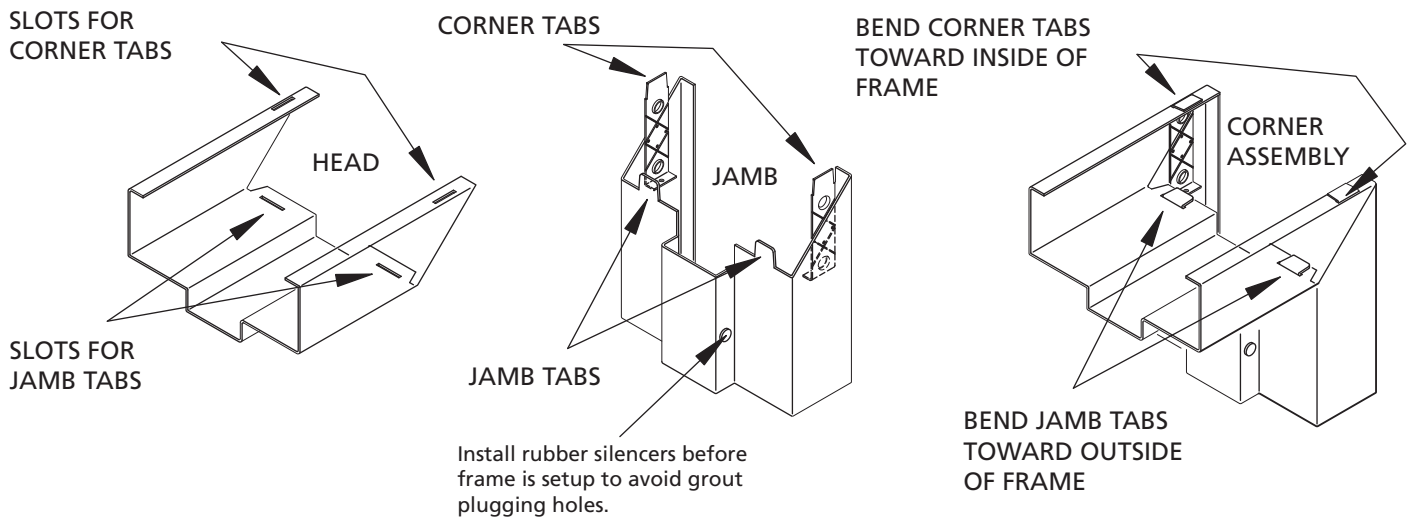


Distributor Tech Data

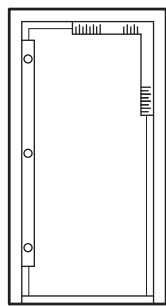
FRAME INSTALLATION MASONRY AND STUD WALLS

JOBSITE STORAGE: Store frames off the ground on wood runners or skids. Do not store directly on the ground. Cover frames with tarpaulin or plastic but do insure that adequate ventilation is provided to eliminate moisture condensation. When frames are to be fully grouted and when plaster or mortar contain "anti-freeze" agents, the inside of the frames should be coated with a bituminous, water-resistant paint by the installation contractor.

ASSEMBLY of FRAME

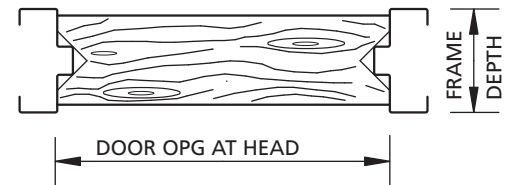


PLUMBING FRAME



SQUARING THE FRAME

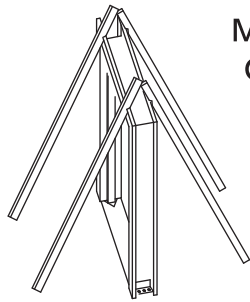
The installer should use wood spreaders (as described at right), a carpenters level (the longer the better), and a carpenters square (the bigger the better). Set the frame in the desired location. Level head and plumb jambs. Shim under jambs if necessary.



