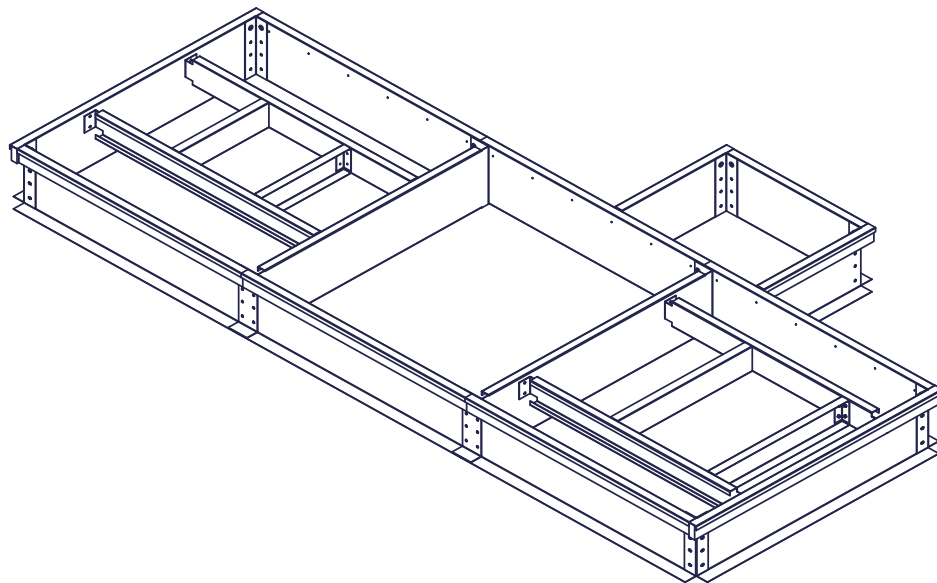




# Installation Instructions

## Roof Curbs for Performance Climate Changer™ Air Handlers Model CSAA and PSCA



### **⚠ 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.



# Introduction

Read this manual thoroughly before operating or servicing this unit.

## 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-including industry replacements for CFCs and HCFCs such as saturated or unsaturated HFCs and HCFCs.

## 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 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 Material Safety Data Sheets (MSDS)/Safety Data Sheets (SDS) and OSHA guidelines for proper PPE.
- When working with or around hazardous chemicals, **ALWAYS** refer to the appropriate MSDS/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 Ingersoll Rand personnel must follow Ingersoll Rand Environmental, Health and Safety (EHS) policies when performing work such as hot work, electrical, fall protection, lockout/tagout, refrigerant handling, etc. All policies can be found on the [BOS site](#). Where local regulations are more stringent than these policies, those regulations supersede these policies.
- Non-Ingersoll Rand personnel should always follow local regulations.

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## Revision History

Updated dimensional data.



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# Introduction

## Overview of Manual

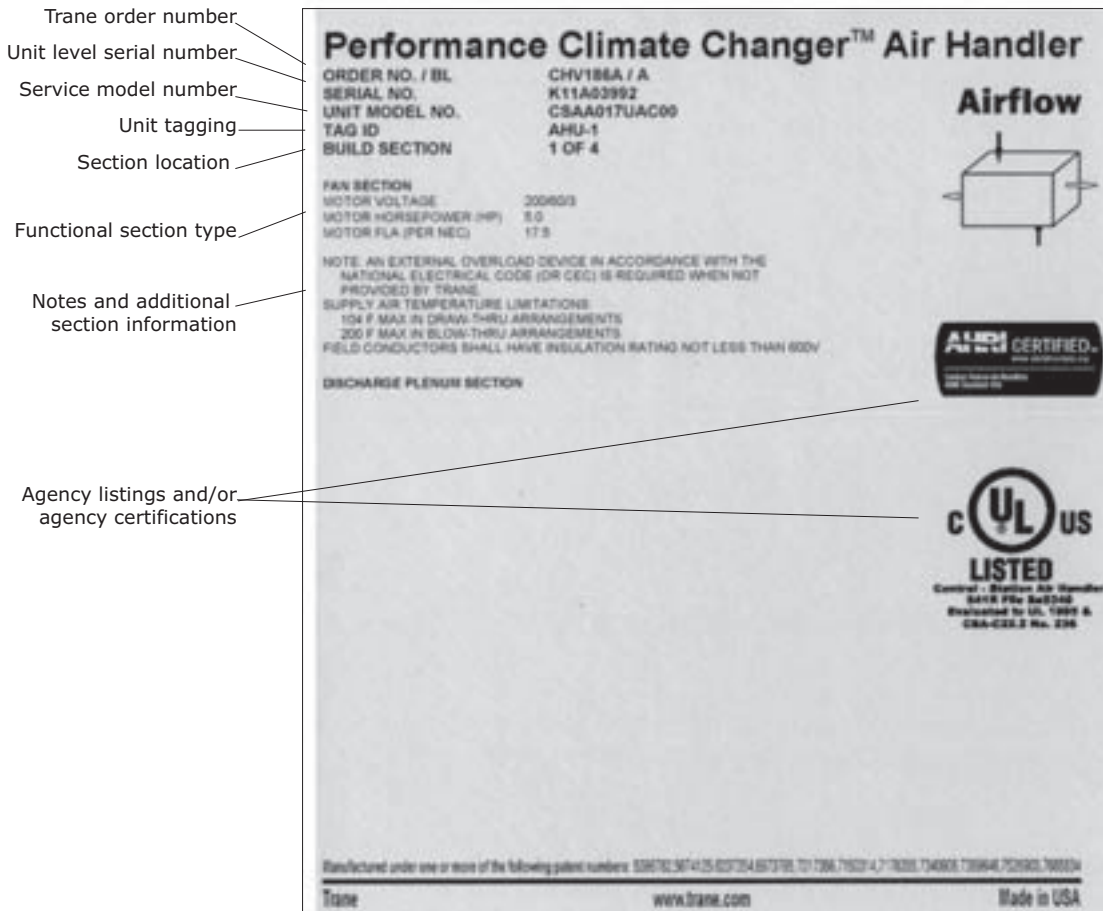
Performance Climate Changer™ air handlers may be mounted on the roof with a roof curb or pier mount. This manual includes the assembly instructions. Before proceeding with the installation, refer to the unit submittal drawings and unit tagging for correct placement of air handler sections. Failure to review the submittal drawings could result in performance or assembly problems. If there are any discrepancies, contact your local Trane sales engineer before proceeding. Carefully review the procedures discussed in this manual to minimize installation and startup difficulties.

