



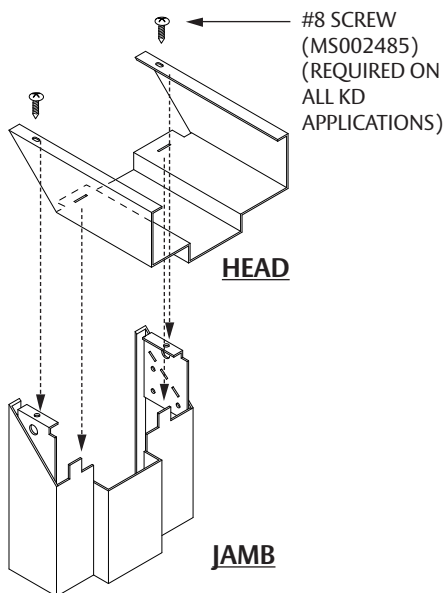
KD FRAME ASSEMBLY INSTRUCTIONS

**IMPORTANT
READ BEFORE PROCEEDING**

KD FRAME ASSEMBLY INSTRUCTIONS

MASONRY FRAMES, THERMAL BREAK, AND CURRISEAL FOR MASONRY, METAL STUD, AND WOOD STD WALLS

Assembly of Frame



Plumbing of Frame

Squaring the Frame

The installer should use wood spreaders (as described below), a carpenter's level (the longer the better), and a full size carpenter's square. Set the frame in the desired location. Level head and plumb jambs. Shim under jambs if necessary.

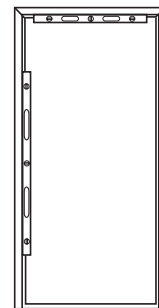


Spreader

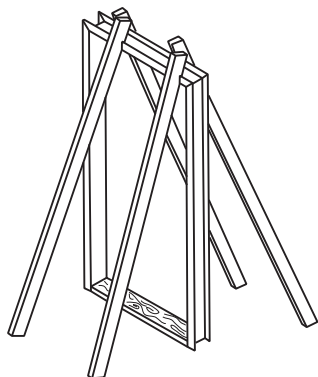
Typical wood spreader must be square and made from lumber at least 1" thick. Length of spreader equals door opening width at the head. Cut clearance notches for frame stops as shown. Spreader must be nearly as wide as frame depth for accurate installation.

Job 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.



BRACING FRAMES BEFORE WALL CONSTRUCTION FOR KD AND WELDED FRAMES

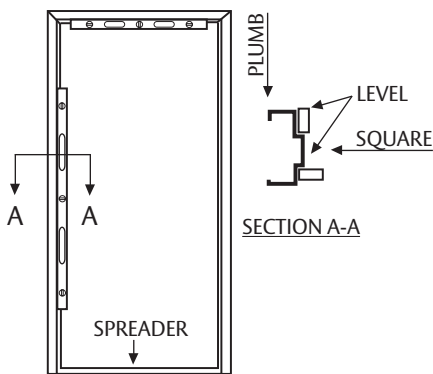


Bracing the frame

Brace the frame as shown or shore to a structure above. Brace in the direction of intended wall. Plumb and square jambs. Install vertical brace to support header for openings over 4'0" wide.

NOTE ON WELDED FRAMES:

Shipping bars should NOT be used as spreader. Remove shipping bar before setting frame.



Plumbing the frame

The contractor should be equipped with a carpenter level, square and spreader. Set the frame in desired location and level the header. Square jambs to header. Shim under jambs if necessary. With frame in place, set spreader and fasten jambs to floor through floor anchors.

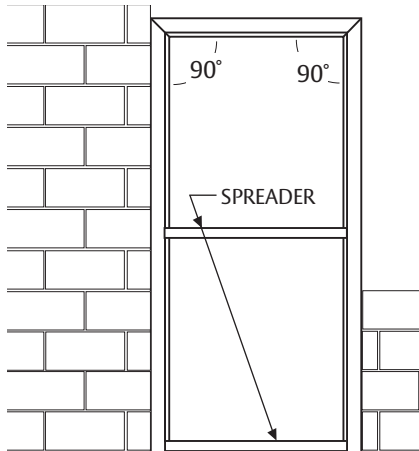


Spreader

Typical wood spreader must be square and fabricated from lumber no less than 1" thick. Correct length is the door opening width between the jambs at the header (i.e., Single Door 3'0" = 36"). Cut clearance notches for frame stops. Spreader must be nearly as wide as frame depth for accurate installation.

