Installer’s Guide

Full Perimeter Roof Mounting Curb

Model:	Used With:
BAYCURB050	***DC*, *TC*, *WC*, *YC*, A5PA*, A5PG*, A5PH* 018-036**

Note: ** Indicates an alphanumeric character.*

⚠ SAFETY WARNING

Only qualified personnel should install and service the equipment. The installation, starting up, and servicing of heating, ventilating, and air-conditioning equipment can be hazardous and requires specific knowledge and training. Improperly installed, adjusted or altered equipment by an unqualified person could result in death or serious injury. When working on the equipment, observe all precautions in the literature and on the tags, stickers, and labels that are attached to the equipment.

June 2025 **PKGR-SVN001A-EN**

Introduction

Read this manual thoroughly before operating or servicing this unit.

This document is customer property and is to remain with this unit. Return to the service information pack upon completion of work.

Warnings, Cautions, and Notices

Safety advisories appear throughout this manual as required. Your personal safety and the proper operation of this machine depend upon the strict observance of these precautions.

The three types of advisories are defined as follows:

⚠ WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
⚠ CAUTION	Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. It could also be used to alert against unsafe practices.
NOTICE	Indicates a situation that could result in equipment or property-damage only accidents.

Important Environmental Concerns

Scientific research has shown that certain man-made chemicals can affect the earth's naturally occurring stratospheric ozone layer when released to the atmosphere. In particular, several of the identified chemicals that may affect the ozone layer are refrigerants that contain Chlorine, Fluorine and Carbon (CFCs) and those containing Hydrogen, Chlorine, Fluorine and Carbon (HCFCs). Not all refrigerants containing these compounds have the same potential impact to the environment. Trane advocates the responsible handling of all refrigerants.

Important Responsible Refrigerant Practices

Trane believes that responsible refrigerant practices are important to the environment, our customers, and the air conditioning industry. All technicians who handle refrigerants must be certified according to local rules. For the USA, the Federal Clean Air Act (Section 608) sets forth the requirements for handling, reclaiming, recovering and recycling of certain refrigerants and the equipment that is used in these service procedures. In addition, some states or municipalities may have additional requirements that must also be adhered to for responsible management of refrigerants. Know the applicable laws and follow them.

⚠ WARNING

Proper Field Wiring and Grounding Required!

Failure to follow code could result in death or serious injury.

All field wiring MUST be performed by qualified personnel. Improperly installed and grounded field wiring poses FIRE and ELECTROCUTION hazards. To avoid these hazards, you MUST follow requirements for field wiring installation and grounding as described in NEC and your local/state/national electrical codes.

⚠ WARNING

Personal Protective Equipment (PPE) Required!

Failure to wear proper PPE for the job being undertaken could result in death or serious injury.

Technicians, in order to protect themselves from potential electrical, mechanical, and chemical hazards, MUST follow precautions in this manual and on the tags, stickers, and labels, as well as the instructions below:

- **Before installing/servicing this unit, technicians MUST put on all PPE required for the work being undertaken (Examples; cut resistant gloves/ sleeves, butyl gloves, safety glasses, hard hat/ bump cap, fall protection, electrical PPE and arc flash clothing). ALWAYS refer to appropriate Safety Data Sheets (SDS) and OSHA guidelines for proper PPE.**
- **When working with or around hazardous chemicals, ALWAYS refer to the appropriate SDS and OSHA/GHS (Global Harmonized System of Classification and Labelling of Chemicals) guidelines for information on allowable personal exposure levels, proper respiratory protection and handling instructions.**
- **If there is a risk of energized electrical contact, arc, or flash, technicians MUST put on all PPE in accordance with OSHA, NFPA 70E, or other country-specific requirements for arc flash protection, PRIOR to servicing the unit. NEVER PERFORM ANY SWITCHING, DISCONNECTING, OR VOLTAGE TESTING WITHOUT PROPER ELECTRICAL PPE AND ARC FLASH CLOTHING. ENSURE ELECTRICAL METERS AND EQUIPMENT ARE PROPERLY RATED FOR INTENDED VOLTAGE.**

⚠ WARNING

Follow EHS Policies!

Failure to follow instructions below could result in death or serious injury.

- **All Trane personnel must follow the company's Environmental, Health and Safety (EHS) policies when performing work such as hot work, electrical, fall protection, lockout/tagout, refrigerant handling, etc. Where local regulations are more stringent than these policies, those regulations supersede these policies.**
- **Non-Trane personnel should always follow local regulations.**

⚠ WARNING

Cancer and Reproductive Harm!

