

## Duct Transition Specification

### **PART 1 GENERAL**

**1.01** General contractor to provide all labor, materials and equipment in connection with the complete installation of the Duct Transitions.

### **PART 2 PRODUCTS**

**2.01** Duct Transitions as manufactured by **AES Industries, Inc., Tallassee, Alabama 36078, Phone 800-786-0402**

### **PART 3 CONSTRUCTION**

**A. General:** Fabricate supply air duct transitions and return air plenums for RTUs and AHUs with drop boxes of minimum 24 gauge galvanized steel unless otherwise noted in SMACNA duct construction standards. Size units as required to complete the installation of drop boxes. Size opening in return air plenums for the unit CFM and cover opening with a 1"x 1" hardware cloth grid. Insulate duct transitions with 1" x 1.5 lb density duct liner glued and spot welded to interior surfaces. Provide neoprene gasket material sufficient for installation of transitions and plenums. Mounting accessory packages shall be provided with the drop box assembly.

**B. Finish:** Mill finish prepared for field prime and finish coat.

**C. Coordination:** Label and package duct transitions and return air plenums for each RTU.

### **PART 4 INSTALLATION**

**4.01** Drop Box Diffusers shall be installed in strict accordance with manufacturers printed instructions and as detailed on drawings.

### **PART 5 COORDINATION**

**5.01** Size of Boxes and required options shall be coordinated by support manufacturer with General Contractor and Mechanical Contractor prior to fabrication.

### **PART 6 GUARANTEE**

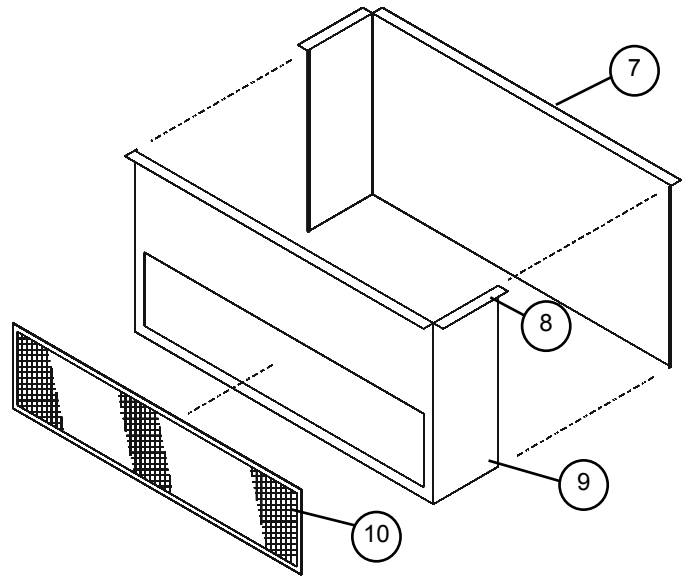
**6.01** Duct Transitions shall be guaranteed against defects in material and/or workmanship for a period of five (1) years.

# Duct Transitions

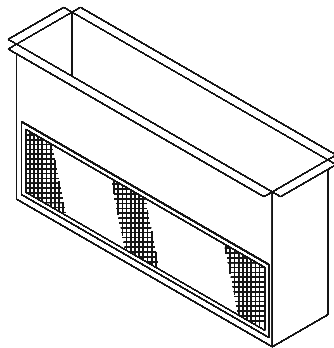
## Supplied Parts List

No.	Description	Qty
1	Supply Drop Side 1	1
2	Supply Drop Side 2	1
3	Supply Transition Side 1	1
4	Supply Transition Side 2	1
5	Supply Transition Side 3	1
6	Supply Transition Side 4	1
7	Return Drop Side 1	1
8	Return Drop Side 2	1
9	Return Elbow	1
10	Return Screen	1
11	Drop Box Assembly	1
12	T.D.C. Corner Bracket	12
13	UNISTRUT	A/R
14	3/8" All-Thread Rod	A/R
15	Ductmate Frames	A/R

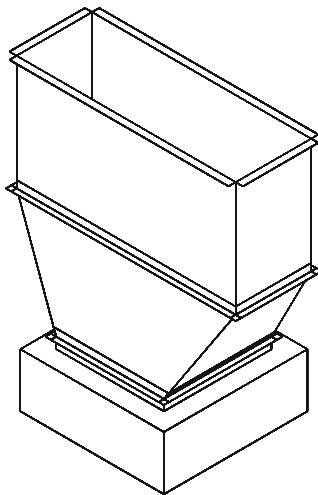
## Assembly Instructions for Supply and Return Transitions



