DUCINAIE

PRODUCT CATALOG

One Source. Infinite Solutions.



DLC Adhesive 55

Our revolutionary patented powdered duct liner concentrated adhesive you mix ondemand.

Page 48



Envirosea

Universal Press-On Bullnosing

Simplifies installation of Available for 1", 1½", double wall Spiralmate[®] & 2" insulation on & all and Econoflange[™].

Page 6



Press-On Inner

Rings

Ductmate 45

Newly improved to accept carriage bolts and 10 gauge duct.

Page 4

EnviroSeal

Brand new UL 181 A -B listed water based duct sealant for fiberglass, flexible, and metal ducts.

Page 45

LA Approve PROflex

Newly improved to exceed strict flame and smoke specifications of LA.

Page 14

Universal Corner/Strap-Pak™

New innovative way to insert TDC and TDF corners - Free retrofit kits available!

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DUCTMATE® INDUSTRIES HIGH-QUALITY VALUE-ADDED PRODUCTS

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1-800-245-3188		orders@ductmate.com
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	Charleroi, PA 15022	
	Manufacturing Facilities	
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1502 Industrial Drive	810 S Cluff Avenue	300 SE 15th Street
Monongahela, PA 15063	Lodi, CA 95240	Wagner, OK 74467

LIMITED PRODUCT WARRANTY

Ductmate warrants that the products in this catalog, 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 the products in this catalog 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.

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The Ductmate[®] Advantage



Made in America





Union Made in Pennsylvania, California, & Oklahoma



Sold Through a Select Distribution Network



DUCTMATE REPUTATION & CERTIFIED QUALITY ASSURANCE

Every Ductmate product is specially designed and engineered to perform a specific function. Structural integrity, proven performance, and added value are built right in. Strict tolerances and high quality control standards are the fundamental principles in our manufacturing guidelines. We are also committed to providing the sheet metal industry with new cutting edge products and technology to increase your productivity and profits in this highly competitive industry.



ENGINEERING ASSISTANCE

Our engineering department will work with you to design and engineer the best possible solution to those difficult or unusual systems. Whether you're dealing with high winds, snow loads, excessive pressures, specialty alloys, or critical air systems, we've dealt with virtually every difficult and unusual duct application you may encounter.



ASSEMBLY AND INSTALLATION TRAINING

Using one of our connector systems for the first time? Have new or additional manpower for a project? Facing a "super tight" spec? Our technicians are available for comprehensive hands-on product training at both your shop and job-site upon request. We also offer detailed assembly and installation videos and manuals, all to help ensure that the system is installed correctly—right from the start!



DUCTMATE SOLID TECHNICAL SUPPORT

Answers to your questions or problems as they occur are only a phone call away. Our engineering and technical assistance department will back up their information with test results and technical data you need to solidify your position as the HVAC expert on-site. Whenever you have a difficult or critical HVAC project, We can provide the kind of technical assistance that can give you a strong competitive edge when you're bidding, fabricating, and installing. For those unusual, challenging, or downright difficult projects, Ductmate's trained specialists can back up your personnel in several key areas. We are committed to providing you with the quality and service you expect and deserve when using any Ductmate product.

FOR MORE INFORMATION OR TO ACCESS OUR SUPPORT TEAM, CALL

1 - 800 - 245 - 3188 or visit us online at <u>www.ductmate.com</u>.

	Legend		
Finished Product Normally Stocked	Made to Order Raw Material Normally Stocked	Made to Order Minimum Quantity & Additional Lead Times Apply	Not Available
\checkmark	•	0	Х

	Material Availability Chart								
Page	Product Category	Galvanized	Galvannealed	Aluminized	Aluminum	304 Stainless	316 Stainless	PVC Coated	Black Iron
	Rectangular Flange Systems								
4	DUCTMATE 35 Flange	✓	✓	•	✓	✓	✓	0	0
4	DUCTMATE 35 Corners	✓	✓	✓	✓	✓	 ✓ 	0	0
4	DUCTMATE 45 Flange	✓	0	0	0	0	✓	0	0
4	DUCTMATE 45 Corners	✓	0	0	0	0	 ✓ 	0	0
4	DUCTMATE Cleat	✓	•	✓	Х	✓	✓	0	0
6	Universal Press-On Bullnose	\checkmark	Х	0	0	X	0	0	X
8	WDCI J Flange	\checkmark	0	•	\checkmark	 ✓ 	0	0	X
8	WDCI J Corners	 ✓ 	•	•	\checkmark	 ✓ 	0	Х	X
8	WDCI Cleat	 ✓ 	•	•	X	 ✓ 	0	0	X
			TDC / TDF Cor	nponents					
13	TDC Corners	\checkmark	✓	•	\checkmark	 ✓ 	•	0	0
13	TDF Corners	✓	 ✓ 	Х	\checkmark	✓	•	0	0
13	TDC Cleat	\checkmark	 ✓ 	•	Х	X	•	0	X
13	TDF Cleat	✓	0	0	X	 ✓ 	0	0	X
13	Universal Press-On Bullnose	 ✓ 	X	0	0	X	0	0	X
		FI	exible Connect	or Systems					
14	PROflex Commercial	\checkmark	0	0	•	•	•	Х	X
14	PROflex Residential	\checkmark	Х	Х	Х	X	X	Х	X
			Standard Cor	nnectors					
11	Standing S	\checkmark	0	0	\checkmark	0	0	Х	X
11	Hemmed S	\checkmark	0	Х	\checkmark	•	0	Х	X
11	Drive Slip	\checkmark	0	Х	\checkmark	•	0	Х	X
		Roun	d & Oval Conn	ector System					
16	SPIRALMATE	 ✓ 	0	0	X	0	0	0	X
18	Press-On Inner Rings	✓	0	0	0	0	0	0	X
19	ECONOflange	✓	0	0	0	0	0	0	X
20	ECONOflange (Oval)	\checkmark	0	0	0	0	0	0	X
21	QUICKSLEEVES	\checkmark	0	0	Х	•	•	Х	X
	Turning Vane Systems								
38	PROrail (Double vane)	 ✓ 	0	0	✓	✓	0	0	X
39	ECONOrail (Double vane)	✓	0	0	0	•	0	0	X
39	MONOrail (single vane)	✓	0	0	0	•	0	0	Х
39	Double Wall Vane	✓	Х	Х	✓	✓	0	Х	X
39	Acoustical Vane	✓	Х	Х	0	0	0	Х	Х
39	Single Wall Vane	✓	Х	Х	0	0	0	Х	X
			Access D	oors					
22	Sandwich (Round Duct)	✓	•	•	Х	•	•	0	•
22	Sandwich (Rect. Duct)	✓	0	•	Х	•	•	0	•
26	ULtimate (Grease Duct)	Х	Х	Х	Х	•	Х	Х	•
29	Framed (Tab-in)	✓	•	Х	•	•	X	Х	Х
29	Framed (Press-On)	✓	Х	Х	•	•	X	Х	X
Hangers & Accessories									
33	Trapeze Hanger	 ✓ 	0	0	X	0	X	X	X
34	Air Brace	 ✓ 	X	Х	Х	✓	X	Х	X
35	1" Strapping	 ✓ 	Х	Х	Х	0	Х	Х	X
35	Strap Bracket (round Duct)	✓	Х	Х	Х	Х	0	Х	X
37	Pre-Punched Angle	✓	Х	Х	Х	Х	X	Х	X
37	Z - Bar Stiffener	✓	X	Х	Х	X	X	Х	X

Important Notes:
Product & material availability chart is a reference guide only and availability, lead times and minimum order quantities may fluctuate or change without notice
Due to the large number of model options available in each product category, not all models are available in special alloys. Please consult factory for suitable product substitutions
Consult factory on large orders and projects
Refer to product page for additional product information
PVC coated Sandwich access doors are available in galvanized and 316SS

DUCTMATE RECTANGULAR DUCT CONNECTOR SYSTEMS

DUCTMATE

THE DUCTMATE '25' '35' & '45'® SLIDE-ON CONNECTOR SYSTEMS



MONEY SAVING VALUE ADDED FEATURES

- AIR TIGHT
- NO ADDED SEALING
- CLEAN APPEARANCE
- USED AS AN ARCHITECTURAL FEATURE
- RIGOROUSLY TESTED
- STRONG EQUAL TO SMACNA F, J, AND K
- INCREASES STRUCTURAL INTEGRITY OF DUCT
- SUBSTANTIAL SAVINGS ON DUCT GAUGES & REINFORCEMENTS
- COST EFFECTIVE AT 1" STANDING-S OR HEAVIER WHEN SEALING IS REQUIRED & ALL FACTORS CONSIDERED
- CAN BE SHIPPED K.D. TO JOB SITES
- OUICK & SIMPLE TO INSTALL
- EXCLUSIVE NO-BOLT & DOWN SET CORNER SYSTEMS ON 25 & 35 SYSTEMS
- UNIVERSAL BULL NOSING ELIMINATES SHOP FABRICATION
- ENGINEERING & TECHNICAL SUPPORT
- INSTALLATION VIDEOS & MANUALS
- DETAILED DUCT CONSTRUCTION TABLES & SKETCHES
- INSTALLATION INFORMATION AVAILABLE FOR VIRTUALLY ANY APPLICATION

THE DUCTMATE System Components: UNIVERSAL PRESS-ON NO-BOLT CORNER Ductmate Gaskets Common to '25'/'35'™ Systems BULLNOSING Ductmate 440[™] Butyl & Neoprene See pg. 47 Tab locks into notch on Corner Piece 11/4" Ductmate Flange 32mm or T.D.C[®] / T.D.F[®] 3/4" Duct Wall 'A' Insulation A=1", 1.5", or 2" Press-On Bullnosing - 3/4" -**CLEATER TOOLS CLEAT OPTIONS CORNER ALIGNMENT TOOL** Ideal tools for attaching any type of cleat to a Flange Joint where spacing is not a consideration. Use the Cleater 1 & 2 in conjunction with Ductmate Metal Cleat. Use the Versa-Cleater in conjunction with Common to '25'/'35' Systems Modified vise grip can facilitate installation of corner clips Ductmate Versa Cleat. Use the Snapper 1 Tool in conjunction with T.D.C./T.D.F. Cleats Cleater 1 & 2 Snapper 1 Versa Tool (Red Handle) (Blue Handle) VERSA Cleat Metal Cleat PVC Cleat Bolt On Cleat

Made With

U.S. Steel

Ideas that work for you everyday...

DUCTMATE RECTANGULAR SYSTEMS SPECIFICATIONS

DUCTMATE

'25' '35' & '45'® SYSTEMS

TECHNICAL DATA

The characteristics of a particular duct connection or joint are usually referenced to the Sheet Metal and Air Conditioning Contractors National Association (SMACNA) Manuals. SMACNA encourages the use of new technology, but does not endorse proprietary products. The Ductmate '45', '35' and '25' Systems have been tested in accordance with SMACNA procedures with no external sealant employed. The tests reveal: the Ductmate '45' Systems are comparable to the SMACNA Class "K" transverse joint, the Ductmate '35' Systems are comparable to the SMACNA Class "J" transverse joint and the Ductmate '25' Systems are comparable to the SMACNA Class "F" joint.

Virtually no leakage at up to 10" WG positive pressure or down to 10" WG negative pressure. Consult Ductmate for static pressures exceeding these specifications. Complete test data is available upon request.

LIMITATIONS

The Ductmate '45' System is not recommended for applications petroleum and salt. with duct gauges heavier than 10 GA. or lighter than 22 GA. The Ductmate '35' System is not recommended for applications with duct gauges heavier than 16 GA. or lighter than 26 GA. The Ductmate '25' System is not recommended for applications with duct gauges heavier than 20 GA. or lighter than 26 GA.

COMPOSITION AND MATERIALS

The Ductmate Systems consist of the following components:

- a. Ductmate '45' Angle is roll-formed from 18 GA. galvanized steel with an integral sealant.
- b. Ductmate '35' Angle is roll-formed from 20 GA. galvanized steel, with an integral sealant.
- c. Ductmate '25' Angle is roll-formed from 24 GA. galvanized steel, with an integral sealant.
- d. Ductmate Corner Pieces inserted into the hollow web of the Ductmate Angle. See drawing on page 7 for corner styles.
- e. Metal Cleat is roll-formed from 20 GA. galvanized steel. (PVC Cleat is available upon request).
- f. Ductmate '45' VersaCleat is roll-formed from 22 GA. galvanized steel.
- g. Also available: optional Ductmate '45' bolt-on cleat, rollformed from 11 GA. electroplate galvanized steel.
- h. Gasket is extruded butyl for use between mating flanges. (Neoprene gasket is available upon request).
- i. Corner Clips are 16 GA. galvanized steel. (Use of nuts and bolts optional: 3/8" x 1" for DCIIIB, 5/16" x 1" for Ductmate DC25 Corner).

DIMENSIONS

Refer to drawings on page 7.

APPLICABLE STANDARDS

Angle Steel: ASTM-A-653 G 60/90 Corner Steel: ASTM A-653 G 60/90 Mastic: Ductmate 5511M Gasket: Ductmate 440[™]

TECHNICAL SERVICES

Detailed assembly and installation instructions, and videos showing step-by-step procedures, are available from the manufacturer and on the Ductmate website. Factory trained personnel are available upon request, at no charge to instruct new customers in the use of the Ductmate Systems.

GUARANTEES

All component parts of the Ductmate Systems are guaranteed against defective material.

DUCTMATE SNAP-ON CLEAT

PVC CLEAT*

Polyvinyl chloride (PVC) is an organic polymer derived from

Performance Properties:

- Relatively high ignition resistance: Flash ignition 391°C/735°F Self ignition 454°C/850°F
- Low fuel contribution
- Lack of flaming drips
- High external heat necessary to maintain combustion
- UL94-Passes
- UL723 (ASTM E-84) Test Data:
 - Flame Spread: 10 Fuel Contribution: 0 Smoke Density: 10
- Service Temp: +32°F to +150°F
- PVC Cleat is used around perimeter of transverse joint.
- Not recommended for outdoor applications. For applications involving chemicals, consult factory.

METAL CLEAT

DM® Metal Cleat is roll-formed 20 GA. galvanized steel for application around perimeter of transverse joint. (See installation manual for correct usage).

BOLT ON CLEAT

Ductmate Bolt-On Cleat is ideal for all flange applications including DM 25/35/45.

Part Number: D45CGA 200pcs/box

How to Order A Complete Ductmate Rectangular Duct Connection System:

Table 1: Ductmate Rectangular Connection System Components:

Ductmate Flange	Compatible Corner(s)	Standard Bundle Sizes*	Cleat	Gasket**	Available Alloys *** (for flange, corners, & cleat)
D45 (Ductmate '45' 1.07 LB per LF)	DC45	(10) 1,000 LF per bundle (50) 500 LF per bundle	DV6C VersaCleat [™] (250 Pcs. @ 61.25 lbs/carton) D45CGA Optional DM45 [™] Bolt-On Cleat (200 Pcs. @ 25.6 lbs/carton) Only available in galvanized	440 3/16" x 1" x 25' DM45 Butyl Gasket (400' @ 50 lbs/carton) NE0 5/16" x 1" x 50' DM45 1" Neoprene Gasket (1000' @ 23 lbs./carton) 440 3"x2"x1/8" Butyl Gasket Patches (512 patches/carton)	
D35 (Ductmate '35' .7 LB per LF)	D3A D3B DC35 BD35	(10) 1,000 LF per bundle	D6C 6" Metal Cleat (500 Pcs. @ 45 lbs/carton) D10C 10' Metal Cleat (100' per bundle)		GA=Galvanized GN=Galvanneal AL=Aluminum (<i>Except Cleat</i>) AZ=Aluminized S4=304 Stainless
D25 (Ductmate '25' .4 LB per LF Only available in galvanized	DJR DBJR	(15) 1,500 LF per bundle (20) 2,000 LF per bundle (30) 3,000 LF per bundle All bundles composed of 20' lengths 10' lengths available	6"PVC 6" Solid PVC Cleat (500 Pcs. @ 18 lbs/Carton) 10'PVC 10' Solid PVC Cleat (100' per bundle) D45CGA Optional DM45 [™] Bolt-On Cleat (200 Pcs. @ 25.6 lbs/carton Only available in galvanized DV6C VersaCleat [™] (250 Pcs. @ 61.25 lbs/carton) Not available for DC25	440 3/16" x 5/8" x 25' Butyl Gasket (500' @ 45 lbs/carton) 440 3"x2"x1/8" Butyl Gasket Patches (512 patches/carton) NEO 5/16" x 3/4" x 50' Neoprene Gasket (750' @ 15 lbs./carton)	S4=304 Stainless S6=316 Stainless PVC=PVC Coated BI=Black Iron

* Consult distributor on minimum ordering requirements

** 440 Butyl Gasket is recommended for standard H.V.A.C. systems

*** Specialty alloys available in exact quantities

Ductmate Flange Part No. Key EXAMPLE: D3530GA

Profile Size*	Bundle Size	Alloy*
Example: D35	Example: 30	Example: GA
D35=Ductmate '35' Flange	30=3000'	GA=Galvanized

* Please see Table 1 above for all available profile sizes and alloys

Ductmate Corners Part No. Key EXAMPLE: D3BGA

Corner Type*	Alloy*
Example: D3B	Example: GA
D3B=Ductmate No-Bolt Corner	GA=Galvanized

* Please see Table 1 above for all available corner types and alloys

Universal Press-On Bullnosing Part No. Key

EXAMPLE: BN1GA

Bullnosing	Size	Alloy
Example: BN • BN = Bullnosing 10' Length 100' Bundles	Example: 1 • $1 = 1^{"}$ • $1.5 = 1\frac{1}{2}$ • $2 = 2^{"}$	Example: GA GA = Galvanized S6 = 316 Stainless Steel

Ductmate Corners Ordering Information

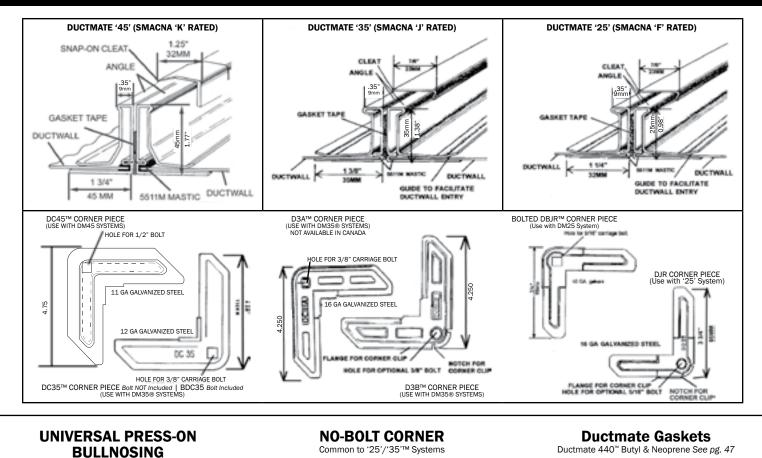
Corner Type*	Corresponding Flange	Gauge	Gauge Clip / Bolt		Pkg. Weight (lbs.)
DC45™	DM45™	11	Requires 1/2" Bolt (Not Included)	100 / Carton	33 lbs. / Carton
D3A	DM35®	16 Requires ¾" Carriage Bolt (Not Included) [‡]		250 / Carton	40 lbs. / Carton
D3B	DM35®	16	Corner Clip Included w/Order *	250 / Carton	43 lbs. / Carton
DC35™	DM35®	12	Requires ¾" Carriage Bolt (Not Included)‡	200 / Carton	43.8 lbs. / Carton
BDC35	DM35®	12	¾" Carriage Bolt Included w/Order‡	200 / Carton	49.8 lbs. / Carton
DJR™	DM25™	16	Corner Clip Included w/Order *	250 / Carton	34 lbs. / Carton
DBJR	DM25™	16	Nut & Bolt Included	250 / Carton	30 lbs. / Carton

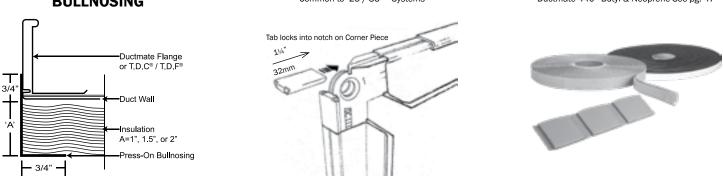
* Please see Table 1 above for all available corner types and alloys

Extra Corner Clips are also available: Part No. DCLPGABX

‡ Extra Carriage Bolts are also available: Part No. CBGA

DUCTMATE RECTANGULAR SYSTEMS (CONT.)





ESTIMATING DUCTMATE '25' '35' & '45' COMPONENTS

FLANGES ESTIMATING FORMULA: Per Duct Size [(W + H) \div 3] x # of Duct Sections.

Add Requirement For Each Size To Determine Total flange Needed.

Example: Duct size 40" x 30" @ 60 joints.

[(40" + 30") ÷ 3] x 60 = 1400' of Flange.

CORNERS: Approx. (1) corner for every (3 lf) of flange = $1400 \div 3 = 467$ (250 pcs/box)

CLEAT: Approx. (6") of cleat for every (4') of flange = $1400 \div 4 = 350$ (6" ea @ 250 lf/ctn or 500 pcs)

GASKETING: Approx. 1 If per 2 If of Flange = $1400 \div 2 = 700'$ (20 rolls @ 25' per roll or 500 If per ctn)

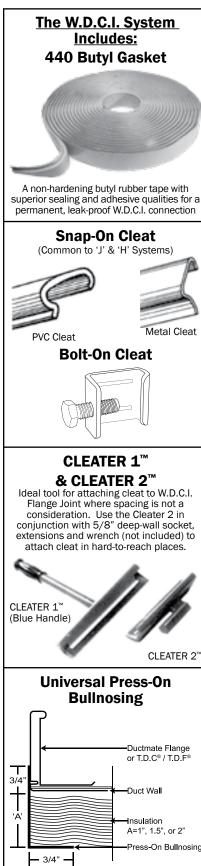
••••••••••••••••••••••••••••••••••••••						
Part Number	Description	Total Required	Weight			
D3515GA	Ductmate '35'	1500 ft.	1035 lbs.			
D3BGA	No-Bolt Corners	500 pcs.	86 lbs.			
D6CGA	6" Metal Cleat	500 pcs.	45 lbs.			
440 3/16" x 5/8"	440 Butyl Gasket	1000 lf.	90 lbs			
	D3515GA D3BGA D6CGA	D3515GADuctmate '35'D3BGANo-Bolt CornersD6CGA6" Metal Cleat	D3515GADuctmate '35'1500 ft.D3BGANo-Bolt Corners500 pcs.D6CGA6" Metal Cleat500 pcs.			

