

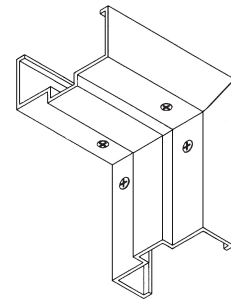


Frame Installation Instructions

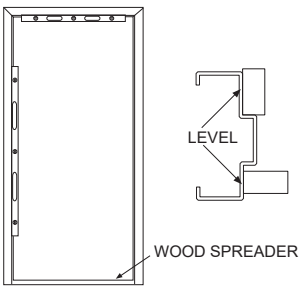
Osprey FRP Frames

KD Frame Assembly (Example #1) - Skip this step if your frame came welded

Lay jambs and head out on a clean level surface being careful not to damage factory finish. Line up miters to verify frame width, height and handing are correct. Attach head to jambs using supplied 2" x 2" fiberglass angle and 3/4" flat head stainless steel wood screws (position head with hardware preps toward the proper jamb as necessary). With the miters lined up perfectly, use a pencil to mark out the pilot hole locations onto the FRP angles. Drill pilot holes into angles before attempting to secure corners.



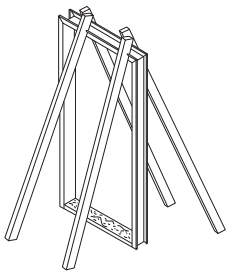
Example #1 – KD Frame Corner



Example #2 – Plumbing the Frame

Plumbing the Frame (Example #2)

The installer shall be equipped with a carpenter level, square, and wood spreaders. Where resin welded frames are provided with wood spreaders, they shall be removed before setting frames. Set the frame in the desired location and level the header. Square jambs to header. Shim under jambs if necessary. With frame on line, set wood spreader and fasten jambs to floor through base anchors.



Example #3 – Bracing the Frame

Bracing the Frame (Example #3)

Brace the frame as shown or shore to a structure above. Plumb and square jambs. Provide vertical support to header for openings over 4'0" wide.

Spreader (Example #4)

Wood spreader shall be square and fabricated from lumber 1" thick or more. Correct length is the door opening width between the jambs at the header. Cut clearance notches for frame stops. Spreader shall be nearly as wide as frame jamb depth for proper installation.

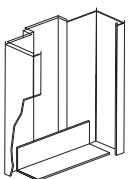
NOTE: Wood spreaders for shipping purposes should not be used as installation spreaders.



Example #4 – Spreader

Base Anchor (Example #5)

Base anchors are furnished in all resin welded frames. Supplied with KD frames upon request only.



Example #5 - Base Anchor

Existing Wall Rough Opening Dimensions

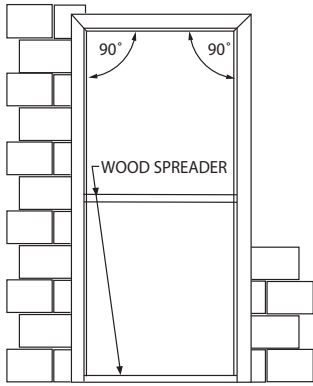
Construct wall before frame is set with a rough opening as follows for 2" face frames:

- Height equal to nominal (door) opening height plus 2-1/4"
- Width equal to nominal (door) opening width plus 4-1/2"

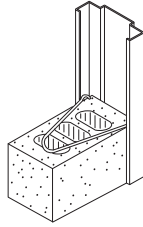
KD Compression Frame Rough Opening Dimensions

Construct wall before frame is set with a rough opening as follows for 2" face frames:

- Height equal to nominal (door) opening height plus 1"
- Width equal to nominal (door) opening width plus 2"



New Masonry Construction - "WIRE" (Example #6)



- a. Assemble frame corners if not resin welded.
- b. Install wood spreaders. Set, brace, and plumb frame as shown in Examples #2 & #3.
- c. Set second spreader at the mid point of the door opening to maintain the door opening dimensions.
- d. Install wire anchors and grout frame in the area of the anchors as block courses are laid up. Frame should be fully grouted. Check plumb and square as wall progresses.

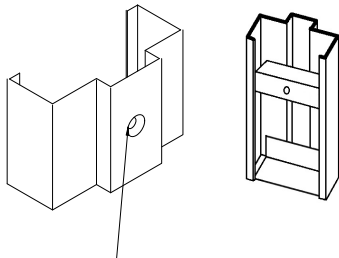
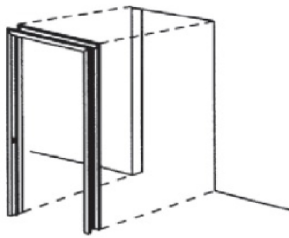
Example #6 – New Masonry Const. - "WIRE"

Existing Wall Construction - "EWA" (Example #7)

Rough Opening Dimensions

Construct wall before frame is set with a rough opening as follows for 2" face frames (when ordering a custom size unit, deduct these measurements from the rough opening for the correct nominal opening size)

- Height equal to nominal opening height plus 2-1/8" to 2-1/4"
- Width equal to nominal opening width plus 4-1/4" to 4-1/2"



