

Installation Instructions for Heavy duty

Please read ALL instructions before installing. Two or more people are recommended to install this product. If a new electrical outlet is required, have the outlet installed by a qualified electrician *before* installing unit.

Preliminary Instructions

Do the following before starting to install unit. See illustrations below.

- 1. Check window opening size** - the mounting parts furnished with this air conditioner are made to install in a wooden sill double-hung window. The standard parts are for a window opening of 32"(812 mm) minimum to 43"(1092 mm) maximum width. Open sash to a minimum of 20" (508 mm). (FIG. 1)
- 2. Check condition of window** - all wood parts of window must be in good shape and able to firmly hold the needed screws. If not, make repairs before installing unit.
- 3. Check your storm windows** - if your storm window frame does not allow the clearance required, correct by adding a piece of wood as shown in FIG. 2, or by removing storm window while room air conditioner is being installed.

(Continued)

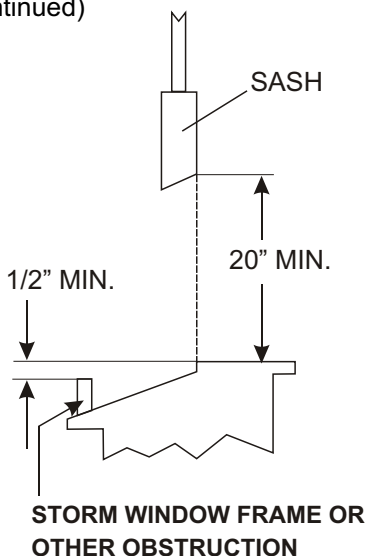


Fig. 1

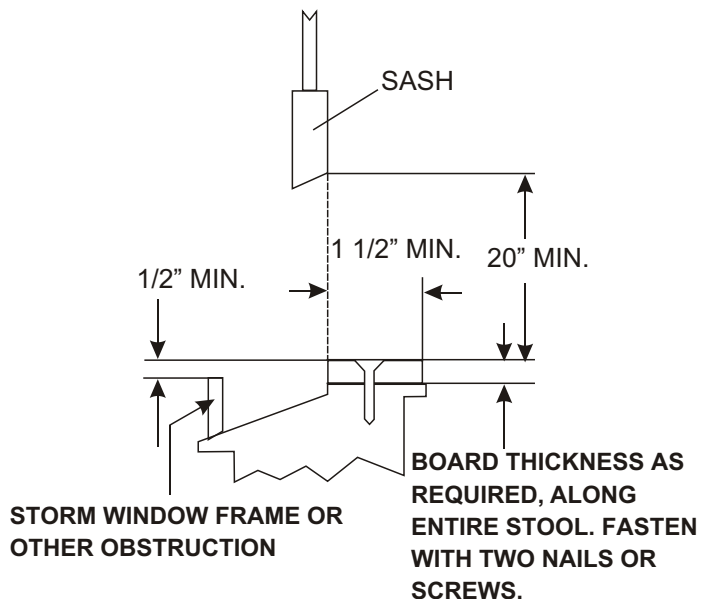
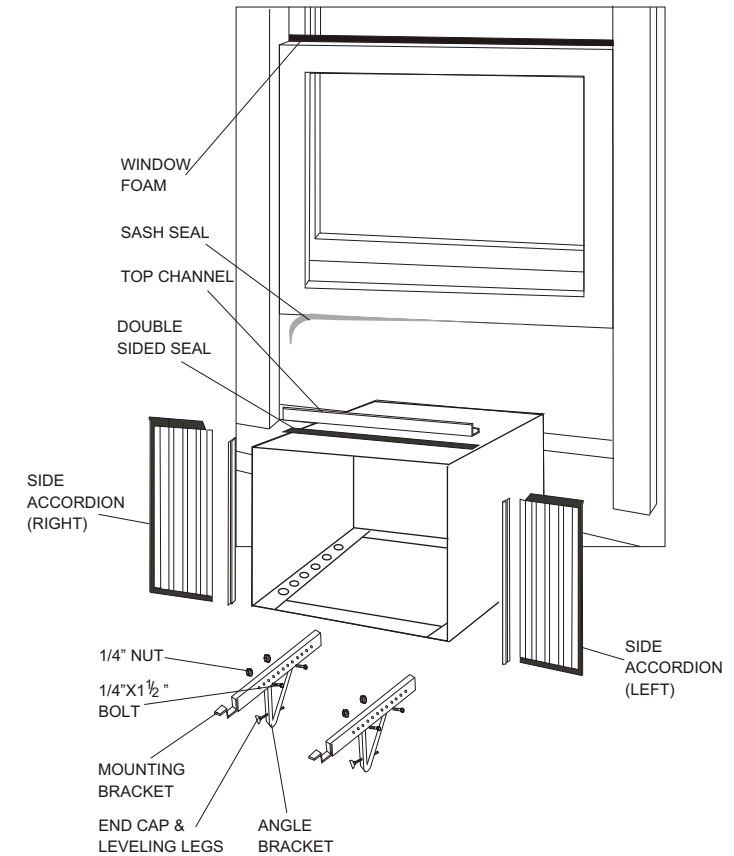


