

EXPI-DOOR® Systems Inc.

MEMBER OF THE BAY FAMILY OF COMPANIES

Installation Instructions

For Series 700, Series 500, Series 400, & Series 200 Doors

At EXPI-DOOR®, our commitment to our clients goes beyond the sale. We strive for excellence in customer service in all aspects of our business. To ensure this is done to the best of our ability, we have compiled a quick summary of typical installation or troubleshooting related issues or adjustments the installer should be aware of.

These issues are inherent to all hollow metal exterior and interior doors and the amount of adjustment needed will vary from door to door and somewhat depend upon other building factors.

A complete troubleshooting guide published by the Steel Door Institute (SDI) is available on our website at www.expidoor.com. If after troubleshooting you are not satisfied with your results, or the problem persists, please contact our Service Representatives for further assistance. If we cannot resolve with a phone call/additional information, we will send a representative to the job site for a thorough evaluation.

Contents

STANDARD INSTALLATION CHECKLIST.....	2
FLUSH INSTALLATION	3
OFFSET INSTALLATION.....	4
MASONRY INSTALLATION: PARTIAL-HEIGHT NEW CONSTRUCTION	5
MASONRY INSTALLATION: PARTIAL-HEIGHT OFFSET	6
MASONRY INSTALLATION: FULL-HEIGHT NEW CONSTRUCTION	7
MASONRY INSTALLATION: FULL-HEIGHT EXISTING OPENING	8
EXISTING OPENING ANCHOR (EOA) INSTALLATION	9
KNOCK-DOWN DOOR ASSEMBLY & INSTALLATION: NO SUBFRAME.....	11
KNOCK-DOWN DOOR ASSEMBLY & INSTALLATION: WITH SUBFRAMES.....	13

STANDARD INSTALLATION CHECKLIST

- Is the concrete level at the point where the door is installed? Did you have to shim one side?
- Does the frame opening width measure 36" (for 3070) at the top, middle, and bottom of the frame opening? (48" for a 4070, and 72" for a 6070).
- Does the door itself measure 35 3/4" across (tolerance of 1/16")? (4070 would be 47 3/4")
- Is the door straight or does it have a small bow of any sort along either vertical edge?
- What does each reveal (gap) measure?
 - Gap between frame head & door leaf (should measure approx. 1/8" - 3/16")
 - Gap between hinge jamb & door leaf (should measure approx. 1/8" - 3/16")
 - Gap between lock jamb & door leaf (should measure approx. 1/8" - 3/16")
 - Gap between top of threshold & bottom of door leaf (should be approx. 1/4")
- Is each vertical frame member plumb & square?
- Is the frame head & door leaf plumb & square?
- Is the entire door system plumb & square in relation to the building/girt line?
- Are there any building or structural issues that are interfering with the door installation or operation?
- Are the adjustable top anchors installed to the girt with a minimum of 4 fasteners? Are there any issues at this connection?
- Has the closer been adjusted for speed and back-check appropriately?
- Are all hinge screws properly tightened? (They sometimes loosen during shipment)

What problem still persists? _____

FAQ:

Question/Concern: Anchor slips inside bore and won't grip or is too loose inside bore. How can I now utilize this anchor prep in the frame and in the wall if it is drilled too large for the provided anchor?

Answer:

1. Wrap the end of the anchor with duct or masking tape to add circumference to the anchor and help "fill" the anchor bore in the rough opening material.
2. Apply special epoxy (type, style, and color/material determined by installer) into the anchor bore, then reinsert the anchor. In this process, you can either leave the anchor just as is and allow the epoxy to secure it in place only, or you can allow the epoxy to fully cure, then attempt to tighten the anchor down with your driver.