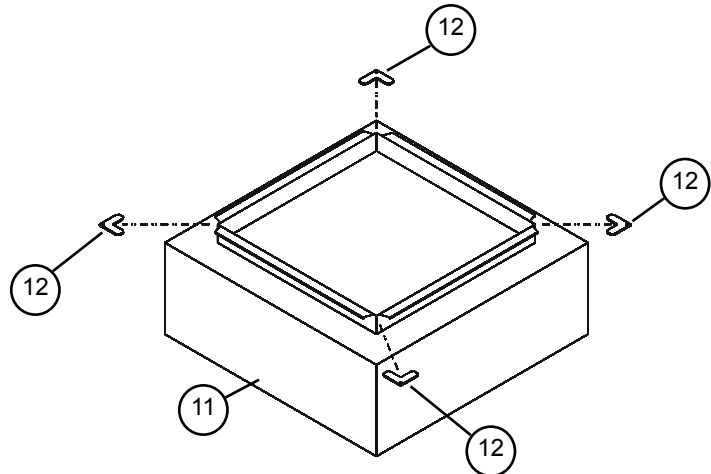
1. Connect return PARTS 7 and 8 Snaploc seams and drop through curb.
2. Install PART 9 to bottom of return duct drop using supplied slip and drives.
3. Attach PART 10 over opening in return drop with self-tapping screws.



**Assembled Sales Floor Return Drop**



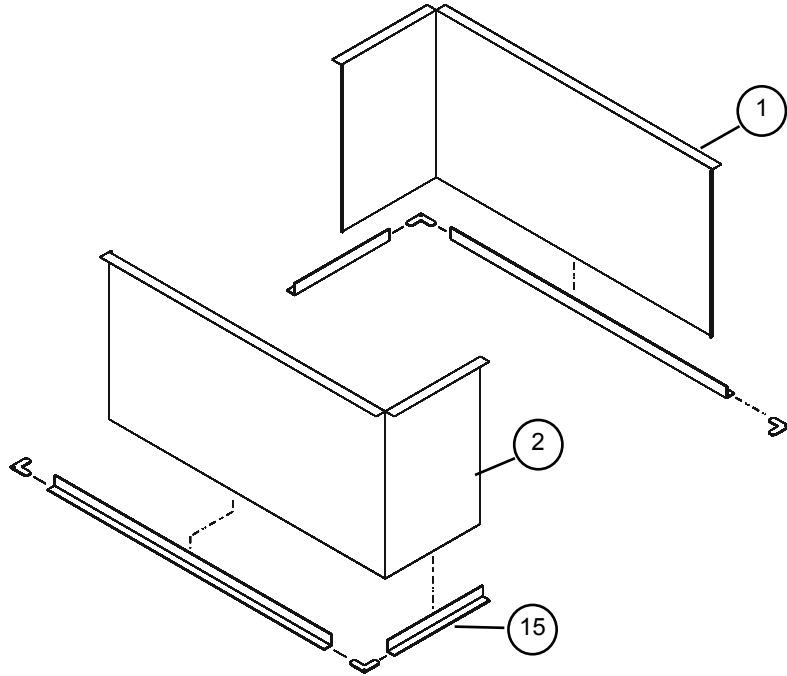
**Assembled Supply Transition**



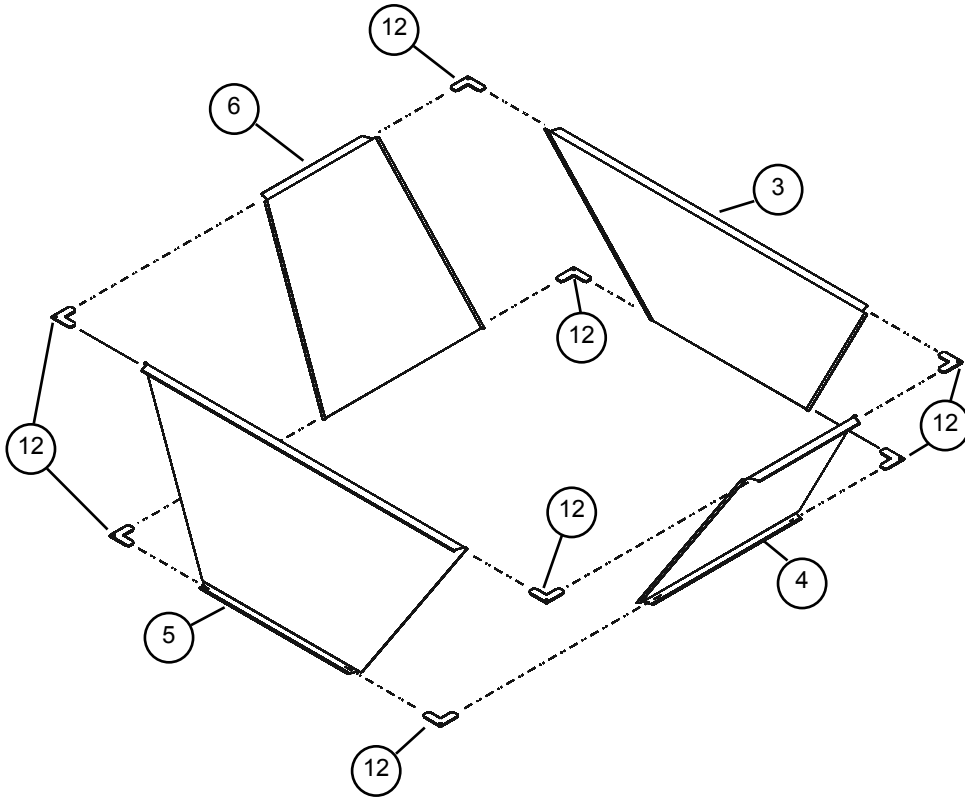
8. Install corner brackets to Drop Box Assembly (refer to fig. A for flange preparation prior to assembly).

