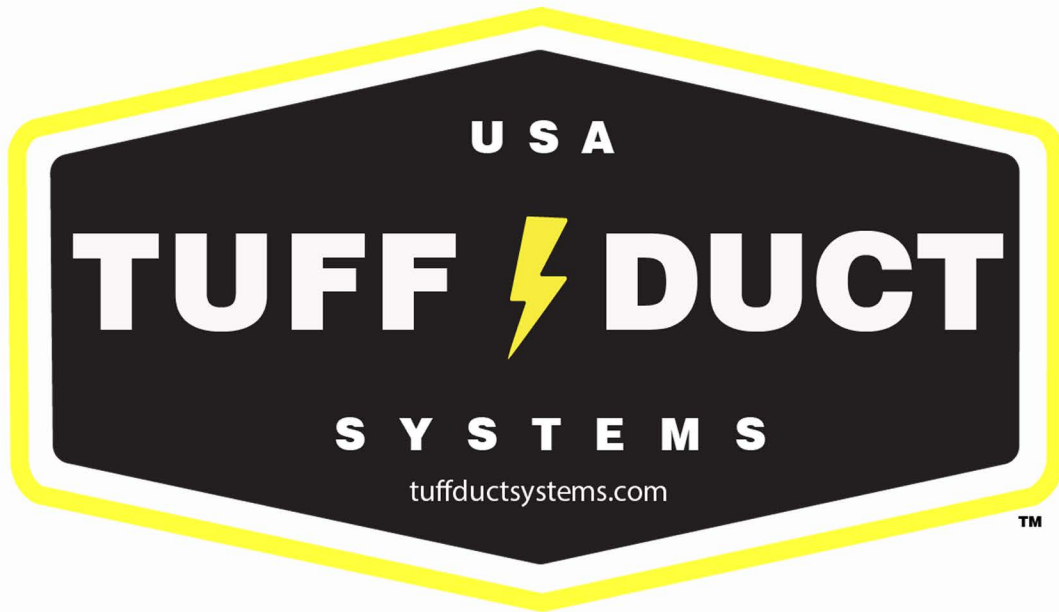




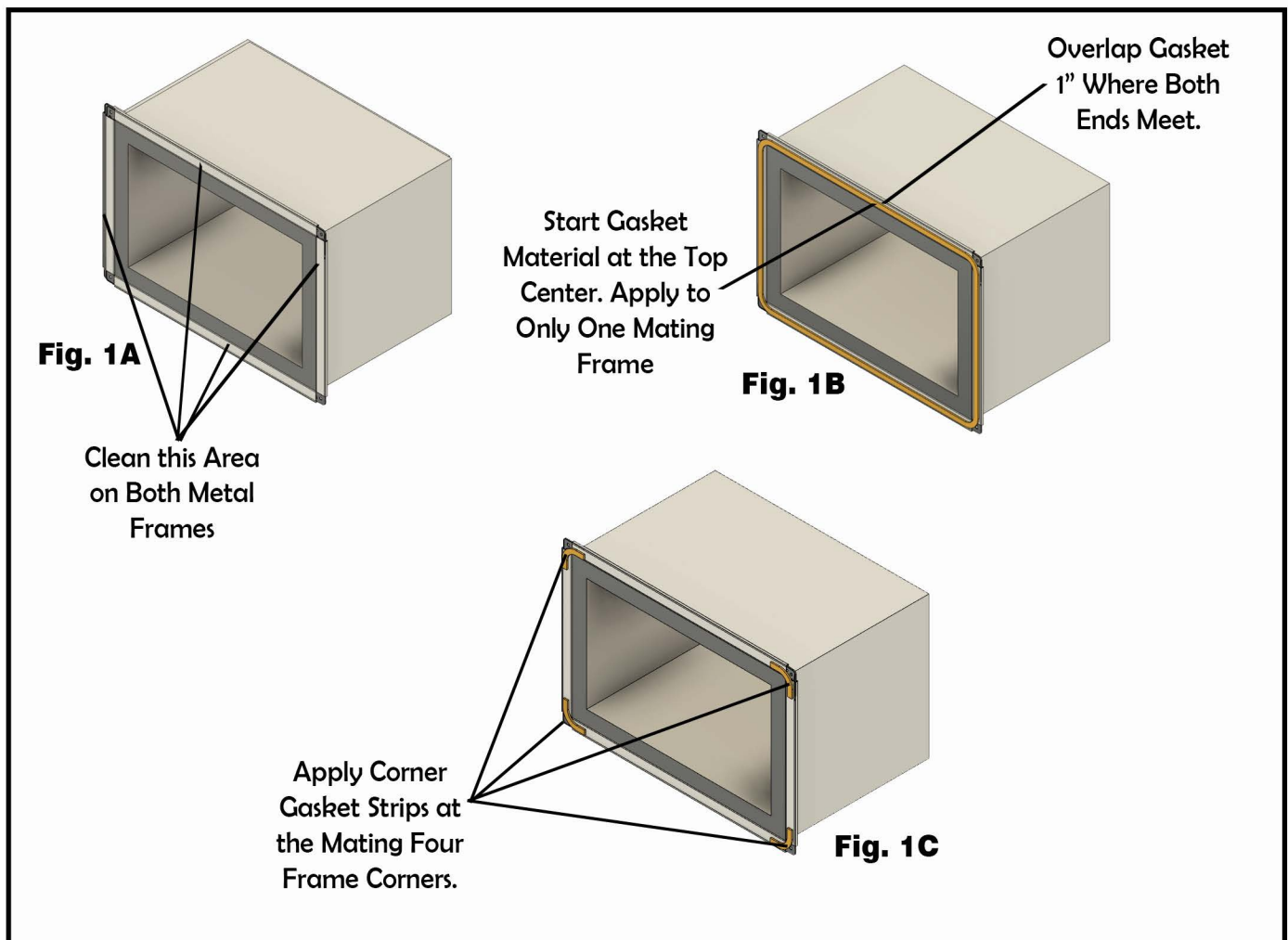
EASY INSTALLATION INSTRUCTIONS

TUFF DUCT EASY INSTALLATION INSTRUCTIONS

TDC AND DURODYNE (DYNAMATE) FRAME CONNECTION INSTRUCTIONS

1. TDC / Durodyne Frame Prep = Wipe the face of both frames that you are about to connect making sure it is free of dirt, oil, and all debris. Leaving 2 clean surfaces to connect. (Fig. 1A)
2. Gasket = Apply the gasket to metal frame by starting at the center of the straight piece at the top of frame. Apply a single layer of gasket completely around the inside edge of the frame. (Fig. 1B)
3. Gasket = At the corners the gasket must cover the small space between the duct wall and the corner.
4. Gasket = Where the gasket meets, overlap 1". (Fig. 1B)
5. Gasket = When using Durodyne (Dynamate) Frame duct connection you must apply a 2" to 3" strip of gasket on the mating frames corners. That is the small space between the corner and the duct wall. When rounding the corners with your gasket it is essential to cover the small space around the corner. (Fig. 1C)

