Installation Instructions

Usage

<table>
<thead>
<tr>
<th>UNIT</th>
<th>ROOF CURB ACCESSORY PACKAGE NO.</th>
<th>NOMINAL ROOF CURB HEIGHT (IN.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>48/50DJ,LJ004,005,006,007 50LJQ,QJ004,005,006</td>
<td>50DJ900771</td>
<td>14</td>
</tr>
<tr>
<td>48/50DJ,LJ004,005,006,007 50LJQ,QJ004,005,006</td>
<td>50DJ900781</td>
<td>24</td>
</tr>
<tr>
<td>48/50DJ,LJ006,009,012,014 50LJQ,QJ006,009,012</td>
<td>50DJ901371</td>
<td>14</td>
</tr>
<tr>
<td>48/50DJ,LJ006,009,012,014 50LJQ,QJ006,009,012</td>
<td>50DJ901381</td>
<td>24</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>UNIT</th>
<th>CONNECTION PACKAGE</th>
</tr>
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<tbody>
<tr>
<td>48DJ,LJ004-007</td>
<td>50DJ900791</td>
</tr>
<tr>
<td>50DJ,LJ004-007, 50LJQ,QJ004-006</td>
<td>50DJ900801</td>
</tr>
<tr>
<td>48DJ,LJ006-014</td>
<td>50DJ901551</td>
</tr>
<tr>
<td>50DJ,LJ008-014, 50LJQ,QJ008-012</td>
<td>50DJ901311</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>UNIT</th>
<th>MAXIMUM ALLOWABLE DIFFERENCE (IN.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>48/50DJ,LJ004-014 50LJQ,QJ004-006,008-012</td>
<td>A-B  B-C  A-C</td>
</tr>
<tr>
<td></td>
<td>0.5    1.0  1.0</td>
</tr>
</tbody>
</table>
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 3/16-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.

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Fig. 1 — Roof Curb Installation

Legend:

1 — End rails (Qty 2, 14 in. or 24 in.)
2 — Side rails (Qty 2, 14 in. or 24 in.)
3 — Duct support beam
4 — Corner bracket (4)
5 — Insulated panels (3)
6 — Sealing gasket (not shown)
7 — Hardware package (not shown)
5. Install duct and attach to roof curb. Ducts must be in place before unit is set on roof curb.

6. 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.

Plan View

Notes:
1. Size of duct drops should be 7/16 in less than the width shown to allow for bolt heads.
2. Center beam hole is alternative drain hole, 1 3/4 in diameter.
3. Dimensions in ( ) are in millimeters.

Fig. 2 — Roof Curb Details, Sizes 004-007
Fig. 3 Roof Curb Details, Sizes 008 - 014

NOTES:
1. SIZE OF DUCT DROPS SHOULD BE 7/16 IN
   LESS THAN THE WIDTH SHOWN TO
   ALLOW FOR BOLT HEADS
   SUPPLY - 19 3/16 IN x 13 3/4 IN
   RETURN - 31 3/4 IN x 13 7/16 IN
2. CENTER BEAM HOLE IS ALTERNATIVE DRAIN
   HOLES, 1 3/4 IN DIAMETER
3. DIMENSIONS IN () ARE IN MILLIMETERS

GASKET (SUPPLIED WITH ROOF CURB)

1" x 4" WOOD NAILE (SUPPLIED WITH ROOF CURB)

COUNTER FLASHING (FIELD SUPPLIED)

ROOFING FELT (FIELD SUPPLIED)

RIGID INSULATION (FIELD SUPPLIED)

CANT STRIP AND ROOFING
FELT (FIELD SUPPLIED)

TYPICAL INSTALLED CURB SECTION