIC ABOVE, WILL VOID THE LIMITED WARRANTY.

RECOMMENDED MAX. LENGTH OF WIRE CONNECTING THE POWER SUPPLY TO THE DOOR

WIRE GAUGE	2 CONDUCTOR CABLE LENGTH	SINGLE CONDUCTOR WIRE LENGTH
20	20'	40'
18	30'	60'
16	50'	100'
14	80'	160'
12	125'	250'

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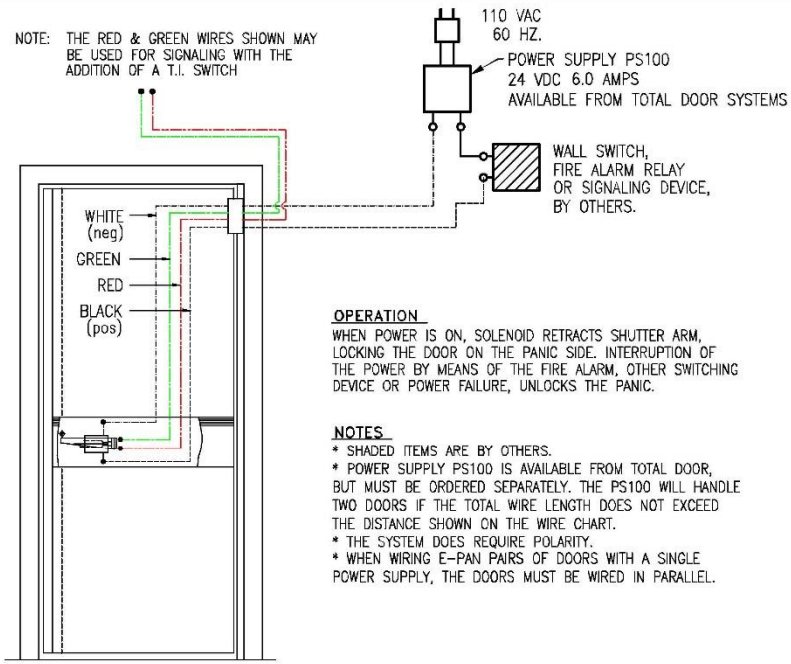
FILE NAME TDS19K-03
DATE 1/12/16

TECHNICAL DATA SHEET #19L

WIRING SCHEMATIC FOR E-PAN.



OPERATION

WHEN POWER IS ON, SOLENOID RETRACTS SHUTTER ARM, LOCKING THE DOOR ON THE PANIC SIDE. INTERRUPTION OF THE POWER BY MEANS OF THE FIRE ALARM, OTHER SWITCHING DEVICE OR POWER FAILURE, UNLOCKS THE PANIC.

NOTES

* SHADED ITEMS ARE BY OTHERS.
* POWER SUPPLY PS100 IS AVAILABLE FROM TOTAL DOOR, BUT MUST BE ORDERED SEPARATELY. THE PS100 WILL HANDLE TWO DOORS IF THE TOTAL WIRE LENGTH DOES NOT EXCEED THE DISTANCE SHOWN ON THE WIRE CHART.
* THE SYSTEM DOES REQUIRE POLARITY.
* WHEN WIRING E-PAN PAIRS OF DOORS WITH A SINGLE POWER SUPPLY, THE DOORS MUST BE WIRED IN PARALLEL.

CAUTION

* CHANGING THE WIRING FROM THAT SHOWN IN THE SCHEMATIC ABOVE, WILL VOID THE LIMITED WARRANTY.
* THE TOTAL DOOR CAN UNLATCH & RELATCH IN APPROX. 1/50TH OF A SECOND. IT IS NECESSARY FOR THE WALL SWITCH TO STAY ON FOR AL LEAST 2 SECONDS OR THE OPERATOR MAY NOT BE ABLE TO OPEN THE DOOR. IT IS THE RESPONSIBILITY OF THE SUPPLIER TO PROVIDE THE DELAY ON THE BREAK FEATURE.

RECOMMENDED MAX. LENGTH OF WIRE CONNECTING THE POWER SUPPLY TO THE DOOR

WIRE GAUGE	2 CONDUCTOR CABLE LENGTH	SINGLE CONDUCTOR WIRE LENGTH
20	20'	40'
18	30'	60'
16	50'	100'
14	80'	160'
12	125'	250'

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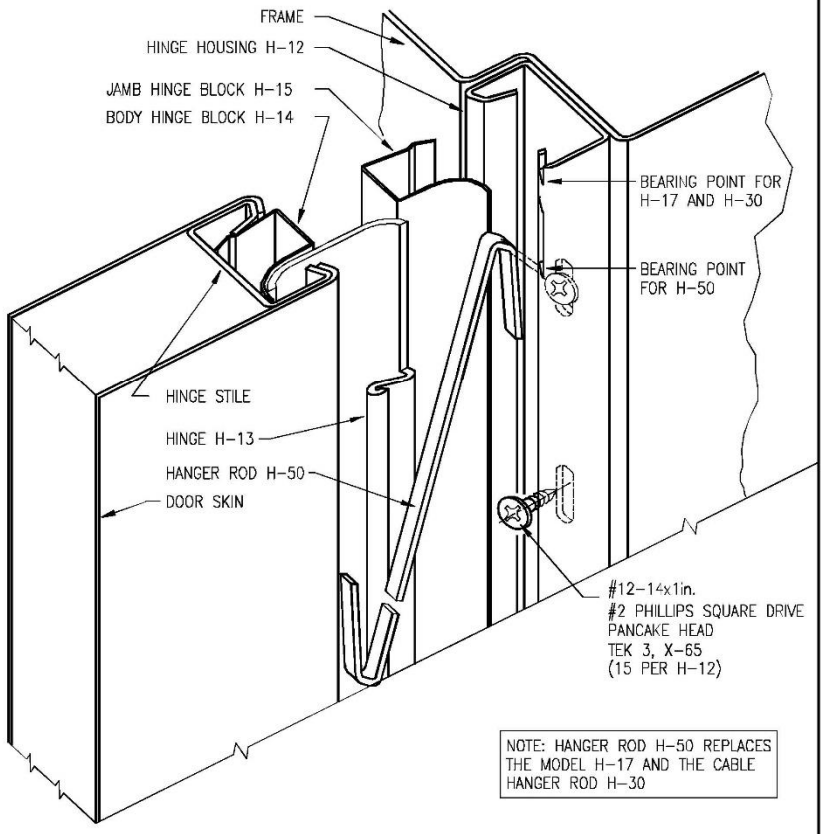
FILE NAME TDS19L
DATE 1/12/16

Tech Data Sheet Index

Technical Data Sheets

TECHNICAL DATA SHEET # 1A 02

DOOR HINGE STILE – PART NAMES AND NUMBERS



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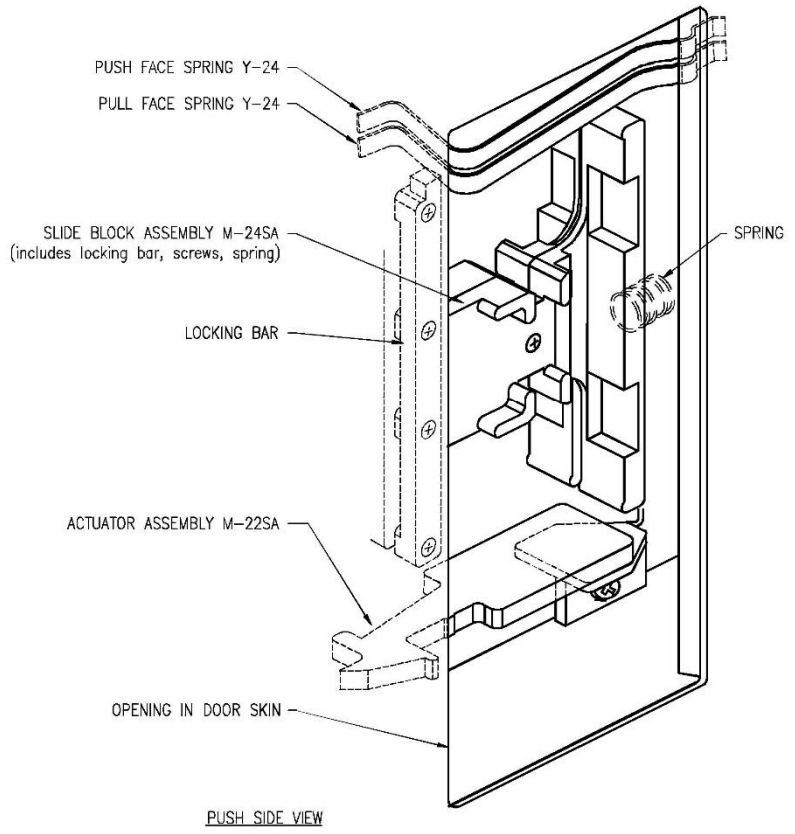
TDS1A–02
DATE: 8/30/13

TECHNICAL DATA SHEET # 1B 01

PUSH–PULL MECHANISM – PART NAMES & NUMBERS



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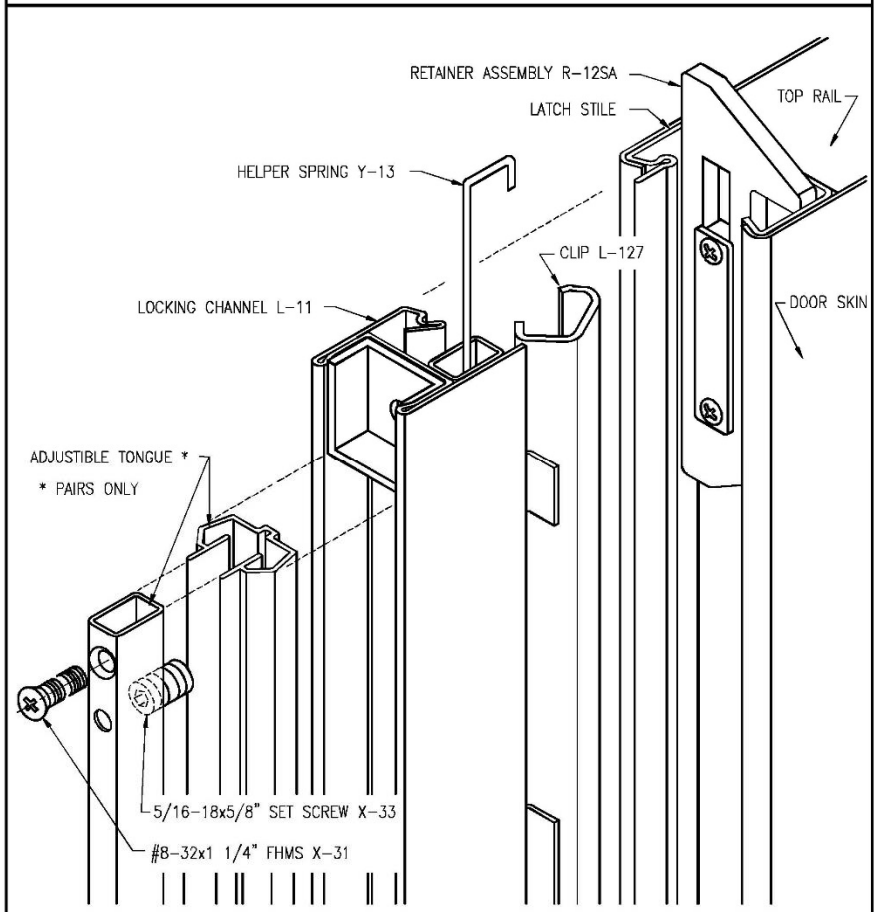
TDS1B–01
DATE 8/30/13

