

Product Model Literature Type

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New



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This booklet covers the rooftop curb listed for the 1 - 1/2 thru 3 ton models only SINGLE PACKAGE UNITS.

These instructions are organized for an easy step-by-step prodecure.

The CRB-I213-14 FULL PERIMETER ROOF MOUNTING CURB (or Frame) is to be field assembled with insulation on side and end rails. See page 1.

# **GENERAL - LOCATIONS AND RECOMMENDATIONS**

These instructions do not purport to cover all variations in systems nor to provide for every possible contingency to be met in commection with installation. Should further information be desired or should particular porblems arise which are not covered sufficiently for the purchaser's purposes, the matter should be refered to the manufacturer.

Check for transportation damage after kit is uncrated. Report promptly, to the carrier, any damage found to the kit.

1. Adequate support must be provided beneath the roof mounting curb for the entire length of the curb. The total weight of the unit, curb, and duct, plus any accessories, must be considered when selecting and placing the curb on the roof.

2. Be sure location of the roof mounting curb will allow needed service clearance around unit when the unit is in plase. (As illustrated).

**3.** Roof Mounting Curb (frame) must be installed on a flat, level section of the roof (maximum of 1/4" per foot pitch), providing a level mounting surface for the unit, even though the roof is not level. If the pitch of the roof exceeds 1/4" per foot, it will be neccessary for the contractor to construct a subbase on which to install the roof mounting curb level.

For instructions related to the Single Package Unit, refer to the instruc-

**NOTE:** The roof mounting curb (frame) not only provides support for the unit, but permits easy penetration of the roof for the connecting

ductwork. The roof mounting curb provides for proper flashing and

sealing by the roofing contractor as approved by the National Roofing

tions packaged with that unit.

Contractors Association.

4. Do not locate the mounting curb vear exhaust vents or other sources of contaminated air that could enter the unit air inlets. Although unit is water proof, guard against water run off from higher overhanging structures.

5. Field Fabricated Ductwork -- Secure all ducts to building structure. Use flexible duct connectors between curb and ducts.

Ducts passing thru unconditioned space must be insulated and covered with a vapor barrier.

#### REQUIRED CLEARANCE FOR UNIT INSTALLATION AND ROOF PENETRATION HOLE SIZE REQUIRED FOR FULL PERIMETER CURB CRB-I213-14



#### ROOF MOUNTING CURB AND SUPPLY/RETURN SIZE REQUIRED AIR OPENING

**CAUTION:** The opening must be covered temporarily to prevent anyone or anything from falling thru the opening. Follow this safety precaution when working in other areas of installation, and leaving the job site overnight for any extended period of time.

1. All duct work must be installed in accordance with the National Fire Protection Association Standards No. 90A and 90B.

2. Remove only that portion of the roof deck to permit the installation of field fabricated air ducts.

Roof decking remaining beneath unit base pan will reduce sweating on bottom of unit base pan during high humidity conditions.

3. All components for CRB-I213-14 are used to assemble roof curb for curb assembly dimensions and models listed in Figure 3.

See Figure 4 for components of curb.

## **CRB-I213-14 FULL PERIMETER ROOF MOUNTING CURB OUTLINE**



## **CRB-I213-14 ROOF MOUNTING CURB ASSEMBLY**

1. Remove the components of the mounting curb from packing and seperate pieces from each other.

2. Lay out, seperate pieces on flat suface close to area where it will be used. See illustrations to determine proper placement of parts. Assemble by snapping the tabs on Channel End Rails, into the slots on Channel Side Rails, the mating parts of the mounting curb.

Set supports in place to configure duct openings shown in Figure 3.

IMPORTANT: The CRB-I213-14 does not have insulation on inside perimeter of curb. To prevent condensation from forming on the inside suface of the curb, insulate and seal the outside surface of the curb as illustrated in cross section view of curb and roof on next page. If the roff deck is removed or omitted from the entire inside area of the roof curb, insulation should be secured to the bottom of the unit base panto prevent condensation from forming on the bottom of the base pan. Insulate the bottom of the condenser section of the unit base pan after the unit has been placed on the curb. Glue a 1" thick foil covered fiberglass duct board or equivalent to the bottom of the unit base pan, with foil side out. Use a good commercial grade of glue - not water base glue.

The CRB-I213-14 Roof Mounting Curb is shipped disassembled with the components to be assembled on the jog site as illustrated. This assembly includes the following components (check list before starting job).



## **ROOF MOUNTING CURB**

3. Place Mounting Curb assembly over hole cut in roof. Square the curb by measuring from one corner diagonally to the opposite corner. Repeat this measurement of opposite corners and adjust the curb until the measurements are the same.

**NOTE:** The top of the End Rails and supports must be flush with the top of the Side Tails to insure a good water and air seal against the bottom of the unit. Caulk ends of adjustable duct Flanges and Divider Baffle to prevent air leakage.

4. Secure Mounting Curb assembly to roof structure by welding or bolting.

5. Install flashing and roofing as illustrated in accordance with local codes. A typical section of insulation, roof, and mounting curb is shown below.

6. Leave the 2 Hold Down Brackets attached to the curb temporarily as they will not be needed until setting the unit.

**NOTE:** If unit is not ready to be set into position at this time, stop work on mounting curb at this point. When unit is ready to be set into position, and just prior to setting unit, complete installation.

7. Field Fabricated Ducts are to be installed from above the mounting curb, the should be installed at this time. See Figures 6 and 7 for installation illustrations.

8. Apply a bead of architectural grade caulking (field supplied) at corners of curb to seal all voids, preventing water leaks.



#### ROOF MOUNTING CURB FIELD FABRICATED (SIDE X SIDE) DUCTS

#### SIDE X SIDE DUCTS INSTALLED FROM ABOVE MOUNTING CURB

Lower Field Fabricated Ducts into position on Duct Supports. See Figure 6. Make assembly secure with sheet metal screws. See Figure 7.





#### ROOF MOUNTING CURB (CONT.) P.V.C. RUBBER GASKET POSITION ON MICROMETL ROOF CURB

1. Install the inulated deck pans (if required) on the curb before placing the 1-1/2" x 1/2" P.V.C. rubber tape (gasket) on mounting curb as illustrated. P.V.C. tape to be applied to curb as shown just prior to setting unit on the mounting curb.

2. P.V.C. rubber tape (supplied with curb) must be applied in continous strips of overlapped 1" minimum for complete water tight seal.



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