

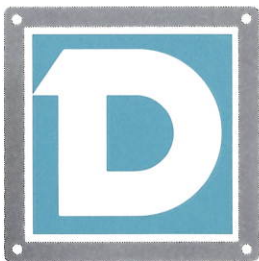
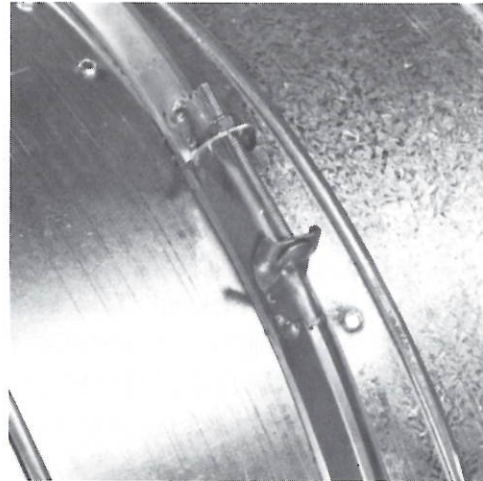
SPIRALMATE

ROUND DUCT CONNECTOR SYSTEM

ASSEMBLY MANUAL

Suitable for all makes
and types of
spiral duct

Automatically adjusts
for minor duct
diameter variations



Patent Pending

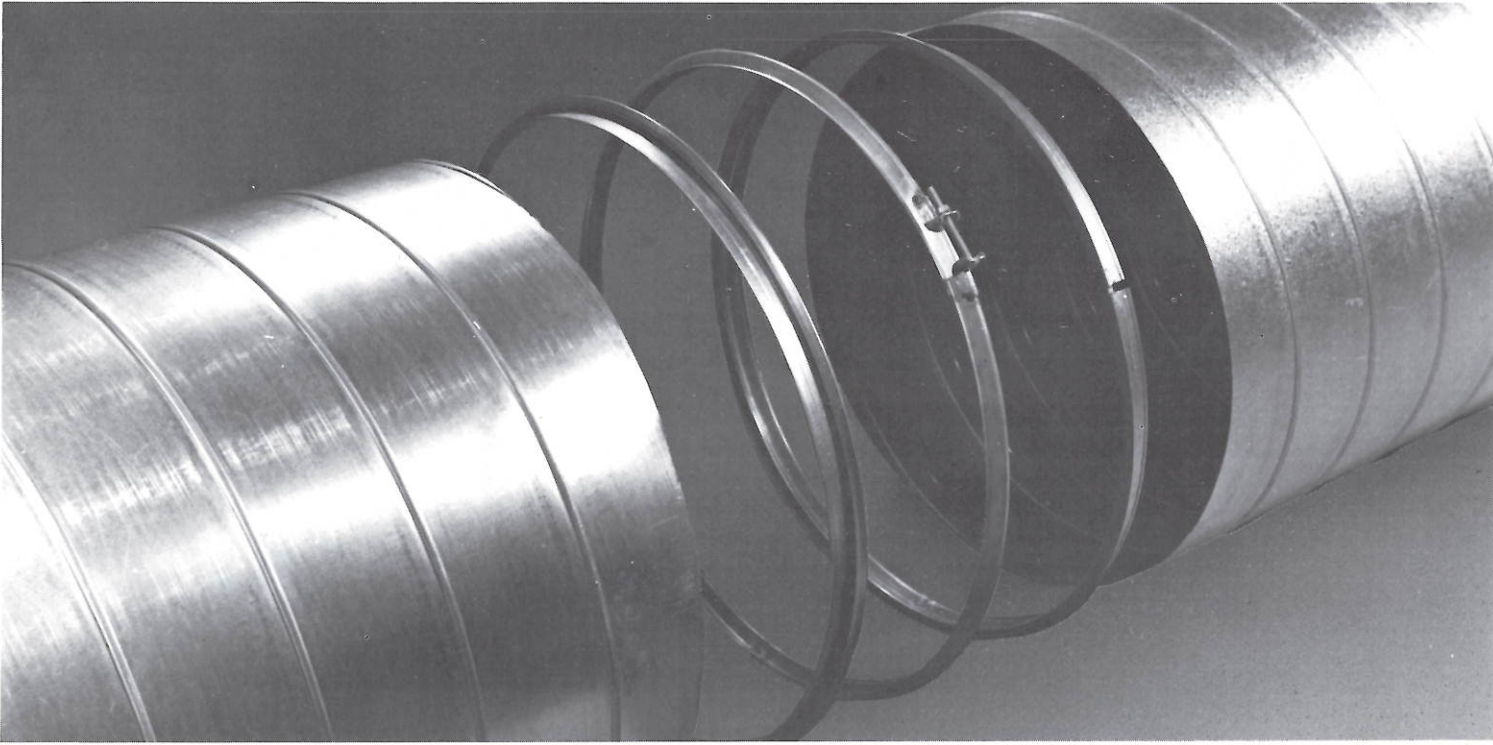
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General Description

The Spiralmate Round Duct Connector System consists of 2 inner (Flanges) rings and 1 outer (Closure) ring. The Flanges have a pocket with factory installed mastic. The duct end must penetrate the mastic to avoid leakage. The leg of the Flange is attached to the duct by mechanical means such as screws or spot welds. The upstanding, triangular-

shaped part of the Flange receives a gasket before mating with second duct section. The closure ring is equipped with a bolt and brackets which permit tightening of the closure ring over the 2 mated inner Flanges and creating permanent, air-tight joints for round (spiral) ductwork.