FLUSH INSTALLATION

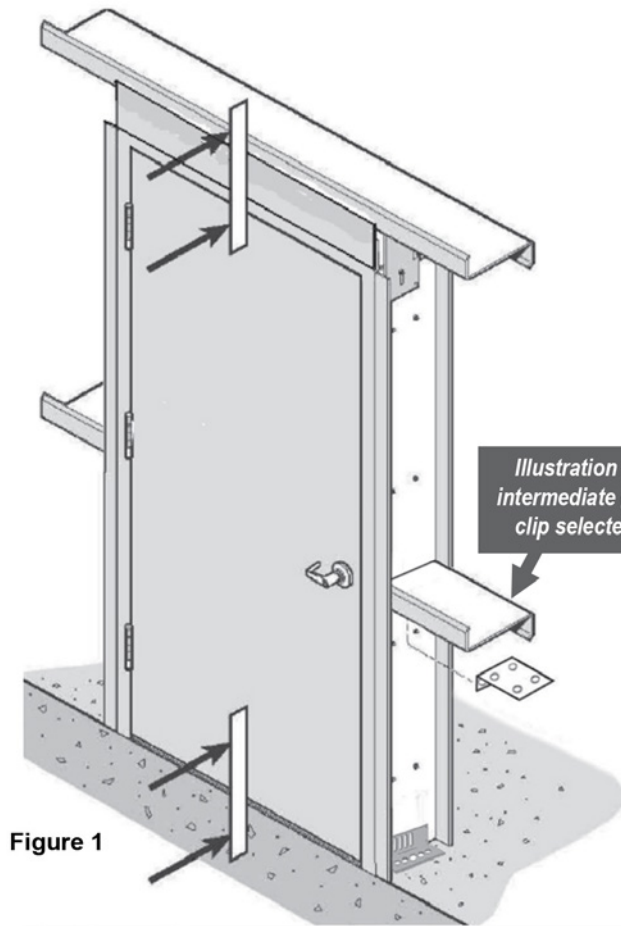


Figure 1

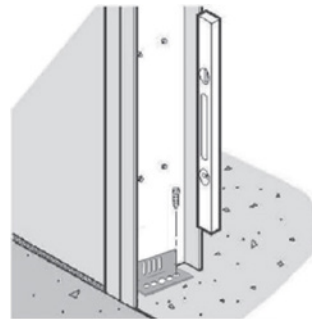


Figure 2

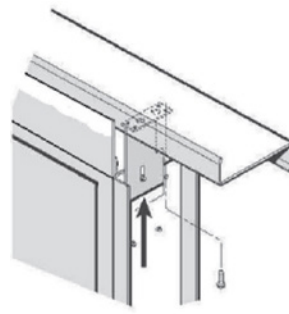


Figure 3

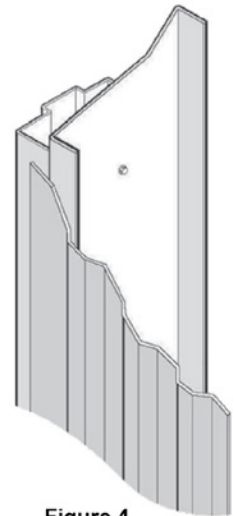


Figure 4



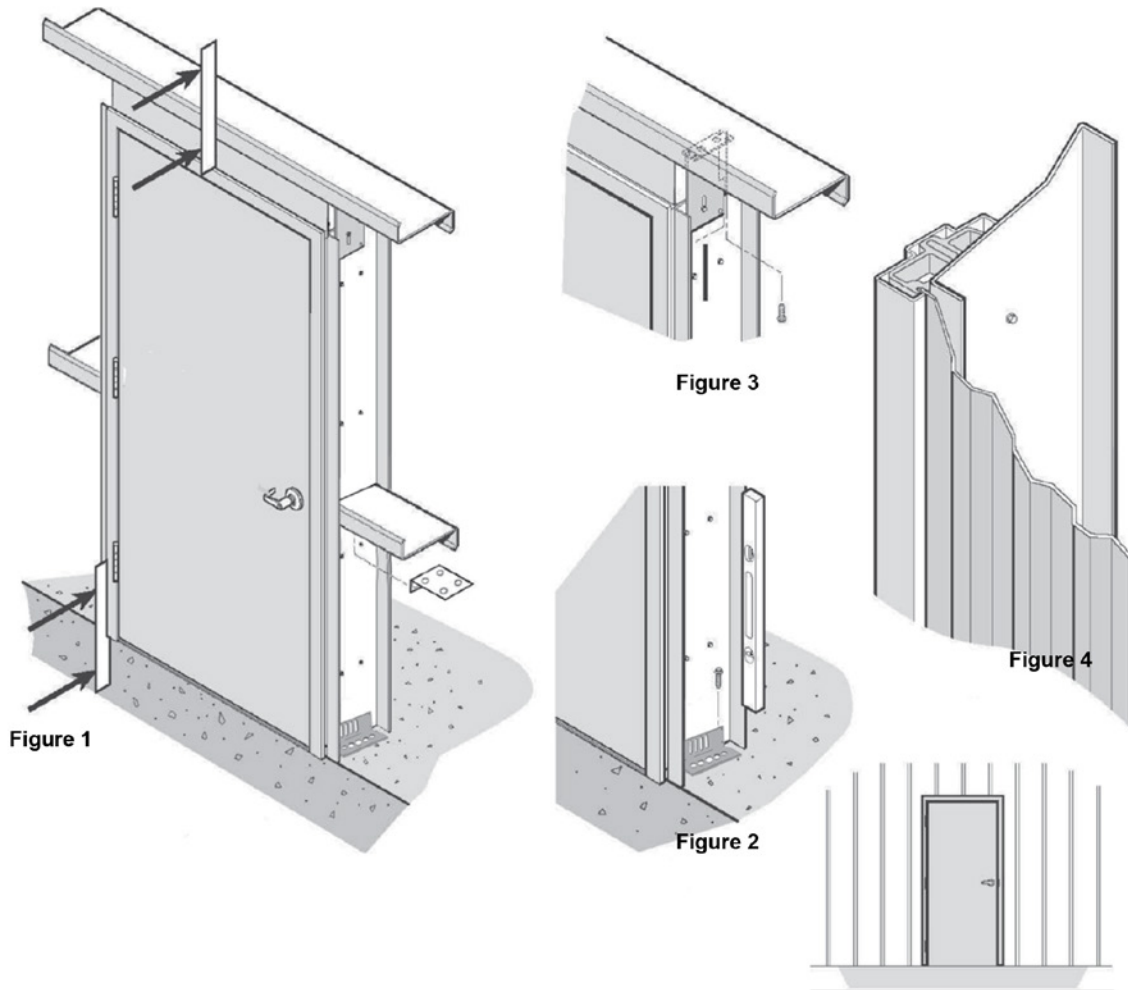
Rough Opening

40 1/4" for 3070 Door
52 1/4" for 4070 Door
76 1/4" for 6070 Door

1. After uncrating, position the door under the girt where desired. The exterior of the frame and subframe should be directly under the outside face of the girt. (Figure 1)
2. Plumb the door unit. Be sure concrete under the threshold is level – shim a side if necessary. Do not separate threshold from the frame as it might eliminate the proper spacing between the sweep and threshold for a good seal.
3. When the door is plumb, bolt the door to the floor with the base clips and the anchor bolts provided. (Figure 2)
4. Back out the screws holding top jamb clips, and slide clips straight up to the girt. Secure the door to the girt through the girt clips with the self-drilling screws provided. (Figure 3)
5. Check gaps on top and sides of the door. Make sure the door swings properly and latches closed. (Some hinge shimming may be required).
6. Anchor threshold in place with provided sleeve anchors; shim, caulk, or grout as needed.
7. Adjust any hardware to ensure locks are latching properly. If provided, adjust closer closing and latching speeds.
8. Complete wall panel installation. Attach drip cap at the header and J-Trim on the jambs. Cut and place wall panel so edge overlaps the frame/subframe connection and dies inside the J-Trim. (Figure 4) Caulk around door.

See page 2 of this booklet for common adjustments needed or minor troubleshooting issues.