This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

⚠ WARNING

Safety Hazard!

Failure to follow instructions below could result in death or serious injury or property damage.

This unit is not to be used by persons (including children) with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety.

Do not allow children to play or climb on the unit or to clean or maintain the unit without supervision.

Copyright

Trademark

All trademarks referenced in this document are the trademarks of their respective owners.

Revision History

- Updated clearance and dimension drawings.
- This document supersedes 18-HE38D9-5*-EN.

Table of Contents

General Information

All phases of this installation must comply with NATIONAL, STATE, AND LOCAL CODES.

The drawings in this document are prepared by the manufacturer in order to provide detail regarding job layout only. These drawings are not intended to be used as a basis to construct, build or modify the items depicted in the drawings. The manufacturer is not responsible for the unauthorized use of these drawings and expressly disclaims any liability for damages resulting from such unauthorized use.

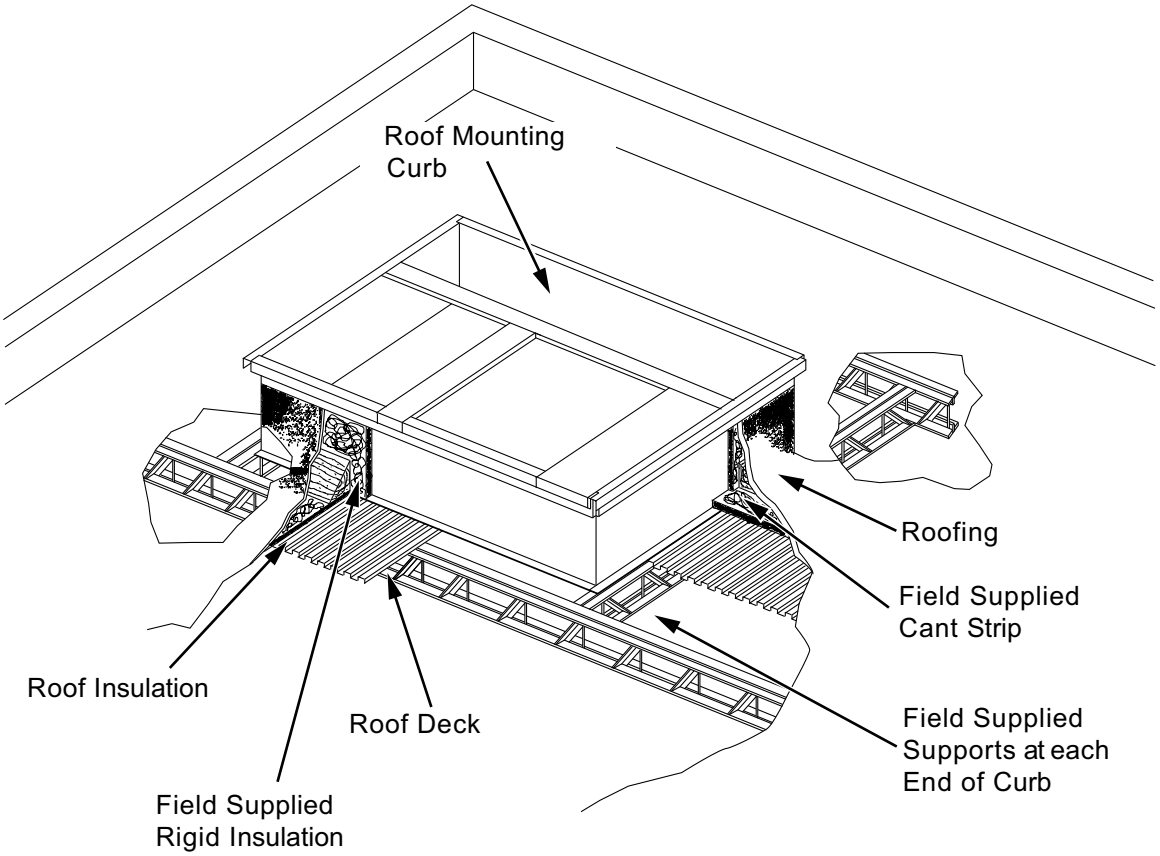
This booklet covers the rooftop curb listed for the 1-1/2 thru 3 ton models only single packaged units.

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

The BAYCURB050 full perimeter roof mounting curb (or frame) is to be field assembled with insulation on side and end rails. See Figure 1, p. 5.

For instructions related to the single packaged units, refer to the instructions packaged with that unit.