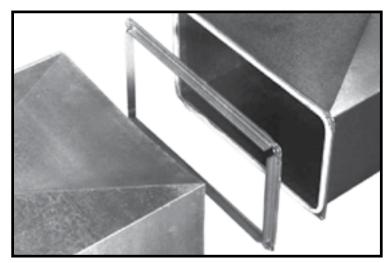
SAMPLE ORDER:

NOTE COMPONENT QUANTITIES WILL VARY WITH SIZE OF DUCT.

W.D.C.I. RECTANGULAR DUCT CONNECTOR SYSTEMS







THE W.D.C.I. 'J' & 'H' SLIDE-ON CONNECTORS

MONEY SAVING VALUE ADDED FEATURES

- AIR TIGHT
- NO ADDED SEALING
- CLEAN APPEARANCE
- USED AS AN ARCHITECTURAL FEATURE
- RIGOROUSLY TESTED
- STRONG
- INCREASES STRUCTURAL INTEGRITY OF DUCT
- SUBSTANTIAL SAVINGS ON DUCT GAUGES & REINFORCEMENTS
- COST EFFECTIVE AT 1" STANDING-S OR HEAVIER WHEN SEALING IS REQUIRED & ALL FACTORS CONSIDERED
- CAN BE SHIPPED K.D. TO JOBSITES
- QUICK & SIMPLE TO INSTALL
- BULL NOSING KITS
- ENGINEERING & TECHNICAL SUPPORT
- INSTALLATION MANUALS
- DETAILED DUCT CONSTRUCTION TABLES & SKETCHES

M	Cleat can be snapped-o driven-on for large secti duct or inaccessible are	ons of 🥿		///
CLEATER 2 [™]				11/
-On			<u></u>	<i>S///</i>
	Angle is roll-formed fr galvanized steel	om		
nate Flange).C [®] / T.D.F [®]		// -		// // //
Wall	Gasket Tape is applied to W.D.C.I. Flanges before joining duct sections for a no-leak seal	A		
1.5", or 2" -On Bullnosing	Duct Wall	Integral mastic sealant perfects the seal	Special guide facilitates duct wall entry	Duct Wall

Ideas that work for you everyday...

TECHNICAL DATA

The characteristics of a particular duct connection or joint are usually referenced to the Sheet Metal and Air Conditioning Contractors National Association (SMACNA) Manuals. SMACNA encourages the use of new technology, but does not endorse proprietary products. The W.D.C.I. 'J' & 'H' Systems have been tested in accordance with SMACNA procedures with no external sealant employed. The tests reveal: the W.D.C.I. 'J' Systems are comparable to the SMACNA Class J transverse joint and the W.D.C.I. 'H' Systems are comparable to the SMACNA Class H joint.

LIMITATIONS

The W.D.C.I. 'J' System is not recommended for applications with duct gauges heavier than 16 GA. or lighter than 26 GA.

The W.D.C.I. 'H' System is not recommended for application with duct gauges heavier than 20 GA. or lighter than 26 GA.

DIMENSIONS

Refer to drawings below.

APPLICABLE STANDARDS

Angle Steel: ASTM-A-653 G 60/90 Corner Steel: ASTM A-653 G 60/90 Mastic: 5511M Gasket: Ductmate 440

W.D.C.I. 'J' & 'H' Systems

COMPOSITION AND MATERIALS

The W.D.C.I. Systems consist of the following components:

- a. W.D.C.I. 'J' Angle is roll-formed from 20 GA. galvanized steel, with an integral sealant.
- W.D.C.I. 'H' Angle is roll-formed from 22 GA. b. galvanized steel, with an integral sealant.
- C. W.D.C.I. Corner Pieces are inserted into the hollow web of the respective angle. See drawing below for corner styles.
- d. Metal cleat is roll-formed from 22 GA. galvanized steel. (PVC Cleat is available upon request).
- e. Gasket is extruded butyl for use between mating flanges. (Neoprene gasket is available upon request).
- Nuts & Bolts f. 3/8" x 1" for W.D.C.I. 'J' 1/4" x 1" for W.D.C.I. 'H'

TECHNICAL SERVICES

videos showing step-by-step procedures, are available usage). from the manufacturer and on the Ductmate website. Factory trained personnel are available upon request. at no charge to instruct new customers in the use of the W.D.C.I. Systems.

W.D.C.I. CLEAT

PVC CLEAT

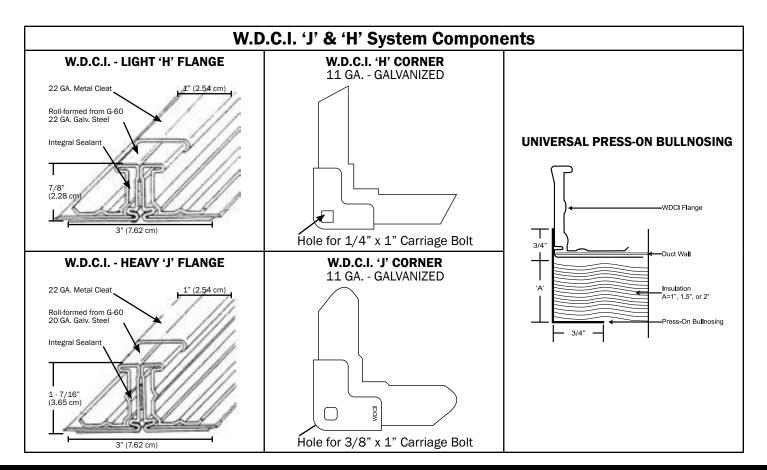
Polyvinyl chloride (PVC) is an organic polymer derived from petroleum and salt.

Performance Properties:

- Relatively high ignition resistance:
- Flash ignition 391°C/735°F
- Self ignition 454°C/850°F
- Low fuel contribution
- Lack of flaming drips
- High external heat necessary to maintain combustion
- **UL94-Passes**
- UL723 (ASTM E-84) Test Data: Flame Spread: 10 Fuel Contribution: 0 Smoke Density: 10 Service Temp: +32°F to +150°F
- PVC Cleat is used around perimeter of transverse joint. Not recommended for roof top applications.

METAL CLEAT

W.D.C.I. Metal Cleat is roll-formed of 22 GA. galvanized steel for application around perimeter of Detailed assembly and installation instructions, and transverse joint. (See installation manual for correct



How to Order A Complete W.D.C.I. Rectangular Duct Connection System:

W.D.C.I. Flange	Compatible Corner(s)	Standard Bundle Size.*	Cleat	Gasket**	Available Alloys* (for flange, corners, & cleat)
• WJ W.D.C.I. 'J' Large Profile (.73 lbs per LF)	WJC 11 GA corner 200 pcs./carton Nuts & bolts included (galv. only) (54.5 lbs/carton)	 (10) 1,000 LF (15) 1,500 LF Specialty alloys 	 Metal Cleat W6C 6" Metal Cleat (500 pcs. @ 50 lbs/carton) W10C 10' Metal Cleat (100' per bundle) 	• 440 3/16" x 5/8" Butyl Gasket (500° @ 45lbs./	 GA=Galvanized GN=Galvanneal AL=Aluminum* AZ=Aluminized S4=304 Stainless
 WH[†] W.D.C.I. 'H' Small Profile (.5 lbs per LF) 	• WHC 11 GA corner 250 pcs./carton Nuts & bolts included (galv. only) (30 lbs/carton)	are available in exact quantities. (Bundles composed of 20' lengths. 10' lengths available)	 Solid PVC Cleat 6" Solid PVC Cleat 6" Solid PVC Cleat (500 Pcs. @ 22 lbs/carton) 10'WPVC 10' Solid PVC Cleat (100' per bundle) 	carton) • NEO 5/16" x 3/4" Neoprene Gasket (750' @ 15lbs./ carton)	 S6=316 Stainless PVC=PVC Coated** BI=Black Iron WH = Galvanized Only Except Cleat ** Except Corners

Table 1: W.D.C.I. Rectangular Connection System Components:

* Consult distributor on minimum ordering requirements. Specialty alloys available in exact quantities

** 440 Butyl Gasket is recommended for standard H.V.A.C. systems

Bullnosing Part No. Key

EXAMPLE: BN1GA

Bullnosing	Size	Alloy
Example: BN	Example: 1	Example: GA
BN = Bullnosing	1 = 1"	GA = Galvanized
10' Length	1.5 = 1 ½"	S6 = 316 Stainless Steel
100' Bundles	2 = 2"	

Estimating W.D.C.I. 'J' & 'H' System Components

FLANGES ESTIMATING FORMULA: Per Duct Size $[(W + H) \div 3] \times #$ of Duct Sections. Add Requirement For Each Size To Determine Total flange Needed. Example: Duct size 40" x 30" @ 60 joints. $[(40" + 30") \div 3] \times 60 = 1400'$ of Flange.

CORNERS: Approx. (1) corner for every (3') of flange = $1400 \div 3 = 467$ (250 pcs/box)

CLEAT: Approx. (6") of cleat for every (4') of flange = $1400 \div 4 = 350$ (6" ea @ 250 lf/ctn or 500 pcs) GASKETING: Approx. 1' per 2' of Flange = $1400 \div 2 = 700'$ (20 rolls @ 25' per roll or 500 lf per ctn)

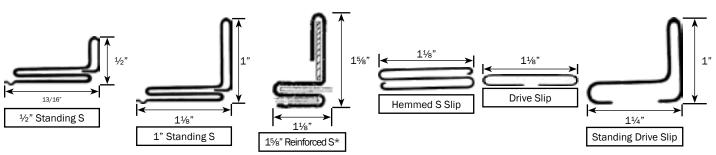
SAMPLE ORDER:

Quantity	Part No.	Description	Total Required	Weight
(1) Bundle	WJ15GA	W.D.C.I. 'J'	1500 ft.	1095 lbs.
(2) Box	WJCGA	Carriage Bolt Corners	400 pcs.	109 lbs.
(1) Box	W6CGA	6" Metal Cleat	500 pcs.	50 lbs.
(2) Box	440 3/16 x 5/8	440 Butyl Gasket	1000 lf.	90 lbs.

NOTE: COMPONENT QUANTITIES WILL VARY WITH SIZE OF DUCT.

STANDING S, SLIPS, AND DRIVES

Part Number and Ordering Information



* Reinforcing bar not included

Slip & Drive System Part No. Key

Connector Type	Standing S Height	Al	оу	Gauge
 SS = Standing S HS = Hemmed S DS = Drive Slip SDS = Standing Drive Slip 	 1 = 1" .5 = 1/2" 1.625 = 15/8" 	 GA = Galvanized GN = Galvannealed AZ = Aluminized AL = Aluminum 	 S4 = 304 Stainless S6 = 316 Stainless PVC = PVC Coated BI = Black Iron 	 20 = 20 GA 22 = 22 GA 24 = 24 GA 26 = 26 GA 28 = 28 GA

Note: May not be available in all alloys

Packaging: 10' Lengths/100' Bundles

Hemmed S Slip, Drive Slip and 1/2" Standing S are also available in 5' lengths Additional lead time and charges will be applied to all cut to length orders.

Weights Listed In Lbs/Ft

Gauges	1⁄2" Standing S	1" Standing S	1%" Standing S	Hemmed S	Drive-Slip	Standing Drive Slip	Color Code
20 Ga.	N/A	0.78	0.79*	N/A	N/A	N/A	Yellow
22 Ga.	N/A	0.58	0.68*	N/A	N/A	0.46	Green
24 Ga.	0.41	0.55*	N/A	0.32*	0.19*	0.40	Orange
26 Ga.	0.35*	0.44	N/A	0.25*	0.15*	0.33	Blue
28 Ga.	N/A	N/A	N/A	0.23	0.12	N/A	Red

* Most popular gauges per connector

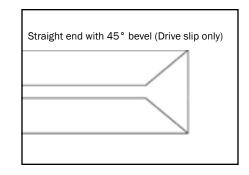
Note: N/A designates gauges not available

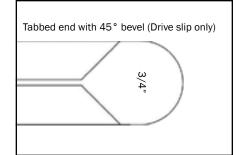
Cut to length Slips and Drives 24 and 26 Gauge

(100 Pieces Per Carton)

Hemmed Slip – 6" through 24" in 2" increments (can be manufactured in 1" increments upon request)

Straight end (Hemmed S)





Drive Slip - 6" through 26" in 2" increments

(can be manufactured in 1" increments upon request)

Ideas that work for you everyday...

STRAP-PAK[™] CORNERS

Compatible With ALL Cornermatic[®] Corner Inserting Machines

Corners Available In Both TDC[®] & TDF[®]



A new and innovative way of inserting Cornermatic[®] TDC and TDF corners. These corners save time and improve corner insertion in two different ways:

- With Iowa Precision's new Cornermatic+Plus machine
- In a traditional Cornermatic machine with our conversion kit

TDC Part Numb	er:	CMCGASTPK
TDF Part Numb	er:	CMFGASTPK
Packaged:	80	Corners/Sleeve (5 Slee

80 Corners/Sleeve (5 Sleeves/Carton) Order in multiples of 400 corners

Technical Information

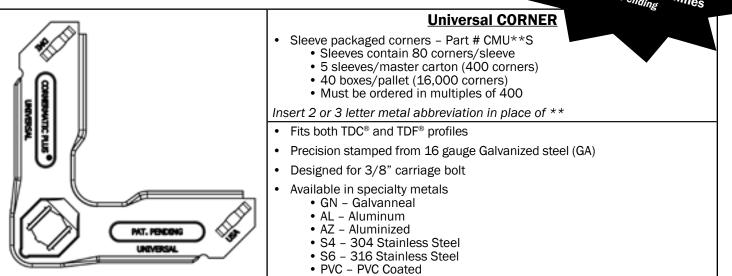
Precision stamped from 16 GA galvanized steel. Hole for 3/8" carriage bolt Available in a variety of metals

- Available in a variety of metal
 - GA Galvanized
 - GN Galvanneal
 - AL Aluminum
 - PVC PVC Coated
 - S4 304 Stainless Steel
 - S6 316 Stainless Steel



The new Cornermatic+ Plus machine is a next generation corner solution from Iowa Precision which allows for speedy corner loading and insertion on a variety of styles of duct. With this table height work station, the corners are fed from below the work surface, eliminating the chance for interference between the duct and corner hopper. Ductwork with acute and obtuse angles, as well as ductwork with offsets and unusual bends can easily work with the new Cornermatic+ Plus machine.

Now Available The UNIVERSAL CORNER For Cornermatic® Machines Patent Pending



Ideas that work for you everyday...

C[®] / TDF[®] Components

Stacked for use with automatic corner

T.D.C. and T.D.F. CORNERMATIC* CORNER

Cornermatic is a trademark of Systemation, Inc. Ductmate is in no way affiliated with Systemation, Inc.

inserter machines

Patent # 5342100

Hole for 3/8" Carriage Bolt Available in a variety of metals

Packaged: 250/carton @ 35 lbs.

16 Gauge

٠

(PAT. #5342100) \bigcirc CORNER \diamond

Part Numbers: CMCGA OR CMFGA

T.D.C. MANUAL INSERTION CORNERS





Part Number: CGA

- 16 Gauge
- Manual insertion only
- Hole for 3/8" Carriage Bolt
- Galvanized only (See Cornermatic Corners for Special Alloys) Packaged: 250/carton @ 42 lbs.

ACGA

T.D.F. MANUAL INSERTION CORNERS



Part Number: FGA

- 16 Gauge
- Manual insertion only
- Hole for 3/8" Carriage Bolt
- Galvanized only (See Cornermatic Corners for Special Alloys)

Part Number:

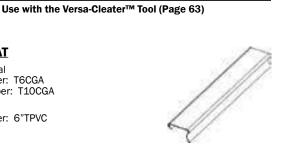
CMFGAMI

Packaged: 250/carton @ 42 lbs. T.D.C. / T.D.F. MANUAL INSERTION (HEAVY GAUGE)

- 14 Gauge
 - Manual insertion only
 - Hole for 3/8" Carriage Bolt
 - Available in a variety of metals
 - Packaged: 250/carton @ WCCGA: 45 lbs. / WFCGA: 48 lbs.

Part Number: WCCGA OR WFCGA

- - 2" Part Number: BN2
 - * Available in Galvanized



T.D.F. CLEAT

T.D.C. CLEAT

22 gauge Metal 6" Part Number: T6CGA 10' Part Number: T10CGA

PVC

22 gauge Metal 6" Part Number: F6CGA 10' Part Number: F10CGA PVC 6" Part Number: 6"FPVC 10' Part Number: 10'FPVC

6" Part Number: 6"TPVC

VERSA CLEAT ™

22 Gauge Metal

6" Part Number: DV6CGA

10' Part Number: DV10CGA

· For use on T.D.C. (and some T.D.F.) profiles

6" Part Numbers

125 L.F. (250) pcs./carton @ 31 lbs.

· Available in Metal Alloys Only



PACKAGING INFORMATION

PACKAGING INFORMATION

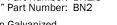
	22 gauge Metal	PVC
	250 L.F. (500) pcs./carton @ 45 lbs	250 L.F. (500) pcs./carton @ 24 lbs
10' Part Numbers	100 L.F. (10) pcs./bundle @ 18 lbs	100 L.F. (10) pcs./bundle @ 12 lbs

Use with the Snapper Tool (Page 63)

UNIVERSAL PRESS-ON BULLNOSING

EXAMPLE: BN1GA

1" Part Number: BN1 11/2" Part Number: BN1.5



Ductmate Flange or T.D.C[®] / T.D.F[®] Duct Wall -Insulation A=1", 1.5", or 2" Press-On Bullnosing

or 316 Stainless Steel

How To Order T.D.C. & T.D.F. Components Using Part Number Variations:

Available Alloys		
GA = Galvanized	S4 = 304 Stainless	
GN = Galvanneal	S6 = 316 Stainless	
AZ = Aluminized	 PVC = PVC Coated 	
AL = Aluminum (except cleat)	BI = Black Iron	

EXAMPLE: CMFGN (Galvannealed Steel T.D.F. Corner)

To order any of these products, use part number variations as defined. Use the part number for your given corner or cleat type, and add the part number code that corresponds to your desired alloy (listed in the chart above).

ALL DUCTMATE GASKETS ON PAGE 47. OTHER TIME SAVING TOOLS ON PAGE 63.



10' Part Numbers

100'/bundle @ 23 lbs.



FLEXIBLE DUCT CONNECTORS



Ideas that work for you everyday...

FABRIC SPECIFICATIONS

VINYL SUPER D	UTY (dual fabric)
Base Fabric:	Polyester/Polyester
Color:	Black
Weight:	20 ± 2 oz/yd ²
Tearing Strength:	W: 65 lbs F: 70 lbs
Tensile Strength:	W: 425 lbs F: 280 lbs
Low Temperature:	-40°F
High Temperature:	200° F

LA APPROVED VINYL SUPER DUTY •

(dual fabric)	
Base Fabric:	Polyester/Polyester
Color:	Black
Weight:	20 ± 2 oz/yd ²
Tearing Strength:	W: 35 lbs F: 25 lbs
Tensile Strength:	W: 45 lbs F: 40 lbs
Low Temperature:	-40°F
High Temperature:	200° F

NEOPRENE

Base Fabric:	Glass C
Color:	Black
Weight:	30 ± 2 (
Tearing Strength:	W: 40 lk
Tensile Strength:	W: 395
Low Temperature:	-40°F
High Temperature:	200° F

Glass Cloth Black $30 \pm 2 \text{ oz/yd}^2$ W: 40 lbs F: 30 lbs W: 395 lbs F: 255 lbs • Meets NFPA 701 -40°F

HYPALON

Base Fabric:	Glass Cloth
Color:	White
Weight:	30 ± 2 oz/yd ²
Tearing Strength:	W: 25 lbs F: 20 lbs
Tensile Strength:	W: 475 lbs F: 375 lb
Low Temperature:	-40°F
High Temperature:	200° F

SILICONE (silicone rubber coating) • Highly durable

Base Fabric:	Fiberglass Fabric
Color:	Silver
Weight:	30 ± 2 oz/yd ²
Tearing Strength:	W: 90 lbs F: 90 lbs
Tensile Strength:	W: 372 lbs F: 372 lbs
Low Temperature:	-70°F
High Temperature:	500° F

TEFLON

Base Fabric: Color: Weight: Tearing Strength: Tensile Strength: Low Temperature: -100°F High Temperature: 600° F

Glass Cloth Gray $18 \pm 1 \text{ oz/yd}^2$ W: 20 lbs F: 20 lbs W: 410 lbs F: 355 lbs

- Strongest all-purpose fabric in the industry with excellent resistance to cuts, tears, and abrasion · Flame resistant coating
- · Resistant to weather and most chemicals
- Mildew resistant per ASTM G-21
 - Meets NFPA 701
 - Strongest all-purpose fabric in the industry with excellent resistance to cuts, tears, and abrasion
- Flame resistant coating
- Resistant to weather and most • chemicals
- Mildew resistant per ASTM G-21
- Meets NFPA 701
- · Ideal for fume hoods
- · Flame resistant coating
- Resistant to weather, most chemicals, fat, grease, and oil
- Mildew resistant per ASTM G-21
- · Ideal for outdoor applications and fume hoods
 - Flame resistant coating
- Resistant to weather, most chemicals, fat, grease, and oil W: 475 lbs F: 375 lbs • UV Resistant
 - Meets NFPA 701

 - · Rubbery surface for grip
 - · Excellent flame resistance
 - Non-combustible fabric
 - Resistant to weather, most chemicals, water, and oil
 - Meets NFPA 701
 - Meets NFPA 90A & 90B
 - Excellent chemical resistance Excellent flexibility in extreme
 - temperatures · Flame resistant coating
 - Meets NFPA 701

PROflex™ ORDERING INFORMATION

Standard 100 ft. per carton.

Metal is available in galvanized, stainless and aluminum.

All fabrics are available without metal attached in various widths x 100 ft. per roll.

For other alloys, fabric sizes or chemical resistance information, consult your nearest Ductmate distributor or call Ductmate direct.

