

D U C T M A T E

Spiralmate®



Round
CONNECTION SYSTEMS



Round Duct Connection System

Eliminates the need for duct sealant!

- Air-tight, efficient
- Simple self-sealing connection
- Consistent connections
- No additional sealing required
- Can be installed on-site
- Sizes from 8" - 72" in standard 2" increments, 1" increments available
- For sizes larger than 72" consult factory
- Available in specialty metals



DESCRIPTION

Round duct connection system

BASIC USE

The Spiralmate® Round Duct Connector was developed to provide a strong and leak free connection without the use of duct sealants.

SPECIAL CHARACTERISTICS

The Spiralmate Duct Connector System has been tested by Professional Service Industries, Inc., a division of Pittsburgh Testing Laboratories, with test results as noted. No external sealant was employed and the certified test results reveal virtually no leakage at up to 18" WG positive pressure or down to 10" WG negative pressure.

Complete test data is available on request.

Flange Steel:	hot dipped galvanized steel
Closure Ring Steel:	hot dipped galvanized steel
Mastic:	DM5511M
Gasket:	Ductmate 440 and Ductmate
Neoprene	

LIMITATIONS

The Spiralmate Small Profile Round Duct Connector is not recommended for applications with spiral duct gauges heavier than 20 GA or lighter than 28 GA. The Spiralmate Large Profile Round Duct Connector is not recommended for applications with spiral duct gauges heavier than 16 GA or lighter than 28 GA. Both Spiralmate Profiles will accept 12 GA longitudinal duct seam. Some duct manufacturers may weld on the seams to keep them from falling apart once the duct is manufactured. These welds may need to be ground down so they can fit the pocket. This will not compromise the duct seam as long as the spiral flanges are attached just after grinding.