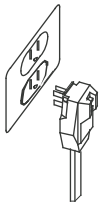
Fig. 2

4. CHECK FOR ANYTHING THAT COULD BLOCK AIRFLOW - check area outside of window for things such as shrubs, trees, or awnings. Inside, be sure furniture, drapes, or blinds will not stop proper airflow.

5. Check the available electrical service - power supply must be the same as that shown on the unit serial nameplate. (See Owner's Guide for serial plate location.) Power cord is 48" long. Be sure you have an outlet near. All models have a 3-prong service plug to provide proper service and safe positive grounding. Do not change plug in any way. Do not use an adapter plug or an extension cord. If your present wall outlet does not match your plug, call a qualified electrician to make the needed change.

⚠ WARNING Avoid fire hazard or electric shock. Do not use an extension cord or an adaptor plug. Do not remove any prong from the power cord.

Grounding type wall receptacle



Do not, under any circumstances, cut, remove, or bypass the grounding prong.

Power supply cord with 3-prong grounding plug and current detection device

Tools Required

- ✓ Flat blade screwdriver
- ✓ Tape measure
- ✓ Adjustable wrench or pliers
- ✓ Pencil
- ✓ Spirit level
- ✓ Socket wrenches
- ✓ Phillips screwdriver
- ✓ Power drill 1/8" bit
- ✓ Scissors

Installation Hardware

- 3/4" Screws (10)
- 1/4" Screws (23)
- Top Channel(1)
- Lock Washers(4)
- 1-1/2"x1/4 Bolts(4)
- 1/4" Nuts(4)
- Mounting Brackets(2)
- Angle Brackets(2)
- End Cap & Leveling Legs(2)
- Shutter Clamp(2)
- Gasket(10)
- Side Accordion RH(1)
- Side Accordion LH(1)
- Sash Seal(1)
- Double Sided Seal(1)
- Widow Foam (1)
- Drain Plug(Only for 25K and 28K models)

NOTE: Surplus screw(s) for spare use.

6. Carefully unpack air conditioner - remove all packing material. Protect floor or carpet from damage. Two people should be used to move and install unit.

Window Installation

⚠ CAUTION ⚠

Because the compressor is located on the controls side of the unit (right side), this side will be heavier and more awkward to manipulate. Inadequate support on control side of the unit can result in personal injury and damage to your unit and property. Therefore, it is recommended to have someone assist you during the installation of this unit.

1. Select the Best Location

A. Your room air conditioner was designed to fit easily into a single or double hung window. However, since window designs vary, it may be necessary to make some modifications for safe and proper installation.

B. Make sure window and frame is structurally sound and free from dry and rotted wood.

C. For maximum efficiency, install the air conditioner on side of the house or building which favors more shade than sunlight. If the unit is in direct sunlight, it is advisable to provide an awning over the unit.