## Nameplate

Each air handler section includes at least one nameplate/label, which identifies the type of section and functional components, customer tagging information, the unit serial number, the unit order number, the build section position for installation, and the unit model number. Refer to this information when ordering replacement parts or requesting service.

**Note:** The unit serial number and order number is required when ordering parts or requesting service for a Trane air handler.

Figure 1. Performance air handler section nameplate





## Pre-Installation

As-built submittals show the intended layout of the various air handler sections to meet job site requirements. Installation information (unit dimensions, clearances, weights, curb location and roof opening dimensions and locations) may vary with special equipment and applications. For exact information, always refer to the specific unit submittals, which can be obtained from your local Trane sales office.

Roof curbs are shipped “knocked down” for assembly at the job site.

### Site Preparation

Ensure the installation site can support the total weight of the air-handling unit, including accessories and the roof curb. For approximate air handler section weights, refer to Performance Climate Changer™ Air Handler IOM, CLCH-SVX07\*-EN. Units with special options or arrangements will differ in dimensions, clearances, weights and roof opening dimensions and locations. Always refer to unit submittals before marking off the dimensions of the unit roof curb, pipe cabinet curb (if pipe cabinet is ordered), and roof openings. For roof curbs supplied by Trane, approximate roof curb weights are in [Table 1](#).

**Note:** To calculate the total curb weight, find the unit length, multiply by the factor supplied in [Table 1](#) for the applicable roof curb height, and add the curb end weight for the applicable roof curb height.

### Roof Curb Installation Checklist

It is recommended that the curb be installed directly on the support members and fastened to the supports using tack welds or other equivalent methods. Properly supported decking should be installed inside the air handler section of the curb when this method is used.

- Verify that the roof structure can adequately support the combined weight of the unit and curb assembly.
- Ensure that the selected installation location provides sufficient service and operational clearances.
- Remove any twist within the curb due to roof supports and square the curb.
- Level the curb.
- Secure the curb to the roof support members.
- Install 2-inch thick boards or rigid insulation around the curb.
- Install cant strips around the curb.
- Bring field supplied roofing felt up to the top of the curb nailing strips. Nail felt into place.
- Install field supplied flashing under the lip of the curb flanges and over the felt.
- Apply sealant to the four corners.
- Caulk all joints between the curb and the roof. Attach the gasket material to the curb's top flanges (entire perimeter) and to the supply and return air duct open panel flanges.



# Dimensions and Weights

**Table 1. CSAA Curb weights**

Curb height	Unit Size	3	4	6	8	10	12	14	17	21	25
14-inch	Curb end and duct support weight	117.23	155.82	155.82	175.88	209.84	225.27	242.25	242.25	266.94	266.94
	Curb side weight	Take total length in inches, multiply by 0.56 pounds, and add to the above curb end & duct support weight.									
18-inch	Curb end and duct support weight	148.76	197.59	197.59	222.98	265.95	285.48	306.96	306.96	338.21	338.21
	Curb side weight	Take total length in inches, multiply by 1.05 pounds, and add to the above curb end & duct support weight.									
22-inch	Curb end and duct support weight	171.54	227.14	227.14	256.05	304.98	327.22	351.68	351.68	387.26	387.26
	Curb side weight	Take total length in inches, multiply by 1.22 pounds, and add to the above curb end & duct support weight.									
26-inch	Curb end and duct support weight	215.31	286.02	286.02	322.78	385.00	413.28	444.39	444.39	489.64	489.64
	Curb side weight	Take total length in inches, multiply by 2.00 pounds, and add to the above curb end & duct support weight.									
30-inch	Curb end and duct support weight	240.72	319.23	319.23	360.06	429.15	460.56	495.11	495.11	545.36	545.36
	Curb side weight	Take total length in inches, multiply by 2.25 pounds, and add to the above curb end & duct support weight.									
36-inch	Curb end and duct support weight	278.82	369.05	369.05	415.98	495.38	531.48	571.18	571.18	628.93	628.93
	Curb side weight	Take total length in inches, multiply by 2.63 pounds, and add to the above curb end & duct support weight.									
Curb height	Unit Size	30	35	40	50	57	66	80	100	120	
14-inch	Curb end and duct support weight	308.62	328.68	367.27	407.39	407.39	453.70	453.70	496.91	581.80	
	Curb side weight	Take total length in inches, multiply by 0.56 pounds, and add to the above curb end & duct support weight.									
18-inch	Curb end and duct support weight	390.95	416.34	465.17	515.95	515.95	574.54	574.54	629.23	736.65	
	Curb side weight	Take total length in inches, multiply by 1.05 pounds, and add to the above curb end & duct support weight.									
22-inch	Curb end and duct support weight	447.31	476.22	531.82	589.64	589.64	656.36	656.36	718.63	840.95	
	Curb side weight	Take total length in inches, multiply by 1.22 pounds, and add to the above curb end & duct support weight.									
26-inch	Curb end and duct support weight	566.00	602.77	673.47	747.00	747.00	831.85	831.85	911.03	1066.58	
	Curb side weight	Take total length in inches, multiply by 2.00 pounds, and add to the above curb end & duct support weight.									
30-inch	Curb end and duct support weight	630.15	670.98	749.50	831.15	831.15	925.37	925.37	1013.31	1186.04	
	Curb side weight	Take total length in inches, multiply by 2.25 pounds, and add to the above curb end & duct support weight.									
36-inch	Curb end and duct support weight	726.38	773.30	863.54	957.38	957.38	1065.66	1065.66	1166.73	1365.24	
	Curb side weight	Take total length in inches, multiply by 2.63 pounds, and add to the above curb end & duct support weight.									

