

DUCTMATE®

PRODUCT CATALOG



CONNECTION
SYSTEMS



ACCESS
DOORS



SEALANTS &
ADHESIVES



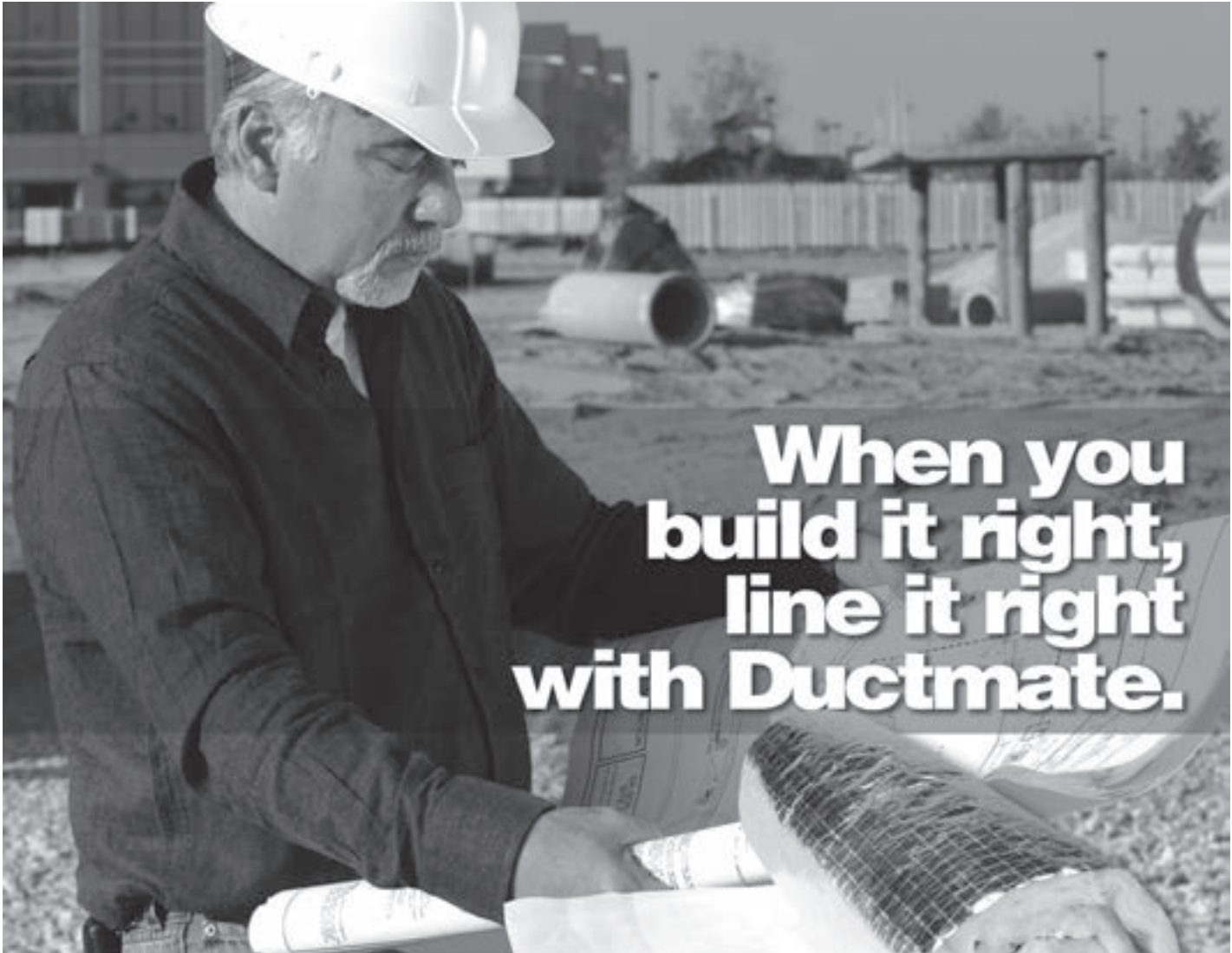
HANGERS &
REINFORCEMENTS



OTHER SYSTEM
COMPONENTS

Issue 16





**When you
build it right,
line it right
with Ductmate.**



**Get a feel for the R-5 duct liner that's easy
on your hands – and the environment.**

Your best work demands our best work - Ductmate PolyArmor. This safe soft and sound absorbent 1" polyester duct liner delivers an R-5 performance making for quieter, more comfortable spaces. It even installs easily and works with water based adhesives to keep your projects as green as possible. Call for a sample so you can see why PolyArmor is worthy of your best work.

Scan the code for more
info on PolyArmor or visit
<http://qrs.ly/3ey5u>



Request a Free sample
of the R-5 duct liner that's
easy on your hands –
and the environment.

ductmate.com/sustainability



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DUCTMATE® INDUSTRIES

HIGH-QUALITY VALUE-ADDED PRODUCTS

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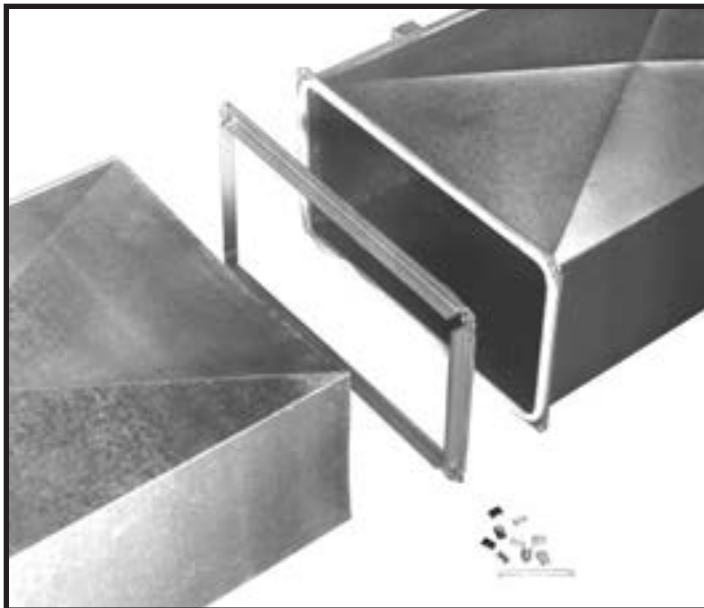
Exclusive patented features make the difference...

DUCTMATE RECTANGULAR DUCT CONNECTOR SYSTEMS

DUCTMATE®

THE DUCTMATE '25' '35' & '45'™

SLIDE-ON CONNECTORS



MONEY SAVING VALUE ADDED FEATURES

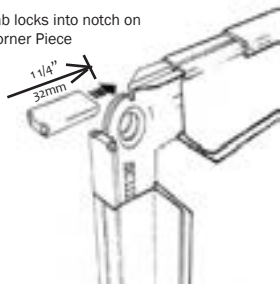
- AIR TIGHT • NO ADDED SEALING • CLEAN APPEARANCE •
- USED AS AN ARCHITECTURAL FEATURE • RIGOROUSLY TESTED
- STRONG • INCREASES STRUCTURAL INTEGRITY OF DUCT •
- SUBSTANTIAL SAVINGS ON DUCT GAUGES & REINFORCEMENTS
- COST EFFECTIVE AT 1" STANDING-S OR HEAVIER WHEN SEALING IS REQUIRED & ALL FACTORS CONSIDERED • CAN BE SHIPPED K.D. TO JOB SITES • QUICK & SIMPLE TO INSTALL
- EXCLUSIVE NO-BOLT & DOWN SET CORNER SYSTEMS ON 25 & 35 SYSTEMS • BULL NOSING KITS • ENGINEERING & TECHNICAL SUPPORT • INSTALLATION VIDEOS & MANUALS •
- DETAILED DUCT CONSTRUCTION TABLES & SKETCHES

THE DUCTMATE® System Features:

NO-BOLT CORNER

(Common to '25'/'35'™ Systems)

Tab locks into notch on Corner Piece



CORNER ALIGNMENT TOOL

Modified vise grip can facilitate installation of corner clips



#AG2000™

CLEATER 1™ & CLEATER 2™

Ideal tool for attaching cleat to Ductmate Flange Joint where spacing is not a consideration. 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.



CLEATER 1™
(Blue Handle)

CLEATER 2™

SNAP-ON CLEAT

(Common to '25'/'35'™ Systems)



PVC Cleat

Metal Cleat

VERSA-CLEAT™

(Common to '45' Systems)



VERSA-CLEATER™ Tool

(Ideal for attaching Ductmate Versa-Cleat)



Exclusive patented features make the difference...

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.

LIMITATIONS

The Ductmate '45' System is not recommended for applications with duct gauges heavier than 10 gauge or lighter than 22.

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:

- Ductmate '45' Angle is roll-formed from 18 GA galvanized steel with an integral sealant.
- Ductmate '35' Angle is roll-formed from 20 GA. galvanized steel, with an integral sealant.
- Ductmate '25' Angle is roll-formed from 24 GA. galvanized steel, with an

integral sealant.

- Ductmate Corner Pieces inserted into the hollow web of the Ductmate Angle. See drawing on page 7 for corner styles.
- Metal Cleat is roll-formed from 20 GA. galvanized steel. (PVC Cleat is available upon request).
- Ductmate '45' VersaCleat is roll-formed from 22 GA galvanized steel.
- Also available: optional Ductmate '45' bolt-on cleat, roll-formed from 11 GA electroplate galvanized steel.
- Gasket is extruded butyl for use between mating flanges. (Neoprene gasket is available upon request).
- 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 5.

APPLICABLE STANDARDS

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

TECHNICAL SERVICES

Detailed assembly and installation instructions, and videos showing step-by-step procedures, are available from the manufacturer and are routinely sent to all new customers. 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 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

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

DUCTMATE RECTANGULAR SYSTEMS PART NUMBERS

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) |
|--|--|--|--|--|---|
| <ul style="list-style-type: none"> D45 † (Ductmate '45' 1.07 LB per LF) | <ul style="list-style-type: none"> DC45 | <ul style="list-style-type: none"> 10 19' lengths @ 1,007 LF per bundle | <ul style="list-style-type: none"> DV6C VersaCleat™ (250 Pcs. @ 61.25 lbs/ carton) D45CGA Optional DM45™ Bolt-On Cleat (200 Pcs. @ 25.6 lbs/carton) | <ul style="list-style-type: none"> 440 3/16" x 1" DM45 Butyl Gasket (400' @ 50 lbs/carton) NEO 5/16 x 1 DM45 1" Neoprene Gasket (1000' @ 23 lbs./carton) | <ul style="list-style-type: none"> GA=Galvanized GN=Galvanneal AL=Aluminum AZ=Aluminized S4=304 Stainless S6=316 Stainless PVC=PVC Coated BI=Black Iron |
| <ul style="list-style-type: none"> D35 (Ductmate '35' .7 LB per LF) | <ul style="list-style-type: none"> D3A D3B DC35 BD35 | <ul style="list-style-type: none"> 10 1,000 LF per bundle 15 1,500 LF per bundle 20 2,000 LF per bundle 30 3,000 LF per bundle | <ul style="list-style-type: none"> D6C 6" Metal Cleat (500 Pcs. @ 45 lbs/ carton) D10C 10" Metal Cleat (100' per bundle) 6"PVC 6" Solid PVC Cleat (500 Pcs. @ 18 lbs/ Carton) 10"PVC 10" Solid PVC Cleat (100' per bundle) | <ul style="list-style-type: none"> 440 3/16" x 5/8" Butyl Gasket (500' @ 45 lbs/carton) NEO 5/16" x 3/4" Neoprene Gasket (750' @ 15 lbs./ carton) | |
| <ul style="list-style-type: none"> D25 ‡ (Ductmate '25' .4 LB per LF) | <ul style="list-style-type: none"> DJR DBJR | <p>(All bundles composed of 20' lengths)</p> | | | <ul style="list-style-type: none"> † D45=Galvanized & 316 SS ONLY ‡ D25=Galvanized ONLY |

* 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 D35=Ductmate '35' Flange | Example: 30 30=3000' | Example: GA 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 D3B=Ductmate No-Bolt Corner | Example: GA GA=Galvanized |

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

Bullnosing Part No. Key

Example: BN1GA

| Bullnosing | Size | Alloy |
|----------------------------------|--|--|
| Example: BN • BN = Bullnosing | Example: 1 • 1 = 1" • 1.5 = 1 1/2" • 2 = 2" | Example: GA • GA = Galvanized • S6 = 316 Stainless Steel |

Ductmate Corners Ordering Information

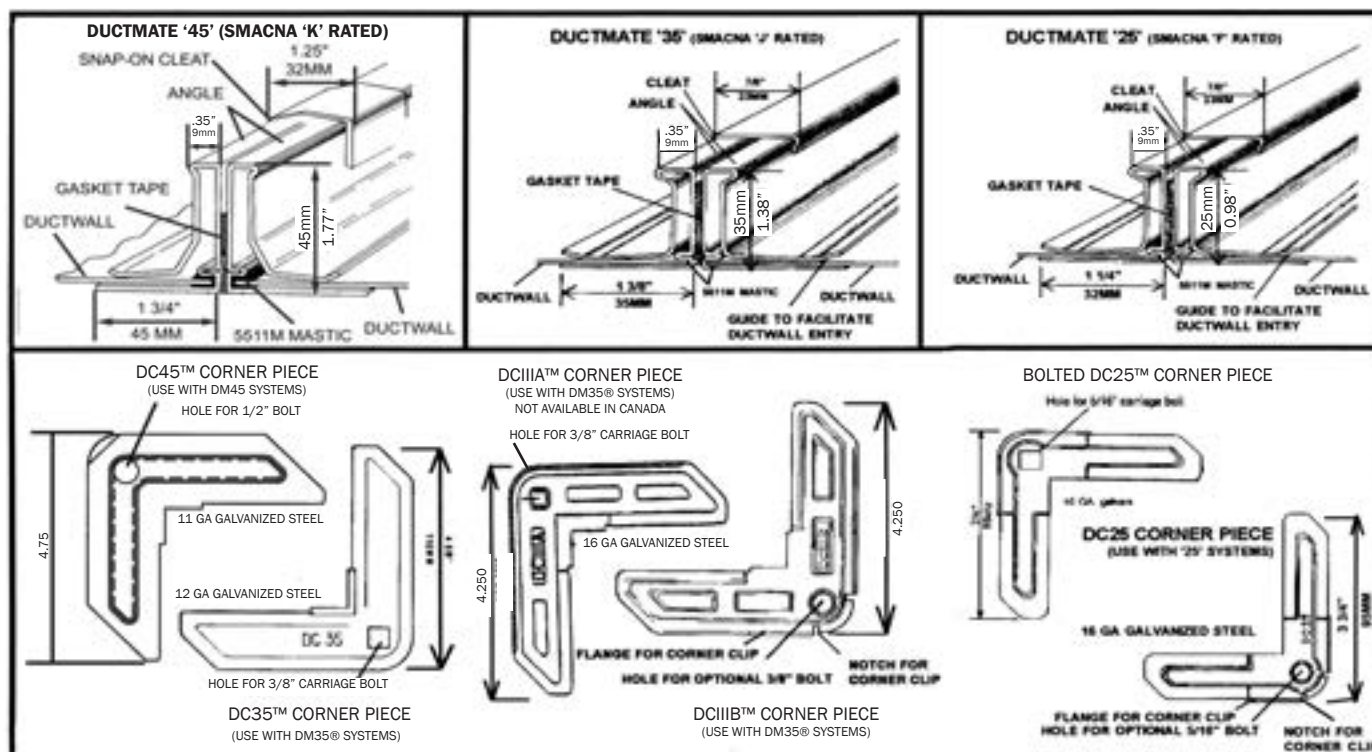
| Corner Type* | Corresponding Flange | Gauge | Clip / Bolt | Pkg. Quantity | Pkg. Weight (lbs.) |
|--------------|----------------------|-------|--|---------------|--------------------|
| DC45™ | DM45™ | 11 | Requires 1/2" Bolt (Not Included) | 100 / Carton | 33 lbs. / Carton |
| D3A | DM35® | 16 | Requires 3/8" 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 3/8" Carriage Bolt (Not Included) | 250 / Carton | 55 lbs. / Carton |
| BDC35 | DM35® | 12 | 3/8" Carriage Bolt Included w/Order | 250 / Carton | 67 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

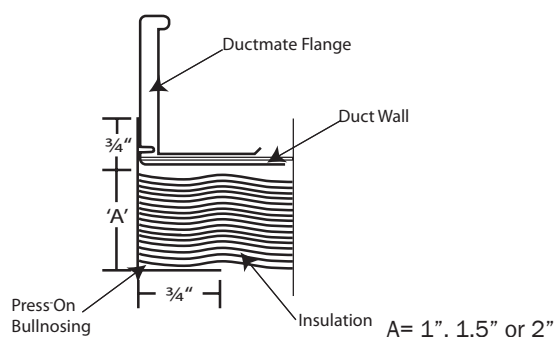
❖ Extra Corner Clips are also available: Part No. DCLPGABX

Exclusive patented features make the difference...

DUCTMATE RECTANGULAR SYSTEMS (CONT.)



CROSS SECTION OF BULL NOSING



Bull Nosing Features:

- Available for 1", 1-1/2", and 2" insulation
- Can be used on insulated or double wall duct
- Protects insulation from being torn or damaged
- Reduces fibers within the air stream
- Double-sided adhesive gasket for fast application
- Gasket is 3/4" x 1/16" double sided neoprene gasket
- Union made in the U.S.A.
- Conforms to SMACNA requirements
- Standard construction consists of G-60 galvanized steel

ESTIMATING DUCTMATE '25' '35' & '45' 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 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 lf per 2 lf of Flange = $1400 \div 2 = 700'$ (20 rolls @ 25' per roll or 500 lf per ctn)

SAMPLE ORDER:

| Quantity | Part Number | Description | Total Required | Weight |
|------------|------------------|------------------|----------------|-----------|
| (1) Bundle | D3515GA | Ductmate '35' | 1500 ft. | 1035 lbs. |
| (2) Box | D3BGA | No-Bolt Corners | 500 pcs. | 86 lbs. |
| (1) Box | D6CGA | 6" Metal Cleat | 500 pcs. | 45 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.

Exclusive patented features make the difference...

