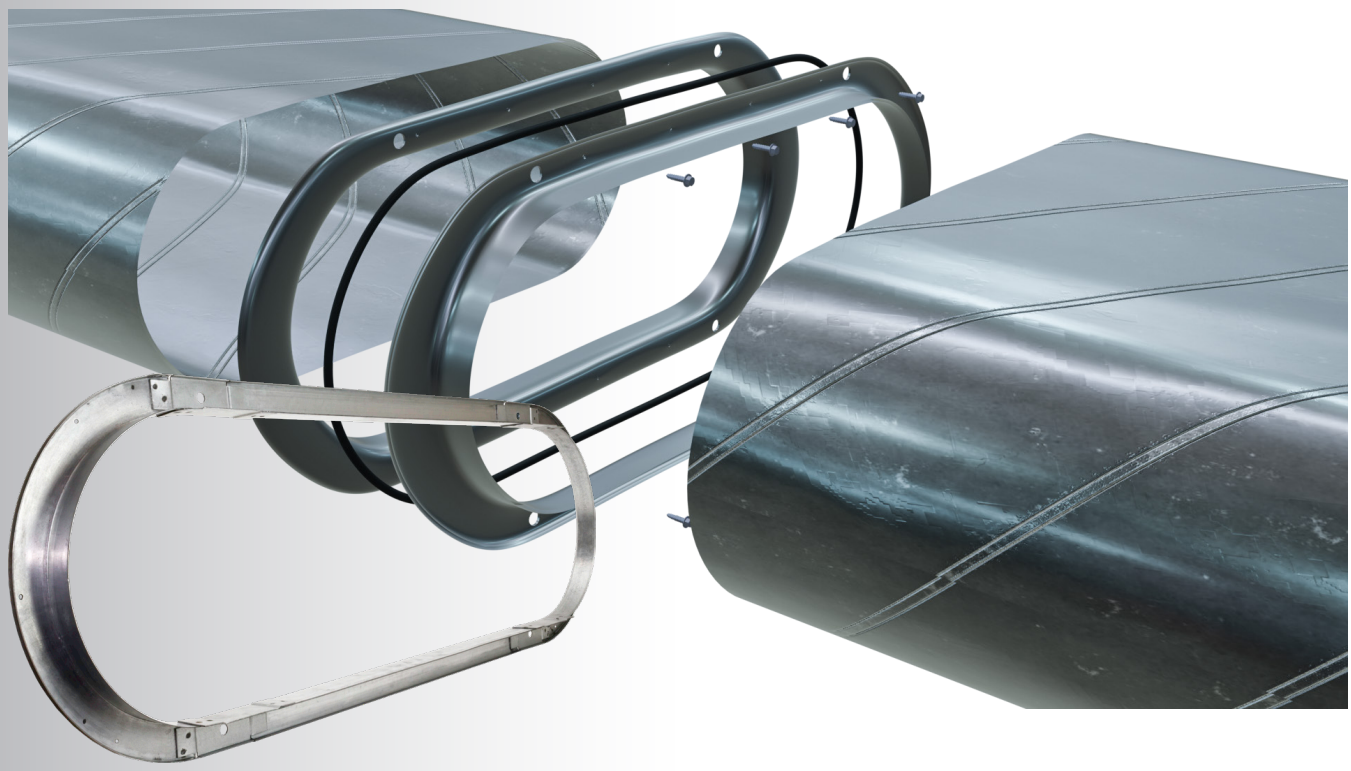
D U C T M A T E

ECONO*flange*™ Oval



Oval Duct Connection System

Modular Oval Connector

- Simple Installation Process
- Can Be Installated On-Site
- No Special Tools Required
- Available In Sizes 8”-25” In Standard 2” Increments
- Available In Specialty Metals

DUCTMATE® Industries, Inc.

ECONO*flange*™ Oval

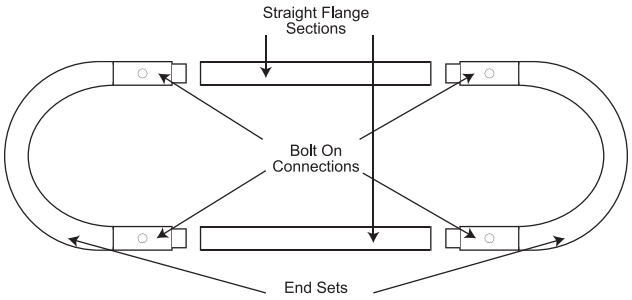
Oval Duct Connection System

DESCRIPTION

Oval duct connection system.