Figure 1. Typical roof curb installation



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 Contractors Association.*

These instructions do not purport to cover all variations in systems nor to provide for every possible contingency to be met in connection with installation. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred 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. Verify location of the roof mounting curb will allow sufficient service clearance around unit when the unit is in place. See Figure 2, p. 7.
3. Roof mounting curb (frame) must be installed on a flat, level section of the roof (maximum of 1/4-inch per foot pitch). Provide a level mounting surface for the unit,

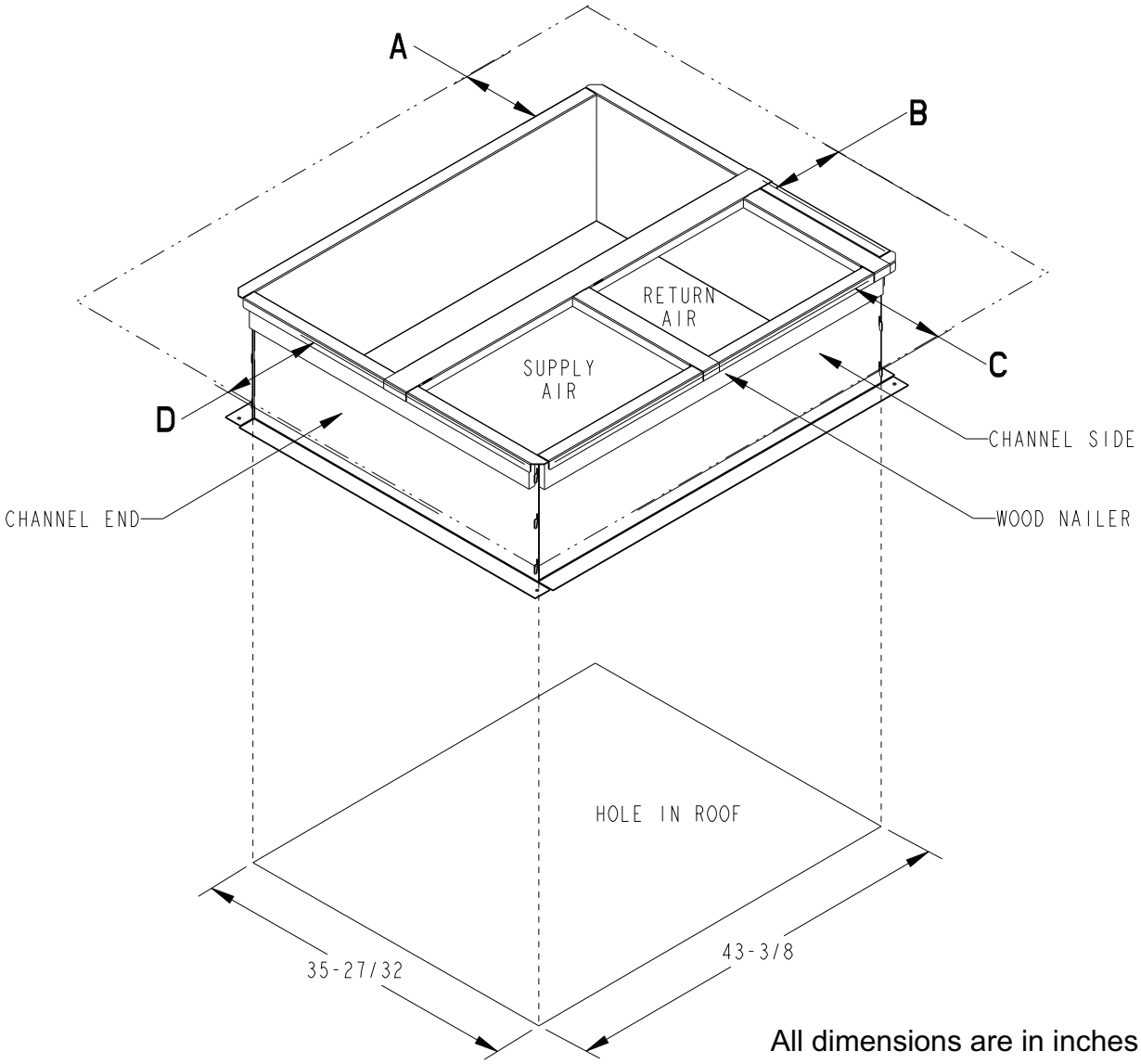
even if the roof is not level. If the pitch of the roof exceeds 1/4-inch per foot, it will be necessary for the contractor to construct a level subbase on which to install the roof mounting curb.

4. Do not locate the mounting curb near exhaust vents or other sources of contaminated air that could enter the unit air inlets. 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 through unconditioned space must be insulated and covered with a vapor barrier.

