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Details are subject to change without prior notice
K.D. FRAME ASSEMBLY FOR MASONRY WALLS

1. Layout heads and jambs. For 4” (102 mm) face frames (See Step 5).

2. Slide head on jambs, engaging jamb tabs in head slots.

3. Bend tabs within head first (see Steps 4 and 5).

4. Bend tabs in direction of corresponding arrows (away from the center of the head). For 2” (50 mm) face frames bend all tabs flat against head. For 4” (102 mm) face frames (see Step 5).

5. **4” HEADS ONLY**

   Bend top portion of corner tab as shown. Assemble head to jambs (see Step 2) and bend rabbet tabs flat against the head. Install #8 x 2 1/2" (63 mm) long drywall screw through head into corner tab.

6. Attach adjustable base anchors with sheet metal screws provided. If frame is not to be set directly on slab, adjust base anchors upward as required.

Details are subject to change without prior notice.
STEEL FRAME INSTALLATION DETAILS FOR MASONRY WALLS

1. Locate frame.

2. Place a wood spreader at base of frame. If frame has threshold installed spreader bar is not needed.


4. Fasten base anchors to the floor with nails.

5. Level head.

6. Plumb jambs.

7. Square corners.

8. Place and support a wood spreader at the center of frame. See Step 4 for spreader size.

9. Place wire anchor in jamb and wall equally spaced, as wall is erected. Check frame during wall erection to keep frame plumb and square.

An anchor must be used for each 30 inches (762 mm) of jamb height or fraction thereof. On the hinge jamb, each anchor must be located immediately above or below each hinge reinforcement. On the strike jamb, the anchors must be located directly opposite anchors on the hinge jamb.

Details are subject to change without prior notice.
EXISTING MASONRY WALL ANCHOR INSTALLATION DETAILS:
Details are for non-label and label frames unless otherwise noted.

ANCHOR SPACING:
- Non-label frames: one anchor must be provided for each 30” of jamb height.
- Label frames: anchors must be located a maximum of 6” from each end of jamb and a maximum of 26” on center.

INSTRUCTIONS:
A. PLACE ANCHOR IN FRAME.
If frame anchors are already welded-in, proceed to installing frame as shown on page Ins 5. Welded-in anchors may be the same design as shown on this instruction sheet or may be tube/strap, channel/strap, or hat shaped design.
1. Flex anchor wings to fit anchor through throat of frame.
2. Nest anchor tube over dimpled hole.
Caution: Keep anchor wings turned upward.

B. LOCK IN ANCHOR
1. Press anchor toward dimpled hole so that wings can be hooked under jamb backbends.
2. Spread anchor wings to lock in place.
Note: Use a hammer to place the anchor in the frame.
INSTALLING FRAMES WITH EMA ANCHORS

INSTALLING THE FRAME:
Details are for frames using a combination shield and screw supplied by Steelcraft.

If using a combination shield and screw not supplied by Steelcraft, or, if you are using separate expansion shields and machine screw, please see the instructions accompanying the fasteners.

**Rough Opening**
The rough opening instructions shown at the left should give you adequate clearance to install the frame (See page Ins 4).

**Install Frame**
1. Place frame in opening. Roughly check frame for squareness and plumbness.
2. Using frame as a template*, drill 3/8” dia. x 2 1/2” deep hole in wall.
   - **Alternate method:** using frame as a template, mark wall through holes in jambs. Remove frame and drill 3/8” dia. x 2 1/2” deep holes at marks*. Replace frame in opening.
3. Install anchors (combination shield and screw) and tighten as required.
4. Shim jambs behind anchors above screws to obtain proper door opening width. Make shims from 16 and/or 12 gage galvanized steel. Shims should be 2” wide x frame jamb depth minus (-) 1/8”.

*Hole specified is for shield supplied by Steelcraft. If another fastener is being used, drill wall as specified for that shield.

**Alternate with separate expansion shield and machine screws.**
1. Place frame in opening. Roughly check frame for squareness and plumbness.
2. Using frame as a template mark wall through holes in jambs.
3. Remove frame and drill holes at marks on wall (hole dia. and hole depth as specified for fastener).
4. Install expansion shields in wall.
5. Replace frame in opening and anchor to wall with machine screws through dimpled holes.
6. Shim jambs behind anchors as described above.