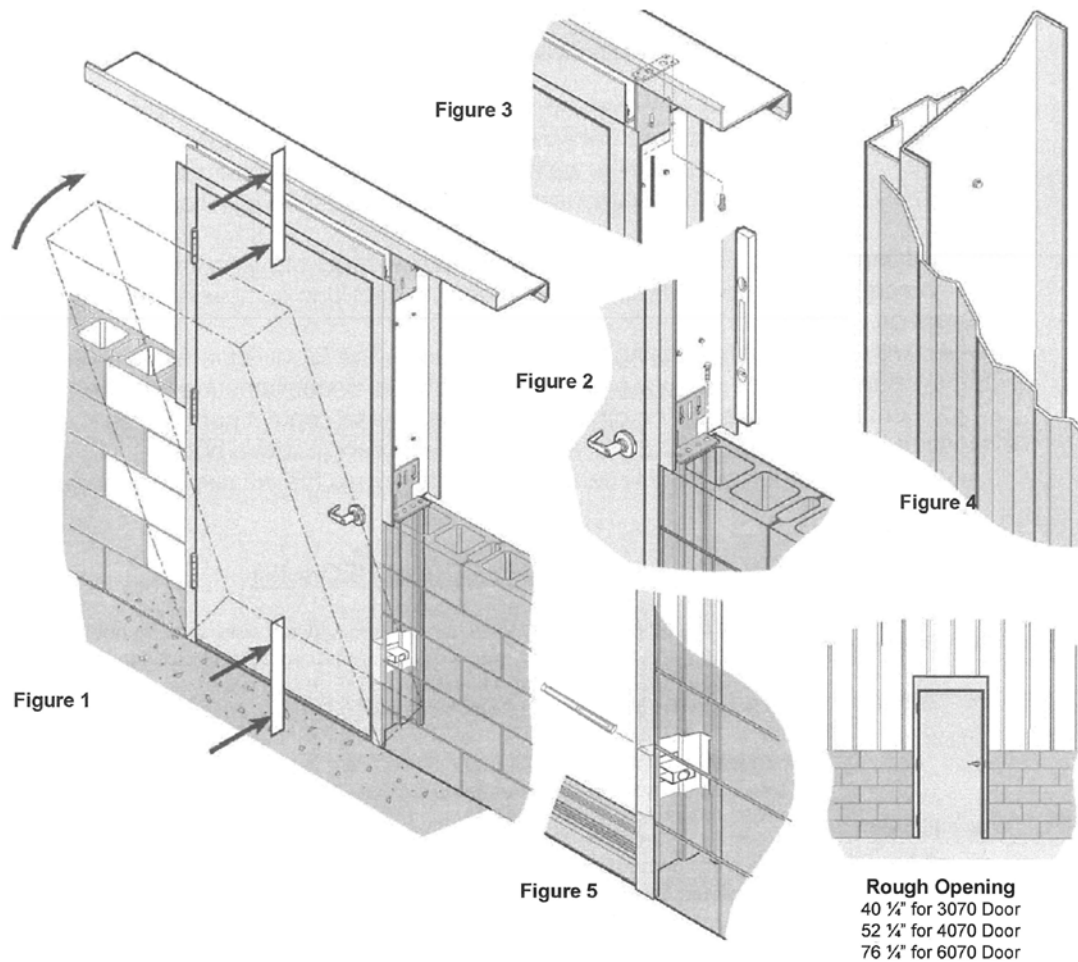
OFFSET INSTALLATION



1. After uncrating, position the door under the girt where desired. The exterior of the frame and subframe should be directly under the outside face of the girt. (Figure 1)
2. Plumb the door unit. Be sure concrete under the threshold is level – shim a side if necessary. Do not separate threshold from the frame as it might eliminate the proper spacing between the sweep and threshold for a good seal.
3. When the door is plumb, bolt the door to the floor with the base clips and the anchor bolts provided. (Figure 2)
4. Back out the screws holding top jamb clips, and slide clips straight up to the girt. Secure the door to the girt through the girt clips with the self-drilling screws provided. (Figure 3)
5. Check gaps on top and sides of the door. Make sure the door swings properly and latches closed. (Some hinge shimming may be required).
6. Anchor threshold in place with provided sleeve anchors; shim, caulk, or grout as needed.
7. Adjust any hardware to ensure locks are latching properly. If provided, adjust closer closing and latching speeds.
8. Complete wall panel installation. Attach drip cap at the header. Insert raw edge of sheeting into offset condition between the jamb return and the C-Channel at the top and both sides of door. (Figure 4) Caulk around door.

See page 2 of this booklet for common adjustments needed or minor troubleshooting issues.

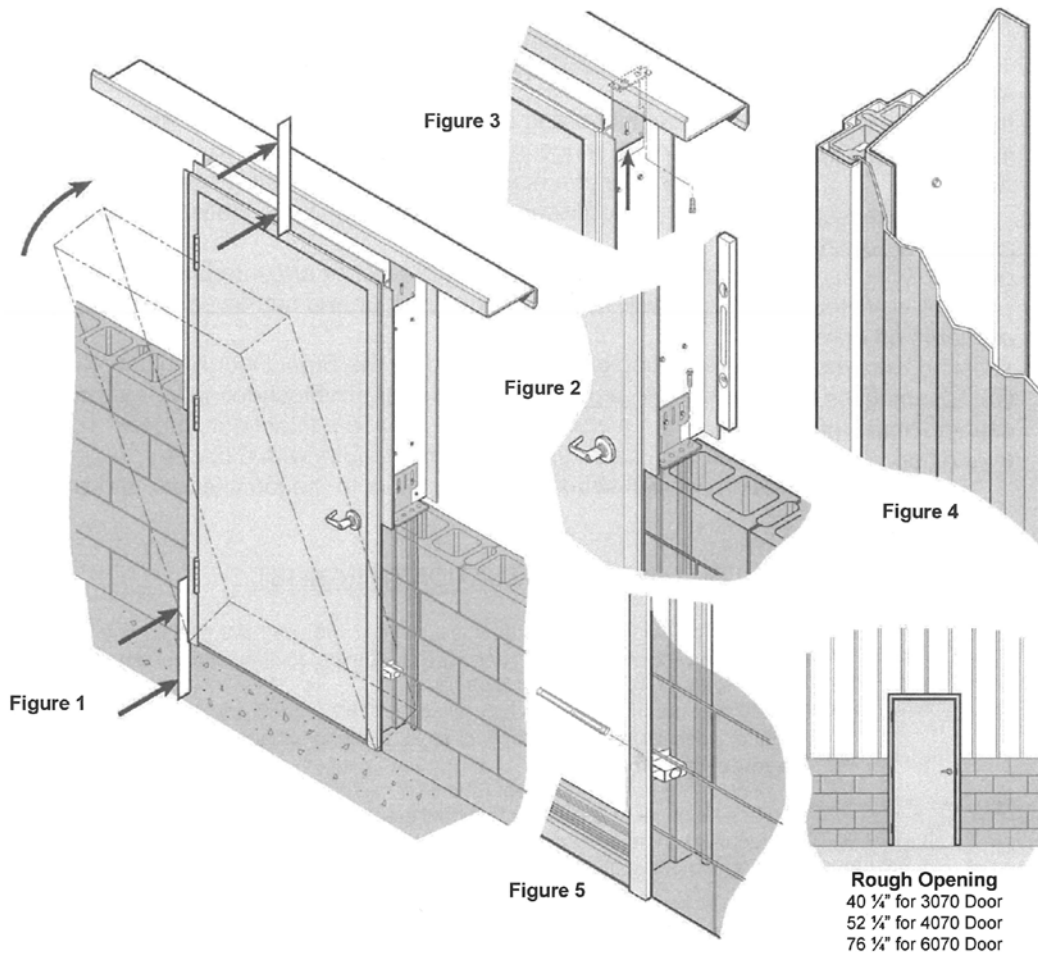
MASONRY INSTALLATION: PARTIAL-HEIGHT NEW CONSTRUCTION



1. After uncrating, position the door under the girt, and subframe should be directly under the outside face of the girt line. (Figure 1)
2. Plumb the door unit. Be sure concrete under the threshold is level - shim a side if necessary. Do not separate threshold from the frame as it might eliminate the proper spacing between the sweep and threshold for a good seal.
3. When the door is plumb, bolt the door to the top of the masonry wall with the base clips and the anchor bolts provided. (Figure 2)
4. Back out the screws holding top jamb clips, and slide clips straight up to the girt. Secure the door to the girt through the girt clips with the self-drilling screws provided. (Figure 3)
5. Drill 3/8" holes into block through the EMA/EOA anchors and install expandable concrete anchors. (Figure 5)
6. Check gaps on top and sides of the door. Make sure the door swings properly and latches closed. (Some hinge shimming may be required).
7. Anchor threshold in place with provided sleeve anchors; shim, caulk, or grout as needed.
8. Adjust any hardware to ensure locks are latching properly. If provided, adjust closer closing and latching speeds.
9. Complete wall panel installation. Attach drip cap at the header and J-Trim on the jambs. Cut and place wall panel so edge overlaps the frame/subframe connection and dies inside the J-Trim. (Figure 4) Caulk around door.

See page 2 of this booklet for common adjustments needed or minor troubleshooting issues.