Commercial: 24 Gauge

Fabric	Size metal x fabric x metal	Part No.
Vinyl Super Duty		PFC*VS**
Neoprene	All fabrics available in:	PFC*N**
Hypalon	3"x3"x3" 4"x4"x4" 3"x6"x3"	PFC*H**
Silicone		PFC*S**
Teflon		PFC*T**

Single-Fold: 24 Gauge

Fabric	Size metal x fabric x metal	Part No.
Vinyl Super Duty	All fabrics	PFCS*VS**
Neoprene	Air faorics available in: 4½"x3"x4½" 3"x6"x3" 3"x3"x3"	PFCS*N**
Hypalon		PFCS*H**
Silicone		PFCS*S**
Teflon		PFCS*T**

Residential: 28 Gauge

Fabric	Size metal x fabric x metal	Part No.
Vinyl		PFR03VGA
Neoprene	All fabrics available in: 1¾"x3"x1¾"	PFRO3NGA
Hypalon		PFRO3HGA
Silicone	1	PFR03SGA

Only available in galvanized

Fabric	LA Vinyl	Neoprene	Hypalon	Silicone
NFPA 90A	3x3x3	3x3x3 4x4x4	3x3x3 4x4x4	3x3x3 4x4x4
NFPA 90B	3x3x3 4x4x4	3x3x3 4x4x4 3x6x3	3x3x3 4x4x4	3x3x3 4x4x4 3x6x3

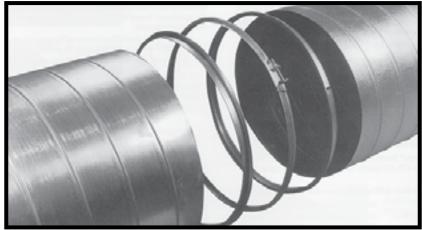
Part Number Key EXAMPLE: PFC3VSGA Commercial Vinyl Super Duty 3"x3"x3" Galvanized

*	Size	**	Alloy
3	3"x3"x3"	GA	Galvanized
Т3	4½"x3"x4½"	AL	Aluminum
4	4"x4"x4"	S4	304 Stainless Steel
6	3"x6"x3"	S6	316 Stainless Steel

ROUND DUCT CONNECTOR SYSTEM



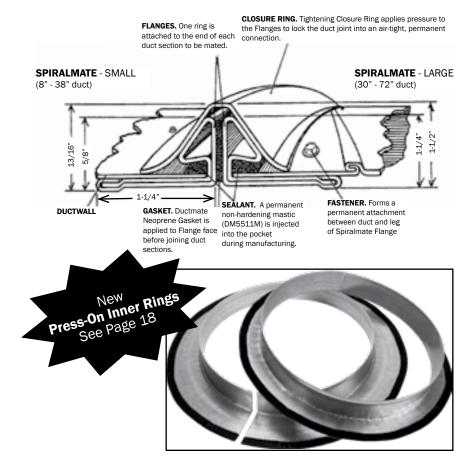
SPIRALmate[®]



MONEY SAVING VALUE ADDED FEATURES

QUICK & SIMPLE TO INSTALL • SUBSTANTIAL REDUCTION IN LABOR & TIME AIR TIGHT • NO ADDITIONAL SEALANTS REQUIRED • CLEAN APPEARANCE • USED AS AN ARCHITECTURAL FEATURE • CAN BE INSTALLED ON-SITE • INCREASES STRUCTURAL INTEGRITY OF DUCT • PRICE COMPARES TO ANGLE RINGS OR COUPLERS REQUIRING SEALANT • FLANGES ADJUST TO MODERATE PIPE DIAMETER VARIATIONS • ONE-BOLT CLOSURE BAND CONNECTION • WORKS ON DOUBLE-WALL PIPE • EASY ALIGNMENT OF FITTINGS • FITS SPIRAL SEAM AND MOST RIBBED PIPE

Duct Sizes From 8" - 72" in 2" Increments Standard (1" Increments And Sizes Larger Than 72" Consult Factory)



TECHNICAL DATA

The characteristics of a particular connection or joint are usually referenced to the Sheet Metal and Air Conditioning Contractors National Association (SMACNA) Manuals. SMACNA encourages the use of new technology, but does not endorse proprietary products. 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 used and the certified test results reveal:

Virtually No leakage at up to 18" WG positive pressure or down to 10" WG negative pressure

Testing was performed on a single-wall connection. Complete test data is available upon request.

DIMENSIONS

Refer to Cross Section on previous page.

LIMITATIONS

The Spiralmate Small Profile Round Duct Connector is not recommended for applications with spiral duct gauges heavier then 20 GA or lighter then 28 GA. The Spiralmate Large Profile Round Duct Connector is not recommended for applications with spiral duct gauges heavier then 16 GA or lighter then 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.

TECHNICAL SERVICES

Detailed assembly and installation instructions & videos showing step-bystep procedures are available from the manufacturer and are sent to all new customers. Factory-trained personnel are available upon request at no charge to instruct new customers in the use of the Spiralmate System

COMPOSITIONS & MATERIALS

The Spiralmate Round Duct Connector Systems consist of the following components:

- Two mating Round Duct Connector Flanges of roll-formed galvanized steel with an integral sealant.
 Large Profile 20 ga., Small Profile 22 ga.
- A Closure Ring of roll-formed galvanized steel. Large Ring 18 ga., Small Ring 20 ga.
- c. Mastic: Ductmate DM5511M
- d. Gasket: Neoprene and Ductmate 440

COMPOSITIONS & MATERIALS FOR THE NEW PRESS-ON INNER RING

The Spiralmate Round Duct Connector Systems consist of the following components:

Two Inner Rings roll-formed from galvanized steel with PSA tape:

10" to 48" - 18 ga. 49" & up - 16 ga.

SPIRALMATE ORDERING INFORMATION

HOW TO ORDER USING PART NUMBER VARIATIONS, EXAMPLE: SM28GA

CONNECTOR TYPE	CONNECTOR SIZE	ALLOY	GASKETING
Example: SM SM = Spiralmate	Example: 28 28 = 28" Diameter Small Profile Sizes 8" thru 38" Large Profile Sizes 30" thru 72" All sizes available in even, odd and	Example: GA GA = Galvanized GN = Galvannealed AZ = Aluminized S4 = 304 Stainless	NEOPRENE NEO 5/16x3/4 50' rolls / 750' per case 440 Butyl Gasket
	metric sizes.	S6 = 316 Stainless	440 3/16x5/8
Inner Ring (if application is double wall) Order Example: 1IR26GAPSA 1 = 1" insulation	Inner Ring Size For 1" insulation the inner ring is 2" smaller than connector. Sizes start at 8"	PVC = PVC Coated***	25' rolls/500' per case 440 Butyl Gasket Patches 440 3x2x1/8
IR = Inner Ring 26 = Size of inner ring GA = Galvanized PSA=Pressure Sensitive Adhesive	For 2" insulation the inner ring is 4" smaller than connector. Sizes start at 12"		512 patches/per case

*** Lead time on PVC coated is 3½ weeks for the coil to arrive at our plant. Production and shipping still have to be factored in.

NOTE: SPIRALMATE CONNECTOR SYSTEM COMES COMPLETE WITH 2 FLANGES AND 1 CLOSURE RING.

ADDITIONAL FLANGE RINGS AND CLOSURE RINGS ALSO SOLD SEPARATELY.

NEOPRENE GASKET IS RECOMMENDED AROUND THE CIRCUMFERENCE OF THE SPIRALMATE FLANGE.

SMALL AMOUNT OF 440 BUTYL GASKET REQUIRED AT BREAK IN FLANGE. SEE GASKETING FOR SPECIFICATIONS.

GASKET CALCULATION: DIAMETER + 1-1/2"X3.1415=(LI ÷ 12 PER JOINT) X (NUMBER OF RELATED SIZES)=SIZE TOTAL

TOTAL FOOTAGE DETERMINED BY ADDING ALL SIZES TOTAL.

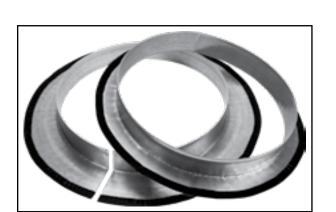
#NUTRUNL - Special long socket for large profile Spiralmate Closure Ring

#NUTRUNS - Special long socket for small profile Spiralmate Closure Ring

ROUND DUCT CONNECTOR SYSTEM



DUCTMATE'S NEW PATENT PENDING PRESS-ON INNER RINGS for Spiralmate and Econoflange Round



MONEY SAVING VALUE ADDED FEATURES

- 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

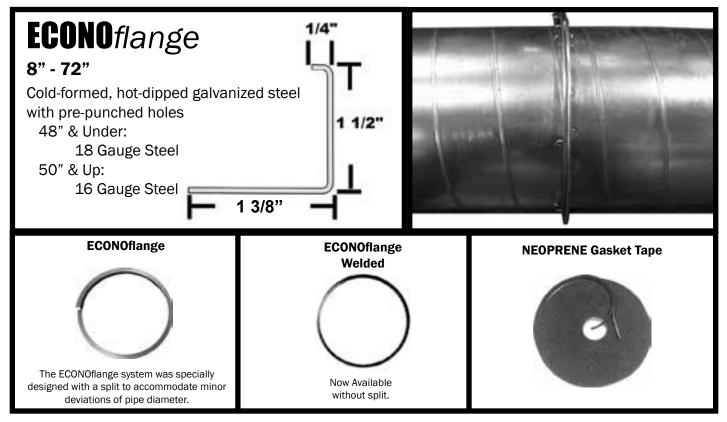
Revolutionary Design For Quick, Hassel-Free Installation

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.

ROUND DUCT CONNECTOR SYSTEMS

ECONOflange[™] Round

Duct Connection System



- Simple installation processCan be installed on-site
- Available in sizes 8" 72" in standard 2" increments

ORDERING AND PACKING INFORMATION EXAMPLE: EFR16GA

INSULATION SIZE*	ТҮРЕ	DIAMETER	ALLOY				
Example = _ • 1 = 1" • 2 = 2" *Only for Inner Ring. See Press-On Inner Ring	Example = EFR • EFR = ECONOflange • EFRW (Econoflange Welded) • IR = Inner Ring (Extension for Double Wall Pipe)	DIAMETER Example = 16 8" 30" 52" 10" 32" 54" 12" 34" 56" 14" 36" 58" 16" 38" 60"	ALLOYExample = GAGA = GalvanizedGN = GalvannealAZ = AluminizedS4 = 304 Stainless				
page for part number description.		18"40"62"20"42"64"22"44"66"24"46"68"26"48"70"28"50"72"	 S4 = 304 Stainless S6 = 316 Stainless PVC = PVC Coated** AL = Aluminum 				

** Lead time on PVC coils is 3½ weeks for the coil to arrive at our plant. Production and shipping still have to be factored in.

GASKETING

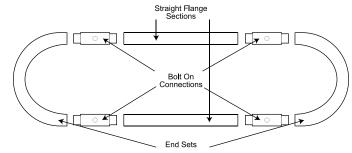
PART NO.	DESCRIPTION	PACKAGE QTY./SHIPPING WT.			
NEO 5/16X3/4	NEOPRENE	50' rolls/750' per case, @ 15 lbs. / case			
440 3/16x5/8	BUTYL	25' rolls/500' per case			
440 3x2x1/8	BUTYL PATCHES	512 patches/per case			

ECONO OVAL DUCT CONNECTOR SYSTEM

ECONOflange™ O

Oval Duct Connection System





Basic Use

The ECONOflange Oval connection system was designed as a cost effective oval connection, all while remaining efficient and easy to install.

Key Features

- 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

Special Characteristics

- Flange Construction:
 - 18 Gauge on sizes 48" & below 16 Gauge on sizes 50" & Up
- Hot Dipped Galvanized Steel
- Gasket: Ductmate Neoprene
- Pre-punched holes for fast connections
- No special tools required
- Simple installation process, can be installed on-site Available in sizes 8" 56" in standard 2" increments
- Available in specialty metals

Ordering Information EXAMPLE: EF016GA

Semi-Circular End Piece	Endse	t Size	Straight Flange Sections	Alloy
Example: EFO EFO = Econoflange Oval	Example: 12 (2 Endset = 1 Radius Flanges)		Example: EF20 • EF = Straight Flange lengths. Order in	Example: GA GA=Galvanized
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" *	10' or 20' lengths.	 GN=Galvannealed AZ=Aluminized PVC=PVC COATED**

* Larger sizes also available

** Lead time on PVC coils is 3¹/₂ weeks for the coil to arrive at our plant. Production and Shipping times still have to be factored in.

Example:

Duct Dimension 68" x 20"

(minus) (minus)	Major Dimension Minor Dimension	68" - 20" - 7¼"
• •	Straight Econoflange	- / - /4
	Oval Angle Length	40¾"

Packaging Information

The ECONOflange Oval connection system consists of semicircular 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.

1/4" Cold-formed, hot-dipped galvanized steel 48" & Under:

18 Gauge Steel 50" & Up: 16 Gauge Steel

1³/₈"

1½"

ROUND DUCT CONNECTOR SYSTEM

QUICK-SLEEVE

3" THRU 16" ROUND DUCT CONNECTOR SYSTEM

Double-Bolt Connection



VALUE ADDED MONEY SAVING FEATURES:

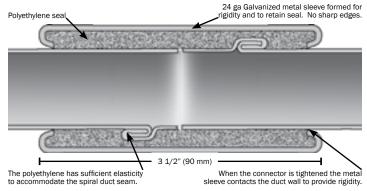
- AIRTIGHT
- NO ADDITIONAL SEALING
- TESTED TO OVER 30" W.G. POS & NEG NO PROTRUSIONS IN AIRSTREAM
- FOR ROLLED OR SPIRAL DUCT
- **REASSEMBLES WITHOUT COMPROMISING SEAL**
- DESIGNED & GASKETED FOR FOOD PROCESSING, DUST COLLECTION, EXHAUST, HIGH-TEMP & STANDARD H.V.A.C. SYSTEMS
- ELIMINATES LENGTHY SHUT DOWN TO SEAL EXISTING SYSTEMS SPECIAL ALLOYS AVAILABLE
- NEW DOUBLE-BOLT CLOSURE ENSURES BETTER STABILITY
- THROUGH LARGER DUCT DIAMETERS





APPLICATION

For air-conditioning, ventilation and dust collection systems.



ORDERING INFORMATION

(HOW TO ORDER USING PART NUMBER VARIATIONS)

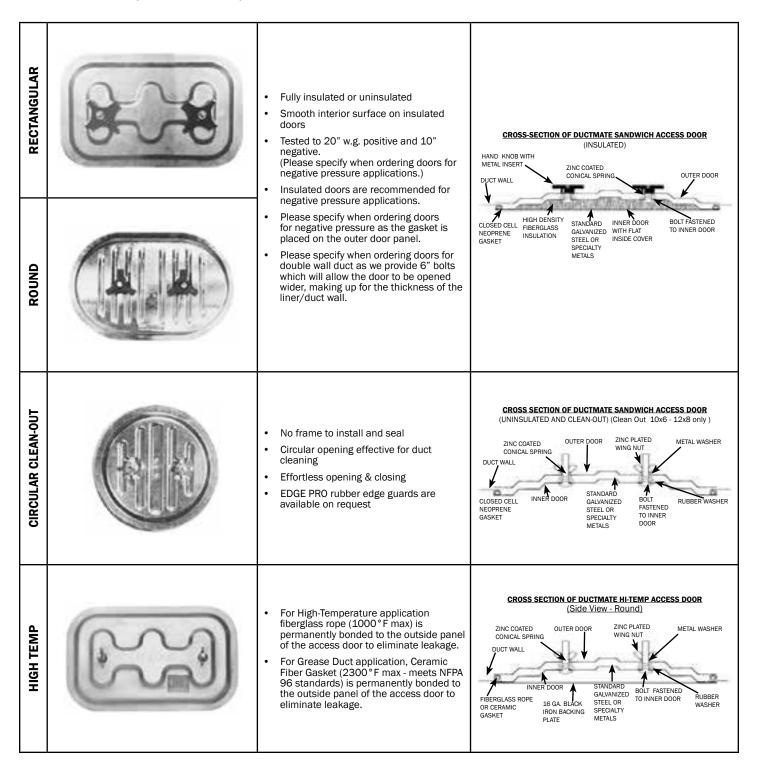
EXAMPLE: QS10GA

CONNECTOR	GASKETING TYPE	CONNEC	<u>TOR SIZE</u>	ALLOY TYPE	
Example: QS	Example: **	Example: 10		Example: GA	
QS = Single-Bolt	** NO NUMBER	3=3"	9=9"	GA = GALVANIZED	
QUICKSLEEVE	REQUIRED FOR	4=4"	10=10"	GN = GALVANNEALED	
	STANDARD GASKET	5=5"	11=11"	AZ = ALUMINIZED	
	(POLYETHYLENE)	6=6"	12=12"	S4 = 304 STAINLESS	
	N = NEOPRENE	7=7"	13=13"	S6 = 316 STAINLESS	
	HT = HIGH-TEMP	8=8"	14=14"		
LABQS = Double-Bolt	S = SILICONE	5=5"	11=11"	GA = GALVANIZED	
QUICKSLEEVE	FDA = FDA APPROVED	6=6"	12=12"	S4 = 304 STAINLESS	
		7=7"	13=13"	S6 = 316 STAINLESS	
		8=8"	14=14"		
		9=9"	15=15"		
		10=10"	16=16"		
		WEIGHTS			
3" = 0.76 lbs/ea	6" = 1.01 lbs/ea	9" = 1.27 lbs/ea	12" = 1.6	69 lbs/ea	
4" = 0.84 lbs/ea	7" = 1.11 lbs/ea	10" = 1.49 lbs/ea	13" = 1.77 lbs/ea		
5" = 0.93 lbs/ea	8" = 1.16 lbs/ea	11" = 1.58 lbs/ea	14" = 1.93 lbs/ea		
			16" = 2.1	10 lbs/ea	

ACCESS DOORS



- Advanced pressure vessel design
- Air tight
- No measuring (self-adhesive template provided)
- Record Of Inspection sticker provided
- Effortless opening & closing (no tools required)
- No frames to install or seal
- Shape provides a better access area



Rectangular

Door	Actual Door Size	Template (Opening Size)	Part No.	Gauge	# Per Carton	Lbs Per Carton
**8" x 4"	9" x 5"	8" x 4"	D*84GA	22	10	12
10" x 6"	11" x 7"	10" x 6"	D*106GA	22	10	25
12" x 8"	13" x 9"	12" x 8"	D*128GA	22	10	35
**16" x 12"	17" x 13"	16" x 12"	D*1612GA	20	5	31
18" x 14"	19" x 15"	18" x 14"	D*1814GA	20	5	45
**24" x 18"	245⁄8" x 18³⁄4"	23¼" x 17½"	D*2418GA	18	3	27

* Available in Insulated (I) or Uninsulated (U), please specify

** Oval Shaped

Round Duct

Door	Actual Door Size	Template (Opening Size)	Duct Diameter	Part Number
8" x 4" 22 Gauge 10 per carton 12 lbs. per carton	9" x 4¾"	7 ^{7/8} " x 3 ^{7/8} "	5" - 6" 7" - 9" 10" - 11" 12" - 14"	DR*846GA DR*849GA DR*8411GA DR*8414GA
12" x 8" 22 Gauge 10 per carton 35 lbs. per carton	12½" x 8 ^{9/16} "	11 ^{11/16} " x 75⁄8"	10" - 11" 12" - 14" 15" - 16" 17" - 18" 19" - 20"	DR*12811GA DR*12814GA DR*12816GA DR*12818GA DR*12820GA
16" x 12" 20 Gauge 5 per carton 31 lbs. per carton	16½" x 12¾"	15¾" x 11 ^{7/16} "	15" - 16" 17" - 18" 19" - 20" 21" - 22" 23" - 24" 25" - 28" 29" - 32" 33" - 36" 37" - 60"	DR*161216GA DR*161218GA DR*161220GA DR*161222GA DR*161224GA DR*161228GA DR*16123GA DR*161236GA Consult Factory
24" x 18" available in 2 panel only 18 Gauge 2 per carton 25 lbs. per carton (Only Available in Galvanized and 316 Stalless)	24⁵%" x 18⁵%"	23¼" x 17½"	29" - 32" 33" - 36" 37" - 40" 41" - 44" 45" - 48" 49" - 52" 53" - 56" 57" - 62" 63" - 144"	DR*241832GA DR*241836GA DR*241840GA DR*241844GA DR*241848GA DR*241852GA DR*241856GA DR*241862GA Consult Factory

* Available in Insulated (I) or Uninsulated (U), please specify

Round Duct Hi - Temp

Door Size	Duct Diameter	Part Number
8" x 4" 22 Gauge 10 per carton 12 lbs. per carton	5" - 6" 7" - 9" 10" - 11" 12" - 14"	DR846*GA DR849*GA DR8411*GA DR8414*GA
12" x 8" 22 Gauge 10 per carton 35 lbs. per carton	10" - 11" 12" - 14" 15" - 16" 17" - 18" 19" - 20"	DR12811*GA DR12814*GA DR12816*GA DR12818*GA DR12820*GA
16" x 12" 20 Gauge 5 per carton 31 lbs. per carton	$\begin{array}{c} 15" - 16" \\ 17" - 18" \\ 19" - 20" \\ 21" - 22" \\ 23" - 24" \\ 25" - 28" \\ 29" - 32" \\ 33" - 36" \\ 37" - 60" \end{array}$	DR161216*GA DR161218*GA DR161220*GA DR161222*GA DR161224*GA DR161228*GA DR161228*GA DR161236*GA Consult Factory
24" x 18" 18 Gauge 2 per carton 25 lbs. per carton	29" - 32" 33" - 36" 37" - 40" 41" - 44" 45" - 48" 49" - 52" 53" - 56" 57" - 62" 63" - 144"	DR241832*GA DR241836*GA DR241840*GA DR241844*GA DR241848*GA DR241852*GA DR241856*GA DR241862*GA Consult Factory

*F1 for doors rated to 1000°F. F2 for doors rated to 2300°F.

Rectangular Duct Hi-Temp

Size	Part No.	Gauge	No. Per Carton	Lbs. Per Carton
**8" x 4"	D84*GA	22	10	12
10" x 6"	D106*GA	22	10	32
12" x 8"	D128*GA	22	10	50
**16" x 12"	D1612*GA	20	5	31
18" x 14"	D1814*GA	20	5	64
**24" x 18"	D2418*GA	18	3	57

* F1 for doors rated to 1000°F. F2 for doors rated to 2300°F.

** Oval Shaped

Clean-Out

Size	Part No.	Gauge	No. Per Carton	Lbs. Per Carton
10" x 6"	DC106GA	24	10	15
12" x 8"	DC128GA	24	10	23

Circular Clean-Out

Size	Part No.	Gauge	No. Per Carton	Lbs. Per Carton
8"	DC*8GA	24	10	12
10"	DC*10GA	24	10	17
12"	DC*12GA	22	10	26

* Available in Insulated (I) or Uninsulated (U), please specify

Observation

Size	Part No.	Gauge	No. Per Carton	Lbs. Per Carton
10" x 6"	DO106GA	22	10	25

Note: For information on our larger 16" x 12" Observation Door see our stand-alone literature.

INSTALLATION INSTRUCTIONS

- 1. Peel backing off template and apply to duct in desired location.
- 2. Opening can be cut with hand-held plasma cutter or by conventional methods.