**General Notes:**
Methods of sealing opening (gap) between frame and wall.
1. Apply bead of caulking. Label frames may require listed caulking.
2. Grout gap with mortar.

An anchor must be used for each 30 inches (762 mm) of jamb height or fraction thereof. On the hinge jamb, each anchor must be located immediately above or below each hinge reinforcement. On the strike jamb, the anchors must be located directly opposite anchors on the hinge jamb.
K.D. FRAME ASSEMBLY FOR WOOD STUD WALLS

1. Layout heads and jambs. For 4” (102 mm) face frames see Step 5.

2. Slide head on jambs, engaging jamb tabs in head slots.

3. Bend tabs within head first (see Steps 4 and 5).

4. Bend tabs in direction of corresponding arrows (away from the center of the head). For 2” (50 mm) face frames bend all tabs flat against head. For 4” (102 mm) face frames see Step 5.

5. 4” HEADS ONLY

   Bend top portion of corner tab as shown. Assemble head to jambs (see Step 2) and bend rabbet tabs flat against the head. Install #8 x 2 1/2” (63 mm) long drywall screw through head into corner tab.

6. Attach adjustable base anchors with sheet metal screws provided. If frame is not to be set directly on slab, adjust base anchors upward as required.

Details are subject to change without prior notice.
Anchor for Wood Stud Construction
Assemble frame per details on page Ins 4

1
1/4” greater than frame
Build rough opening.

2
Install anchors.

3
Place frame in rough opening.

4
Support frame.

5
Level head.

6
Bend base anchor tabs around wood studs. Attach base anchors to floor plate.

7
Place and support wood spreader at center of frame.

8
Square corners.

9
Plumb jambs.

10
Bend jamb anchor tabs around wood studs. Attach jamb anchors to wood studs.

An anchor must be used for each 30 inches (762 mm) of jamb height or fraction thereof. On the hinge jamb, each anchor must be located immediately above or below each hinge reinforcement. On the strike jamb, the anchors must be located directly opposite anchors on the hinge jamb.

Details are subject to change without prior notice.
**K.D. FRAME ASSEMBLY FOR OPEN STEEL STUD WALLS**

**1.** Layout heads and jambs. For 4” (102 mm) face frames see Step 5.

**2.** Slide head on jambs, engaging jamb tabs in head slots.

**3.** Bend tabs within head first (see Steps 4 and 5).

**4.** Bend tabs in direction of corresponding arrows (away from the center of the head). For 2” (50 mm) face frames bend all tabs flat against head. For 4” (102 mm) face frames see Step 5.

**5. ** **4” HEADS ONLY**

Bend top portion of corner tab as shown. Assemble head to jambs (see Step 2) and bend rabbet tabs flat against the head. Install #8 x 2 1/2” (63 mm) long drywall screw through head into corner tab.

**6.** Attach adjustable base anchors with sheet metal screws provided. If frame is not to be set directly on slab, adjust base anchors upward as required.
Anchor for Open Steel Stud Construction
Assemble frame per details on page Ins 8

1. Jamb anchors
   - Insert
   - Twist
   - Attach base anchors with S.M. screws
   - Install anchors.

2. Locate frame.

3. Spreader bar length = Door width
   - 30" (2'6" door)
   - 32" (2'8" door)
   - 36" (3'0" door)
   - Place a wood spreader at base of frame.

4. Fasten base anchors to the floor.

5. Set floor channels and install steel stud channels.

6. Place and support wood spreader at center of frame.

7. Plumb jambs.

8. Level head.


An anchor must be used for each 30 inches (762 mm) of jamb height or fraction thereof. On the hinge jamb, each anchor must be located immediately above or below each hinge reinforcement. On the strike jamb, the anchors must be located directly opposite anchors on the hinge jamb.

Details are subject to change without prior notice.
K.D. FRAME ASSEMBLY FOR CLOSED STEEL STUD WALLS

1. Layout heads and jambs. For 4" (102 mm) face frames see Step 5.

2. Slide head on jambs, engaging jamb tabs in head slots.

3. Bend tabs within head first (see Steps 4 and 5).

4. Bend tabs in direction of corresponding arrows (away from the center of the head). For 2" (50 mm) face frames bend all tabs flat against head. For 4" (102 mm) face frames see Step 5.

5. **4" HEADS ONLY**
   - Bend top portion of corner tab as shown. Assemble head to jambs (see Step 2) and bend rabbet tabs flat against the head. Install #8 x 2 1/2" (63 mm) long drywall screw through head into corner tab.