MASONRY INSTALLATION: PARTIAL-HEIGHT OFFSET



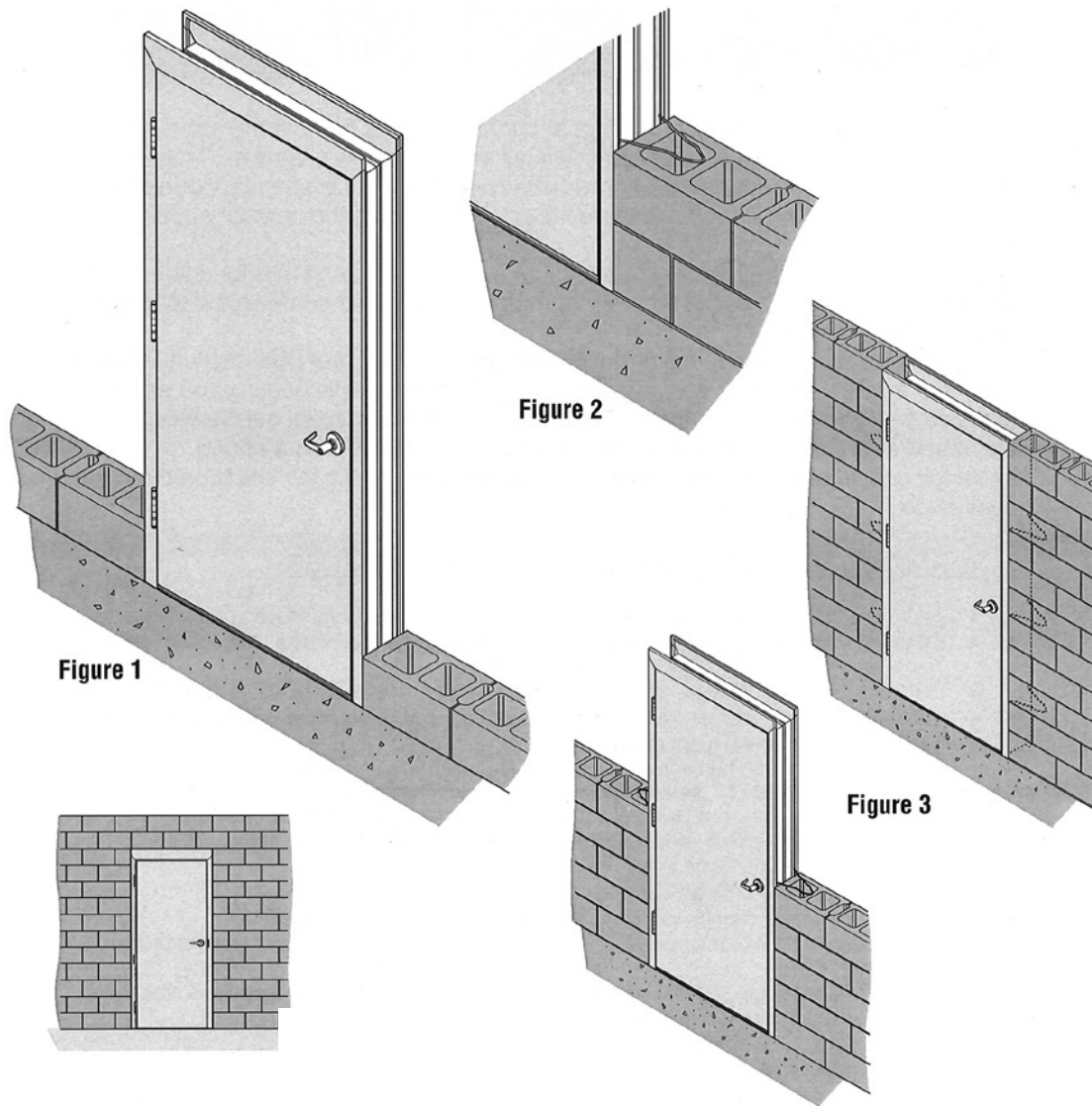
1. After uncrating, position the door under the girt. The wall panel will tuck behind the frame returns. The frame itself will sit slightly outside the face of the girt line. The subframe header should be directly under the outside face of the girt and the door frame should be beyond the concrete edge of the concrete. (Figure 1)
2. Plumb the door unit. Be sure concrete under threshold is level - shim a side if necessary. Do not separate threshold from the frame as it might eliminate the proper spacing between the sweep and threshold for a good seal.
3. When the door is plumb, bolt door to the top of the masonry wall with the base clips and anchor bolts provided. (Figure 2)
4. Back out the screws holding top jamb clips, and slide clips straight up to the girt. Secure the door to the girt through the girt clips with the self-drilling screws provided. (Figure 3)
5. Drill 3/8" holes into block through the EMA/EOA anchors and install expandable concrete anchors. (Figure 5)
6. Check gaps on top and sides of the door. Make sure the door swings properly and latches closed. (Some hinge shimming may be required).
7. Anchor threshold in place with provided sleeve anchors; shim, caulk, or grout as needed.
8. Adjust any hardware to ensure locks are latching properly. If provided, adjust closer closing and latching speeds.
9. Complete wall panel installation. Attach drip cap at the header and J-Trim on the jambs. Cut and place wall panel so edge overlaps the frame/subframe connection and dies inside the J-Trim. (Figure 4) Caulk around door.

See page 2 of this booklet for common adjustments needed or minor troubleshooting issues.

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MASONRY INSTALLATION: FULL-HEIGHT NEW CONSTRUCTION



1. Begin the first few rows of block to a height between 12 and 18 inches A.F.F.
2. Uncrate the door, position door in place within the wall as desired. Temporary support may be needed to help hold door in place. (Figure 1)
3. Plumb and square the door unit in the opening. Be sure concrete under the threshold is level. This double-check will ensure proper seal between sweep and threshold.
4. Apply first wire masonry anchors into mortar joint - (3) anchors provided per side. (Figure 2)
5. Continue laying block, continually checking plumb and square of door. Repeat step 1 at approximately 48 and 80 inches A.A.F. (Figure 3)
6. Anchor threshold in place with provided sleeve anchors; shim, caulk, or grout as needed.
7. Caulk and flash as desired around entire door masonry opening.

See page 2 of this booklet for common adjustments needed or minor troubleshooting issues.