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



The W.D.C.I. System **Includes:**

440 Butyl Gasket



A non-hardening butyl rubber tape with superior sealing and adhesive qualities for a permanent, leak-proof W.D.C.I. connection

Snap-On Cleat

(Common to 'J' & 'H' Systems)



PVC Cleat



Metal Cleat

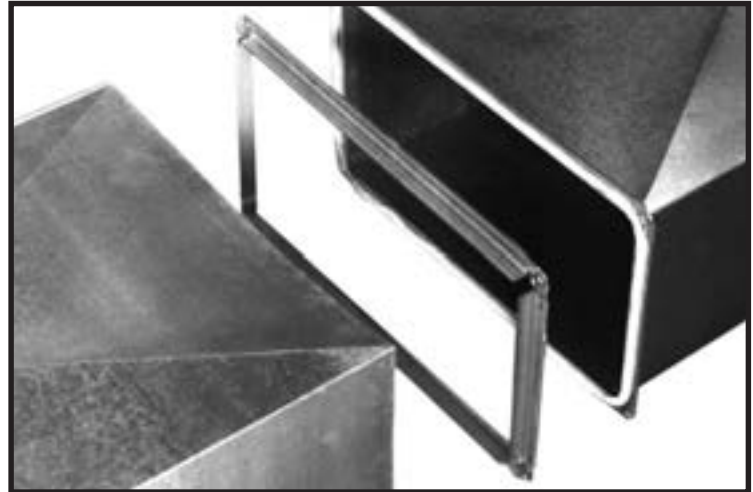
CLEATER 1™ **& CLEATER 2™**

Ideal tool for attaching cleat to W.D.C.I. Flange Joint where spacing is not a consideration. 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.



CLEATER 1™
(Blue Handle)

CLEATER 2™



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 VIDEOS & MANUALS • DETAILED DUCT CONSTRUCTION TABLES & SKETCHES

Cleat can be snapped-on or driven-on for large sections of duct or inaccessible areas

Angle is roll-formed from galvanized steel

Gasket Tape is applied to W.D.C.I. Flanges before joining duct sections for a no-leak seal

Duct Wall

Integral mastic sealant perfects the seal

Special guide facilitates duct wall entry

Duct Wall

Ideas that work for you every day...

W.D.C.I. RECTANGULAR SYSTEMS SPECIFICATIONS

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

COMPOSITION AND MATERIALS

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

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

TECHNICAL SERVICES

Detailed assembly and installation instructions, and videos showing step-by-step procedures, are available from the manufacturer and are routinely sent to all new customers. 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

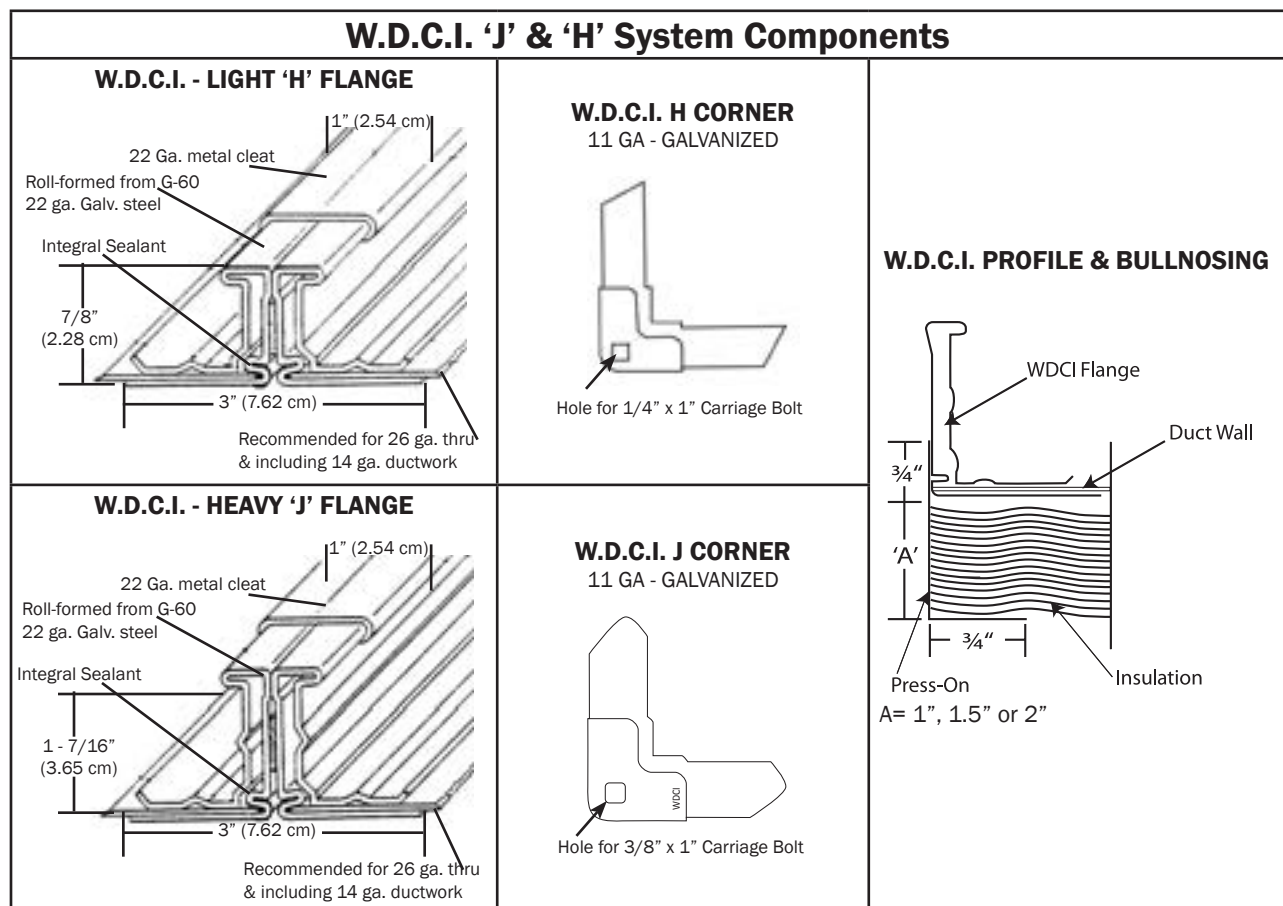
Polyvinyl chloride (PVC) is an organic polymer derived from petroleum and salt.

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 transverse joint. (See installation manual for correct usage).



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

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

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

| W.D.C.I. Flange | Compatible Corner(s) | Standard Bundle Szs.* | Cleat | Gasket** | Available Alloys* (for flange, corners, & cleat) |
|---|--|--|--|--|---|
| <ul style="list-style-type: none"> WJ W.D.C.I. 'J' Large Profile (.73 lbs per LF) | <ul style="list-style-type: none"> WJC 11 GA corner 250 pcs./carton Nuts & bolts included (galv. only) (75 lbs/carton) | <ul style="list-style-type: none"> 15 1,500 LF Specialty alloys are available in exact quantities. | Metal Cleat <ul style="list-style-type: none"> W6C 6" Metal Cleat (500 pcs. @ 50 lbs/carton) W10C 10' Metal Cleat (100' per bundle) | <ul style="list-style-type: none"> 440 3/16" x 5/8" Butyl Gasket (500' @ 45lbs./carton) NEO 5/16" x 3/4" Neoprene Gasket 750' @ 15lbs./carton) | <ul style="list-style-type: none"> GA=Galvanized GN=Galvanneal AL=Aluminum AZ=Aluminized S4=304 Stainless S6=316 Stainless PVC=PVC Coated BI=Black Iron |
| <ul style="list-style-type: none"> WH† W.D.C.I. 'H' Small Profile (.5 lbs per LF) | <ul style="list-style-type: none"> WHC 11 GA corner 250 pcs./carton Nuts & bolts included (galv. only) (30 lbs/carton) | | Solid PVC Cleat <ul style="list-style-type: none"> 6"WPVC 6" Solid PVC Cleat (500 Pcs. @ 22 lbs/carton) 10'WPVC 10' Solid PVC Cleat (100' per bundle) | | |

* 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 BN = Bullnosing | Example: 1 1 = 1" 1.5 = 1 1/2" 2 = 2" | Example: GA GA = Galvanized S6 = 316 Stainless Steel |

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

FLANGES ESTIMATING FORMULA: Per Duct Size [(W + H) ÷ 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') of flange = 1400 ÷ 3 = 467 (250 pcs/box)

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

GASKETING: Approx. 1' per 2' of Flange = 1400 ÷ 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 | 500 pcs. | 150 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. |

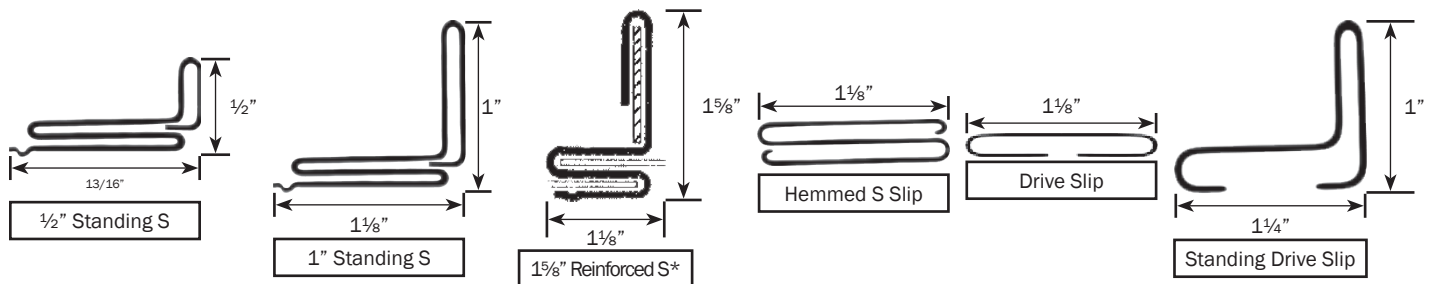
NOTE: COMPONENT QUANTITIES WILL VARY WITH SIZE OF DUCT.

Exclusive patented features make the difference...

SLIP AND DRIVE TYPE CONNECTIONS

SLIPS & DRIVES

Part Number and Ordering Information



* Reinforcing bar not included

Slip & Drive System Part No. Key

| Connector Type | Standing S Height | Alloy | | Gauge |
|--|--|--|---|--|
| <ul style="list-style-type: none"> SS = Standing S HS = Hemmed S DS = Drive Slip SDS = Standing Drive Slip | <ul style="list-style-type: none"> 1 = 1" .5 = 1/2" 1.625 = 15/8" | <ul style="list-style-type: none"> GA = Galvanized GN = Galvannealed AZ = Aluminized AL = Aluminum | <ul style="list-style-type: none"> S4 = 304 Stainless S6 = 316 Stainless PVC = PVC Coated BI = Black Iron | <ul style="list-style-type: none"> 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 5/8" 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)

Drive Slip – 6" through 26" in 2" increments
(can be manufactured in 1" increments upon request)

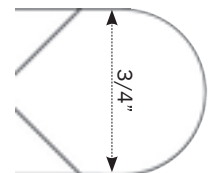
Straight end
(Hemmed S)



Straight end with 45° bevel
(Drive slip only)



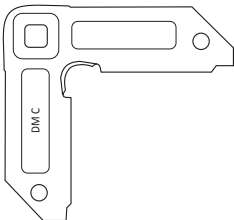
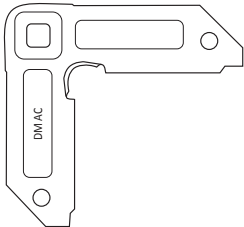
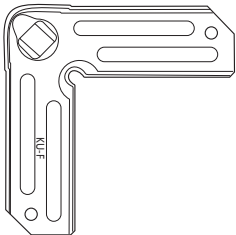
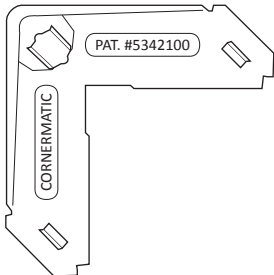
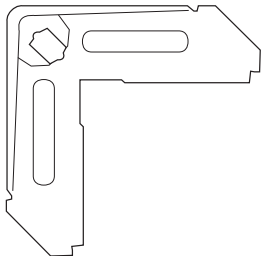
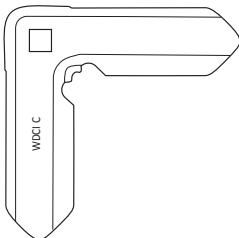
Tabbed end with 45° bevel
(Drive slip only)



Exclusive patented features make the difference...







FORMED-ON FLANGE CONNECTION COMPONENTS

T.D.C./T.D.F. CORNERS

| | | |
|---|--|--------------------------------|
|  | T.D.C. CORNER Part Number: CGA | |
| | <ul style="list-style-type: none"> • 16 Gauge • Manual insertion only • Hole for 3/8" Carriage Bolt • Available in a variety of metals • Packaged: 250/carton @ 42 lbs. | |
|  | T.D.C. AUTO CORNER Part Number: ACGA | |
| | <ul style="list-style-type: none"> • 16 Gauge • Manual insertion only • Hole for 3/8" Carriage Bolt • Available in a variety of metals • Packaged: 250/carton @ 45 lbs. | |
|  | T.D.F. CORNER Part Number: FGA | |
| | <ul style="list-style-type: none"> • 16 Gauge • Manual insertion only • Hole for 3/8" Carriage Bolt • Available in a variety of metals • Packaged: 250/carton @ 42.5 lbs. | |
|  | T.D.C. and T.D.F. CORNERMATIC* CORNER <small>* Cornermatic is a trademark of Systemation, Inc. Ductmate is in no way affiliated with Systemation, Inc.</small> | |
| | T.D.C. Part Number: CMCGA | T.D.F. Part Number: CMFGA |
| | <ul style="list-style-type: none"> • 16 Gauge • Stacked for use with automatic corner inserter machines • Hole for 3/8" Carriage Bolt • Available in a variety of metals • Patent # 5342100 • Packaged: 250/carton @ 35 lbs. | |
|  | T.D.C. & T.D.F. 'DMA'™ CORNER (Unstacked, for manual insertion) | |
| | T.D.C. Part Number: CMCGAMI | T.D.F. Part Number: CMFGAMI |
| | <ul style="list-style-type: none"> • 16 Gauge • Manual insertion only • Hole for 3/8" Carriage Bolt • Available in a variety of metals • Packaged: 250/carton @ 36 lbs. | |
|  | W.D.C.I. 'T' CORNERS FOR T.D.C. & T.D.F. | |
| | T.D.C. Part Number: WCCGA | T.D.F. Part Number: WFCGA |
| | <ul style="list-style-type: none"> • 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. | |

FORMED-ON FLANGE CONNECTION COMPONENTS

OTHER T.D.C./T.D.F. SYSTEM COMPONENTS

| | | | |
|---|---|---|--|
|  <p>Use with the Versa-Cleater™ Tool (Page 2)</p> | <p>VERSA CLEAT™ 6" Part Number: DV6CGA 10' Part Number: DV10CGA</p> <ul style="list-style-type: none"> • 22 Gauge • Available in Metal Alloys Only • For use on T.D.C. (and some T.D.F.) profiles • 6" cleat packaged 125 L.F. (250) pcs./carton @ 31 lbs. • 10' cleat packaged 100'/bundle @ 23 lbs. | | |
|  <p>Use with the Snapper Tool</p> | <p>T.D.C. CLEAT</p> <table border="1"> <tr> <td data-bbox="750 562 1117 741"> <p><u>22 gauge Metal</u> 6" Part Number: T6CGA • Packaged: 250 L.F. (500) pcs./carton @ 45 lbs 10' Part Number: T10CGA • Packaged: 100 L.F. (10) pcs./bundle @ 18 lbs</p> </td><td data-bbox="1117 562 1484 741"> <p><u>PVC</u> 6" Part Number: 6"TPVC • Packaged: 250 L.F. (500) pcs./carton @ 24 lbs</p> </td></tr> </table> | <p><u>22 gauge Metal</u> 6" Part Number: T6CGA • Packaged: 250 L.F. (500) pcs./carton @ 45 lbs 10' Part Number: T10CGA • Packaged: 100 L.F. (10) pcs./bundle @ 18 lbs</p> | <p><u>PVC</u> 6" Part Number: 6"TPVC • Packaged: 250 L.F. (500) pcs./carton @ 24 lbs</p> |
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|  <p>Use with the Snapper Tool</p> | <p>T.D.F. CLEAT</p> <table border="1"> <tr> <td data-bbox="750 814 1117 993"> <p><u>22 gauge Metal</u> 6" Part Number: F6CGA • Packaged: 250 L.F. (500) pcs./carton @ 50 lbs 10' Part Number: F10CGA • Packaged: 100 L.F. (10) pcs./bundle @ 23 lbs</p> </td><td data-bbox="1117 814 1484 993"> <p><u>PVC</u> 6" Part Number: 6"FPVC • Packaged: 250 L.F. (500) pcs./carton @ 22 lbs 10' Part Number: 10'FPVC • Packaged: 100 L.F. (10) pcs./bundle @ 12 lbs</p> </td></tr> </table> | <p><u>22 gauge Metal</u> 6" Part Number: F6CGA • Packaged: 250 L.F. (500) pcs./carton @ 50 lbs 10' Part Number: F10CGA • Packaged: 100 L.F. (10) pcs./bundle @ 23 lbs</p> | <p><u>PVC</u> 6" Part Number: 6"FPVC • Packaged: 250 L.F. (500) pcs./carton @ 22 lbs 10' Part Number: 10'FPVC • Packaged: 100 L.F. (10) pcs./bundle @ 12 lbs</p> |
| <p><u>22 gauge Metal</u> 6" Part Number: F6CGA • Packaged: 250 L.F. (500) pcs./carton @ 50 lbs 10' Part Number: F10CGA • Packaged: 100 L.F. (10) pcs./bundle @ 23 lbs</p> | <p><u>PVC</u> 6" Part Number: 6"FPVC • Packaged: 250 L.F. (500) pcs./carton @ 22 lbs 10' Part Number: 10'FPVC • Packaged: 100 L.F. (10) pcs./bundle @ 12 lbs</p> | | |
|  | <p>STICKY TAPE GASKET Part Number: STICKY TAPE</p> <ul style="list-style-type: none"> • Butyl Gasket • 3/16" x 5/8" x 25' rolls • Packaged: 500 LF/carton @ 40 lbs. | | |
|  | <p>T.D.C./T.D.F. CRIMPER TOOL Part Number: TCT</p> <ul style="list-style-type: none"> • Packaged: (1) @ 3 lbs • Tungsten Welded • Replaceable bronze bushings for longer tool life • Reduces the installation time to insert manual TDC/TDF corners | | |
|  | <p>SNAPPER 1 TOOL Part Number: SNAPPER1</p> <ul style="list-style-type: none"> • Red Handle • Packaged (1) @ 1 lb. | | |

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

| Available Alloys | |
|--|---|
| <ul style="list-style-type: none"> • GA = Galvanized • GN = Galvanneal • AZ = Aluminized • AL = Aluminum | <ul style="list-style-type: none"> • S4 = 304 Stainless • S6 = 316 Stainless • PVC = PVC Coated • BI = Black Iron |

Example: FGN (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).