3. Insert door into opening at an angle and tighten knobs.





4. Do not overtighten knobs or wing nuts.



OBSERVATION ACCESS DOOR

DOUBLE PANED OBSERVATION ACCESS DOOR

16" x 12" Sandwich[®] Door With 8" x 8" View Port

Solid Door With Simple Installation

This door was designed specifically for hospitals, clean rooms, pharmaceuticals, and laboratories to eliminate danger of dust contaminating ductwork while inspecting in-duct smoke detectors, UVC emitters, fire and smoke dampers, and humidifiers.

- Double Pane Safety Glass Extra Large 8" x 8" Viewport
- Available Insulated or Uninsluated
- Tested to 10" W.G. positive pressure with minimal leakage noted
- Also Available In Stainless Steel



Packaging Information									
Size	Part No.	Gauge	No. Per Carton	Lbs. Per Carton					
16" x 12"	DO*1612GA	22	5	32 lbs.					

* Insert I for insulated or U for uninsulated

SINGLE PANED OBSERVATION

Access Door

10" x 6" Sandwich[®] Door with 4" x 2⁵/₈" View Port



Allows inspection of the inside of duct without removing the door

Access door which allows inspection of the inside of the duct without door removal.

Provides a solid, leak proof door that offers a simple installation and ability to view the interior of HVAC single wall applications through a clear safety glass without the need to open access door.

- 4" x 25%" viewport
- Single pane of safety glass
- Tested to 10" w.g.

Packaging Information							
Size	Part No.	Gage	No. Per	Lbs. Per			
0.100			Carton	Carton			
10" x 6"	D0106GA	22	10	25			

DOUBLE PANED AHU VIEWPORT ACCESS DOOR

10" x 6" Sandwich[®] Door with 4" x 2⁵/₈" View Port



Effective means for viewing working UV Lights

The AHU Viewport Panel provides a safe, effective means to view working UVC Emitters inside an air handling unit (AHU) with an insulated wall thickness of up to 3". The AHU Viewport Panel includes 2 layers of laminated safety glass with a 4"x25%" clear window.

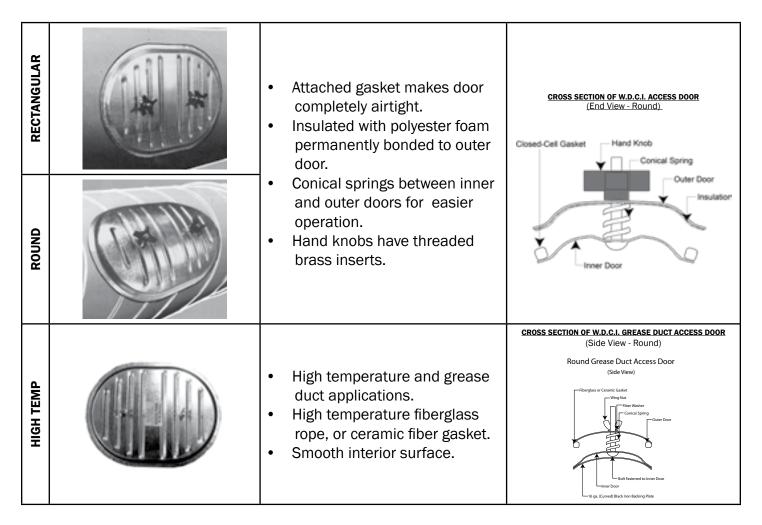
- 4" x 25%" viewport
- Two layers of safety glass
- Tested to 10" w.g.

Packaging Information								
Size	Part No.	Corro	No. Per	Lbs. Per Carton				
3 12e	Fart NO.	uage	Carton	Carton				
10" x 6"	D0106GA4	22	10	25				

WDCI SANDWICH® DOOR

Oval Configuration

- Shape, design, and construction differ from Ductmate® Sandwich Door®
- Stamped from hot-dipped galvanized G-60.
- No measuring (self adhesive template provided).
- No frame to install and seal.
- Effortless opening and closing (no tools required).



ORDERING INFORMATION

EXAMPLE: WRI161236GA

	W.D.C.I. Access Doors							
Door Type	Insulation	Door Size			iameter duct only)	High Temp Door Class	Alloy∻	
W = Flat WR = Round	I = Insulated U = Uninsulated	Rectangular Doors $106 = 10" \times 6"$ $1612 = 16" \times 12"$ $2418 = 24" \times 18"$ Round Doors $84 = 8" \times 4"$ $106 = 10" \times 6"$ $128 = 12" \times 8"$ $1612 = 16" \times 12"$ $2418* = 24" \times 18"$	(Fits Duct Dia.) 6" - 14" 6" - 28" 10" - 20" 15" - 36" (Over 36" Consult Factory) 29" - 60" (Over 60" Consult Factory)	7 = 6" - 7" $9 = 8" - 9"$ $12 = 10" - 12"$ $14 = 13" - 14"$ $16 = 15" - 16"$ $20 = 17" - 20"$ $24 = 21" - 24"$ $28 = 25" - 28"$ (over 60" cc	32 = 29" - 32" $36 = 33" - 36"$ $40 = 37" - 40"$ $44 = 41" - 44"$ $48 = 45" - 48"$ $52 = 49" - 52"$ $56 = 53" - 56"$ $60 = 57" - 60"$ modult factory)	F1 - 1000° F F2 - 2300° F	GA = GALVANIZED GN = GALVANNEALED AZ = ALUMINIZED S4 = 304 STAINLESS S6 = 316 STAINLESS BI = BLACK IRON	

* Only Available in Galvanized and 316 Stainless

UL RATED GREASE DUCT DOOR



Insert S4 for Stainless Steel (provided with Stainless Steel hex bolts).

For D1212UL/D1212ULWS Stainless Steel is a special order and may take additional time.



*

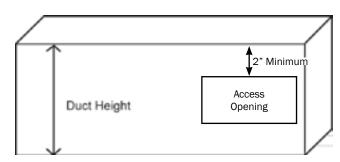
Insert BI for Black Iron.

- UL 1978 Listed
- Easy to install sandwich design with no special tools required
- Minimal penetration into the duct
- Dramatically reduces installation time
- No welding required
- Grease and air tight
- Meets NFPA 96 Standards
- Union made in the U.S.A.



- Available in a variety of sizes
- Door is completely removable for easy cleaning
 Can be used with all types of duct wrap insulation systems
- No need for any clips
- No need for any drilling
- Unique collapsible handle design for easy installation

Part #	Description	Opening Size	Door Size	Minimum Duct Height	Packaging Quantity	Weight
D66UL*	UL Door Only	6" x 6"	8" x 8"	13"	5	25.3 lbs.
D66ULWS*	UL Door with Insulation Kit and 12" x 12" Outer Plate	6" x 6"	8" x 8"	13"	5	45.0 lbs.
D720UL*	UL Door Only	7" x 20"	9" x 22"	13"	3	36.0 lbs.
D720ULWS*	UL Door with Insulation Kit and 13" x 26" Outer Plate	7" x 20"	9" x 22"	13"	3	52.0 lbs.
D106UL*	UL Door Only	10" x 6"	12" x 8"	12"	5	39.0 lbs.
D106ULWS*	UL Door with Insulation Kit and 16" x 12" Outer Plate	10" x 6"	12" x 8"	12"	5	63.0 lbs.
D1010UL	UL Door Only	10" x 10"	12" x 12"	17"	5	57.0 lbs.
D1010ULWS*	UL Door with Insulation Kit and 16" x 16" Outer Plate	10" x 10"	12" x 12"	17"	5	70.0 lbs.
D128UL*	UL Door Only	12" x 8"	14" x 10"	14"	5	55.9 lbs.
D128ULWS*	UL Door with Insulation Kit and 18" x 14" Outer Plate	12" x 8"	14" x 10"	14"	4	70.0 lbs.
D1212UL*	UL Door Only	12" x 12"	14" x 14"	19"	2	24.01 lbs.
D1212ULWS*	UL Door with Insulation Kit and 18" x 18" Outer Plate	12" x 12"	14" x 14"	19"	2	43.56 lbs.
D1612UL*	UL Door Only	16" x 12"	18" x 14"	18"	2	25 lbs.
D1612ULWS*	UL Door with Insulation Kit and 22" x 18" Outer Plate	16" x 12"	18" x 14"	18"	2	54.68 lbs.
D1814UL*	UL Door Only	18" x 14"	20" x 16"	20"	2	48.0 lbs.
D1814ULWS*	UL Door with Insulation Kit and 24" x 20" Outer Plate	18" x 14"	20" x 16"	20"	2	68.0 lbs.
D2020UL*	UL Door Only	20" x 20"	22" x 22"	26"	1	36.0 lbs.
D2020ULWS*	UL Door with Insulation Kit and 26" x 26" Outer Plate	20" x 20"	22" x 22"	26"	1	49.0 lbs.
D2418UL*	UL Door Only	24" x 18"	26" x 20"	24"	1	39.6 lbs.
D2418ULWS*	UL Door with Insulation Kit and 30" x 24" Outer Plate	24" x 18"	26" x 20"	24"	1	50.63 lbs.
ULINSULKIT	Kit 1: Four 8" extension studs, washers, fasteners, "Do Not Obstruct" stickers, and installation instructions			•	5	1.12 lbs.
OP_UL* INSERT SIZE	Kit 2: UL Door Outer Plate				1	Consult Factory



In order to use the minimum duct height, the door must be installed with it's longest dimension running horizontally along the length of the duct. If the minimum duct height is used, the top of the opening must be 2" from the top of the duct. For every inch over the minimum duct height, the opening can be lowered 1" from the top of the duct.

Listed 88VF Fittings for Hood and Duct Penetration Grease Duct Access Door



UL RATED GREASE DUCT DOOR





• Can be used with all types of duct wrap insulation systems

• Unique collapsible handle design for easy installation

• Top plate is completely removable for easy cleaning

• Available in a variety of sizes

No need for any clips

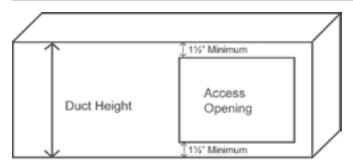
No need for any drilling



- UL 1978 Listed
- Available with optional hinge
- No special tools to remove
- Minimal penetration into the duct
- Dramatically reduces installation time
- Grease and air tight
- Meets NFPA 96 Standards
- * Insert S4 for Stainless Steel (provided with Stainless Steel hex bolts).
- * Insert BI for Black Iron.

Items in Bold refer to hinged doors.

Part #	Description	Opening Size	Door Size	Minimum Duct Height	Packaging Quantity	Weight
DW66UL* DWH66UL*	UL Door Only	6" x 6"	8" x 8"	9"	5	20.0 lbs. 23.0 lbs.
DW66ULWS* DWH66ULWS*	UL Door with Insulation Kit and 12" x 12" Outer Plate	6" x 6"	8" x 8"	9"	5	26.7 lbs. 42.5 lbs.
DW106UL* DWH106UL*	UL Door Only	10" x 6"	12" x 8"	9"	5	38.1 lbs. 32.5 lbs.
DW106ULWS* DWH106ULWS*	UL Door with Insulation Kit and 16" x 12" Outer Plate	10" x 6"	12" x 8"	9"	5	34.95 lbs. 56.5 lbs.
DW1010UL* DWH1010UL*	UL Door Only	10" x 10"	12" x 12"	13"	5	40.0 lbs. 40.9 lbs.
DW1010ULWS* DWH1010ULWS*	UL Door with Insulation Kit and 16" x 16" Outer Plate	10" x 10"	12" x 12"	13"	4	53.0 lbs. 55.0 lbs.
DW128UL* DWH128UL*	UL Door Only	12" x 8"	14" x 10"	11"	5	46.22 lbs. 41.3 lbs.
DW128ULWS* DWH128ULWS*	UL Door with Insulation Kit and 18" x 14" Outer Plate	12" x 8"	14" x 10"	11"	4	53.0 lbs. 53.7 lbs.
DW1814UL* DWH1814UL*	UL Door Only	18" x 14"	20" x 16"	17"	2	32.6 lbs. 34.0 lbs.
DW1814ULWS* DWH1814ULWS*	UL Door with Insulation Kit and 24" x 20" Outer Plate	18" x 14"	20" x 16"	17"	2	53.0 lbs. 52.0 lbs.
DW2020UL* DWH2020UL*	UL Door Only	20" x 20"	22" x 22"	23"	1	34.95 lbs. 36.9 lbs.
DW2020ULWS* DWH2020ULWS*	UL Door with Insulation Kit and 26" x 26" Outer Plate	20" x 20"	22" x 22"	23"	1	34.95 lbs. 37.0 lbs.
DW2418UL* DWH2418UL*	UL Door Only	24" x 18"	26" x 20"	21"	1	23.5 lbs. 24.3 lbs.
DW2418ULWS* DWH2418ULWS*	UL Door with Insulation Kit and 30" x 24" Outer Plate	24" x 18"	26" x 20"	21"	1	36.0 lbs. 36.8 lbs.
ULINSULKIT	Kit 1: Four 8" extension studs, washers, fasten- ers, "Do Not Obstruct" stickers, and installation instructions				5	1.12 lbs.
OP_UL* INSERT SIZE	Kit 2: UL Door Outer Plate				1	Consult Factory



Unlike the ULtimate sandwich style door, the ULtimate II weld on door requires minimal additional clearance. The duct only needs to be large enough to accommodate the frame and satisfy the NFPA 96 Standard. Although the frame only extends 1" past each side of the opening, the NFPA 96 standard requires a minimum of 1.5" clearance between the opening and all seams or edges. Therefore, a minimum of 1.5" clearance is recommended on each side of the opening. In order to use the minimum duct height, the door must be installed with its longest dimension running horizontally along the length of the duct.

Listed 88VF Fittings for Hood and Duct Penetration Grease Duct Access Door



UL RATED GREASE DUCT DOOR





• UL 1978 Listed

- · Easy to install Sandwich design with no special tools required
- Minimal penetration into the duct
- Dramatically reduces installation time
- · No welding required
- · Grease and air tight
- Meets NFPA 96 standards
- Union made in the U.S.A.



- · Holes line up easily with adjustable fastening system
- · Door is completely removable for easy cleaning
- Can be used with all types of duct wrap insulation systems
- · No need for any clips
- · No need for any drilling
- Unique collapsible handle design for easy installation

ULtimate Round Door Packaging Info and Sizing Guidelines

Package

Quantity

1

1

1

1

Insert pipe diameter. t

- Insert S4 for Stainless Steel (provided with Stainless Steel hex bolts).
- Insert BI for Black Iron.

For Use With Duct Wrap Systems

Outer Plate Diameter

current round doors being offered.

Description

tions.

Outer Plate for 10" x 6" Door

Outer Plate for 12" x 8" Door

Outer Plate for 18" x 14" Door

Insulation Kit: Two(2) 6" extension

studs, 2 washers, 2 coupler nuts,

2 wing nuts, "Do Not Obstruct"

sticker, and Installation Instruc-

ΧХ

‡‡

Part #

Outer Template

OPR106ULXX‡‡

(Sold Separately) OPR128ULXX±±

(Sold Separately) OPR1814ULXX±±

(Sold Separately)

(Sold Separately)

ULRINSULKIT

Door Part #	Description	Opening Size	Door Size	Minimum Diameter	Package Quantity	Weight
DR106†UL*	Round UL Door 10" x 6"	10" x 6"	12" x 8"	10"	5	39.0 lbs.
DR128†UL*	Round UL Door 12" x 8"	12" x 8"	14" x 10"	12"	5	55.9 lbs.
DR1814†UL*	Round UL Door 18" x 14"	18" x 14"	20" x 16"	14"	2	48.0 lbs.

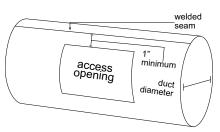
Available in BI (Black Iron) or S4 (Stainless Steel Type 304) Outer plates will be offered to cover the 3

Outer Plate

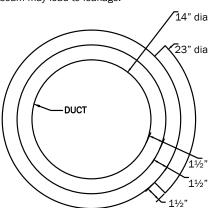
16" x 12"

18" x 14"

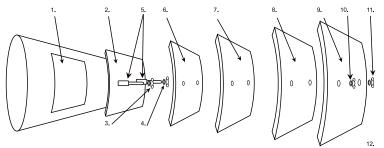
24" x 20"



The door frame extends 1" around the opening; therefore, a minimum of 1" clearance is required on either side of the welded seam. Cutting the opening too close to the welded seam may lead to leakage.



Note: To determine the diameter of the outer plate: Insulation thickness x number of layers x 2 + duct diameter Example: Diameter of the duct is 14" using 3 layers of 1¹/₂" insulation. (1¹/₂" x 3) x 2 + 14" = 23" Outer Plate. Part# 0PR106UL23BI



1. Duct Opening

Weight

Consult Factory

Consult Factory

Consult Factory

1.0 lbs.

- Ductmate Industries ULtimate 2. Round Grease Duct Access Door
- 3. Wing Nuts
- 4. Washers
- 5. Extended Insulation Studs With Coupler
- 6 One Layer 11/2" Fire Wrap Insulation

7. One Layer 1¹/₂" Fire Wrap

- Insulation
- 8. One Layer 11/2" Fire Wrap Insulation
- 9. Outer Plate (16 ga)
- 10. Washers
- 11. Wing Nuts 12. Identification Sign

Listed 88VF Fittings for Hood and

Grease Duct Access Door



ACCESS PANEL DO NOT OBSTRUCT

SQUARE FRAMED ACCESS DOORS

STANDARD CHARACTERISTICS OF DUCTMATE SQUARE FRAMED ACCESS DOORS

- DOUBLE GASKETED
- PRECISION DESIGNED AND MANUFACTURED
- **INSULATED**
- AVAILABLE IN SPECIALTY METALS & RECTANGULAR SIZES

*1" or 1 1/2"

TECHNICAL INFORMATION

- 1" High density fiber glass insulation board made from inorganic glass fibers bonded with renewable bio-based materials (FHC25/50).
- R Valve 4.2.

Tabbed:

Press-On:

- Door consists of two, 24 gauge galvanized steel panels, mechanically locked together.
- Meets SMACNA requirements for low pressure doors (3" w.g. positive/2" w.g. negative).
- Closed cell cross-linked polyethylene gasketing, with a service temperature range of -70°F to 175°F, is bonded to the inside of both the Dovetail frame and Press-On frames, and also to the outside of the Dovetail frame only.
- Double-sided adhesive gasket: closed cell cross-linked polyethylene is UL 94HF1 listed with a temperature range -110°F to 158°F and is bonded to the outside of the Press-On frame only for easy installation to metal ductwork.
- Frames measuring 6" x 6" to 12" x 12" are manufactured from 24 gauge galvanized steel. Frames measuring 14" x 14" to 24" x 24" are manufactured from 22 gauge steel.
- Dovetail frames have an improved design for easy installation on Metal Ductwall, 1" Duct Board or 1 1/2"Duct Board.*
- Hinged Models come with full length piano hinge secured to both the door and frame.
- All cams are manufactured from 16 gauge galvanized steel and secured to the door with a rivet.
- All latches are manufactured from 20 gauge galvanized steel and securely fastened to the frame.
- All Hinge and Cam Doors available with additional Cam Locks*
- All Cam Doors available with optional Chain*
- * Consult Ductmate for ordering information

Doors For Metal Ductwall

Doors for Duct Board

* Doors can be manufactured with dovetailed flange in extended widths to accommodate 1" or 1 1/2" thick Duct Board.

ORDERING INFORMATION EXAMPLE: FD1C10GA

Door Type	Frame Type	Closure	Size	s:**	Alloy
FD = Framed Door	1 = 1" Duct Board 15 = 1 1/2" Duct Board P = Press-On Frame (Insert nothing for a tabbed door for metal ductwall, Example: FDC10GA)	C = Cam Latch H = Hinge	6 = 6" x 6" 8 = 8" x 8" 10 = 10" x 10" 12 = 12" x 12" 14 = 14" x 14"	16 = 16" x 16" 18 = 18" x 18" 20 = 20" x 20" 24 = 24" x 24"	GA = Galvanized GN = Galvanneal AL = Aluminum AZ = Aluminized S4 = 304 Stainless S6 = 316 Stainless

** Note: Sizes Larger Than 14": Hinged: Two Cams Are Attached Opposite The Hinge - Cam Latch: Four Cams Are Attached Doors are available up to size 36"x36" for square or rectangular

PACKAGING INFORMATION

Door Size	6"	8"	10"	12"	14"	16"	18"	20"	24"
No. / Carton	20	20	10	10	10	5	5	5	5
Lbs / Carton	31	45	30	39	50	30	38	45	60

CLUTCHER CABLE HANGING/REINFORCEMENT SYSTEM





- Meets SMACNA upper and lower attachment construction standards if used per manufacturer's installation guidelines
- Comprehensive Clutcher Hanging System Load Charts and Installation Videos available online at <u>Ductmate.com</u>
- Seismic tested and conforms to ICC Code guidelines AC284
- Engineered for strength and durability
- Tapered bore design for fast and easy installation
- Eliminates the need to stock multiple lengths of cable
- Compact design is aesthetically pleasing
- Easily adjust hanging height by hand
- Available in 3 sizes to meet specific load ranges
- Items can be hung at angles up to 60° from vertical

The Ductmate Clutcher System and Ductmate Clutcher Cable Must Always be Used In Conjunction. Use Of Any Other Steel Cable Is Prohibited.

PACKAGING INFO

Size	<u>Box Quantity</u>	<u>Bag Quantity</u>	Bag/Boxes
CL10	500	10	50
CL20	400	10	40
CL30	120	4	30

LOAD RATINGS

<u>Clutcher Part #</u>	Load Rating	Required Ductmate Clutcher Cable
CL10	125 lbs.	WR10
CL20	250 lbs.	WR20
CL30	650 lbs.	WR30

CLUTCHER CABLE HANGING/REINFORCEMENT SYSTEM

CLUTCHER CABLE

Ductmate Clutcher cable is designed for the suspension of HVAC systems. This product has been designed exclusively to be used in conjunction with Ductmate's Clutcher Cable Hanging System.

- Ductmate Clutcher Cable can be easily recognized by the unique red thread woven into the cable
- Engineered for superior strength
- Supplied in spools of 500' and 1000' to reduce waste
- Available in 3 diameter sizes to match each Clutcher mechanism

The Ductmate Clutcher System and Ductmate Clutcher Cable Must Always be Used In Conjunction. Use Of Any Other Steel Cable Is Prohibited.