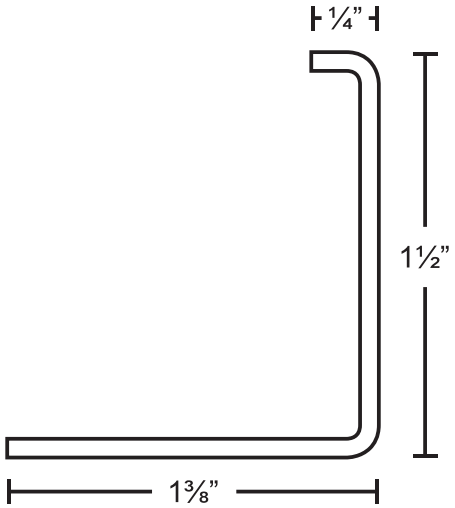
BASIC USE

The ECONO*flange* Oval connection system was designed to be user friendly and provide exceptional performance, making it the most economical oval flange connection system on the market.



SPECIAL CHARACTERISTICS

- End Sets shipped complete with connectors attached
- Modular design reduces inventory and allows for manufacturing flexibility
- Cut straight sections on-demand for "exact" fit
- Bolted connectors make installation quick, safe, and easy
- Simple installation process; can be installed on site no, special tools required
- Available in specialty metals



ECONO*flange* OVAL

8" - 56" (In standard 2" increments)

Flange Construction:
16 Gauge 50" & Up; 18 Gauge 48" & below
Cold-formed, Hot Dipped Galvanized Steel
Pre-punched holes for fast connections

Gasket:
Ductmate® Neoprene

PACKAGING INFORMATION

The ECONO*flange* Oval connection system consists of semi-circular end flange sections and straight flange. Straight flange is sold in 20' lengths. The semi-circular end pieces are sold individually with the connector pieces welded onto the ends. (One oval frame consists of two lengths of straight flange and two semi-circular end pieces.

Ordering Information
EXAMPLE: EFO20GA†

Semi-Circular End Piece	Endset Size		Straight Flange Sections	Alloy
Example: EFO	*Example: 12* (2 Endset Are Needed For A Full Connection)		*Example: EF20*	*Example: GA*
• EFO = Econoflange Oval semi-circular end piece	12=12" 14=14" 16=16" 18=18" 20=20" 22=22" 24=24"	26=26" 28=28" 30=30" 32=32" 34=34" 36=36" *	• EF=Straight Flange lengths Order in 10' or 20' lengths • Assembly required, straights must be assembled to end sets	• GA=Galvanized • GN=Galvannealed • AZ=Aluminized • PVC=PVC Coated**

* Larger sizes also available
** Lead time on PVC coils is 3½ weeks for the coil to arrive at our plant. Production and Shipping times still have to be factored in.
† EconoFlange Oval can be provided without end connector due to major and minor dimensions of duct, consult Ductmate for more information.

LIMITED PRODUCT WARRANTY

Ductmate warrants that Econoflange Oval, when properly installed and maintained, will be free from defects in material and workmanship, and will comply with all written specifications made by Ductmate at the time of sale. Ductmate's warranty shall run for a period of one year from the date of manufacture.

Warranty Limitation
The warranty stated above is in lieu of all other warranties, express or implied, including but not limited to the implied warranties of MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Although Ductmate may have suggested the product, or provided written or oral advice to the Purchaser, it is the Purchaser's responsibility to test and determine the suitability of Econoflange Oval, for the intended use and purpose, and Purchaser and/or its customer assumes all risk and liability whatsoever regarding such suitability.

Limitation of Liability
In the event of a breach of the above warranty, Ductmate's sole obligation, and Purchaser's sole and exclusive remedy, shall be, at Ductmate's option, repair or replacement of any defective products, or refund of an applicable portion of the purchase price. Ductmate shall have no liability for costs of removal or reinstallation of the product. The Purchaser agrees that no other remedy, including but not limited to loss of profits, loss sales, injury to person or property, or any other special, incidental or consequential damages, shall be available to the Purchaser for any claim arising out of this Agreement, regardless of whether such claim is made in contract or in tort, including strict liability in tort. In no event will Ductmate be obligated to pay damages to the Purchaser in any amount exceeding the purchase price that the Purchaser paid to Ductmate for the allegedly defective product.

