

# 48/50 Series Accessory Roof Curbs

## Installation Instructions

#### Usage

UNIT	ROOF CURB ACCESSORY PACKAGE NO.	NOMINAL ROOF CURB HEIGHT (in. )
48/50DJ,LJ004,005,006,007 50LJQ,QJ004,005,006	50DJ900771	14
48/50DJ,LJ004,005,006,007 50LJQ,QJ004,005,006	50DJ900781	24
48/50DJ,LJ008,009,012,014 50LJQ,QJ008,009,012	50DJ901371	14
48/50DJ,LJ008,009,012,014 50LJQ,QJ008,009,012	50DJ901381	24

#### **GENERAL**

Each accessory package contains these components. (Depending on accessory, some components may not be used. Discard the unused components.)

- 2 Roof Curb End Rails
- 2 Roof Curb Side Rails
- 3 Insulated Panels
- 3 Duct Support Beams
- 4 Corner Brackets
- 1 Sealing Gasket
- 1 Hardware Package (consisting of nuts, bolts, screws and washers)

Accessory roof curb packages listed above may be used with accessory thru-the-curb service connections. These connections allow gas piping, power and control wiring to be routed through the curb to reduce the number of roof penetrations. Thru-the-curb service connection packages are used as follows:

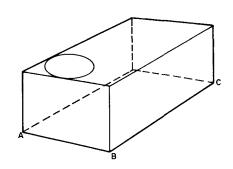
UNIT	CONNECTION PACKAGE
48DJ,LJ004-007	50DJ900791
50DJ,LJ004-007, 50LJQ,QJ004-006	50DJ900801
48DJ,LJ008-014	50DJ901551
50DJ,LJ008-014, 50LJQ,QJ008-012	50DJ901311

### **A** CAUTION

To prevent injuries and rain damage, do not leave roof opening uncovered. If installation is not completed immediately after roof opening is cut and framed, provide an adequate temporary cover for the roof opening.

Table 1 — Unit Leveling Tolerances

UNIT	MAXIMUM ALLOWABLE DIFFERENCE (in.)		
	A-B	B-C	A-C
48/50DJ,LJ004-014 50LJQ,QJ004-006,008-012	0.5	10	10



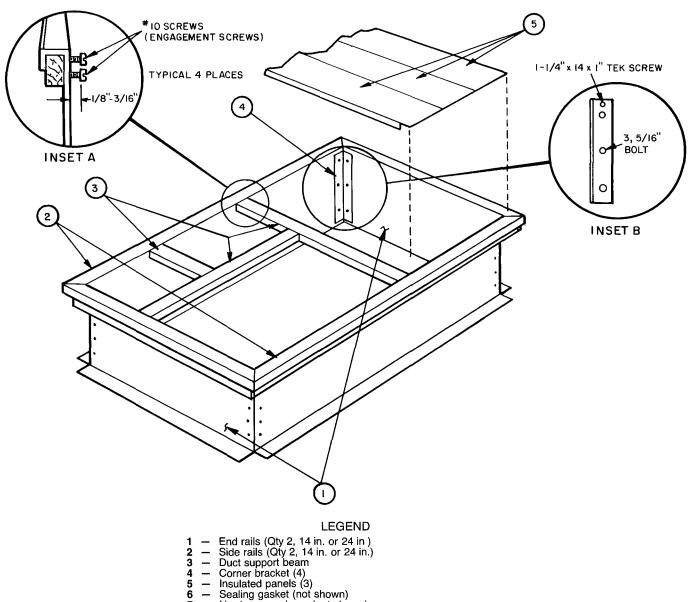
#### INSTALLATION

Before installing roof curb, be sure curb is located so that all required clearances are maintained. Check unit nameplate or unit installation instructions for correct clearances.

NOTE: Refer to Fig. 1 for item numbers.

- 1. Cut hole in the roof for duct openings. See Fig. 2 or 3. It is not necessary to cut out the entire inside area of the roof curb. If electrical or gas connections are to be made through the curb, cut out access space near the location of the utility mounting plate.
- 2. Frame the roof opening to provide proper structural strength.
- 3. Assemble roof curb:
  - a. Bolt side rails (item 2) and end rails (item 1) together, using corner bracket (item 4) and the 5/16-in. hex head bolts, plain washer, lock washer and nuts. Bolt head should be on the inside of the curb. All screws, nuts, bolts and washers are found in the hardware package (item 7) shipped with the curb.