**GO TO STEP 9 FOR DROP BOX SUPPORT**

**Duct Transitions**



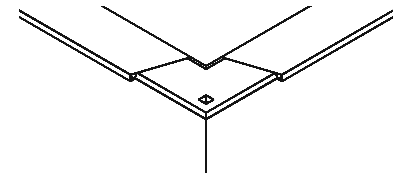
- 4. Connect supply PARTS 1 and 2 Snaploc seams and drop through curb.
- 5. Install Ductmate frame and corner brackets.



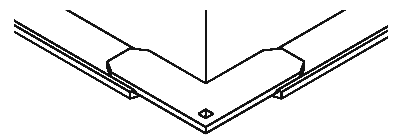
- 6. Connect supply PARTS 3,4,5 and 6 with Pittsburg seams to form the transition section.
- 7. Install corner brackets (refer to fig. A for flange preparation prior to assembly).

**Fig. A**

**FLANGE PREPARATION**

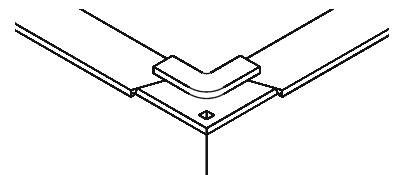


Top view of installed bracket.

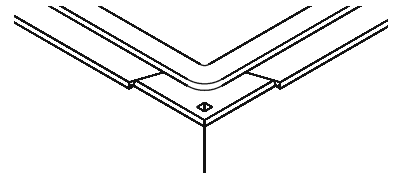


Bottom view of installed bracket.

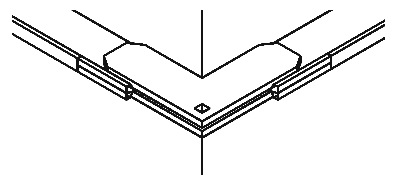
Using a mallet or Vise-Grips, snap the corner brackets into the rolled flanges as shown.



Apply a 2" to 3" strip of gasket on the 4 exposed corners of one frame as shown.

