SPIRAmir **SPIRAmir**

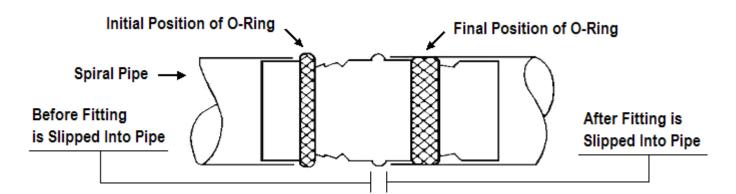
SPIRAmir SPI **SPIRAmir**® The GREEN Product" **SUBMITTAL**

SPIRAmir®, A Patented self-Sealing Spiral Duct System, is the latest innovation in HVAC Industry.

SPIRAmir®, The Environmentally Friendly Product, is the most energy efficient system for your green applications.

SPIRAmir®, The "GREEN" Product is the most unique way to join round duct and fittings without the use of sealant or duct tape.

SPIRAmir®, The "GREEN" Self-Sealing Spiral Duct System uses <u>O-Ring Gasket</u>. This gasket is not <u>attached</u> to the fitting. It rotates naturally and easily between two grooves placed on the SPIRAmir® fittings.



MATERIALS

- G60 or better for pipe and fittings, conforming to ASTM A653 / A924 standards.
- Stainless steel 304/2B and 316/2B, conforming to ASTM A240 standard.
- Aluminum 3003-H14.
- PVC Coated Steel, 4 x 1 Underground, 4 x 4 Aboveground, and 4 x 1 Reverse.

METAL GAUGES

Gauges are in accordance with SMACNA's Duct Construction Standards. Gauges for spiral duct and fittings are outlined in the table below.

| Diameter (inches) | Spiral Pipe | Fitting/ Rolled Pipe |
|-------------------|----------------|-------------------------|
| 4 - 14 | 26 | 24 |
| 16 - 26 | 24 | 22 |
| 28 - 36 | 22 | 20 |
| 38 - 48 | 20 | 20 |

FITTINGS CONSTRUCTION

SPIRAmir® "GREEN" fittings are manufactured by using one or more of the following construction methods:

- Overlapped and stitch welded along the entire length of the fitting.
- Standing seam gorelocked.
- Button punched and internally sealed.

PIPE CONSTRUCTION

Pipe shall be manufactured by using one or more of the following construction methods:

- Spiral lock seam construction.
- Rolled construction continuously stitch welded along the entire length of the pipe.

PRESSURE CLASS

SPIRAmir® "GREEN" fittings far exceed SMACNA's medium pressure / high velocity requirements (+10" W.G.).

JOINT CONNECTIONS

Joint connections are made in the following way:

- Duct-to-duct connections are made by using a pipe coupling.
- Fitting-to-duct connections are made by inserting fitting into the duct.
- Fitting-to-fitting connections are made by using a fitting coupling.

SPIRAmir® connections exceed SMACNA's leakage Class 3 requirements, per SMACNA's Duct Design Manual from -12" W.G. to +12" W.G.

SPIRAmir® FITTINGS
ARE ENVIROMENTLY FRIENDLY.

SPIRAmir® SPECIFICATION

SPIRAmir[®], The "GREEN" Self-Sealing Spiral Duct System has been tested by an accredited testing laboratory in accordance with UL testing standards. The results indicate that when testing in accordance with UL 723 and NFPA 255 standards, **SPIRAmir**[®] The "GREEN" Spiral Duct System produces a flame spread index of zero (0) and smoke developed index of zero to five (0 - 5).

ADVANTAGES OF SPIRAmir® OVER CONVENTIONAL FITTINGS

No need for any duct sealer or duct tape, consequently **SPIRAmir**[®] "GREEN" System has the following advantages:

- Environmentally friendly system.
- Saves energy, due to a much tighter joint connection.
- Lower field installation costs (about 30% to 40% saving) due to faster and easier joint connection.
- Saving time, since connections are made faster.
- Clean appearance, therefore, the best for exposed applications.

<u>Conclusion</u>: **SPIRAmir**® Fittings are the **BEST CHOICE** in particular for your <u>Green Applications</u>.

INSTALLATION INSTRUCTIONS

- 1. Make sure the spiral pipe or large end fitting is pushed all the way in and up to the bead of the small end fitting.
- 2. Secure the slip connection together by using 1/8" sheet metal screws or rivets.
- 3. Place the screws or rivets 1½" from the edge of the pipe or the large end fitting to avoid cutting into the O-Ring gasket.
- **4.** Insert the sheet metal screws or rivets by using the sequence shown below.
- **5.** If any spiral pipe is cut in the field, cut it as straight as possible for best result.

SPIRAmir® O-RING

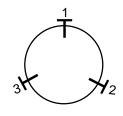
SPIRAmir® O-Ring is made from EPDM sponge rubber cord and is resistant to ozone, sunlight, weathering, aging and temperature fluctuations (-40° F to +212° F).

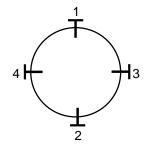
ADVANTAGES OF SPIRAmir® OVER OTHER SELF-SEALING SYSTEMS

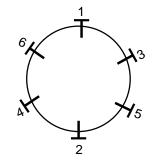
- SPIRAmir®, The "GREEN" Fittings can be used with almost any spiral duct manufacturer's pipe.
 Neither the spiral duct machine nor the pipe needs to be calibrated.
- SPIRAmir® The "GREEN" Fittings can be taken apart easily after connections have been made.
- SPIRAmir®, The "GREEN" Fittings can be reused.
 New screw holes can be added without destroying the integrity or clean look of the self-sealing system.
- If, at some point, the O-Ring is damaged, the fittings can still be used as a part of the self-sealing system by slipping on a new O-Ring.
- Flexible lead time to accommodate projects and/or contractors needs.
- In addition to standard SPIRAmir®, The "GREEN"
 Fitting, we can easily make many non standard
 fittings using the SPIRAmir® "GREEN" Self Sealing Spiral Duct System. Some examples
 include: Square to Round Transitions, Reducing
 Tees (any angle), etc. Please call with your special
 needs.
- **SPIRAmir**[®], The "GREEN" Fittings are made in PVC Coated Steel (4 x 1 & 4 x 4), Aluminum, in addition to Galvanized and Stainless Steel.
- No guick ship charges, for items in stock.

SPIRAmir®: "THE RIGHT FIT" = "THE GREEN FIT"









4"- 5" Dia. Pipe

6"- 10" Dia. Pipe

12"- 24" Dia. Pipe

26"- 48" Dia. Pipe

The #1 "GREEN" Self-Seling Spiral Duct System



MANUFACTURED BY:

- Air -Duct Mfg., Inc.
- API of NH
- Die Stamped Products, Inc.
- Gray Metal Products, Inc.
- Macy Industries, Inc.
- MKT Metal Mfg., Inc.
- North Central Fabricators

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