

**INSTALLATION INSTRUCTIONS FOR ROOF MOUNTING FRAME (LB-110352A & 603759-01; 13W27 & 52W24) USED WITH TG/TC/TH/KG/KC/KH/LGH/LCH 024-090 UNITS**

**Packing List**

- 2- Sides
- 2- Ends
- 3- Cross supports
- 2- Supply and return air supports
- 1- Bag assembly containing 40 screws

Check parts for shipping damage. Receiving party should contact last carrier immediately if shipping damage is found.

**Application**

The roof mounting frame provides support when units are installed in downflow rooftop applications. See table 1.

The mounting frame can be installed directly on deck having adequate structural strength or on roof supports under deck. See figure 1 for frame dimensions, location of supply and return air openings, and location of cross supports for supply and return air transitions. See figure 2 for service clearance dimensions.

*NOTE-Frame assembly must be installed level within 1/16" per linear foot in any direction.*

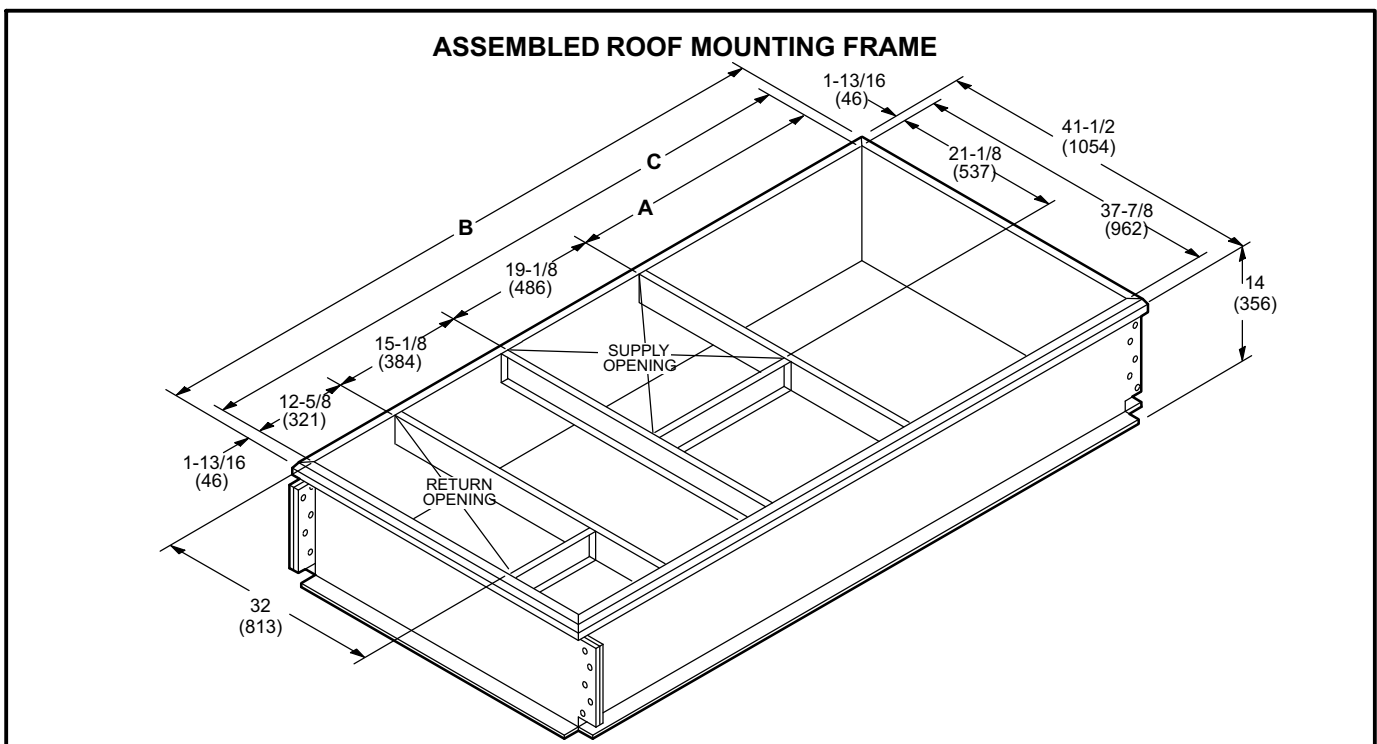
**⚠ WARNING**

**Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Installation and service must be performed by a qualified installer, service agency or the gas supplier**