D. Provide sufficient clearance around the cabinet to allow for ample air circulation through the unit. See (Fig.B). The rear of the unit should be outdoors and not in a garage nor inside of a building. Keep unit as far away as possible from obstacles and obstructions and at least 30" above the floor or ground. Curtains and other objects within a room should be prevented from blocking the air flow.

E. Be certain the proper electrical outlet is within reach of the installation. All wiring should be in accordance with local and national electrical codes.

F. Your unit was designed to evaporate condensation under normal conditions. However, under extreme humidity conditions, excess condensation may cause base pan to overflow to the outside. The unit should be installed where condensation run-off cannot drip on pedestrians or neighboring properties.

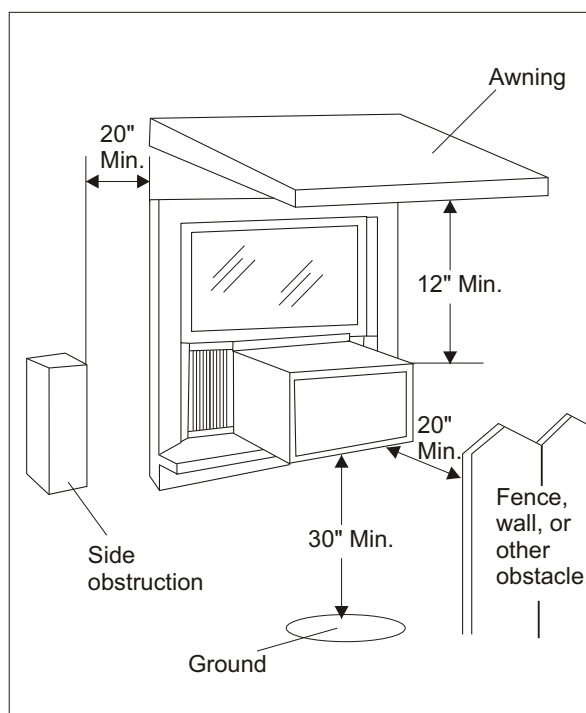


Fig.B

Window opening requirements (see table below)

Cabinet size (W*H*D)	26.5" *18.5" *26.9"
Min. Window opening	30"
Max. Window opening	44"

Window Installation

2. Preparation to Remove the Air Conditioner From Slide-Out Chassis

A. Place unit on floor, remove total of (4) Philips screws securing the chassis to the cabinet. There are (2) screws on each side. The set of screws closest to the front of the unit secure the front panel to the cabinet. The set of screws closest to the rear of the unit secure the cabinet to the chassis. See (Fig. 1).

NOTE: Screws must be reinstalled upon completion of the window installation to secure slide-out chassis.

B. Remove the front panel assembly from the cabinet by gently pulling it.

C. Grasp the pull handle at the front of the slide-out chassis and carefully slide the air conditioner out of the cabinet. See (Fig. 2).

NOTE: Avoid touching coil in case of injury or damage..

3. Assemble of the top channel to the cabinet

Stick the double sided seal to the top channel, and then Install it to the cabinet as shown in (Fig. 3) using (5) 1/4" screws.

4. Assemble of the accordions to the cabinet.

Slide the accordions into the top and bottom channels as shown in (Fig. 4). The accordions are identified (on each frame) as "left" & "right". Attach the accordions to the cabinet using (4) 1/4" screws on each side.