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MASONRY INSTALLATION: FULL-HEIGHT EXISTING OPENING

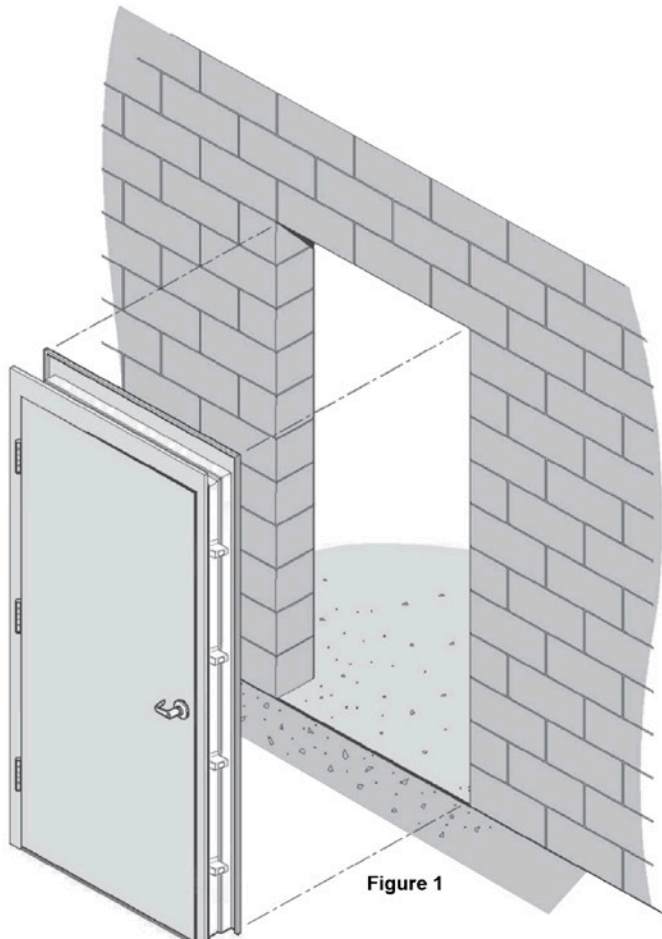


Figure 1

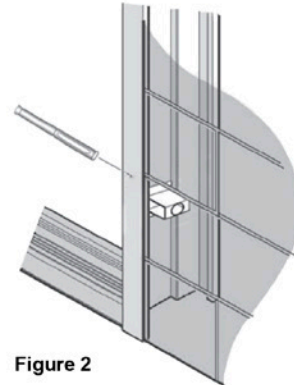
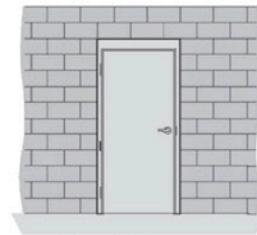


Figure 2



Rough Opening
40 1/4" for 3070 Door
52 1/4" for 4070 Door
76 1/4" for 6070 Door

Add 1/4" to width and height of opening to allow for clearance during installation.

- 1.** Uncrate the door, position the door in place within the wall as desired. Exterior of door/frame should be flush with the outside edge of the wall. Temporary support may be needed to help hold the door in place. (Figure 1)
- 2.** Plumb and square the door unit in the opening. Be sure concrete under the threshold is level - shim a side if necessary. Do not separate threshold from the frame as it might eliminate the proper spacing between the sweep and threshold for a good seal.
- 3.** Drill 3/8" holes into block through the EMA/EOA anchors and install expandable concrete anchors. (Figure 2)
- 4.** Anchor threshold in place with provided sleeve anchors; shim, caulk, or grout as needed.
- 5.** Make sure door swings properly and latches closed. (Some hinge shimming may be required).
- 6.** Adjust any hardware to ensure locks are latching properly. If provided, adjust closer closing and latching speeds.
- 7.** Caulk and flash as desired around entire door masonry opening.

See page 2 of this booklet for common adjustments needed or minor troubleshooting issues.

EXPI-DOOR® Systems Inc.

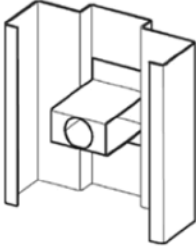
MEMBER OF THE BAY FAMILY OF COMPANIES

EXISTING OPENING ANCHOR (EOA) INSTALLATION

“HAT SPACERS” WELDED IN BY EXPI-DOOR® PRIOR TO ASSEMBLY

Figure 1

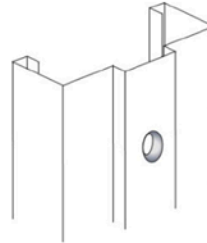
HAT SPACER REINFORCEMENT



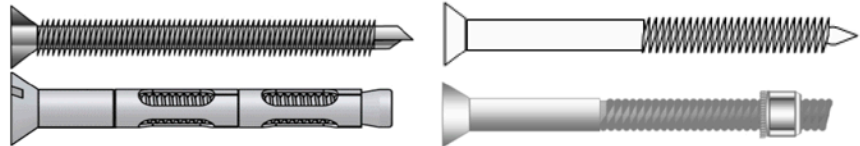
- Self-drilling anchor screw
- Expandable concrete sleeve anchor
- Wood anchor screw
- Threaded rod with lock-nut & washer

Figure 2

JAMB SOFFIT DIMPLED



Frame is dimpled for one of the below shown anchor or fastener. Dimples are in the center of the frame soffit. Dimples are located approximately 30" on center.



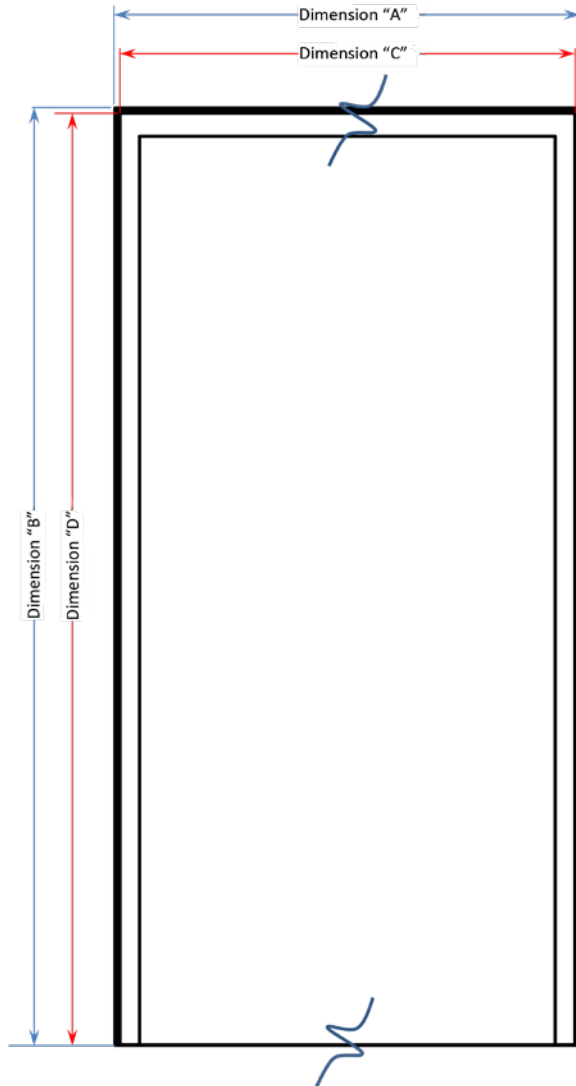
- **Material:** 16 gauge Galvannealed Steel
- **Supplied (figure 1):** Welded in jamb throat prior to assembly
- **Soffit Prep (figure 2):** Jambs shall be drilled & dimpled in center of jamb soffit. Dimples shall be “staggered” or off-set on wider jamb profiles typically from 8” up to 14-3/4” jamb width (depth)
- **Application:** Arrives at job site with hat spacers welded into frame and face of jamb soffit, punched and dimpled, typically in four locations per jamb for doors up to 8’ in height
- **Hardware:** Appropriate anchor screws, anchors, or anchor fasteners provided and shipped loose
- **Wall Construction:** Poured concrete, concrete block (CMU), steel stud, wood stud, steel cee-channel (pre-engineered metal building)
- **Available Fire-Rating:** 45 minute or “C” Label UL, 90 minute or “B” Label UL, 3 hour or “A” Label UL
- **Locations of Preps:** Pre-determined by EXPI-DOOR, or place at locations requested by customer, if the door is to replace an existing replacement door which already consists of a “EMA” prepped door system.