**TABLE 1**

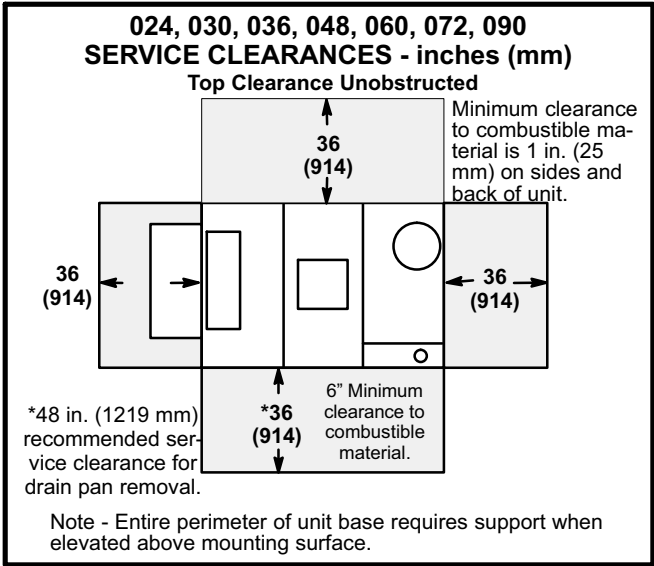
Cat. No.	Model No.	Dimensions in. (mm)		
		A	B	C
13W27	KH 024, 030, 036, 048, 060, 1072 TG/TC/TH/KG/KC 024, 030, 036, 048, 060, 072, 1090 LGH/LCH048, 060, 072	29-1/4 (743)	79-3/4 (2026)	76-1/8 (1934)
52W24	KC/KG 090; KH 072	42-1/4 (1073)	92-3/4 (2356)	89-1/8 (2264)

<sup>1</sup> Models can be used on smaller 79-3/4 in. (2026 mm) roof curbs (not full perimeter) with 15-3/4 in. (400 mm) overhang at condenser end of unit.



**FIGURE 1**





**FIGURE 2**

**Securing Frame**

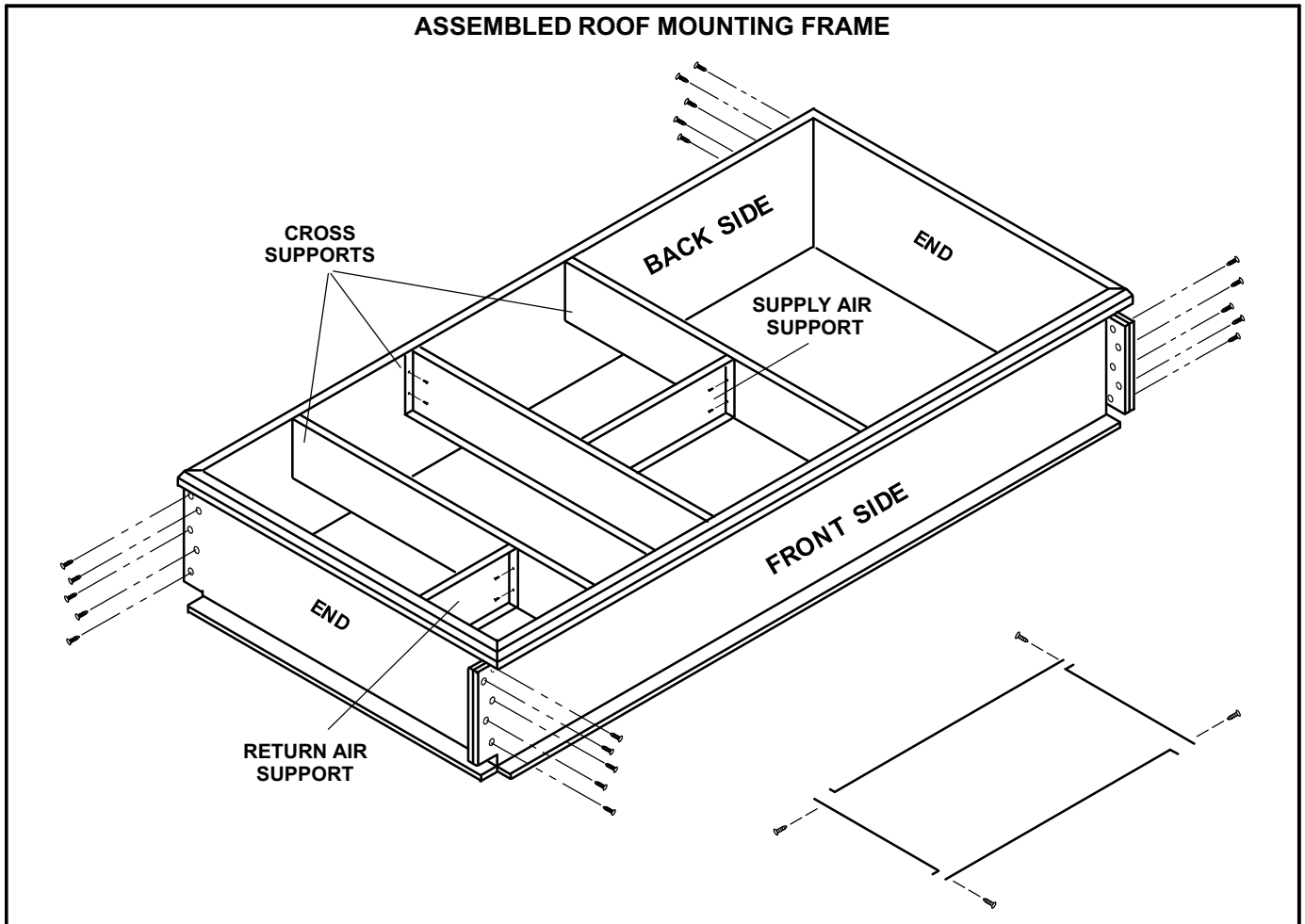
To assure proper mating with units, it is mandatory the mounting frame be squared to roof structure as follows:

- 1- With frame situated level in desired location on roof trusses, tack weld (1) corner of frame.
- 2- Measure frame diagonally from corner to corner as shown in figure 4. These dimensions must be equal for frame to be square.
- 3- It is extremely important to sight frame from all corners to make certain frame is not twisted across top side. Shim frame under any low sides. Maximum slope tolerance is 1/16" per linear foot in any direction.
- 4- After frame has been squared, straightened and shimmed, weld or attach frame securely to roof deck.

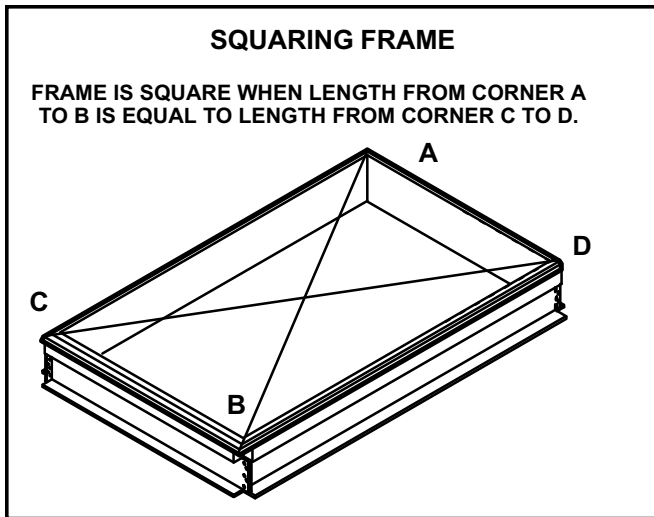
*NOTE - Securely fasten roof frame to roof per local codes.*

**Frame Assembly**

Assemble frame as illustrated in figure 3.



**FIGURE 3**

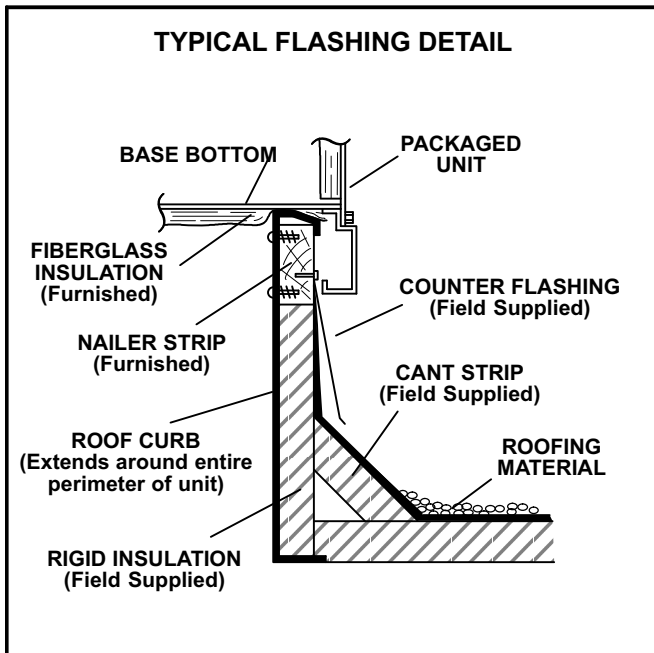


**FIGURE 4**

**Curbing and Flashing**

- 1- Outside of frame should be insulated with rigid type insulation, preferably 2" (51 mm) thick. Do not use combustible material for filling around frame.
- 2- Counter-flash and seal around frame as shown in figure 5.