Ideas that work for you every day...

ROUND DUCT CONNECTOR SYSTEM

SPIRALMATE CONNECTION CONSISTS OF 2 FLANGE RINGS AND 1 OUTER CLOSURE BAND



SPIRALMATE OUTER CLOSURE RING

Cold-formed galvanized steel. Outer Closure Ring maintains the duct connection.



SPIRALMATE FLANGE RING

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



INNER RING FOR DOUBLE WALL APPLICATIONS

Cold-formed galvanized steel Inner Ring is specially designed for use with SpiralMATE on double wall spiral pipe.



NEOPRENE GASKET TAPE



#AG2001

ALIGNMENT GRIPS

A modified vise grip to help you do a better job and save time.

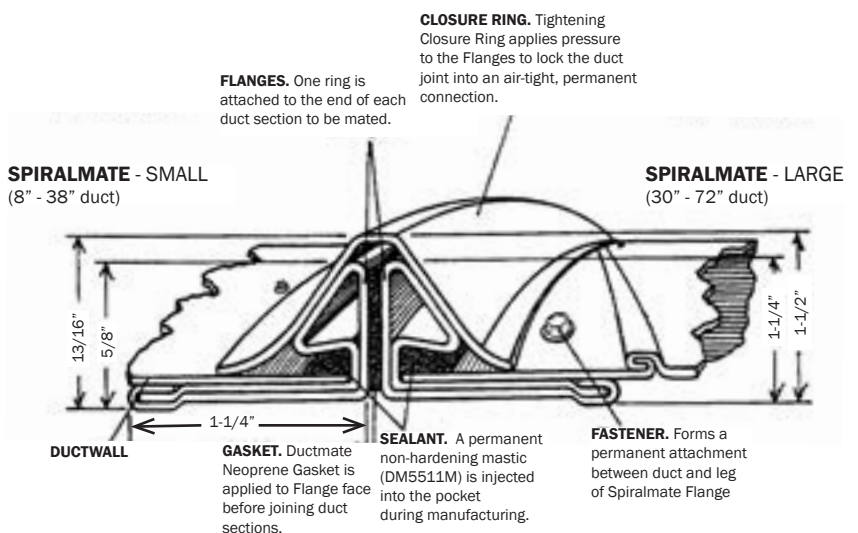
SPIRALmate®



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)**



Exclusive patented features make the difference...

ROUND DUCT CONNECTOR SYSTEM SPECIFICATIONS

| | | |
|--|--|---|
| <p>TECHNICAL DATA</p> <p>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:</p> <p>Virtually No leakage at up to 18" WG positive pressure or down to 10" WG negative pressure</p> <p>Testing was performed on a single-wall connection. Complete test data is available upon request.</p> <p>DIMENSIONS</p> <p>Refer to Cross Section on previous page.</p> | <p>LIMITATIONS</p> <p>The Spiralmate Small Profile Round Duct Connector is not recommended for applications with spiral duct gauges heavier than 20 GA or lighter than 28 GA. The Spiralmate Large Profile Round Duct Connector is not recommended for applications with spiral duct gauges heavier than 16 GA or lighter than 28 GA. Both Spiralmate Profiles will accept 12 GA longitudinal duct seam. Some duct manufacturers may weld on the seams to keep them from falling apart once the duct is manufactured. These welds may need to be ground down so they can fit the pocket. This will not compromise the duct seam as long as the spiral flanges are attached just after grinding.</p> <p>TECHNICAL SERVICES</p> <p>Detailed assembly and installation instructions & videos showing step-by-step 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</p> | <p>COMPOSITIONS & MATERIALS</p> <p>The Spiralmate Round Duct Connector Systems consist of the following components:</p> <ol style="list-style-type: none"> 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. Mastic: Ductmate DM5511M Gasket: Neoprene and Ductmate 440 <p>COMPOSITIONS & MATERIALS FOR SPIRALMATE INNER RING</p> <p>The Spiralmate Round Duct Connector Systems consist of the following components:</p> <p>One Inner Ring roll-formed from galvanized steel:</p> <p>10" to 48" - 18 ga. 49" & up - 16 ga.</p> |
|--|--|---|

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 metric sizes. | Example: GA GA = Galvanized GN = Galvannealed AZ = Aluminized S4 = 304 Stainless S6 = 316 Stainless PVC = PVC Coated*** | NEOPRENE NEO 5/16x3/4 50' rolls / 750' per case 440 Butyl Gasket 440 3/16x5/8 25' rolls/500' per case |
| Inner Ring (if application is double wall) Order Example: 1IR26GA 1 = 1" insulation IR = Inner Ring 26 = Size of inner ring GA = Galvanized | Inner Ring Size For 1" insulation the inner ring is 2" smaller than connector. Sizes start at 8" For 2" insulation the inner ring is 4" smaller than connector. Sizes start at 12" | | |

*** 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

Exclusive patented features make the difference...

ECONOflange

ECONOflange

8" - 72"

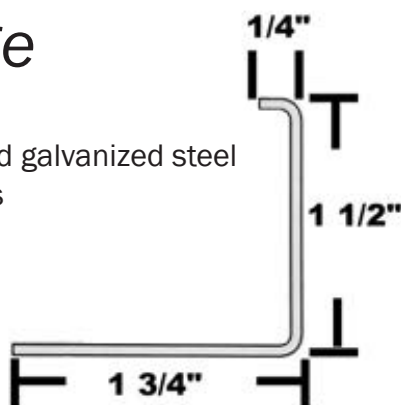
Cold-formed, hot-dipped galvanized steel
with pre-punched holes

46" & Under:

18 Gauge Steel

48" & Up:

16 Gauge Steel



ECONOflange



The ECONOflange system was specially designed with a split to accommodate minor deviations of pipe diameter.

**ECONOflange
Welded**



Now Available
without split.

NEOPRENE Gasket Tape



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

ORDERING AND PACKING INFORMATION

Example: EFR16GA

| INSULATION SIZE* | TYPE | DIAMETER | | | ALLOY |
|---|---|--------------|-----|-----|--|
| Example = _ • 1 = 1" • 2 = 2" *Only for Inner Ring | Example = EFR • EFR = ECONOflange • EFRW (Econoflange Welded) • IR = Inner Ring (Extension for Double Wall Pipe) | Example = 16 | | | Example = GA • GA = Galvanized • GN = Galvanneal • AZ = Aluminized • S4 = 304 Stainless • S6 = 316 Stainless • PVC = PVC Coated** • AL = Aluminum |
| | | 8" | 30" | 52" | |
| | | 10" | 32" | 54" | |
| | | 12" | 34" | 56" | |
| | | 14" | 36" | 58" | |
| | | 16" | 38" | 60" | |
| | | 18" | 40" | 62" | |
| | | 20" | 42" | 64" | |
| | | 22" | 44" | 66" | |
| | | 24" | 46" | 68" | |
| | | 26" | 48" | 70" | |
| | | 28" | 50" | 72" | |

** 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 |

Exclusive patented features make the difference...

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. |
| Type: | 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 |

| Item # | Grade | Dimension | Packaging |
|----------------------|------------|--------------|-------------|
| Color - Blue | | | |
| PG24B | Standard | 24" x 200' | 2 rolls/box |
| PG36B | Standard | 36" x 200' | 1 roll/box |
| Color - Clear | | | |
| PG24 | Heavy Duty | 24" x 200' | 2 rolls/box |
| PG24K | Heavy Duty | 24" x 1,000' | 1 roll/box |
| PG24C | Standard | 24" x 200' | 2 rolls/box |
| PG36 | Heavy Duty | 36" x 200' | 1 roll/box |
| PG36K | Heavy Duty | 36" x 1,000' | 1 roll/box |
| PG36C | Standard | 36" x 200' | 1 roll/box |
| PG48 | Heavy Duty | 48" x 200' | 1 roll/box |
| PG48C | Standard | 48" x 200' | 1 roll/box |

QUICK-SLEEVE

3" THRU 16" ROUND DUCT CONNECTOR SYSTEM

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 AND TOXIC VAPORS TO SEAL EXISTING SYSTEMS • SPECIAL ALLOYS AVAILABLE • NEW DOUBLE-BOLT CLOSURE ENSURES BETTER STABILITY THROUGH LARGER DUCT DIAMETERS**



**Standard Single-Bolt
Connection**

**Double-Bolt Connection
Now Available!**



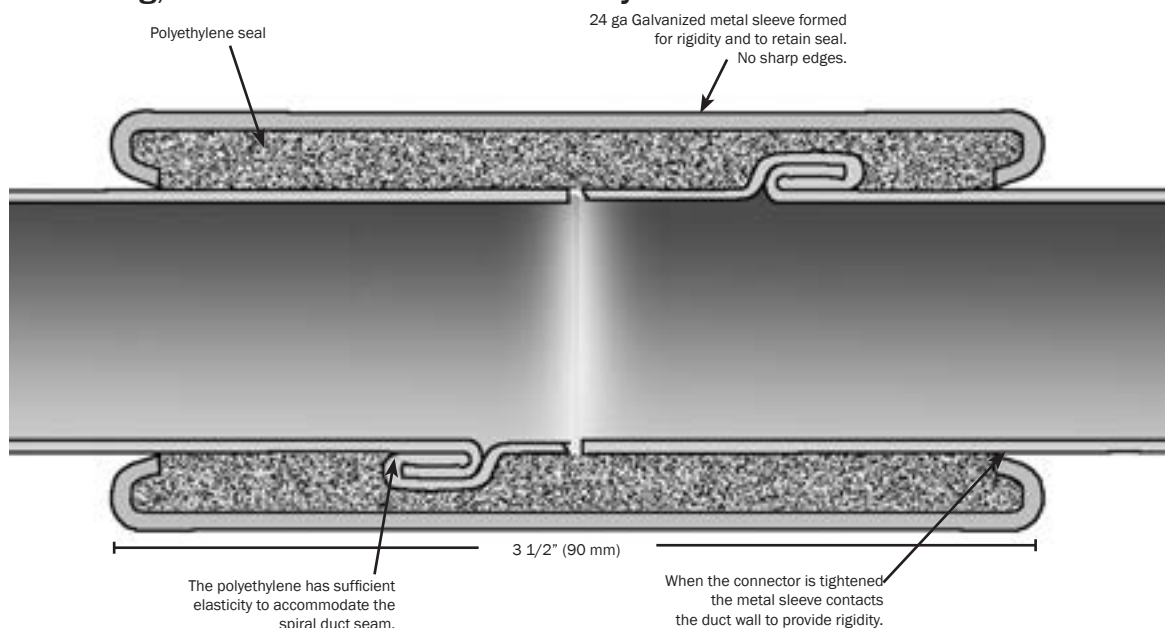
ROUND DUCT CONNECTOR SYSTEM

QUICK-SLEEVE

3" THRU 16" ROUND DUCT CONNECTOR SYSTEM

APPLICATION

For air-conditioning, ventilation and dust collection systems.



ASSEMBLY

1. Loosen bolt.
2. Insert each duct about halfway into the "Quick-Sleeve."
3. Tighten bolt.

ORDERING INFORMATION

(HOW TO ORDER USING PART NUMBER VARIATIONS)

EXAMPLE: QS10GA

| CONNECTOR Example: QS | GASKETING TYPE Example: ** | CONNECTOR SIZE Example: 10 | | ALLOY TYPE Example: GA |
|---------------------------------|--|--------------------------------------|--------|---|
| QS = Single-Bolt QUICKSLEEVE | ** NO NUMBER REQUIRED FOR STANDARD GASKET (POLYETHYLENE) N = NEOPRENE HT = HIGH-TEMP S = SILICONE FDA = FDA APPROVED *Note EPDM Rubber Gasket is available upon request. | 3=3" | 9=9" | GA = GALVANIZED GN = GALVANNEALED AZ = ALUMINIZED S4 = 304 STAINLESS S6 = 316 STAINLESS |
| LABQS = Double-Bolt QUICKSLEEVE | | 4=4" | 10=10" | |
| | | 5=5" | 11=11" | |
| | | 6=6" | 12=12" | |
| | | 7=7" | 13=13" | |
| | | 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" = 1.69 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" = x.xx lbs/ea |

Ideas that work for you every day...

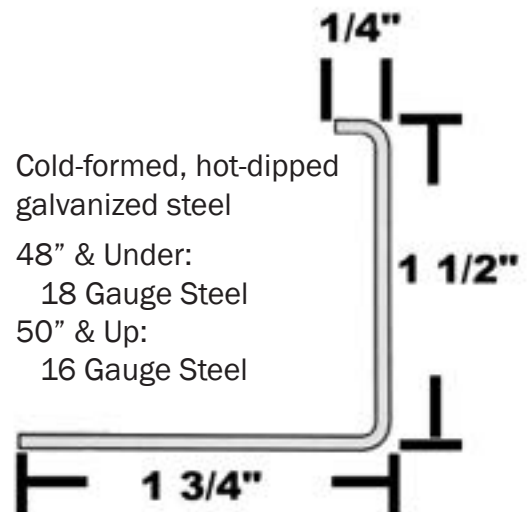
ECONO*flange*TM OVAL

Oval Duct Connection System



Fast Screw Connection

- Simple installation process
- Can be installed on-site
- No special tools required
- Available in sizes 8" - 56" in standard 2" increments
- Available in specialty metals
- Pre-punched holes



ECONO OVAL SYSTEM SPECIFICATIONS

ECONOflange™ Oval 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.

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

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.

Installation Instructions

Cut straight flange to length according to the following formula:
For Duct with 8" through 56"
Minor Dimension

1. Measure your preformed ductwork and cut the straight flanges for the ECONOflange Oval connection.

EXAMPLE:

Duct Dimension 68" x 20"

| | |
|-------------------------------|-------|
| Major Dimension | 68" |
| (minus) Minor Dimension | - 20" |
| (minus) 7¼" | - 7¼" |
| (equals) Straight Econoflange | ----- |
| Oval Angle Length | 40¾" |

- Formula is based on exact dimensions. Measure your frame and check fit of completed frame.
 - ECONOflange Oval is not recommended when formula calculates angle length at less than 4".
2. Weld the end sets flat to the straight flanges to form the completed flange.
 3. Begin seating the ECONOflange Oval frame.
Note: Mark a common reference point on both ends of the duct. ECONOflange Oval frames must be centered properly in relation to the frame on the other side of the duct to eliminate racking and/or twisting.
 4. Seat ECONOflange Oval onto the duct so the flange is perpendicular to the ductwork. Do not hammer the center of the major axis. An inward curve could occur.

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

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

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

7. Apply Ductmate Neoprene gasket 5/16" thick by 3/4" wide to the face of one of the ECONOflange Oval. The Neoprene should be positioned parallel to the inside edge of the ECONOflange. The Neoprene gasket ends must be butted up against each other.
8. Align mating frames by matching the ECONOflange Oval frames evenly around the ductwork.
9. Clamp the mating ECONOflange Oval frames compressing the gasket until the mating rings touch.
10. Fasten self-drilling screws 6" on center around the ECONOflange Oval flange face. In order to assure a proper closed joint, the flanges should be clamped tightly together with the two faces touching each other prior to fastening the self drilling screws. Proper care should be taken in setting the clutch adjustment of your screw gun to assure your screws have 100% holding strength.

Ordering Information

(How to order using part number variations)

| Connector Type | Endset Size | | Alloy |
|--|---|--------|---|
| <i>Example: EFO</i> <ul style="list-style-type: none"> EFO = Econoflange Oval semi-circular end piece EF = Straight Flange in 20' lengths | <i>Example: 12</i> (1 Endset=4 Radius Flanges) | | <i>Example: GA</i> <ul style="list-style-type: none"> GA=Galvanized GN=Galvannealed AZ=Aluminized PVC=PVC COATED** |
| | 12=12" | 26=26" | |
| | 14=14" | 28=28" | |
| | 16=16" | 30=30" | |
| | 18=18" | 32=32" | |
| | 20=20" | 34=34" | |
| | 22=22" | 36=36" | |
| | 24=24" | * | |

* Larger sizes also available

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

Sample Order: 1-(60"x12") ECONOflange Connection

| QTY | PART NO. | DESCRIPTION | ESTIMATING QTY+ | ESTIMATING WTS.+ |
|------------|----------------|----------------------|---------------------------------|--------------------------|
| 1/Endset | EFO12GA | 4-12" Radius Flanges | 1 Endset=4 Semi-circles | (Dia + 1.5")x 0.7x π x 2 |
| 20 ft./pc. | EFGA | 20' Straight Flanges | (W-H-7.25) ÷ 3 x # equal joints | .84 lbs/ft x Total LF |
| 50 ft./pc. | NEO 5/16 x 3/4 | Neoprene Gasket | (Dia+ 1.5")x π+1/2 straight | .87/Roll, 13 lbs/CS |

Ideas that work for you every day..

PROflex™

FLEXIBLE DUCT CONNECTOR



**TESTED TO
10" W.G. POSITIVE AND
10" W.G. NEGATIVE!**

- ISOLATES VIBRATION & NOISE AT SOURCE
- COMMERCIAL & RESIDENTIAL APPLICATIONS
- AIRTIGHT & WATERPROOF
- GALVANIZED, STAINLESS, OR ALUMINUM METAL
- AVAILABLE WITH VINYL SUPER DUTY, NEOPRENE, HYPALON, SILICONE, & TEFLON® FABRICS
- FABRICS ARE AVAILABLE IN VARIOUS WIDTHS WITHOUT METAL ATTACHED.