**Note:** Example: Size 21 Performance air handler with airfoil damper mixing section, small coil section, medium access section, medium coil section, small blank section, VFD control section, and fan section (down discharge) total unit length is 156.75 inches. Total roof curb weight for the 18-inch curb would be 502.80 lbs (156.75 x 1.05 = 164.5875 lbs + 338.21 = 502.7975 lbs.)

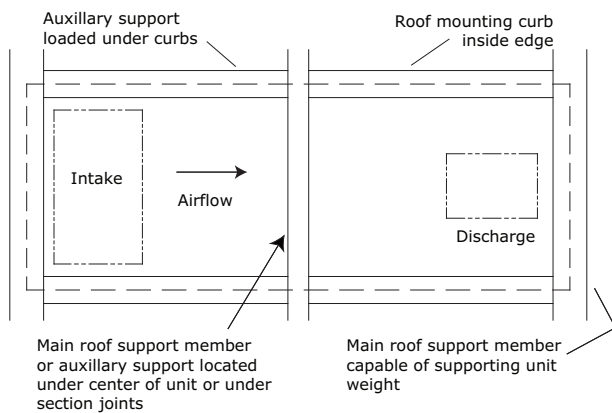
# Installation

## Placement

**Note:** Isolation rails should not be installed on top of Trane roof curbs. If isolation rails or isolation curbs are required, the entire curb system should be supplied by a specialty curb company.

The roof curb must be supported along its entire perimeter. The curb may be set parallel or at right angles to roof support members. If at right angles to the support members, there must be adequate supporting roof cross members between the ends (in the direction of airflow). Be sure the cross members do not interfere with the connection of supply and return ducts to the unit. See figure below for details.

**Figure 2. Unit set perpendicular to roof curb members**

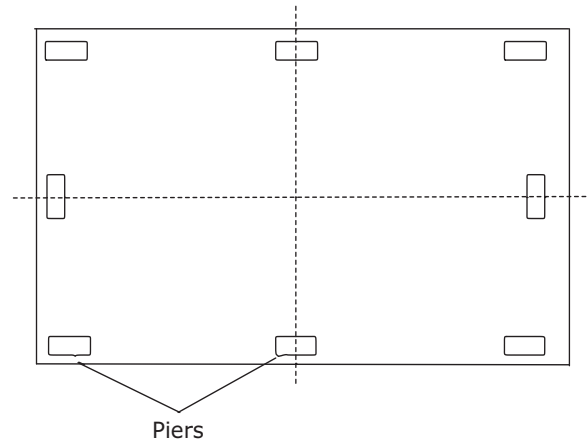


- When mounting the unit on its roof curb, make sure that the gasketing between the roof curb and unit base provides an airtight seal.

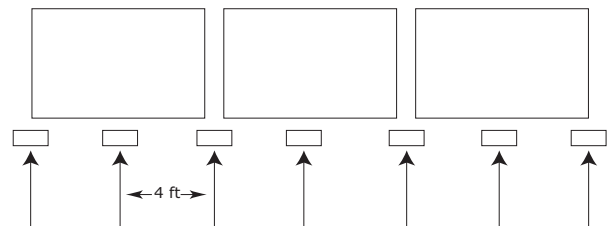
**Note:** When pulling shipping split sections together, the field-supplied gasket material may bunch up between bases. Make certain this does not prevent tight contact between shipping sections.

- If a unit is pier-mounted, at a minimum, locate one pier at each corner directly underneath any shipping split (ensure full support under each side), and then every four feet at equally spaced intervals around the perimeter of the unit. Both the unit and the pipe cabinet should be supported by their base channel around the entire perimeter (see Figure 3 and Figure 4).

**Figure 3. Pier locations (typical)**



**Figure 4. Side view with shipping splits**

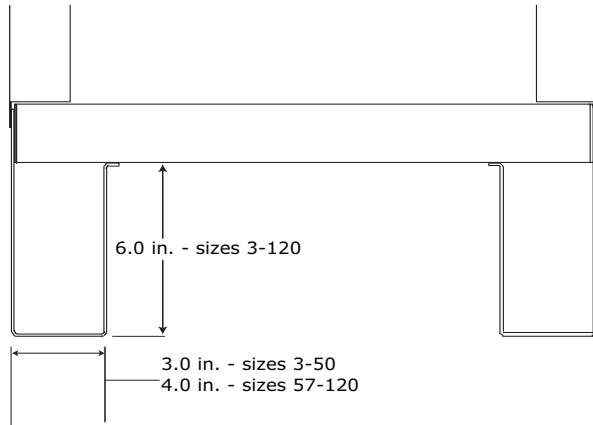


**Note:** Piers beneath shipping splits must be structurally sound to support the weight of the unit.

See Figure 5 for typical cross section for pier- or slab-mounted base.