Technical Data Sheets

TECHNICAL DATA SHEET # 1C 01

DOOR LATCH STILE – PART NAMES AND NUMBERS



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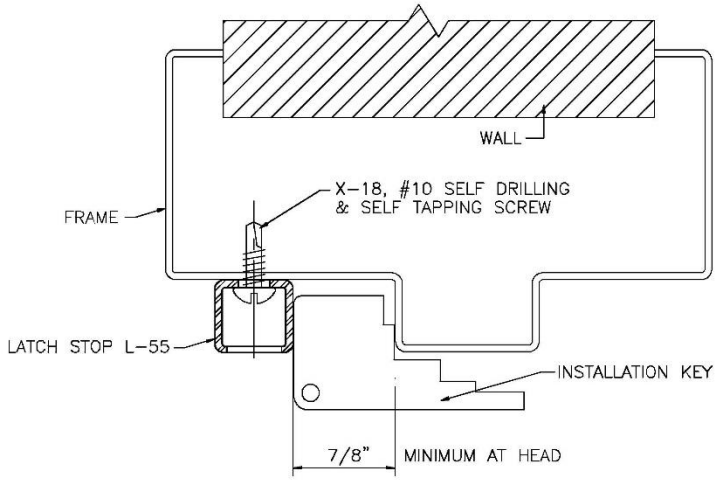
TDS1C-01
DATE: 8/30/13

TECHNICAL DATA SHEET # 1D 02

ONE PIECE LATCH STOP L-55

NOTE: FAILURE TO FOLLOW THESE INSTRUCTIONS WILL RESULT IN DOORS NOT LATCHING, NOT LOCKING, OR BEING DIFFICULT TO OPEN OR CLOSE



LATCH STOP L-55, INSTALLATION PROCEDURE

1. Install top screw of latch stop L-55, with the back side 7/8" from the frame rabbet. Use the installation key provided to insure correct tolerances.
2. Depress the retainer on the top of the door and rotate the locking channel L-11 to the locked position. Close the door firmly against the latch stop L-55. Press the L-55 against the locking channel L-11 and scribe a line on the jamb the length of the L-55 on the rabbet side.
3. With the L-55 on the scribed line, install the bottom and middle screws.
4. Test the door for proper operation. If the door operates smoothly and easily, install the balance of the screws and nylon hole plugs.

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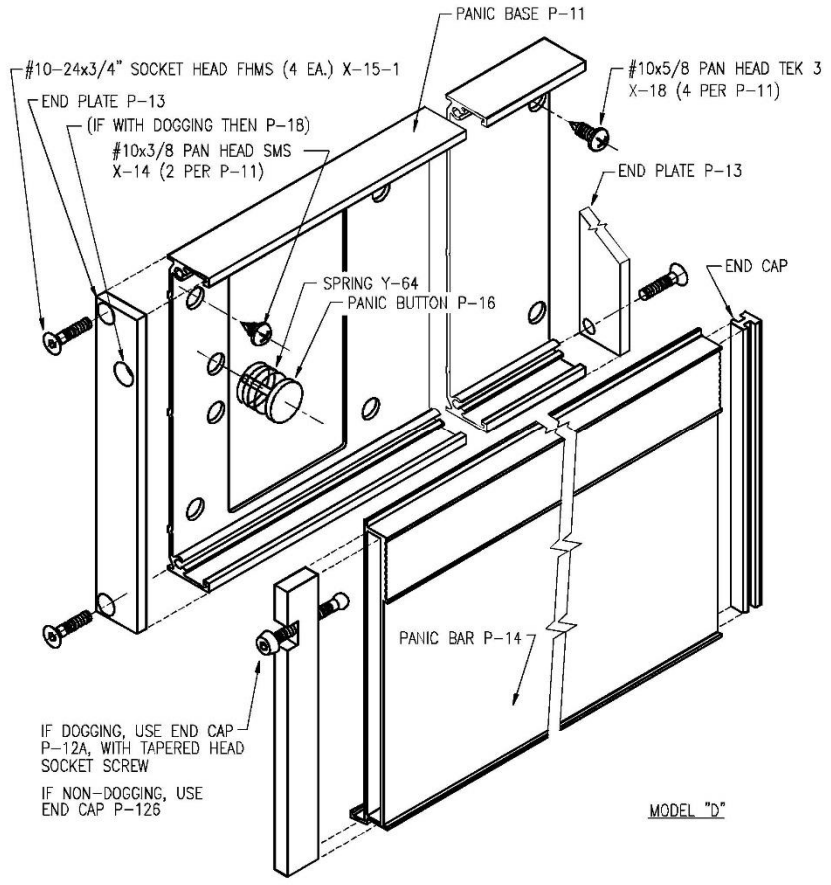
Technical Data Sheets

TECHNICAL DATA SHEET # 1 F 01

STANDARD PANIC DEVICE - COMPONENT PART NAMES AND NUMBERS



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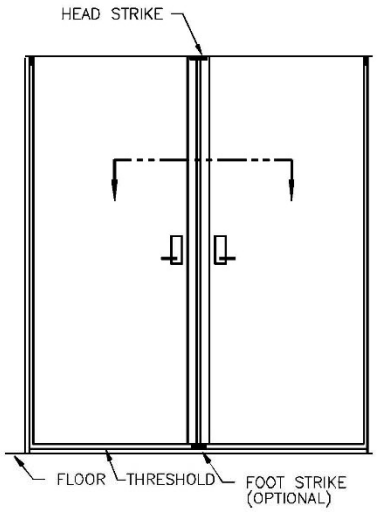
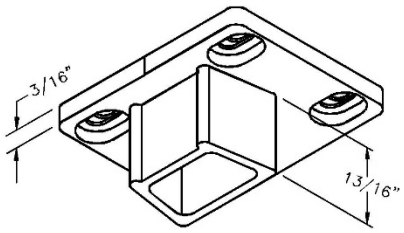
FILE NAME
TDS1F-01
DATE 8/30/13

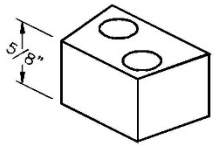
TECHNICAL DATA SHEET # 2 01

STANDARDS FOR PAIRS OF DOORS

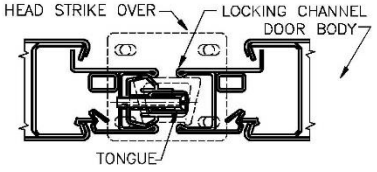




L-45 HEAD STRIKE - BRONZE



L-46A FOOT STRIKE - BRASS



SECTION THRU LATCH STILES

TONGUE ADJUSTMENT:
TO MOVE TONGUE FURTHER OUT OF IT'S LOCKING CHANNEL L-11:
A) BACK OUT PHILLIPS SCREW
B) TIGHTEN ALLEN SET SCREW NEXT TO PHILLIPS SCREW

FOOT STRIKES ARE NOT REQUIRED FOR LABEL OR NON-LABEL DOORS, BUT ARE RECOMMENDED ON IN SWINGING, HIGH SECURITY DOORS.

NOTES

SCREWS:
STRIKES ARE MOUNTED WITH #10x5/8", #3 TEK, PAN HEAD SCREWS (SELF DRILLING & SELF-TAPPING) X-18

TONGUE:
THE R.H. OR L.H.R. DOOR OF A PAIR IS PROVIDED WITH AN ADJUSTABLE TONGUE TO ACCOMODATE FRAME VARIATIONS OF ±1/16"

ALIGNMENT:
PAIRS OF DOORS MUST HAVE BOTH LATCH STILES IN PLANE. WITHIN 1/8". MISALIGNMENT OVER 1/8" WILL RESULT IN HIGH MAINTENANCE AND LOSS OF SECURITY.

INSTALLATION:
THE HEAD & FOOT STRIKE MUST BE CENTERED ±1/32" BETWEEN THE 2 DOORS, THE SMALL FACE OF THE STRIKE MUST BE ON THE PULL SIDE OF THE DOOR.

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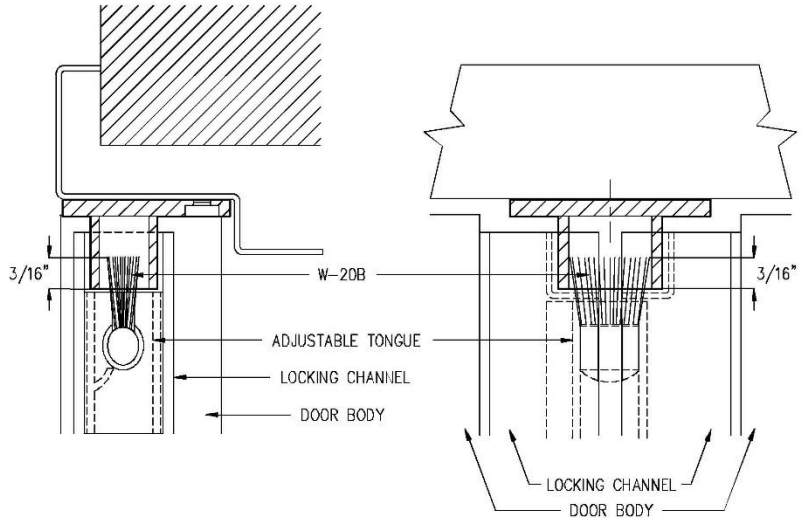
DATE 11/06/13

Technical Data Sheets

TECHNICAL DATA SHEET # 2A 01

PAIRS OF DOORS – HEAD STRIKE WEATHER SEALING



SECTION VIEW

FACE VIEW

AFTER MOUNTING THE DOORS AND HEAD STRIKE ACCORDING TO TDS#2, INSTALL THE WEATHER SEAL W-20B INTO THE STIFFENER TUBE OF THE ADJUSTABLE TONGUE. CLOSE DOOR TO TEST FIT. CUT BRUSH FOR A 3/16" PROJECTION UP IN THE CENTER OF HEAD STRIKE. ONCE FIT IS CORRECT, REMOVE AND ADD SILICONE TO THE BASE AND RE-INSERT BACK INTO STIFFENER TUBE TO SECURE.

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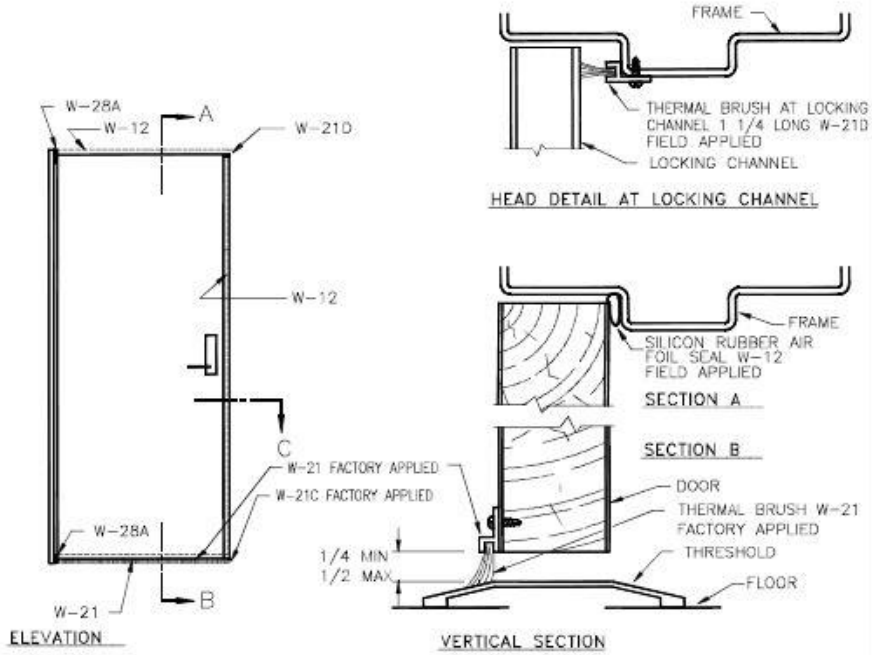
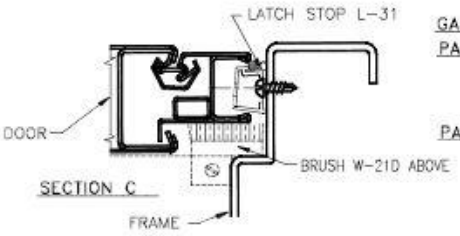
TDS2A-01
DATE 8/10/15