Installation

Required Clearance for Unit Installation and Roof Hole Size

Figure 2. Set-up for small cabinet



All dimensions are in inches

	SERVICE CLEARANCE DIMENSIONS			
	A	B	C	D
WC*/TC*/ A5PH/A5PA	42.00	36.00	12.00**	24.00
DC*/YC*/ A5PG	42.00	36.00	12.00**	36.00

** 42.00 WITH ECONOMIZER WITH 25% FRESH AIR ACCESSORY

Roof Mounting Curb and Supply/ Return Size Required Air Opening

⚠ CAUTION

Risk of Injury!

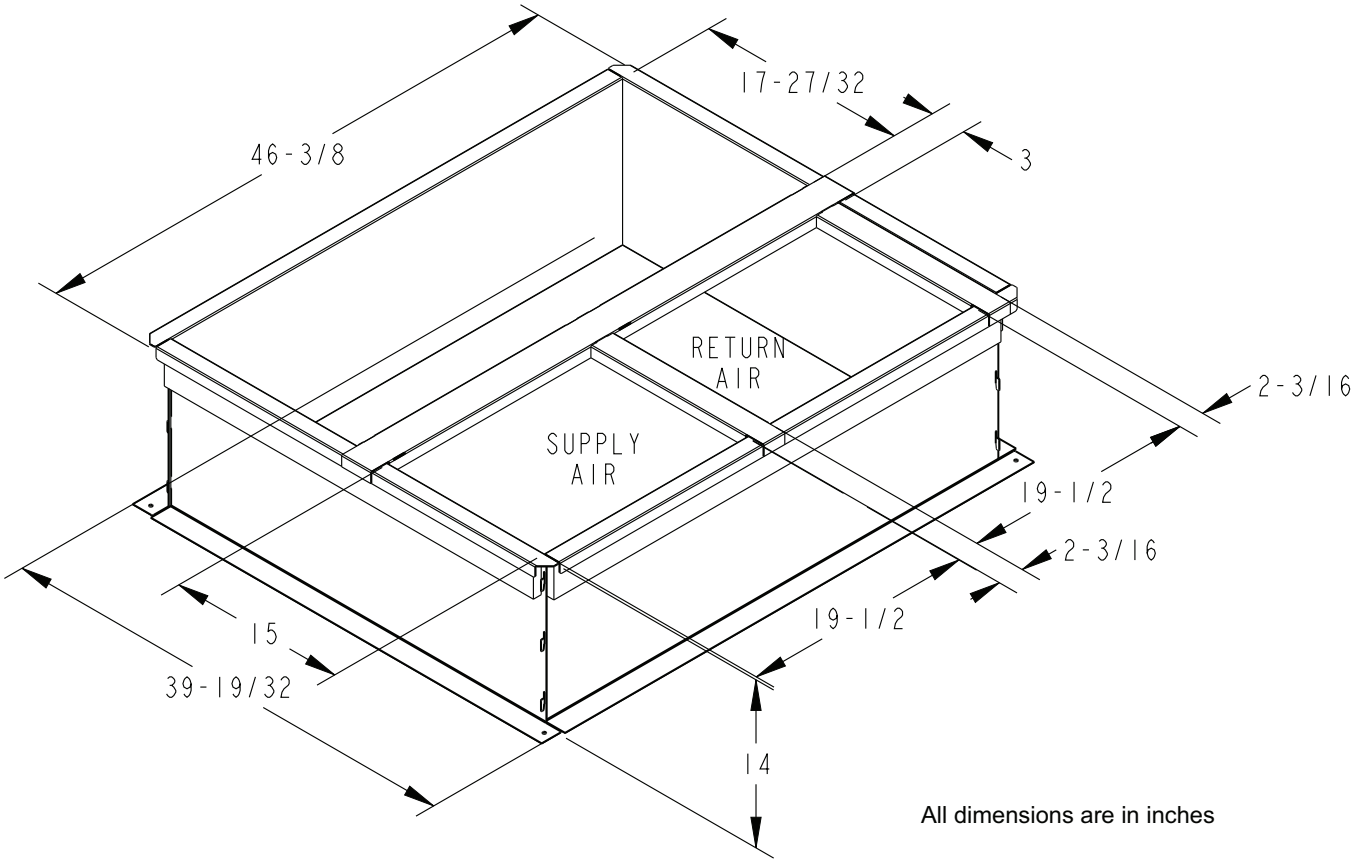
Failure to follow instructions below could result in minor to moderate injury.