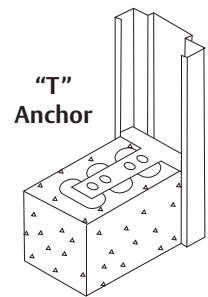
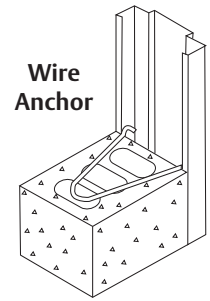
KD FRAME ASSEMBLY INSTRUCTIONS

NEW MASONRY CONSTRUCTION FOR KD AND WELDED FRAMES



1. Assemble frame.
2. Set brace and plumb frame.
3. Install anchors. Grout frame in the area of the anchors as block courses are laid up. Frames may also be supplied with anchors welded in place.
4. A second spreader is recommended at the mid point of the door opening to maintain the door opening dimension.
5. Continually check plumb and square as wall progresses.

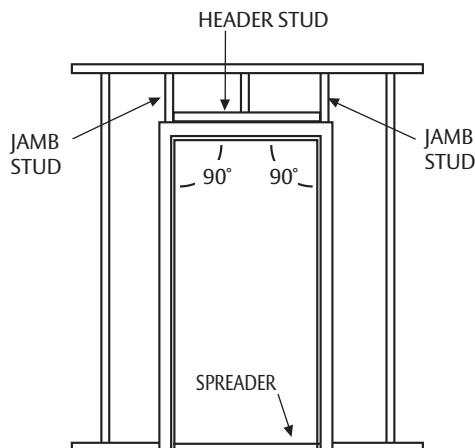
NOTE: Anchors in frame heads are not required.



Existing Masonry Construction

1. Drill (4) 9/16" diameter holes evenly spaced in each jamb for 3/8" expansion shell anchors. Install multipurpose anchor at each 9/16" hole.
2. Assemble 3 frame pieces flat on floor. Install (4) #8 x 1/2" sheet metal screws (included) at corners of head to each jamb (required for Underwriters Laboratories fire rating). Locate removable spacing bar at base of frame to maintain proper opening width during installation.
3. Position assembled frame in opening. Plumb and level the frame. Shim frame as required.
4. Anchor frame to wall with 3/8" expansion shell anchors, shimming behind anchors as needed.

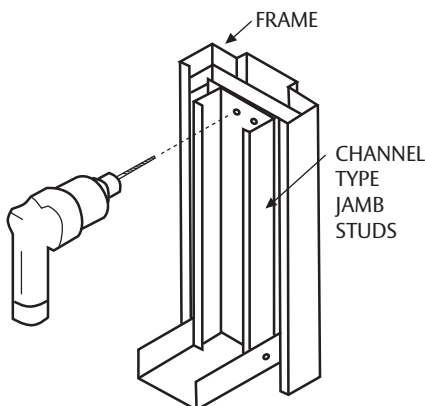
STEEL STUD WALL CONSTRUCTION WITH FLUSH OR RECESS TYPE ANCHORS FOR KD AND WELDED FRAMES



Elevation

1. Assemble frame.
2. Install anchors. Position anchors in frame through the throat and tap in with a hammer. Frames may also be supplied with anchors welded in place.
3. Square, brace and plumb frame as shown.
4. Set spreader. Attach jambs to floor through floor anchor or floor extension. Install jamb studs to floor and ceiling runners and tightly against frame anchors.
5. Attach studs to frame anchors as shown below.

NOTE: Drywall must extend at least 1/2" into frame at fire rated installations.