1. Stand assembled door in opening and brace-in-place once frame is plumb and square.
*Optional: Unlatch and open the door to avoid damage by drill to the door leaf.
2. Mark holes on wall or drop drill bit directly through holes to create anchor bores in the rough opening material.

3. Insert anchors and tighten down.
4. Grout or caulk all meetings between the frame and the wall or floor.
5. Drill for threshold anchors by inserting drill bit directly through holes to create anchor bores in the floor.

See page 2 of this booklet for common adjustments needed or minor troubleshooting issues.

ROUGH OPENING INFORMATION:



WIDTH:

Rough Opening Dimension "A"

- 3'0" x 7'0" = 3'-4 1/4"
- 3'4" x 7'0" = 3'-8 1/4"
- 3'6" x 7'0" = 3'-10 1/4"
- 3'8" x 7'0" = 4'-0 1/4"
- 4'0" x 7'0" = 4'-4 1/4"
- 6'0" x 7'0" = 6'-4 1/4"
- 7'0" x 7'0" = 7'-4 1/4"
- 8'0" x 8'0" = 8'-4 1/4"

Frame Overall Dimension "C"

- 3'0" x 7'0" = 3'-4"
- 3'4" x 7'0" = 3'-8"
- 3'6" x 7'0" = 3'-10"
- 3'8" x 7'0" = 4'-0"
- 4'0" x 7'0" = 4'-4"
- 6'0" x 7'0" = 6'-4"
- 7'0" x 7'0" = 7'-4"
- 8'0" x 8'0" = 8'-4"

HEIGHT:

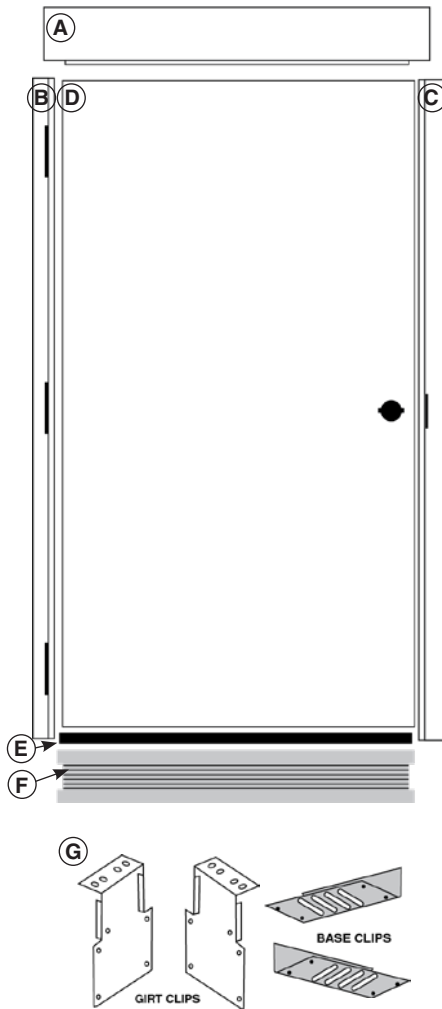
Rough Opening Dimension "B"

- 2" Header Profile
 - 6'-8" Door = 6'-10 1/4"
 - 7'-0" Door = 7'-2 1/4"
 - 8'-0" Door = 8'-2 1/4"
 - 9'-0" Door = 9'-2 1/4"
- 4" Header Profile
 - 6'-8" Door = 7'-0 1/4"
 - 7'-0" Door = 7'-4 1/4"
 - 8'-0" Door = 8'-4 1/4"
 - 9'-0" Door = 9'-4 1/4"

Frame Overall Dimension "D"

- 2" Header Profile
 - 6'-8" Door = 6'-10"
 - 7'-0" Door = 7'-2"
 - 8'-0" Door = 8'-2"
 - 9'-0" Door = 9'-2"
- 4" Header Profile
 - 6'-8" Door = 7'-0"
 - 7'-0" Door = 7'-4"
 - 8'-0" Door = 8'-4"
 - 9'-0" Door = 9'-4"

KNOCK-DOWN DOOR ASSEMBLY & INSTALLATION: NO SUBFRAME

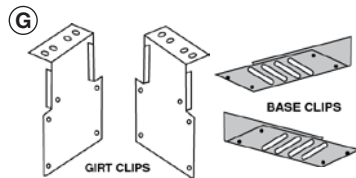
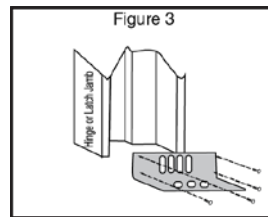
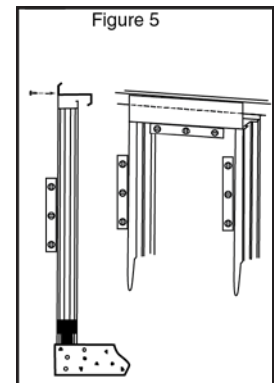
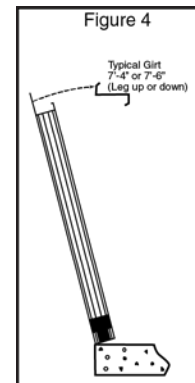
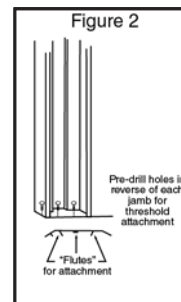
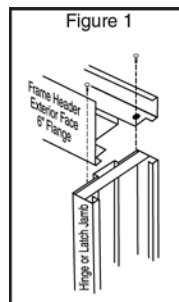


3070 PARTS LIST

- A) Door frame header, 6" x 2" profile
- B) Hinge jamb
- C) Latch jamb
- D) 18 gauge insulated door leaf
- E) Fas-seal dual-finger door sweep
- F) 1/2" high-fluted threshold, holes counter-sunk for sleeve anchors
- G) 2 girt clips & 2 base clips

FASTENER LIST

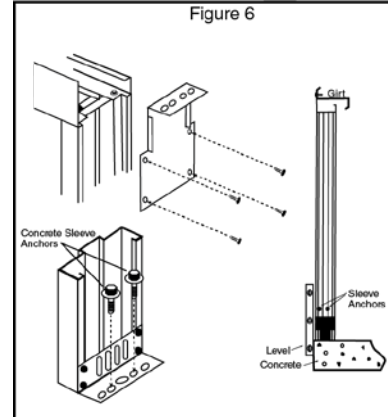
- (4) #10 x 3/4" washer/HEX for header attachment to top of jambs
- (4) 3/8" x 4" sleeve anchors for "L" clip attachment to concrete
- (4) #10 x 3/4" washer/HEX for self-drillers for attachment of "L" clips to jambs @ top & bottom
- (4) Sleeve anchors for attachment of threshold to concrete
- (4) Hex-head self-drillers for attachment of "L" clips to girt, each jamb