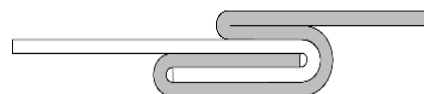
- DESIGNED TO MEET NFPA 90A & 90B (except Teflon®)
- 24 AND 28 GAUGE GALVANIZED STEEL MEETS ASTM-A-653-94-G60
- FABRICS MEET NFPA 701 REQUIREMENTS (except Teflon®)
- RESISTANT TO FUNGAL & MOLD GROWTH (ASTM G-21)
- ALL PROflex DUCT CONNECTORS ARE GUARANTEED AGAINST DEFECTIVE MATERIAL
- SHIPPED IN STANDARD 100 FOOT ROLLS PER CARTON
- SHIPPING WEIGHTS VARY WITH METAL AND FABRIC SELECTED



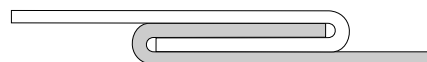
POWER LOCK



PROTECT LOCK



SINGLE FOLD



FLEXIBLE DUCT CONNECTORS SPECIFICATIONS

FABRIC SPECIFICATIONS

VINYL RESIDENTIAL (coated fabric)

Base Fabric: woven polyester
Color: black
Weight: 13 oz./sq. yd.
Tongue Tear: 77/77 lbs.
Tensile Strength: 220/220 lbs.
Low Temperature: -40°F
High Temperature: 160°F

- Economical all-purpose fabric with excellent resistance to cuts, tears and abrasions
- Flame retardant coating
- Resistant to weather and most chemicals
- Meets NFPA 701 (formerly UL 214)

VINYL SUPER DUTY™ (coated fabric)

Base Fabric: woven nylon
Color: black
Weight: 22 oz./sq. yd.
Tongue Tear: 115/85 lbs.
Tensile Strength: 500/400 lbs.
Low Temperature: -22°F
High Temperature: 158°F

- Strongest all-purpose fabric in the industry with excellent resistance to cuts, tears and abrasions
- Flame retardant coating
- Resistant to weather and most chemicals
- Mildew resistant per ASTM G-21
- Meets NFPA 701 (formerly UL 214)

NEOPRENE COMMERCIAL (coated fabric)

Base Fabric: woven fiberglass
Color: black
Weight: 30 oz./sq. yd.
Tongue Tear: 25/20 lbs.
Tensile Strength: 475/375 lbs.
Low Temperature: -40°F
High Temperature: 200°F

- Ideal for fume hoods
- Fire retardant coating with non-combustible fabric
- Resistant to weather and most chemicals, fat, grease and oil
- Meets NFPA 701 (formerly UL 214)

NEOPRENE RESIDENTIAL (coated fabric)

Base Fabric: woven fiberglass
Color: black
Weight: 24 oz./sq. yd.
Tongue Tear: 25/20 lbs.
Tensile Strength: 475/375 lbs.
Low Temperature: -40°F
High Temperature: 200°F

- Ideal for fume hoods
- Fire retardant coating with non-combustible fabric
- Resistant to weather and most chemicals, fat, grease and oil
- Meets NFPA 701 (formerly UL 214)

HYPALON (coated fabric)

Base Fabric: woven fiberglass
Color: white
Weight: 24 oz./sq. yd.
Tongue Tear: 20/15 lbs.
Tensile Strength: 400/300 lbs.
Low Temperature: -50°F
High Temperature: 250°F

- Ideal for outdoor applications & fume hoods
- Flame proof coating with non-combustible fabric
- Resistant to weather and most chemicals, fat, grease and oil
- UV Resistant
- Meets NFPA 701 (formerly UL 214)

SILICONE (coated fabric)

Base Fabric: satin weave fiberglass
Color: aluminum
Weight: 17.5 oz./sq. yd.
Tongue Tear: 50/40 lbs.
Tensile Strength: 200 lbs. or better
Low Temperature: -67°F
High Temperature: 500°F

- Ideal for high temp applications
- Flame proof coating with non-combustible fabric
- Resistant to weather and most chemicals
- Adversely affected by gas, Toluene, Acetone and grease
- Meets NFPA 701 (formerly UL 214)

TEFLON® (coated fabric)

Base Fabric: woven fiberglass
Color: gray
Weight: 18 oz./sq. yd.
Tongue Tear: 60/40 lbs.
Tensile Strength: 400/300 lbs.
Low Temperature: -67°F
High Temperature: 500°F

- Excellent chemical resistance
- Excellent flexibility in extreme temperatures
- Flame proof coating with non-combustible fabric

PROflex™ ORDERING INFORMATION

COMMERCIAL

| Fabric | Part No. | Gauge metal | Size metal x fabric x metal |
|------------------|-----------|-------------|---|
| Vinyl Super Duty | PFC**VSGA | 24 | All fabrics available in: 3" x 3" x 3" 4" x 4" x 4" 3" x 6" x 3" Other fabric widths available upon request |
| Neoprene Comm. | PFC**NGA | 24 | |
| Hypalon | PFC**HGA | 24 | |
| Silicone | PFC**SGA | 24 | |
| Teflon® | PFC**TGA | 24 | |

** = fabric size 3,4,6

ECONOMY

| Fabric | Part No. | Gauge metal | Size metal x fabric x metal |
|------------------|-----------|-------------|---|
| Vinyl Super Duty | PFE04VSGA | 28 | All fabrics available in: 2-3/4" x 4" x 2-3/4" |
| Neoprene Res. | PFE04NGA | 28 | |
| Hypalon | | 28 | |
| Silicone | | 28 | |

RESIDENTIAL

| Fabric | Part No. | Gauge metal | Size metal x fabric x metal |
|---------------|----------|-------------|--|
| Vinyl Res. | PFR03VGA | 28 | All fabrics available in: 1-3/4"x3"x1-3/4" Vinyl and Neoprene are also available in 150' lengths |
| Neoprene Res. | PFR03NGA | 28 | |
| Hypalon | PFR03HGA | 28 | |
| Silicone | PFR03SGA | 28 | |

SINGLE FOLD

| Fabric | Part No. | Gauge metal | Size metal x fabric x metal |
|------------------|------------|-------------|---|
| Vinyl Super Duty | PFCS**VSGA | 24 | All fabrics available in: 4 1/2" x 3" x 4 1/2" 3" x 3" x 3" 3" x 6" x 3" |
| Neoprene Com. | PFCS**NGA | 24 | |
| Hypalon | PFCS**HGA | 24 | |
| Silicone | PFCS**SGA | 24 | |

GA = GALVANIZED

S4 = 304 STAINLESS STEEL

AL = ALUMINUM

S6 = 316 STAINLESS STEEL

* * T3=4 1/2" x 3" x 4 1/2"; 3=3" x 3" x 3"; 6=3" x 6" x 3"

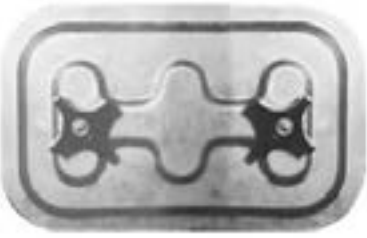
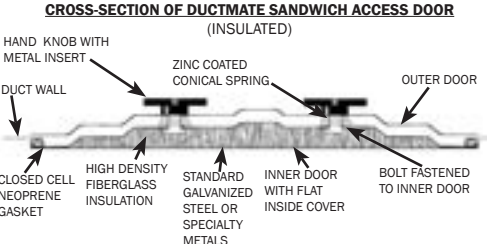

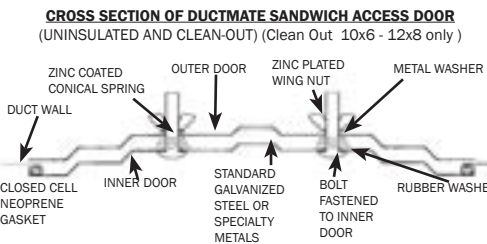

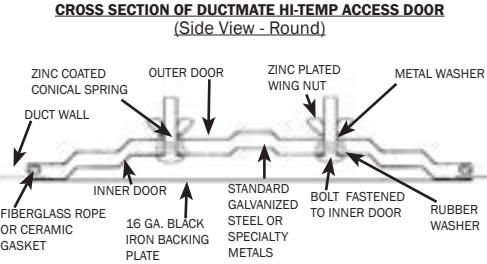

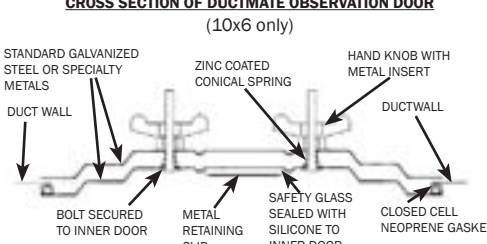

- SHIPPED IN STANDARD 100 FOOT ROLLS PER CARTON.
- RESIDENTIAL VINYL & NEOPRENE ARE ALSO AVAILABLE IN 150' ROLLS
- SHIPPING WEIGHTS VARY WITH METAL AND FABRIC SELECTED.

Ideas that work for you every day...

DUCTMATE®

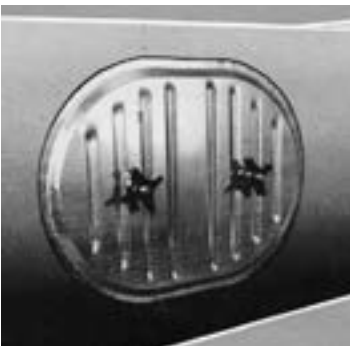
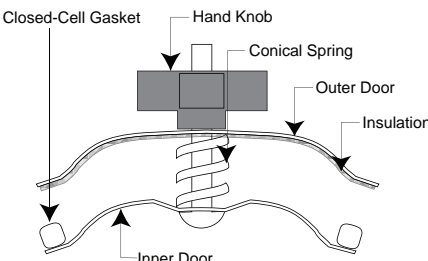


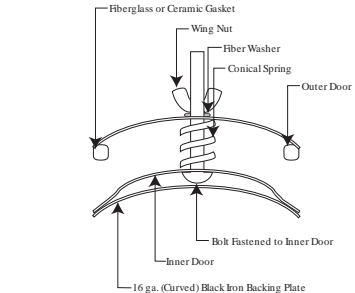
THE SANDWICH® DOOR

- 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 |  | <ul style="list-style-type: none"> • Fully insulated or uninsulated • Smooth interior surface on insulated doors • Tested to 20" w.g. positive and 10" negative. (Please specify when ordering doors for negative pressure applications.) • Insulated doors are recommended for negative pressure applications. | <p>CROSS-SECTION OF DUCTMATE SANDWICH ACCESS DOOR (INSULATED)</p>  |
| ROUND |  | <ul style="list-style-type: none"> • Please specify when ordering doors for negative pressure as the gasket is placed on the outer door panel. • Please specify when ordering doors for double wall duct as we provide 6" bolts which will allow the door to be opened wider, making up for the thickness of the liner/duct wall. | <p>CROSS SECTION OF DUCTMATE SANDWICH ACCESS DOOR (UNINSULATED AND CLEAN-OUT) (Clean Out 10x6 - 12x8 only)</p>  |
| CIRCULAR CLEAN-OUT |  | <ul style="list-style-type: none"> • No frame to install and seal • Circular opening effective for duct cleaning • Effortless opening & closing • Meets FDA requirements • EDGE PRO rubber edge guards are available on request | <p>CROSS SECTION OF DUCTMATE HI-TEMP ACCESS DOOR (Side View - Round)</p>  |
| HIGH TEMP |  | <ul style="list-style-type: none"> • For High-Temperature application fiberglass rope (1000° F max) is permanently bonded to the outside panel of the access door to eliminate leakage. • For Grease Duct application, Ceramic Fiber Gasket (2300° F max - meets NFPA 96 standards) is permanently bonded to the outside panel of the access door to eliminate leakage. | <p>CROSS SECTION OF DUCTMATE OBSERVATION DOOR (10x6 only)</p>  |
| OBSERVATION |  | <ul style="list-style-type: none"> • 4" X 2-5/8" viewport • Safety glass window • Available in 10" x 6" only | |

THE 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).

| | | | |
|-------------|---|--|--|
| RECTANGULAR |  | <ul style="list-style-type: none"> • Attached gasket makes door completely airtight. • Insulated with polyester foam permanently bonded to outer door. | <p>CROSS SECTION OF W.D.C.I. ACCESS DOOR (End View - Round)</p>  |
| ROUND |  | <ul style="list-style-type: none"> • Conical springs between inner and outer doors for easier operation. • Hand knobs have threaded brass inserts. | |
| HIGH TEMP |  | <ul style="list-style-type: none"> • High temperature and grease duct applications. • High temperature fiberglass rope, or ceramic fiber gasket. • Smooth interior surface. | <p>CROSS SECTION OF W.D.C.I. GREASE DUCT ACCESS DOOR (Side View - Round)</p> <p>Round Grease Duct Access Door (Side View)</p>  |


INSTALLATION INSTRUCTIONS



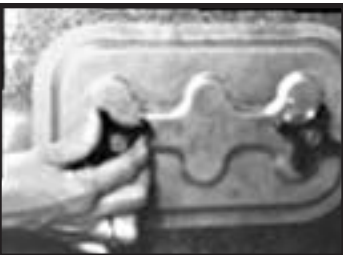
1
PEEL BACK OFF
TEMPLATE AND APPLY TO
DUCTWORK IN DESIRED
LOCATION



2
OPENING CAN BE MADE 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.
NEOPRENE GASKET ASSURES
AIRTIGHT SEAL

ORDERING INFORMATION

(Samples: DRI161236GA; WRI161236GA)

| DUCTMATE Access Doors | | | | | | | |
|--|---|-------------------------------------|----------------|--|----------------|------------------------------|--|
| Door Type | Insulation * | Door Size | | Duct Diameter (for round duct only) | | High Temp Door Class ** | Alloy❖ |
| D = Rect. or Hi-Temp Rect. DR = Round or Hi-Temp Round DC = Clean Out DO = Observation DC = Circular | I = Insulated | <u>Rectangular Doors</u> | | 6 = 5" - 6" | 28 = 25" - 28" | F1 - 1000° F F2 - 2300° F | GA = GALVANIZED GN = GALVANNEALED AZ = ALUMINIZED S4 = 304 STAINLESS S6 = 316 STAINLESS BI = BLACK IRON PVC=PVC Coated* *Uninsulated doors only |
| | U = Uninsulated | 84 = 8" x 4" (<i>oval shaped</i>) | | 9 = 7" - 9" | 32 = 29" - 32" | | |
| | 106 = 10" x 6" | | 11 = 10" - 11" | 36 = 33" - 36" | | | |
| | 128 = 12" x 8" | | 14 = 12" - 14" | 40 = 37" - 40" | | | |
| | 1814 = 18" x 14" | | 16 = 15" - 16" | 44 = 41" - 44" | | | |
| | 2418 = 24" x 18" (<i>oval shaped</i>) *** | | 18 = 17" - 18" | 48 = 45" - 48" | | | |
| | <u>Round Doors</u> (Fits Duct Dia.) | | 20 = 19" - 20" | 52 = 49" - 52" | | | |
| | 84 = 8" x 4" 5" - 14" | | 22 = 21" - 22" | 56 = 53" - 56" | | | |
| | 128 = 12" x 8" 10" - 20" | | 24 = 23" - 24" | 62 = 57" - 62" | | | |
| | 1612 = 16" x 12" 15" - 36" | | | | | | |
| (Over 36" Consult Factory) | | | | | | | |
| 2418 = 24" x 18" 29" - 62" | | | | | | | |
| (Over 62" Consult Factory) | | | | | | | |

| W.D.C.I. Access Doors (all are oval shaped) | | | | | | | |
|---|----------------------------------|---|--|--|--|------------------------------|--|
| Door Type | Insulation * | Door Size | | Duct Diameter (for round duct only) | | High Temp Door Class ** | Alloy❖ |
| W = Flat WR = Round | I = Insulated U = Uninsulated | <u>Rectangular Doors</u> 106 = 10" x 6" 1612 = 16" x 12" 2418 = 24" x 18" | | 7 = 5" - 7" 9 = 8" - 9" 12 = 10" - 12" 14 = 13" - 14" | 32 = 29" - 32" 36 = 33" - 36" 40 = 37" - 40" 44 = 41" - 44" | F1 - 1000º F F2 - 2300º F | GA = GALVANIZED GN = GALVANNEALED AZ = ALUMINIZED S4 = 304 STAINLESS S6 = 316 STAINLESS BI = BLACK IRON |
| | | <u>Round Doors</u> (Fits Duct Dia.) 84 = 8" x 4" 5" - 14" 106 = 10" x 6" 5" - 28" 128 = 12" x 8" 10" - 20" 1612 = 16" x 12" 15" - 36" 2418 = 24" x 18" (Over 36" Consult Factory) | | | | | |

* INSULATION CLASSIFICATION ONLY USED WHEN USING PREFIXES D OR DR

** ONLY USED WHEN ORDERING HIGH TEMPERATURE DOORS

*** NOTE: THE DUCTMATE 24" X 18" ACCESS DOOR, AND ALL W.D.C.I. DOORS CONSIST OF ONLY TWO LAYERS OF PRECISION STAMPED STEEL. A POLYESTER FOAM PAD INSTALLED BETWEEN THE INNER AND OUTER DOOR PANELS PROVIDES INSULATION.

❖ NOTE: ALL ACCESS DOORS MAY NOT BE AVAILABLE IN ALL ALLOYS

SQUARE FRAMED ACCESS DOORS

STANDARD CHARACTERISTICS OF DUCTMATE SQUARE FRAMED ACCESS DOORS

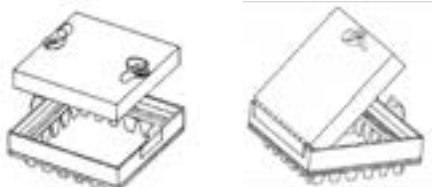
- DOUBLE GASKETED
- INSULATED
- PRECISION DESIGNED AND MANUFACTURED
- AVAILABLE IN SPECIALTY METALS & RECTANGULAR SIZES

TECHNICAL INFORMATION

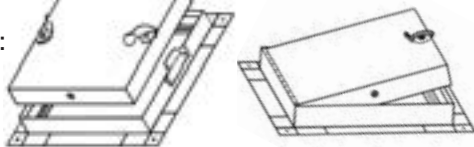
- 1" High density fiber glass insulation board made from inorganic glass fibers bonded with renewable bio-based materials (FHC25/50).
- R Value 4.2.
- Door consists of two, 24 gauge galvanized steel panels, mechanically locked together.
- Meets SMACNA requirements for low pressure doors (3" w.g. positive/2" w.g. negative).
- Closed cell cross-linked polyethylene gasketing is bonded to the inside of both the Dovetail frame and Press-On frames, and also to the outside of the Dovetail frame only.
- Both closed cell cross-linked polyethylene gaskets combine creating a service temperature range of -70°F to 175°F.
- 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.
- Double-sided adhesive gasket: closed cell cross-linked polyethylene is UL 94HF1 listed with a temperature range -110°F to 158°F.
- Dovetail frames have an improved design for easy installation on Metal Ductwall, 1" Duct Board or 1 1/2" Duct Board.* Press-On frames have a double sided neoprene for easy installation to metal ductwork.
- 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.