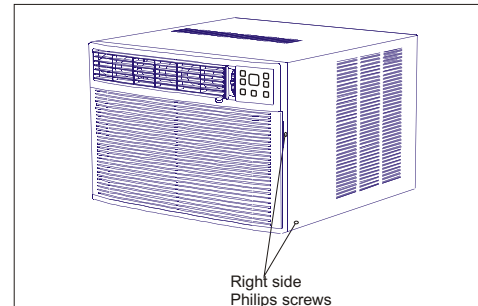


Fig. 1

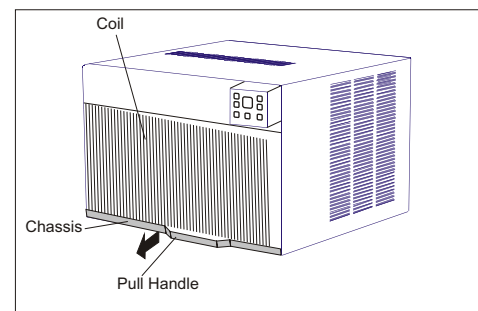


Fig. 2

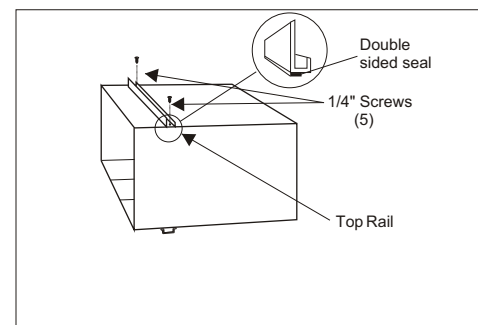


Fig. 3

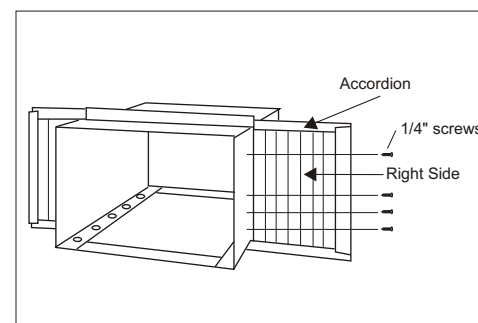


Fig. 4

Window Installation

5. Installation of Mounting Brackets and the Sealing Strip

NOTE: Windows come in a variety of different styles. Therefore, it may be necessary to modify or improve your particular installation.

A. Attach the **bracket assembly** to **90° angle support brackets** (*Fig. 5*) using (2) 1/4"X1 1/2" **bolts** two bolts per bracket. Secure with the (2) 1/4" **lock washers** and (2) 1/4" **nuts**. **DO NOT** immediately tighten these bolts as it may be necessary to adjust the depth of the **bracket assembly**, depending on the depth of your window sill. See (*Fig. 6*). Install the two **leveling screws** into the 90° support brackets. Test the bracket assembly in the window before cabinet installation. If the leveling screws are distanced too far away from the wall to provide stability, it may be necessary for you to shim this area with a solid piece of wood. See (*Fig. 7*).

B. For proper condensation run-off it will be necessary to adjust the angle/pitch of the window brackets. This is accomplished by adjusting the distance of the leveling screw on the outer wall. The maximum angle/pitch should not exceed more than 3/16". See (*Fig. 6*).

C. Measure the inside window sill width and find the center as shown in (*Fig. 8*), and measure 12 3/5" either side of the center line. Align the **V-slot** in each bracket on these marks and mount the brackets to the sill using **3/4" screws** provided. Brackets should be perpendicular to the inside window sill. See (*Fig. 8*).

D. Cut the **sash seal** to fit the underside of the bottom **window sash**. Remove the peel-off backing on the foam and attach it to this sash. See (*Fig. 9*).