-----Refer To Below Illustration -----

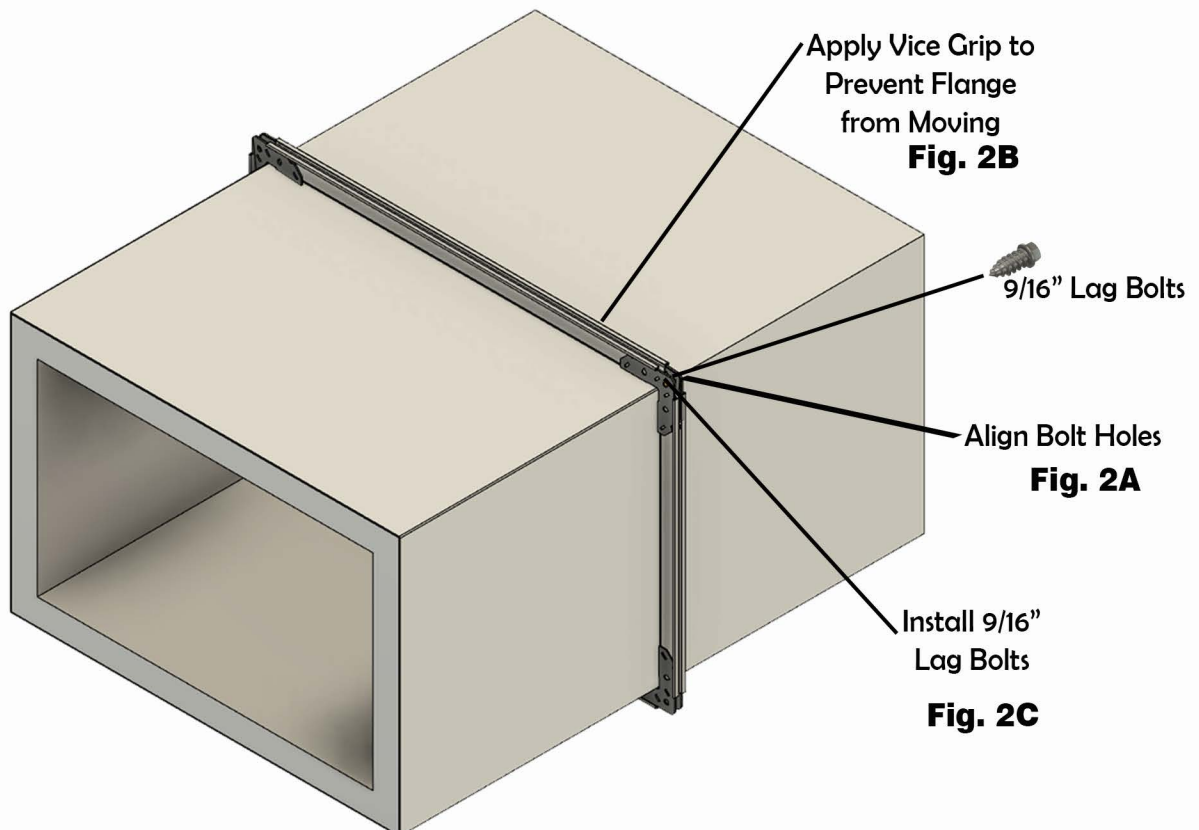


TUFF DUCT EASY INSTALLATION INSTRUCTIONS

BOLTING THE CONNECTION

- 1. BOLTING UP = TUFF DUCT COMES WITH 4 LAG BOLTS FOR MATING YOUR CONNECTION. TUFF DUCT DOES NOT USE THE STANDARD 3/8" CARRIAGE NUTS AND BOLTS. THE 9/16" HEAD LAG BOLTS WILL SAVE THE INSTALLING CREW TIME.**
- 2. BOLTING UP = ALIGN THE CONNECTING FLANGES. THE BOLT HOLES IN THE FOUR CORNERS OF BOTH FLANGES SHOULD LINE UP. (FIG. 2A)**
- 3. BOLTING UP = ONCE THE BOLT HOLES ARE CLOSE TO BEING ALIGNED APPLY A VICE GRIP TO PREVENT THE FLANGES FROM MOVING. (FIG. 2B)**