*IMPORTANT-If a poured roof is used, such as concrete, be sure inside of mounting frame is adequately braced to ensure a square and level frame.*



**FIGURE 5**

**Miscellaneous**

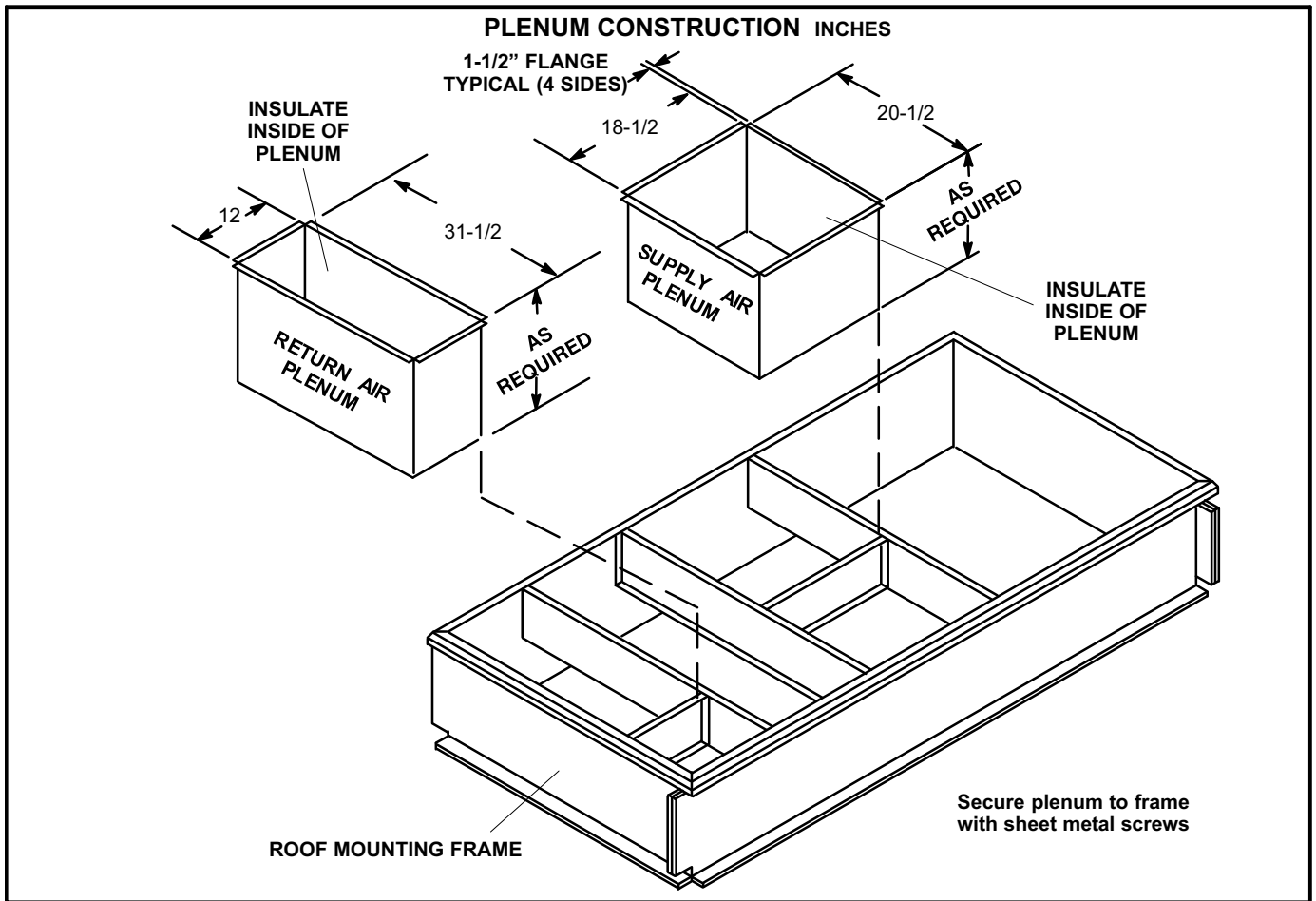
- 1- Where pipes and electrical conduit extend through roof, flashing must conform to National Roofing Contractors Association (NRCA) Standards.
- 2- Roof walkways should be provided around equipment to facilitate servicing.