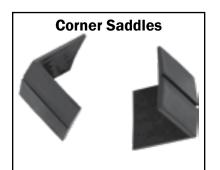
TECHNICAL and PACKAGING INFORMATION

7x7							
Part #	Length	For use with					
WR10500	500'/Spool	CL10					
WR101000	1000'/Spool	CL10					
WR20500	500'/Spool	CL20					
WR201000	1000'/Spool	CL20					

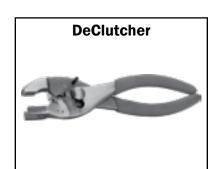
	7x19	
Part #	Length	For use with
WR30500	500'/Spool	CL30
WR301000	1000'/Spool	CL30

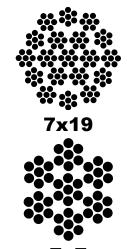
Also Available:

Part #	Description	
HFCCS	Corner Cleat Saddle for rectangular duct edges. For WR10 & WR20.	
HFWRC	Clutcher Cable Cutter for WR10 & WR20 Clutcher Cable	
CLT00L1020	Declutcher for CL10 & CL20	









7x7

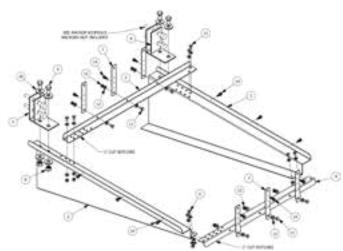
Ideas that work for you everyday...

HANGER SYSTEMS



Direct Mount Hanging Bracket For Condenser Units, Heat Pumps, and Other Equipment.





Packing List:

1.	(1) Side Bracket, Right	8.	(4) 1/2"-13 Lock Nut
2.	(1) Side Bracket, Left	9.	(4) 1/2"-13, 1" Long Bolt
З.	(1) Top Cross Brace	10.	(8) 1/2" Washer
4.	(1) Front Cross Brace	11.	(14) 1/4"-20, 5/8" Long Bolt
5.	(2) Mounting Bracket	12.	(28) 1/4" Washer
6.	(2) Support Bracket	13.	(14) 1/4"-20 Lock Nut
	(For 45" and 55" Air Brace Only)	14.	(12) #14 Tek Screw
7.	(6) Strap		· · ·

Note: The enclosed strapping is not needed for installation not requiring hurricane restraints.

Compare the Air Brace to Conventional Methods

- Rugged structural grade steel construction
- Tested for use in hurricane regions
- Meets the most stringent building codes!
- Available in stainless steel type 304 (Hardware included)
- Engineered product to determine allowable weight loads
- No leveling of ground or waiting for final grade
- No need for shovels, gravel, or block
- Provided individually packaged in a sturdy box
- Reduced chance for air blockage

Technical Information

Wall Material	Allowable Weight
Concrete Block/Brick	375
Concrete	425
Steel Stud	375
Wood Stud	375

- No cracking, chipping, or decaying
- Bracket supports are a true 90° angle
- Right and left brackets are rounded as an added safety factor
- 10 Gauge mounting brackets are precision punched for accurate spacing every time
- Includes 6 hurricane straps (1" x 6" x 16 ga. galvanized G90)
- Lightweight--transports easily
- Assembles and mounts in minutes
- · Perfect for low-lying and flood-prone areas

Ordering Information

Part #	Description	Packaging	Shipping
AIRBRACE36GA	36" x 30"* Condenser Unit Support	1 per box	16.4 lbs. each
AIRBRACE45GA	45" x 36"* Condenser Unit Support	1 per box	23 lbs. each
AIRBRACE55GA	55" x 48"* Condenser Unit Support	1 per box	30.85 lbs. each

* All widths adjustable down to 20"

Also available in 304 Stainless Steel

Mounting fasteners not included: Because of the diversity of wall materials, (brick, wood, concrete, etc.) the mounting is the responsibility of the installer.

Note: If using only one hole in the mounting brackets, use the bottom hole.

Engineered Raised Seal Drawing Available Upon Request For Additional Fee Contact Ductmate For More Information

HANGER SYSTEMS

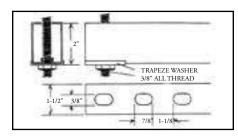
DUCTMATE TRAPEZE DUCT HANGER

DESCRIPTION

Pre-punched channel section for supporting rectangular or oval ductwork.

SPECIAL CHARACTERISTICS

- 18 gauge galvanized, 20' lengths 2" high x 1-1/2" wide. Oval holes punched 2" on center.
- · Easy to cut, light in weight, low in theft
- Neat professional appearance
- Eliminates the hard to cut and punched angle iron, and painting of same, when applicable. Nothing is done in the shop, ship directly to jobsite for immediate use.
- Highly competitive in pricing to 2"x2"x1/4", 2-1/2"x2-1/2"x1/8", 2"x2"x3/16" black angle iron, galvanized iron, or unistrut when all is considered.
- Versatile enough to standardize, thus possibly replacing several other types of hangers, reducing inventory cost.



ISOLATION PAD

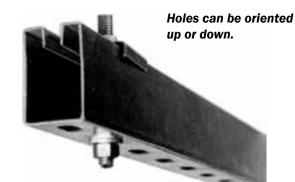


Heavy neoprene pads can be inserted into the hanger profile if sound insulation is required.

> Beam clamp fastens hanger profile to structural members up to 1 1/2" thick.

BEAM CLAMP ASSEMBLY*





INSTALLATION INSTRUCTIONS

- 1. Cut trapeze duct hanger to size.
- Slide all thread through pre-punched oval holes. Slide on washer (included with each bundle), tighten nut.
- 3. Space hanger rods according to load chart below:

TRAPEZE LOAD CHART		
L	d=2 inches P (lbs)	*d-6 inches P (lbs)
18"	1100	850
24"	1100	850
30"	1100	840
36"	1100	830
42"	1100	810
48"	1100	780
54"	1100	735
60"	1100	680
66"	1100	600
72"	1100	520
78"	680	400
84"	190	275
96"		
108"		

L = Distance between hanger rods.

d = Distance between hanger rods and duct wall. Above tables assume duct is centered between hangers.

P = Total weight of duct including reinforcements, connections, insulation, etc. NOTE: For d greater than 2 inches, the 6 inch table MUST be used.

See page 5.14 fig. 5-6 of the 2005 SMACNA HVAC Duct Construction Standards - metal and flexible for calculation method.

* This table is similar to table in SMACNA in that it assumes a 6" space between duct and hanger rod.

PACKAGING INFORMATION			
Part No.	Part No. Product Packing Unit		Weight
TRAP03GA	Trapeze Hanger	300' bundle w/75 washers	360 lbs/bdl
TRAP05GA	Trapeze Hanger	500' bundle w/125 washers	600 lbs/bdl
DM2735AS	Isolation Pad	100 Pieces	12 lbs/carton
TBCLAMP1	Beam Clamp only	Each	.275 lbs
TBCLAMP	Beam Clamp Assembly*	100 Pieces	48 lbs/carton
* Beam Clamp Assembly consists of: beam clamp, trap washer, $3/8 \times 6$ " bolt, 2 flat washers, and nut.			

HANGER SYSTEMS

VISUALLY APPEALING DUCT HANGERS NO TOOLING OR FABRICATION REQUIRED

Please Contact Ductmate About Specialty Metal Requests

ISOLATION DUCT HANGER



The sturdy tension bracket has a much greater load-bearing capacity than the corresponding threaded rods.

The rubber padding which prevents vibrations from being transmitted is 1-3/4" (45 mm) x 2" (50 mm) and 2-3/16" (55 mm) thick.

RUBBER PREVENTS VIBRATION NOISE TRANSMISSION FROM AIR DUCTS AND OTHER VENTILATION DEVICES TO PARTS OF THE BUILDING.

- For 3/8" Threaded Rod
- Overall Length 5-7/8" (150mm)
- Max. Width 1-13/16"x1-13/16" (45x45mm)
- Load-Bearing Capacity: 1100 lbs (500 kg) 680 lbs (308 kg) is the maximum allowable load with 3/3" rod.
- Packing Unit: 50 Pcs./Case
 @ 37 lbs (17KG)/Case

Technical Information:

- Finish/Coating: Zinc Electroplated to 10-15 Microns
- Rubber Type: Styrene-butadiene
- Durometer Hardness: 75-85 Shore Hardness
- Max Temp: 194° F
- Min Temp: -22° F

Part No. DM2723SI

ROUND DUCT HANGER



Specifications:

- Manufactured from 20 gauge galvanized metal.
- ¹/₄"-20x1" carriage bolt with zinc plated wing nut.
- No tools needed

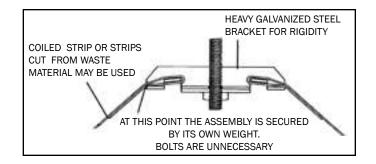
Part Number Variation: RDH * GA20

 Insert desired diameter in sizes 3"-10" (in 1" increments) 12"-34" (in 2" increments)

ROUND DUCT STRAP BRACKET



THE IDEAL WAY TO HANG ROUND DUCTWORK. NO TOOLS NEEDED. THE STEEL STRAP IS HAND BENT INTO THE BRACKET WHICH IS SELF LOADING.



PART NUMBER VARIATIONS

Part No.	Alloy	PACKAGING QTY
DM4703	GA = 14 GA. Galvanized	200 Pcs./Case
	S6 = 316 Stainless Steel	@ 27.5 Lbs. (12.5 KG)/Case

SPECIFICATIONS

- CAN BE USED WITH DUCTWORK UP TO 50" IN DIAMETER
- FITS STRAPPING 1" IN WIDTH, GAUGES 18 - 22
- CAN BE USED WITH ROD 5/16" 3/8"
- Review SMACNA's 2005 HVAC Duct Construction Standards Table 5-1 for allowable weight load.

Convenient Strapping For Hanging



- Convenient carrying handle
- Easy to dispense box design
- Standard galvanized
- Available in stainless
- Perfect for small or difficult installations



- 100 LB Coils have a 20" I.D. with 30" O.D.
- 18 gauge hot-dipped galvanized (meets ASTM-A-653 G 60/90)
- Available in 100 pound coils
- Each coil is banded with metal straps
- · Orders must be by full skids

STRAPPING IN 10' LENGTHS

PRODUCT NO.	GAUGE	WIDTH	WT. (lbs.)	PACKAGING QTY.
1STGA16	16	1"	.200/LF	
1STGA18	18	1"	.170/LF	10' LENGTHS
1STGA20	20	1"	.120/LF	100' BUNDLES
1STGA24	24	1"	.100/LF	(ALL GAUGES)
1STGA26	26	1"	.074/LF	

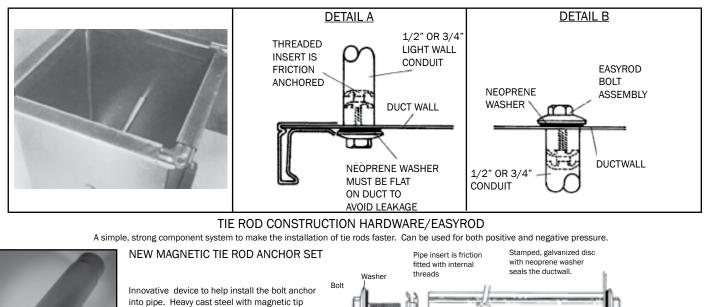
STRAPPING IN A BOX

PRODUCT NO.	GAUGE	WIDTH	WT. PER BOX	FT. PER BOX
1BSTGA16	16	1"	22 LBS	100
1BSTGA18	18	1"	17 LBS	100
1BSTGA20	20	1"	12 LBS	100
1BSTGA22	22	1"	21 LBS	200
1BSTGA24	24	1"	17 LBS	200
1BSTGA26	26	1"	15 LBS	200
1.5BSTGA24	24	1.5"	26 LBS	200
1.5BSTGA26	26	1.5"	20 LBS	200
1.5BSTGA28	28	1.5"	18 LBS	200

STRAPPING IN COILS

PRODUCT NO.	GAUGE	WIDTH	WEIGHT	LENGTH	PACKAGING
1CST100GA18	18	1"	APP. 100 LBS. PER COIL	APP. 610 FT PER COIL	1 SKID 10 COILS - 1000 LBS.

insures a fast, strong friction fit.



EASYROD TIE ROD CONSTRUCTION



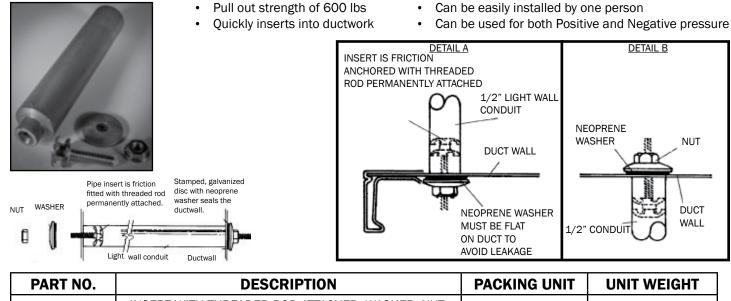
Ductwall

Light wall conduit

- Quickly inserts into ductwork
- Can be used for both Positive and Negative pressure

PART NO.	DESCRIPTION	PACKING UNIT	UNIT WEIGHT
EZ50	BOLT, WASHER, INSERT FOR 1/2" EMT CONDUIT	250 SETS	9 LBS (4.1 KG)
EZ75	BOLT, WASHER, INSERT FOR 3/4" EMT CONDUIT	250 SETS	10 LBS (4.5 KG)
EZTOOL	MAGNETIC TIE ROD ANCHOR SET	1 EA.	2 LBS (.9 KG)

EASYSTUD TIE ROD CONSTRUCTION



PART NO.	DESCRIPTION	PACKING UNIT	UNIT WEIGHT
ES50	INSERT WITH THREADED ROD ATTACHED, WASHER, NUT, FOR 1/2" EMT CONDUIT	250 SETS	10.5 LBS (4.1 KG)
ESTOOL	INSERTER TOOL FOR EASYSTUD	1 EA	2 LBS (.9 KG)

DUCTMATE "Z-BAR" REINFORCEMENT

FEATURES:

SPECIFICATIONS:

- Advanced Design Precision roll-formed from 24 gauge galvanized steel.
 - Classification Conforms to SMACNA "H" equivalent.

Intermediate reinforcement for rectangular duct. Fasten

- RECOMMENDED USE:
- Strong
- Easy To Use within 3/4" of vertical duct wall, then 8" on center.

Cost Effective

Light Weight

PACKAGING:

	Part No.	Description	Weight	Length/Bundle
	DLST15GA	"Z-BAR"	.67 lbs/ft	(75) 20' pcs/1500' bdl.
1				

NOTE: CONSULT MATERIAL AVAILABILITY CHART FOR SPECIALTY ALLOYS

RETAINING ANGLE FOR EXTERNAL REINFORCEMENT & FRAMING FIRE DAMPERS

- Cold formed galvanized angle
- Two sizes available: 1 ½ X 1 ½ x 16 ga
 - 1 ½ x 1 ½ x 14 ga.
- Pre-punched 7/32 holes for faster fastening of angle to sleeve
- 20 foot lengths minimize scrap
- SMACNA E class rigidity (may be used for duct reinforcement)
- In stock at your Ductmate distributor
- Other angle sizes and materials available (consult your distributor)

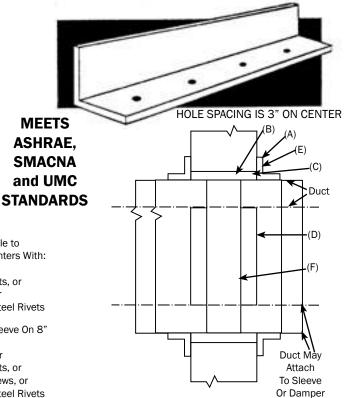
Typical Installation Details

(E)

(F)

- (A) Retaining Angles: Minimum 1 1/2 x 1 1/2 x 0/058 (16 ga.) Retaining angles must lap structural opening 1" minimum and cover corners of openings.
- (B) Clearance: 1/8 Per Linear Foot Both Dimensions.
- (C) Steel Sleeve
- (D) Approved Fire Damper (curtain or blade type)

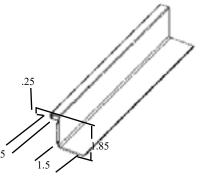
- AIIS Secure Retaining Angle to Sleeve Only on 8" Centers With:
- 1. $1/2 \log welds$ or
- 1/4 Bolts and Nuts, or
- 3. No. 10 screws, or
- 4. Minimum 3/16 Steel Rivets
- Secure Damper To Sleeve On 8" Centers With:
 - 1. 1/2 long welds, or
 - 2. 1/4 Bolts and Nuts, or
 - 3. No. 10 Steel Screws, or
 - 4. Minimum 1/16 Steel Rivets



PACKAGING:

Part No.	Description	Weight	Length
AI1.5*GA1610H	1-1/2" X 1-1/2" with holes	.62 lbs Lf.	10' or 20' pcs/1000' bdl
AI1.5*GA1610NH	1-1/2" X 1-1/2" no holes	.62 lbs Lf.	10' or 20' pcs/1000' bdl
AI1.5*GA1650H	1-1/2" X 1-1/2" with holes	.62 lbs Lf.	10' or 20' pcs/500' bdl
AI1.5*GA1650NH	1-1/2" X 1-1/2" no holes	.62 lbs Lf.	10' or 20' pcs/500' bdl
AI1.5*GA1410H	1-1/2" X 1-1/2" with holes	.73 lbs Lf.	10' or 20' pcs/1000' bdl
AI1.5*GA1410NH	1-1/2" X 1-1/2" no holes	.73 lbs Lf.	10' or 20' pcs/1000' bdl
AI1.5*GA1450H	1-1/2" X 1-1/2" with holes	.73 lbs Lf.	10' or 20' pcs/500' bdl
AI1.5*GA1450NH	1-1/2" X 1-1/2" no holes	.73 lbs Lf.	10' or 20' pcs/500' bdl

* Insert 10 for 10' lengths; Insert 20 for 20' lengths



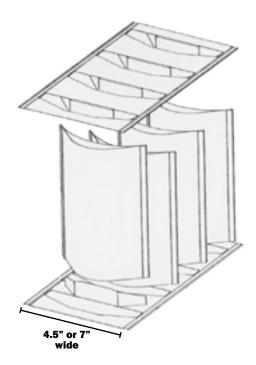
TURNING VANE AND RAIL SYSTEMS



PATENT# 5,529,092

UNIQUE FRICTION-FIT FEATURES & BENEFITS

- ASSEMBLES QUICKLY AND EASILY
- SUBSTANTIAL REDUCTION IN LABOR
- SUPERIOR PULL-OUT STRENGTH / TESTED TO 15" W.G.
- SECURELY LOCKS VANE & RAIL TOGETHER
- TABS CONFORM TO SMACNA'S SPACING STANDARDS
- NO MECHANICAL FASTENERS REQUIRED
- NO SPECIAL TOOLS NEEDED
- VANES ARE AUTOMATICALLY CENTERED AND ALIGNED
- EXTENDED TABS INCREASE VANE RIGIDITY RESULTING IN LESS
 NOISE & VIBRATION
- WORKS ON STANDARD 2" & 4" DOUBLE WALL AND ACOUSTICAL VANES
- MAGNETIC TEMPLATES AVAILABLE TO EASE FASTENING RAIL TO DUCTWALL
- INSTALLATION LITERATURE AVAILABLE FOR REDUCING ELBOWS, OFFSETS, ETC.



Tab Spacing: Conforms to SMACNA Standards

- 2" 2 1/8"
- 4" 3 1/4"

ORDERING INFORMATION

EXAMPLE: 2PRGA24

PRORAIL SIZE	ALLOY		GAUGES
Example: 2PR	Example: GA		Example: 24
2PR = 2" PRORAIL 4PR = 4" PRORAIL	GA = GALVANIZED GN = GALVANNEAL S4 = 304 STAINLESS S6 = 316 STAINLESS	AZ = ALUMINIZED AL = ALUMINUM BI = BLACK IRON PVC = PVC COATED	22 = 22 GA 24 = 24 GA

PACKAGING INFORMATION

ITEM	PACKAGING	WEIGHT (lbs/ft)	
	QTY	22 GA	24 GA
2" RAIL	10'/ea-100'/bdl	.47	.39
4" RAIL	10'/ea-100'/bdl	.73	.61



ECONORAIL[™]

- Can be used with a variety of double wall vane
- Easily attaches vane to rail without the use of fasteners
- Economic means to install double wall vane
- No special tools required

PACKAGING

ITEM	PACKAGING	WEIGHT (lbs/ft)	
	PACKAGING	22 ga	24 ga
2" RAIL	10'/ea-100'/bdl	.47	.39
4" RAIL	10'/ea-100'/bdl	.87	.74

GAUGES

Example: 24 22 = 22 GA

24 = 24 GA

MONORAIL[™]

ECONORAIL SIZE

Example: 2ER 2ER = 2" ECONORAIL

4ER = 4" ECONORAIL

ORDERING INFORMATION EXAMPLE: 2ERGA24

ALLOY TYPE (Example: GA)

GA = GALVANIZED

GN = GALVANNEAL

S4 = 304 STAINLESS

S6 = 316 STAINLESS

- Versatile single wall or double wall system
- Slotted for even spacing of vane
- Rigid design for reduced vibration
- No special tools required

PACKAGING

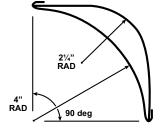
ITEM	PACKAGING	WEIGHT (per Box)
2" Rail	100'/Roll - 2 Roll/Box	40 Lbs.
4" Rail	100'/Roll - 1 Roll/Box	40 Lbs.

ORDERING INFORMATION EXAMPLE: 4MRGA24

MONORAIL SIZE	ALLO	GAUGES	
2MR = 2" Monorail 4MR = 4" Monorail		S4 = 304 STAINLESS S6 = 316 STAINLESS	24 = 24 GA

DOUBLE WALL TURNING VANE

4" Double Wall or Acoustical Vane

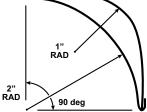


4" vane is available in two options:

1. Standard Double Wall

2. Acoustical Vane Sound-absorbing insulation inside perforated metal fascia.

- · Dimpled seam for superior strength
- Consistent product quality
- Union made in the U.S.A. •



2" Double Wall Vane

PACKAGING

ITEM	PACKAGING	WEIGHT (lbs/ft)
2" SINGLE WALL VANE	10'/EA-100'/bdl	.22
2" DOUBLE WALL VANE	10'/EA-100'/bdl	.43
4" VANE SINGLE WALL	10'/EA-50'/bdl	.65
4" DOUBLE WALL VANE	10'/EA-50'/bdl	1.3
4" DOUBLE WALL ACOUSTICAL VANE	10'/EA-50'/bdl	1.3

⊿'

ORDERING INFORMATION EXAMPLE: 2VGA26

VANE SIZE	ALLOY TYPE	GAUGES
 2V = 2" Double Wall Vane 	GA = GALVANIZED	22 = 22 GA (4" Single Wall Only)
 4V = 4" Double Wall Vane 	AL = ALUMINUM	24 = 24 GA (4" Double Wall Only)
 4AV = 4" Double Wall Acoustical Vane 	S4 = 304 STAINLESS	26 = 26 GA (2" Double Wall Only)
 4SWV = 4" Single Wall Vane 	S6 = 316 STAINLESS	24 = 24 GA (2" Single Wall Only)
 2SWV = 2" Single Wall Vane 		

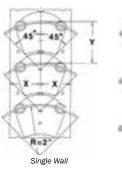
SINGLE WALL DOUBLE WALL						L
PART NO.	Х	Y		PART NO.	Х	Y
2MR	1-1⁄8"	1-1/2"		2MR	1-1⁄8"	1-1/2"
4MR	2-¼"	3 -1⁄4"		4MR	2-1/4"	3-1/4"

AZ = ALUMINIZED

AI = AI UMINUM

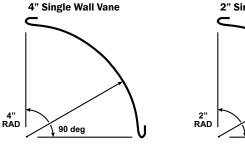
BI = BLACK IRON

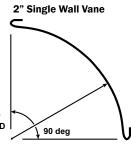
PVC = PVC COATED



45 45 х R=2Double Wall

SINGLE WALL TURNING VANE







PROseal is a premium water based high-velocity duct sealant.