- 4. BOLTING UP = THEN INSTALL THE 9/16" HEAD LAG BOLT IN ALL FOUR CORNERS. SNUGGING THE LAG BOLTS TO A TIGHT POSITION. (FIG. 2C)**

-----Refer To Below Illustration -----



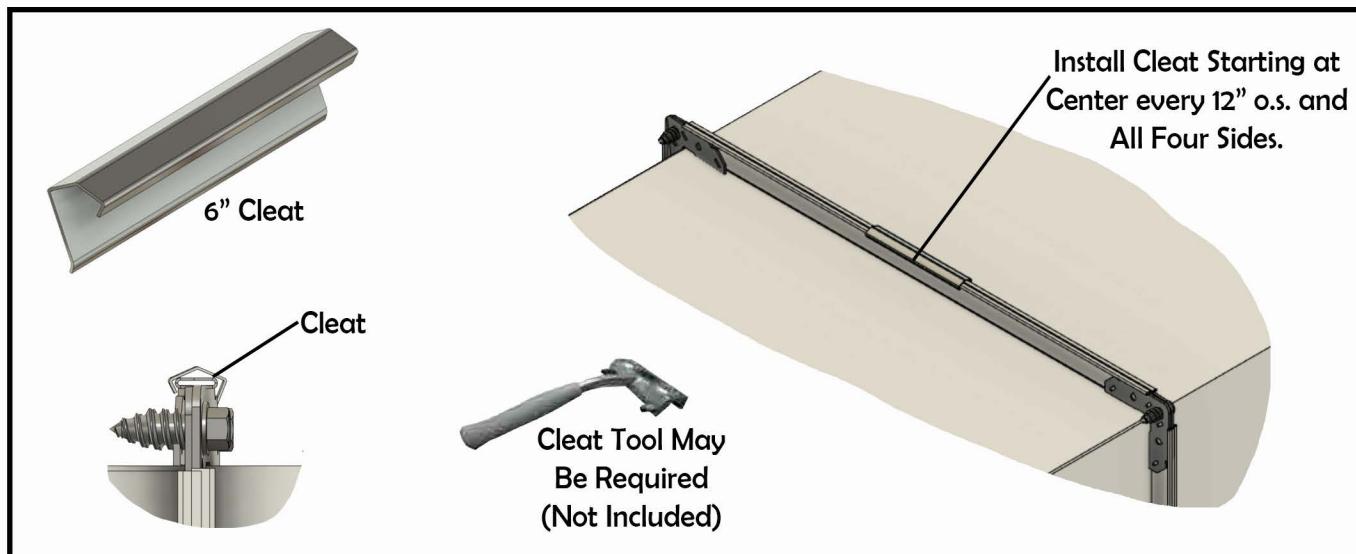
NOTE: Repeat Steps in Fig. 2A, 2B and 2C for all Four Corners

TUFF DUCT EASY INSTALLATION INSTRUCTIONS

CLEAT INSTALLATION

1. **CLEAT INSTALLATION = STARTING AT THE CENTER OF EACH OF THE 4 SIDES OF THE CONNECTION INSTALL A 6" LONG CLEAT THAT IS PROVIDED WITH YOUR ORDER.**
2. **CLEAT INSTALLATION = CONTINUE TO INSTALL A 6" LONG CLEAT EVERY 12" ON CENTER ALONG ALL 4 SIDES OF THE CONNECTION.**

