Shell Installation: Sash Window Installations

⚠WARNING

Falling Object Hazard

Not following Installation Instructions for mounting your air conditioner can result in property damage, injury, or death.

STEP 1 Check the window sill and frame to be sure they are in good condition and firmly anchored to the wall. Repair if necessary.

STEP 2 CABINET MOUNTING: Raise the lower window sash 1/4" more than the height of the cabinet. Carefully slide the cabinet through the open window until the sill plate channel rests behind the window sill and the top support angle rests against the window (See Figure D). Center the cabinet side to side and drill three (3) 5/32" diameter pilot holes into the window sill using the holes in the cabinet sill plate as a guide. Install three (3) #12A x 2" long screws (Item #4) (See Figure D).

Figure D

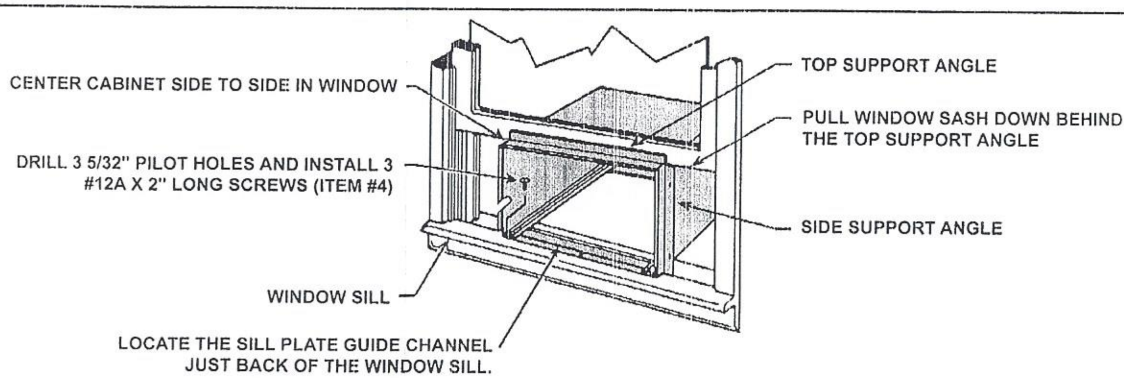
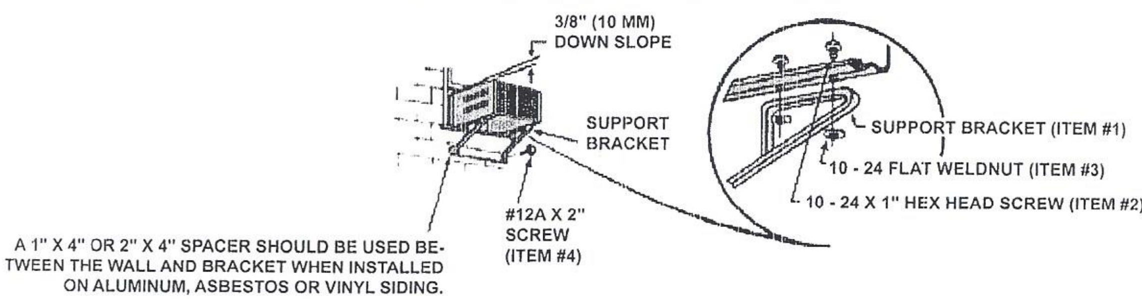


Figure E



STEP 3 OUTSIDE SUPPORT MOUNTING: Assemble the support brackets (Item #1) to the bottom rails of the cabinet with four (4) 10-24 1" long screws (Item #2) and four (4) 10–24 flat nuts (Item #3). Adjust the support brackets to bring the bottom pads in contact with the wall surface. (See Figure E.)

A 1" x 4" or 2" x 4" SPACER SHOULD BE USED BETWEEN THE WALL AND THE SUPPORT BRACKETS WHEN INSTALLED ON ALUMINUM OR VINYL SIDING). Drill 5/32" (4 mm) dia. pilot holes, and secure the brackets to the wall with two (2) #12A x 2" long screws (Item #4). Adjust the support brackets to provide an approximate 3/8" (10 mm) down slope towards the outside for drainage. Tighten all screws. (See Figure E).

Shell Installation: Thick Wall

The illustrations below show a standard frame construction installation as well as some suggested ways of adapting the support bracket to thick walls and large brick ledges.

NOTICE

Instructions for mounting sleeve with slope must be observed to prevent entry of water into room.
Failure to follow instructions can result in property damage.