- Indoor/outdoor grade
- For applications up to 15" WG
- Low brush drag & spreadability
- Permanently seals metal duct systems
- Highly crack resistant
- · Remains flexible
- Excellent UV, flexibility, mold resistant, & water resistant properties

- Paintable with latex based paint
- Will not drip or sag
- Mild odor
- UL 181B-M Listed & UL 723
 Classified
- LEED[®] Compliant, meets all applicable SCAQMD standards
- Conforms to requirements of NFPA
 90A & 90B
- Manufactured by S.M.W.I.A. Local 12

ORDERING INFORMATION

PART NUMBER	PACKAGING
PROSEALT	1/12 gallon tubes (25 tubes/case)
PROSEAL1	1 gallon pail (4 pails/case)
PROSEAL5	5 gallon pail
PROSEAL55	54 gallon drum

BASE:

COLOR: TYPE: DENSITY: SOLID CONTENTS: VISCOSITY: VOC CONTENT EPA Method 24: TVOC EMISSIONS CDPH Standard Method v1.1: APPLICATION TEMPERATURE: SERVICE TEMPERATURE: STORAGE TEMPERATURE: DRY TO TOUCH: CURE TIME:

FLASH POINT:

FLEXIBILITY ASTM D522 (1/8" Mandrel Bend): MOLD RESISTANCE UL 181B Mold & Humidity Test: FREEZE THAW STABILITY UL 181B: ADHESION STRENGTH ASTM C794: SAG/SLUMP ASTM D2202: COVERAGE:

ODOR: SHELF LIFE:

CURED SEALANT:

Engineered Polymer Emulsion Gray Water Base 11.3 ±.3 lbs per gallon 68% ±3% 325,000 ±50,000 c.p.s. 1.3 g/L Pass 35°F to 110°F 0°F to 220°F 35°F to 110°F 1 hour (approximate) 24 to 72 hours + Depending on humidity, application, and temperature No flash to boiling Pass Pass 5 cycles Bright Annealed Stainless Steel - 6.25 PLI 0 25 sq. ft./gal. at 1/16" 50 sq. ft./gal. at 1/32" Mild (wet) None (dry) 1 year (unopened container) Tough and permanently flexible

61MF

ASSIFIE

CAULKINGS AND SEALANTS SURFACE BURNING CHARACTERISTICS 51RF

KEEP OUT OF REACH OF CHILDREN Consult The SDS Sheet Before Using Product





PROseal Spray is a premium water based high-velocity duct sealant that can be applied using a wide range of sealant application equipment.

- Tremendous labor savings
- Indoor/Outdoor grade
- For applications up to 15" w.g.
- UL 181B-M listed & UL 723 classified
 Non-Flammable
- LEED[®] Compliant, meets all applicable SCAQMD standards
- Excellent UV, Flexibility, & Mold Resistant Properties
- Remains flexible

- Excellent adhesion to metal
- · Will not drip or sag
- Low shrinkage
- Mild odor
- Conforms to requirements of NFPA 90A & 90B
- Paintable with latex based paint
- Manufactured by S.M.W.I.A. local 12

ORDERING INFORMATION			
PART NUMBER PACKAGING			
PROSEALSPRAY5	5 gallon pail		
PROSEALSPRAY55	54 gallon drum		

BASE: **Engineered Polymer Emulsion** COLOR: Gray TYPE: Water Base **DENSITY:** 11.3 ± .3 lbs per gallon SOLID CONTENTS: 68% ± 3% VISCOSITY: 80,000 cPs +/- 20,000 cPs **VOC CONTENT EPA Method 24:** 1.3 g/L **TVOC EMISSIONS CDPH Standard Method v1.1:** Pass **APPLICATION TEMPERATURE:** 35°F to 110°F SERVICE TEMPERATURE: 0°F to 220°F STORAGE TEMPERATURE: 35°F to 110°F DRY TO TOUCH: 1 hour (approximate) **CURE TIME:** 24 to 72 hours + Depending on humidity, application, and temperature **FLASH POINT:** No flash to boiling FLEXIBILITY ASTM D522 (1/8" Mandrel Bend): Pass MOLD RESISTANCE UL 181B Mold & Humidity Test: Pass FREEZE THAW STABILITY UL 181B: 5 cycles ADHESION STRENGTH ASTM C794: Bright Annealed Stainless Steel - 6.25 PLI SAG/SLUMP ASTM D2202: 0 COVERAGE: 25 sq. ft./gal. at 1/16" 50 sq. ft./gal. at 1/32" ODOR: Mild (wet) None (dry) SHELF LIFE: 1 year (unopened container) Tough and permanently flexible CURED SEALANT: **KEEP OUT OF REACH OF CHILDREN** Consult The SDS Sheet Before Using Product

EDUCTION TO THE





FIBERseal is a premium water based high-velocity duct sealant.

- Indoor/outdoor grade
- · For applications up to 15" WG
- Low brush drag & spreadability
- Permanently seals metal duct systems
- Highly crack resistant
- Remains flexible
- Excellent UV, flexibility, mold resistant, & water resistant properties
- Paintable with latex based paint
- · Will not drip or sag
- Mild odor
- · UL 181B-M Listed & UL 723 Classified
- LEED® Compliant, meets all applicable
- SCAQMD standards
 Conforms to requirements of NFPA 90A & 90B
- Manufactured by S.M.W.I.A. Local 12

ORDERING INFORMATION

PART NUMBER	PACKAGING
FIBERSEALT	1/12 gallon tubes (25 tubes/case)
FIBERSEAL1	1 gallon pail (4 pails/case)
FIBERSEAL5	5 gallon pail
FIBERSEAL55	54 gallon drum

BASE:

COLOR: TYPE: DENSITY: SOLID CONTENTS: VISCOSITY: VOC CONTENT* EPA Method 24: TVOC EMISSIONS CDPH Standard Method v1.1: APPLICATION TEMPERATURE: SERVICE TEMPERATURE: STORAGE TEMPERATURE: DRY TO TOUCH: CURE TIME:

FLASH POINT:

FLEXIBILITY ASTM D522 (1/8" Mandrel Bend): MOLD RESISTANCE UL 181B Mold & Humidity Test: FREEZE THAW STABILITY UL 181B: ADHESION STRENGTH ASTM C794: SAG/SLUMP ASTM D2202: COVERAGE:

ODOR: SHELF LIFE: CURED SEALANT:

42

Grav Water Base 11.2 +/- .3 lbs per gallon 68% +/- 3% 350,000 ±50,000 c.p.s. 1.3 g/L Pass 35°F to 110°F 0°F to 220°F 35°F to 110°F 1 hour (approximate) 24 to 72 hours + Depending on humidity, application, and temperature No flash to boiling Pass Pass 5 cycles Bright Annealed Stainless Steel - 9.33 PLI 0 25 sq. ft./gal. at 1/16" 50 sq. ft./gal. at 1/32" Mild (wet) None (dry) 1 year (unopened container) Tough and permanently flexible

Engineered Polymer Emulsion with fiber reinforcement

KEEP OUT OF REACH OF CHILDREN Consult The SDS Sheet Before Using Product





CAULKINGS AND SEALANTS SURFACE BURNING CHARACTERISTICS

51RF

61MF



EVERseal is a commercial grade water based, smooth duct sealant.

- Indoor/outdoor grade
- For applications up to 10" WG
- Low brush drag & spreadability
- Permanently seals metal duct systems LEED® Compliant, meets all applicable
- Highly crack resistant
- Remains flexible
- Excellent UV, flexibility, mold resistant, & water resistant properties
- · Paintable with latex based paint
- Will not drip or sag
- · Mild odor
- UL 181B-M Listed & UL 723 Classified
- SCAQMD standards
- · Conforms to requirements of NFPA 90A & 90B
- Manufactured by S.M.W.I.A. Local 12

ORDERING INFORMATION

PART NUMBER	PACKAGING
EVERSEALT	1/12 gallon tubes (25 tubes/case)
EVERSEAL1	1 gallon pail (4 pails/case)
EVERSEAL5	5 gallon pail
EVERSEAL55	54 gallon drum

BASE:	Engineered Polymer Emulsion
COLOR:	Gray
TYPE:	Water Base
DENSITY:	11.3 +/3 lbs per gallon
SOLID CONTENTS:	66% +/- 3%
VISCOSITY:	325,000 ±50,000 c.p.s.
VOC CONTENT EPA Method 24:	0 g/L
TVOC EMISSIONS CDPH Standard Method v1.1:	Pass
APPLICATION TEMPERATURE:	35°F to 110°F
SERVICE TEMPERATURE:	0°F to 220°F
STORAGE TEMPERATURE:	35°F to 110°F
DRY TO TOUCH:	1 hour (approximate)
CURE TIME:	24 to 72 hours +
	Depending on humidity, application, and temperature
FLASH POINT:	No flash to boiling
FLASH POINT: FLEXIBILITY ASTM D522 (1/8" Mandrel Bend):	No flash to boiling Pass
	-
FLEXIBILITY ASTM D522 (1/8" Mandrel Bend):	Pass Pass Passes 5 cycles
FLEXIBILITY ASTM D522 (1/8" Mandrel Bend): MOLD RESISTANCE UL 181B Mold & Humidity Test:	Pass Pass Passes 5 cycles WARNING: DO NOT FREEZE or apply at freezing conditions, If frozen
FLEXIBILITY ASTM D522 (1/8" Mandrel Bend): MOLD RESISTANCE UL 181B Mold & Humidity Test:	Pass Pass Passes 5 cycles WARNING: DO NOT FREEZE or apply at freezing conditions, If frozen completely thaw prior to use.
FLEXIBILITY ASTM D522 (1/8" Mandrel Bend): MOLD RESISTANCE UL 181B Mold & Humidity Test: FREEZE THAW STABILITY: ADHESION STRENGTH ASTM C794:	Pass Pass Passes 5 cycles WARNING: DO NOT FREEZE or apply at freezing conditions, If frozen
FLEXIBILITY ASTM D522 (1/8" Mandrel Bend): MOLD RESISTANCE UL 181B Mold & Humidity Test: FREEZE THAW STABILITY:	Pass Pass Passes 5 cycles WARNING: DO NOT FREEZE or apply at freezing conditions, If frozen completely thaw prior to use. Bright Annealed Stainless Steel - 6.93 PLI O
FLEXIBILITY ASTM D522 (1/8" Mandrel Bend): MOLD RESISTANCE UL 181B Mold & Humidity Test: FREEZE THAW STABILITY: ADHESION STRENGTH ASTM C794: SAG/SLUMP ASTM D2202:	Pass Pass Passes 5 cycles WARNING: DO NOT FREEZE or apply at freezing conditions, If frozen completely thaw prior to use. Bright Annealed Stainless Steel - 6.93 PLI
FLEXIBILITY ASTM D522 (1/8" Mandrel Bend): MOLD RESISTANCE UL 181B Mold & Humidity Test: FREEZE THAW STABILITY: ADHESION STRENGTH ASTM C794: SAG/SLUMP ASTM D2202:	Pass Pass Passes 5 cycles WARNING: DO NOT FREEZE or apply at freezing conditions, If frozen completely thaw prior to use. Bright Annealed Stainless Steel - 6.93 PLI 0 25 sq. ft./gal. at 1/16"
FLEXIBILITY ASTM D522 (1/8" Mandrel Bend): MOLD RESISTANCE UL 181B Mold & Humidity Test: FREEZE THAW STABILITY: ADHESION STRENGTH ASTM C794: SAG/SLUMP ASTM D2202: COVERAGE:	Pass Pass Passes 5 cycles WARNING: DO NOT FREEZE or apply at freezing conditions, If frozen completely thaw prior to use. Bright Annealed Stainless Steel - 6.93 PLI 0 25 sq. ft./gal. at 1/16" 50 sq. ft./gal. at 1/32"
FLEXIBILITY ASTM D522 (1/8" Mandrel Bend): MOLD RESISTANCE UL 181B Mold & Humidity Test: FREEZE THAW STABILITY: ADHESION STRENGTH ASTM C794: SAG/SLUMP ASTM D2202: COVERAGE: ODOR:	Pass Pass Passes 5 cycles WARNING: DO NOT FREEZE or apply at freezing conditions, If frozen completely thaw prior to use. Bright Annealed Stainless Steel - 6.93 PLI 0 25 sq. ft./gal. at 1/16" 50 sq. ft./gal. at 1/12" Mild (wet) None (dry)

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CAULKINGS AND SEALANTS STED SURFACE BURNING CHARACTERISTICS 181 B-M 51RF 61MF

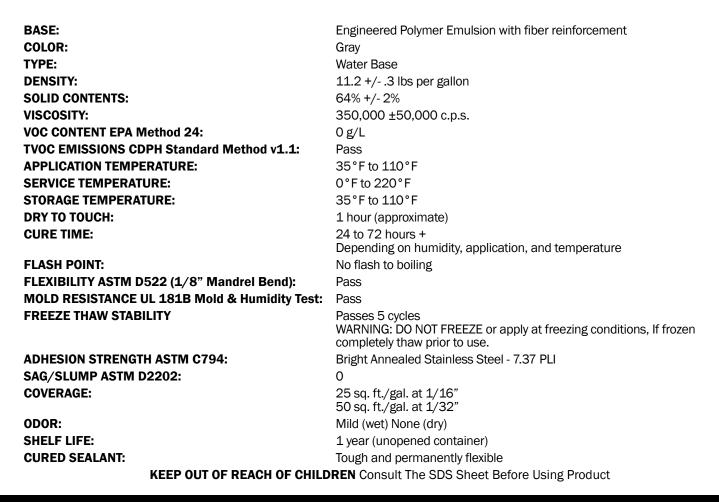
EZ-SEAL™

EZ-Seal is a commercial grade water-based duct sealant with fiber reinforcement.

- Indoor/outdoor grade
- For applications up to 10" WG
- Low brush drag & spreadability
- Permanently seals metal duct systems
- Highly crack resistant
- Remains flexible
- Excellent UV, flexibility, mold resistant, & water resistant properties
- · Paintable with latex based paint
- · Will not drip or sag
- Mild odor
- UL 181B-M Listed & UL 723 Classified
- LEED[®] Compliant, meets all applicable
- SCAQMD standardsConforms to requirements of NFPA
- 90A & 90B
- Manufactured by S.M.W.I.A. Local 12

ORDERING INFORMATION

PART NUMBER	PACKAGING
EZSEALT	1/12 gallon tubes (25 tubes/case)
EZSEAL1	1 gallon pail (4 pails/case)
EZSEAL5	5 gallon pail
EZSEAL55	54 gallon drum



<image><image>



UL 181 A - B Grade Commercial or Residential water-based duct sealant with fiber reinforcement.

- Indoor/outdoor grade
- For applications up to 10" WG
- · Low brush drag & spreadability
- Permanently seals metal duct
- systems
- Highly crack resistant
- Remains flexible
- Excellent UV, flexibility, mold resistant, and water resistant properties
- · Paintable with latex based paint

- · Will not drip or sag
- Mild odor
- UL 181B-M & UL 181A-M Listed / UL 723 Classified
- LEED[®] Compliant, meets all applicable SCAQMD standards
- Conforms to requirements of NFPA 90A & 90B
- Manufactured by S.M.W.I.A. Local 12

ORDERING INFORMATION

PART NUMBER	PACKAGING
ENVIROSEAL1	1 gallon pail (4 pails/case)







BASE: COLOR: TYPE: **DENSITY DM 2000: SOLID CONTENTS DM 1000:** VISCOSITY @ 5rpm Brookfield: VOC CONTENT EPA Method 24: **TVOC EMISSIONS CDPH Standard Method v1.1:** WATER RESISTANCE DM 1900: SERVICE TEMPERATURE: STORAGE TEMPERATURE: TACK FREE TIME ASTM C 679: FLASH POINT: FLEXIBILITY: MOLD RESISTANCE: FREEZE THAW STABILITY DM 1400: ADHESION STRENGTH ASTM C 794: SAG/SLUMP ASTM D 2202: COVERAGE:

ODOR: SHELF LIFE: CURED SEALANT:

Engineered Polymer Emulsion with fiber reinforcement Light Gray Water Base 11.2 +/- .3 lbs per gallon 60% +/- 3% 250,000 +/- 50,000 cPs 36 g/L Pass Excellent (14% absorption by weight) 0°F to 220°F 35°F to 110°F < 90 minutes No flash to boiling Pass Pass Excellent (Passes 5 cycles) Bright Annealed Stainless Steel - 8 PLI 0 25 sq. ft./gal. at 1/16" 50 sq. ft./gal. at 1/32" Mild (wet) None (dry) 1 year (unopened container) Tough and permanently flexible

KEEP OUT OF REACH OF CHILDREN Consult The SDS Sheet Before Using Product

SOLVENT BASED SEALANT

TM

SOLVSea

SOLVseal is a premium solvent based high velocity duct sealant based on a blend of unique synthetic elastomers, select hydrocarbon resins and minerals. This blend results in a superior product that is unequaled in performance.

- · UL Classified
- Permanently flexible
- Fast drying
- Exceptional workability
- Will not drip or sag
- High water resistance
- Low brush drag
- · Excellent spreadability

- Minimal shrinkage
- · Excellent adhesion to metal
- Indoor & outdoor use
- · Superior sealing strength
- Conforms to the requirements of NFPA 90A & 90B
- · Mildew resistant
- USDA Chemically Acceptable





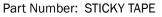
ORDERING INFORMATION

PART NUMBER	PACKAGING	WEIGHT
SOLVSEALT11	1/12 gallon tubes (24 tubes/case)	21 lbs./case
SOLVSEAL1	1 gallon pail (4 pails/case)	39 lbs./case
SOLVSEAL5	5 gallon pail	50 lbs./pail

TECHNICAL INFORMATION PRESSURE RATING: 15" w.g. BASE: Synthetic Rubber COLOR: Gray TYPE: Solvent Base WEIGHT: 9 lbs per gallon SOLID CONTENTS: 51% VISCOSITY: 200.000 cPs **APPLICATION TEMPERATURE:** 0°F to 110°F - 20°F to 190°F **SERVICE TEMPERATURE:** STORAGE: Room temperature (with cross ventilation) DRY TO TOUCH: 15 min. (approximate) **CURE TIME:** 24 to 48 hrs+ (depending on humidity, application, and temperature) (Wet) Extremely flammable Flash point -4°F FLAMMABILITY: (Dry) See UL Classification WATER RESISTANCE: Excellent **MILDEW RESISTANCE:** Excellent **COVERAGE:** 25 sq. ft/gal at 1/16" 12.5 sq. ft./gal. at 1/8" Mild solvent (wet) ODOR: None (dry) SHELF LIFE: 1 year (unopened container) CURED SEALANT: Tough and permanently flexible Flammable Liquid, UN 1133, Adhesives, 3, PG II DOT SHIPPING INFORMATION: **KEEP OUT OF REACH OF CHILDREN** Consult The SDS Sheet Before Using Product

Ductmate System Gaskets STICKY TAPE GASKET





- Butyl Gasket
- 3/16" x 5/8" x 25' rolls
 Packaged: 500 LF/
- carton @ 40 lbs.

Ductmate 440 is a non-skinning, non-drying synthetic polymer based sealing tape, capable of withstanding joint movement without cracking.

Ductmate 440 is also available in $2^{n} \times 2^{n}$ patches. Perfect for covering the critical points in the corner of a 4 bolt connection. Optional corner patch can be used on "ALL" 8 corners in conjunction with continuous piece in lieu of standard gasketing method.

PERFORMANCE PROPERTIES:

% SOLIDS ASTM C771-74:	>98%
COLOR:	Off-White
SPECIFIC GRAVITY:	1.71 ± .05
SHORE OO HARDNESS:	50 - 65
SLUMP RESISTANCE DM 1100 (300°F, 24 hours):	≤ 0.5"
FLEXIBILITY ASTM C 765-73:	Cold temperature passes
WATER RESISTANCE:	Hydrophobic
ELONGATION DM 1200:	≥ 600%
ELONGATION AFTER AGING DM 1200A:	≥ 600%
COMPRESSIBILITY ASTM C 907-mod. (75°F, 50%H):	≥ 40 lbF - peak force
TENSILE STRENGTH ASTM C 907:	≥ 7 psi
TACK STRENGTH ASTM D 3121 (Ambient):	< 1"
PEEL ADHESION ASTM C 794-mod.:	\geq 2.0 PLI on galvanized steel
SERVICE TEMPERATURE:	0°F to 190°F
APPLICATION TEMPERATURE:	Above 40°F
DIMENSIONAL TOLERANCES:	Tape Width 5/8" ±1/32"
FEDERAL SPECIFICATIONS: TT-C- 1796A, (Supersedes MILC- 18909B & 18969B)	Type II, Class B
U.S.D.A ACCEPTABILITY:	Product chemically accept- able to the U.S. Department

of Agriculture for use in meat and poultry processing areas under Federal inspection. Meets requirements

F.D.A REQUIREMENTS 21CFR175.105:

ORDERING INFORMATION

PART #	PACKAGING
440 3/16 X 5/8	(20) 25 ft/rolls 500 ft/case @ 45 lbs/case
440 3/16 X 1 (used w/ DM45)	(16) 25 ft/rolls 400 ft/case @ 53 lbs/case
440 3X2X1/8	512 Patches/case

NEOPRENE GASKET



Neoprene Gasket Tape is a synthetic closed cell, rubber-based sealing tape. Excellent for connecting ductwork which must be taken apart periodically for cleaning purposes, or for fire damper breakaway installations.