Doors For Metal Ductwall

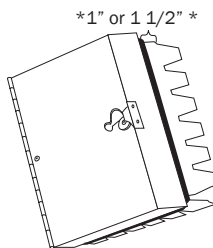
Tabbed:



Press-On:



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 | Sizes:** | | 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

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 |

Ideas that work for you every day..

Double Paned Observation Access Door

16" x 12" Sandwich® Door
With 8" x 8" view port

Solid Door With Simple Installation

- Double Pane Safety Glass
- Extra Large 8" x 8" Viewport
- Available Insulated or Uninsulated
- Tested to 10" W.G. with minimal leakage noted

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.



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

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

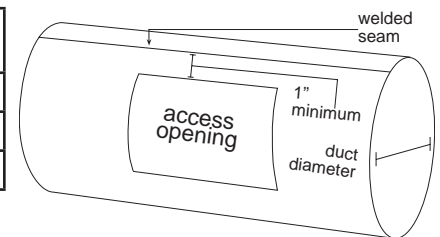
ULTIMATE Round Door Packaging Info and Sizing Guidelines

† Insert pipe diameter.

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

* Insert BI for Black Iron.

| 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" | 12" | 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. |



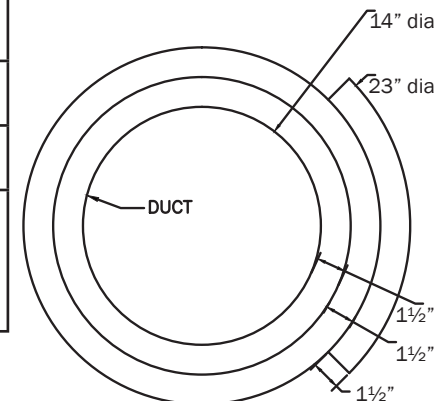
For Use With Duct Wrap Systems

XX Outer Plate Diameter

‡‡ Available in BI (Black Iron) or S4 (Stainless Steel Type 304) Outer plates will be offered to cover the 3 current round doors being offered.

| Outer Template Part # | Description | Outer Plate | Package Quantity | Weight |
|------------------------------------|--|-------------|------------------|-----------------|
| OPR106ULXX‡‡ (Sold Separately) | Outer Plate for 10" x 6" Door | 16" x 12" | 1 | Consult Factory |
| OPR128ULXX‡‡ (Sold Separately) | Outer Plate for 12" x 8" Door | 18" x 14" | 1 | Consult Factory |
| OPR1814ULXX‡‡ (Sold Separately) | Outer Plate for 18" x 14" Door | 24" x 20" | 1 | Consult Factory |
| ULRINSULKIT (Sold Separately) | Insulation Kit: Two(2) 6" extension studs, 2 washers, 2 coupler nuts, 2 wing nuts, "Do Not Obstruct" sticker, and Installation Instructions. | | 1 | 1.0 lbs. |

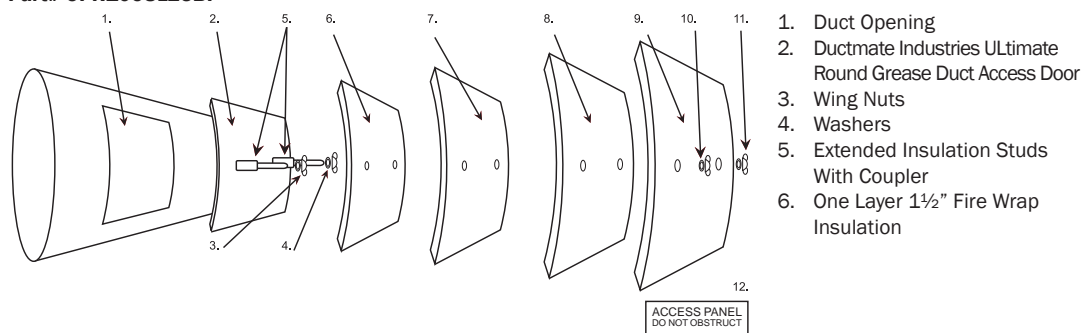
The door frame extends 1" around the opening; therefore, a minimum of 1" clearance is required on either side of the welded seam. Cutting the opening too close to the welded seam may lead to leakage.



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 1½" insulation. (1½" x 3) x 2 + 14" = 23" Outer Plate.

Part# OPR106UL23BI



Exclusive patented features make the difference...

UL RATED GREASE DUCT DOOR

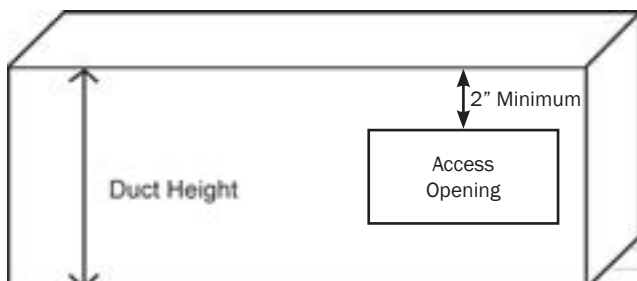


- UL 1978 Listed
- Easy to install sandwich design with no special tools required
- Minimal penetration into the duct
- Dramatically reduces installation time
- No welding required
- Grease and air tight
- Meets NFPA 96 Standards
- Union made in the U.S.A.
- Available in a variety of sizes
- Door is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

* 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.

| 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. |
| D106UL* | UL Door Only | 10" x 6" | 12" x 8" | 14" | 5 | 39.0 lbs. |
| D106ULWS* | UL Door with Insulation Kit and 16" x 12" Outer Plate | 10" x 6" | 12" x 8" | 14" | 5 | 63.0 lbs. |
| D1010UL | UL Door Only | 10" x 10" | 12" x 12" | 19" | 5 | 57.0 lbs. |
| D1010ULWS* | UL Door with Insulation Kit and 16" x 16" Outer Plate | 10" x 10" | 12" x 12" | 19" | 5 | 70.0 lbs. |
| D128UL* | UL Door Only | 12" x 8" | 14" x 10" | 17" | 5 | 55.9 lbs. |
| D128ULWS* | UL Door with Insulation Kit and 18" x 14" Outer Plate | 12" x 8" | 14" x 10" | 17" | 4 | 70.0 lbs. |
| D1212UL* | UL Door Only | 12" x 12" | 14" x 14" | 22" | 2 | 24.01 lbs. |
| D1212ULWS* | UL Door with Insulation Kit and 18" x 18" Outer Plate | 12" x 12" | 14" x 14" | 22" | 2 | 43.56 lbs. |
| D1814UL* | UL Door Only | 18" x 14" | 20" x 16" | 26" | 2 | 48.0 lbs. |
| D1814ULWS* | UL Door with Insulation Kit and 24" x 20" Outer Plate | 18" x 14" | 20" x 16" | 26" | 2 | 68.0 lbs. |
| D2020UL* | UL Door Only | 20" x 20" | 22" x 22" | 35" | 1 | 36.0 lbs. |
| D2020ULWS* | UL Door with Insulation Kit and 26" x 26" Outer Plate | 20" x 20" | 22" x 22" | 35" | 1 | 49.0 lbs. |
| D2418UL* | UL Door Only | 24" x 18" | 26" x 20" | 32" | 1 | 39.6 lbs. |
| D2418ULWS* | UL Door with Insulation Kit and 30" x 24" Outer Plate | 24" x 18" | 26" x 20" | 32" | 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 |



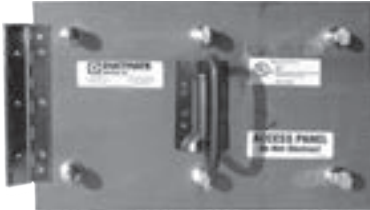
In order to use the minimum duct height, the door must be installed with it's longest dimension running horizontally along the length of the duct. If the minimum duct height is used, the top of the opening must be 2" from the top of the duct. For every inch over the minimum duct height, the opening can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

Exclusive patented features make the difference...

UL RATED GREASE DUCT DOOR



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



- 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

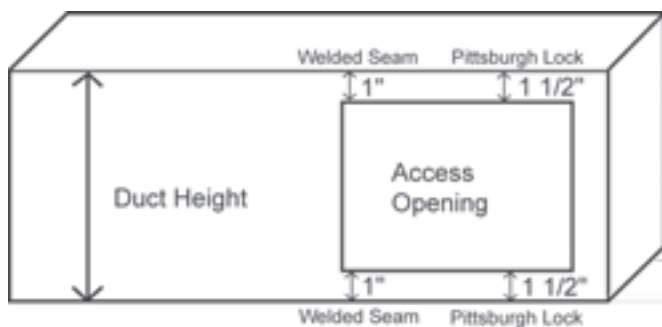
- Union made in the U.S.A.
- Available in a variety of sizes
- Can be used with all types of duct wrap insulation systems
- No need for any clips
- No need for any drilling
- Unique collapsible handle design for easy installation
- Top plate is completely removable for easy cleaning

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

* Insert BI for Black Iron.

Items in **Bold** refer to hinged doors.

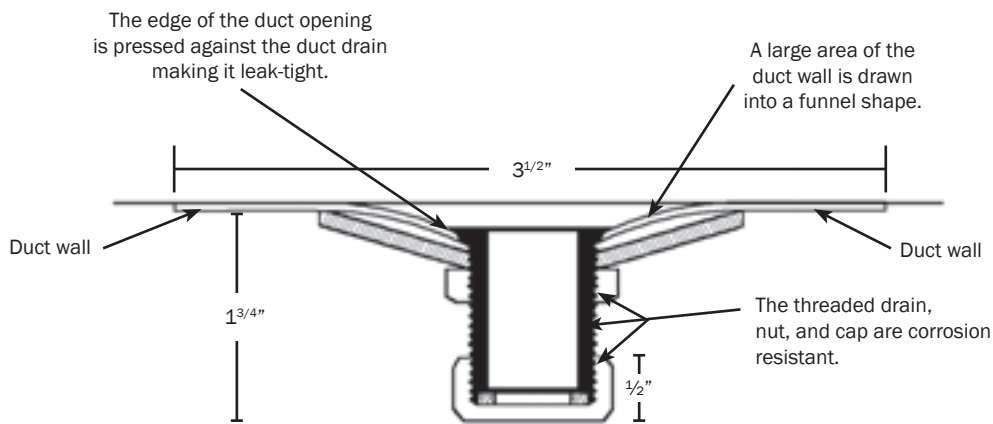
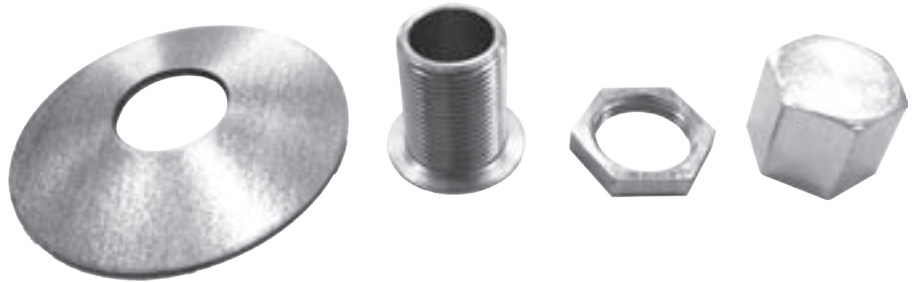
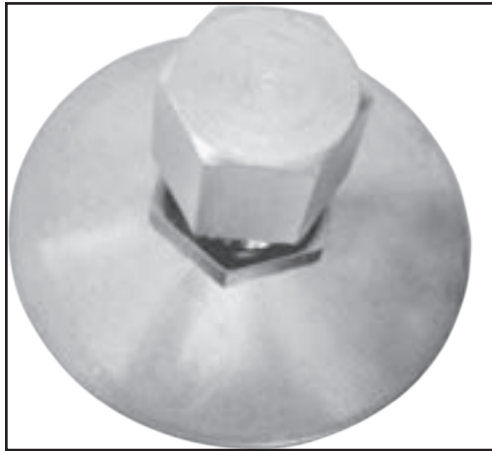
| Part # | Description | Opening Size | Door Size | Minimum Duct Height | | Packaging Quantity | Weight |
|------------------------------------|---|--------------|-----------|---------------------|-------------|--------------------|--------------------------------|
| | | | | Welded Seam | Pitts. Lock | | |
| DW66UL* DWH66UL* | UL Door Only | 6" x 6" | 8" x 8" | 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" | 8" | 9" | 5 | 26.7 lbs. 42.5 lbs. |
| DW106UL* DWH106UL* | UL Door Only | 10" x 6" | 12" x 8" | 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" | 8" | 9" | 5 | 34.95 lbs. 56.5 lbs. |
| DW1010UL* DWH1010UL* | UL Door Only | 10" x 10" | 12" x 12" | 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" | 12" | 13" | 4 | 53.0 lbs. 55.0 lbs. |
| DW128UL* DWH128UL* | UL Door Only | 12" x 8" | 14" x 10" | 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" | 10" | 11" | 4 | 53.0 lbs. 53.7 lbs. |
| DW1814UL* DWH1814UL* | UL Door Only | 18" x 14" | 20" x 16" | 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" | 16" | 17" | 2 | 53.0 lbs. 52.0 lbs. |
| DW2020UL* DWH2020UL* | UL Door Only | 20" x 20" | 22" x 22" | 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" | 22" | 23" | 1 | 34.95 lbs. 37.0 lbs. |
| DW2418UL* DWH2418UL* | UL Door Only | 24" x 18" | 26" x 20" | 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" | 20" | 21" | 1 | 36.0 lbs. 36.8 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 |



Unlike the ULtimate sandwich style door, the ULtimate II weld on door requires no additional clearance. The duct only needs to be large enough to accommodate the frame. The frame extends 1" past each side of the opening, therefore a minimum of 1" clearance is required on each side of the opening when duct incorporates a welded longitudinal seal. To allow for manufacturing variances in the duct 1-1/2" clearance is recommended on each side of the opening when duct incorporates a Pittsburgh lock seam. Remember an internal longitudinal seam could take up extra space and prevent the frame from properly attaching in the case of a minimum size duct. 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.

Ideas that work for you every day...

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

| 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) |

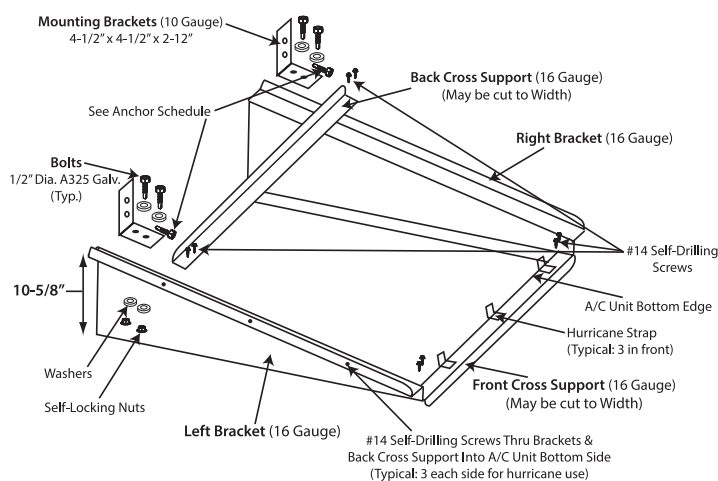
SHIPPING INFORMATION

| PART NO. | MOISTURE DRAIN | PACKING UNIT | UNIT WEIGHT |
|----------|---------------------|--------------|-------------------|
| MD75GA | DRAIN FITTINGS 3/4" | (10) PIECES | 5.5 LBS (2.89 KG) |
| MDC75GA | DRAIN CAP 3/4" | (10) PIECES | 0.85 LBS (.4 KG) |

HURRICANE AIR BRACE™



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



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, stainless hardware sold separately
- 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
- 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

Technical information

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

Ordering information

| Part # | Description | Packaging | Shipping |
|-------------|-----------------------------------|-----------|-----------------|
| AIRBRACE | 36" x 30"* Condenser Unit Support | 1 per box | 16.4 lbs. each |
| AIRBRACE45S | 45" x 36"* Condenser Unit Support | 1 per box | 23 lbs. each |
| AIRBRACE55S | 55" x 48"* Condenser Unit Support | 1 per box | 30.85 lbs. each |

* All widths adjustable down to 20"

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.

Ideas that work for you every day...

STEEL CABLE HANGING/REINFORCEMENT SYSTEM

Clutcher®



- U.S. Patent No. 7,222,824
- Can be used on a variety of mechanical systems
- Cable & Clutcher sold separately
- Eliminates the need to stock pre-cut cable
- Tapered bore design for fast and easy installation
- Easily adjust hanging height by hand
- Extremely Strong
- Offers a 5 to 1 safety factor
- Available in variety of sizes for different weights
- Items can be hung at angles up to 60° from vertical
- Lightweight design reduces the risk of on-site accidents
- Aesthetically pleasing
- Seismic tested and conforms to ICC Code guidelines EG284
- Available in galvanized steel only
- Full product specification sheets is available online: <http://bit.ly/11K3fNC>
- Full product information and installation instructions are available online: <http://bit.ly/18BZ9w6>

PACKAGING INFO

| Size | Box Quantity | Bag Quantity | Bag/Boxes |
|------|--------------|--------------|-----------|
| CL10 | 500 | 10 | 50 |
| CL20 | 400 | 10 | 40 |
| CL30 | 120 | 4 | 30 |

LOAD RATINGS

| Clutcher Part # | Load Rating | Recommended Ductmate Steel Cable * |
|-----------------|-------------|------------------------------------|
| CL10 | 125 lbs. | WR10 |
| CL20 | 250 lbs. | WR20 |
| CL30 | 650 lbs. | WR30 |

* **Must be used in conjunction with Ductmate Steel Cable**

DECLUTCHER

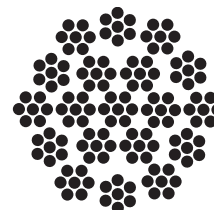


CLTOOL1020

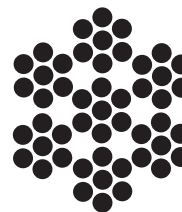
STEEL CABLE

Ductmate steel cable is designed for the suspension of HVAC and other mechanical systems. This product has been designed to be used in conjunction with Ductmate's Cablemate Systems.