Whenever work is not active in the area, temporarily cover opening to prevent persons or objects from falling through the opening.

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 BAYCURB050 are used to assemble roof curb.
4. See Figure 4, p. 9, for components of curb.

Figure 3. Full perimeter roof mounting curb outline



All dimensions are in inches

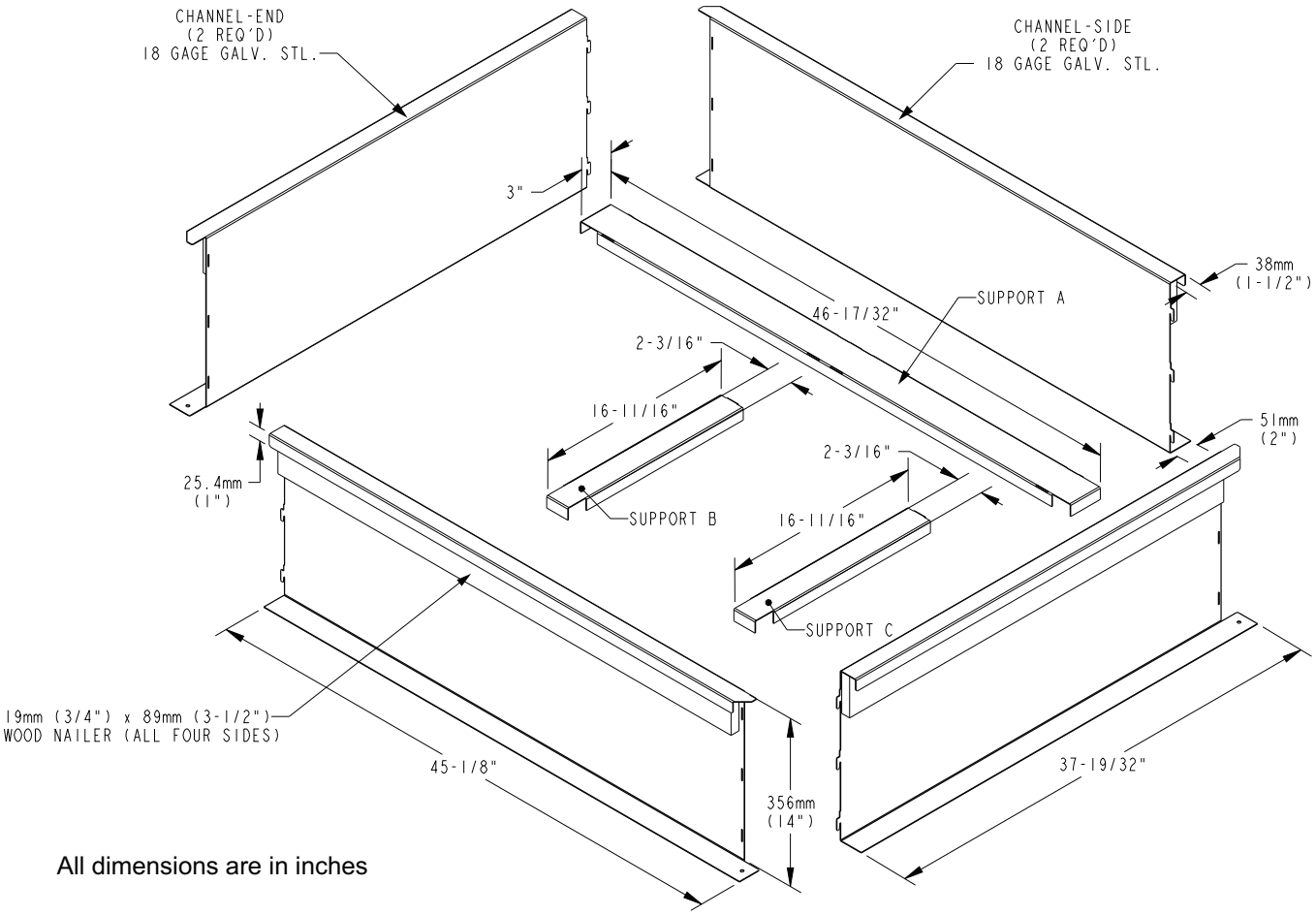
Roof Mounting Curb Assembly

The BAYCURB050 Roof mounting curb is shipped disassembled with the components to be assembled on the job site as illustrated. This assembly includes the following components (check list before starting job).