TECHNICAL DATA SHEET # 3-01

GASKET OPTIONS – SINGLE DOOR





GASKET PACKAGES

PACKAGE A INCLUDES THE FOLLOWING AND IS REQUIRED FOR SMOKE SEAL
W-21D HEAD SEAL, FIELD APPLIED
W-12 AIR FOIL SEAL

PACKAGE B – (FACTORY INSTALLED)
INCLUDES ALL OF ABOVE PLUS:
W-21 SURFACE MOUNTED BOTTOM SWEEP (THERMAL BRUSH)
W-21C SURFACE MOUNTED BOTTOM SWEEP MOUNTED TO LOCKING CHANNEL (1)
W-28A FIELD APPLIED

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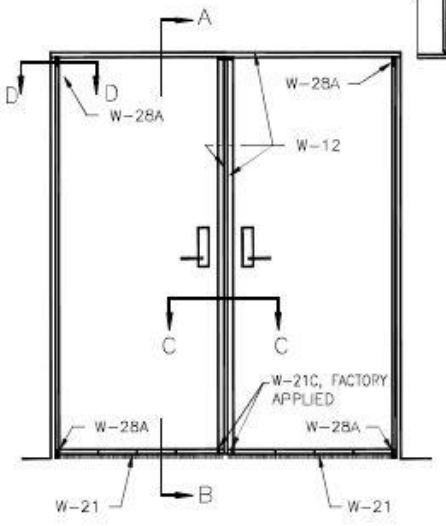
TDS3-01
DATE 8/13/30

Technical Data Sheets

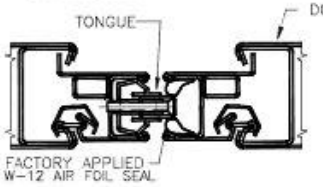
TECHNICAL DATA SHEET # 4 01

GASKET OPTIONS – PAIR OF DOORS

NOTE: W-28A-1/2"x1/2"x2" CELLULAR FOAM. FIELD MOUNT ON FACE OF H-15, JAMB HINGE BLOCK, END OF W-28 TO TOUCH FRAME HEAD & SILL, (4 PIECES)

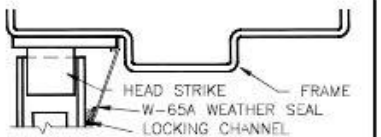


ELEVATION

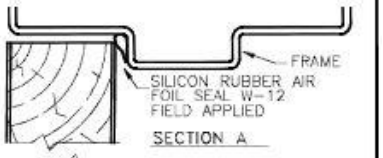


SECTION C

SECTION D, DOOR OPEN

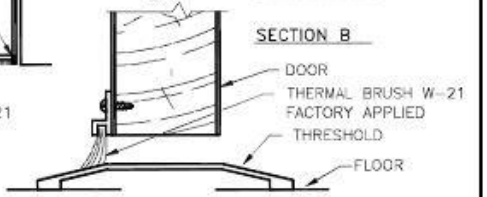


HEAD DETAIL AT LOCKING CHANNEL



SECTION A

SECTION B



WEATHERSTRIPPING PAIRS

PACKAGE A INCLUDES THE FOLLOWING:
W-12 AIR FOIL SEAL
W-65A WEATHER SEAL, FIELD APPLIED
W-28A FIELD APPLIED

PACKAGE B – (FACTORY INSTALLED)
INCLUDES ALL OF ABOVE PLUS:
W-21 SURFACE MOUNTED BOTTOM SWEEP (THERMAL BRUSH)
W-21C SURFACE MOUNTED BOTTOM SWEEP MOUNTED TO LOCKING CHANNEL (2)

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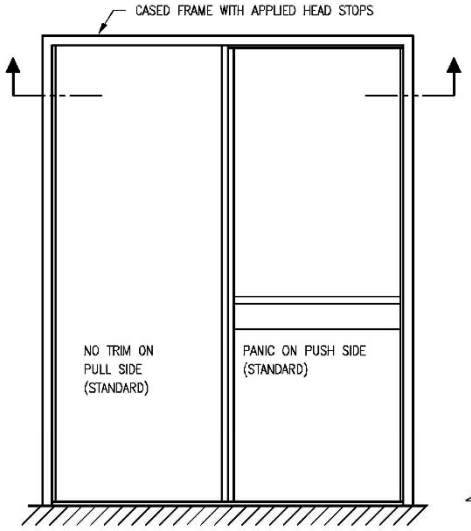
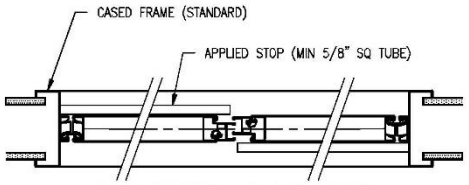
TDS4-01
DATE 8/30/13

TECHNICAL DATA SHEET # 5 01

DOUBLE EGRESS PAIR DETAIL

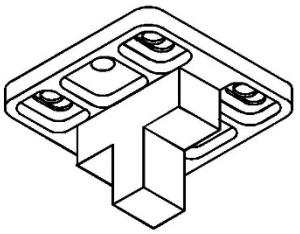


ELEVATION (RIGHT HAND TRAFFIC SHOWN)

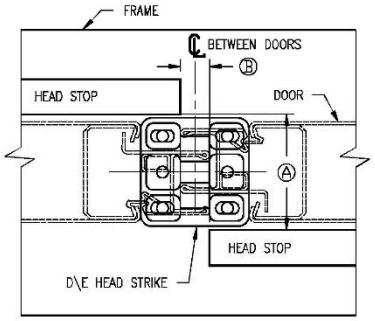


REFLECTED PLAN VIEW

NOTE: IF DOORS WILL BE INSTALLED IN AN EXISTING TRIPLE STEP DOUBLE EGRESS FRAME, THIS MUST BE NOTED ON THE ORDER SO THAT SPECIAL MODIFICATIONS CAN BE MADE TO THE HEAD STRIKE AND LOCKING CHANNEL. REFER TO TECH DATA SHEET #70



L-47 HEAD STRIKE



DETAIL REFLECTED VIEW OF DOUBLE EGRESS HEAD STRIKE

DIMENSION Ⓑ MUST BE 1/2"±1/32"
DIMENSION Ⓐ MUST BE 2" FOR PAINTED STEEL DOORS & 2 1/8" FOR DOORS WITH WOOD VENEER OR OTHER SURFACE APPLIED FINISHES

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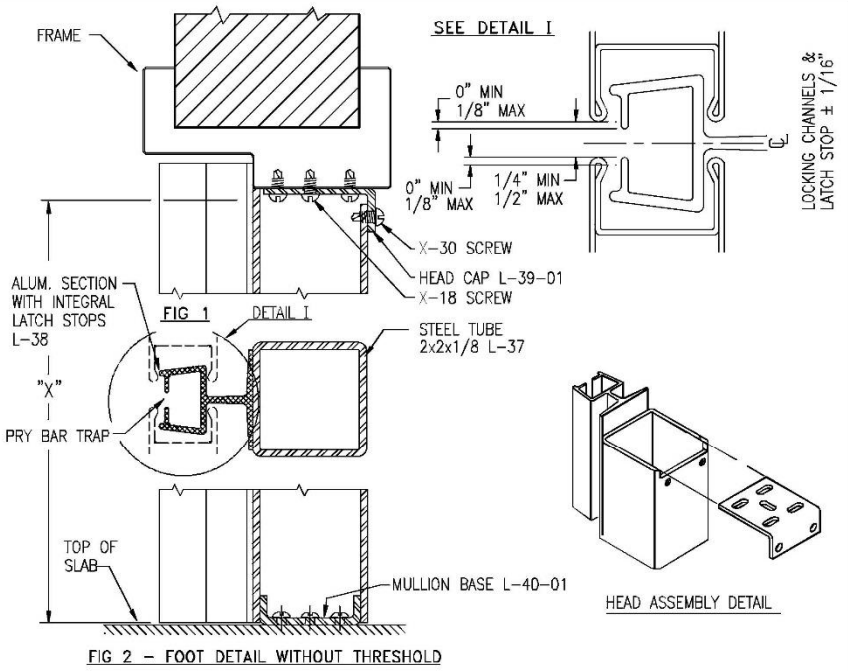
FILE NAME
TDS5-01
DATE 8/30/13

Technical Data Sheets

TECHNICAL DATA SHEET # 13 02

REMOVABLE MULLION DETAILS



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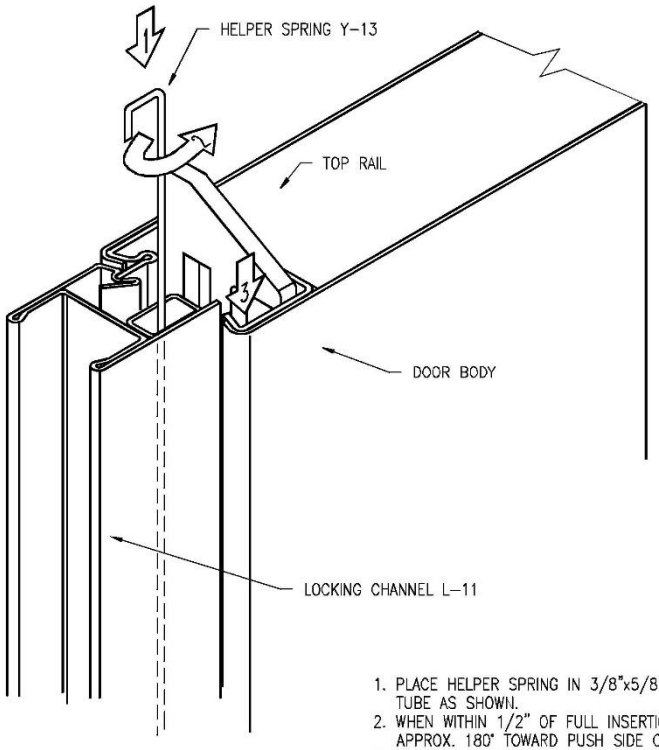
DATE 8/30/13

TECHNICAL DATA SHEET # 17 01

HELPER SPRING MOUNTING DETAIL



1. PLACE HELPER SPRING IN 3/8"x5/8" STIFFENER TUBE AS SHOWN.
2. WHEN WITHIN 1/2" OF FULL INSERTION, ROTATE APPROX. 180° TOWARD PUSH SIDE OF DOOR.
3. WHILE IN TORQUED POSITION, INSERT BEHIND LIP OF STILE BY PUSHING DOWN.

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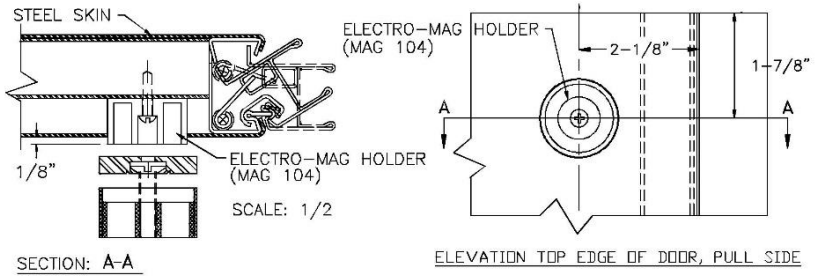
DATE 8/30/13

Technical Data Sheets

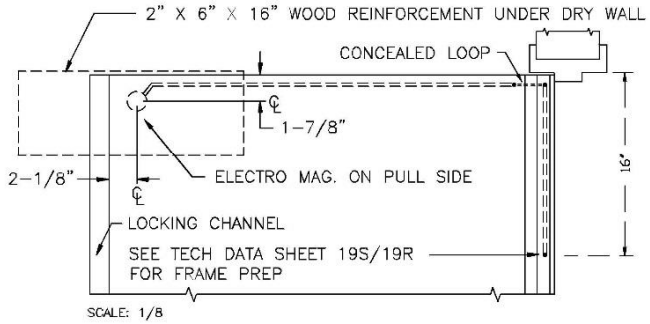
TECHNICAL DATA SHEET # 19V

MORTISE ELECTROMAGNETIC HOLDER TDH 100



SECTION: A-A

ELEVATION TOP EDGE OF DOOR, PULL SIDE



ELEVATION OF DOOR SHOWN OPEN 90° – 180° OPEN SIMILAR

FEATURES: INTEGRAL PART OF TOTAL DOOR SYSTEM.