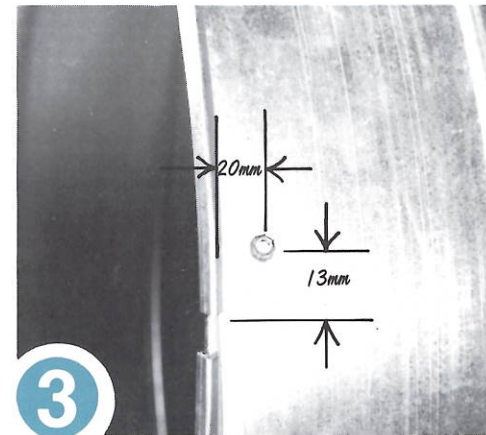


1 Start inner ring (Flange) by inserting duct end into Flange pocket at the break in the ring.

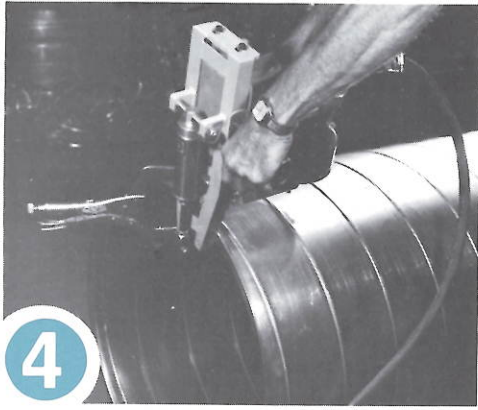


2 Seat Flange permanently by pressing it so the leading edge of the duct is seated in the pocket of the Flange and penetrates the sealant.

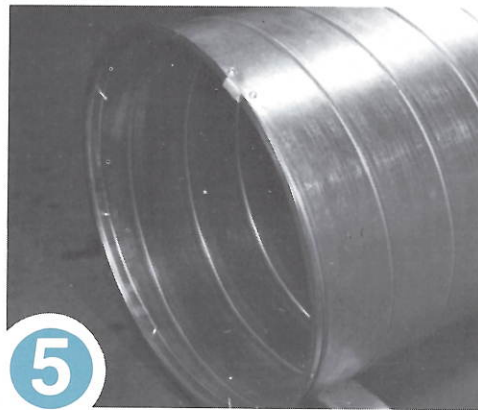
Hold Flange in position with vice-grip a few inches from the break.



3 Begin securing the leg of the Flange to the duct section by placing a pop rivet, screw or spot weld within 13mm of the end of the Flange break. The fastener should be placed no closer than 20mm or further than 25mm from the face of the Flange.



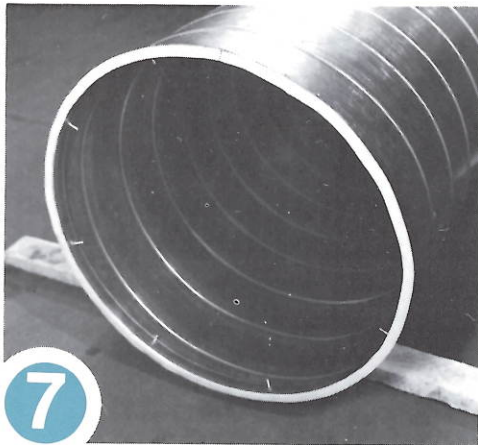
4 Continue in the same direction around the duct at evenly spaced intervals, as noted below. Place the last fastener within 13mm of the end of the Flange ring.
 254mm - 457mm—203mm on centre
 508mm - 711mm—305mm on centre
 762mm & larger duct—457mm on centre.
 Using the Ductmate or Repeater is optional but can save time and increase product consistency.



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 gasket to the Flange face over this visible leading edge on **both** mating Flanges.



6 Complete the gasket application by installing gasket on the face of the Flange around the entire circumference of **one** of the mating Flanges.



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



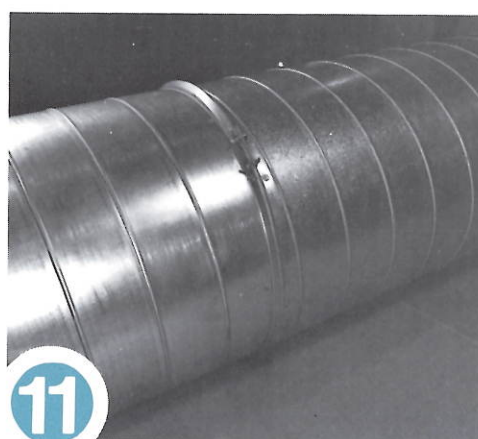
8 Slip outer Closure ring over end of duct. Align Flanges on mating duct sections before they touch.



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.



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

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 30 to 100 m 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.

Reprinted from SMACNA High Pressure Manual.

Spiralmate Round Duct Connector System Cross Section And Components

Inner rings (Flanges). One ring is attached to the end of each duct section to be mated.

Closure Ring. Tightening Closure Ring applies pressure to the inner ring Flanges and locks the duct joint into an air-tight, permanent connection.

Duct wall

Duct wall

Gasket. Ductmate gasket is applied to Flange face before joining duct sections.

Sealant. A permanent, non-hardening mastic is injected into the Flange pocket during manufacturing.

Fastener. Forms a permanent attachment between duct and leg of Spiralmate Flange.



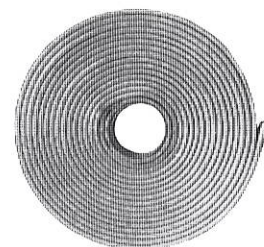
**SPIRALMATE
CLOSURE RING**

Cold-formed galvanized steel Closure ring maintains the duct connection.



**SPIRALMATE
INNER RING**

Flange is cold-formed galvanized steel with an integral mastic to form an air-tight connection with duct end.



**DUCTMATE
GASKET TAPE**

A closed cell rubber based tape ideally suited for connections that have to be disassembled periodically.

YOUR LOCAL DISTRIBUTOR IS:



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