Typical Installation Sill Plate

Figure 1

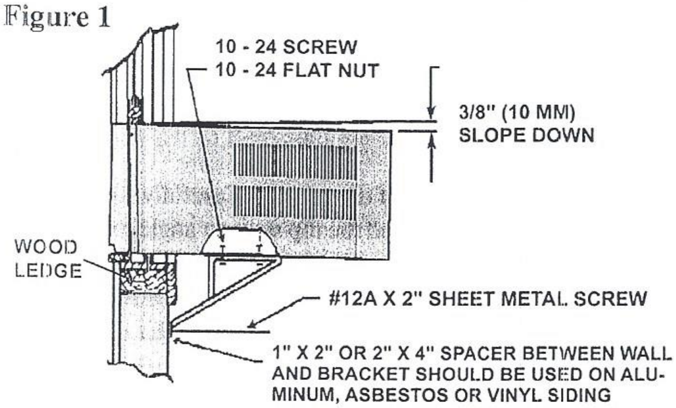


Figure 2

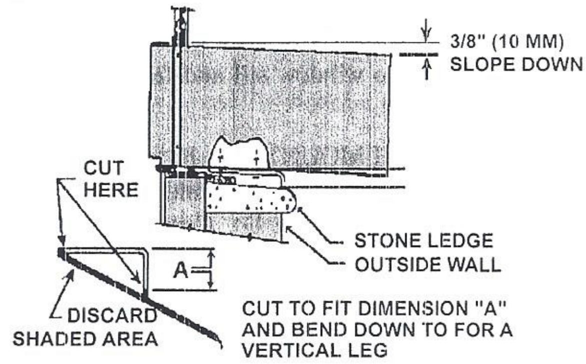


Figure 3

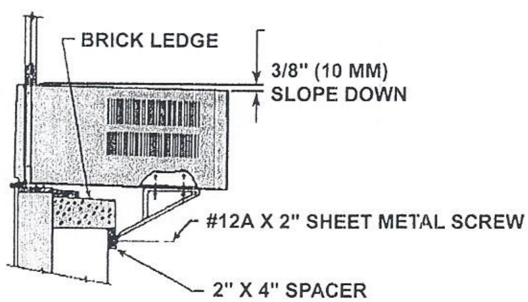
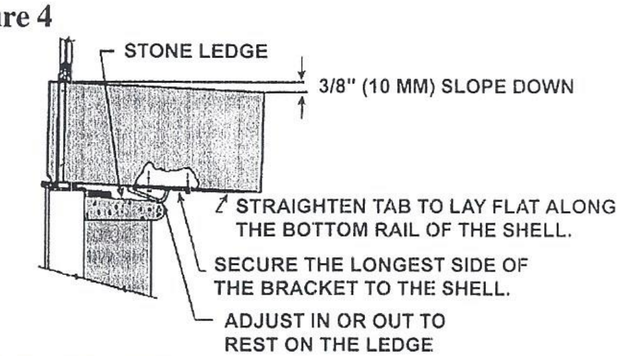


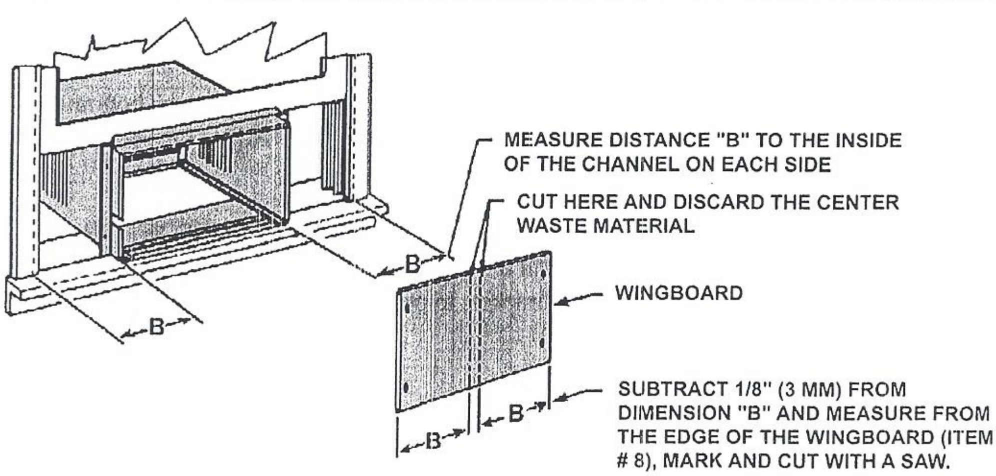
Figure 4



STEP 4 CUT WINGBOARD PANELS: Measure and cut the wingboard panels from the supplied masonite (Item #8) to fit the spaces between the side window channels and the sides of the cabinet (See Figure F).