INSTALLATION INSTRUCTIONS

Cut The Flange

Cut straight flange to length according to the following formula:

Example

Duct Dimension 68" x 20"

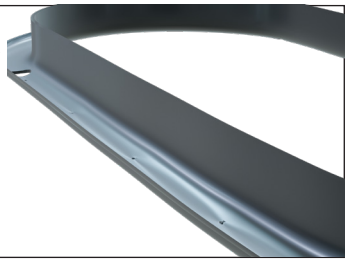
Major Dimension	68"
(minus) Minor Dimension	-20"
(minus)	-6¼"
(equals) Straight Angle Length	40¾"

Formula is based on exact dimensions. Measure your frame and check fit of completed frame.

ECONOflange Oval is not recommended when formula calculates angle length at less than 4".

1. Measure your preformed ductwork and cut the straight flanges for the ECONO*flange* Oval.

2. Weld the end sets flat to the straight flanges to form the completed frame.



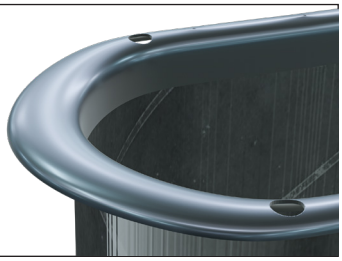
Seating ECONO*flange* Oval Frame

3. Begin seating the ECONO*flange* Oval frame. Seat ECONO*flange* Oval onto the duct so the flange is perpendicular to the ductwork. Do not hammer the center of the major axis. An inward curve could occur.

   Note: Mark a common reference point on both ends of the duct. ECONO*flange* Oval frames must be centered properly in relation to the frame on the other side of the duct to eliminate racking and/or twisting.

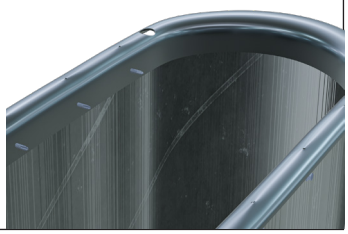
Fastening ECONO*flange* Oval Frame To Duct

4. Begin securing the leg of the ring to the duct section. Hold the flange in position by placing vise grips around the duct. Begin placing self-drilling screws, spot welds, or rivets every 10" on Center.

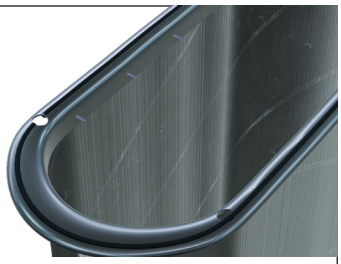


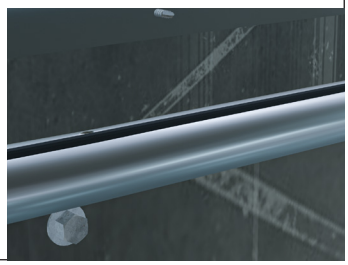
5. Seal the joint internally with PROseal® duct sealant. Brush the sealer into the joint and onto both the face and inside edge of the connector pieces to achieve a 100% seal.

   Note: Additional sealing at the connector pieces is required for ductwork over 6" positive pressure.



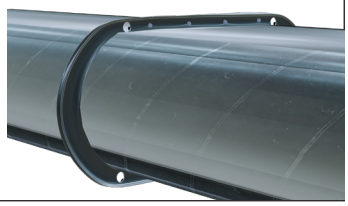
6. Apply Ductmate® Neoprene gasket 5/16" thick by 3/4" wide to the face of one of the ECONO*flange* Oval. The Neoprene should be positioned parallel to the inside edge of the ECONO*flange*. The Neoprene gasket ends must be butted up against each other. Do not overlap gasket ends



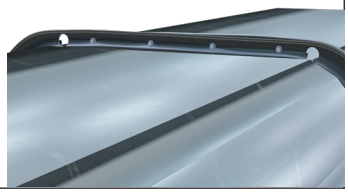


Connecting The Flat Oval Duct Sections

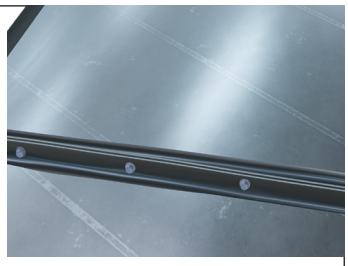
7. Align mating frames by matching the ECONO*flange* Oval frames evenly around the ductwork.