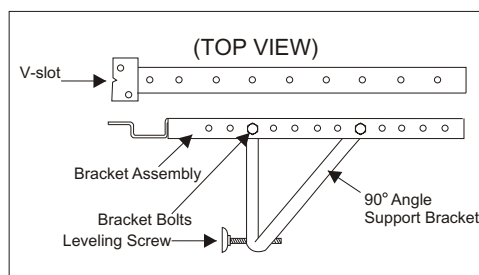


Fig. 5

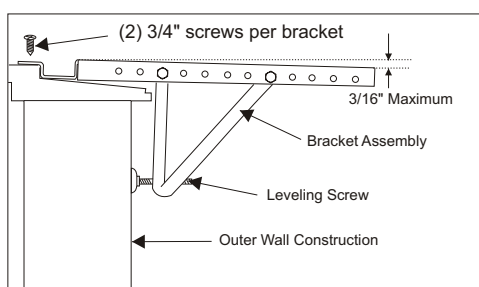


Fig. 6

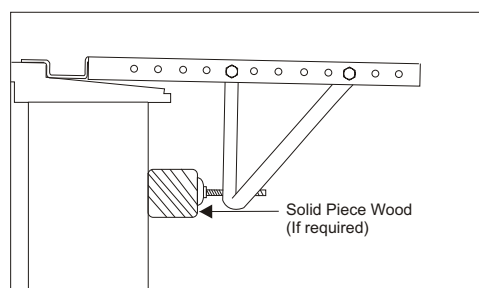


Fig. 7

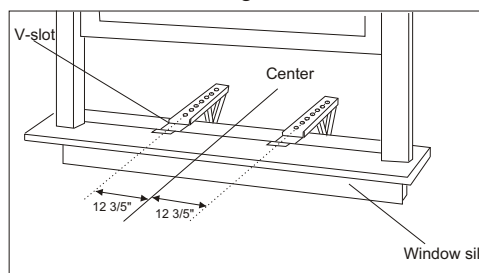


Fig. 8

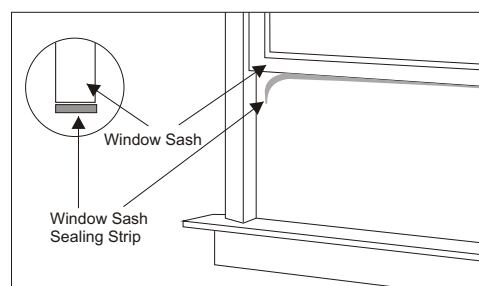


Fig. 9

CAUTION

Use a solid piece of wood to provide stability. This will be required when sills are extra deep. See (*Fig. 8*).

Window Installation

6. Installation of the cabinet

A. Align one hole in the bottom of the cabinet with one hole in the bracket assembly. Secure the cabinet to the bracket using (3) 1/4" screws provided. Repeat the same procedure on the opposite side of the cabinet. See (Fig. 10).

B. Ensure the top rail is positioned in front of the sash. The "U" shaped channel on the bottom of the cabinet should be positioned in the track provided on the bracket assembly. Pull the window down until it rests just behind the top rail. See (Fig. 11).

C. Check to make sure that the cabinet is slanted slightly downward on the outside. If necessary, re-adjust support bracket as shown in (Fig. 6).

NOTE: Secure all hardware.

7. Secure Accordions

A. Carefully slide the air conditioner back into the cabinet. (Please seek assistance for this procedure).

B. Reinstall the slide-out-chassis security screws (removed earlier) on both sides of the cabinet. See (Fig. 12).

Secure the top of the leave same to the window sash with (2) 3/4" screws.

C. Now, secure bottom frame of shutters using one accordion clamp and one 3/4" screw on each side (Fig. 12).

8. Reinstalling Front Panel Assembly

A. Position the front panel on the cabinet starting at the top. The front panel lock tabs must be inserted into the retaining slots in the cabinet. Repeat this procedure on all sides.