NOTE: AFTER CUTTING PANELS, MAKE A TRIAL TEST TO SEE IF THEY FIT THE SPACE WITH ABOUT 1/8" CLEARANCE BEFORE GOING TO STEP 5.

Figure F



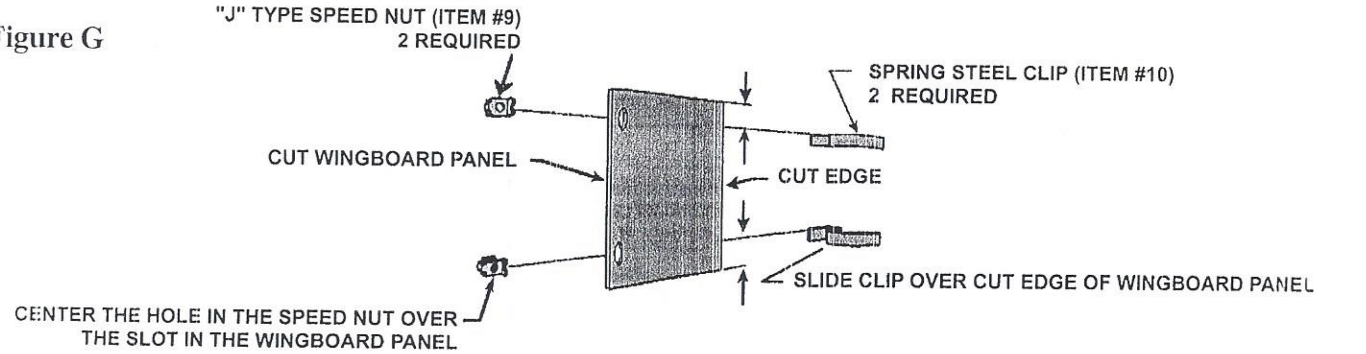


Figure G

STEP 5 ASSEMBLE CLIPS TO WINGBOARD PANELS: Assemble "J" type speed nuts (Item #9) and spring steel clips (Item #10) to the edges of the cut wingboard panels (See Figure G).

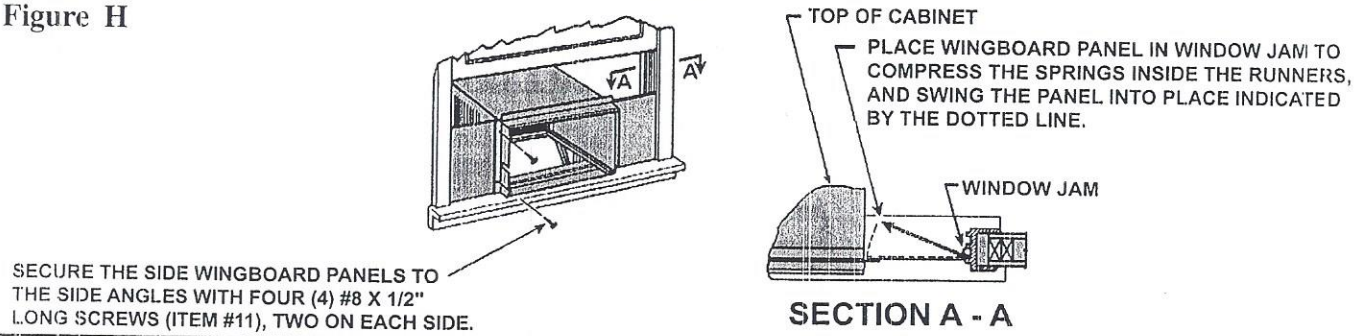


Figure H

STEP 6 INSTALL SIDE WINGBOARD PANELS: Be sure that the cabinet has been secured to the window sill and the outside support brackets have been installed as shown in Figures D and E on Page 10. Raise the window sash and install the right and left side wingboard panels (See Figure H).

STEP 7 INSTALL WINDOWSEALING GASKETS: Measure and cut the dark foam window seal gasket (Item#12) and install it between the upper glass panel and the top part of the lower sash (See Figure I).