6. Attach adjustable base anchors with sheet metal screws provided. If frame is not to be set directly on slab, adjust base anchors upward as required.
Anchor for Closed Steel Stud Construction
Assemble frame per details on page Ins 10

1. Jamb anchors
   Insert
   Twist
   Attach base anchors with S.M. screws
   Install anchors.

2. Locate frame.

3. Spreader bar length = Door width
   30" (2'6" door)
   32" (2'8" door)
   36" (3'0" door)
   Place a wood spreader at base of frame.

4. Fasten base anchors to the floor.

5. Set floor channels and install steel stud channels.

6. Place and support wood spreader at center of frame.

7. Plumb jambs.

8. Level head.


10. Wall framework is now ready for wall finish.

An anchor must be used for each 30 inches (762 mm) of jamb height or fraction thereof. On the hinge jamb, each anchor must be located immediately above or below each hinge reinforcement. On the strike jamb, the anchors must be located directly opposite anchors on the hinge jamb.

Some typical wall conditions.

Details are subject to change without prior notice.
UNIVERSAL ANCHOR INSTALLATION - F SERIES FRAMES

TYPICAL ANCHOR

Steelcraft supplies an adjustable Universal anchor with their frames. The anchor is designed to work in the F and MU series frames, and the same anchor can be used in a wood stud or steel stud partition.

ADJUSTING ANCHOR

The anchor can be adjustable to work in other jamb depths by bending the outside flanges of the anchor. To bend a flange, engage one ear of an anchor with another and bend the ear in or out as required.

INSTALLATION INTO F SERIES FRAME

The anchor as supplied, adjusted for the jamb depth, can be installed into a F series frame without modification. The installation of the anchor into a F frame is as illustrated below.

Place anchor into the throat opening of the frame. Rotate the anchor, locking it into a horizontal position between the frame faces. A hammer will aid in this operation.

Install the frame in accordance with “Steelcraft Frame Installation Instructions”.

Details are subject to change without prior notice.
UNIVERSAL ANCHOR INSTALLATION - MU SERIES FRAMES

The Universal Anchor will not fit into a MU series frame without pre-forming. The pre-forming will allow the anchor to be inserted into the throat opening. Determine the type stud condition, wood or steel and pre-form the anchoring straps as shown below.

**WOOD STUD**
- Anchorings straps formed for wood stud condition.

**STEEL STUD**
- Anchorings straps formed for steel stud condition.

1. Place anchor into jamb as shown.
2. Rotate the anchor so it is in a horizontal position. A hammer will be required to rotate the anchor.
3. Using a hammer, rotate the anchor so that the attaching ears are extending out of the frame throat opening. This is done by striking the anchor on the back leg. Do not strike the anchor on the flat portion. Rotate the anchor until it is firmly locked into place with the flat portion of the anchor parallel to the bottom of the frame.

Install the frame in accordance with “Steelcraft Frame Installation Instructions.”

Details are subject to change without prior notice.
1” FACE K.D. FRAME ASSEMBLY FOR STEEL OR WOOD STUD WALLS

1. Layout heads and jambs.

2. Slide head on jambs, engaging jamb tabs in head slots.

3. Bend tabs within head first (see Steps 4 and 5).

4. Bend tabs in direction of corresponding arrows (away from the center of the head). For 2” (50 mm) face frames bend all tabs flat against head.

5. Special Wood Stud strap anchor is to be welded into the base of the frame.

Details are subject to change without prior notice.
Special Anchor for Steel or Wood Stud Construction
Assemble frame per details on page Ins 14.

1. Jamb anchors are welded in.

2. Locate frame.

3. Place a wood spreader at base of frame.

4. Note:
   Special Anchors must be ordered separately - they do not ship automatically.
   Jamb anchors are used as base anchors.

5. Set floor channels (or floor plate) and install steel stud channels (or wood studs).

6. Place and support wood spreader at center of frame.

7. Plumb jambs.

8. Level head.


An anchor must be used for each 30 inches (762 mm) of jamb height or fraction thereof. On the hinge jamb, each anchor must be located immediately above or below each hinge reinforcement. On the strike jamb, the anchors must be located directly opposite anchors on the hinge jamb.