PERFORMANCE PROPERTIES:

Color:	Black
Density:	(p.c.f.) average 4-8
Water absorption by wt. (max):	5%
Compression deflection (p.s.i.):	2-5
Temp range Low (Flex without cracking): High continuous: High intermittent: UL 94 HF-1-Passes	200°F

ORDERING INFORMATION

PART #	PACKAGING
NEO 5/16 X 3/4 (RECOMMENDED FOR SPIRALMATE & ECONOFLANGE ROUND & OVAL)	(15) 50 ft/rolls 750 ft/case 15 lbs/case
NEO 5/16 X 1 (Used with DM45)	(20) 50 ft/rolls 1000 ft/case 23 lbs/case
VM GASKET-L 5/16 X 1 1/4	(19) 50 ft rolls 950 ft/case 21 lbs/case

DUCT LINER CONCENTRATED ADHESIVE

Revolutionary Cost Saving Formula!





DUCTMATE

DLC Adhesive 55 is Ductmate's patented duct liner adhesive formula available in 5 and 55 gallon powder mixes. DLC can be mixed on demand by simply adding water and the ingredients to a 5 or 55 gallon bucket or drum and mixed with a standard air powered mixer or our custom designed mixer.

DLC Adhesive is used to:

- Bond duct liner insulation, like PolyArmor[™], to galvanized duct work
- · Seal cut edges of fiberglass insulation
- Bond multiple layers of fibrous insulation board

SPECIAL CHARACTERISTICS

- High performance water based adhesive
- Non-flammable in wet state
- Environmentally friendly
 - Water based
 - No Toluene
 - Reduces waste
 - Reduces carbon emissions due to freight efficiencies
- On demand, quick and simple to mix
- Spray, roll, or brush applications
- Non-webbing when sprayed
- High performance mixer available at low cost
- · Enhanced shelf life
- · Easy to ship and store
- Available in 5 or 55 gallon mixes
- High resistance to microbes
- Eliminate drum disposal cost
 One drum and done

PACKAGING INFORMATION

Description	Includes	Part Number
55 Gallon Starter Pack	2 - 35 lb bags of powder 1 - 1 gallon Power Pack 1 - 55 gallon drum 1 - Drum liner 1 - DLC mixer	DLCADHESIVE55+55GMIXERASSY Makes one 55 gallon drum
5 Gallon Starter Pack	1 - 6 lb bucket of powder 1 - 1 quart Power Pack 1 - 5 gallon pail 1 - Small DLC mixer	DLCADHESIVE5+5GMIXERASSY Makes one 5 gallon pail
55 Gallon Mix	8 - 35 lb bags of powder 4 - 1 gallon Power Pack 4 - Drum liner	DLC4DRUMKIT Makes four 55 gallon drums
5 Gallon Mix	1 - 6 lb bucket of powder 1 - 1 quart Power Pack	DLCADHESIVE5
Black 55 Gallon Mix	8 - 35 lb bags of powder 4 - 1 gallon Power Pack 4 - Black pigment 4 - Drum liner	DLC4DRUMKITB Makes four 55 gallon drums
Black 5 Gallon Mix	1 - 6 lb bucket of powder 1 - 1 quart Power Pack 1 - Black pigment	DLCADHESIVE5B
55 Gallon Mixer	1 - DLC mixing unit	55G*MIXERASSY
5 Gallon Mixer	1 - DLC mixing unit**	5GMIXERASSY

* Add HD for DLC Mixer HD with additional blade and horsepower.

** Cannot be used with 55 gallon mix.

DLC 55 GALLON MIXER - STANDARD

DLC 55 GALLON MIXER - HEAVY DUTY

DLC 5 GALLON MIXER



Volume:	55 Gallon
Horse Power:	1.7 Hp
Props:	1 - 10" Dia Triblade
Estimated Mixing Time:	25 - 30 Minutes
Part Number:	55GMIXERASSY



Volume:	55 Gallon
Horse Power:	4 Hp
Props:	2 - 10" Dia Triblade
Estimated Mixing Time:	20 - 25 Minutes
Part Number:	55GHDMIXERASSY



Volume:	5 Gallon
Horse Power:	0.45 Hp
Props:	1 - 6" Dia Triblade
Estimated Mixing Time:	20 - 25 Minutes
Part Number:	5GMIXERASSY



SPRAY / DRIP / ROTO-BOND / MANUAL

4-EVERhold is a versatile, easy-to-use, water-based duct liner adhesive that can be sprayed, dripped, roto-bonded or manually applied.





ADHESIVES SURFACE BURNING CHARACTERISTICS + 52XF USC (CNC) APPLIED TO INORGANIC REINFORCED CEMENT BOARD FLAME SPREAD: 0 (0) 0 (0) 0 (0) SMOKE DEVELOPED: + - Tested as applied in two 2 in. (5.08 cm) wide strips 8 in. (20.3 cm) on center covering 16 percent of the test sample area at a coverage rate of 400 sq. ft. per gallon (9.6 sq. M/L).

- Spray, drip, roto-bond and manually apply UL Classified
- Fast tracking
- Non-flammable
- · Solvent free
- LEED[®] Compliant, meets all applicable SCAQMD standards
- Made in the USA by SMWIA Local 12
- · Wipes clean with water
- Moisture resistant
- Exceptional coverage

TECHNICAL INFORMATION

BASE:	Synthetic latex
COLOR:	White
TYPE:	Water Base
VOC CONTENT:	0 g/L EPA Method 24
WEIGHT:	9.1 lbs per gallon
SOLID CONTENTS:	55%
VISCOSITY:	2,500 cPs
APPLICATION TEMPERATURE:	40°F to 90°F
SERVICE TEMPERATURE:	0°F to 200°F
STORAGE TEMPERATURE:	40°F to 90°F
DRY TO TOUCH:	$10\ \mathchar`-20$ minutes, depending on temperature, humidity, and application thickness
FLAMMABILITY:	None
FLASH POINT:	No flash to boiling
WATER RESISTANCE:	Excellent
MILDEW RESISTANCE:	Excellent
FREEZE THAW STABILITY:	1 cycles
COVERAGE:	Approximately 400 - 500 sg. ft./gal, depending on application technique
ODOR:	Mild (wet) None (dry)
SHELF LIFE:	6 Months (unopened container)
PACKAGING:	4EVERHOLD1: 1 Gallon Pail (4 Pails/Case) 4EVERHOLD5: 5 Gallon Pail 4EVERHOLD54: 54 Gallon Drum



KEEP OUT OF REACH OF CHILDREN **Consult The SDS Sheet Before Using Product**

PROtack[™] / **PRO**tack[™] HV

PROTACK IS A PREMIUM QUALITY, FIRE RETARDANT, WATER BASED DUCT LINER ADHESIVE.





· U.L. Classified

- Non-flammable
- Fire retardant, moisture resistant
- Solvent free
- Spray, roll, or brush application
- Exceptional coverage
- LEED[®] Compliant, meets all applicable SCAQMD standards

ADHESIVES

SURFACE BURNING CHARACTERISTICS + 52XF

USC (CNC) APPLIED TO INORGANIC REINFORCED CEMENT BOARD 0 (0) 0 (0) FLAME SPREAD:

SMOKE DEVELOPED:

+ - Tested as applied in two 2 in. (5.08 cm) wide strips 8 in. (20.3 cm) on center covering 16 percent of the test sample area at a coverage rate of 400 sq. ft. per gallon (9.6 sq. M/L).

TECHNICAL INFORMATION

BASE: Synthetic	Latex
	t: Gray; Dry: Black) : White; Dry: Clear)
TYPE: Water	
VOC CONTENT: 0 g/L	
WEIGHT PER GALLON: 9.5 ± 0.5	lbs.
SOLIDS: 44 ± 2%	
	6,500 cPs */- 1,000 cPs HV: 15,000 cPs */- 2,000 cPs
APPLICATION TEMPERATURE: 40°F to	90°F
SERVICE TEMPERATURE: 0°F to 2	D0°F
STORAGE TEMPERATURE: 40°F to 5	90°F
DRY TIME: 10-20 m	nutes, depending on temperature, humidity, and application thickness
FLAMMABILITY: None	
FLASH POINT: No flash	to boiling
COVERAGE: Approxim	ately 400 - 500 sq. ft./gal, depending on application technique
FREEZE THAW STABILITY: 5 cycles	
SHELF LIFE: 1 year (u	nopened containers)

PACKAGING & ORDERING INFORMATION

Part #	Description	Quantity & Weights
PROTACK1	1 Gal - Black	4 - 1 Gal Pails @ 37 lbs/case
PROTACK5	5 Gal - Black	1 - 5 Gal pail @ 45 lbs/pail
PROTACK54	54 Gal - Black	1 - 54 Gal drum @ 494 lbs/drum
PROTACK1W	1 Gal - White	4 - 1 Gal Pails @ 37 lbs/case
PROTACK5W	5 Gal - White	1 - 5 Gal pail @ 45 lbs/pail
PROTACK54W	54 Gal - White	1 - 54 Gal drum @ 494 lbs/drum
PROTACKHV1	1 Gal High Viscosity - Black	4 - 1 Gal Pails @ 37 lbs/case
PROTACKHV5	5 Gal High Viscosity - Black	1 - 5 Gal pail @ 45 lbs/pail
PROTACKHV54	54 Gal High Viscosity - Black	1 - 54 Gal drum @ 494 lbs/drum
PROTACKHV5W	5 Gal High Viscosity - White	1 - 5 Gal pail @ 45 lbs/pail
PROTACKHV54W	54 Gal High Viscosity - White	1 - 54 Gal drum @ 494 lbs/drum

KEEP OUT OF REACH OF CHILDREN Consult The SDS & Spec Sheet Before Using Product



DESCRIPTION

Quick-Stick HS is a premium-quality, high strength adhesive formulated for fast tack and a permanent bond.

BASIC USE

QUICK-STICK HS is designed to apply insulation or other materials to smooth nonporous surfaces.

SPECIAL CHARACTERISTICS

- Extremely quick tack
- Non-flammable
- Pressure sensitive
- High solids content
- Easy application
- Strong permanent bond
- Exceptional coverage
- LEED[®] Compliant, meets all applicable SCAQMD standards

APPLICATION: Apply using Ductmate approved spray hoses, and gun to smooth nonporous surfaces. Surfaces should be free from all dirt, oil, and grease.

DIRECTIONS:

- 1. Insure that surfaces are dry and free from dirt, grease, oils and any other solvents. Try gun on a test surface to make sure adhesive is flowing.
- 2. Hold spray gun 8-10 inches from surface to be sprayed.
- 3. Avoid buildup of adhesive or bubbles. Edges of spray pattern should overlap giving consistent coverage over surface.
- 4. Allow solvent to evaporate for 2 minutes before making bond. Apply even pressure along the two surfaces to ensure effective bond.

CLEAN UP: Ductmate recommends that a degreaser be used for cleaning out hoses and spray guns.

DISPOSAL: When all adhesive has been used from cylinder, close cylinder valve and clear hose and gun before disconnecting hose from cylinder. Do not clear hose and gun until a new cylinder is available. After hose and gun are connected to cylinder, leave pressure in gun and hose to prevent the adhesive from hardening. The cylinder is not hazardous when empty. Once empty and the hose is disconnected, open the valve to exhaust all the vapors from the cylinder. Puncture the empty emergency release valve to ensure the container cannot be repressurized. In most areas the empty cylinder can be disposed of in the same way as an aerosol can, or it may be recycled as scrap metal. Dispose of product in accordance with applicable local, state, and federal regulations.

TECHNICAL INFORMATION

BASE:	Solvent
SOLVENT:	Methylene Chloride
COLOR:	Green
SOLIDS:	32 - 34%
APPLICATION TEMP:	60°F-90°F
FLAMMABILITY:	Non-flammable wet and dry
COVERAGE:	375 lbs: 37,000 sq.ft 43,000 sq.ft. 40 lbs: 4,000 sq.ft 4,600 sq.ft.
BONDING TIME:	3 to 5 minutes
LIQUID SPEC. GRAVITY:	1.19 +/- 0.02
SHEAR ADHESION:	>100 psi
FAILURE TEMP:	200° F
SHELF LIFE:	1 year

PACKAGING INFORMATION				
ITEM NO. DESCRIPTION QTY/WEIGHTS				
QUICKSTICKHS40	40 lbs.	(1) @ 40 lbs		
QSH6	6' Hose	(1) @ 1 lb		
QSH12	12' Hose	(1)@1 lb		
QSH18	18' Hose	(1) @ 2 lbs		
QSSG	Spray Gun	(1) @ 1 lb		

KEEP OUT OF REACH OF CHILDREN Consult The SDS Sheet Before Using Product





DESCRIPTION

Quick-Stick adhesive is formulated for fast tack and a permanent bond.

BASIC USE

QUICK-STICK is designed to apply insulation or other materials to smooth nonporous surfaces.

SPECIAL CHARACTERISTICS

- Pressure sensitive
- Methylene chloride based
- High solids content
- Easy application
- Extremely quick tack
- Strong permanent bond
- Meets DOT 39 NRC
- Non-Flammable in wet and dry state
- Exceptional coverage
- Convenient 40 and 200 lb. cylinders
- LEED[®] Compliant, meets all applicable SCAQMD standards

APPLICATION: Apply using Ductmate approved spray hoses, and gun to smooth nonporous surfaces. Surfaces should be free from all dirt, oil, and grease.

DIRECTIONS FOR USE:

Keep cylinder off of concrete floor during freezing temperatures. For best results use at temperatures between $60^{\circ}F$ - $90^{\circ}F$.

- 1. Make sure all surfaces to be sprayed are clean and free from debris, dust, dirt, grease, etc.
- 2. Try gun on a test surface to make sure adhesive is flowing.
- Hold spray gun 8-10 inches from surface to be sprayed.
- Avoid buildup of adhesive or bubbles. Edges of spray pattern should overlap giving consistent coverage over surface

FOR PERMANENT BOND: Spray both surfaces, bond activates from moment of contact with adhesive, bond will be permanent after 2 minutes.

CLEAN UP: Ductmate recommends that a degreaser be used for cleaning out hoses and spray guns.

DISPOSAL: When all adhesive has been used from cylinder, close cylinder valve and clear hose and gun before disconnecting hose from cylinder. Do not clear hose and gun until a new cylinder is available. After hose and gun are connected to cylinder, leave pressure in gun and hose to prevent the adhesive from hardening. The cylinder is not hazardous when empty. Once empty and the hose is disconnected, open the valve to exhaust all the vapors from the cylinder. Puncture the empty emergency release valve to ensure the container cannot be repressurized. In most areas the empty cylinder can be disposed of in the same way as an aerosol can, or it may be recycled as scrap metal. Dispose of product in accordance with applicable local, state, and federal regulations.

KEEP OUT OF REACH OF CHILDREN Consult The SDS Sheet Before Using Product



TECHNICAL INFORMATION

-		
Solvent		
Methylene Chloride		
Green		
25%		
60°F to 90°F		
-30°F to 160°F		
Below 120°F		
Non-flammable wet and dry		
None		
200 lbs: 23,000 sq. ft 23,650 sq.ft. 40 lbs: 4,000 sq. ft 4,600 sq.ft. (Depending on temperature, humidity, and thickness)		
1 - 10 minutes (Depending on application rate)		
Does not apply		
1 year		

PACKAGING AND ORDERING INFORMATION

ITEM NO.	DESCRIPTION	QTY/WEIGHTS
QUICKSTICK40	40 lbs. Cylinder	(1) @ 40 lbs.
QUICKSTICK200*	200 lbs. Cylinder	(1) @ 200 lbs.
QSSG	Quick-Stick Spray Gun	(1) @ 1 lbs.
QSH6	Quick-Stick 6' Hose	(1) @ 1 lbs.
QSH12	Quick-Stick 12' Hose	(1) @ 1 lbs.
QSH18	Quick-Stick 18' Hose	(1) @ 2 lbs.

* 200 lbs Cylinder only available by custom order **No Deposit Required**

ALSO AVAILABLE IN AEROSOL CANS

PART NUMBER: QUICKSTICKCAN

DUCTMATE

QUANTITY/WEIGHT:

(12) 11.75 oz. cans/case @ 15 lbs/case

Contact Ductmate for more information

Not Available in California

SUPER LINER SEAL ТМ

S.L.S. QUICKLY AND EFFICIENTLY SEALS THE SURFACE OF DUCT INSULATION, VIRTUALLY ELIMINATING THE PROBLEM OF AIRBORNE FIBERS



- Flame, moisture, & mold resistant Low VOC
- Exceptional coverage
- Good dry time
- Water based
- Durable finish

BASIC USE:

CLEANING:

APPLICATION:

depending on application technique

(Unopened containers) 1 year

- LEED[®] Compliant, meets all applicable SCAQMD standards
- Specifically designed antimicrobial agents are added to resist mold growth.

S.L.S. is used to encapsulate fiberglass duct and duct insulation, eliminating airborne fibers, the leading contributor to poor indoor air quality.

Clean tools with soap and water or mineral spirits.

S.L.S. has been specially formulated for spray applications.

TECHNICAL INFORMATION

Synthetic Latex

Water

0 g/L

9.5 ± .2%

Gray (dries black)

BASE: COLOR: SOLVENT: VOC CONTENT: WEIGHT per GALLON: **APPLICATION TEMP.:** SOLIDS: VISCOSITY: STORAGE TEMP.: DRY TIME:

FLAMMABILITY: FLASH POINT: COVERAGE:

SHELF LIFE:

45°F to 90°F 44± 2% 15.000 cPs +/- 2.000 40°F to 90°F 4 hours, tack free 24 - 48 hours, fully cured Depending on temperature, humidity, and application thickness None No Flash to Boiling Approximately 400 - 500 sq.ft. per gal.

SURFACE BURNING CHARACTERISTICS UL 723 Applied to Inorganic Reinforced Cement Board +

FLAME SPREAD SMOKE DEVELOPED

Tested as applied in two 2 in. wide strips 8 in. on center covering 22.2 percent of the test sample area at a coverage rate of 200 sq. ft. per gallon.

ULC S102.2 APPLIED TO INORGANIC REINFORCED CEMENT BOARD +

0

FLAME SPREAD SMOKE DEVELOPED

Tested as applied in two 50 mm wide strips space 200 mm on center (covering 22.6 % of the exposed test sample area) at a coverage of 5 m²/L.

ITEM NO. DESCRIPTION QUANTITY WEIGHTS SLS1 S.L.S. 1-GAL 4-1 GAL PAILS 39 LBS/CASE S.L.S. 5-GAL 1-5 GAL PAIL 45 LBS/PAIL SLS5 S.L.S. 54-GAL 1-54 GAL DRUM 494 LBS/DRUM SLS54

ORDERING & PACKAGING INFORMATION

LAG-ITTM

LAG-IT IS A FAST, COST EFFECTIVE MEANS FOR SEALING THE EDGES AND TEARS IN DUCT INSULATION

- LEED[®] Compliant, meets all applicable SCAQMD standards
- ASTM G21 & G22 fungal & bacterial growth resistance rating 0: no fungal growth on surface, no bacterial growth
- High strength and durability
- Exceptional coverage
- Non-flammable
- Water resistant
- UV resistant
- Low odor
- Low VOC
- Union Made

ASTM E-84 Flame Spread: 0 Smoke Developed: 0 Tested when applied at 200 sq.ft/gal. in two 3" strips, 8" on center

TYPICAL PHYSICAL PROPERTIES AND TECHNICAL INFORMATION

BASE:	Acrylic Latex
COLOR:	White
SOLVENT:	Water
VOC CONTENT:	<52 g/L
APPLICATION TEMPERATURE:	40°F to +110°F
SOLIDS:	62 ± 2%
VISCOSITY:	app. 75,000 cPs
STORAGE TEMPERATURE:	40°F to +100°F
SHELF LIFE:	(Unopened containers) 2 Years
DRY TIME:	Depending on temperature, humidity, and thickness:
	DRY TO TOUCH: 1 hour
	CURE TIME: 6 hours
FLAMMABILITY:	None
FLASH POINT:	No Flash
COVERAGE:	~200 sq. ft. per gallon depending on application technique



BASIC USE: LAG-IT is used for bonding and sealing jackets of canvas, cloth and other fabrics/insulators to air-conditioning ducts, cold water pipes, etc.

CLEANING: Clean tools with soap and water or mineral spirits.

APPLICATION: LAG-IT can be applied to cloth or duct board surfaces using a trowel, brush, hand (rubber gloves recommended), or airless spray.

		•••••	
PART NUMBER	DESCRIPTION	QUANTITY	WEIGHTS
LAGIT1	LAGIT 1-GAL	(4) 1 GAL PAILS	45 LBS/CS
LAGIT5	LAGIT 5-GAL	(1) 5 GAL PAIL	64 LBS/PAIL
LAGIT54	LAGIT 54-GAL	(1) 54 GAL DRUM	494 LBS/DRUM

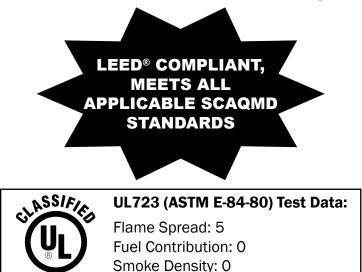
PACKAGING & ORDERING INFORMATION

MASTICS AND GASKETS

5511M[™] Seam Sealer

5511M is a non-skinning, non-oxidizing, non-drying synthetic polymer-based, pumpable mastic/ sealant specifically formulated for precise application to duct joints at the roll-forming line.





TYPICAL PHYSICAL PROPERTIES AND TECHNICAL INFORMATION

% SOLIDS: COLOR: WEIGHT per GALLON: SHELF LIFE:

SERVICE TEMPERATURE: EXTRUDABILITY: ASTM D1252 SLUMP: ASTM D2202 MOLD AND MILDEW: ASTM G21 TACK STRENGTH: ASTM C907 mod. APPLICATION METHOD: \geq 90% Off white to grey 12 lbs \pm 2 Indefinite (unopened container) 0°F to 200°F 3 - 8 s/mL \leq 0.2" 0 - 2 growth > 2,000 Psi (peak) Hand or power pump equipment

ORDERING INFORMATION

PART #	PACKAGING	Shipping Weight
5511 M-55 W	52 gal (196.84 liters)	584 lbs/drum
5511M5	5 gal (19 liters)	57 lbs/pail

DUCT COVERS

Proguard

- Heavy-Duty grade for superior performance
- Standard grade for light applications
- · High-tack and low-tack adhesive coating
- · Leaves no sticky residue on ductwork
- Elongation up to 600%
- · Excellent strength with convenient pliability

ProGuard protective film combines the latest in adhesive and plastic technology to effectively and economically protect ductwork from contamination.