1. Removing all materials from the packaging. Lay all parts out and ensure all necessary parts are present.
2. Locate jamb header at the top of the door jambs according to which swing is needed. (Example: for "B" swing type - that is, when facing the door from exterior after it is assembled and installed, the hinges will be to your right and the lock to your left.)
3. Attach frame header to the top, pre-drilled strap (Figure 1) with the bolts and nuts (furnished).
4. Attach the threshold to the reverse of each jamb (Figure 2) with the (6) hex-head self-drilling fasteners provided.
5. Once the frame header is attached, attach the base clip so the pre-drilled flat portion is flush with the base of each Door Jamb. (Figure 3)
6. From the exterior, stand the bottom of the assembled door frame on the concrete and tilt it in towards the girt. (Figure 4)
7. The 6" flange will now make contact with the girt face, either with the girt leg going up or down. Ensure with a level that each jamb is plumb and square under the girt, and attach 6" Header Flange to Girt. Use (3) hex head TEKscrews (included). Attach through the center, and each end of the 6" Header Flange. (Figure 5)

KNOCK-DOWN DOOR ASSEMBLY & INSTALLATION: NO SUBFRAME

8. Once the Frame Header is attached to the Girt, attach the remaining two "L" Clips to the top of each jamb through the jamb returns, in the same manner as done on the base of each jamb. Ensure the "L" Clip is touching the bottom of the girt, then attach "L" Clip to the jamb returns, followed by attaching them to the girt. Ensure the face of each jamb is flush with the girt line and/or the edge of the concrete. Drill holes in the concrete, two times per "L" Clip per jamb at the base, and secure with the 1/2" x 4" Sleeve Anchors provided. (Figure 6)
9. Anchor threshold in place with provided sleeve anchors; shim, caulk, or grout as needed.



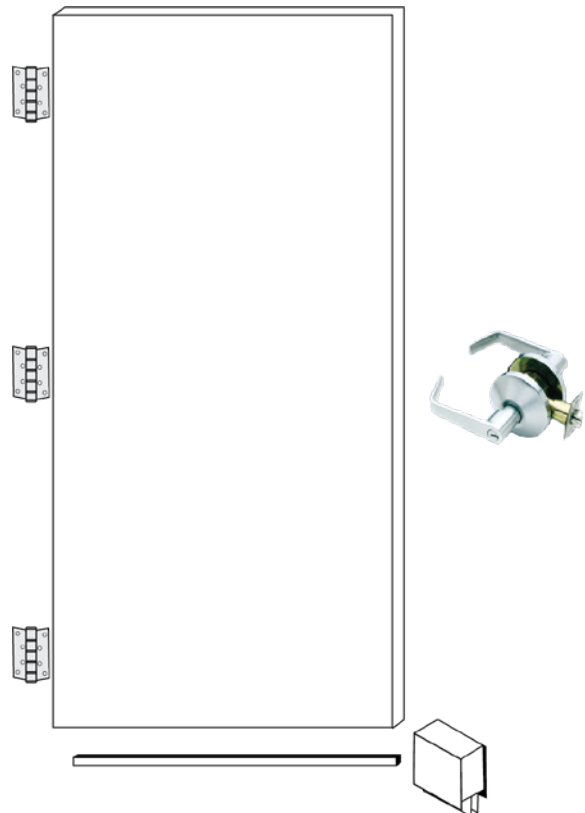
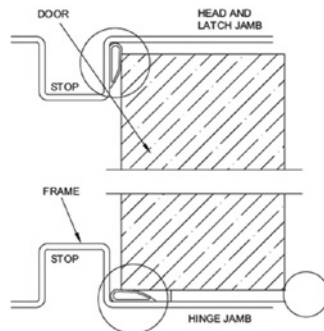
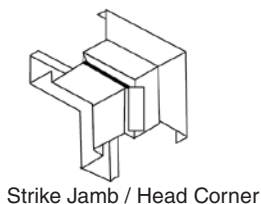
Door Leaf & Hardware Assembly Instructions

1. Lay door on sawhorses.
2. Attach hinges, based on swing type desired.
3. Attach door sweep as shown, with #10 Phillips pan head self-drillers (*included*).
4. Install lockset (or exit device) per manufacturers instructions, which are included with each.
5. Attach hinges to installed door frame (hang the door).
6. Attach any other hardware, such as closer or kickplate, with all fasteners and instructions (*included*).
7. Attach weatherseal to frame as shown.

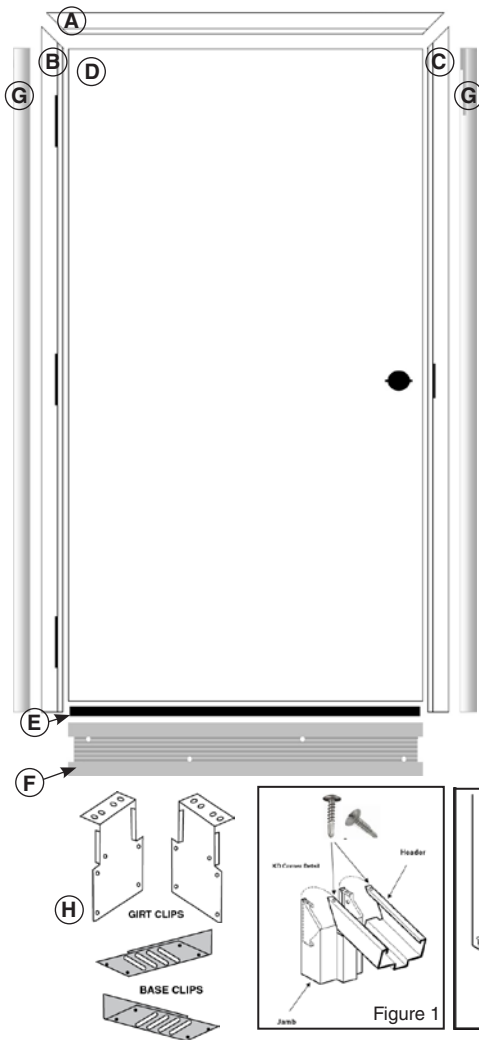
3070 DOOR LEAF AND HARDWARE PARTS LIST

- A) Hinges (box of 3, fasteners included)
- B) Lockset (or exit device, etc.). Instructions included.
- C) Door sweep (shown below)

Door leaf and hardware is now completely and properly aligned.