B. Secure the front grille to the cabinet using the Philips screws removed earlier (Fig. 1).

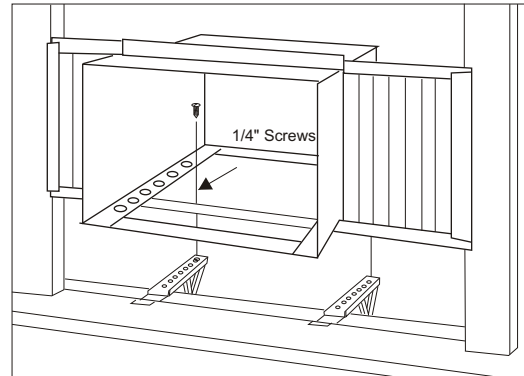


Fig. 10

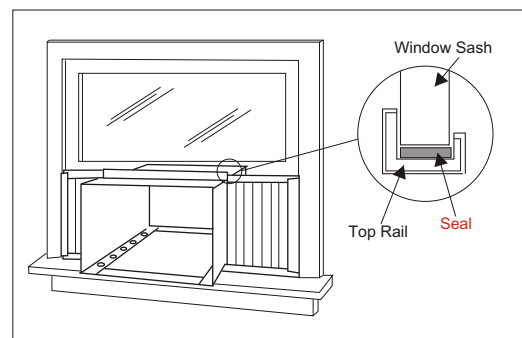


Fig. 11

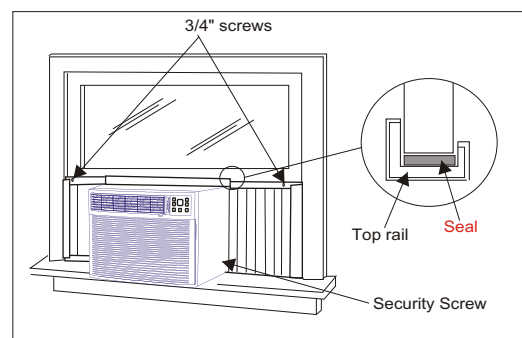


Fig. 12

Coil

Window Installation

9. Complete the installation

A. Cut the **foam** to fit the opening between the top of the inside and outside window.

See (Fig. 13).

B. Some installations may require additional sealing around the window and air conditioner. Check for any air leaks and seal where necessary.

C. For 25K and 28K models, the condensed water will maybe overflow the unit in highly humid areas. You may wish to install the **drain plug** underneath the base and attach a **drain hose (not included)** to the plug.

See (Fig. 14).

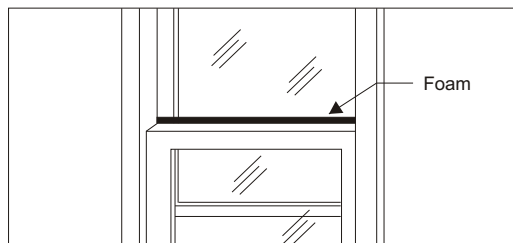


Fig. 13

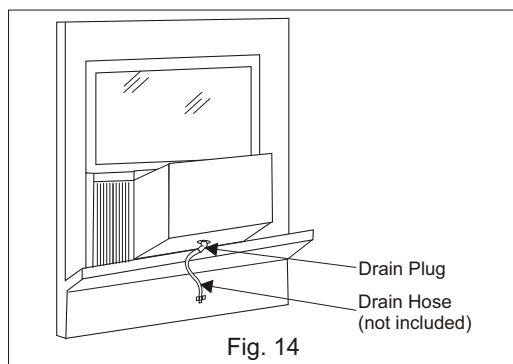


Fig. 14

Wall Installation

NOTE: Consult local building codes prior to installation, or a qualified carpenter.

Select Wall Location

This air conditioner has a slide-out chassis, so it can be installed through an outside wall up to 12" thick. **IMPORTANT:** Side louvers must never be blocked.

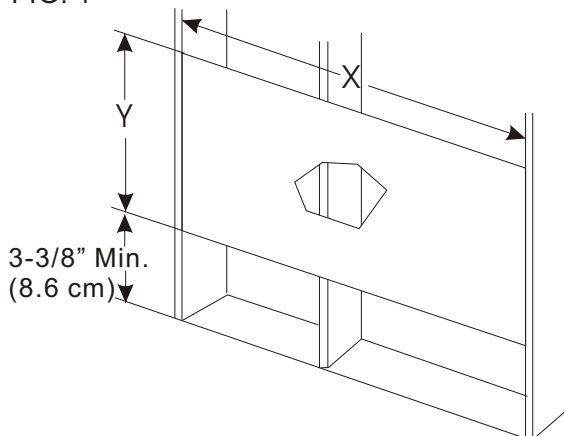
NOTE: All parts needed for Wall Installation are provided, except a wood frame, shims, and 10 wood screws (#10-1" long minimum). Select a wall surface that:

1. does not support major structural loads such as the frame construction at ends of windows, and under truss-bearing points, etc.
2. does not have plumbing or wiring inside.
3. is near existing electrical outlets, or where another outlet can be installed.
4. faces, and is not blocked to the area to be cooled.
5. allows unblocked airflow from rear sides and end (outside) of installed air conditioner.