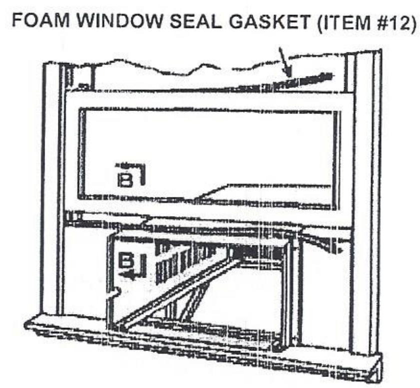


Figure I

NOTE: FOR REASONS OF SECURITY , THE CUSTOMER MUST PROVIDE A MEANS OF PREVENTING THE WINDOW FROM OPENING.

STEP 8 When possible, caulk the outside of the installation with industrial type caulking to prevent air and water leaks.

Shell Installation: Through-the-wall Installations

⚠WARNING

Falling Object Hazard

Not following Installation Instructions for mounting your air conditioner can result in property damage, injury, or death.

Wall Preparation

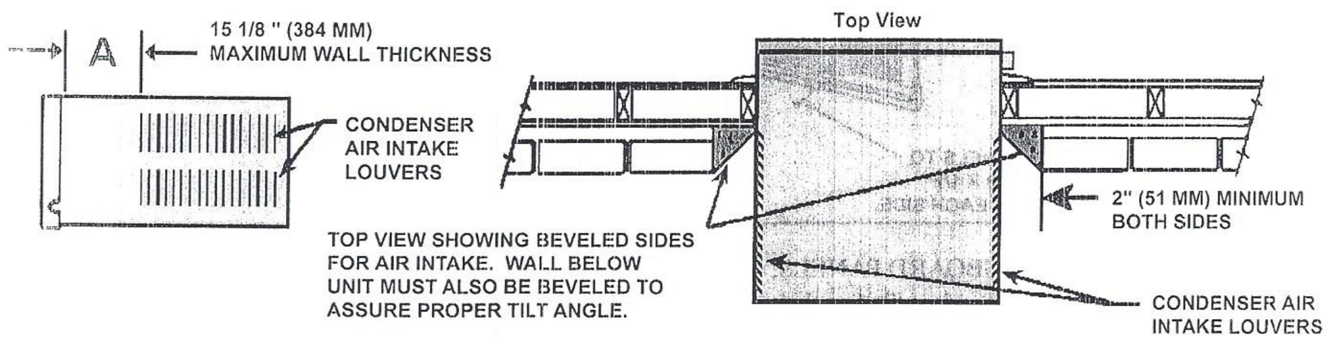
The maximum wall thickness permissible without special construction is determined by the model size to be installed. THE OUTSIDE CABINET CONDENSER AIR INTAKE LOUVERS MUST NOT BE BLOCKED BY EXTENDING INSIDE THE WALL AREA. Observe the maximum wall thickness shown as dimension "A" in Figure J.

Special Instructions For Extra Thick Walls

For installation in walls exceeding the maximum thickness shown as dimension A, the following suggested construction may apply. (See Figure J).

Figure J

EXTRA THICK WALL CONSTRUCTION

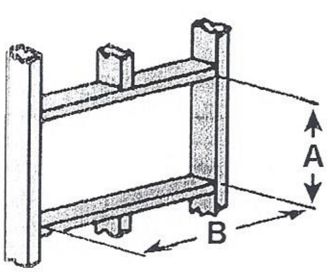


STEP 1 CHECKING WIRING AND PLUMBING: Check all wiring and plumbing inside and outside the wall to be sure none will be broken where the hole is to be cut.

STEP 2 HOLE CONSTRUCTION: Depending on the size of the unit to be installed, layout the hole dimensions in accordance with the chart below (See Figure K). Cut and frame in the hole to the finished dimensions. Use 2" x 4" material for framing and follow the suggested typical installations in Figure L, M or N on Page 14.

NOTE: IF THE WALL CONSTRUCTION IS TYPICAL FRAME OR 2 X 4 STUDDING WITH BRICK OR STONE VENEERS, LOCATE THE HOLE NEXT TO ONE OF THE STUDS. FOR MASONRY, CONCRETE OR CINDER BLOCK WALLS, LOCATE THE HOLE FOR CONVENIENCE.