**Supply and Return Plenum**

*IMPORTANT-Plenum system must be installed before unit is set on mounting frame.*

Plenums must be constructed of galvanized steel with coated fiberglass insulation applied to the inside. It is recommended that 1/2" (13 mm) thick, 3 lb./ft<sup>3</sup> (48 kg/m<sup>3</sup>) density fiberglass insulation be used.

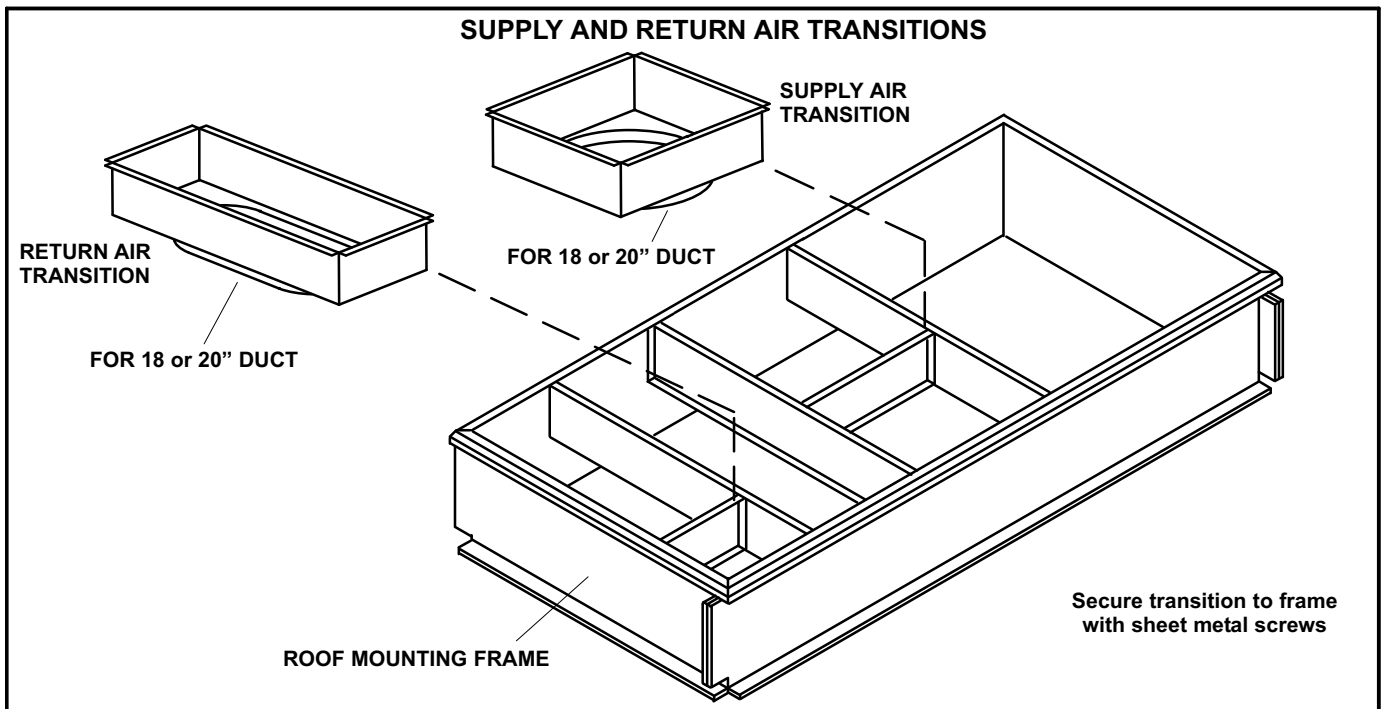
However, if 1-1/2 lb./ft<sup>3</sup> (24 kg/m<sup>3</sup>) density insulation is used, it should be secured with mechanical fasteners. Install plenums as shown in figure 6.



**FIGURE 6**

**Supply and Return Air Transitions**

Supply and return air transitions are shown in figure 7.



**FIGURE 7**