Prepare Wall

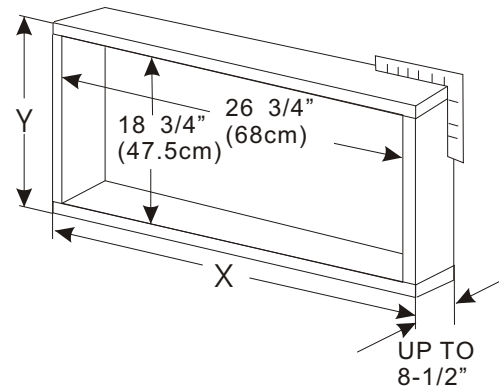
1. Prepare wall in frame construction (including brick and stucco veneer). Working from inside the room, find wall stud nearest the center of area where air conditioner will be installed (by sounding wall, or by magnetically finding nails).
2. Cut or knock out a hole on each side of center stud.
3. Measure between inside edges of every other stud as shown in FIG. 1.

FIG. 1



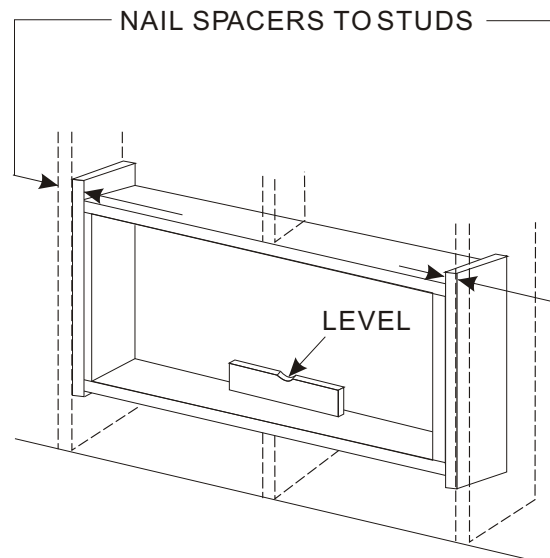
Carefully measure and cut an opening with the following dimensions. See FIGS. 1 and 2. WIDTH "X" = $26\frac{5}{8}$ " (68cm) plus twice the thickness of framing material used. HEIGHT "Y" = $18\frac{5}{8}$ " (47cm) plus twice the thickness of framing material used.

FIG. 2

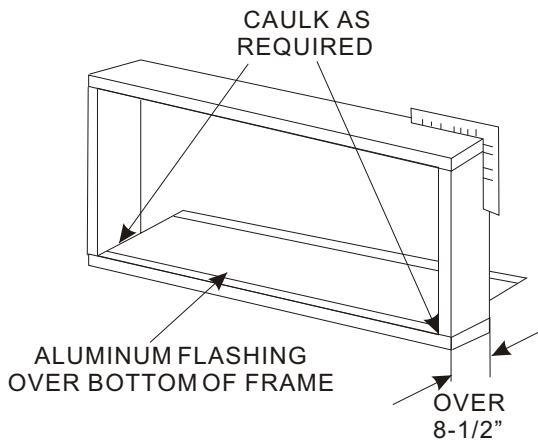


4. Build a wooden sleeve with the INSIDE dimensions of $26\frac{5}{8}$ " (68cm) in width and $18\frac{5}{8}$ " (47cm) in height. Frame depth should be the same as wall thickness. Fill in the space from the opening to the studs with wood spacers, as shown in FIG. 3.
5. Nail frame to spacers to studs with front flush with drywall.

FIG. 3

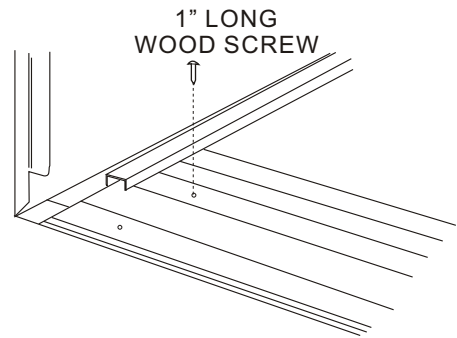


NOTE: If wall thickness is 8-1/2" or more, add aluminum flashing over bottom of frame opening to assure no water can enter area between inner and outer wall.