**Figure 5. Typical cross section for pier mounted or slab-mounted base**

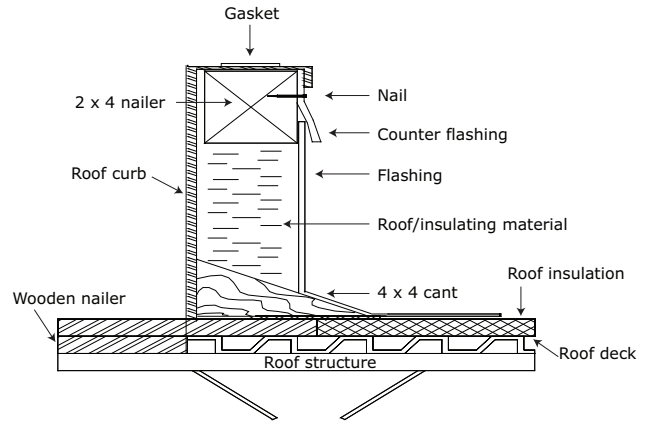


**Note:** For PSCA, the base rail height is 7.25 in. Verify the base rail width in unit submittal.

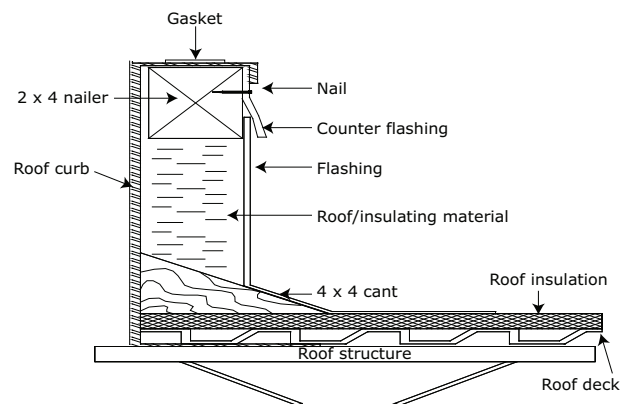
- For new building construction, the roof curb may be installed as soon as the roof support members are in place. Trane recommends that the roof curb be placed directly on the roof support members and welded into place. If the curb is mounted on the roof deck, additional support is necessary directly below the curb flanges to minimize vibration.
- Do not overlap counter flashing over the top of the roof curb. Counter flashing should extend to the bottom of the roof curb drip lip. Attach counter flashing with fastener through the wooden nailer. Figure 6, Figure 7 and Figure 8 show typical roof curb installations and detail.

**Note:** Materials that attach to the roof curb are supplied by the installer, including flashing, insulating material and cant. Gasket and 2 x 4 nailer are supplied by Trane.

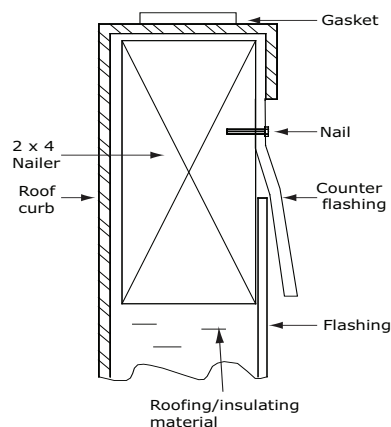
**Figure 6. Typical roof curb installation - existing building**



**Figure 7. Typical roof curb installation - new construction**



**Figure 8. Detail of installation**

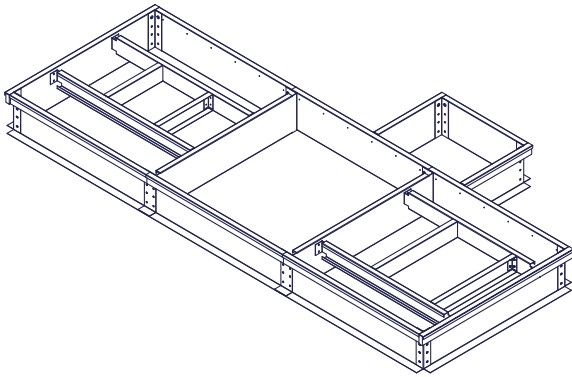


## Assembly and Installation

The following procedure explains how to assemble and install roof curbs provided by Trane. An attachment specific to your roof curb is shipped with your Trane-ordered roof curb. See typical exploded view and parts list in [Figure 22, p. 15](#) and [Table 4, p. 16](#). In order to properly locate the duct supports (if required) and external piping cabinet (if ordered), it is recommended that you have a copy of the as-built curb drawings from the submittal package. For specialty or field-fabricated roof curbs please see the section entitled ["Specialty Roof Curbs," p. 12](#) for important information.

### Unit Roof Curb

**Figure 9. Typical roof curb provided by Trane**



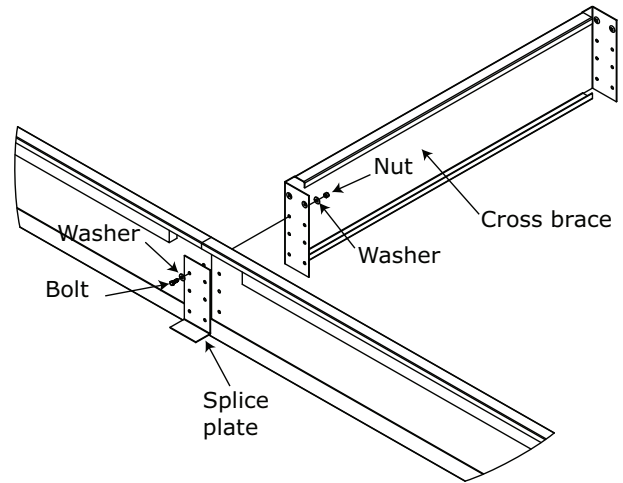
#### **⚠ WARNING**

#### **Risk of Roof Collapsing!**

Failure to ensure proper structural roof support could cause the roof to collapse, which could result in death or serious injury and property damage. Confirm with a structural engineer that the roof structure is strong enough to support the combined weight of the roof curb and the unit. Refer to ["Dimensions and Weights," p. 7](#) for typical curb weights.

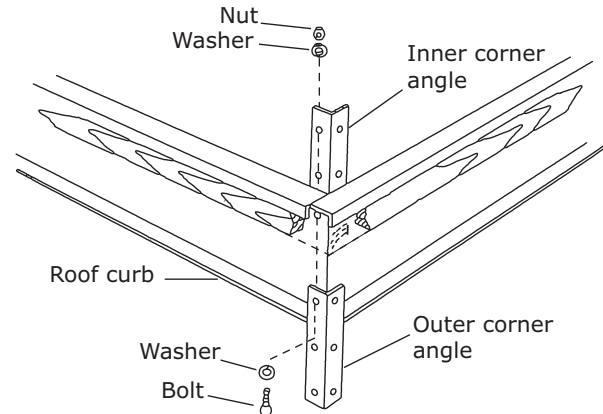
1. Attach cross brace and outer side splice plates at splice locations (refer to the following figure).

**Figure 10. Side splice detail**



2. Attach outer and inner corner splice plates (4 places) as shown in the figure below.

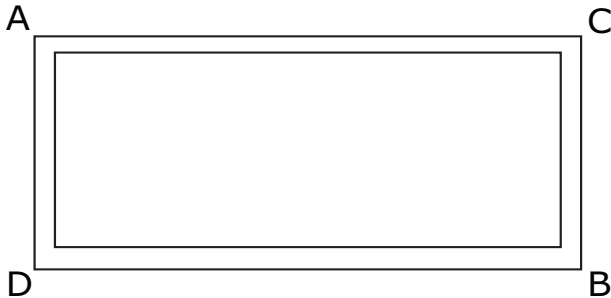
**Figure 11. Corner splice detail**



Check curb dimensions for squareness as shown in the figure below. Measurements from A-B should equal measurement from C-D ( $\pm 1/8$ -inch).