SPREADER

Typical wood spreader must be square and made from lumber at least 1" thick. Length of spreader equals door opening width at the head. Cut clearance notches for frame stops as shown. Spreader must be nearly as wide as frame depth for proper installation.

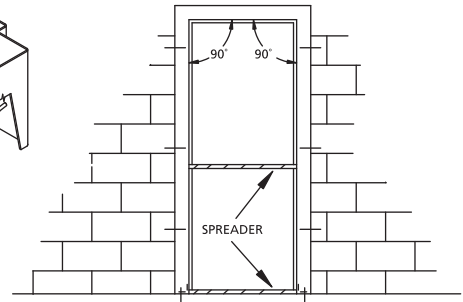
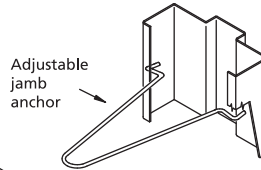
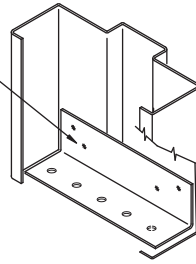
FRAME INSTALLATION CONT.



BRACING THE FRAME

MASONRY WALL CONSTRUCTION

Floor anchor is attached to jamb at sill with (4) welds.



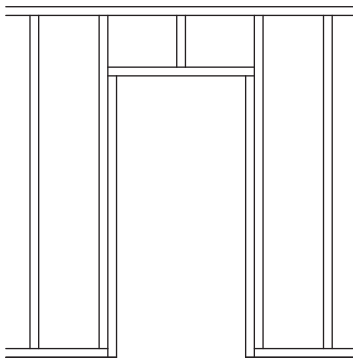
INSTALLING THE FRAME

NOTE: If frame is received setup and welded, remove and discard the temporary metal supports that are tack welded to jambs at sill before starting installation.

Brace the frame as shown or shore to ceiling. Do not brace in the direction of intended wall. Plumb and square jambs. Set spreader. Attach jambs to floor through floor anchor.

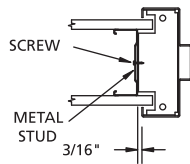
Set and plumb frame. Install jamb anchors at hinge levels as wall is laid up. (3 anchors for heights to 7-2 -- one more anchor per jamb for each additional 2 feet of height or fraction thereof.) Grout frame in the area of the anchors. A second spreader should be used at mid-point of opening to maintain the door opening dimension. Continually check plumb and square as wall progresses. CHECK: The difference between diagonals measured from opposite corners should not exceed 1/16".

WOOD or METAL STUD WALL CONSTRUCTION

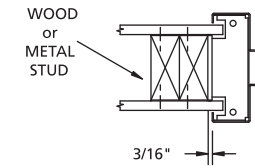


ROUGH STUD OPENING

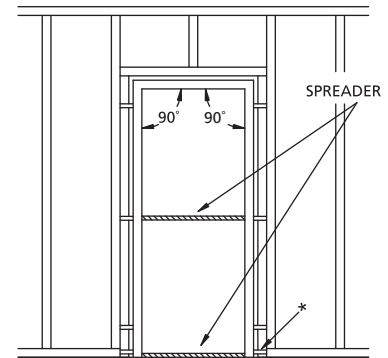
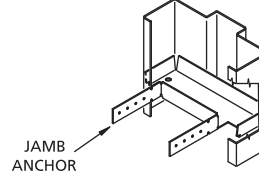
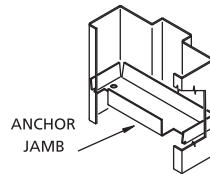
ADD 3/8" TO OVERALL FRAME WIDTH
ADD 1/8" TO OVERALL FRAME HEIGHT



DET. A



DET. B



INSTALLING THE FRAME

1. Build the rough opening in wall allowing 3/16" clearance between upright stud and frame jamb and 1/8" clearance between header and top of door frame.

2. Insert jamb anchors in frame throat and tap into place with a hammer. Place at hinge location and directly opposite on strike jamb. Position anchors also at sill.