Factory drilled and countersunk

- a. Assemble KD frame (if not already resin-welded).
- b. Remove wood spreader.
- c. Position frame into rough opening. Wall opening width and height should be 1/8"-1/4" larger than frame over-all dimensions to allow for shimming.
- d. Position a removable frame spreader at bottom and center of frame to maintain proper opening width during installation - as per Example #4.
- e. Use tapered shims between anchor blocks, wall, and spreader to maintain squareness, alignment of frame, and door opening width.
- f. Using a drill and bit, drill through the frame into the wall, 1-1/4" to 1-1/2" deep at each anchor location on the hinge jamb only for now.
- g. Plumb and square the frame again. Adjust shims as necessary.
- h. Secure hinge jamb to wall using the supplied bolts.
- i. Hang door and check for fit. Check that clearance at top of door is 1/8" across entire width, and shim bottom of strike jamb as necessary.
NOTE: use only wood screws for hinge attachment on door and frame.
- j. With door closed against frame stops, check that entire height of door is contacting the strike jamb stop.
- k. Use shims to hold the frame in position, and drill for anchors on strike side.
- l. Secure strike jamb the same as hinge jamb.
- m. Use backer rod and caulk around perimeter of frame as needed.

Example #7 – Existing Wall Const.

Specify type of fastener needed when ordering:

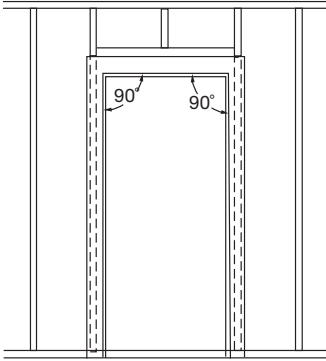
"EWA-M" (masonry expansion bolts)

"EWA-T" (tapcons)

"EWA-W" (wood lag screws)

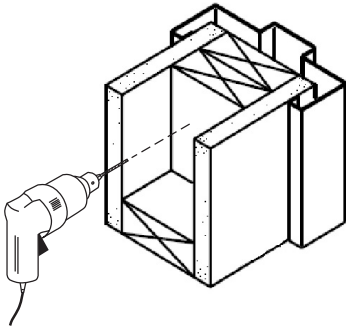
"EWA-S" (machine screw & nut for steel channel wall)

New Steel or Wood Stud Wall Construction (Example #8)



Example #8 – New Steel/wood Stud Wall Const.

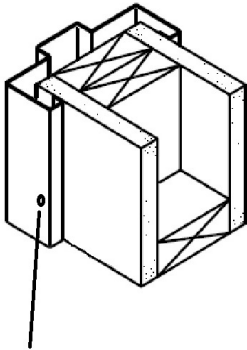
- Assemble frame corners per Example #1 (if not already resin-welded).
- Set spreaders. Brace and plumb frame as shown in Examples #2 & #3.
- Attach jambs to floor through base anchors.
- Install studs to floor and ceiling runners and tightly against frame anchor blocks. Position studs in frame throat and attach with screws. Drill from the backside of the stud, through both the stud and the anchor block, then attach with two screws per anchor location. See Example #9.



Example #9 – New Stud Wall Const.

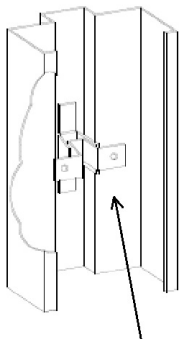
Knockdown (KD) Wall Construction (Example #10)

(Steel or wood stud and drywall construction)



Example #10 – Countersunk Holes

- Construct wall with rough opening height equal to frame nominal (door) opening height plus 1". Maximum rough opening width for a 2" face frame is nominal (door) opening width plus 2".
- Pre-drill corner brackets before installation.**
 - Lay jambs and head out on a clean level surface being careful not to damage factory finish.
 - Line up miters to verify frame width, height and handing are correct (position head with hardware preps toward the proper jamb as necessary).
 - With the miters lined up perfectly, use a pencil to mark out the pilot hole locations onto the supplied 2" x 2" fiberglass angles.
 - Drill pilot holes into angles before attempting to secure corners.
 - Attach head to jambs using and 3/4" flat head stainless steel wood screws, making sure miters are still aligned perfectly.
- Remove only the screws from the hinge and strike jambs, leaving the 2" x 2" brackets installed onto the head.
- Bottom of frame must set on a solid surface.
- If base anchor is used, notch wall in that area.
- Retract compression bars (Example #11) near the top of the jambs by turning screws counter clockwise, and install head into position on wall.
- Insert hinge and strike jambs under the corner brackets of the head and raise them into position on wall.
- Line up miters perfectly again. Attach jambs to head using pre-drilled holes from earlier and 3/4" flat head stainless steel wood screws. Verify nominal width and height of frame.
- Level, square, and plumb frame. Fasten bottom of jambs to wall through countersink holes in frame face and into wall (Example #10).
- Some installers prefer to hang door and fit frame to door prior to fastening frame at base.
- Square top of frame and tighten compression bars by turning screws clockwise. NOTE: DO NOT OVER TIGHTEN.



Example #11 – Compression Bars