AGENCY APPROVALS: WARNOCK HERSEY/ITS LISTED.

SPECIFICATIONS: MINIMUM HOLDING FORCE AT RATED VA = 38 POUNDS (17.2kg).

INSTALLATION: ELECTRO MAGNET IS MOUNTED IN THE FACTORY. THE ARMATURE (CATCH PLATE) IS FIELD MOUNTED. PROVIDE BACKER BLOCK AS SHOWN ABOVE. NO ELECTRICAL GANG BOX IS REQUIRED.

POWER OPTIONS: PROVIDED WITH A 110V IN/24V-DC OUT, 800MA TRANSFORMER (MAG 105A) FOR PLUGGING INTO A DEDICATED CIRCUIT RECEPTACLE. CAN ALSO BE WIRED DIRECT TO A 24V-DC ALARM PANEL BY OMITTING THE TRANSFORMER.

ELECTRO MAGNET: MIN. POWER REQUIRED AT THE DOOR IS 24 VOLTS-DC AND 250 MILLIAMPS (6 WATTS). TRANSFORMER IS SIZED TO OPERATE TWO DOORS.

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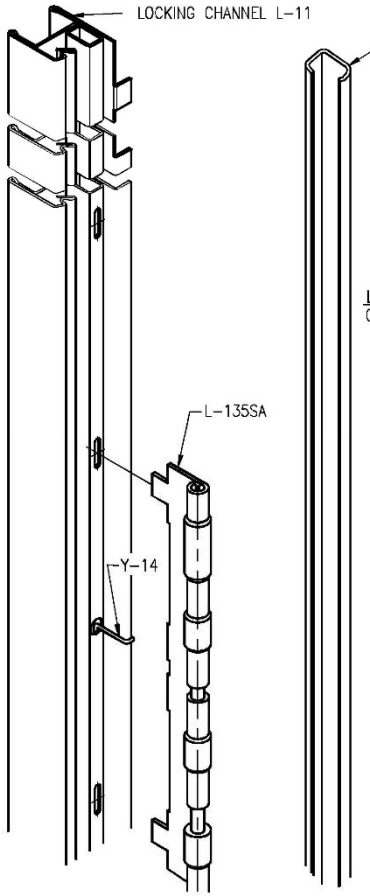
FILE NAME
TDS19V
DATE 2/25/16

TECHNICAL DATA SHEET # 21 01

LOCKING CHANNEL – PARTS NAMES AND NUMBERS



LOCKING CHANNEL L-11 ASSEMBLY
COMES COMPLETE WITH:

- BLOCKING MEMBER SUBASSEMBLY L-135SA
- BLOCKING MEMBER SPRING Y-14
- MOUNTING CLIP L-127

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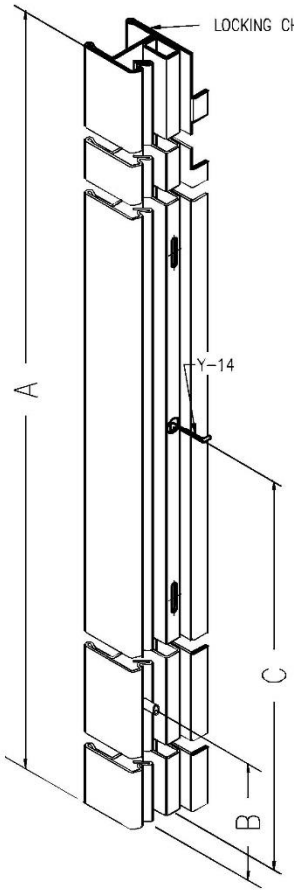
FILE NAME
TDS21-01
DATE 8/30/13

Technical Data Sheets

TECHNICAL DATA SHEET # 21 03

LOCKING CHANNEL – ORDERING INFORMATION



WHEN ORDERING REPLACEMENT LOCKING CHANNELS
ALL OF THE FOLLOWING INFORMATION IS REQUIRED

DIMENSIONS SHOWN +/- 1/32"
ALL MEASURED FROM BOTTOM OF LOCKING CHANNEL
"A" OVERALL HEIGHT; _____
"B" ROLL PIN HEIGHT; _____
"C" Y-14 HOLE HEIGHT: _____

IN ADDITION PROVIDE THE FOLLOWING
HAND OF DOOR; R, L, RR, LR; _____

CONFIGURATION OF DOOR
SINGLE _____
PAIR _____
DOUBLE EGRESS _____

OPERATING HARDWARE
LEVER X LEVER _____
GRIP X GRIP _____
STANDARD PANIC _____
FLUSH PANIC _____

FINISH _____

DOUBLE EGRESS FRAME
TRIPLE STEP? _____
OFFSET BETWEEN HEADSTOPS _____
SEE TECH DATA SHEET #5

CASED FRAME? _____

FOOT STRIKE
IS ONE BEING USED? YES NO

MODIFIED FOR ELECTRIC
SOLENOID IN TOP RAIL? YES NO

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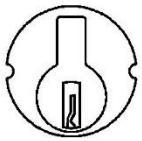
FILE NAME TDS21-03
DATE 4/2/15

TECHNICAL DATA SHEET # 25 05

CYLINDER STANDARDS & MODIFICATIONS FOR FUNCTIONS 07, 09 & E-SAF

FOR LEVER MECHANISMS

MINIMUM CYLINDER LENGTH = 1-1/8", MAXIMUM = 1-3/8"



LEVER LOCKS:
THE STANDARD CAM MUST BE USED

LEVER FLUSH PANIC LOCK:
THE STANDARD C4 CAM MUST BE USED

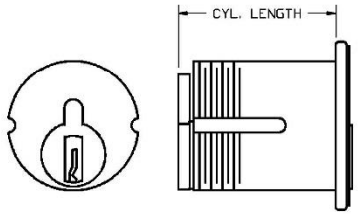
IF SHORTER OR LONGER CAMS ARE USED, THEY WILL NOT OPERATE THE MECHANISM.

INDUSTRY STANDARD CAMS WHICH ARE FLARED, SHOULD NOT BE USED

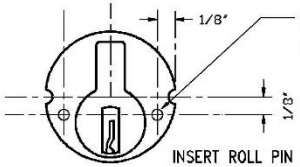
FOR PUSH-PULL GRIPS

MINIMUM CYLINDER LENGTH = 7/8", MAXIMUM = 1-3/8"

THE SECOND MOST COMMON CAM IN THE INDUSTRY IS KNOWN AS THE A/R CAM.
THIS CAM MUST BE USED WITH PUSH-PULL GRIPS.
NO OTHER CAM WILL WORK.

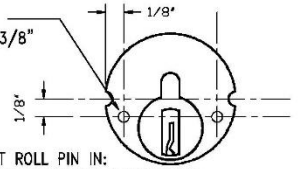


CYLINDER MODIFICATION FOR LOCK FUNCTIONS L07 L09 LP07
REVERSE PROCEDURE FOR E-SAF LOCKS AND KEY UNLATCHING.



INSERT ROLL PIN IN:
LEFT HOLE FOR LH & LHR DOOR.
RIGHT HOLE FOR RH & RHR DOOR.

CYLINDER MODIFICATION FOR LOCK FUNCTIONS G07 G09 GP07



INSERT ROLL PIN IN:
LEFT HOLE FOR RH & RHR DOOR.
RIGHT HOLE FOR LH & LHR DOOR.

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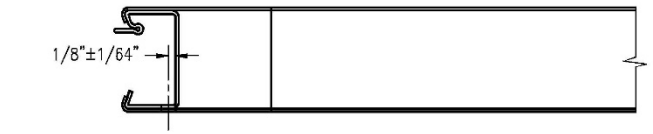
FILE NAME TDS25-05
DATE 8/30/13

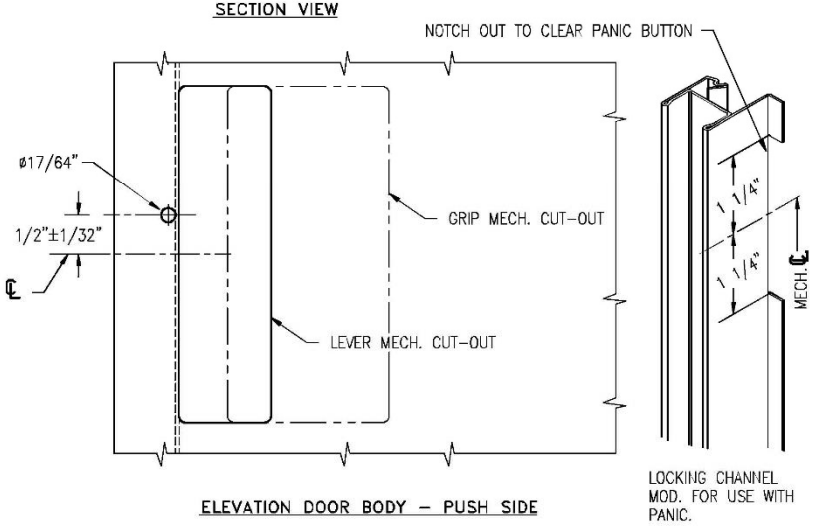
Technical Data Sheets

TECHNICAL DATA SHEET # 27 01

FIELD DOOR PREPARATION FOR STANDARD PANIC



SECTION VIEW



ELEVATION DOOR BODY – PUSH SIDE

LOCKING CHANNEL MOD. FOR USE WITH PANIC.

DO NOT SCALE

NOTE: WHEN CHANGING TO PANIC FUNCTION IN FIELD, MECHANISM MUST BE CHANGED TO PANIC MECHANISM.

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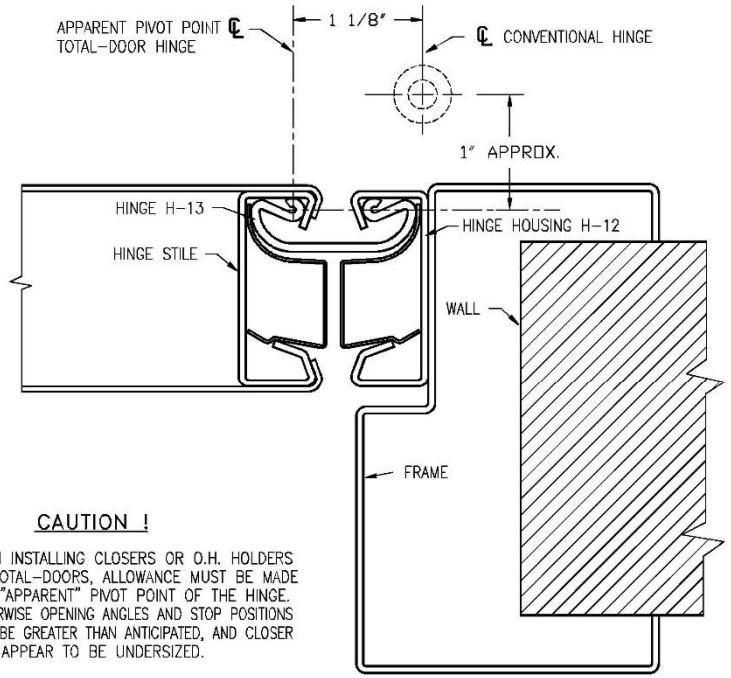
FILE NAME
TDS27-01
DATE 8/30/13

TECHNICAL DATA SHEET # 29 01

APPARENT PIVOT POINT OF TOTAL-DOOR® HINGE



CAUTION !