ProGuard Heavy-Duty grade uses dual-film polyethylene for high strength while reducing material weight. The result is an extremely puncture-resistant light-weight film, providing greater protection for ductwork and less plastic film into the waste stream. ProGuard Heavy-Duty grade's tacky non-residue adhesive grabs hold of metal edges, reducing overlap waste.

TECHNICAL INFORMATION

Colors:	Blue and Clear
Adhesion:	Adheres to Galvanized, Stainless Steel, Galvannealed, Aluminum, PVC Coated, Aluminized, and Black Iron.
Туре:	Polyethylene
Shelf Life:	For best results use within 1 year of purchase
Elongation:	Heavy Duty Grade: 600% Standard Grade: 325% MD
Break Strength:	Heavy Duty Grade: 13.1 lbs/in (5.9 kg/mm) Standard Grade: 12.6 lbs/in (5.7 kg/mm)
Indoor/Outdoor:	Stands up to the rain, snow, and sun
UV Resistance:	Good
Adhesive:	Acrylic. Does not leave sticky residue on ductwork after removal
VOC Content:	0 g/L

ΤМ

Item #	Grade	Dimension	Packaging		
Color - Blue	Color - Blue				
PG24B	Standard	24" x 200' x 2.5 Mil	6 rolls/box		
PG24BR	Standard Reverse Wound	24" x 200' x 2.5 Mil	6 rolls/box		
PG24B-2M	Standard 2 Mil	24" x 200' x 2 Mil	6 rolls/box		
PG36B	Standard	36" x 200' x 2.5 Mil	6 roll/box		
PG36BR	Standard Reverse Wound	36" x 200' x 2.5 Mil	6 roll/box		
PG36B-2M	Standard 2 Mil	36" x 200' x 2 Mil	6 roll/box		
PG48B	Standard	48" x 200' x 2.5 Mil	6 roll/box		
PG48B-2M	Standard 2 Mil	48" x 200' x 2 Mil	6 roll/box		
PG60B-2M	Standard 2 Mil	60" x 200' x 2 Mil	Special Order - Not Stocked		
Color - Clear					
PG24	Heavy Duty	24" x 200' x 3.2 Mil	2 rolls/box		
PG24-2M	Standard 2 Mil	24" x 200' x 2 Mil	6 rolls/box		
PG24K	Heavy Duty	24" x 1000' x 3.2 Mil	1 roll/box		
PG24C	Standard	24" x 200' x 2.5 Mil	6 rolls/box		
PG36	Heavy Duty	36" x 200' x 3.2 Mil	1 roll/box		
PG36-2M	Standard 2 Mil	36" x 200' x 2 Mil	6 roll/box		
PG36K	Heavy Duty	36" x 1000' x 3.2 Mil	Special Order - Not Stocked		
PG36C	Standard	36" x 200' x 2.5 Mil	6 roll/box		
PG48	Heavy Duty	48" x 200' x 3.2 Mil	1 roll/box		
PG48C	Standard	48" x 200' x 2.5 Mil	6 roll/box		



DUCT LINER INSULATION

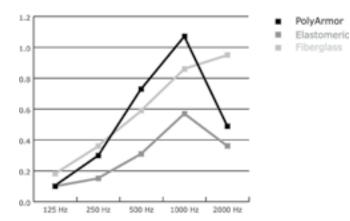


PolyArmor duct liner is engineered from strong and safe polyester to provide industry leading R-values with excellent noise reduction values and superior indoor air quality.

SOUND ABSORPTION COEFFICIENTS AT FREQUENCY - ASTM Standard C423

PolyArmor

Material	125 Hz	250 Hz	500 Hz	1,000 Hz	2,000 Hz	NRC
Min. 1"	0.10	0.30	0.73	1.07	0.49	0.65
Elastomeri	c					
Material	125 Hz	250 Hz	500 Hz	1,000 Hz	2,000 Hz	NRC
Min. 1"	0.10	0.15	0.31	0.57	0.36	0.35
Fiberglass						
Material	125 Hz	250 Hz	500 Hz	1,000 Hz	2,000 Hz	NRC
Min. 1"	0.18	0.36	0.59	0.86	0.95	0.70



- High Noise Reduction Coefficient (NRC) value
- Smooth and extremely durable facing
- Made of soft user friendly and hypoallergenic polyester
- Engineered for application with water based adhesives
- · Labor saving alternative to elastomeric duct liner
- Made with recycled content
- Mildew and mold resistant
- Light weight design with excellent rebound
- Can be installed utilizing standard insulation application methods
- Can be used in spiral duct work

TECHNICAL SPECIFICATIONS

Item	Test Method	Result
Thermal resistance 1" material, ft2.F.hr/Btu 1¼" material, ft2.F.hr/Btu 1½" material, ft2.F.hr/Btu 2" material, ft2.F.hr/Btu	ASTM C518, 75 F	R-4.2 R-5 R-6 R-8
Surface burning characteristics Flame spread index Smoke developed	ASTM E84	<25 <50
Density, lb/ft3 1" material 1¼" material 1½" material 2" material	ASTM D 1667	1.6 1.5 1.5 1.4
Corrosiveness	ASTM C665	Pass
Fungi Resistance	ASTM C1338	Pass
Mold Growth	ASTM G-21/UL 181	Meets Requirements
Odor	ASTM C1304	Pass
Moisture vapor absorption, %	ASTM C1104	0.24
Temperature Resistance Upper Limit	ASTM C411	Up to 250°F
Erosion Resistance	ASTM C 1071 (tested to maximum throughput of 10,000 fpm)	Rating 4,000 fpm
Smoke density and toxicity	ASTM E662/ ASTM E800	
Density, optical Ds at 4 minutes	ASTM E662 flaming (non flaming)	2.5 (0.54)
Toxicity, ppm	ASTM E800 (flaming exposure)	
СО		21
HBr, HCl, HCN, HF, NOx, So2		0
Volatile Organic Compound (VOC), ppm	ASTM D5116 (CA1350)	0
Greenguard® Environmental Institute		Compliant, CS

PACKAGING INFORMATION

	R-Value, Thickness, And Length				
Width	R-4.2 1"x 100'	R-5 1 ¹ ⁄ ₄ "x 100'	R-6 1 ¹ ⁄2"x 50'	R-8 2"x 50'	
47.5"	PA475F1W100	PA475F125W100	PA475F15W50	PA475F2W50	-
48"	PA48F1W100	PA48F125W100	PA48F15W50	PA48F2W50	art
56.25"	PA5625F1W100	PA5625F125W100	PA5625F15W50	PA5625F2W50	Nur
59"	PA59F1W100	PA59F125W100	PA59F15W50	PA59F2W50	nbe
60"	PA60F1W100	PA60F125W100	PA60F15W50	PA60F2W50	~

WELD PINS

DESCRIPTION

Ductmate Weld Pins are used to permanently secure insulation to the inside of sheet metal ductwork. Ductmate Weld Pins are designed to work with all the standard resistance welding equipment.

RECOMMENDATIONS

All equipment should be well maintained and operated within the machines's specifications. The first time Ductmate weld pins are used on a new machine, it is recommended that the user examine the first fifty welds for contact and strength. Adjustments may need to be made to the machine's electrical current before a satisfactory weld can be achieved.

Fastener Size	Recommended For		
1/2"	1/2" Insulation - All Densities		
3/4"	1" Insulation - 1 1/2 lb. Density		
1"	1" Insulation - 3 lb. Density		
1 1/8"	1" Insulation - 4-6 lb. Density		
1 1/2"	1 1/2" Insulation - 1 1/2 lb. Density		
2"	2" Insulation - 1 1/2 lb. Density		

FEATURES

- Can be used with multi-head, automatic-feed, singlehead, dual-head and portable systems
- Cupped head prevents liner tears
- Conical point for strength and weld consistency.
- Superior strength
- Unmatched product consistency
- Superior design helps reduce misfires
- Cupped head reduces jams and down time
- Available in a variety of sizes and packaging
- Conical point reduces welding time
- Designed to provide complete sheet to pin fusion
- All Ductmate pins are electroplate galvanized
- All pins are 10 gauge
- Manufactured in the USA

Press On Hanger

DESCRIPTION

Ductmate's Press On Hanger have a unique Easy-Peel adhesive backing design so that there isn't any fumbling with the release paper. Every Press On Hanger is neatly packed for quick access and they take up about a third less storage space than loose packed hangers. Prevent injuries and speed up your operation with Ductmate Press On Hangers.

FEATURES

- Fasteners and self-locking washers are manufactured from low carbon galvanized steel.
- All spindles are 12 gauge. Other spindle lengths, gauges and materials are available upon request.
- Washers measure 1¹/₄" X 1¹/₈"
- Load per anchor should not exceed 3 lbs.
- Operating temperature should not exceed 150°F
- Application temperature should exceed 40°F
- Shelf life is estimated at 2 years if hangers are stored at room temperature and at 50% relative humidity.

Cupped Head:

Reduces jams and machinery down time while preserving the insulation

Contact Head:

Oversized head increases the welding surface, resulting in a reduction in misfires and superior strength **Point:** Conical point for strength and weld

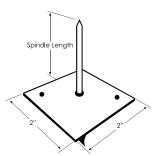
consistency

Shaft:

Cold drawn weldable wire shaft for strength and consistency

PACKAGING & ORDERING INFORMATION

Part No.	Description	Qty.	Packaging	
WP.5GA10C1	1/2" Weld Pin	1,000	Box	
WP.5GA10C5	1/2" Weld Pin	5,000	Box	
WP.5GA10P5	1/2" Weld Pin	5,000	5 Gal. Pail	
WP.75GA10C1	3/4" Weld Pin	1,000	Box	
WP.75GA10C5	3/4" Weld Pin	5,000	Box	
WP.75GA10P5	3/4" Weld Pin	5,000	5 Gal. Pail	
WP1GA10C1	1" Weld Pin	1,000	Box	
WP1GA10C5	1" Weld Pin	5,000	Box	
WP1GA10P5	1" Weld Pin	5,000	5 Gal. Pail	
WP1.125GA10C1	1 1/8" Weld Pin	1,000	Box	
WP1.125GA10C3	1 1/8" Weld Pin	3,000	Box	
WP1.125GA10P3	1 1/8" Weld Pin	3,000	5 Gal. Pail	
WP1.5GA10C1	1 1/2" Weld Pin	1,000	Box	
WP1.5GA10C3	1 1/2" Weld Pin	3,000	Box	
WP1.5GA10P3	1 1/2" Weld Pin	3,000	5 Gal. Pail	
WP2GA10C1	2" Weld Pin	1,000	Box	
WP2GA10C3	2" Weld Pin	3,000	Box	
WP2GA10P3	2" Weld Pin	3,000	5 Gal. Pail	

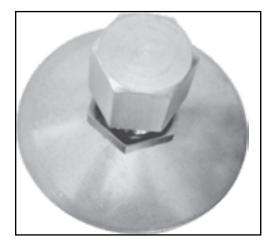


PACKAGING & ORDERING INFORMATION

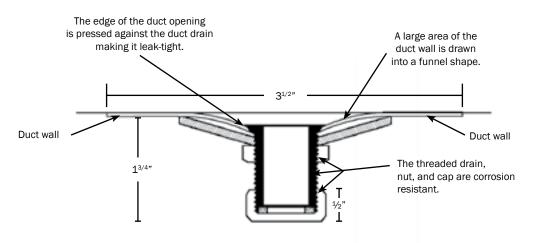
Part No.	Description	Packaging	
IH.75GA2B	.75" Press On Hanger	2,000/Box	
IH1.25GA1B	1.25" Press On Hanger	1,000/Box	
IH1.625GA1B	1.625" Press On Hanger	1,000/Box	
IH2GA1B	2" Press On Hanger	1,000/Box	
IH2.5GA1B	2.5" Press On Hanger	1,000/Box	
IH3.5GA1B	3.5" Press On Hanger	1,000/Box	
IHS125GA	1.25" x 1.125" Washer	1,000/Box	

MOISTURE DRAINS

MOISTURE DRAINS







- A fast, economical method of installing a leakproof drain in duct work and drain pans.
- The funnel is made of 12 gauge galvanized steel and won't deform
- Can be used on ductwork as light as 26 gauge, and no heavier than 20 gauge. Heavier duct gauges can't be pulled into a funnel shape.

INSTALLATION

- 1. Drill a 1 1/16" hole in duct
- 2. Insert threaded drain through drilled hole from inside of the duct
- 3. On the outside of the duct, insert the funnel on the threaded drain
- 4. Screw the nut on the threaded drain until the duct wall is drawn into a funnel shape.
- 5. Use drain cap when needed.

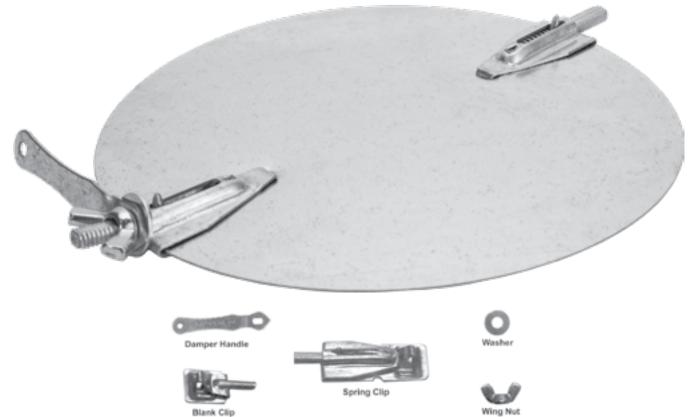
DIMENSIONS

Dimensions				
MOISTURE DRAIN	DIAMETER OF MPT PIPE	DIA. OF HOLE IN DUCTWALL	DIAMETER OF FUNNEL	TOTAL HEIGHT WITHOUT CAP
3/4"	3/4"	1-1/16" (27 MM)	3-1/2" (86 MM)	1-1/2" (40 MM)

SHIPPING INFORMATION

PART NO.	MOISTURE DRAIN	PACKING UNIT	UNIT WEIGHT
MD75GA	3/4" DRAIN FITTINGS	(10) PIECES	5.5 LBS (2.89 KG)
MDC75GA	³ ⁄4" DRAIN CAPS	(10) PIECES	0.85 LBS (.4 KG)
MD75GAK	3/4" DRAIN FITTINGS AND CAPS	(10) PIECES	6.35 LBS (3.29 KG)

BANGIT[™] DAMPER HARDWARE FROM DUCTMATE



Description	Ordering Information		
Description	Part Number	Box Quantity	Box Weight
Spring Clip			
Precision stamped galvanized damper clip. Superior spring loaded design for labor saving installation. Engineered with an oversized point for increased strength.	BDHBSC	1,250	77 Lbs.
Blank Clip			
Precision stamped galvanized damper clip, with threaded post for easy installation. Engineered with an oversized point for increased strength.	BDHBC	2,500	71 Lbs.
Washer			
Stamped from galvanized steel for increased strength and corrosion resistance.	BDHBW	10,000	43 Lbs.
Damper Handle			
Stamped from galvanized steel for increased strength and corrosion resistance. Allows for fast and easy adjustment of the dampers. (BDHBH is used on Spring Clip)	BDHBH	5,000	82 Lbs.
Wing Nut			
This galvanized steel wing nut is die cast for superior strength and reliability.	BDHBWN	5,000	54 Lbs.
BANGIT Hardware			
Comes completely assembled with 2-Springs Clips, Handle, washer and wingnut	DBLR_GASDH	N/A	N/A
BANGIT Hardware			
Comes completely assembled with 1- Spring Clip, 1-Blank Clip, handle, washer and wingnut	DBLR_GABDH	N/A	N/A

FASTENERS



Hitex. self-drilling fasteners

Part Number: WSDS31034

Box Quantity: 5000

- · Recommended for all sheet metal applications
- High-hat hex head fits snugly into provided chuck
- · Extra wide serrated washer reduces walking and stripping
- #10-16 screw
- Locking serrations
- #3 S-Type Point
- Complies with SAE-J78
- Chromate finish for corrosion resistance

PROscrew

Hex Washer Self-Drilling				
PART#	DESCRIPTION	PACKAGING		
SDS21034C5K	10-16 3/4 #2 SELF DRILL SCREW	5,000/CARTON		
SDS21034MB	10-16 3/4 #2 SELF DRILL SCREW	1,000/BOX		
HEXBN38NY	3/8-16 X 1 NYLON HEX BOLT	SPECIAL ORDER		
SDS2812M	8-18 1/2 #8 SELF DRILL SCREW	1,000/CASE		



Hex Washer Self-Drilling



DESCRIPTION PACKAGING 10-16 X 3/4 #3 SELF DRILL SCREW 1,000/BOX



Self-Piercing (Slotted hex Washer) with Serrations

PART# SPS812MB

DESCRIPTION 8-15 X 1/2 SELF PIERCING SCREW

PACKAGING SCREW 1,000/BOX



Quickest HVAC Flange Fastener In The Industry!

Features:

- Lightweight only 10.5 lbs
- Depth of drive adjustment
- 360° adjustable exhaust deflector
- Uses Smooth Wire-Collated Coil Nails
- Anti-Double fire mechanism
- Shock absorbing comfort rubber handle
- Belt clip

Fastener Specifications:

- Smooth Wire-Collated Coil Nails: 3/4"
- Shank Diameter: .100"
- Shank Type: Helical/Gripshank

Ordering Information:

- Part Number: RPF3000
- Pins Per Roll: 200
- Rolls Per Case: 15
- Pins Per Case: 3,000
- Pin Length: ³/₄"





SAVE TIME & MONEY WITH TOOLS FROM DUCTMATE

Ductmate® System Alignment Grip Tool

Reduce onsite installation time for rectangular duct. This tool uses the holes in the Ductmate corners to quickly align and compress mating ductwork allowing for fast and easy installation of Ductmate's patented corner clips.



Ductmate System Cleater® 1 and 2 Tools

The Cleater 1 is the ideal tool for attaching cleat to Ductmate Flange joints where spacing is not an issue. Use the Cleater 2 in conjunction with 5/8" deep-wall socket, extensions, and wrench (not included) to attach cleat in hard-to-reach places.



Part Numbers: CLEATER1 / CLEATER2

Ductmate System Versa-Cleater Tool

Versatile tool to attach the Ductmate Versa-Cleat to Ductmate 35, 45, or TDC (and some TDF) profiles.



PolyArmor[™] Tools

High speed mechanical rotatory knives, available for purchase from Eastman[®], for fast and effective cutting of all sizes of PolyArmor. The Cardinal 534 is Eastman's lightweight model and provides lightweight maneuverability with plenty of cutting power. The Falcon 548 equips Eastman's Cardinal model 548 with a special baseplate and handle to work with the Falcon guide track making straight cuts fast and easy. Both models are capable of cutting any thickness of PolyArmor.





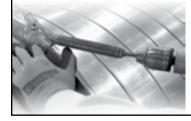
Spiralmate[®] System Alignment Grip Tool

These customized vise grips work in conjunction with Ductmate's Spiralmate system to quickly align mating duct sections, reducing time manpower and cost. This tool is a must for any large installer of round duct.



Spiralmate[®] System Nut Runners

Custom deep dish sockets designed to open and close the Spiralmate Closure Band. Available in two sizes 7/16" small and 9/16" large.



Part Numbers: NUTRUNS/NUTRUNL

WDCI Flange System Snapper Tool

The Snapper1 is the ideal tool for attaching cleat to the WDCI Flange where space is not an issue.



Clutcher[®] System Tools*

The Clutcher Cable Cutter (HFWRC) and the DeClutcher (CLTOOL1020) were both engineered to making working with the Clutcher Cable Hanging System easier. The cutter was specifically designed to cut WR10 and WR20 Clutcher Cable without causing the cable ends to fray. The DeClutcher easily releases the locking boar on CL10 and CL20 Clutchers allowing for adjustments to be made.

* Please see detailed Clutcher Installation Instructions before using Clutcher or Clutcher Tools.



Part Numbers: HFWRC/CLTOOL1020

Ductmate's New Revolutionary Duct Liner Concentrate (DLC) Adhesive One Drum & Done!

Don't let the high cost and inconsistencies of "premixed" adhesives have you over a barrel.

Ductmate's innovative approach to duct liner adhesives not only reduces your overall material costs, it eliminates your drum disposal and material spollage expense associated with traditional adhesives.

The patented formula is a non-flammable, water based adhesive which contains no Toluene, so it is environmentally friendly and sofe for workers.

Utilizing a high performance low cost mixing system, you mix each drum on demand in minutes by simply adding water to the concentrate to achieve the desired viscosity for your applicator system.

For more information on this revolutionary product contact your local Ductmate distributor or visit www.ductmate.com/dlc

1-877-866-2808

TMATE.

ductmate.com/dlc

When heavy duty ductwork requires heavy duty connections, the Ductmate 45° connector system provides big solutions!

DH(7)

1/1019

Equal in strength to 2 1/2" x 2-1/2" x 3/16" angle, the Ductmate 45 self-sealing rectangular duct connector system has the strength you need to connect the biggest duct imaginable, without the labor intensive fabrication processes of dnilling bolt holes, welding frames or applying rust proof coatings commonly associated with companion angle connections.

Engineered to exceed industry standards on even the largest applications and backed by rigorous testing, the Ductmate 45 system gives you the performance you need for high pressure critical air systems.

Available in a wide range of alloys, Ductmate 45 is the right solution for the most extreme applications such as oil and gas extraction platforms, waste water treatment facilities, pharmaceutical and food processing plants, just to name a few.

Next time you are faced with a large scale duct system, consider a connector designed to meet the challenge and reduce your installed costs, consider the Ductmate 45 rectangular duct connector system.



1-855-558-8428 • Ductmate.com

One Source. Infinite Solutions.



Rectangular Connections

We started our business building better connectors, and we continue to excel in this area. The Ductmate '25'/35'/45', WDCI J&H, PROflex, and Slips and Drives are the gold standard in the industry when it comes to rectangular ducts requiring a rigid, near leak-proof connection. Time has proved just how durable these connectors are.



Sealants, Adhesives, & Gaskets

This family of products includes duct sealants, adhesives, and gaskets. Formulated for indoor or outdoor use that function well in low, medium and high pressure systems. Each is designed to solve problems, such as mildew resistance, UL specs and flexibility.

Round Connections

We started our business building better connectors, and we continue to excel in this area. Spiralmate, ECONOflange, Quick-Sleeve, and PROflex are easy to install, virtually air tight and very cost efficient. In most cases, no end prep of the ductwork is needed.



HVAC Components

These products and tools are problem-solvers and simply make it easier to get the job done. They are used to reduce the noise the system generates, direct air flow, reduce leakage and remove excess moisture.

Scan The Code To Request A Digital Version Of The Ductmate Product Catalog Or Visit <u>http://qrs.ly/v144lyz</u>





For more information about our complete line of products and services, call or visit us online. 1-800-245-3188 | www.ductmate.com 183 - 11/17