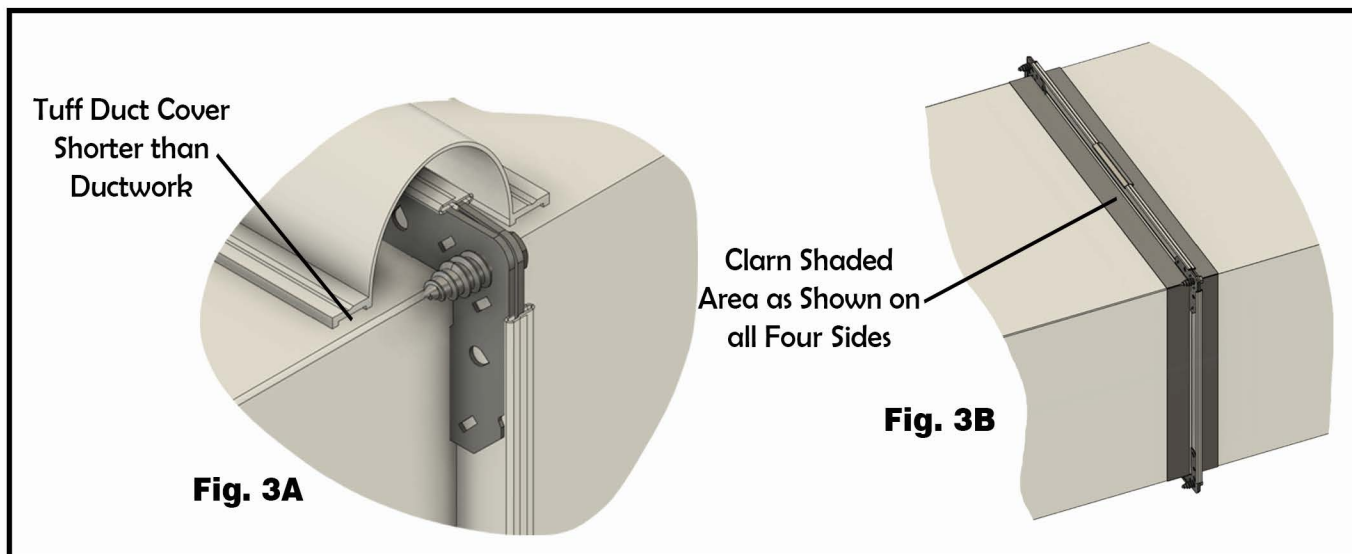
-----Refer To Below Illustration -----



TUFF CAP CONNECTION COVER

1. **TUFF CAP = MEASURE YOUR DUCT SIZE AND CUT A PIECE OF YOUR PROVIDED TUFF CAP STRAIGHT SECTION APPROXIMATELY 1/2" LESS THAN THE DUCT DIMENSIONS. THIS ALLOWS FOR THE CORNERS TO FIT PROPERLY. THERE WILL BE FOUR TUFF CAP STRAIGHT SECTIONS NEEDED TO BE CUT FOR EACH CONNECTION. ACCORDING TO YOUR DUCT SIZE. (FIG. 3A)**
2. **TUFF CAP = TO BEGIN INSTALLATION OF THE TUFF CAP WIPE DOWN THE AREA ON BOTH SIDES OF THE CONNECTION APPROXIMATELY 2" THAT YOU ARE ABOUT TO COVER WITH THE TUFF CAP. (FIG. 3B)**

-----Refer To Below Illustration -----



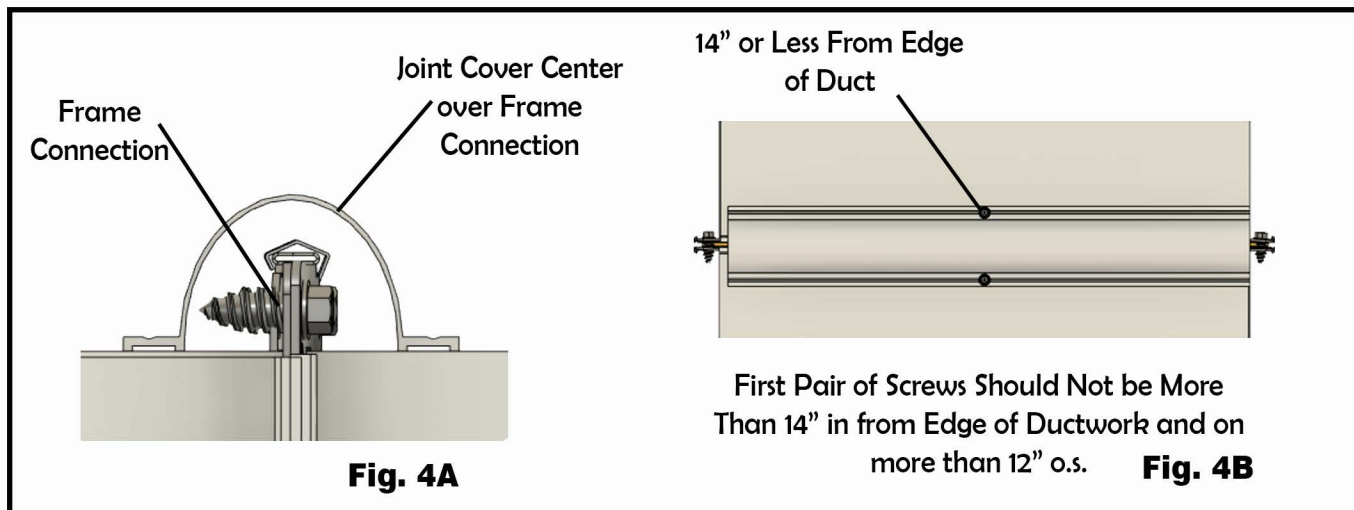
TUFF DUCT EASY INSTALLATION INSTRUCTIONS

TUFF CAP CONNECTION COVER (CONTINUED)