- b. Install a TEK sheet metal screw in the pilot holes provided at the top of the curb on the side rails (item 2) and end rails (item 1). Screws should go through curb into wood nailer.
- c. Use two #10 sheet metal screws at each joint for the duct support rails (item 3). Insert screw in the hole provided, leaving head of screw sticking out (see Inset A, Fig. 1). Insert the slotted end of the duct support rails (item 3) over the screws and tighten as necessary.
- d. Interlock the 3 insulated panels (item 5) together with the reverse standing seam provided.
- e. Install the insulated panels (item 5) in place allowing flanged portion of panels to rest on the top curb flange.
- 4. Square up curb and locate properly over the roof penetrations for duct openings. Level curb by placing shims (thin pieces of wood or metal) under the bottom flange of the curb. Leveling tolerances are shown in Table 1. Secure curb in place by welding or screwing to roof deck.



Hardware package (not shown)

Fig. 1 — Roof Curb Installation

(S)

- 5. Install duct and attach to roof curb. Ducts must be in place before unit is set on roof curb.
- If accessory utility connection package is to be used, it should be attached to the roof curb at this time. Instructions are shipped with the accessory utility connection package.
- 7. Weatherproof curb:
  - a. Insulate outside of curb space between roof material and curb to prevent moisture from forming on the curb sides. See Fig. 2 and 3.
  - b. Insert top edge of roofing and flashing material between wood nailer strip and curb flange. Nail material to nail strips as required.
- 8. Glue sealing gasket (item 6) to the top of the curb and duct support rails. When installed, the weight of the unit will compress the gasket to seal the joint between the unit and the curb. Gasket strips must fit perfectly together.

IMPORTANT: The gasketing for the unit to the roof curb is critical for water integrity. Install gasketing material with the roof curb as shown in Fig. 2 and 3. Improperly applied gasketing can also result in air leaks and poor unit performance.

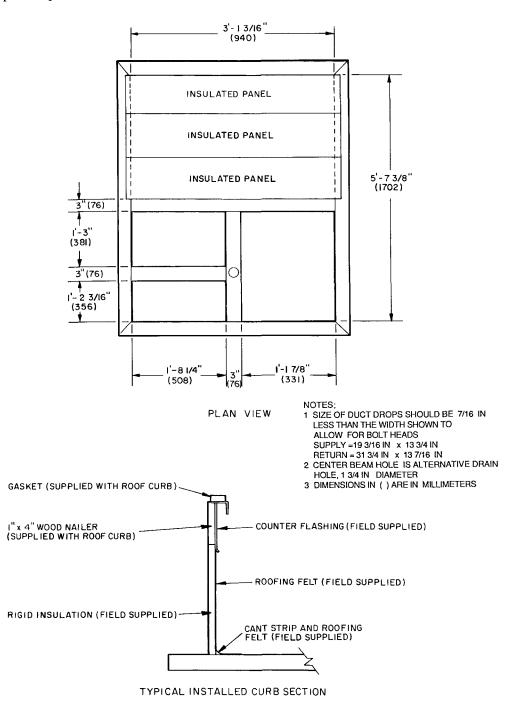


Fig. 2 - Roof Curb Details, Sizes 004-007

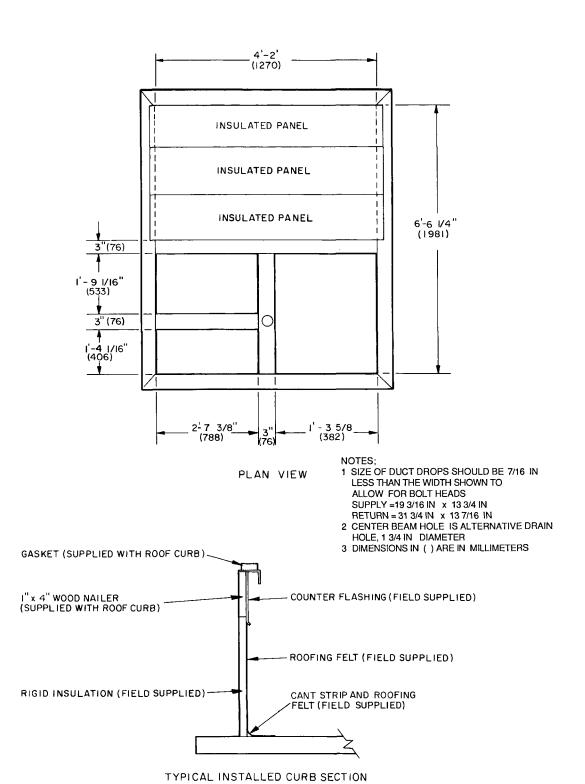


Fig. 3 Roof Curb Details, Sizes 008 - 014

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