WHEN INSTALLING CLOSERS OR O.H. HOLDERS ON TOTAL-DOORS, ALLOWANCE MUST BE MADE FOR "APPARENT" PIVOT POINT OF THE HINGE. OTHERWISE OPENING ANGLES AND STOP POSITIONS WILL BE GREATER THAN ANTICIPATED, AND CLOSER WILL APPEAR TO BE UNDERSIZED.

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FILE NAME
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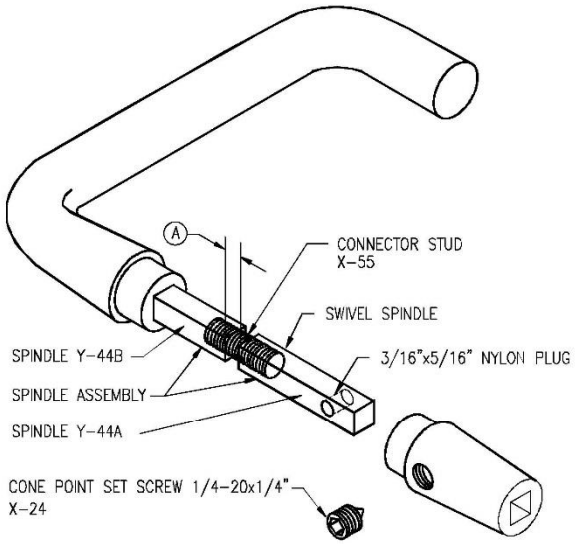
DATE 8/30/13

Technical Data Sheets

TECHNICAL DATA SHEET # 33 03

SPINDLE FASTENING DETAIL



(A) NOTE: BACK OFF SPINDLE TO SUIT DOOR THICKNESS

THE NEW SPINDLE FASTENING MECHANISM FOR LEVERS IS PICTURED ABOVE.
INSTALL AS FOLLOWS:

A) TIGHTEN UP, THEN BACK OFF SWIVEL SPINDLE TO SUIT DOOR THICKNESS.

B) INSERT LEVER FROM OUTSIDE. (NYLON PLUG MUST BE HORIZONTAL). PUSH ON INNER LEVER.

C) CHECK THAT THE NYLON PLUG IS VISUALLY CENTERED ON THE SET SCREW HOLE. IF IT IS NOT, REMOVE OUTER LEVER AND SPINDLE AND ADJUST TO SUIT DOOR THICKNESS.

D) REPEAT (B) AND (C)

E) INSTALL SET SCREW.

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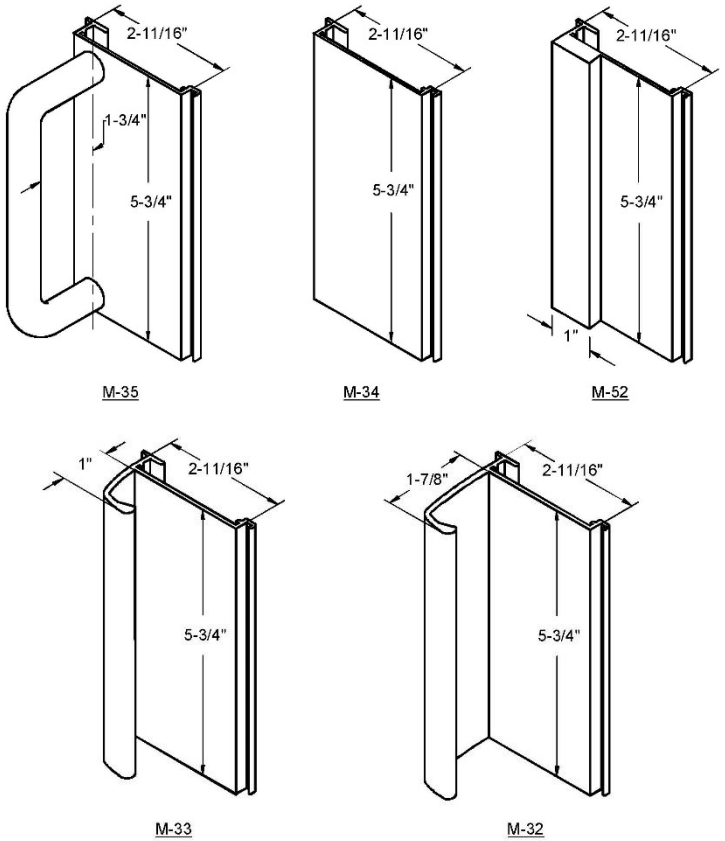
FILE NAME
TDS33-03
DATE 4/20/12

TECHNICAL DATA SHEET # 35 04

PUSH-PULL DIMENSIONS AND PROJECTIONS



NOTE: ALL 2-11/16" x 5 3/4" FACES ARE FLUSH WITH DOOR.

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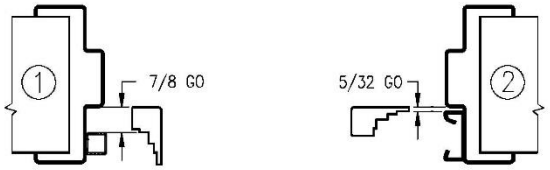
FILE NAME
TDS35-04
DATE 8/30/13

Technical Data Sheets

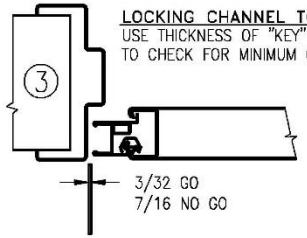
TECHNICAL DATA SHEET # 36 02

TOTAL–DOOR INSTALLATION "KEY"



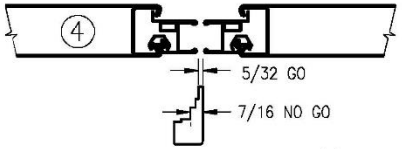
LATCH STOP TO FRAME STOP
USE 7/8 PORTION OF "KEY" TO CHECK PROPER STOP POSITION

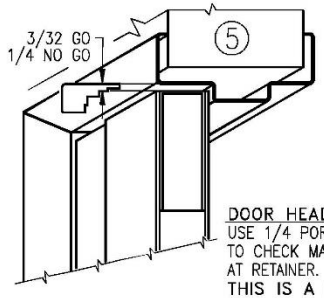
HINGE HS'G TO FRAME STOP
USE 5/32 PORTION OF "KEY" TO CHECK FOR MINIMUM CLEARANCE AT TOP OF JAMB.



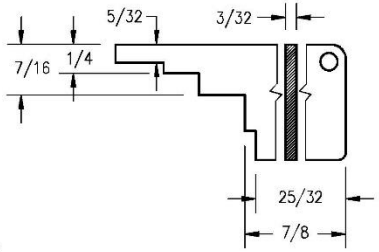
LOCKING CHANNEL TO FRAME
USE THICKNESS OF "KEY" (3/32) TO CHECK FOR MINIMUM CLEARANCE

LOCKING CHANNEL OF PAIRS
USE 5/32 PORTION OF "KEY" TO CHECK FOR MINIMUM CLEARANCE BETWEEN LOCKING CHANNELS. MEASURE PULL SIDE ONLY.





DOOR HEAD TO FRAME
USE 1/4 PORTION OF "KEY" TO CHECK MAXIMUM CLEARANCE AT RETAINER.
THIS IS A NO GO CHECK.



TOTAL–DOOR INSTALLATION "KEY"
CHECKING OF INSTALLATION WITH THIS "KEY" WILL ASSURE SMOOTH, TROUBLE FREE OPERATION.

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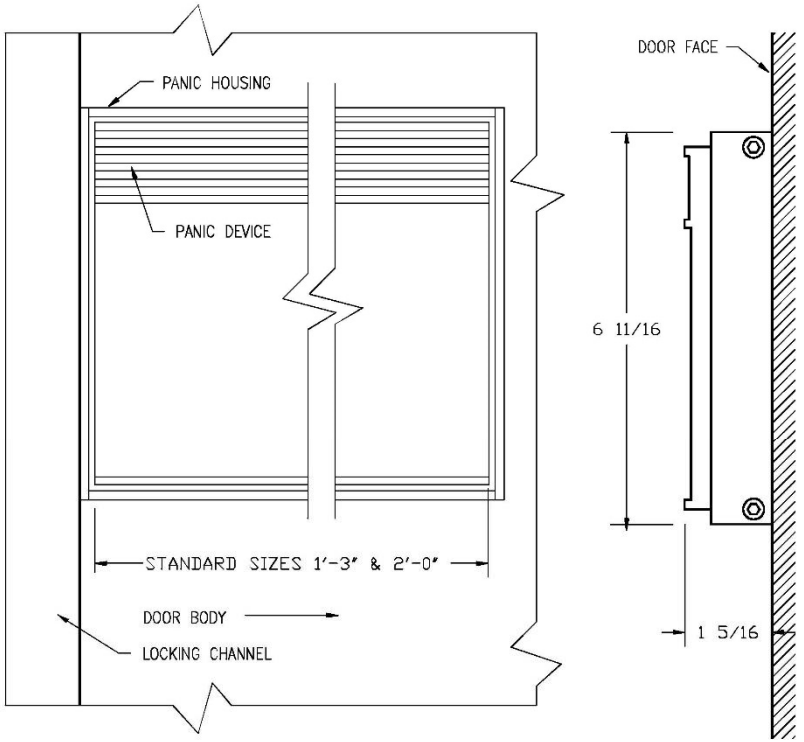
FILE NAME
TDS36–02
DATE 4/16/15

TECHNICAL DATA SHEET # 37A

STANDARD PANIC DEVICE P–14



ELEVATION

SECTION

DOOR WIDTH	SIZE OF PANIC
2'–4" AND WIDER	2'–0"
1'–7" TO 2'–3 15/16	1'–3"

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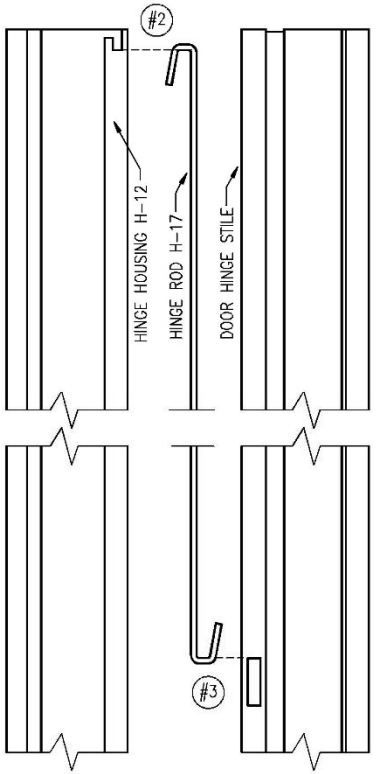
FILE NAME
TDS37A
DATE 8/30/13

Technical Data Sheets

TECHNICAL DATA SHEET # 40

H-17 HANGER ROD INSTALLATION INSTRUCTIONS

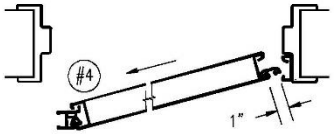


NOTE: IF REPLACING H-17 WITH H-50 HINGE HOUSING H-12 AND HINGE H-13 MUST BE REPLACED

HANGER ROD INSTALLATION

#1 DO NOT OPEN UP THE HOOK

OPENING UP HANGER ROD WILL CAUSE FAILURE.