3. TUFF CAP = PLACE ONE STRAIGHT SECTION OF JOINT COVER OVER THE FRAME CONNECTION CENTERING THE JOINT COVER OVER THE CONNECTION. REMEMBER YOUR TUFF CAP COVER WILL BE A LITTLE SHORT ON EACH SIDE. (ALL CONNECTION JOINT COVER STRAIGHT SECTIONS SHOULD BE CENTERED OVER TOP OF THE CONNECTION THAT YOU ARE COVERING) (FIG. 4A)

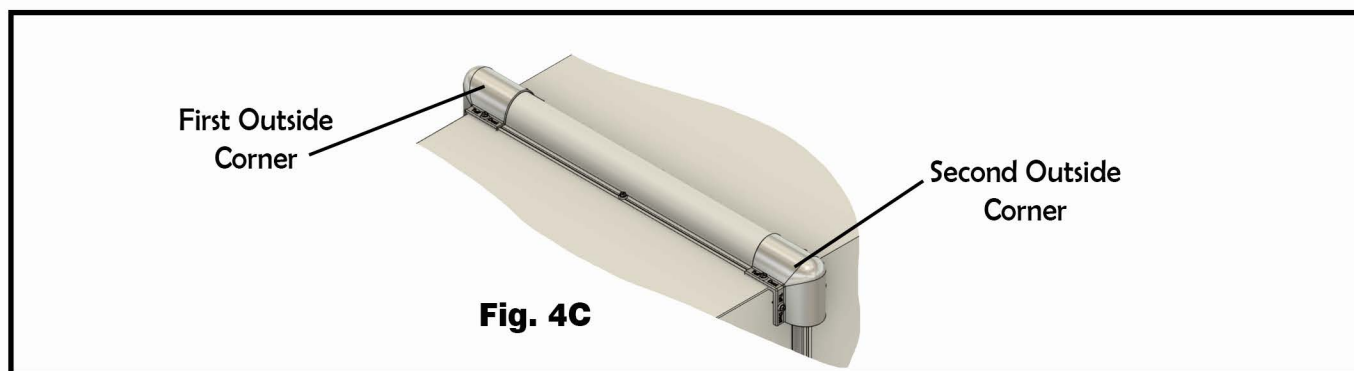
4. TUFF CAP = WITH THE FIRST CONNECTION COVER PIECE IN PLACE COVERING THE TDC / DURODYNE CONNECTION YOU ARE READY TO START SCREWING IT DOWN. STARTING AT EITHER END INSTALL TWO GASKETED SCREWS (PROVIDED WITH EACH ORDER) IN THE SCREW LINE APPROXIMATELY 14" FROM THAT EDGE. THEN GO TO THE OPPOSITE SIDE OF THAT CONNECTION COVER AND INSTALL TWO SCREWS IN THE SCREW LINE OF THE CONNECTION COVER 14" IN FROM THAT SIDE. NOW YOU WILL CONTINUE TO INSTALL GASKETED SCREW IN THE SCREW LINE EVERY 12" ALONG BOTH SIDES OF THE STRAIGHT SECTION OF CONNECTION COVER. (SCREWS SHOULD BE NO GRATER THAN 12' APART). (FIG. 4B)

-----Refer To Below Illustration -----



5. TUFF CAP = INSTALL FIRST AND SECOND OUTSIDE CORNERS ON THE CONNECTION COVER THAT WAS JUST SCREWED DOWN. USE THE SCREW HOLES PROVIDED IN THE CORNER PIECE, INSTALL GASKETED SCREWS IN BOTH SCREW HOLE OPENINGS THROUGH THE CONNECTION COVER THAT WAS JUST INSTALLED. DON'T INSTALL THE SCREWS ON THE OPPOSITE SIDE OF THE OUTSIDE CORNER YET. (FIG. 4C)