Figure K

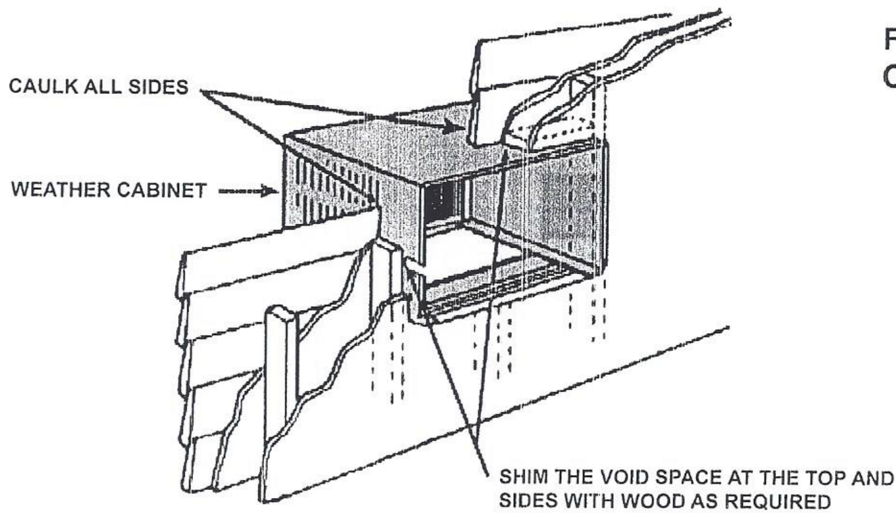


HOLE SIZE REQUIREMENTS

FINISHED DIMENSION	SH15 CHASSIS	SH20, SH24 CHASSIS
A	16-3/16"	18-3/16"
B	26-3/16"	26-3/16"

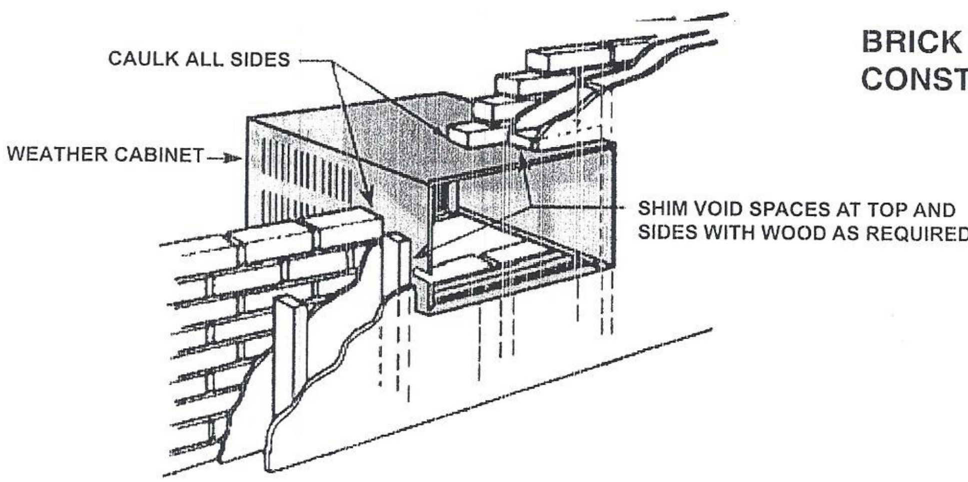
NOTE: THESE DIMENSIONS ARE FOR FINISHED HOLE SIZE

Figure L



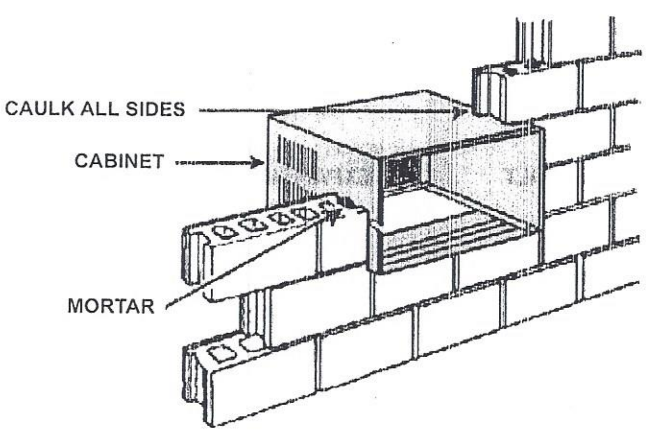
FRAME WALL CONSTRUCTION

Figure M



BRICK VENEER CONSTRUCTION

Figure N



SOLID MASONRY CONSTRUCTION

STEP 3 Slide the cabinet into the hole far enough to allow the guide-channel of the sill plate to contact the inside wall surface (See Figure O).