#2 ENGAGE THE HANGER ROD IN THE SLOT IN THE HINGE HOUSING H-12 WITH THE DOOR IN POSITION AS SHOWN

#3 TILT THE TOP OF THE DOOR AWAY FROM THE HINGE JAMB TO RAISE THE HINGE STILE. THEN ENGAGE THE HANGER ROD IN THE HINGE STILE WITHOUT OPENING THE HOOK ANGLE. DO NOT ALLOW THE END OF THE HOOK TO TOUCH THE TOP OF THE SLOT IN THE HINGE STILE OR HANGER ROD BREAKAGE MAY OCCUR.

#4 WHEN DOING THE ABOVE DO NOT PULL DOOR AWAY FROM THE JAMB BY MORE THAN 6". THIS CAN CAUSE HANGER ROD FAILURE.

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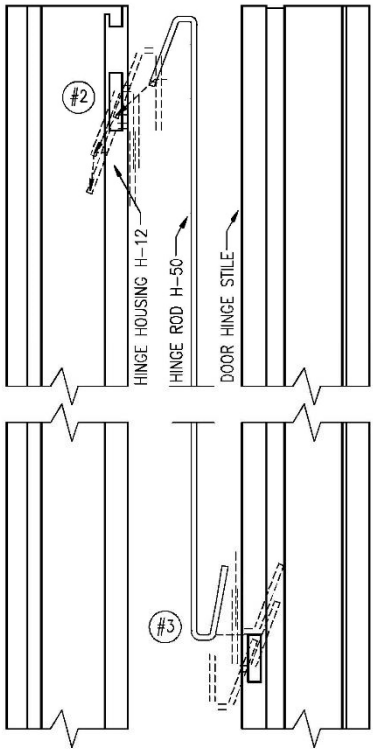
FILE NAME
TDS40
DATE 8/30/13

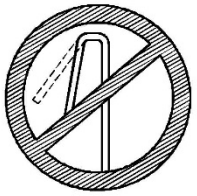
TECHNICAL DATA SHEET # 40B

H-50 HANGER ROD INSTALLATION INSTRUCTIONS

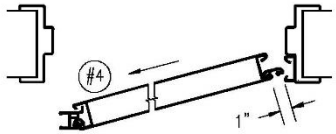


HANGER ROD INSTALLATION

#1 DO NOT OPEN UP THE HOOK



OPENING UP HANGER ROD WILL CAUSE FAILURE.



#2 ENGAGE THE HANGER ROD IN THE SLOT IN THE HINGE HOUSING H-12 WITH THE DOOR IN POSITION AS SHOWN

#3 TILT THE TOP OF THE DOOR AWAY FROM THE HINGE JAMB TO RAISE THE HINGE STILE. THEN ENGAGE THE HANGER ROD IN THE HINGE STILE WITHOUT OPENING THE HOOK ANGLE. DO NOT ALLOW THE END OF THE HOOK TO TOUCH THE TOP OF THE SLOT IN THE HINGE STILE OR HANGER ROD BREAKAGE MAY OCCUR.

#4 WHEN DOING THE ABOVE DO NOT PULL DOOR AWAY FROM THE JAMB BY MORE THAN 6". THIS CAN CAUSE HANGER ROD FAILURE.

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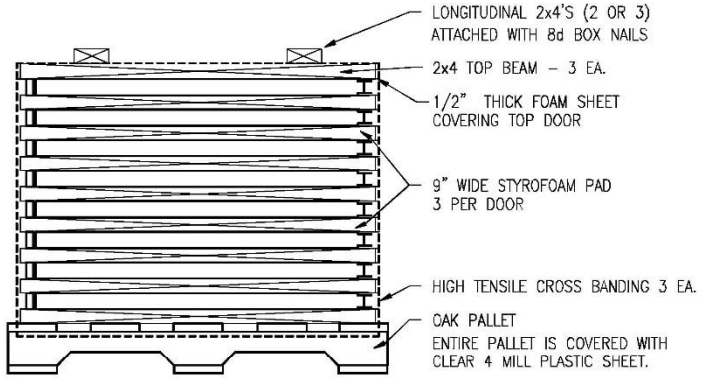
FILE NAME
TDS40B
DATE 8/30/13

Technical Data Sheets

TECHNICAL DATA SHEET # 42 01

PACKAGING STANDARDS



A) UP TO 12 DOORS ARE PACKED PER PALLET. (DEPENDING ON HARDWARE)

B) ALL GRIPS AND MECHANISMS ARE INSTALLED (LEVERS ARE NOT INSTALLED).

C) WHENEVER ANY OF THE FOLLOWING ITEMS ARE ORDERED, THEY ARE AUTOMATICALLY INSTALLED BY TOTAL DOOR SYSTEMS:

PANIC DEVICES, LITES, LOUVERS, GLAZING, TOP CAPS, WEATHERSTRIPPING, SOUND AND SMOKE GASKETING, KICK, MOP AND ARMOR PLATES, CORNER GUARDS, CLOSERS AND ELECTRIC LOCKING OR UNLATCHING.

COPIES OF PHOTOGRAPHS OF ALL SHIPMENTS ARE AVAILABLE TO THE CUSTOMER TO SHOW CONDITION OF DOORS AND PACKAGING WHEN SHIPPED FROM FACTORY.

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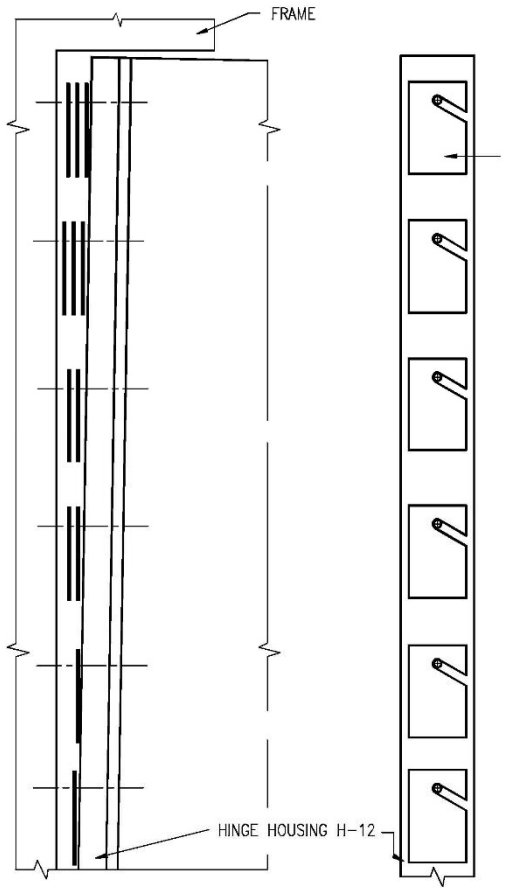
FILE NAME
TDS42-01
DATE 8/02/13

TECHNICAL DATA SHEET # 46A

SHIM KIT FOR BOWED OR OUT OF PLUMB FRAMES



NOTE: EACH SHIM KIT CONTAINS 100 SHIMS

SHIM H-40A

THE HINGE HOUSING MAY BE SHIMMED UP TO 1/4" ON FIRE DOORS WITHOUT VOIDING THE LABEL, PROVIDED THAT A LABELED FIRE CAULKING IS USED TO FILL THE REMAINING GAP BETWEEN THE DOOR AND FRAME

NOTE:
INSTALL SHIMS WITH DOOR IN THE CLOSED POSITION
DO NOT FORCE SHIMS

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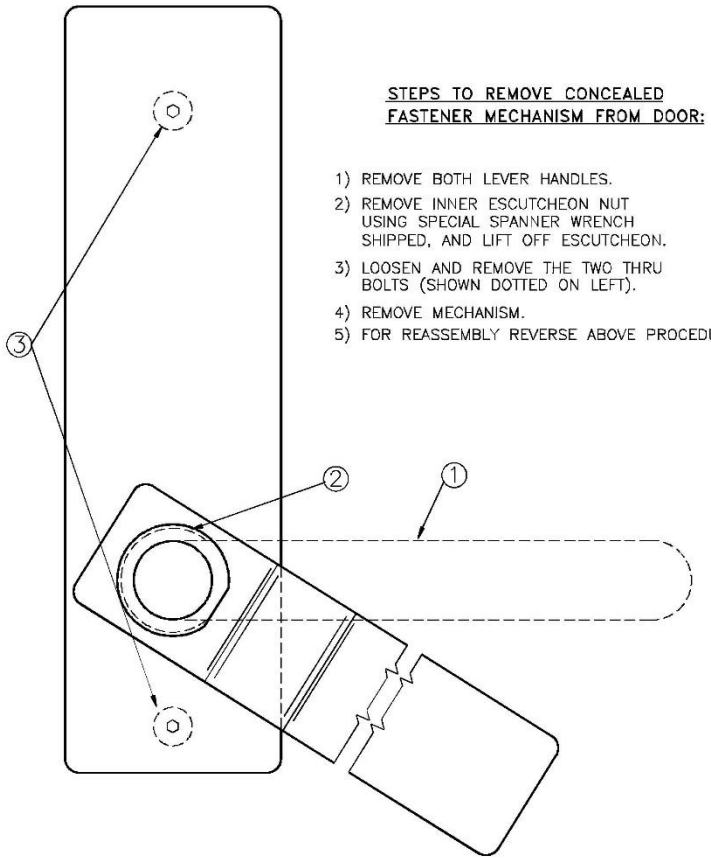
FILE NAME
TDS46A
DATE 8/30/13

TECHNICAL DATA SHEET # 51 01

INSTALLATION OF ESCUTCHEONS WITH CONCEALED FASTENERS



STEPS TO REMOVE CONCEALED FASTENER MECHANISM FROM DOOR:

1) REMOVE BOTH LEVER HANDLES.
2) REMOVE INNER ESCUTCHEON NUT USING SPECIAL SPANNER WRENCH SHIPPED, AND LIFT OFF ESCUTCHEON.
3) LOOSEN AND REMOVE THE TWO THRU BOLTS (SHOWN DOTTED ON LEFT).
4) REMOVE MECHANISM.
5) FOR REASSEMBLY REVERSE ABOVE PROCEDURE.

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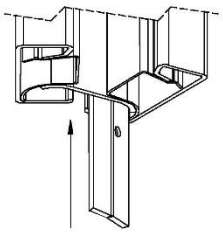
FILE NAME
TDS51-01
DATE 8/30/13

TECHNICAL DATA SHEET # 52 05

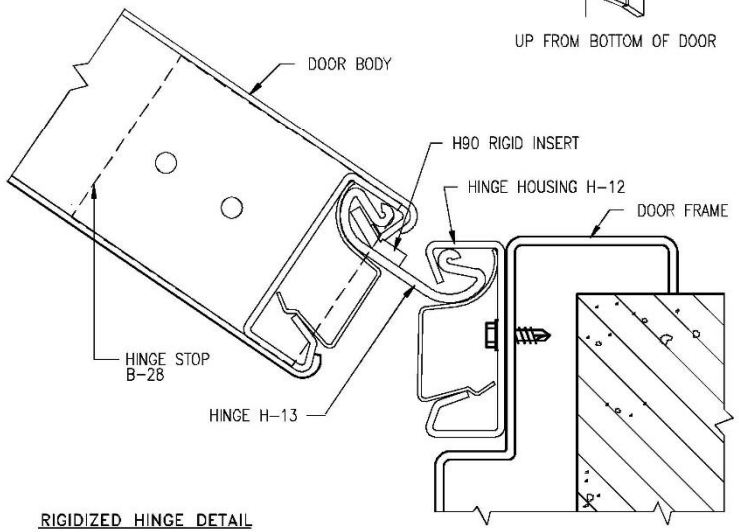
RIGIDIZED HINGE – FIELD MODIFICATION

FIELD INSTALLATION INSTRUCTIONS

1) REMOVE DOOR FROM THE OPENING.
2) REMOVE HINGE STOP (B-28) AND SLIDE RIGID INSERT (H-90) UP BETWEEN HINGE (H-13) AND THE BODY HINGE STILE AS SHOWN IN THE ILLUSTRATION BELOW.
3) REINSTALL HINGE STOP (B-28) & REINSTALL DOOR IN OPENING.