- Aircraft quality zinc coated steel cable
- Superior strength
- Supplied in coils to reduce waste
- Coils were designed for strength and ease of use
- Available in a variety of sizes and lengths



7x19



7x7

TECHNICAL and PACKAGING INFORMATION

7x7

| Part # | Description | Length |
|----------|-----------------|-------------|
| WR10500 | #10 Steel Cable | 500'/Spool |
| WR101000 | #10 Steel Cable | 1000'/Spool |
| WR20500 | #20 Steel Cable | 500'/Spool |
| WR201000 | #20 Steel Cable | 1000'/Spool |

7x19

| Part # | Description | Length |
|----------|-----------------|-------------|
| WR30500 | #30 Steel Cable | 500'/Spool |
| WR301000 | #30 Steel Cable | 1000'/Spool |

Steel Cable CUTTER



HFWRCDM

Also available:

| Part # | Description |
|------------|--|
| HFCCS | Corner Cleat Saddle for rectangular duct edges |
| HFWRCDM | Steel Cable Cutter for WR10 & WR20 Steel Cable |
| CLTOOL1020 | Declutcher for CL10 & CL20 |

DUCTMATE TRAPEZE DUCT HANGER

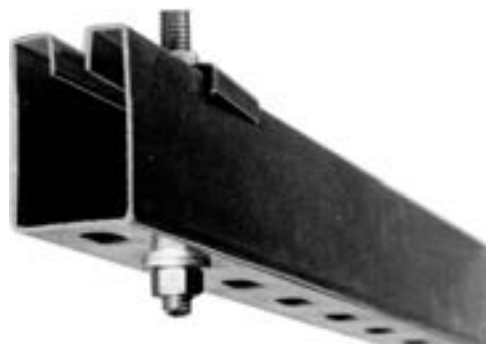
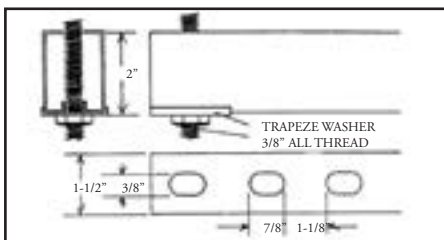
SPECIAL CONTRACTOR PRICING & BUNDLING

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.



INSTALLATION INSTRUCTIONS

1. Cut trapeze duct hanger to size.
2. 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.

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



PACKAGING INFORMATION

| 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 x 6" bolt, 2 flat washers, and nut.










HANGERmate™

Threaded Rod Anchoring System

- For Use In Steel, Concrete or Wood Construction
- Allows For Fast And Easy Anchoring Of Threaded Rod
- Increased Labor Savings
- Unbelievable Strength
- Self-Drilling
- Available For Both Horizontal And Vertical Applications

**The
Easiest-To-Install,
Most Versatile System
Available!**

INSTALLATION COMPONENTS

| | | | |
|---|---|--|---|
| <p>HMB38W Wood</p>  <p>For side attachment in wood. Tapped to accept 3/8 - 16 thread. Qty: 50/box</p> | <p>HM38SN STEEL</p>  <p>For attachment to bottom of purlin .060 - .250. Tapped to accept 3/8 - 16 thread. Supplied with hex nuts. Qty: 50/box</p> | <p>HM38S STEEL</p>  <p>For attachment to bottom of purlin .060 - .250. Tapped to accept 3/8 - 16 thread. Qty: 50/box</p> | <p>HM38W Wood only</p>  <p>For attachment to bottom of wood joists. Tapped to accept 3/8 - 16 thread. Qty: 50/box</p> |
| <p>HMB38SN STEEL</p>  <p>For side attachment to steel .060 - .250. Tapped to accept 3/8 - 16 thread. Supplied with hex nuts. Qty: 50/box</p> | <p>HMB38S STEEL</p>  <p>For side attachment to steel .060 - .250. Tapped to accept 3/8 - 16 thread. Qty: 50/box</p> | <p>HM38M CONCRETE/ MASONRY</p>  <p>For attachment to concrete/masonry. Tapped to accept 3/8 - 16 thread. Qty: 50/box</p> | |
| <p>HMDSM</p>  <p>Recessed Drive Sleeve (Use for concrete/masonry applications) Qty: 1/ea.</p> | | <p>HMDS</p>  <p>Recessed Drive Socket (Use for vertical and horizontal mount metal and wood applications) Qty: 1/ea.</p> | |

Performance Values for HangerMate Threaded Rod Anchors

(All values in pounds)

STEEL APPLICATIONS

End-Drilled Anchors

| PART NO. | ROD SZ. | ANCHOR SHANK | SHANK LGTH | NUT INCL.? | DRILL PT. | 16 Ga. | 14 Ga. | 12 Ga. | 1/8" | 3/16" | 1/4" |
|----------|---------|--------------|------------|------------|-----------|--------|--------|--------|------|-------|------|
| HM38S | 3/8-16 | 1/4-20 | 1" | N | #3 | 786 | 1139 | 1738 | 2376 | 4694 | 5994 |
| HM38SN | 3/8-16 | 1/4-20 | 1" | Y | #3 | 3435 | 4024 | 4279 | 4692 | 5812 | 5909 |

Cross-Drilled Anchors

| PART NO. | ROD SZ. | ANCHOR SHANK | SHANK LGTH | NUT INCL.? | DRILL PT. | 16 Ga. | 14 Ga. | 12 Ga. | 1/8" | 3/16" | 1/4" |
|----------|---------|--------------|------------|------------|-----------|--------|--------|--------|------|-------|------|
| HMB38S | 3/8-16 | 1/4-20 | 1" | N | #3 | 1739 | 1944 | 2420 | 2570 | 2809 | 2809 |
| HMB38SN | 3/8-16 | 1/4-20 | 1" | Y | #3 | 2756 | 2753 | 2809 | 2809 | 2809 | 2809 |

WOOD APPLICATIONS

End-Drilled Anchors

| PART NO. | ROD SIZE | ANCHOR SHANK | SHANK LENGTH | DOUGLAS FIR | SOUTHERN PINE | HEMFIR |
|----------|----------|--------------|--------------|-------------|---------------|--------|
| HM38W | 3/8-16 | 5/16-14 | 2 1/4" | 2487 | 2162 | 1768 |

Cross-Drilled Anchors

| PART NO. | ROD SIZE | ANCHOR SHANK | SHANK LENGTH | DOUGLAS FIR | SOUTHERN PINE | HEMFIR |
|----------|----------|--------------|--------------|-------------|---------------|--------|
| HMB38W | 3/8-16 | 5/16-14 | 2 1/4" | 1801 | 1460 | 1451 |

CONCRETE APPLICATIONS

End-Drilled Anchors

| PART NO. | ROD SIZE | ANCHOR SHANK | SHANK LENGTH | 3650 PSI CONCRETE |
|----------|----------|--------------|--------------|-------------------|
| HM38M | 3/8-16 | 5/16-14 | 2 1/4" | 2188 |

ORDERING & PACKAGING INFORMATION

| PART NO. | DESCRIPTION | QTY. | WEIGHT |
|----------|--|--------|-----------|
| HM38S | 3/8-16 Rod Steel Self-Driller | 50/ctn | 3.00 lbs. |
| HM38SN | 3/8-16 Rod Steel w/nut Self-Driller | 50/ctn | 3.50 lbs. |
| HMB38S | 3/8-16 Rod Steel up to 1/4" thick | 50/ctn | 4.50 lbs. |
| HMB38SN | 3/8-16 Rod Steel w/Nut up to 1/4" thick | 50/ctn | 5.00 lbs. |
| HM38W | 3/8-16 Rod Wood | 50/ctn | 3.10 lbs. |
| HMB38W | 3/8-16 Rod Wood | 50/ctn | 4.75 lbs. |
| HM38M | 3/8-16 Rod Concrete/Masonry | 50/ctn | 3.00 lbs. |
| HMDS | Drive Socket For Verticle-Mounted Applications | 1 ea | 0.25 lb. |
| HMDSM | Drive Sleeve For Masonry Applications | 1 ea | 1.00 lb. |

• The indicated loads are average ultimate values achieved under laboratory conditions and appropriate safety factors should be applied for design purposes.

• NFPA (National Fire Protection Assoc.) minimum fastening requirements are 5 times the weight of a 15 ft. section of water filled pipe plus 250 lbs. This is 1475 lbs. for 4" pipe.

• All test values were obtained using 3/8-16 rod. The strength of 1/4-20 rod may be less than the pullout values of the anchors.

• Loads were determined by testing products in the orientation for which they were designed to be used. End drilled parts were pulled in line with the anchor's axis. Cross drilled parts were tested with the force perpendicular to the axis.

ISOLATION 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 3/8" rod.
- Packing Unit: 50 Pcs./Case
@ 37 lbs (17KG)/Case



Part No. DM2723SI

ROUND DUCT HANGER

Specifications:

- Manufactured from 20 gauge galvanized metal.
- 1/4"-20x1" carriage bolt with zinc plated wing nut.

Part Number Variation: RDH * GA20

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

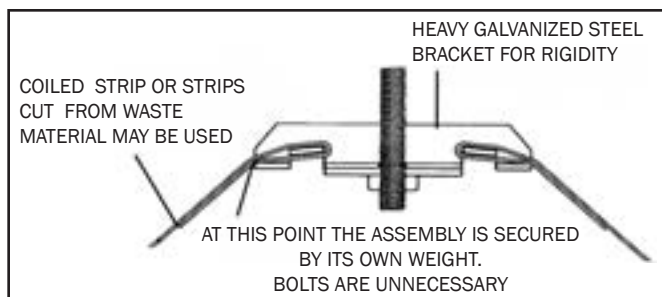


HANGER SYSTEMS

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 S4 = 304 Stainless Steel S6 = 316 Stainless Steel | 200 Pcs./Case @ 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"
- WILL HOLD UP TO 660 LBS (300KG)

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 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 10' LENGTHS

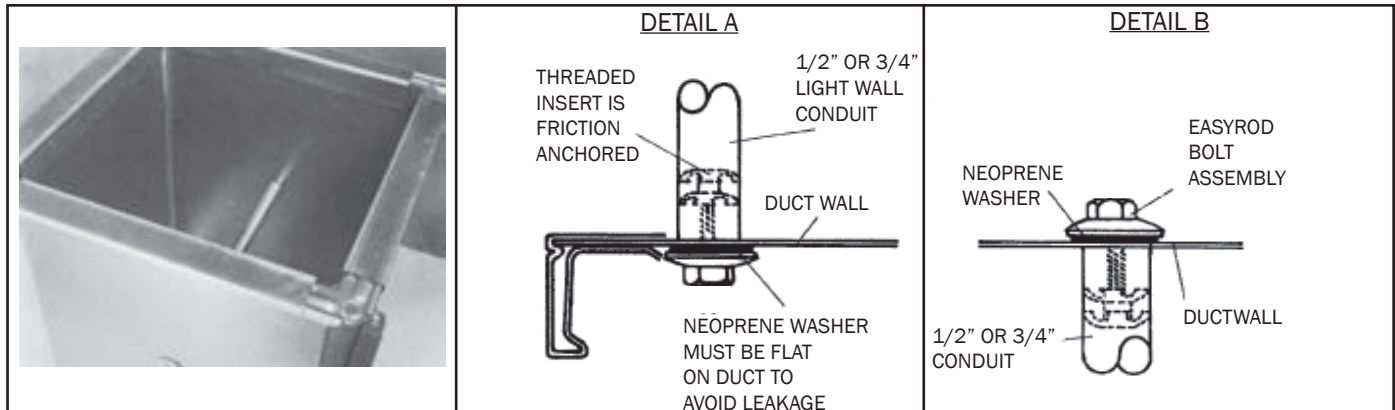
| PRODUCT NO. | GAUGE | WIDTH | WT. (lbs.) | PACKAGING QTY. |
|-------------|-------|-------|------------|---|
| 1STGA16 | 16 | 1" | .200/LF | 10' LENGTHS 100' BUNDLES (ALL GAUGES) |
| 1STGA18 | 18 | 1" | .170/LF | |
| 1STGA20 | 20 | 1" | .120/LF | |
| 1STGA24 | 24 | 1" | .100/LF | |
| 1STGA26 | 26 |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

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. |

REINFORCEMENTS

EASYROD TIE ROD CONSTRUCTION



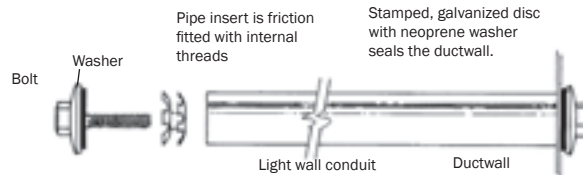
TIE ROD CONSTRUCTION HARDWARE/EASYROD

A simple, strong component system to make the installation of tie rods faster. Can be used for both positive and negative pressure.



NEW MAGNETIC TIE ROD ANCHOR SET

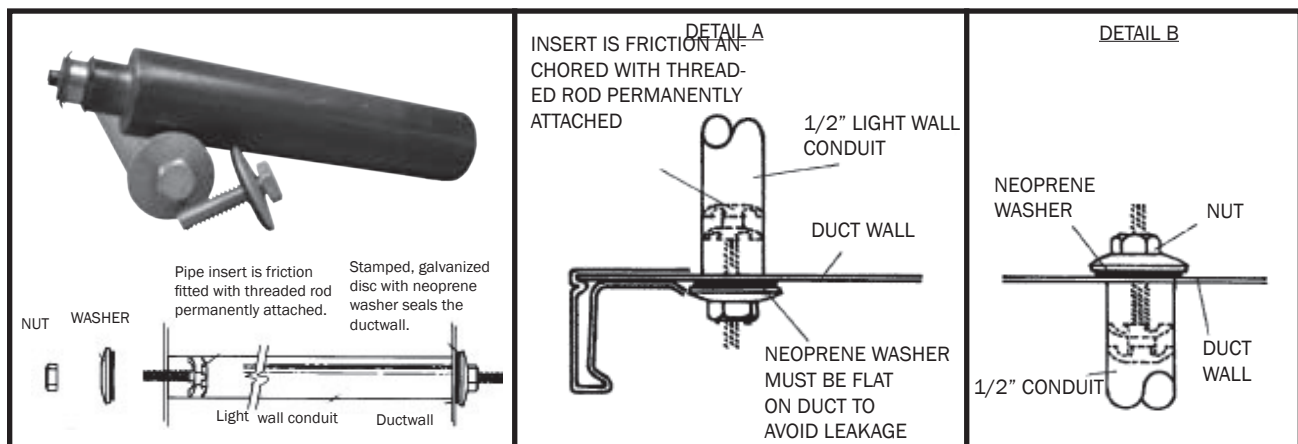
Innovative device to help install the bolt anchor into pipe. Heavy cast steel with magnetic tip insures a fast, strong friction fit.



- Pull out strength of 800 lbs
- 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



- Pull out strength of 600 lbs
- Quickly inserts into ductwork
- Can be easily installed by one person
- Can be used for both Positive and Negative pressure

| 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) |

REINFORCEMENTS

DUCTMATE "Z-BAR" REINFORCEMENT

FEATURES:

- Advanced Design
- Cost Effective
- Light Weight
- Strong
- Easy To Use

SPECIFICATIONS:

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

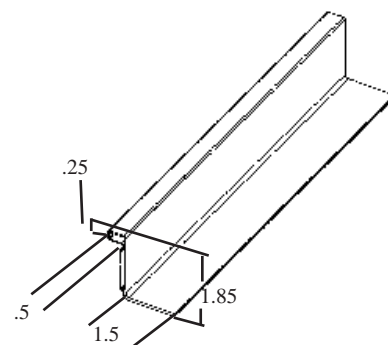
RECOMMENDED USE:

Intermediate reinforcement for rectangular duct. Fasten within 3/4" of vertical duct wall, then 8" on center.

PACKAGING:

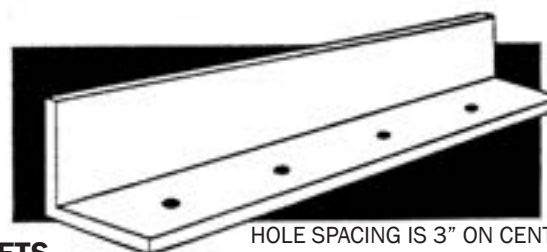
| Part No. | Description | Weight | Length/Bundle |
|----------|-------------|------------|-------------------------|
| DLST15GA | "Z-BAR" | .67 lbs/ft | (75) 20' pcs/1500' bdl. |

NOTE: CONSULT MATERIAL AVAILABILITY CHART FOR SPECIALTY ALLOYS



RETAINING ANGLE FOR EXTERNAL REINFORCEMENT & FRAMING FIRE DAMPERS

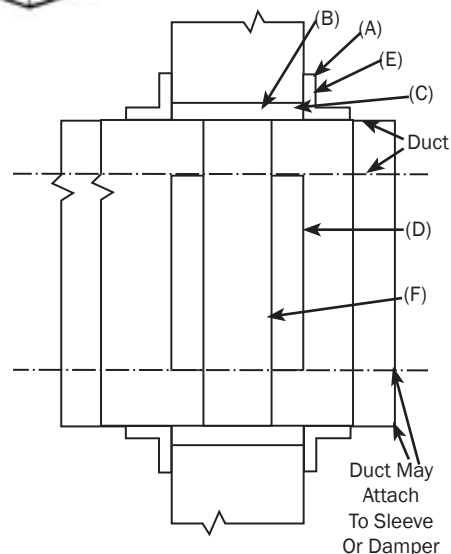
- Cold formed galvanized angle
- Two sizes available:
1 1/2 X 1 1/2 x 16 ga
1 1/2 x 1 1/2 x 14 ga.
- Pre-punched 7/32 holes for faster fastening of angle to sleeve
- 20 foot lengths minimize scrap
- SMACNA E class rigidity (may be used for duct reinforcement)
- In stock at your Ductmate distributor
- Other angle sizes and materials available (consult your distributor)



**MEETS
ASHRAE,
SMACNA
and UMC
STANDARDS**

Typical Installation Details

- | | |
|--|---|
| <p>(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.</p> <p>(B) Clearance: 1/8" Per Linear Foot Both Dimensions.</p> <p>(C) Steel Sleeve</p> <p>(D) Approved Fire Damper (curtain or blade type)</p> | <p>(E) Secure Retaining Angle to Sleeve Only on 8" Centers With:</p> <ol style="list-style-type: none"> 1. 1/2 long welds, or 2. 1/4 Bolts and Nuts, or 3. No. 10 screws, or 4. Minimum 3/16 Steel Rivets <p>(F) Secure Damper To Sleeve On 8" Centers With:</p> <ol style="list-style-type: none"> 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

Ideas that work for you every day..