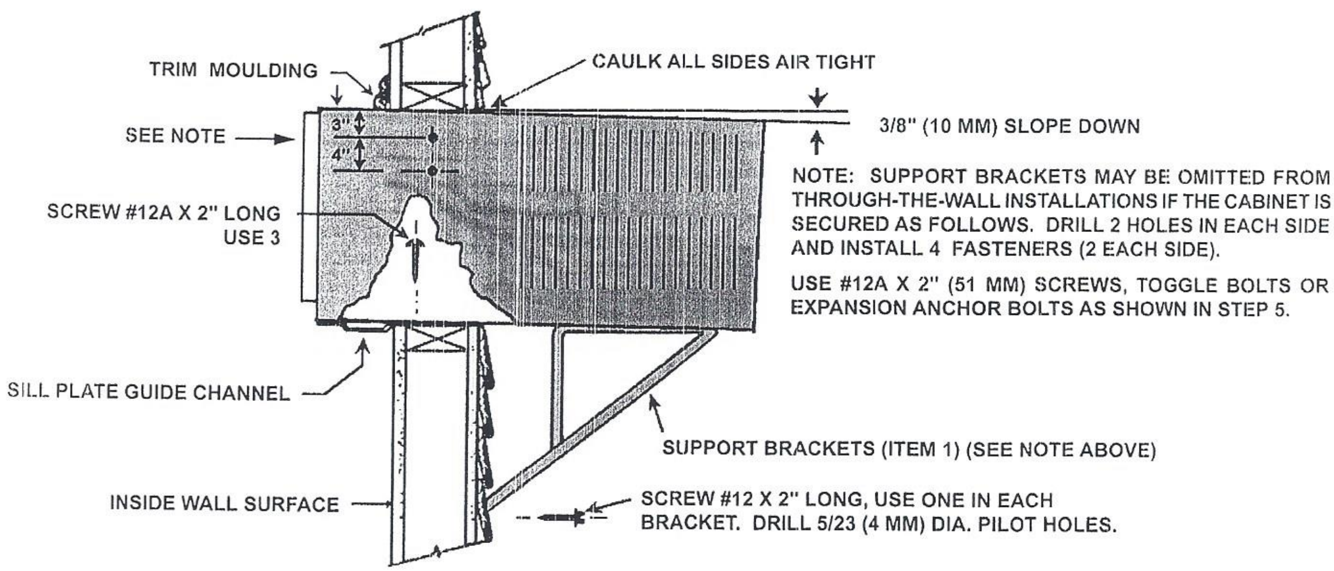
STEP 4 Drill three (3) 5/32" diameter pilot holes through holes in sill-plate into the framing and install three (3) #12 x 2" long screws (Item #4) (See Figure O).

NOTICE

Instructions for mounting sleeve with slope must be observed to prevent entry of water into room.
Potential property damage can occur if instructions are not followed.

Figure O

TYPICAL INSTALLATION



NOTE: ALTERNATE FASTENERS WHICH MAY BE USED FOR SECURING THE SILL PLATE IN THE WALL, AND THE SUPPORT BRACKETS TO THE OUTSIDE WALL ARE NOT FURNISHED, BUT ARE AVAILABLE AT A LOCAL HARDWARE STORE.

MOLLY OR TOGGLE BOLT **EXPANSION ANCHOR BOLT**

STEP 5 Drill two (2) 5/32" (4 mm) dia. pilot holes in each side at the locations shown (Figure O) and install four (4) #12 x 2" screws (Item #4). If the hole construction in Step 2 provides a sturdy mount with solid vertical studs, no support brackets are required. The installation must support the weight of the unit plus an additional weight of 400 pounds (185 kg) on the rear of the cabinet. The support brackets may be used for through-the-wall installations as shown in Figure O, for additional support.

STEP 6 If desired, trim around the cabinet on the room side with a suitable frame molding furnished by the installer (See Figure O).

Chassis Installation

STEP 1 Slide the chassis into the cabinet stopping approximately 3" from full insertion. Stuff the chassis seal gasket (Item # 14) one inch deep between the chassis and the cabinet (See Figure P). Begin at either bottom corner and go up the side, **across the top,** and down the opposite side. Make sure that the gasket is behind the conduit connector (furthest from you). Push the chassis into the shell the remaining distance so that the plastic front shrouds the front edge of the shell. Fasten the junction box mounting foot to the shell with the sheet metal screw.

If chassis seal gasket is not installed, the operation of the unit will be negatively affected. Also, the operation noise and outside noise will be amplified.

⚠CAUTION

Excessive Weight Hazard

Use two or more people when installing your air conditioner.

Failure to do so can result in back or other injury.

⚠CAUTION

Cut/Sever

Although great care has been taken to minimize sharp edges in the construction of your unit, use gloves or other hand protection when handling unit.

Failure to do so can result in minor to moderate personal injury.