UP FROM BOTTOM OF DOOR



RIGIDIZED HINGE DETAIL

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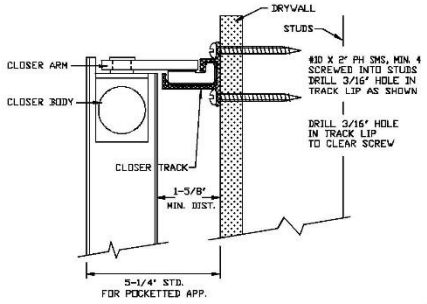
FILE NAME
TDS52-05
DATE 7/28/14

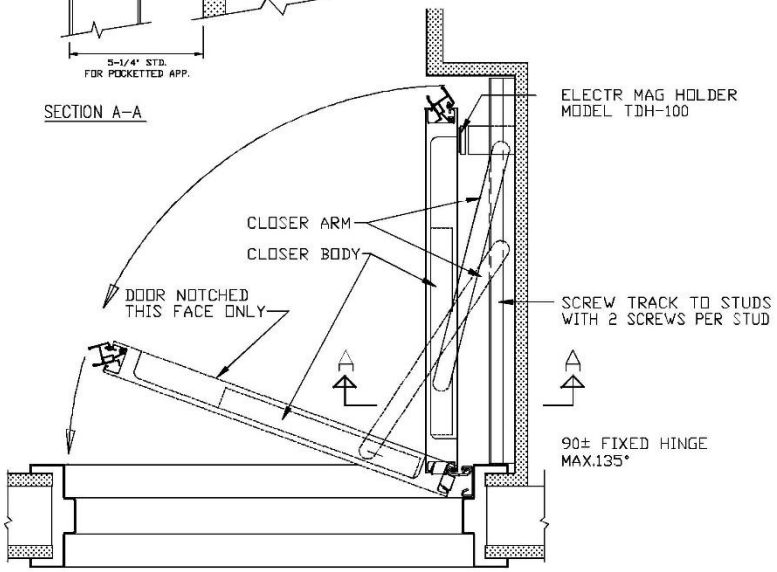
Technical Data Sheets

TECHNICAL DATA SHEET # 58E

TDC-96p DETAIL FOR HOLD OPEN POCKETED DOORS



SECTION A-A



VIEW THROUGH JAMBS ABOVE THE DOOR

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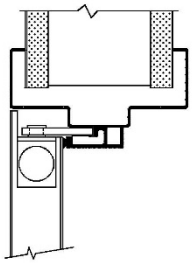
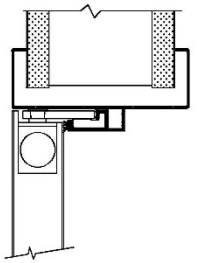
FILE NAME
TDS58E
DATE 1/17/14

TECHNICAL DATA SHEET # 58F

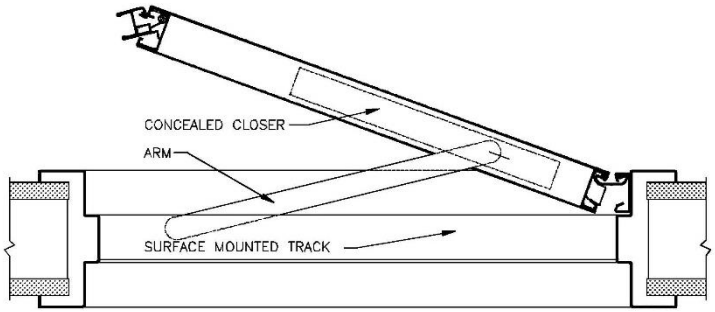
TDC-96 DETAIL FOR CONCEALED CLOSERS



RETRO-FIT HEAD DETAIL



NEW CONSTRUCTION HEAD DETAIL



REFLECTED VIEW OF HEADER WITH CAM ACTION TRACK CLOSER
MAXIMUM OPENING ANGLE = 135 DEGREES

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FILE NAME
TDS58F
DATE 1/17/14

Technical Data Sheets

TECHNICAL DATA SHEET # 66 01

SUMMARY OF TOTAL-DOOR® WEIGHTS

HEAVY (HVY) STEEL / 20 GAUGE	TO 2'6"	TO 3'0"	TO 3'6"	TO 4'0"
6'8" 7'0" 7'2"	90	105	119	133
TO 8'0"	103	120	136	152
TO 9'0"	115	134	153	172
TO 10'	129	150	169	190
X-HEAVY (X-HVY) STEEL / 18 GAUGE				
6'8" 7'0" 7'2"	114	132	150	167
TO 8'0"	131	151	171	191
TO 9'0"	147	169	193	213
S-HEAVY (S-HVY) STEEL / 16 GAUGE				
6'8" 7'0" 7'2"	138	160	182	204
TO 8'0"	157	183	208	234

NOTES:

REMOVABLE MULLION	ADD 25# EA
PALLETS (10 TO 12 DOORS EA.)	ADD 135# EA
CARTONS	ADD 30# EA
LEAD LINED DOORS 1/16"	ADD 4#/SQ FT
LEAD LINED DOORS 1/32"	ADD 2#/SQ FT
CLOSERS	ADD 9# EA
TEMPERATURE RISE CORES	ADD 3#/SQ FT

FREIGHT CLASSIFICATION FOR – SKIDS STEEL DOORS NOIIOS 34265 CL-110 OR 250

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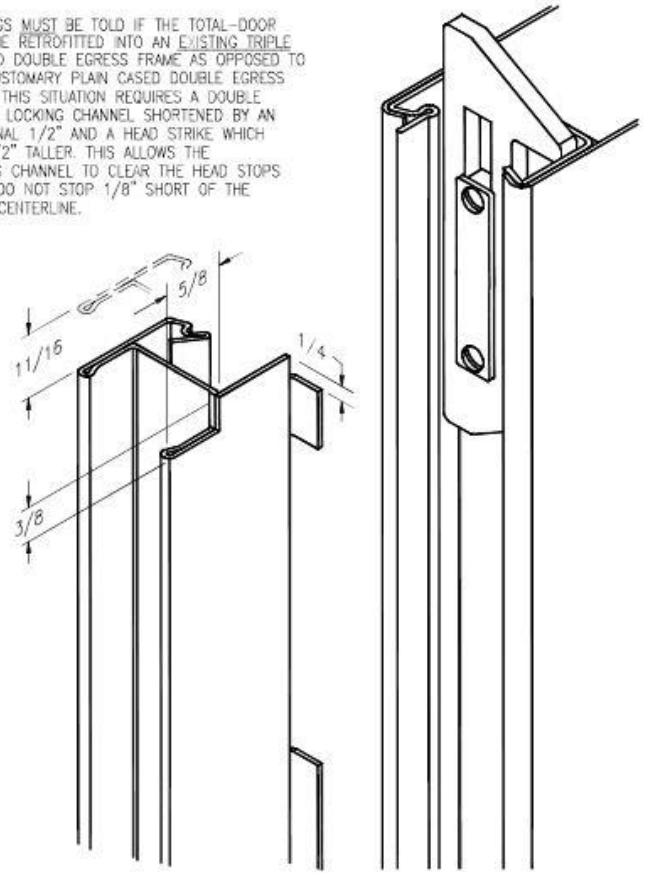
FILE NAME
TDS66-01
DATE 10/15/08

TECHNICAL DATA SHEET # 70 01

D/E L-11 PREPARATION FOR 3-STEP FRAME

NOTE: OPENINGS MUST BE TOLD IF THE TOTAL-DOOR IS TO BE RETROFITTED INTO AN EXISTING TRIPLE STEPPED DOUBLE EGRESS FRAME AS OPPOSED TO OUR CUSTOMARY PLAIN CASED DOUBLE EGRESS FRAME. THIS SITUATION REQUIRES A DOUBLE EGRESS LOCKING CHANNEL SHORTENED BY AN ADDITIONAL 1/2" AND A HEAD STRIKE WHICH IS A 1/2" TALLER. THIS ALLOWS THE LOCKING CHANNEL TO CLEAR THE HEAD STOPS WHICH DO NOT STOP 1/8" SHORT OF THE FRAME CENTERLINE.



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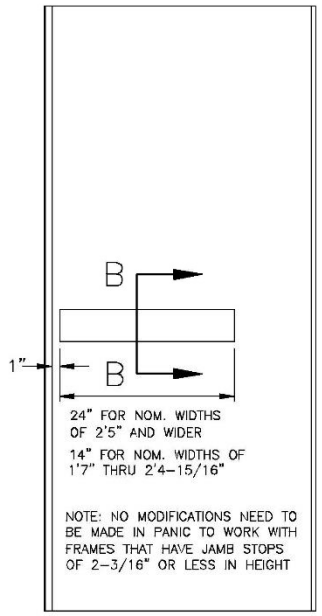
FILE NAME
TDS70-01
DATE 8/30/13

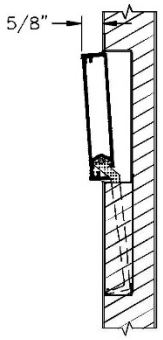
Technical Data Sheets

TECHNICAL DATA SHEET # 72

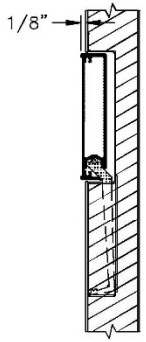
FLUSH PANIC BAR DIMESIONS



PUSH SIDE ELEVATION OF DOOR WITH FLUSH PANIC
MIN. DOOR WIDTH NOM. = 1'7"
MAX. DOOR WIDTH NOM. = 4'2-3/16"
AVAILABLE IN POSITIVE PRESSURE LABELS THRU 3 HOUR



SECTION: B-B
SCALE: 1:4
DOOR IN CLOSED POSITION



SECTION: B-B
SCALE: 1:4
DOOR IN OPEN POSITION

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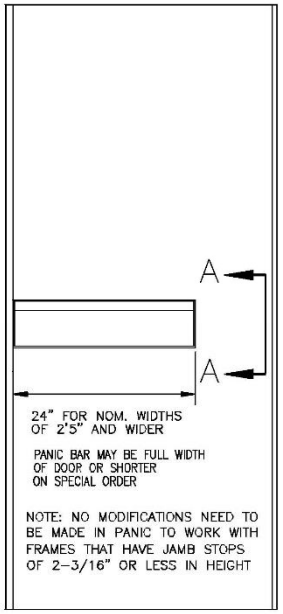
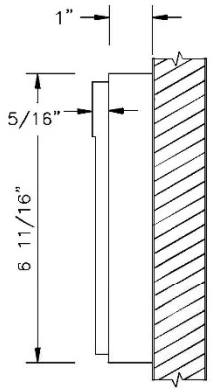
FILE NAME
TDS72
DATE 8/30/13

TECHNICAL DATA SHEET # 72 B

STANDARD PANIC BAR DIMENSIONS



PUSH SIDE ELEVATION OF DOOR WITH STANDARD PANIC
AVAILABLE IN POSITIVE PRESSURE LABELS THRU 3 HOUR



SECTION: A-A
SCALE: 1:4

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FILE NAME
TDS72B
DATE 8/30/13

Technical Data Sheets

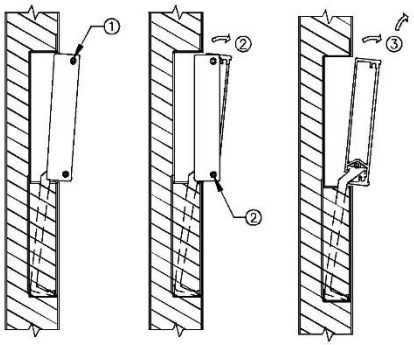
TECHNICAL DATA SHEET # 75

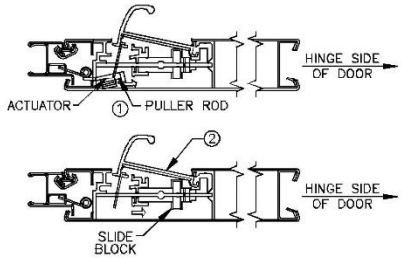
FLUSH PANIC BAR & TRIM REMOVAL

TO REMOVE FLUSH PANIC BAR

With the door in the open position, depress the retainer at the top of the door and rotate the locking channel into the latched position.

