



## **General Instructions for Assembling Exhaust Duct Work & the Weather Head**

The following is a suggested method to aid in assembling the air exhaust ductwork sections and weather head using the fan-mounting ring.

Refer to drawing GENERAL INSTRUCTIONS – DUCT WORK and GENERAL INSTRUCTIONS – WEATHER HEAD

### **Assembling Duct** - refer to drawing DUCT WORK, DETAIL I

1. place the ring on a level surface, vertical leg up. Place a pre-rolled section of 48" long duct around the outside vertical leg of the ring and draw tight around the ring using a ratchet type utility tie down. Fasten the seam with 1 TEK screw 3" above the bottom edge of the duct.
2. remove the duct from the ring, turn end for end and place the bottom end over the ring. Readjust the ratchet tie down as needed. Fasten the seam with 1 TEK screw 3" above the bottom edge of the duct.
3. place TEK screws 6 to 8" apart along the seam. Remove from ring and remove the ratchet tie down.
4. seal seams with duct tape.

### **Assembling Duct Work** – refer to DETAIL I, STEP 4 and DETAIL II, DUCT WORK

1. insert the pre-rolled 4" wide companion band into one end, clamp in place and attach the TEK screws every 6 to 8".
2. place the fan mounting ring into the end of one duct and TEK screw together placing screws every 6 to 8" apart. This section will be fastened to the fan.

### **Assembling the Weather Head** – refer to drawing WEATHER HEAD, Detail III.

1. to a section of assembled duct (Duct Work, Detail I, Step 3), "C" clamp the 4 "Z" brackets at 90 degrees apart and flush with the top edge of the duct. Attach in place with 3 TEK screws for each bracket.
2. place the 2 end caps 180 degrees apart and 45 degrees from the "Z" brackets with the long tab flush with the top of the duct. Attach each cap with 2 TEK screws.
3. place the flapper section on the end caps and center the flapper with the duct. Attach the flapper with 2 TEK screws per side, attaching the screws from the bottom of the end cap. The flapper is properly positioned if the 2 leaves are free to rotate upwards.
4. place one end of the 16" skirt to one of the "Z" brackets, with the bottom edge flush with the bottom of the "Z" bracket, and clamp in place. Draw the skirt tight using a ratchet tie down. Attach the skirt to each "Z" bracket with 3 TEK screws.

Assembling the Roof Flange – refer to the drawing WEATHER HEAD, Detail IV.

1. place the pre-formed roof sleeve in the hole of the roof flange. Center the sleeve midway through the flange.
2. attach the sleeve to the flange with the “L” brackets and TEK screws.
3. attach the seams of the sleeve with TEK screws.

Installation of Roof Flange, Duct Thru Roof, and Rain Cap – refer to the drawing WEATHER HEAD, Details V and VI.

1. cut opening through roof approximately  $\frac{1}{2}$ ” larger in diameter than the roof flange sleeve. Secure in place to the roof and thoroughly caulk (note – this step is situational and depends on the type of roof. Roofing cement may be used instead of caulk.).
2. extend preformed duct through the sleeve to the desired elevation and secure in place (note – this step is also situational). The roof sleeve is not to support the duct.
3. place rain collar around duct and place a single TEK screw at each seam of the collar.
4. slide the rain collar over the roof sleeve, form a cone and secure both seams with TEK screws.
5. caulk the joint between the rain collar and the duct.
6. apply duct tape to all seams and joints. Note – caulk may also be used instead of duct tape.
7. install the weather head to the proper height above the roof.