8. Clamp the mating ECONO*flange* Oval frames compressing the gasket until the mating rings touch.



9. Fasten with self-drilling screws 6" on center around the ECONO*flange* Oval flange face. In order to assure a proper closed joint, the flanges should be clamped tightly together with the two faces touching each other prior to fastening the self-drilling screws. Proper care should be taken in setting the clutch adjustment of your screw gun to assure your screws have 100% holding strength.



ECONOflange Oval can be installed on reducing fittings in the same manner as a small end collar. This eliminates the need for collars unlike other traditional connecting systems.

Oval Bullnosing

Revolutionary Design For Quick, Hassle-Free Installation

DESCRIPTION

The Press-On Inner Ring was specifically designed to significantly reduce installation time and labor cost. This system uses a double-sided pressure sensitive adhesive to bond the outer flange and inner ring without the need for costly welding. There are also no issues with aligning the rings to fit around the insulation and inner diameter of the duct because the outer flange and Press-On Inner Ring are installed on the ductwork separately.

BASIC USE

Designed to protect insulation installed inside spiral duct from damage and prevent fibers from breaking away into the airstream. Installs with an easy to use peel and stick press-on gasket that quickly secures the cut edges of insulation to the duct wall.

SPECIAL CHARACTERISTICS

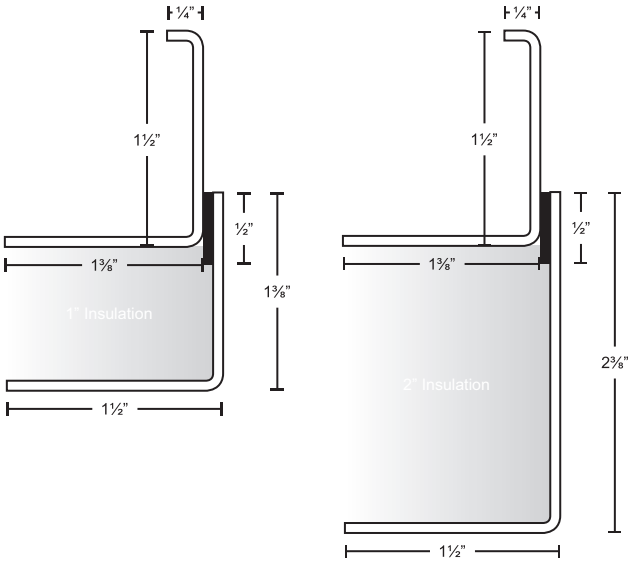
- Double Sided high strength PSA tape to adhere
- Simplifies installation of double wall duct
- Available in 1" and 2" rings
- Inner-ring adjusts to fit the variations in pipe diameter
- Tested to 10" W.G. positive pressure
- Eliminates welding or fasteners
- Can be installed on-site

INSTALLATION INSTRUCTIONS

1. Remove backing from adhesive gasket and starting with the split in the Inner Ring apply on the opposite side of the Sprialmate flange split.
2. Working in one direction around the Inner Ring, apply pressure to the areas where the adhesive gasket makes contact with the flange face to attach.

PACKAGING

The Press-On Inner Rings are sold as single rings.



Ordering Information
EXAMPLE: 1IRO30GAPSA

Insulation Thickness	Size of Inner Diameter		Straight Flange Sections	Alloy	Adhesive
1IR = 1" 2IR = 2"	*8=8" *10=10" 12= 2" 14=14" 16=16" 18=18" 20=20" 22=22"	24=24" 26=26" 28=28" 30=30" 32=32" 34=34" 36=36" *	*Example: 1IR20* • 1IR=1" Straight Flange lengths Order in 10' or 20' lengths • 2IR=2" Straight Flange lengths Order in 10' or 20' lengths • Assembly required, straights must be assembled to end sets	• GA=Galvanized • GN=Galvannealed • AL=Aluminum • AZ=Aluminized • S4=304 Stainless Steel • S6=316 Stainless Steel • **1" Only** PVC=PVC Coated	PSA=Pressure Sensitive Adhesive

** Only available for 1" insulation*

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