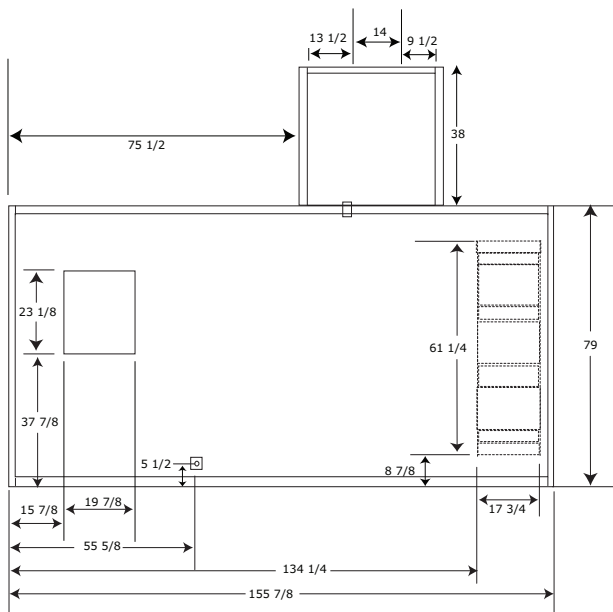
**Note:** Measurements A-C, D-B, A-D, and B-C are inside curb dimensions and are supplied with the unit-specific roof curb manual.

**Figure 12. Unit roof curb perimeter**



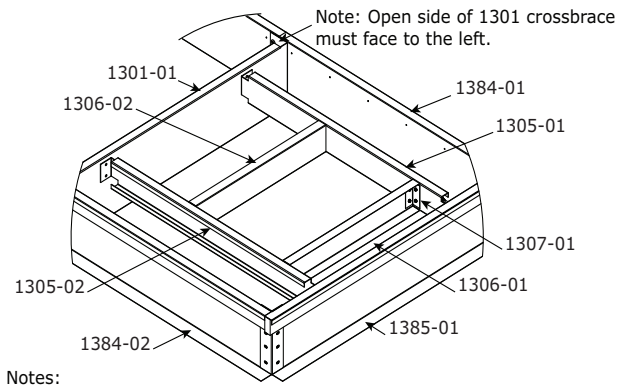
3. Tighten nuts/bolts at all locations. Ensure lock nuts are securely tightened.
4. Review the details curb plan view as-built to determine the location of the supply and/or return openings and placement of duct support members. See figure below.

**Figure 13. Typical as-built curb detail plan view (inches) from submittal package**



5. Attach duct support members to each side of roof curb perimeter wall with self-drill screws. See figure below.

**Figure 14. Duct support detail**



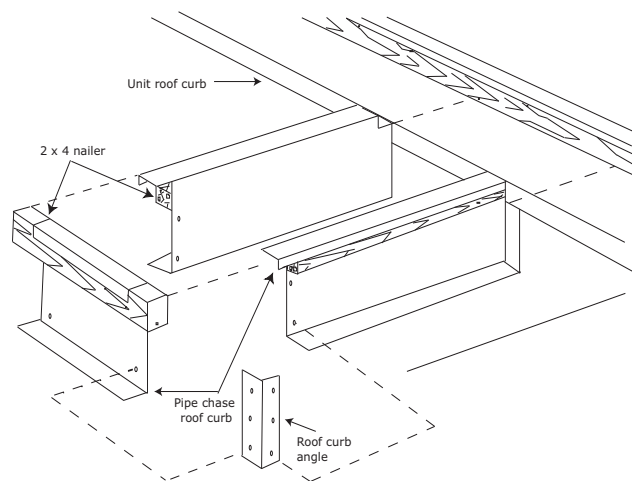
Notes:

1. 1306-xx (PTAF duct support) is field cut to length.
2. Use self drillers (included) to attach 1307-xx (duct support angle) to 1305-xx and 1606-xx.

6. Assemble the pipe cabinet roof curb (when supplied). See the figure below.

**Note:** If pipe cabinet roof curb interferes with splice plates, field drill holes to match those in the splice plate. Attach the pipe cabinet roof curb with splice plate bolts. Self-drill the other end.

**Figure 15. Pipe cabinet roof curb assembly**



7. Install gasket along the perimeter of the pipe chase roof curb and unit roof curb. Gasketing is provided with the roof curb when ordered from Trane.
8. Install the curb. The curb may be set on structural framing (by others). This curb is designed to transfer the load to a continuous underlying structural frame. The structural members (by others) should span the perimeter of the curb.

- Complete all ductwork, piping, and electrical connections only after mounting the unit. Refer to unit submittals.

## Pipe Cabinet Roof Curb

Pipe cabinets ordered from Trane for field installation require special attention with regard to joining the unit roof curb and pipe cabinet roof curb. A good joint will prevent any water management problems within the pipe cabinet.

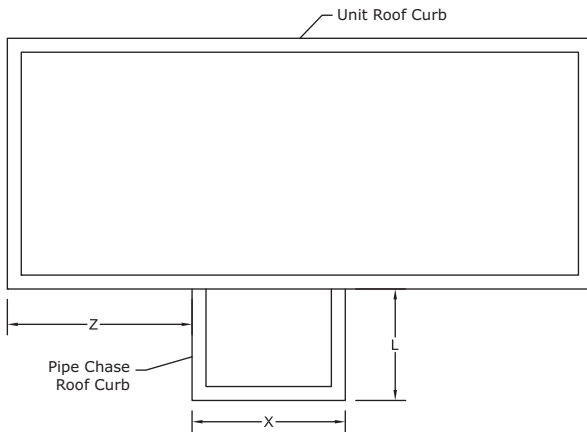
The pipe cabinet roof curb should be three-sided and have dimensions as shown in the figure below, a top view of the pipe cabinet roof curb, and [Table 2](#). Dimension 'L' is from the outside of the unit roof curb to the outside of the pipe cabinet roof curb. Dimension 'X' is the outside-to-outside width dimension of the pipe cabinet roof curb. Dimension 'Z' locates the pipe chase roof curb along the unit roof curb in the direction of airflow. This measurement is from the outside of the unit roof curb to the outside of the pipe cabinet roof curb.