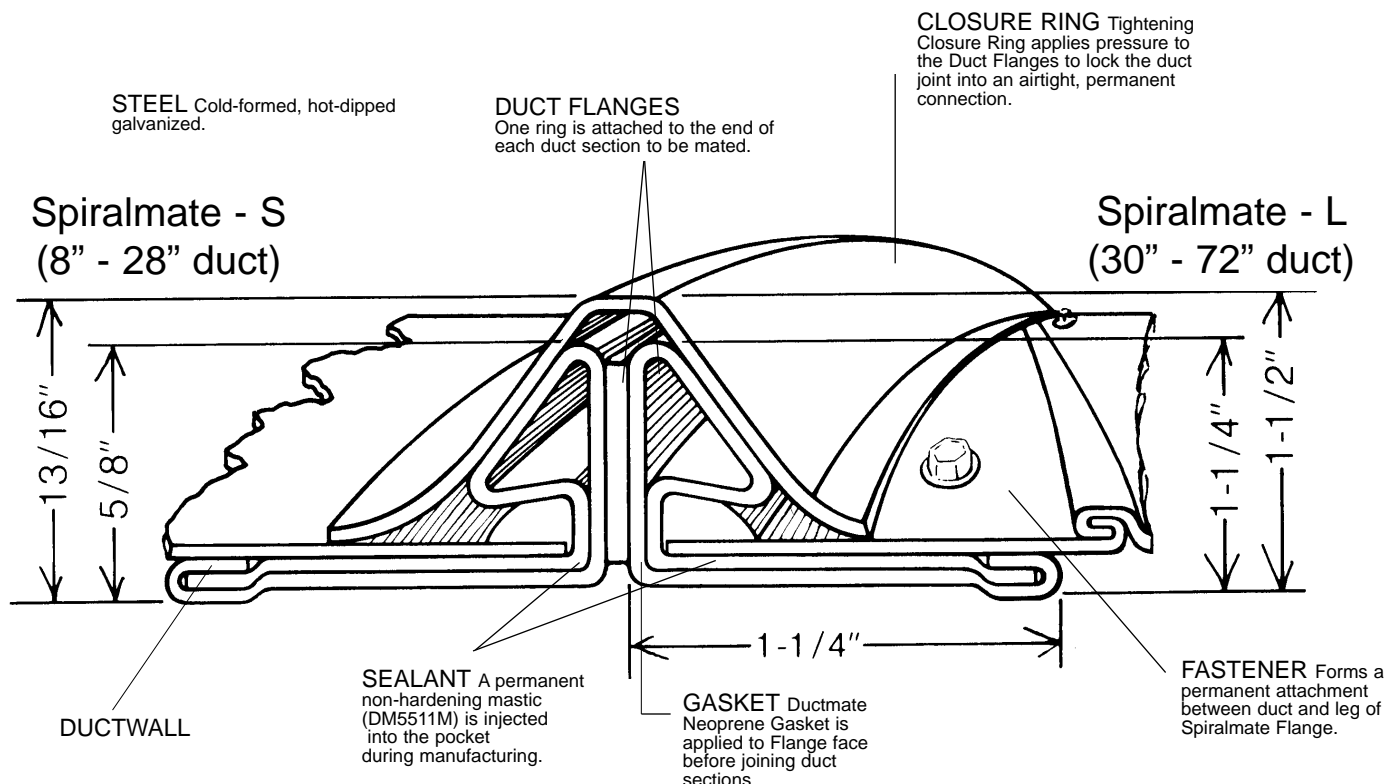
PRODUCT GUARANTEE

All component parts of the Spiralmate System are guaranteed against defective material.

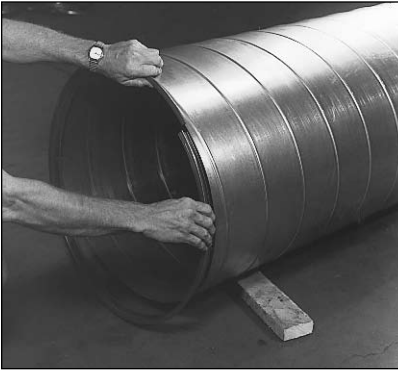
PACKAGING INFORMATION

The Spiralmate Round Duct Connector system consists of the following components:

- Two mating Round Duct Connector Flanges with an integral mastic in the duct receiving pocket.
- A Closure Ring roll-formed from hot dipped galvanized steel.



INSTALLATION INSTRUCTIONS



1. Start duct flange by inserting duct end into flange pocket at the break in the ring.



5. The break in the flange will allow a portion of the leading edge of the duct to be visible.* Apply a short piece of Ductmate 440 gasket to the flange face over this visible leading edge on **both** mating flanges.

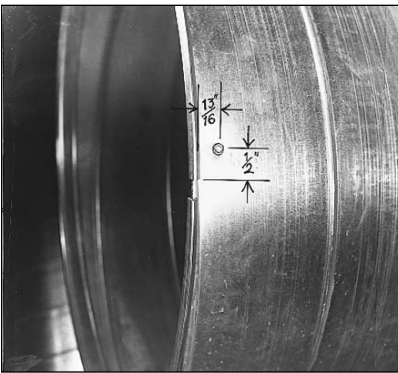


2. Seat flange permanently by pressing it so the leading edge of the duct is seated in the pocket of the flange and penetrates the sealant.

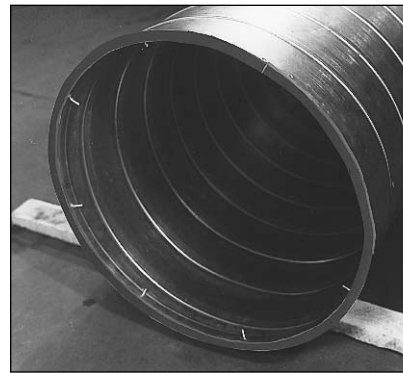
Hold flange in position with vise-grip a few inches from the break.



6. Complete the gasket application by installing Ductmate Neoprene gasket on the face of the flange around the entire circumference of **one** of the mating flanges.