KNOCK-DOWN DOOR ASSEMBLY & INSTALLATION: WITH SUBFRAMES

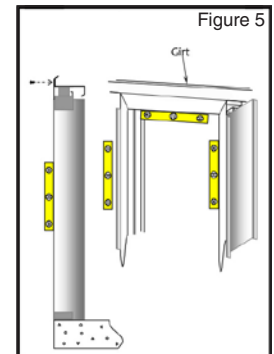
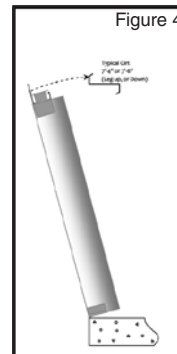
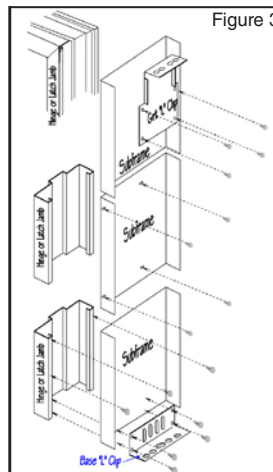


3070 PARTS LIST

- A) Door frame header, 2" x 2" profile
- B) Hinge jamb
- C) Strike jamb
- D) 18 gauge insulated door leaf
- E) NGP 331 dual-finger door sweep
- F) 1/2" high-fluted threshold, holes counter-sunk for sleeve anchors
- G) 2 each subframes, width varies
- H) 2 girt clips & 2 base clips

FASTENER LIST

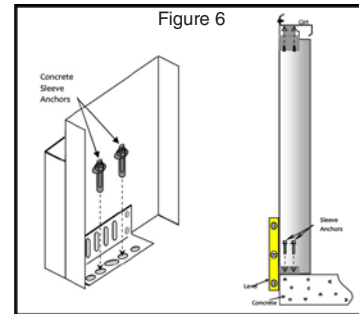
- (4) #8 self-tapping screws for head/jamb connection
- (4) 3/8" x 3" sleeve anchors for "L" clip attachment to concrete
- (16) #10 hex-head self-drillers for attachment of "L" clips to jambs at top & bottom
- (4-6) Sleeve anchors for attachment of threshold to concrete (quantity dependent on size of door)
- (4) #14 hex-head self-drillers for attachment of "L" clips to girt
- (4) Hex-head self-drilling screws for threshold thru jambs



1. After removing all materials from the packaging, it is recommended that you lay all parts out and ensure all necessary parts are present.
2. Locate frame header at the top of the door and jambs according to which swing is needed. (Example: for "B" swing type - that is when facing the door from exterior after it is assembled and installed, the hinges will be to your right, and the lock to your left)
3. Attach frame header to the miter (Figure 1) of each jamb with the self-drilling pan head screws provided.
4. Attach the threshold to the reverse of each jamb (Figure 2), with the hex-head self-drilling fasteners provided.
5. Once the frame is assembled, attach the subframes with #10 hex-head self-tappers through backbends of door frame. Leave off the top girt clip anchor for now, but attach the bottom base "L" clip. Ensure the subframe and the base clip are flush with the floor. (Figure 3)
6. Stand the bottom of the assembled door frame on the concrete from the exterior and tilt it in towards the girt (Figure 4)
7. The flange will now make contact with the girt face, either with the girt leg going up or down. Ensure with a level that each jamb is plumb and square under the girt, and attach subframe header flange to girt - Use (3) hex head TEK screws (not included). Attach through the center, and each end of the header flange. (Figure 5)

KNOCK-DOWN DOOR ASSEMBLY & INSTALLATION: WITH SUBFRAMES

8. Once the frame header is attached to the girt, attach the remaining two “L” clips to the top of each jamb, through the subframes into the slotted areas of the top girt. Adjust height to meet top girt and then extra screws can be used to fasten through “L” clip into jamb returns for rigidity. Ensure the “L” clip is touching the bottom of the girt, then attach “L” clip to the girt. Ensure the face of each subframe is flush with the girt line and/or the edge of the concrete. Drill holes in the concrete, two times per “L” clip, per jamb at the base and secure Base “L” clip with the 3/8” x 3” sleeve anchors provided. (Figure 6)



9. Anchor threshold in place with provided sleeve anchors; shim, caulk, or grout as needed.

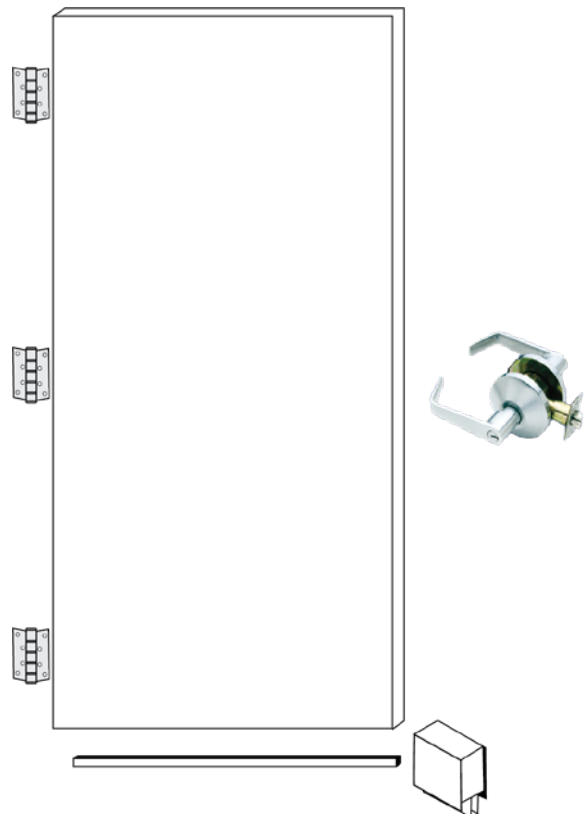
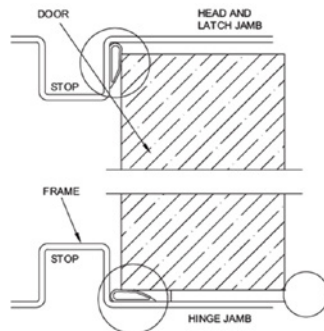
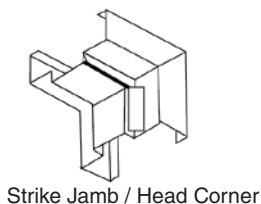
Door Leaf & Hardware Assembly Instructions

- 1.** Lay door on sawhorses.
- 2.** Attach hinges, based on swing type desired.
- 3.** Attach door sweep as shown, with #8 x 1/2” pan head stainless screw (*included*).
- 4.** Install lockset (or exit device) per manufacturers instructions, which are included with each.
- 5.** Attach hinges to installed door frame (hang the door).
- 6.** Attach any other hardware, such as closer or kickplate, with all fasteners and instructions (*included*).
- 7.** Attach weatherseal to frame as shown.

3070 DOOR LEAF AND HARDWARE PARTS LIST

- A) Hinges (box of 3, fasteners included)
- B) Lockset (or exit device, etc.). Instructions included.
- C) Door sweep (shown below)
- D) Top cap included loose (Series 700 only)

Door leaf and hardware is now completely and properly aligned.



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