The basic formula becomes:

- $Z = LDS - 3$  for CSAA sizes 3 to 50
- $Z = LDS - 3.5$  for CSAA sizes 57 to 120
- $Z = LDS - 3.5$  for all PSCA sizes

where LDS is the total length of the sections downstream of the pipe cabinet.

**Figure 16. Top view of unit and pipe cabinet roof curb**



**Table 2. Pipe cabinet roof curb dimensions**

Unit size	L dimension		
	Reduced	Standard	Extended
3 to 50 CSAA	26.00	38.00	50.00
57 to 120 CSAA	26.50	38.50	50.50
All PSCA	36.50	38.50	50.50

All unit sizes	X dimension
Reduced	$L_p + 5$
Standard	$L_p + 5$
Extended	$L_p + 5$

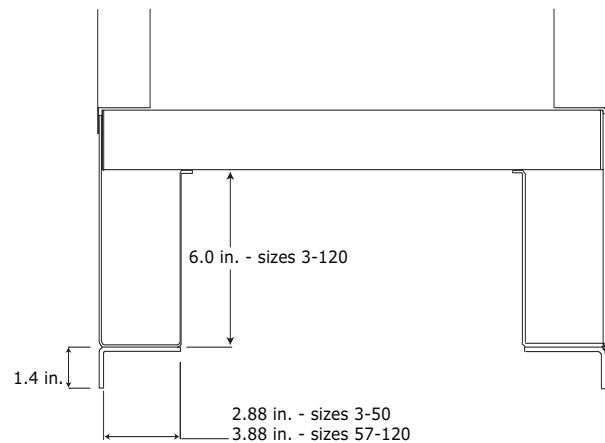
**Note:**  $L_p$  is the sum of the section length(s) covered by the pipe cabinet. Refer to submittal.

## Specialty Roof Curbs

Units to be mounted on a roof curb not supplied by Trane require special attention.

Center the unit base on the roof curb as shown in the figure below.

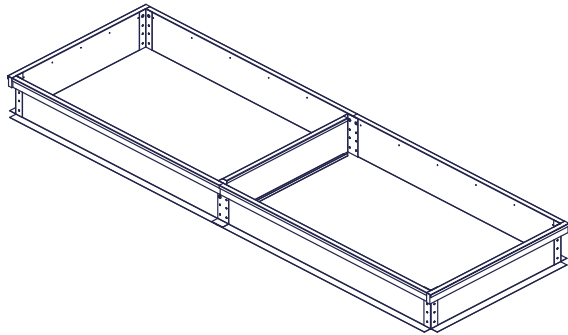
**Figure 17. Cross section**



**Note:** For PSCA, the base rail height is 7.25 in. Verify the base rail width in unit submittal.

A typical unit roof curb and unit base cross-section without a pipe cabinet is shown in the figure below.

**Figure 18. Roof curb with flashing**



The table below lists the outside-to-outside dimensions for over all width and length of the roof curb for each size unit. Length is dependent on the various unit options ordered. Refer to submittals for section lengths.

**Note:** Center the unit base on the roof curb.

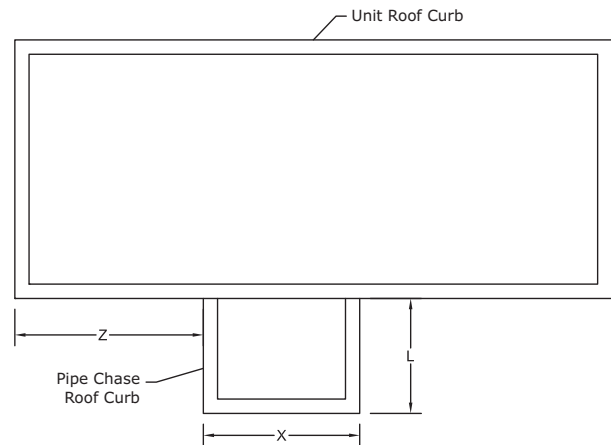
**Table 3. CSAA Specialty roof curb dimensions**

Unit Size	Width	Length
3	30.50	Ls-1
4	43.00	Ls-1
6	43.00	Ls-1
8	49.50	Ls-1
10	60.50	Ls-1
12	65.50	Ls-1
14	71.00	Ls-1
17	71.00	Ls-1
21	79.00	Ls-1
25	79.00	Ls-1
30	92.50	Ls-1
35	99.00	Ls-1
40	111.50	Ls-1
50	124.50	Ls-1
57	123.50	Ls-2
66	138.50	Ls-2
80	138.50	Ls-2
100	152.50	Ls-2
120	180.00	Ls-2

**Notes:**

1. Where Ls is the sum of all section lengths in the unit.
2. For PSCA, the curb width is 2 in. less than the unit width (Ls-2) and the curb length is 2 in. less than the unit length (Ls-2).

**Figure 19. Top view of unit and pipe cabinet roof curb**



**Figure 20. Pipe cabinet roof curb dimensions**

Unit size	L dimension		
	Reduced	Standard	Extended
3 to 50 CSAA	26.00	38.00	50.00
57 to 120 CSAA	26.50	38.50	50.50
All PSCA	26.50	38.50	50.50

All unit sizes	X dimension
Reduced	Lp + 5
Standard	Lp + 5
Extended	Lp + 5

**Note:** Lp is the sum of the section length(s) covered by the pipe cabinet. Refer to submittal.

## Ductwork Recommendations

### Sound Attenuation

Noise is produced by unit supply fans, and exhaust fans. Supply fan noise is substantially attenuated by the ductwork, provided it is properly constructed.

SMACNA recommendations for metal gauge thickness and installation should be followed carefully. Lightly constructed ductwork can produce "oil canning"-a rapid in-and-out pulsating motion of the duct walls-resulting in sound problems.