3. Place frame in rough opening.

4. Set spreader and level frame. Shim jambs if necessary.

*If you choose to erect door frame before wall framing: brace frame and anchor at sill per masonry procedure above, then butt studs to door frame.

5. Square and fasten top anchors to stud on ONE JAMB ONLY. Check plumb and square of door frame and continue to fasten balance of anchors to studs. Repeat on opposite jamb.

6A. If your anchor looks like Det. A, fasten anchor to metal stud thru web of channel using suitable fastener for sheet metal.

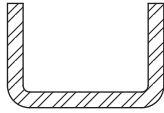
6B. If your anchor looks like Det. B, bend anchor tabs around stud and fasten tabs with suitable fastener.

7. Maintain necessary clearance between frame returns and stud for inserting wall board. Do not install wall board until you are sure that frame is plumb and square.

Distributor Tech Data

FRAME SPREADER BARS

1. SPREADER BAR PROFILE



This bar is not to be used for installation. A wood spreader is to be used for maintaining proper spacing between jambs. (See the DHI publication "The Installation of Commercial Steel Doors and Steel Frames", "Insulated Steel Doors in Wood Frames", and "Builder's Hardware").

2. SPREADER BAR LENGTH

Length of spreader bar is equivalent to door opening width dimension.

3. SPREADER BAR QUANTITY AND LOCATION

- A. All single rabbet frames and double rabbet, single swing frames with depth not exceeding 6 inches: attach (1) spreader bar to the door rabbet. (See Fig. #1)
- B. All double rabbet, double swing frames or double rabbet, single swing frames with depth exceeding 6 inches: attach one (1) spreader bar to each frame rabbet (two total). (see Fig. #2)

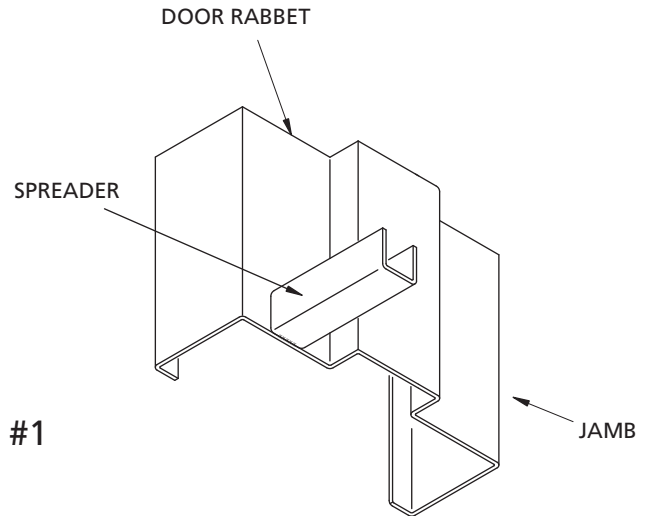


Fig. #1

4. SPREADER BAR ATTACHMENT

Verify spreader bar length by checking to see that said length is equivalent to the door opening width dimension at head. Place the spreader bar at the bottom of the door opening and tack weld in place. Strength of welds should be such that spreader bar remains in place during transit and also be such that the spreader bar can be removed when required (by means of a sharp hammer blow) without incurring frame damage.

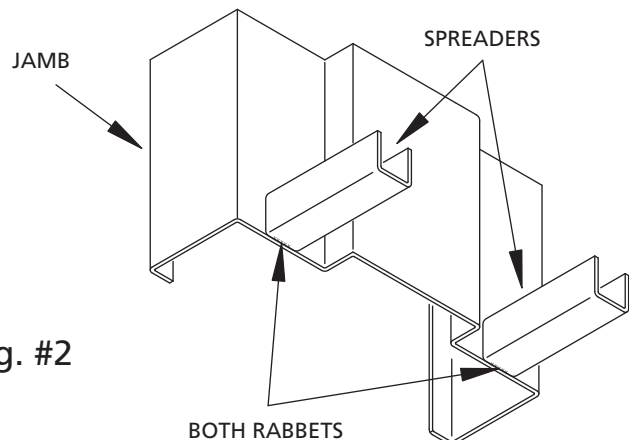


Fig. #2