BANGIT™ DAMPER HARDWARE FROM DUCTMATE



Damper Handle



Blank Clip



Spring Clip



Washer



Wing Nut

| DESCRIPTION | ORDERING INFORMATION | | |
|---|----------------------|---------------------|-------------------|
| <u>Spring Clip</u> Precision stamped galvanized damper clip. Superior spring loaded design for labor saving installation. Engineered with an oversized point for increased strength. | <u>Part Number</u> | <u>Box Quantity</u> | <u>Box Weight</u> |
| | BDHBSC | 1250 | 77 LBS |
| <u>Blank Clip</u> Precision stamped galvanized damper clip, with threaded post for easy installation. Engineered with an oversized point for increased strength. | <u>Part Number</u> | <u>Box Quantity</u> | <u>Box Weight</u> |
| | BDHBC | 2500 | 71 LBS |
| <u>Washer</u> Stamped from galvanized steel for increased strength and corrosion resistance. | <u>Part Number</u> | <u>Box Quantity</u> | <u>Box Weight</u> |
| | BDHBW | 10,000 | 43 LBS |
| <u>Damper Handle</u> 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) | <u>Part Number</u> | <u>Box Quantity</u> | <u>Box Weight</u> |
| | BDHBH | 5,000 | 82 LBS |
| <u>Wing Nut</u> This galvanized steel wing nut is die cast for superior strength and reliability. | <u>Part Number</u> | <u>Box Quantity</u> | <u>Box Weight</u> |
| | BDHBWN | 5,000 | 54 LBS |

TURNING VANE AND RAIL SYSTEMS

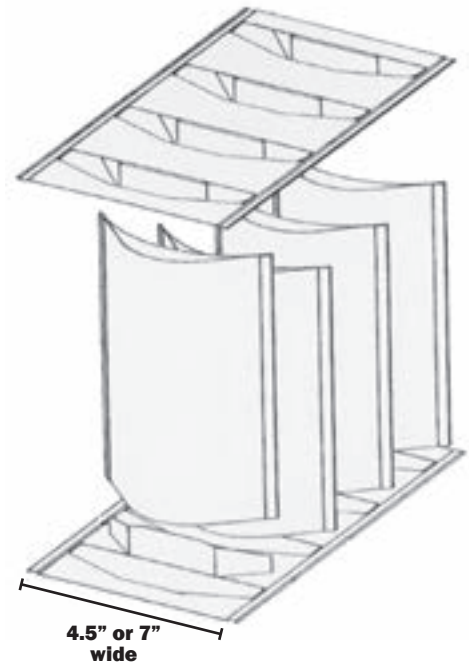


SELF-LOCKING RAIL SYSTEM

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

PACKAGING INFORMATION

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



Exclusive patented features make the difference...

TURNING VANE AND RAIL SYSTEMS

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) | |
|---------|-----------------|-----------------|-------|
| | | 22 ga | 24 ga |
| 2" RAIL | 10'/ea-100'/bdl | .47 | .39 |
| 4" RAIL | 10'/ea-100'/bdl | .87 | .74 |

ORDERING INFORMATION (EXAMPLE: 2ERGA24)

| ECONORAIL SIZE | ALLOY TYPE (Example: GA) | | GAUGES |
|--------------------|--------------------------|------------------|-------------|
| Example: 2ER | GA = GALVANIZED | AZ = ALUMINIZED | Example: 24 |
| 2ER = 2" ECONORAIL | GN = GALVANNEAL | AL = ALUMINUM | 22 = 22 GA |
| 4ER = 4" ECONORAIL | S4 = 304 STAINLESS | BI = BLACK IRON | 24 = 24 GA |
| | S6 = 316 STAINLESS | PVC = PVC COATED | |

MONORAIL™

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

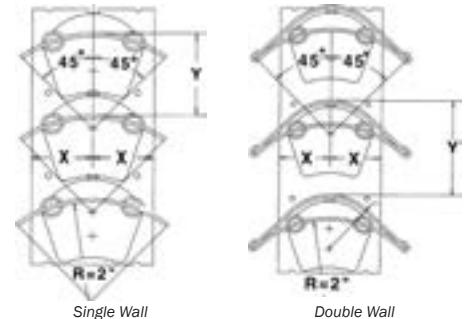
| SINGLE WALL | | | DOUBLE WALL | | |
|-------------|--------|--------|-------------|--------|--------|
| PART NO. | X | Y | PART NO. | X | Y |
| 2MR | 1-1/8" | 1-1/2" | 2MR | 1-1/8" | 1-1/2" |
| 4MR | 2-1/4" | 3-1/4" | 4MR | 2-1/4" | 3-1/4" |

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)

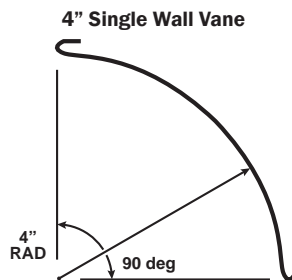
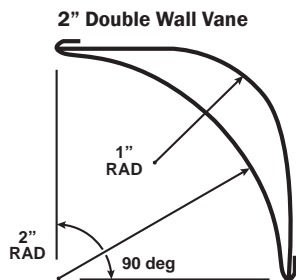
| VANE SIZE | ALLOY TYPE | | GAUGES |
|-------------------|-----------------|--------------------|------------|
| 2MR = 2" Monorail | GA = GALVANIZED | S4 = 304 STAINLESS | 24 = 24 GA |
| 4MR = 4" Monorail | AL = ALUMINUM | S6 = 316 STAINLESS | |



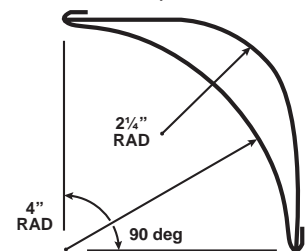
Single Wall

Double Wall

TURNING VANE



4" Double Wall Vane / 4" Acoustical Vane



PACKAGING

| ITEM | PACKAGING | WEIGHT (lbs/ft) |
|--------------------------------|-----------------|-----------------|
| 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 | S4 = 304 STAINLESS | 22 = 22 GA (4" Single Wall Only) |
| • 4V = 4" Double Wall Vane | AL = ALUMINUM | S6 = 316 STAINLESS | 24 = 24 GA (4" Double Wall Only) |
| • 4AV = 4" Double Wall Acoustical Vane | | | 26 = 26 GA (2" Double Wall Only) |
| • 4SWV = 4" Single Wall Vane | | | |

4" vane is available in two options:

1. Standard Double Wall

Sound-absorbing insulation inside perforated metal fascia.

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

Exclusive patented features make the difference...

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.

- 1" material has an extremely high thermal resistance of R-5
- 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 of 25% recycled content
- Mildew and mold resistant
- Light weight design with excellent rebound

SOUND ABSORPTION COEFFICIENTS AT FREQUENCY - ASTM Standard C423

PolyArmor

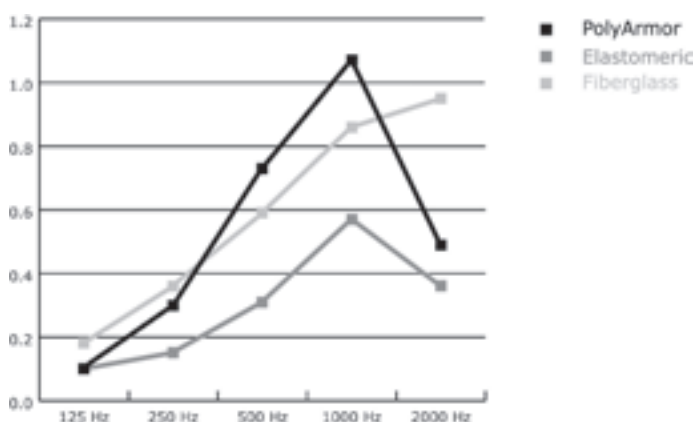
| Material | 125 Hz | 250 Hz | 500 Hz | 1,000 Hz | 2,000 Hz | NRC |
|----------|--------|--------|--------|----------|----------|------|
| Min. 1" | 0.10 | 0.30 | 0.73 | 1.07 | 0.49 | 0.65 |

Elastomeric

| 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 |



PACKAGING INFORMATION

| Width | Thickness & Length | | | Part Number |
|--------|--------------------|----------------|--------------|-------------|
| | R5 - 1"x 100' | R6 - 1.5"x 50' | R8 - 2"x 50' | |
| 47.5" | PA475F1W100 | PA475F15W50 | PA475F2W50 | |
| 48" | PA48F1W100 | PA48F15W50 | PA48F2W50 | |
| 56.25" | PA5625F1W100 | PA5625F15W50 | PA5625F2W50 | |
| 59" | PA59F1W100 | PA59F15W50 | PA59F2W50 | |
| 60" | PA60F1W100 | PA60F15W50 | PA60F2W50 | |

TECHNICAL SPECIFICATIONS

| Item | Test Method | Result |
|--|---|---------------------------------------|
| Thermal resistance 1" material, ft ² .F.hr/Btu 1.5" material, ft ² .F.hr/Btu 2" material, ft ² .F.hr/Btu | ASTM C518, 75 F | R-5 R-6 R-8 |
| Surface burning characteristics Flame spread index Smoke developed | ASTM E84 | <25 <50 |
| Density, lb/ft ³ 1" material 1.5" material 2" material | ASTM D 1667 | 1.6 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 Density, optical Ds at 4 minutes Toxicity, ppm CO HBr, HCl, HCN, HF, NOx, So2 | ASTM E662/ ASTM E800 ASTM E662 flaming (non flaming) ASTM E800 (flaming exposure) | 2.5 (0.54) 21 0 |
| Volatile Organic Compound (VOC), ppm | ASTM D5116 (CA1350) | 0 |
| Greenguard® Environmental Institute | | Compliant, CS |

WATER BASED SEALANTS



UL-181B-M
61MF

ALSO



CAULKINGS AND
SEALANTS
SURFACE BURNING
CHARACTERISTICS
51RF

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

- Sprays easily from a variety of equipment
- Tremendous labor savings
- Indoor/Outdoor grade
- For applications up to 15" w.g.
- UL 181B-M listed
- UL 723 classified
- Qualified for LEED® EQ 4.1
- UV, water and mildew resistant
- Permanently flexible
- Excellent adhesion to metal
- Will not drip or sag
- Low shrinkage
- Non-Flammable
- Mild odor
- Conforms to requirements of NFPA 90A and 90B
- Paintable - latex or epoxy
- Manufactured by S.M.W.I.A. local 12

SURFACE BURNING CHARACTERISTICS

USC - Classification

Applied to Inorganic Reinforced Cement Board +

| | |
|-----------------|---|
| FLAME SPREAD | 0 |
| SMOKE DEVELOPED | 5 |

+ - 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 25 sq. ft. per gallon.

CNC - Classification

Applied to Inorganic Reinforced Cement Board +

| | |
|-----------------|---|
| FLAME SPREAD | 0 |
| SMOKE DEVELOPED | 5 |

+ - Tested as applied in two 5.08cm wide strips 20.3cm on center covering 22.2 percent of the test sample area at a coverage rate of 0.6 sq. M/L.

| | |
|---------------------------------|---|
| BASE: | Synthetic latex emulsion |
| COLOR: | Gray |
| TYPE: | Water base |
| WEIGHT: | 11.3 ± .3 lbs per gallon |
| SOLID CONTENTS: | 66% ± 3% |
| VISCOSITY: | 80,000 cP +/- 10,000 cP |
| 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) |
| FLAMMABILITY: | Non-flammable in wet state |
| FLASH POINT: | No flash to boiling |
| WATER RESISTANCE: | Excellent |
| MILDEW RESISTANCE: | Excellent |
| FREEZE THAW STABILITY: | 5 cycles |
| 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) |
| CURED SEALANT: | Tough and permanently flexible |
| PACKAGING: | 5 gallon pail 55 gallon drum |

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



Ideas that work for you every day...

WATER BASED SEALANTS



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



ALSO



CAULKINGS AND
SEALANTS
SURFACE BURNING
CHARACTERISTICS
51RF

- Indoor/outdoor grade
- For applications up to 15" WG
- Low brush drag and spreadability
- Permanently seals metal duct joints
- Highly crack resistant
- Remains flexible
- Excellent UV, water, and mold resistance
- Paintable with latex or epoxy based paint
- Will not drip or sag
- Mild odor
- UL 181B-M Listed
- UL 723 Classified
- LEED® Compliant
- Conforms to requirements of NFPA 90A and 90B
- Manufactured by S.M.W.I.A. Local 12
- Comes in fiber and non-fiber

SURFACE BURNING CHARACTERISTICS

USC - Classification

Applied to Inorganic Reinforced Cement Board +

| | |
|-----------------|---|
| FLAME SPREAD | 0 |
| SMOKE DEVELOPED | 5 |

+ - 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 25 sq. ft. per gallon.

CNC - Classification

Applied to Inorganic Reinforced Cement Board +

| | |
|-----------------|---|
| FLAME SPREAD | 0 |
| SMOKE DEVELOPED | 5 |

+ - Tested as applied in two 5.08cm wide strips 20.3cm on center covering 22.2 percent of the test sample area at a coverage rate of 0.6 sq. M/L.

| | |
|---------------------------------|--|
| BASE: | Synthetic latex emulsion |
| COLOR: | Gray |
| TYPE: | Water Base |
| WEIGHT: | 11.3 ± .3 lbs per gallon |
| SOLID CONTENTS: | 66% ± 3% |
| VISCOSITY: | 350,000 c.p.s. |
| 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 |
| WATER RESISTANCE: | Excellent |
| MILDEW RESISTANCE: | Excellent |
| FREEZE THAW STABILITY: | 5 cycles |
| 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) |
| CURED SEALANT: | Tough and permanently flexible |
| PACKAGING: | 1/12 gallon tubes (25 tubes/case) 1 gallon pail (4 pails/case) 5 gallon pail 54 gallon drum |

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



Ideas that work for you every day...

WATER BASED SEALANTS



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



ALSO



CAULKINGS AND
SEALANTS
SURFACE BURNING
CHARACTERISTICS
51RF

- Indoor/outdoor grade
- For applications up to 15" WG
- Low brush drag and spreadability
- Permanently seals metal duct joints
- Highly crack resistant
- Remains flexible
- Excellent UV, water, and mold resistance
- Paintable with latex or epoxy based paint
- Will not drip or sag
- Mild odor
- UL 181B-M Listed
- UL 723 Classified
- LEED® Compliant
- Conforms to requirements of NFPA 90A and 90B
- Manufactured by S.M.W.I.A. Local 12
- Comes in fiber and non-fiber

SURFACE BURNING CHARACTERISTICS

USC - Classification Applied to Inorganic Reinforced Cement Board +

| | |
|-----------------|---|
| FLAME SPREAD | 5 |
| SMOKE DEVELOPED | 5 |

+ - Tested as applied in two 2 in. wide strips 8 in. on center covering 16 percent of the test sample area at a coverage rate of 25 sq ft per gal.

CNC - Classification Applied to Inorganic Reinforced Cement Board +

| | |
|-----------------|---|
| FLAME SPREAD | 5 |
| SMOKE DEVELOPED | 5 |

+ - Tested as applied in two 5.08 cm wide strips 20.32 cm on center covering 16 percent of the test sample area at a coverage rate of 0.6 sq. m/l.

| | |
|---------------------------------|--|
| BASE: | Synthetic latex emulsion with fiber reinforcement |
| COLOR: | Gray |
| TYPE: | Water Base |
| WEIGHT: | 11.3 ± .3 lbs per gallon |
| SOLID CONTENTS: | 66% ± 3% |
| VISCOSITY: | 350,000 c.p.s. |
| 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 |
| WATER RESISTANCE: | Excellent |
| MILDEW RESISTANCE: | Excellent |
| FREEZE THAW STABILITY: | 5 cycles |
| 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) |
| CURED SEALANT: | Tough and permanently flexible |
| PACKAGING: | 1/12 gallon tubes (25 tubes/case) 1 gallon pail (4 pails/case) 5 gallon pail 54 gallon drum |

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



Ideas that work for you every day...

WATER BASED SEALANTS

EVERseal

EVERseal is a smooth economy grade water-based duct sealant.



ALSO



CAULKINGS AND
SEALANTS
SURFACE BURNING
CHARACTERISTICS
51RF

- Permanently seals metal duct joints
- Indoor and outdoor use
- For applications up to 10" W.G.
- UL 181B-M Listed
- UL 723 Classified
- LEED® Compliant
- Remains flexible
- Superior adhesion to metal
- Very good UV, water, and mold resistance
- Manufactured by S.M.W.I.A. Local 12
- Paintable with latex epoxy based paint

SURFACE BURNING CHARACTERISTICS

USC - Classification Applied to Inorganic Reinforced Cement Board ±

| | |
|-----------------|---|
| FLAME SPREAD | 0 |
| SMOKE DEVELOPED | 5 |

+ - Tested as applied in one 2 in. wide strip covering 11 percent of the test sample area at a coverage rate of 25 sq. ft. per gal.

