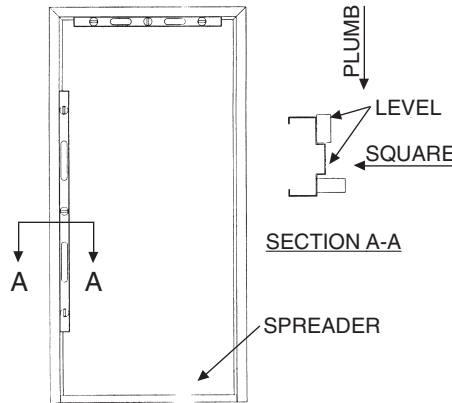


ASSA ABLOY, the global leader in door opening solutions

July 1, 2003

BRACING FRAMES BEFORE WALL CONSTRUCTION

NOTE: Shipping bars should not be used as spreader. Remove shipping bar before setting frame.

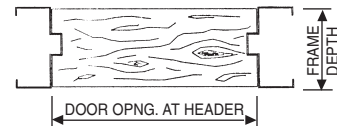
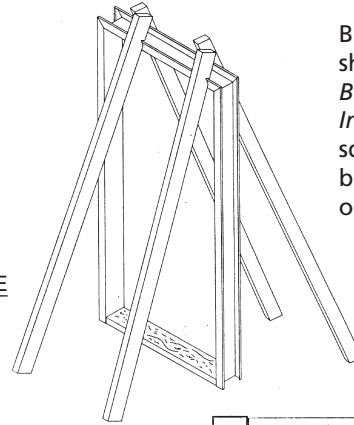


Plumbing the frame

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

Bracing the frame

Brace the frame as shown or shore to a structure above. *Brace In The Direction Of Intended Wall.* Plumb and square jamba. Install vertical brace to support header for openings over 4'0" wide.

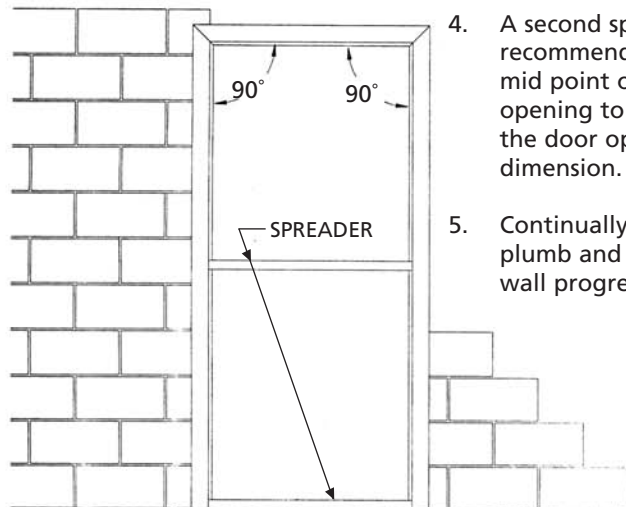


Spreader

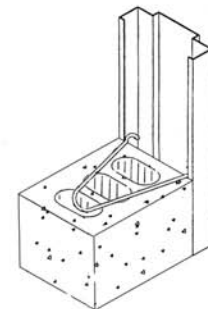
Typical wood spreader must be square and fabricated from lumber no less than 1" thick. Correct length is the door opening width between the jamba at the header (i.e., Single Door 3'0" = 36"). Cut clearance notches for frame stops. Spreader must be nearly as wide as frame depth for proper installation.

NEW MASONRY CONSTRUCTION

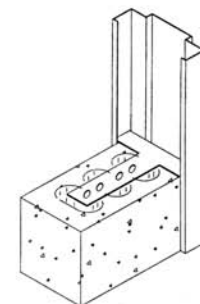
1. Assemble frame.
2. Set brace and plumb frame.
3. Install anchors. Grout frame in the area of the anchors (see above) as block courses are laid up. Frames may also be supplied with anchors welded in place.



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.



Wire Anchor



"T" Anchor

NOTE: Anchors in frame heads are not required.

FRAME TECHNICAL DATA

July 1, 2003

STEEL STUD WALL CONSTRUCTION

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.

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.

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

FRAME
CHANNEL TYPE JAMB STUDS

WOOD STUD CONSTRUCTION

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.

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. Position and anchor second jamb. Plumb, level and square frame, then brace.

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

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.