Details are subject to change without prior notice.
INSTALLATION

FRAME ASSEMBLY FOR MU SERIES FRAMES

1. Layout heads and jambs.

2. Slide head on jambs, engaging jamb tabs in head slots and interlock head under corner tab.

3. Connect jamb and head together using sheet metal screws provided.

4. Attach adjustable base anchors with sheet metal screws provided. If frame is not to be set directly on slab, adjust base anchors upward as required.

Details are subject to change without prior notice.
MU SERIES STEEL FRAME INSTALLATION DETAILS FOR STUD WALLS

1. Install anchors.
2. Place frame in rough opening.
3. Place a wood spreader at base of frame.
4. Level head.
5. Fasten base anchors.
6. Set floor channels and install steel stud channels.
7. Place and support wood spreader at center of frame.
8. Square and plumb frame.
10. Wall framework is now ready for wall finish.

An anchor must be used for each 30 inches (762 mm) of jamb height or fraction thereof. On the hinge jamb, each anchor must be located immediately above or below each hinge reinforcement. On the strike jamb, the anchors must be located directly opposite anchors on the hinge jamb.

Details are subject to change without prior notice.
INFORMATION:
Quantity of "Z" Spacers
1. One (1) spacer for door openings 3'6" (1067 mm) wide and less.
2. Two (2) spacers for door openings over 3'6" (1067 mm) wide up to and including 5'6" (1676 mm) wide.
3. Three (3) Spacers for door openings over 5'6" (1676 mm) wide up to and including 8'0" (2438 mm).

Vertical studs are to be centered over each welded-in "Z" spacer and attach vertical studs to horizontal runners (see Section A-A)

Vertical studs not to exceed 24" (610 mm) on center.
EASY SET® DRYWALL FRAME INSTALLATION INSTRUCTIONS

PREPARE ROUGH OPENING

1. Twist base anchors into strap at base of jamb. (See Steps 6A and 6B)

2. Notch drywall at base for attachment of base anchor.

3. Install frame head. Center in rough opening.

4. Insert tab on jamb in slot in head. Pivot jamb into place. This will engage corner clips.

5. Repeat Step 4 with other jamb.

6. A. Base anchors can be installed at this time following directions in Step 1.
B. For K-Series frames, attach base of jamb to the wall with drywall screws through holes in jambs.

7. Place spreader bar between jambs at base. This will insure proper opening width at base of frame. Level head. Screw base anchors to floor runner or studs.

8. Plumb frame by adjusting anchors at top of jambs. Make certain anchors are pressed tightly against rough opening.

9. Frame is now ready to receive a door (baseboard is attached after frame is installed).

Details are subject to change without prior notice
ADDITIONAL STEPS FOR FIRE RATED EASY SET® FRAMES ONLY

All fire rated frames

After installing frame, connect jamb and head using sheet metal screws supplied.

ADDITIONAL STEPS FOR 4” (102 MM) FACE HEADS

#8 x 2 1/2” (63 mm) drywall screws
2 screws per frame corner

Install the frame following Steps 1 through 8 shown on Page Ins 19.

After installing the frame, connect jamb and head using #8 x 2 1/2” (63 mm) long drywall screws.

SECURITY STUD ANCHOR INSTALLATION

1. Locate security anchor immediately above or below strike reinforcement, and/or above or below hinge reinforcement.
2. For additional security, use security anchor on both sides of the jamb.
3. Security anchors cannot be used with Vinyl Throat Filler.

Press base of anchor towards face of frame until anchor snaps into position shown.

Frame installed in opening - leg of security anchor is to fit between gypsum and studs. Mark the centerline of anchor on outside face of gypsum board before installing frame in opening. Install self drilling drywall screw through gypsum board, at mark, into security anchor and stud.
NOTES:
1. Frames are equipped with compression anchors in the head and sill sections only.
2. After completing the installation of the Borrowed Lite frame, attach the cut-to-length glazing bead using self-drilling screws or oval head sheet metal screws.

Rough opening: finished opening plus 2 3/4" (70 mm ± 1/4" [16 mm]).

Make rough opening finished opening plus 2 3/4" (70 mm ± 1/4" [16 mm]) wider and 2 3/4" (70 mm ± 1/4" [16 mm]) higher than finished opening.

Install jambs tightly against edges of opening making width, or opening, as wide as possible.

Retract anchors all the way within sill. Insert mitered end of sill into corner of opening and pivot to horizontal position. Repeat same operation for head.