-----Refer To Below Illustration -----



TUFF DUCT EASY INSTALLATION INSTRUCTIONS

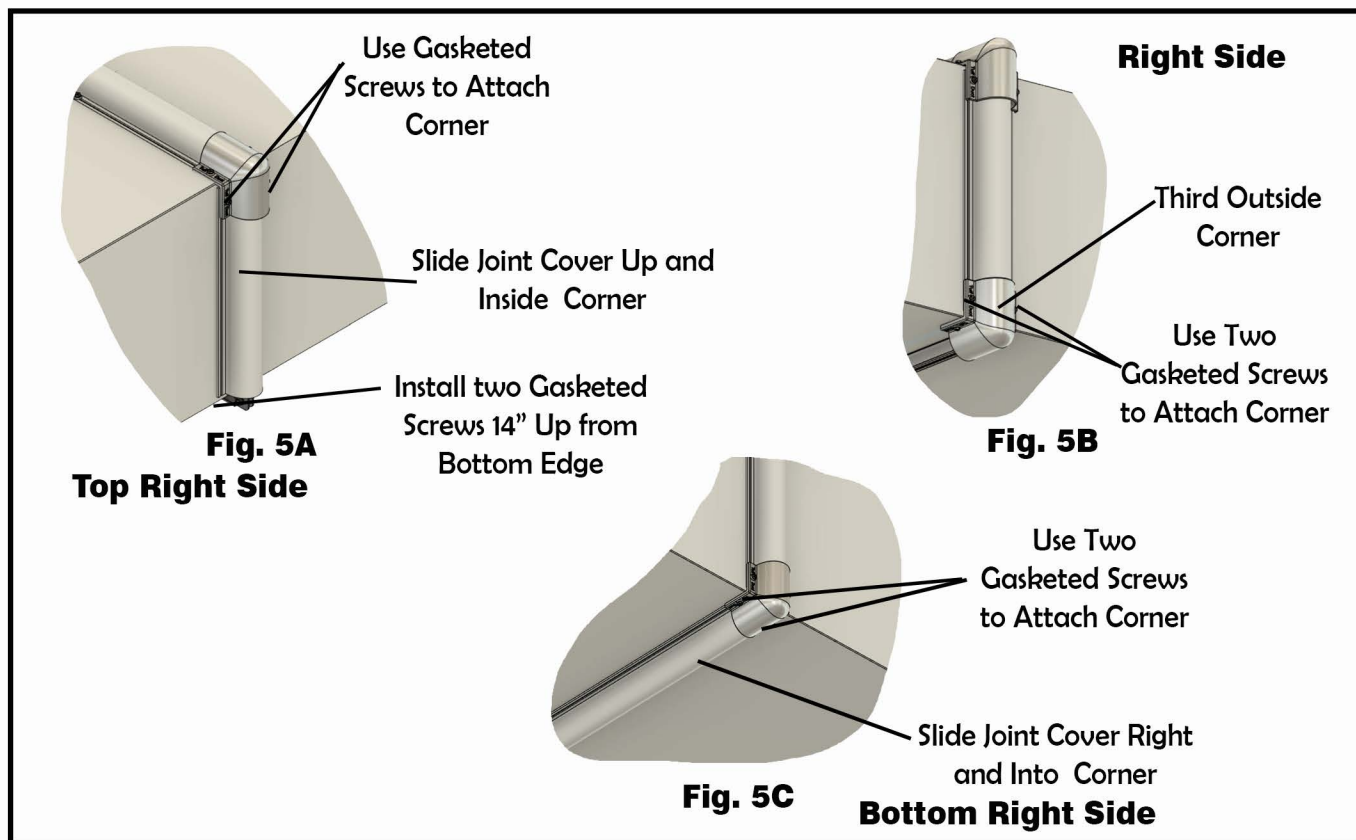
TUFF CAP CONNECTION (CONTINUED)

6. TUFF CAP = INSTALL THE SECOND PIECE OF STRAIGHT SECTION BY SLIDING IT INTO THE OPEN SIDE OF ONE OUTSIDE CORNER THAT WAS JUST INSTALLED. INSTALL TWO GASKETED SCREWS IN THE SCREW LINE OF THE STRAIGHT SECTION APPROXIMATELY **14"** IN FROM THE EDGE OF THE SIDE THAT IS NOT SLID INTO THE OUTSIDE CORNER. INSTALL TWO GASKETED SCREWS IN THE SCREW HOLES OF THE OUTSIDE CORNER THAT THE STRAIGHT SECTION WAS SLID INTO. **NOW YOU WILL CONTINUE TO INSTALL GASKETED SCREWS IN THE SCREW LINE OF THE CONNECTION COVER STRAIGHT SECTION EVERY 12" ON BOTH SIDES OF THE CONNECTION COVER STRAIGHT SECTION. (FIG. 5A)**

7. TUFF CAP = INSTALL THE THIRD OUTSIDE CORNER ON THE STRAIGHT SECTION THAT WAS JUST INSTALLED. **USE THE SCREW HOLES PROVIDED IN THE CORNER PIECE, INSTALL TWO GASKETED SCREWS IN BOTH SCREW HOLE OPENINGS THROUGH THE STRAIGHT SECTION THAT WAS JUST INSTALLED. DON'T INSTALL THE SCREWS ON THE OPPOSITE SIDE OF THE OUTSIDE CORNER YET. (FIG. 5B)**

8. TUFF CAP = INSTALL THE THIRD PIECE OF STRAIGHT SECTION BY SLIDING IT INTO THE OPEN SIDE OF THE OUTSIDE CORNER THAT WAS JUST INSTALLED. INSTALL TWO GASKETED SCREWS IN THE SCREW LINE OF THE STRAIGHT SECTION APPROXIMATELY **14"** IN FROM THE EDGE OF THE SIDE THAT IS NOT SLID INTO THE OUTSIDE CORNER. INSTALL TWO GASKETED SCREWS IN THE SCREW HOLES OF THE OUTSIDE CORNER THAT THE STRAIGHT SECTION WAS SLID INTO. **NOW YOU WILL CONTINUE TO INSTALL GASKETED SCREWS IN THE SCREW LINE OF THE CONNECTION COVER STRAIGHT SECTION EVERY 12" ON BOTH SIDES OF THE CONNECTION COVER STRAIGHT SECTION. (FIG. 5C)**