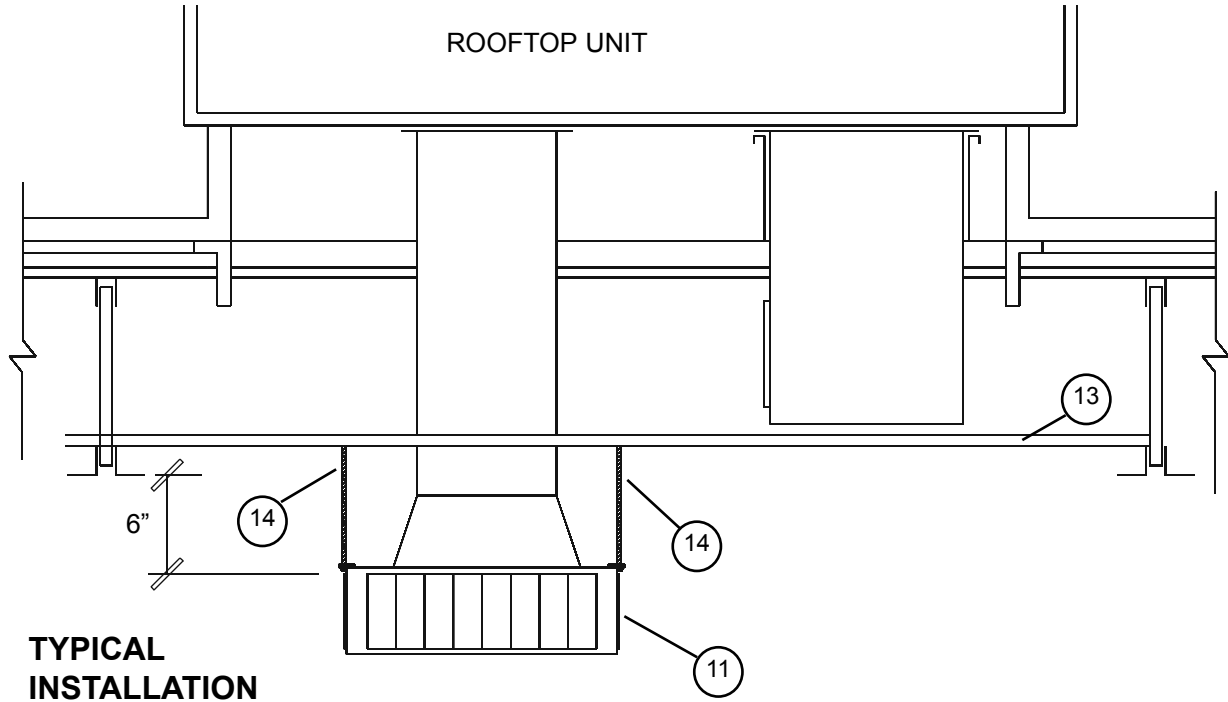


Starting at the center of the mating frame, apply a single strip of gasket completely around the inside edge of the frame.

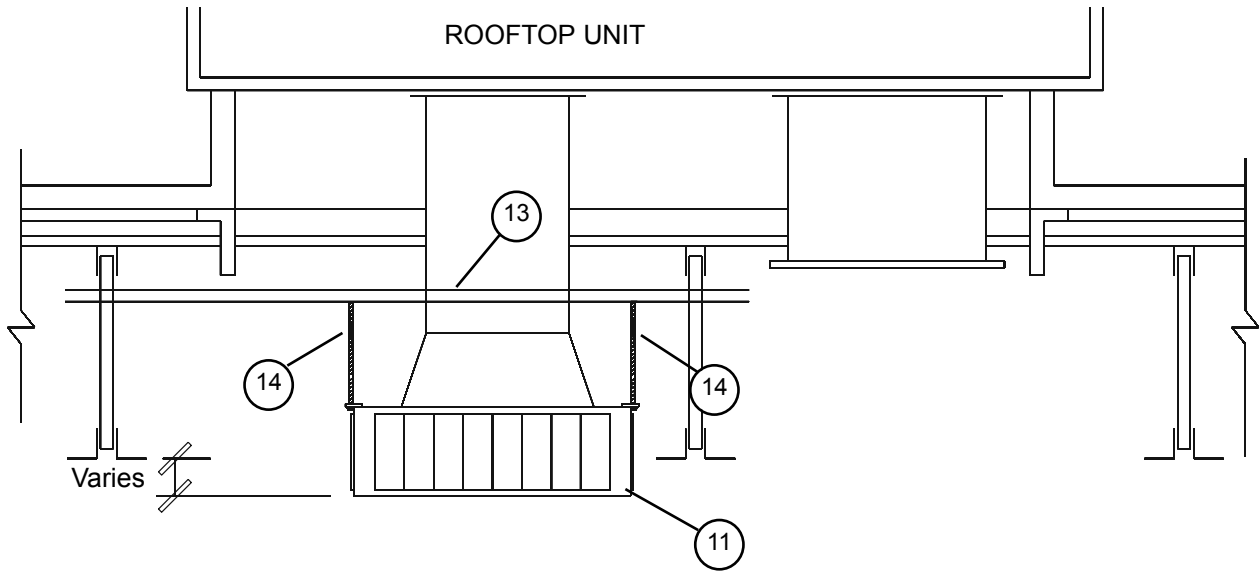


Snap cleats over the mating frames at 18" centers.

**Duct Transitions**



- 9. Lay PART 13 UNISTRUT through the joist and line up the holes with the mounting brackets on the Drop Box assembly.
- 10. Install PART 14 between the Drop Box assembly and PART 13 using the nuts provided.



Note: Distance from Drop Box assembly to joist varies depending on minimum transition height and joist height.

- 9. Install PART 13 UNISTRUT at the top of the joist and line up the holes with the mounting brackets on the Drop Box assembly.
- 10. Install PART 14 between the Drop Box assembly and PART 13 using the nuts provided.