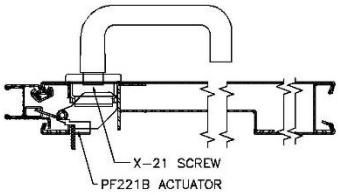
1) Remove the top screw from the end cap at the latch edge of the door.
2) Pull the panic bar out far enough so that the bottom screw clears the face of the door, then remove the second screw.
3) Pull the bar out until it clears the door face, lift the bar upward and remove it from the door body.





PLAN SECTION:

SECTION:



PLAN SECTION:

TO REMOVE GRIP

1) Disengage the puller rod from the actuator by sliding it over the cap.
2) With one hand, push the slide block towards the hinge side of the door forcing the slide block to the rear of the mechanism. Grasp the grip with your other hand and push the hinge side of the grip inward at the same time forcing the entire grip towards the hinge side of the mechanism cut-out. The grip will come free from the latch side. Pull the grip out of the door.

TO REMOVE LEVER

Remove the phillips head anchor screw and slide lever out.

The installation procedure is the reverse of the above.

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FILE NAME
TDS75
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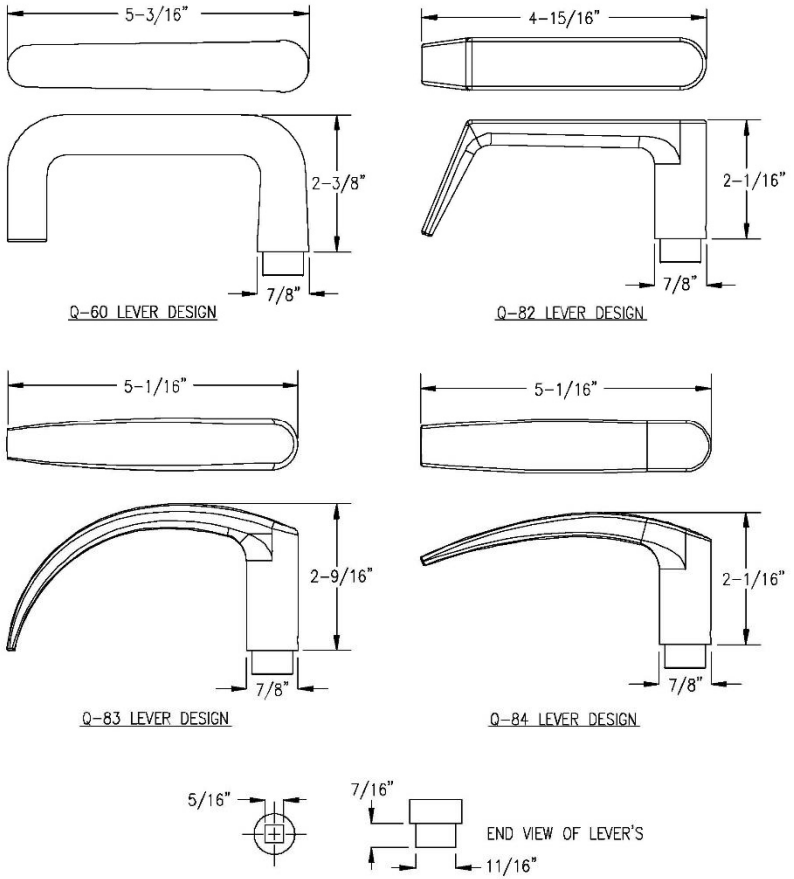
TECHNICAL DATA SHEET # 80

LEVER DESIGNS #60, #82, #83 & #84



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TDS80
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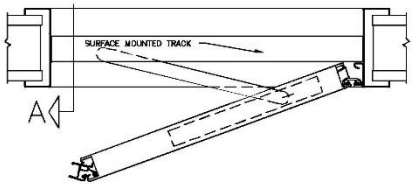
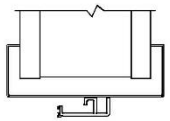
Technical Data Sheets

TECHNICAL DATA SHEET #76-A

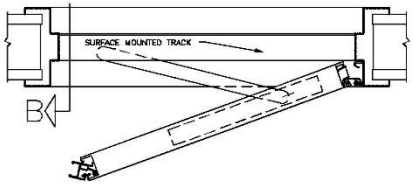
TDC-96 CONCEALED CLOSER



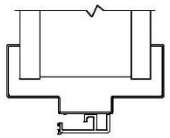
CASED HEADER & JAMBS



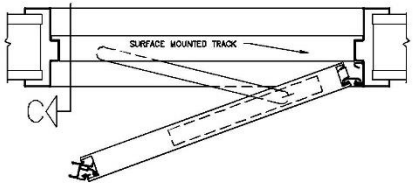
CASED HEADER
SECTION A



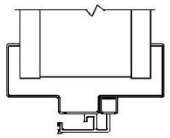
RABBETED JAMBS, CASED OR RABBETED HEADER



RABBETED HEADER
SECTION B



RABBETED JAMBS, CASED OR RABBETED HEADER



RABBETED HEADER
SECTION C

FEATURES: INTEGRAL PART OF TOTAL DOOR. 10 YEAR WARRANTY

AGENCY APPROVALS: UL

INSTALLATION: CONCEALED CLOSER IS FACTORY INSTALLED. TRACK IS CUSTOM MADE TO FIT OPENING, AND INSTALLED BY A FACTORY TRAINED TECHNICIAN.

OPTIONS: TRACK AND ARM CAN BE CUSTOM PAINTED TO MATCH FRAME FINISH.

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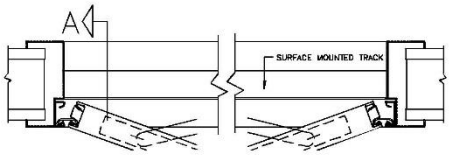
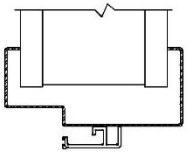
TECHNICAL DATA SHEET #76-B

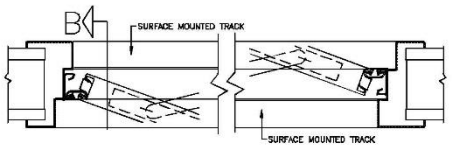
TDC-96 CONCEALED CLOSER



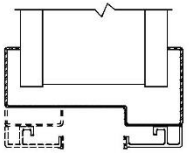
SINGLE RABBETED JAMBS
PAIR CONFIGURATION SHOWN



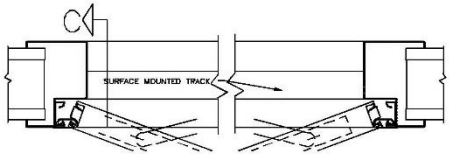
RABBETED HEADER
SECTION A



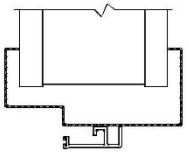
TRIPLE STEP DOUBLE EGRESS JAMBS
RIGHT TRAFFIC SHOWN, LEFT HAND IS OPPOSITE



RABBETED HEADER
SECTION B



SINGLE RABBETED JAMBS
TYPICALLY USED WITH POCKETED FRAMES



RABBETED HEADER
SECTION C

FEATURES: INTEGRAL PART OF TOTAL DOOR. 10 YEAR WARRANTY

AGENCY APPROVALS: UL

INSTALLATION: CONCEALED CLOSER IS FACTORY INSTALLED. TRACK IS CUSTOM MADE TO FIT OPENING, AND INSTALLED BY A FACTORY TRAINED TECHNICIAN.

OPTIONS: TRACK AND ARM CAN BE CUSTOM PAINTED TO MATCH FRAME FINISH.

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LIMITED WARRANTY

This limited warranty covers the materials and workmanship of its products manufactured after March 1, 2017 for five (5) years from the ship date for interior applications and two (2) years from the ship date for exterior applications.

This limited warranty shall apply only if the product is properly stored, installed and maintained in accordance with Total Door Systems' published tolerances. Total Door Systems will, at its option, replace, repair or refund the purchase price paid to Total Door Systems for products which in its opinion, are found to be defective in workmanship or material under normal use and service within the above defined time periods. Total Door Systems' sole responsibility is as stated herein and it shall not be liable for consequential, indirect or incidental damages. *Warranty replacement parts/components must be sent back to the factory for credit. An RA (return authorization) form must be requested when placing an order. Any and all warranty work must be handled through a certified distributor. Please contact Total Door Systems if assistance is need in locating a distributor.*

This limited warranty is in place of all other warranties, express or implied, and excludes any warranties of fitness or merchantability. No agent, representative, dealer, or employee of Total Door Systems has the authority to increase or alter the obligations of this limited warranty.

Notice Requirement
Purchaser is responsible for inspection of product upon receipt to ensure order is complete/accurate and provide notice of discrepancies to Total Door Systems within 30 days.

Storage and Handling Instructions

1. Store Total Doors flat on a level surface in a dry, well ventilated building, separated by foam spacer blocks provided with original shipment so that no projecting hardware touches any part of an adjacent door.
2. Cover doors with opaque covering to keep clean and avoid discoloration. Cover must allow air circulation.
3. Steel doors with wood faces should not be subjected to extremes of heat and/or humidity conditions. Relative humidity should not be less than 30% or more than 60%.
4. Handle with clean gloves and do not drag doors across one another or across other surfaces.

Installation
Total Doors must be installed in full compliance with manufacturer's published tolerances.

Maintenance
To assure coverage under this limited warranty, the following must be maintained: the adjustment of hardware and fasteners attached to or fitted into the doors or frame, the finishes on all wood surfaces and the moisture protection on exterior doors.

Exclusions
This limited warranty does not include:

- Total Doors that are not installed by a factory certified installer.
- Total Doors that are not installed to factory specified tolerances.
- Any products which, in the opinion of Total Door Systems, have been modified, repaired or altered in any way without the express written consent of the Company.
- Doors with cutouts for lights, louvers or other hardware nearer than six inches to the door edge, or doors with less than six inches between cutouts.
- Normal wear and tear including wear-through of finishes or deterioration for reasons other than material and workmanship.
- Items by other manufacturers and/or items supplied in the field.
- Wood surfaced doors exposed to relative humidity of less than 30% or greater than 60%.
- Field Painting of Hinge Verticals (H12, H13, H14 or H15).
- Field Paint of Locking Channel Verticals (L11).
- The appearance of field finished doors.
- The appearance of high gloss surfaced doors.
- Natural variations in the color or texture of wood.
- Custom finishes supplied by customer.
- Freight damage.
- Doors not stored per storage & handling instructions.

Exclusions for Exterior Doors
An exterior door is one that cannot be controlled on both sides for temperature and humidity. The following conditions will void the limited warranty:

- Use of concealed closers.
- Wood faced doors.
- Doors and frames not properly protected by flashing or drip caps.
- Doors that are not sealed top and bottom.

Contact Information

Total Door SYSTEMS™

Global Leader in Integrated Access Technology™

6145 Delfield Drive

Waterford, MI 48329

Service:

Å**248-623-6899**

Å**866-781-2069**

Å**service@totaldoor.com**