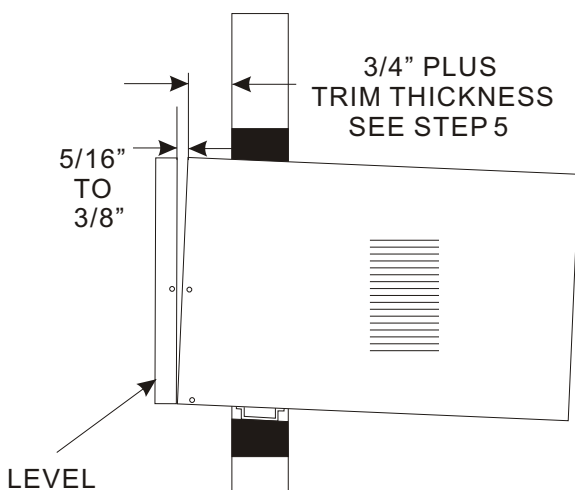
4. OPTIONAL: Support brackets may be used. Installation brackets are recommended for walls under 5" thick. Refer to Step 4 of Window Mounting for assembly of support brackets. A wooden strip nailed to the outside wall should be used in conjunction with sill support angle brackets.

FIG. 2

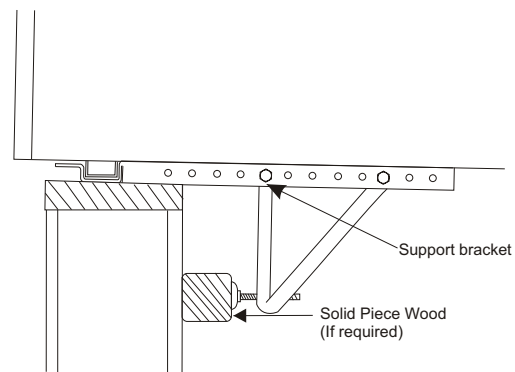


Prepare and Install Cabinet

1. Slide chassis from cabinet. Refer back to Step 2 of Window Mounting.
2. Place cabinet into opening with bottom rail resting firmly on bottom board of wooden frame.
3. Position cabinet to achieve proper slope for water removal. (See FIG. 1 below.)



5. Secure bottom rail to wood frame with two large wood screws 1" (2.5 cm) long using the two holes in the bottom of the channel resting on frame. (See FIG. 2 following)



6. Screw or nail cabinet wooden frame using shims if frame is oversized, to eliminate distortion. Remember to maintain proper slope as described in Step 3.

7. Install chassis into cabinet by following all steps in Step 8 of Window Mounting.

(Continued)

RECOMENDED: Caulking and installation of trim on interior wall may be done. You can buy wood from your local lumber or hardware supply. On the outside, caulk openings around top and sides of cabinet, and all sides of wood sleeve to the opening.

Masonry Construction

1. Cut or build a wall opening in the masonry wall similar to the frame construction (refer to Step 2 of Wall Installation for a wall thickness greater than 8-1/2").
2. Secure cabinet in place using masonry nails, or the right masonry anchor screws. (Another way to do this is to build an in-between frame of 2x4's as shown in the Step 2 Prepare Wall illustrations-but make it double framed on either side, and install between masonry wall opening and cabinet. Frame must be securely anchored to masonry wall opening) This way gives very good louver clearance on either side of cabinet.
3. Install a lintel to support masonry wall above cabinet. Existing holes in cabinet can be used and/or additional holes can be drilled to fasten cabinet at various positions. Be sure that side louver clearance is in accordance with Step 1 above.
4. Install exterior cabinet support brackets as shown in Step 2 of Wall Installation. Caulk or flash if need, to provide a wether-tight seal around top and sides of cabinet.
5. To complete installation, apply wood trim molding around room side projection of cabinet.