**Note:** If roof decking cannot be placed under the unit, an acoustical barrier can be installed.

Corrugated steel decking is acoustically ideal for the installation of the roof curb and connecting ductwork. Closely toleranced holes must be cut in the roof deck for the supply and return ductwork. When the duct is installed, caulking must be used to seal the decking to the duct. Even

## Installation

a small air leak between the duct and the deck will destroy most of the attenuation available from the steel decking.

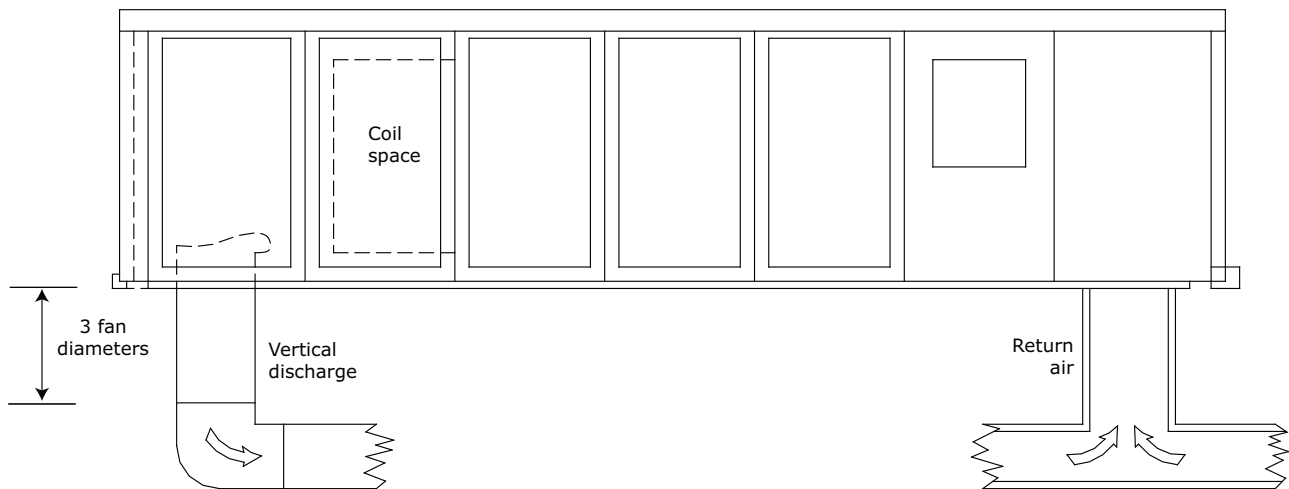
In addition, special consideration may be required to ensure that the weight of the unit does not crush the roof deck at those points where the deck is between the curb and support joist. Poured insulation will usually add the required strength, while the use of rigid insulation may require placement of three-inch support channels on the decking.

As a general rule, exhaust fan noise is not a problem and can be adequately attenuated by the return ductwork. For critical applications where return ductwork is not required, however, installation of an acoustically-lined "return T" is recommended; see [Figure 21](#).

### Supply and Return Air Ductwork

Ductwork for all units must be fabricated and installed by the installing contractor; to ensure proper duct construction and installation, SMACNA recommendations should be closely followed.

**Figure 21. Typical supply and return ductwork**



Use lined duct for all returns (1-inch thick, 6-pound density fiberglass recommended).

Below are several typically used guidelines for ductwork construction:

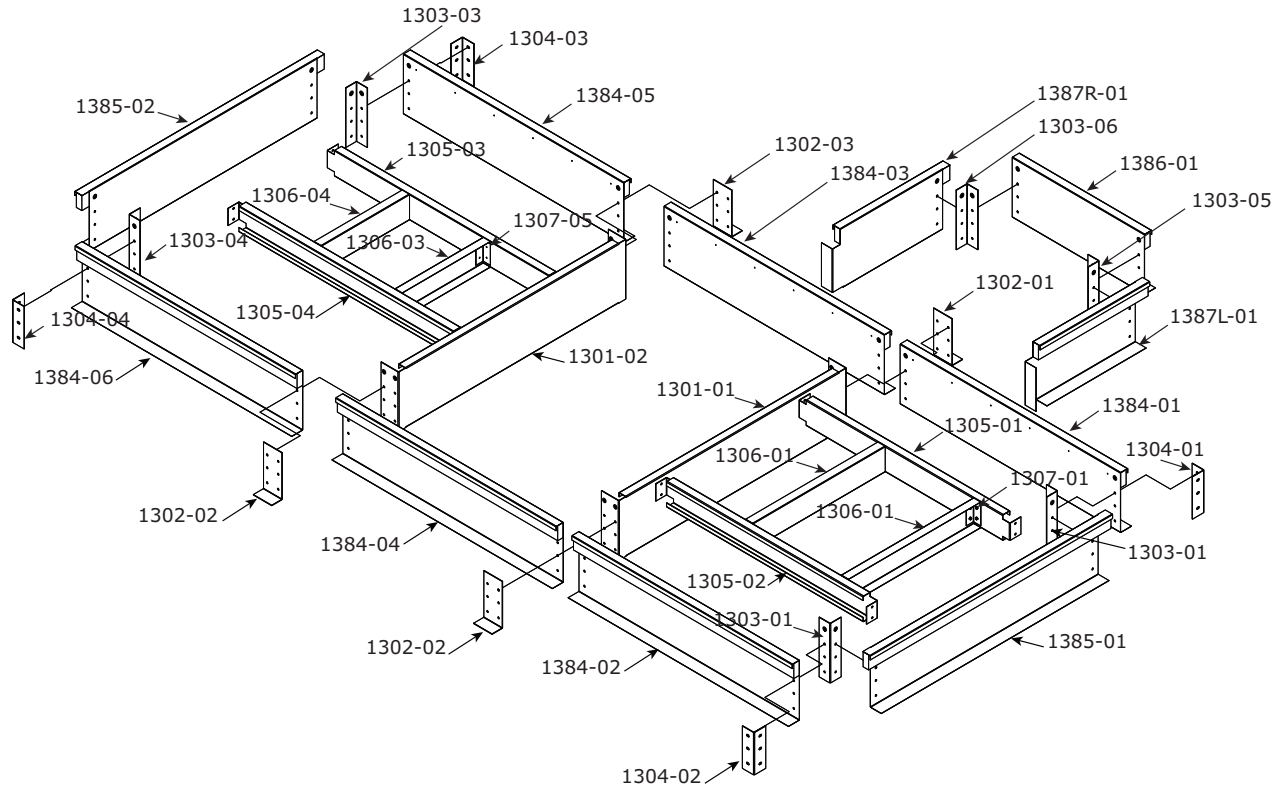
- Elbows with turning vanes or splitters are recommended to minimize air noise and resistance.
- The first elbow in the ductwork leaving the unit should be no closer than 3 fan diameters from the unit, thereby minimizing noise and resistance.