1. Remove the components of the mounting curb from packing and separate pieces from each other.
2. Lay separate pieces on flat surface close to area where it will be used. See Figure 4, p. 9 to determine proper placement of parts. Assemble by inserting the tabs of one channel rail into the slot on the other channel rail. Lightly tap downward on the ends with the tabs to ensure they are fully seated and the tops of the channel rails are flush with each other.
3. Set supports A, B, and C onto channel sides and channel ends as shown in Figure 3, p. 8.

Important: *The BAYCURB050 does not have insulation on inside perimeter of curb. To prevent condensation from forming on the inside surface of the curb, insulate and seal the outside surface of the curb as illustrated in Figure 5, p. 10. If the roof 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 pan to 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-inch 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 based glue.*

Figure 4. Component drawing



All dimensions are in inches

4. 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, Center Rail, Divider Baffle, and Adjustable Duct Flanges must be flush with the top of the Side Rails 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.*

5. Secure mounting curb assembly to roof structure by welding or bolting.

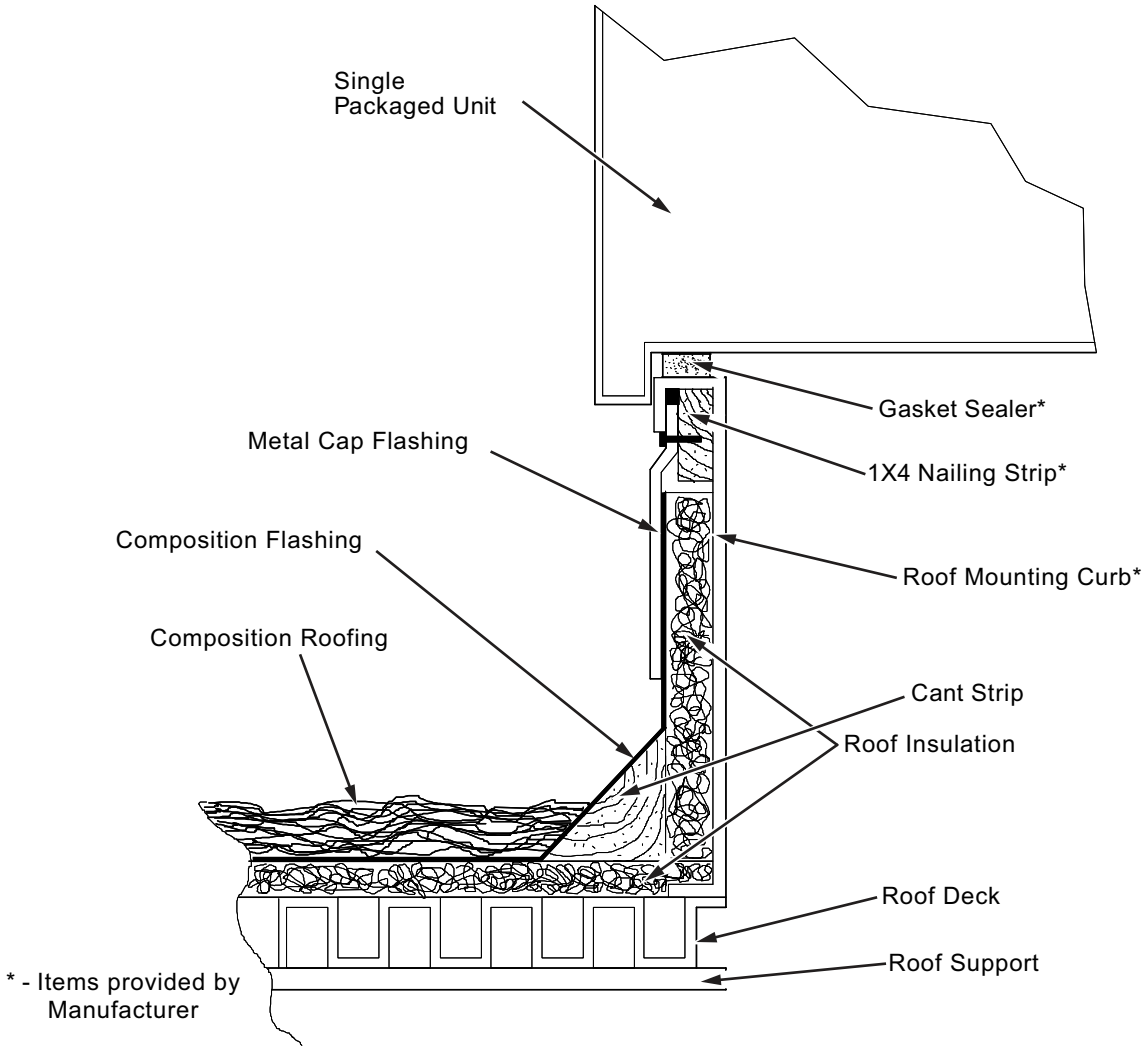
6. Install flashing and roofing in accordance with local codes. A typical section of insulation, roof, and mounting curb is shown in Figure 5, p. 10.