⚠WARNING

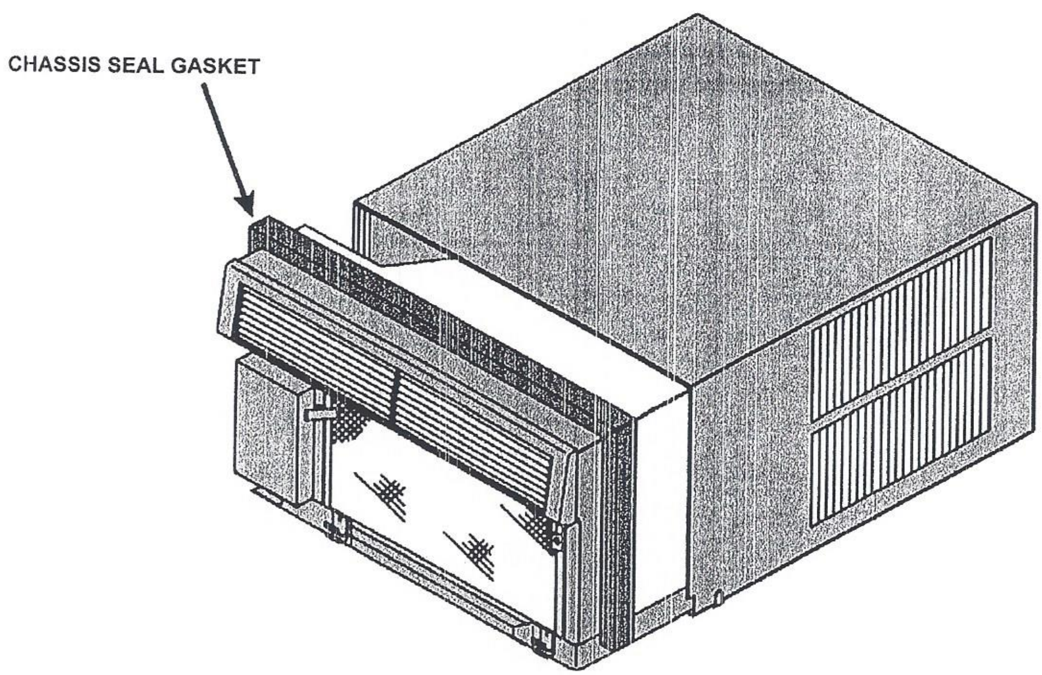
Explosion Hazard

Electrical Shock Hazard

Electrically connect unit in accordance with NEC Code Article 501. Failure to do so can result in death, explosion, fire, or electrical shock.

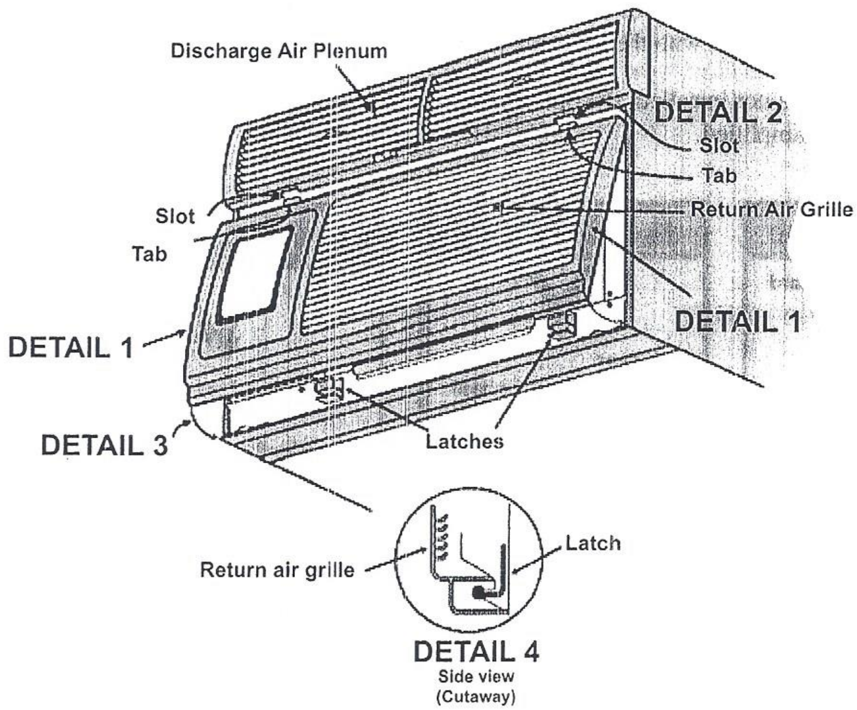
NOTE: Field wiring must be provided to this junction box in accordance with NATIONAL ELECTRIC CODE (NFPA 70, 2008 or current edition) ARTICLE 501. Field and equipment grounds are to be terminated at the post in the junction box with the green screw provided. Equipment power leads are to be connected with the field supply by means of wire nuts (not provided). Install the gasket and cover plate onto the junction box.