In those instances where the unit is installed over an acoustically critical area, additional treatment of the ductwork is recommended. Both supply and return

ductwork should be lined internally with glass fiber duct liner 1-inch thick. The external surface of the supply duct should be covered with an acoustical barrier material such as one or two pound/sq. ft. sheet lead (1/64-inch or 1/32-inch) or loaded vinyl sheet or gypsum board for the first 10 ft. of ductwork. The lining should extend from the point where the duct penetrates the roof to a distance of 10 ft. beyond the vertical drop from the unit.

## Parts Information

Figure 22. Typical exploded view of curb with part numbers





## Installation

**Table 4. Typical customer parts list**

Customer Parts List			
Thank you for purchasing the roof curb accessory for the Trane Performance Climate Changer™ air handler for this project. We at Trane appreciate your business, and strive constantly to improve products. To that end, we welcome any comments or suggestions you may have regarding this product.			
<b>Job Number</b>	<b>123456-1-1</b>	<b>E-Bolts:</b>	<b>20</b>
<b>Length (I.D.)</b>	<b>157.25 in.</b>	<b>Bolts:</b>	<b>60</b>
<b>Width (I.D.)</b>	<b>45.50 in.</b>	<b>Nuts:</b>	<b>80</b>
<b>Weight (EST.):</b>		<b>Washers:</b>	<b>140</b>
		<b>Weight:</b>	<b>267.33</b>
<b>Project Name:</b>		<b>Self Drillers:</b>	<b>56</b>
<b>Tags:</b>	<b>RTU-1</b>		
<b>Part Description</b>	<b>Dimensions</b>	<b>Qty</b>	
<b>TP1301 Cross Brace</b>			
TP1301-01 Cross Brace	45.50 x 14.00 x 14.00	1	
TP1301-02 Cross Brace	45.50 x 14.00 x 14.00	1	
<b>TP1302 Outer Side Plate</b>			
TP1302-01 Outer Side Plate	9.88 x 5.00	1	
TP1302-02 Outer Side Plate	9.88 x 5.00	1	
TP1302-03 Outer Side Plate	9.88 x 5.00	1	
TP1302-04 Outer Side Plate	9.88 x 5.00	1	
<b>TP1303 Inner Corner Angle</b>			
TP1303-01 Inner Corner Angle	13.88	1	
TP1303-02 Inner Corner Angle	13.88	1	
TP1303-03 Inner Corner Angle	13.88	1	
TP1303-04 Inner Corner Angle	13.88	1	
TP1303-05 Inner Corner Angle	13.88	1	
TP1303-06 Inner Corner Angle	13.88	1	
<b>TP1304 Outer Corner Angle</b>			
TP1304-01 Outer Corner Angle	9.88	1	
TP1304-02 Outer Corner Angle	9.88	1	
TP1304-03 Outer Corner Angle	9.88	1	
TP1304-04 Outer Corner Angle	9.88	1	
<b>TP1305 Duct Support</b>			
TP1305-01 Duct Support	56.50	1	
TP1305-02 Duct Support	56.50	1	
TP1305-03 Duct Support	42.50	1	
TP1305-04 Duct Support	42.50	1	
<b>TP1305 Duct Support Cross</b>			
TP1306-01 Duct Support Cross	45.50	1	
TP1306-02 Duct Support Cross	45.50	1	
TP1306-03 Duct Support Cross	45.50	1	
TP1306-04 Duct Support Cross	45.50	1	
<b>TP1305 Duct Support Angle</b>			
TP1307-01 Duct Support Angle	5.00 x 2.00 x 2.00	1	
TP1307-02 Duct Support Angle	5.00 x 2.00 x 2.00	1	
TP1307-03 Duct Support Angle	5.00 x 2.00 x 2.00	1	
TP1307-04 Duct Support Angle	5.00 x 2.00 x 2.00	1	
TP1307-05 Duct Support Angle	5.00 x 2.00 x 2.00	1	
TP1307-06 Duct Support Angle	5.00 x 2.00 x 2.00	1	
TP1307-07 Duct Support Angle	5.00 x 2.00 x 2.00	1	
TP1307-08 Duct Support Angle	5.00 x 2.00 x 2.00	1	
<b>TP1384 Side Wall</b>			
TP1384-01 Side Wall	58.88 x 14.00 x 14.00	1	
TP1384-02 Side Wall	58.88 x 14.00 x 14.00	1	
TP1384-03 Side Wall	58.13 x 14.00 x 14.00	1	
TP1384-04 Side Wall	58.13 x 14.00 x 14.00	1	
TP1384-05 Side Wall	40.25 x 14.00 x 14.00	1	
TP1384-06 Side Wall	40.25 x 14.00 x 14.00	1	



**Table 4. Typical customer parts list (continued)**

<b>TP1385 End Wall Dog Ear Both Ends</b>		
TP1385-01 End Wall Dog Ear Both Ends	49.50 x 14.00 x 14.00	1
TP1385-02 End Wall Dog Ear Both Ends	49.50 x 14.00 x 14.00	1
<b>TP1386 Chase Side</b>		
TP1386-01 Chase Side	35.00 x 14.00 x 14.00	1
<b>TP1386 Left Chase End</b>		
TP1386-01 Chase Side	39.00 x 14.00 x 14.00	1
<b>TP1387 Right Chase End</b>		
TP1387-01 Right Chase End	39.00 x 14.00 x 14.00	1
Tools Required for Assembly: 2 Sockets with 9/16 Drive		







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