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 set into position, and just prior to setting unit, complete installation.*

7. Field fabricated ducts are to be installed from above mounting curb, they should be installed at this time. See Figure 6, p. 11 and Figure 7, p. 12 for installation illustrations.

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

Figure 5. Cross-sectional view



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, p. 11 and Figure 7, p. 12. Make assembly secure with sheet metal screws.

Figure 6. Roof mounting curb field fabricated (side X side) ducts

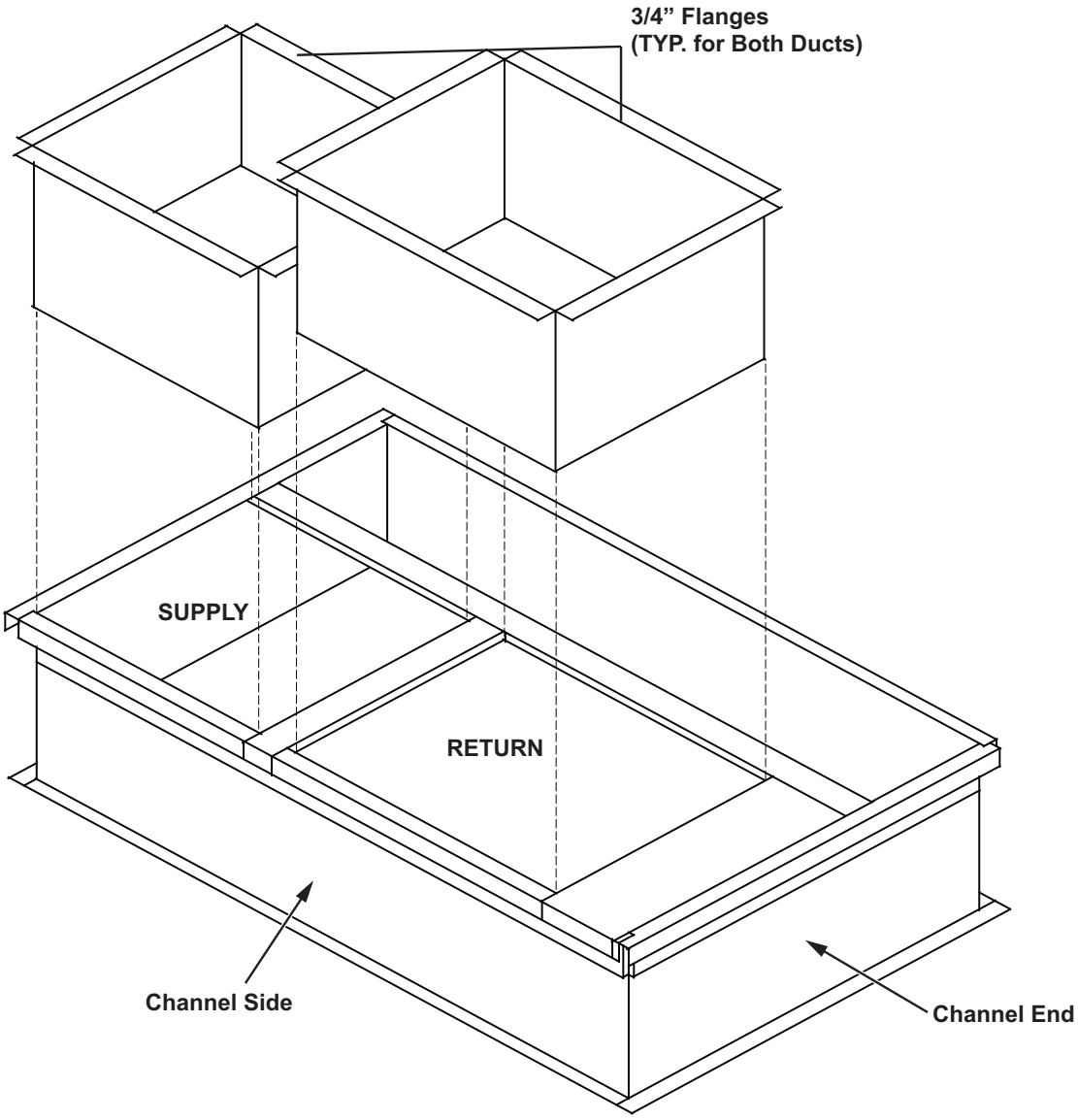
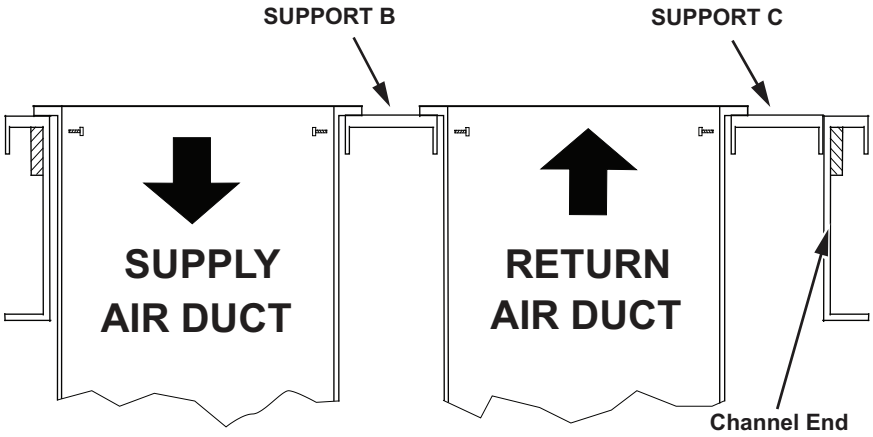