Figure P



STEP 2 Be sure that the filter is in place then install the return air grille (See Figure Q). The top of the return air grille can be butted against the bottom of the discharge plenum. Snap the grille into place by pushing the grille up and onto the unit's latches at the bottom. (See Detail 4).

Figure Q



STEP 3 You have completed your installation. Conduct a review of your installation to insure that the unit is safely and securely installed.

End of Life – Customers are advised to ensure that the unit is disposed of in accordance with federal, state and local guidelines of their country. Contact your municipal department of public works to inquire about the procedures for collecting and disposing of refrigerated appliances / air conditioners in your neighborhood.

FRIEDRICH

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HAZARDGARD®
ROOM AIR CONDITIONERS
LIMITED WARRANTY

LIMITED ONE YEAR PARTS WARRANTY

1. **Limited warranty – One year.** Friedrich warrants that it will provide a replacement for any part of this HazardGard Room Air Conditioner found defective in material or workmanship for a period of one (1) year from the date of original purchase.

2. **Limited warranty – One year.** The Friedrich warranty also covers the cost of labor for repairing any compressor, condenser, evaporator or inter-connecting tubing found defective within the warranty period, providing the unit is returned to an authorized Friedrich Repair Station located within the Continental United States.

The Friedrich warranty does not cover:

(1) Any charges for removal, transportation or reinstallation of the unit; (2) the cost of labor to replace parts other than those described above; and (3) does not apply to any HazardGard Room Air Conditioner that has been subject to (a) accident, misuse, flood, fire, or neglect; (b) repairs or alterations outside of the Friedrich Authorized Dealer or Service Center so as to affect adversely its performance and reliability; or (c) any repairs or servicing as a result of using parts not sold or approved by Friedrich.

LIMITATIONS: This warranty is a LIMITED warranty. Anything in the warranty notwithstanding, IMPLIED WARRANTIES FOR PARTICULAR PURPOSE AND MERCHANTABILITY SHALL BE LIMITED TO THE DURATION OF THE EXPRESS WARRANTY. MANUFACTURER EXPRESSLY DISCLAIMS AND EXCLUDES ANY LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF ANY EXPRESSED OR IMPLIED WARRANTY.

Performance of Friedrich's Warranty obligation is limited to one of the following methods:

1. Repair of the unit
2. A refund to the customer for the prorated value of the unit based upon the remaining warranty period of the unit.
3. Providing a replacemehunit of equal value

The method of fulfillment of the warranty obligation is at the sole discretion of Friedrich Air Conditioning.

FRIEDRICH

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INTERNATIONAL LIMITED WARRANTY

TERMS OF LIMITED WARRANTY

Friedrich Air Conditioning Co. warrants to the original purchaser that this Friedrich Air Conditioner is free from defects as to material and workmanship.

This Warranty pertains to such manufacturing defects as may develop through normal usage and is in effect for a period of 12 months from date of installation or 18 months from the original date of purchase (date of invoice), whichever date shall occur first. The Company's obligation under this Warranty is limited to furnishing (FOB San Antonio, Texas – no freight allowed), at its option, either a suitable replacement part or a remanufactured part or assembly for the sole purpose of replacing any part or parts which may be defective. All such warranty claims shall be directed through an authorized Friedrich Distributor/Dealer. Friedrich reserves the right to have the defective part returned to Friedrich for examination at the customer's expense.
This Warranty does not apply to air filters, fuses, cabinet enclosures, refrigerant charge, and damage to any part resulting from installation not in accordance with manufacturer's recommendations; nor does it apply to exterior finishes, except where examination discloses that same was defective at the time of initial shipment. This Warranty also does not apply to a Friedrich Air Conditioner, or any part thereof, which has been subject to misuse, neglect, alteration, accident, flood, fire, or Act of God. No warranty shall apply if the product has been used on electrical circuits of voltage and cycle characteristics other than specified on the model and serial number plate.

GENERAL TERMS

The furnishing of replacement parts as described above shall constitute complete fulfillment of all obligations with respect to the Friedrich Air Conditioner. Under no circumstances does Friedrich assume any responsibility for service, labor costs, or transportation charges. THESE WARRANTIES ARE GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.