Assemble frame by pushing jamb tabs into sill slots. Push head slots down into jamb tabs.

Raise and level sill to desired height with adjusting anchors.

Square corners and adjust anchors in head tightly against rough openings. Glaze and install glazing in standard manner.

CAUTION:
When borrowed lite frames are located near 3-sided frames, locate the top of the borrowed lite rough opening 1/2" (3 mm) above the top of the 3-sided frame rough opening.
PS 074™ SURFACE APPLIED WEATHERSTRIP INSTALLATION

SURFACE PREPARATION:
Thoroughly clean surfaces of frame where weatherstrip is to be applied. Use a solvent cleaner such as mineral spirits or a detergent cleaner. Remove any irregularities or loose paint from the surface area.

It is recommended that the weatherstrip be applied after finish painting door and frame. Do not paint weatherstrip. Paint will not hurt the weatherstrip, but could leave it with a non-acceptable appearance.

INSTALLATION:
1. Determine position that weatherstrip is to be applied on the strike jamb, head and hinge jamb. See Fig 1.
2. Install head weatherstrip first.
   a. Measure head width (rabbet to rabbet) and cut weatherstrip to that dimension.
   b. Remove paper liner (see Helpful Hint 3).
   c. Install head weatherstrip. Start at one end and work to the other end. Align and press strip to head while working from one end to the other.
3. Install strike jamb weatherstrip (see Fig. 2).
   a. Fold paper liner back at top end (approx. 2”). Lap top end of weatherstrip about 1/8” over back leg of head strip and stick in place. See corner detail in Fig. 2
   b. Peel paper liner loose (see Helpful Hint 3). Align and press strip on jam as you remove liner.
   c. Cut off excess weatherstrip at bottom of jamb.
4. Install hinge jamb weatherstrip.
   a. Fold paper liner back at top end (about 2”). Butt strip to head rabbet and stick in place.
   b. Peel paper liner loose (see Helpful Hint 3). Align and press strip on jam as you remove liner.
   c. Cut off excess weatherstrip at bottom of jamb.
5. After installation of the weatherstrip is complete, run a finger back over the base strip to make sure that it is pressed tight against the frame.

HELPFUL HINTS:
1. The best tool to use in cutting weatherstrip is a pair of scissors.
2. Ideal temperature range to apply weatherstripping is 70° to 90°F (21° to 32°C). Weatherstripping should not be applied when temperature is below 50°F or above 100°F (10° to 38°C).
3. To remove paper liner, fold one end of liner back against itself and peel liner down weatherstrip. This will help eliminate danger of pulling the adhesive film from the weatherstrip.

4. Storage: do not store weatherstrip in high temperature areas. Use weatherstrip within a year after receipt. If weatherstrip is stored for continuous use, stock should be rotated upon receipt of new material.
CLOSER REINFORCEMENTS:
Closer reinforcements can be added to Steelcraft frames using one of the following sleeves. Sleeves provide reinforcement for regular arm, parallel arm and top jamb mounted closers.

FULL CLOSER SLEEVE:
Installation
1. Install sleeve in head.
2. Slide sleeve to position required. See closer manufacturer’s template for location.
3. Bend tab over end of head. If tab will not extend far enough to bend, tackweld sleeve into position.

Note: Sleeves can be used in label frames.

HALF CLOSER SLEEVE:
Installation:
1. Hook sleeve under backbend.
2. Slide sleeve to position required. See closer manufacturer’s template for location.
3. Push down into soffit, locking sleeve into position. A screwdriver and hammer can be used to put sleeve into position.

Note: Sleeves can be used in label frames.
The temporary installation of the spreader bars shown below is designed to snap into position and establish the proper door opening width at the bottom and center of the frame. **IT IS RECOMMENDED THAT A TEMPORARY SPREADED BAR BE USED IN BOTH RABBETS TO PREVENT FRAME TWISTING.** After the frame has been properly anchored, the temporary spreader bars can be removed and reused in the installation of another opening.

**NOTES:**
1. Temporary spreader bars can be fabricated from 16 gage galvannealed steel.
2. DO NOT Paint the spreader bars.
3. These units are designed to be used with 2” face frames only, and can be used on both 1 15/16” and 1 9/16” rabbets.
4. When using to square a frame in an opening, avoid all hardware preparations where possible.
5. It is recommended to use temporary spreader bars on frames being installed in both masonry and drywall applications.