-----Refer To Below Illustration -----



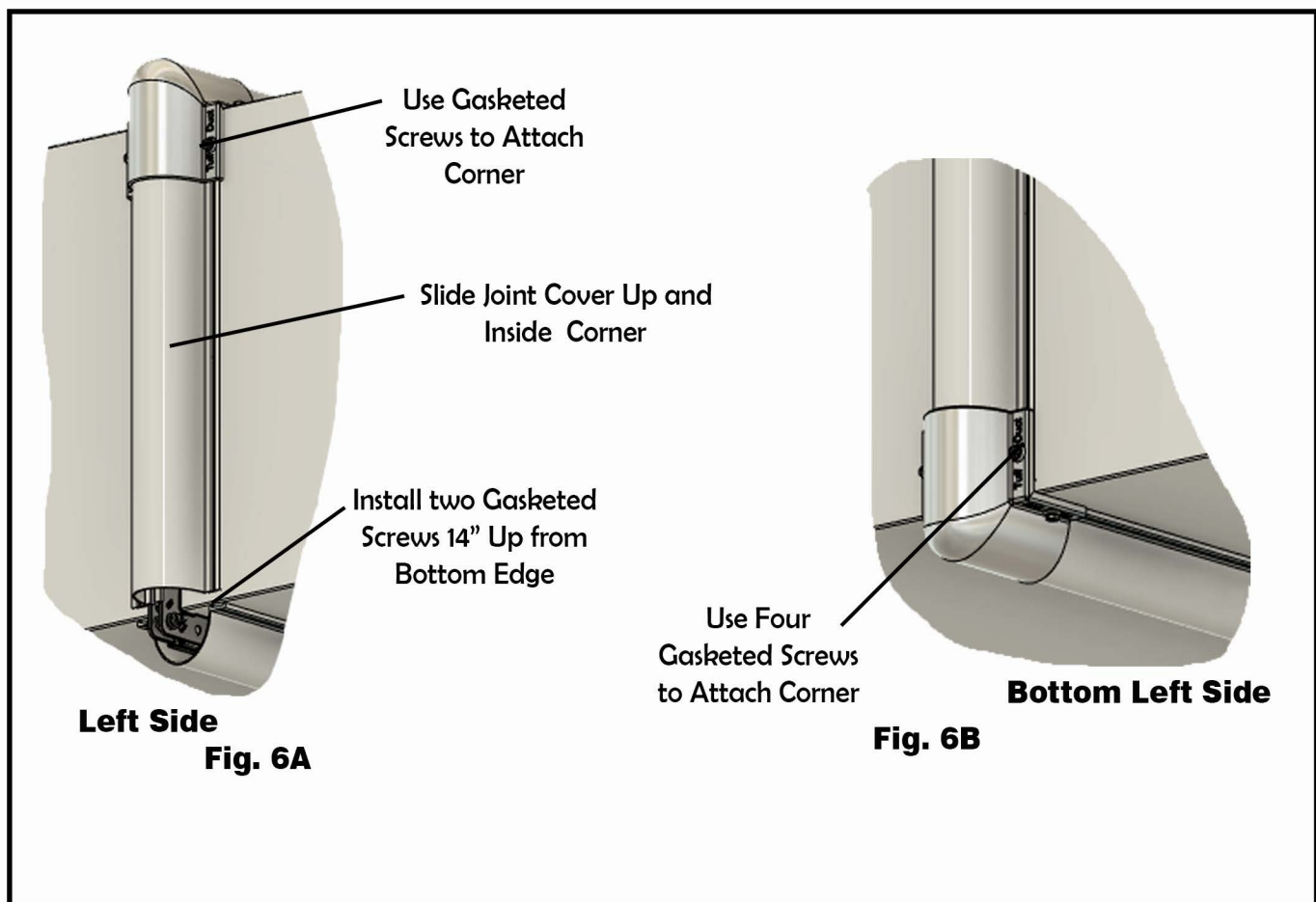
TUFF DUCT EASY INSTALLATION INSTRUCTIONS

TUFF CAP CONNECTION (CONTINUED)

9. TUFF CAP = INSTALL THE FOURTH PIECE OF STRAIGHT SECTION BY SLIDING IT INTO THE OPEN SIDE OF THE SECOND OUTSIDE CORNER THAT WAS INSTALLED AT STEP 5. INSTALL TWO GASKETED SCREWS IN THE SCREW LINE OF THE STRAIGHT SECTION APPROXIMATELY **14"** IN FROM THE EDGE OF THE SIDE THAT IS NOT SLID INTO THE OUTSIDE CORNER. INSTALL TWO GASKETED SCREWS IN THE SCREW HOLES OF THE OUTSIDE CORNER THAT THE STRAIGHT SECTION WAS SLID INTO. **NOW YOU WILL CONTINUE TO INSTALL GASKETED SCREWS IN THE SCREW LINE OF THE CONNECTION COVER STRAIGHT SECTION EVERY 12" ON BOTH SIDES OF THE CONNECTION COVER STRAIGHT SECTION. (FIG. 6A)**

10. TUFF CAP = INSTALL THE **4TH** OUTSIDE CORNER AT THE LAST OPEN CORNER USING GASKETED SCREWS IN ALL **4** SCREW HOLES **(FIG. 6B)**