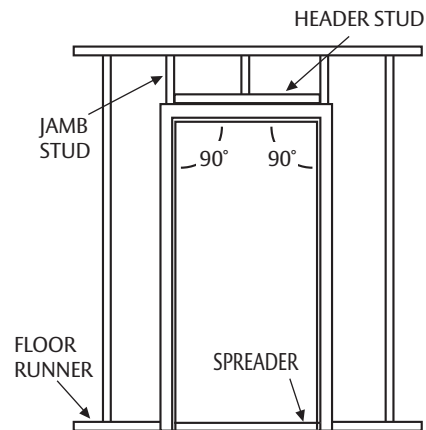
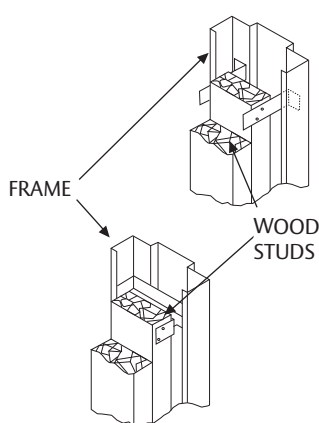
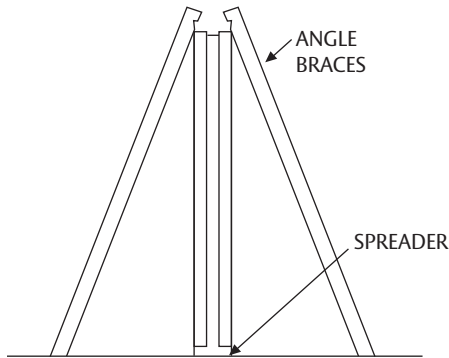
Channel type steel stud

Position studs in frame throat and attach to anchors with screws or weld. If using screws, the installer should drill from the back side of the stud, through both the stud and anchor, then attach with (2) screws per anchor location.

NOTE: When attaching header stud to jamb studs, be sure the stud is above frame header. This will assure ample room for attaching plaster lath or drywall and will not interfere with installation of hardware attached to frame header. Anchors are not required in frame heads, except fire listed double egress openings.

KD FRAME ASSEMBLY INSTRUCTIONS

WOOD STUD CONSTRUCTION FOR KD AND WELDED FRAMES



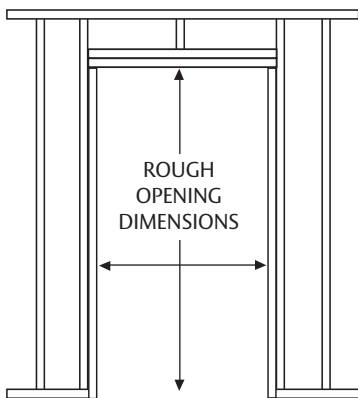
Erect frame

Assemble frame. Stand frame up in desired location. Anchor one jamb to floor and set spreader on floor from anchored jamb to loose jamb. Plumb, level, and square frame. Position and anchor second jamb, then brace.

NOTE: Drywall must extend at least 1/2" into frame at fire rated installations.

1. Install anchors. Position anchors in frame throat and tap in with a hammer. Frames may also be supplied with anchors welded in place.
2. Set spreader. Attach jambs to floor through floor anchor or floor extension. Install double jamb studs to floor and ceiling runners and header.
3. Bend anchor tabs around stud leaving desired clearance between frame return and stud for inserting finished wall material.
4. Square and nail top anchor to stud on ONE JAMB ONLY. Check plumb and square and continue to nail balance of anchors to stud. Repeat for opposite jamb.
5. Anchors are not required in frame heads, except fire listed double egress openings.

WOOD STUD CONSTRUCTION (STUDS ERECTED BEFORE FRAME)



Rough opening

Build rough opening. Rough opening dimensions for 2" face frames should be 4-1/4" - 4-1/2" larger than door width and 2-1/4" - 2-1/2" larger than door height. It is recommended that double studs be used at jambs and headers.

NOTE: Drywall must extend at least 1/2" into frame at fire rated installations.

1. Assemble frame.
2. Install anchors. Position anchors in frame throat and tap in with a hammer. Frames may also be supplied with anchors welded in place. Base anchors may also be used. If base anchor cannot be used add one anchor per jamb at bottom.
3. Place frame in rough stud opening.
4. Bend anchor tabs around stud leaving desired clearance between frame return and stud for inserting finished wall material.
5. Set spreader and level frame. Shim jambs if necessary.
6. Square and nail top anchor to stud on ONE JAMB ONLY. Check plumb and square and continue to nail balance of anchors to stud. Repeat for opposite jamb.
7. Anchors are not required in frame heads, except fire listed double egress openings.