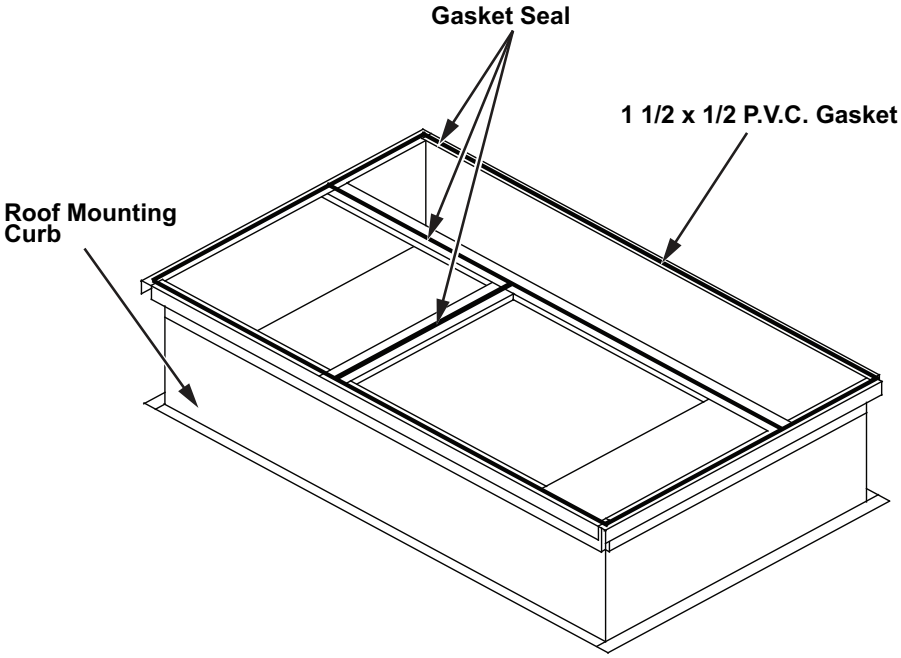
Figure 7. Side view – Roof mounting curb field fabricated (side X side) ducts



Roof Mounting Curb (continued) P.V.C. Rubber Gasket Position on Curb for Unit Placement

1. Install the optional insulated deck pan accessory kit (if required) on the curb before placing the 1-1/2” x 1/2” P.V.C. rubber tape (gasket) on mounting curb as shown in Figure 8, p. 12. 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 continuous strips of overlapped 1-inch minimum for complete watertight seal.

Figure 8. P.V.C. rubber gasket position on curb



Notes:

1. *Overlap and position joints in P.V.C. rubber gasket.*
2. *Air seals - apply P.V.C. rubber last to insure there is adequate P.V.C. for the water seal.*
3. *Use typical sealing methods to prevent air duct leakage at curb-duct joint.*

Notes

About Trane and American Standard Heating and Air Conditioning

Trane and American Standard create comfortable, energy efficient indoor environments for residential applications. For more information, please visit www.trane.com or www.americanstandardair.com.

PKGR-SVN001A-EN 03 Jun 2025
Supersedes 18-HE38D9-5C-EN (June 2024)