-----Refer To Below Illustration -----

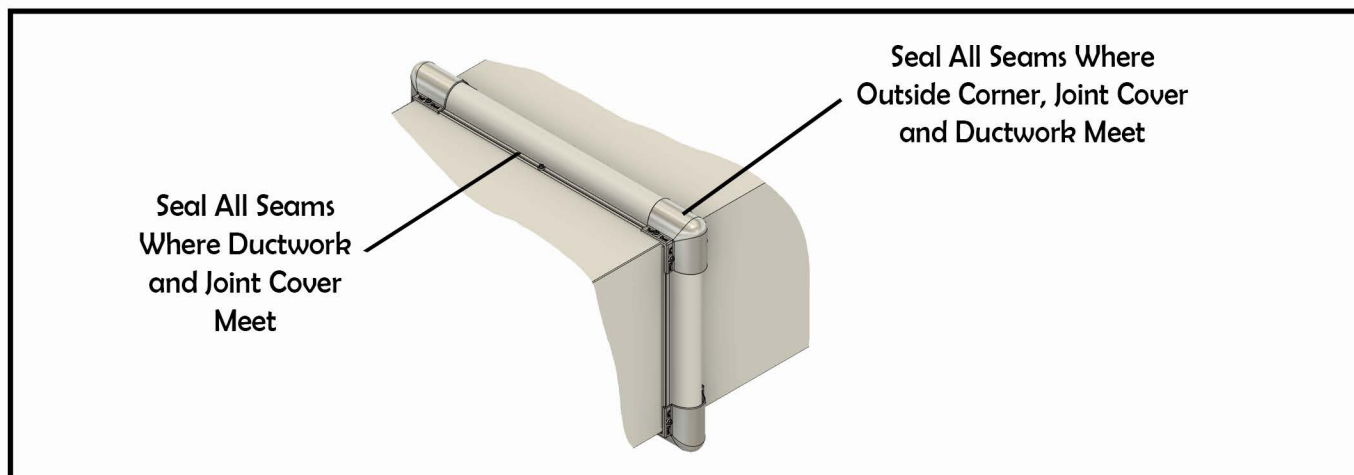


TUFF DUCT EASY INSTULATION INSTRUCTIONS

SEALING CONNECTION COVER

SEAL THE ENTIRE CONNECTION COVER STRAIGHT SECTION AND OUTSIDE CORNER WITH THE PROVIDED CAULKING

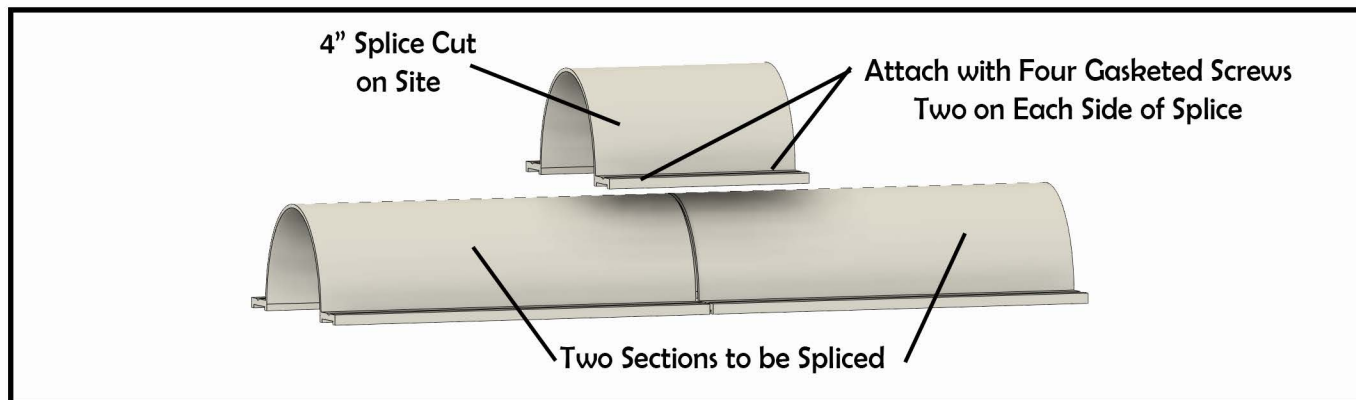
-----Refer To Below Illustration -----



SPLICING STRAIGHT SECTION WHERE NEEDED

WHERE DUCT DIMENSIONS ARE GREATER THAN THE STANDARD PROVIDED LENGTH OF CONNECTION COVER STRAIGHT SECTION OR IF TRYING TO UTILIZE SHORTER LENGTHS OF CONNECTION COVER STRAIGHT SECTION YOU CAN CUT A 4" PIECE OF STRAIGHT SECTION TO COVER WHERE THE TWO SECTIONS OF STRAIGHT SECTION BUTT UP TO EACH OTHER AND SECURE USING FOUR GASKETED SCREWS (TWO ON EACH SIDE OF THE SPLICE) THAT WERE PROVIDED. BE SURE TO SEAL THE ENTIRE SPICE SECTION

-----Refer To Below Illustration -----



DAMAGED COATING TOUCH UP PAINT

EVEN THOUGH WE ARE USING THE TUFFEST COATING ON THE MARKET WE HAVE SEEN WHERE DAMAGE TO THE COATING CAN OCCUR DUE TO ABUSE TO THE COATING DURING THE INSTALLATION PROCESS. IF DAMAGE TO THE COATING OCCURS DURING INSTALLATION WE PROVIDE A CAN OF TOUCH UP PAINT WITH EVERY DELIVERY.