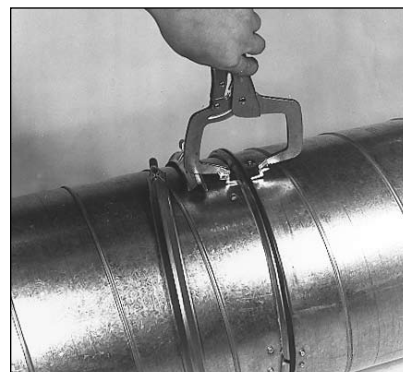
3. Begin securing the leg of the flange to the duct section by placing a pop rivet, screw, or spot weld within 1/2" of the end of the flange break. The fastener should be placed no closer than 3/4" or further than 1" from the face of the flange.



7. The end of the gasket should butt up to the beginning.



4. Continue in the same direction around the duct at evenly spaced intervals, as noted below left. Place the last fastener within 1/2" of the end of the duct flange.



8. Slip outer closure ring over end of duct. Align flanges using Spiralmate alignment grips.

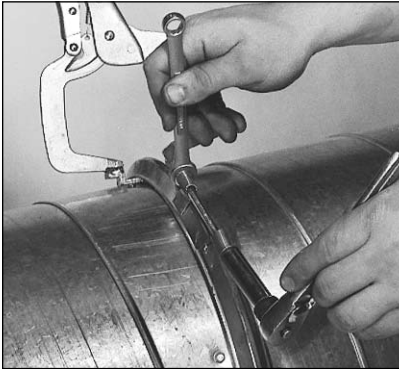
8" - 18" duct - 8" on center
 20" - 28" duct - 12" on center
 30" and larger duct - 18" on center

Using the Ductmater or Repeater Pro is optional but can save time and increase product consistency.

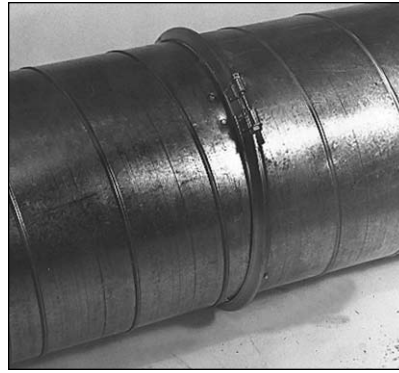
** Because most spiral duct is not true to size it may be necessary to cut a larger gap in the flange at the break. There **must** be a gap at the break.*



9. Slide closure ring over mating flanges and insert bolt.



10. Tighten the bolt on the closure ring until it makes even contact around the circumference of the duct sections. Tap around joint with hammer if necessary to seat flange while tightening.



11. A completed, air-tight, round transverse duct joint. Fast, neat and clean.

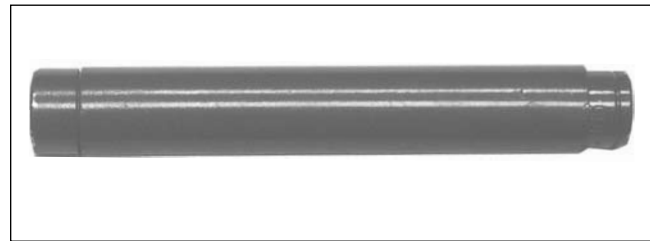
IMPORTANT: On duct sizes 72" and larger consult factory for additional assembly and installation information.

SPECIAL TOOLS



Spiralmate Alignment Grips

These modified Alignment Grips help you quickly align your Spiralmate flanges, further reducing your labor time and costs.



Spiralmate Nut Runner

The Spiralmate Nut Runner was specifically designed to quickly secure the Spiralmate Ring during installation.

Frequently a contractor installing a high velocity duct system will employ a duct joint with which either he or his work force have no experience. In such a case, it is strongly recommended that the contractor promptly test the initial 100 to 300 feet of duct before installing any more duct. This test will quickly reveal whether or not the workmen can make this joint air-tight in an economical manner.

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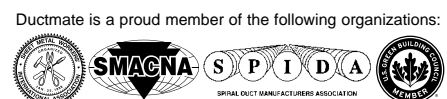
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