CNC - Classification Applied to Inorganic Reinforced Cement Board ±

| | |
|-----------------|---|
| FLAME SPREAD | 5 |
| SMOKE DEVELOPED | 5 |

+ - Tested as applied in two 50.8 mm wide strips 203.2 mm OC and covering 22.2 percent of the exposed test sample area at a coverage rate of 0.6 sq m/l.

| | |
|---------------------------------|--|
| BASE: | Synthetic latex emulsion |
| COLOR: | Gray |
| TYPE: | Water base |
| WEIGHT: | 11.3 ± .3 lbs per gallon |
| SOLID CONTENTS: | 62% ± -2% |
| VISCOSITY: | 450,000 c.p.s. |
| 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 |
| MILDEW RESISTANCE: | Excellent |
| FREEZE THAW STABILITY: | 5 cycles |
| 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) |
| CURED SEALANT: | Tough and permanently flexible |
| PACKAGING: | 1/12 gallon tubes (25 tubes/case) 1 gallon pail (4 pails/case) 5 gallon pail 54 gallon drum |

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



Ideas that work for you every day...

WATER BASED SEALANTS

EZ-SEAL™

EZ-Seal is an economy grade water-based duct sealant with fiber reinforcement.

- UL Listed and UL Classified
- Low VOC
- LEED® Compliant
- Indoor and Outdoor Use
- UV, Water and Mildew Resistant
- Will Not Drip or Sag
- Permanently Flexible
- Excellent Adhesion to Metal
- Low Shrinkage
- Mild Odor
- Paintable: Latex or Epoxy Paint
- Non-Flammable in wet state
- Conforms to requirements of NFPA 90A and 90B
- Union-Made in the USA!



ALSO



CAULKINGS AND
SEALANTS
SURFACE BURNING
CHARACTERISTICS
51RF

SURFACE BURNING CHARACTERISTICS

USC - Classification

Applied to Inorganic Reinforced Cement Board +

| | |
|-----------------|---|
| FLAME SPREAD | 5 |
| SMOKE DEVELOPED | 0 |

+ - Tested as applied in two 2 in. wide strips 8 in. OC and covering 22.2 percent of the exposed test sample area at a coverage rate of 25 sq ft./gal. Flash point of finished Caulking and Sealant, closed cup: No flash to boiling

CNC - Classification

Applied to Inorganic Reinforced Cement Board +

| | |
|-----------------|---|
| FLAME SPREAD | 5 |
| SMOKE DEVELOPED | 0 |

+ - Tested as applied in two 50.8 mm wide strips 203.2 mm OC and covering 22.2 percent of the exposed test sample area at a coverage rate of 0.6 sq m/l. Flash point of finished Caulking and Sealant, closed cup: No flash to boiling

| | |
|---------------------------------|--|
| BASE: | Synthetic latex emulsion with fiber reinforcement |
| COLOR: | Gray |
| TYPE: | Water base |
| WEIGHT: | 11.4 ± .3 lbs per gallon |
| SOLID CONTENTS: | 63% ± 3% |
| VISCOSITY: | 400,000 c.p.s. |
| 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) |
| FLAMMABILITY | Non-flammable in both wet and dry state |
| FLASH POINT: | No flash to boiling |
| FREEZE THAW STABILITY: | 5 cycles |
| COVERAGE: | 25 sq. ft./gal. at 1/16" 50 sq. ft./gal. at 1/32" 100 sq. ft./gal. at 1/64" |
| ODOR: | Mild (wet) None (dry) |
| SHELF LIFE: | 1 year (unopened container) |
| CURED SEALANT: | Tough and flexible |
| PACKAGING: | 1/12 gallon tubes (25 tubes/case) 1 gallon pail (4 pails/case) 5 gallon pail 55 gallon drum |

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



Ideas that work for you every day...

SOLVseal™



| CAULKING AND SEALANTS SURFACE BURNING CHARACTERISTICS + 51RF | | | |
|--|-----------|---|----------|
| USC Classification | | CNC Classification | |
| Applied to Inorganic Reinforced Cement Board | | Applied to Inorganic Reinforced Cement Board | |
| FLAME SPREAD: | 10 | FLAME SPREAD: | 5 |
| SMOKE DEVELOPED: | 0 | SMOKE DEVELOPED: | 0 |
| + - Tested as applied in 3/8 in. 12 in. on center at a rate of 30 ft ² /gal. Flash point to finished adhesive (closed cup) less than -20°C. | | + - Tested as applied in .95 cm .3 m on center at a rate of 2.5 m ² /L. Flash point to finished adhesive (closed cup) less than -20°C. | |

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 unequalled 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 and outdoor use
- Superior sealing strength
- Conforms to the requirements of NFPA 90A and 90B
- Mildew resistant
- USDA Chemically Acceptable

TECHNICAL INFORMATION

| | | | |
|---------------------------------|--|----------------------------------|---|
| PRESSURE RATING: | 15" w.g. | DRY TO TOUCH: | 15 min. (approximate) |
| BASE: | Synthetic Rubber | CURE TIME: | 24 to 48 hrs+ (depending on humidity, application, and temperature) |
| COLOR: | Gray | FLAMMABILITY: | (Wet) Extremely flammable Flash point -4 °F (Dry) See UL Classification |
| TYPE: | Solvent Base | WATER RESISTANCE: | Excellent |
| WEIGHT: | 9 lbs per gallon | MILDEW RESISTANCE: | Excellent |
| SOLID CONTENTS: | 51% | COVERAGE: | 25 sq. ft./gal at 1/16" 12.5 sq. ft./gal. at 1/8" |
| VISCOSITY: | 150,000 cPs | ODOR: | Mild solvent (wet) None (dry) |
| APPLICATION TEMPERATURE: | 0 °F to 110 °F | SHELF LIFE: | 1 year (unopened container) |
| SERVICE TEMPERATURE | - 20°F to 190°F | CURED SEALANT: | Tough and permanently flexible |
| STORAGE: | Room temperature (with cross ventilation) | DOT SHIPPING INFORMATION: | Flammable Liquid, N.O.S., 3 UN 1993, PG III. (Hexane CAS 110-54-3) |

PACKAGING INFORMATION

| ITEM NO. | SIZE | PACKED | WEIGHT |
|-------------|-------------------|-----------------|--------------|
| SOLVSEALT11 | 1/12 gallon tubes | (24) tubes/case | 21 lbs./case |
| SOLVSEALT29 | 1 quart tube | (10) tubes/case | 23 lbs./case |
| SOLVSEAL1 | 1 gallon pail | (4) gal./case | 39 lbs./case |
| SOLVSEAL5 | 5 gallon pail | (1) pail | 50 lbs./pail |

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



Ideas that work for you every day...

DUCT LINER ADHESIVE

QuadGrip™

SPRAY / DRIP / ROTO-BOND / MANUAL



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



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

| ADHESIVES SURFACE BURNING CHARACTERISTICS + 52XF USC (CNC) | |
|--|-------|
| APPLIED TO INORGANIC REINFORCED CEMENT BOARD | |
| FLAME SPREAD: | 0 (0) |
| SMOKE DEVELOPED: | 0 (0) |
| + - 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 |
| COLOR: | White |
| TYPE: | Water Base |
| 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 - 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 500 sg. ft./gal, depending on application technique |
| ODOR: | Mild (wet) None (dry) |
| SHELF LIFE: | 6 Months (unopened container) |
| PACKAGING: | QUADGRIP1: 1 Gallon Pail (4 Pails/Case) QUADGRIP5: 5 Gallon Pail QUADGRIP54: 54 Gallon Drum |

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



Ideas that work for you every day...

PROtack™ / PROtack™ 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

| ADHESIVES SURFACE BURNING CHARACTERISTICS + 52XF | |
|--|-------|
| USC (CNC) | |
| APPLIED TO INORGANIC REINFORCED CEMENT BOARD | |
| FLAME SPREAD: | 0 (0) |
| SMOKE DEVELOPED: | 0 (0) |
| + - 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 |
| COLOR: | Black (Wet: Gray; Dry: Black) White (Wet: White; Dry: Clear) |
| TYPE: | Water |
| WEIGHT PER GALLON: | 9.5 ± 0.5 lbs. |
| SOLIDS: | 44 ± 2% |
| VISCOSITY: | PROtack: 6,500 cPs +/- 1,000 cPs PROtackHV: 15,000 cPs +/- 2,000 cPs |
| APPLICATION TEMPERATURE: | 40°F to 90°F |
| SERVICE TEMPERATURE: | 0°F to 200°F |
| STORAGE TEMPERATURE: | 40°F to 90°F |
| DRY TIME: | 10-20 minutes, depending on temperature, humidity, and application thickness |
| FLAMMABILITY: | None |
| FLASH POINT: | No flash to boiling |
| COVERAGE: | Approximately 500 sq. ft./gal, depending on application technique |
| FREEZE THAW STABILITY: | 5 cycles |
| SHELF LIFE: | 1 year (unopened 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 MSDS & Spec Sheet Before Using Product

Ideas that work for you every day...

QUICK-STICK HS™

Solvent-Based Spray Adhesive



SPECIAL CHARACTERISTICS

- Extremely quick tack
- Non-flammable
- Pressure sensitive
- High solids content
- Easy application
- Strong permanent bond
- Exceptional coverage
- LEED® Compliant

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 Ductmate 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.

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.

TECHNICAL INFORMATION

| | |
|-------------------------------------|---|
| BASE: | Solvent |
| SOLVENT: | Methylene Chloride |
| COLOR: | Green |
| SOLIDS: | 32 - 34% |
| APPLICATION TEMP: | 60° - 90° F |
| FLAMMABILITY: | Non-flammable wet and dry |
| COVERAGE: | 375 lb: 37,500 sq. ft. - 43,125 sq. ft. 40 lb.: 4,000 sq. ft. - 4,600 sq. ft. 12 lb.: 1,200 sq. ft. - 1,385 sq. ft. |
| BONDING TIME: | 3 to 5 minutes |
| LIQUID SPEC. GRAVITY: | 1.19 +/- 0.02 |
| SHEAR ADHESION: | >100 psi |
| SHEAR ADHESION FAILURE TEMP: | 200° F |
| SHELF LIFE: | 1 year |

PACKAGING INFORMATION

| ITEM NO. | DESCRIPTION | QTY/WEIGHTS |
|-----------------|-------------|---------------|
| QUICKSTICKHS12 | 12 lbs. | (1) @ 12 lbs |
| QUICKSTICKHS40 | 40 lbs. | (1) @ 40 lbs |
| QUICKSTICKHS375 | 375 lbs. | (1) @ 375 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 MSDS Sheet Before Using Product

QUICK-STICK™

Solvent-Based Spray Adhesive

QUICK-STICK IS A PREMIUM QUALITY, COMPLETELY NON-FLAMMABLE, PRESSURE SENSITIVE ADHESIVE SPECIALLY FORMULATED FOR A QUICK PERMANENT TACK



NONFLAMMABLE
MEETS DOT 39 NRC
REGULATIONS

PERMANENT OR TEMPORARY
BONDING

Apply using industry approved spray equipment 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°F - 90°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.
3. Hold spray gun 8-10 inches from surface to be sprayed.
4. Avoid buildup of adhesive or bubbles. Edges of spray pattern should overlap giving consistent coverage over surface.

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 12, 40, and 375 lb. cylinders
- LEED® Compliant

PHYSICAL PROPERTIES & TECHNICAL INFORMATION

BASE: Solvent

COLOR: Green

SOLVENT: Methylene Chloride

APPLICATION TEMPERATURE: 60°F to 90°F

SERVICE TEMPERATURE: -30°F to 160°F

STORAGE TEMPERATURE: Below 120°F

FREEZE THAW: Does not apply

SOLIDS: 25%

BONDING TIME: 1 - 10 minutes (Depending on application rate)

FLAMMABILITY: Non-flammable wet and dry

FLASH POINT: None

COVERAGE: 375 lb.: 37,500 sq. ft. - 43,125 sq. ft.

40 lb.: 4,000 sq. ft. - 4,600 sq. ft.

12 lb.: 1,200 sq. ft. - 1,385 sq. ft.

(Depending on temperature, humidity, and thickness)

SHELF LIFE: 1 year

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 Ductmate 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.

PACKAGING AND ORDERING INFORMATION

| ITEM NO. | DESCRIPTION | QTY/WEIGHTS |
|---------------|-----------------------|----------------|
| QUICKSTICK12 | 12 lbs. Cylinder | (1) @ 12 lbs. |
| QUICKSTICK40 | 40 lbs. Cylinder | (1) @ 40 lbs. |
| QUICKSTICK375 | 375 lbs. Cylinder | (1) @ 375 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. |

QUICK-STICK™

Aerosol Liner Adhesive

QUICK-STICK is a solvent based fiberglass duct liner adhesive. It provides instant adhesion to most metal surfaces, allowing for quick installation or touch-ups of duct liners. Do not use or store near flame or any source of heat. Can be applied to dirt free metal, cloth or duct board surfaces. Apply per industry standards.

- Premium quality
- Excellent workability
- High strength and durability
- Instant adhesion
- Water resistant
- Permanently bonds fabric
- Exceptional coverage
- Good dry time
- Convenient aerosol can
- LEED® Compliant

TECHNICAL INFORMATION

| | |
|---------------|----------------------|
| BASE: | Synthetic Rubber |
| COLOR: | White / Straw |
| WEIGHT/CAN: | 11.75 |
| SOLIDS: | 18% |
| Service Temp. | 0°F - 165°F |
| FLAMMABILITY: | Extremely Flammable |
| SHELF LIFE: | Approximately 1 year |



PACKAGING & ORDERING INFORMATION

| PART NUMBER | DESCRIPTION | QUANTITY / WEIGHT |
|---------------|-----------------------------|---------------------------------------|
| QUICKSTICKCAN | Aerosol Duct Liner Adhesive | (12) 11.75 oz. cans/case @ 15lbs/case |

EZ- SPRAYER



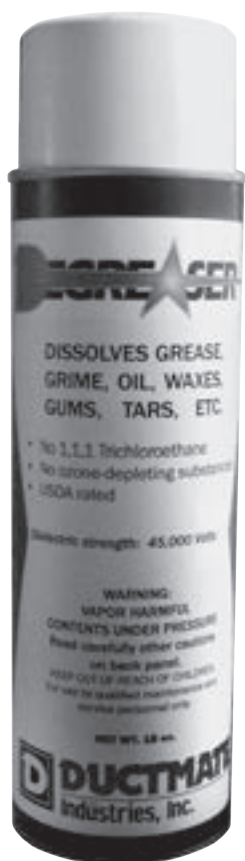
- Easy, economical application from drum or pail
- Non-corrosive parts for compatibility with water-based spray adhesives
- Comes with hoses and gun
- Includes fluid and air regulators
- Easy cleanup using Ductmate Degreaser!

ORDERING & PACKAGING INFORMATION

| Part No. | Description | Quantity |
|-----------|-------------------------------------|----------|
| EZSPRAYER | Complete Ductmate EZ-Sprayer System | (1) |



Dissolves adhesives, grease, grime, oil, waxes, gums, tars, etc.



- Removes dried adhesive
- No 1,1,1 Trichloroethane
- No ozone-depleting substances
- USDA Rated

DESCRIPTION:

Ductmate Degreaser removes adhesive residue and similar grime from any surface. The formula is noncorrosive to metals, has low toxicity, and is not a fire hazard. Ductmate Degreaser dries fast and clean with no residue.

BASIC USE:

Dissolves adhesive buildup inside of Ductmate Quickstick spray pumps, hoses, tips, and nozzles. Spray pump parts liberally and wipe clean with a cloth.

APPEARANCE:

Flowable liquid

INCOMPATIBILITY:

Avoid contact with strong oxidizing agents, strong alkalis, and aluminum.

PACKAGING:

Available in 18 oz. aerosol cans, and 15 lb. cylinders.

ORDERING & PACKAGING INFORMATION

| Part No. | Description | Quantity |
|--------------|-----------------|------------------|
| DEGREASERCAN | Aerosol Can | (12) cans / case |
| DEGREASER15 | 15 lb. Cylinder | (1) / case |

SUPER LINER SEAL™

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



- Flame, moisture, & mold resistant
- Exceptional coverage
- Good dry time
- Water based
- Durable finish
- Low VOC
- LEED® Compliant
- Specifically designed anti-microbial agents are added to resist mold growth.

BASIC USE:

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

CLEANING:

Clean tools with soap and water or mineral spirits.

APPLICATION:

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

TECHNICAL INFORMATION

| | |
|--------------------|---|
| BASE: | Synthetic Latex |
| COLOR: | Gray (dries black) |
| SOLVENT: | Water |
| WEIGHT per GALLON: | 9.5 ± .2% |
| APPLICATION TEMP.: | 45°F to 90°F |
| SOLIDS: | 44± 2% |
| VISCOSITY: | 2,500 cPs |
| STORAGE TEMP.: | 40°F to 90°F |
| DRY TIME: | 10 - 20 minutes, depending on temperature, humidity, and application thickness |
| FLAMMABILITY: | None |
| FLASH POINT: | No Flash to Boiling |
| COVERAGE: | Approximately 500 sq.ft. per gal. (13 sq. m per liter) depending on application technique |
| SHELF LIFE: | (Unopened containers) 1 year |



UNDERWRITERS LABORATORIES INC.
CLASSIFIED
ADHESIVE
SURFACE BURNING CHARACTERISTICS
52XF

S.L.S. Adhesive applied to Inorganic Reinforced Board
Flame Spread 0 Smoke Developed 0
Tested as applied on two 2" wide strips 8" on center (coverage 16 percent of the exposed test sample area) at a coverage rate of 400 sq.ft. per gal. Flash point of the finished sealant, closed cup. No flash to boiling.

ORDERING & PACKAGING INFORMATION

| ITEM NO. | DESCRIPTION | QUANTITY | WEIGHTS |
|----------|---------------|---------------|--------------|
| SLS5 | S.L.S. 5-GAL | 1-5 GAL PAIL | 45 LBS/PAIL |
| SLS54 | S.L.S. 54-GAL | 1-54 GAL DRUM | 494 LBS/DRUM |

LAG-IT™

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



- LEED® Compliant
- 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 |
| 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: | 50 sq. ft. - 200 sq. ft. depending on application rate |



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.

PACKAGING & ORDERING INFORMATION

| 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 |

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.



UL723 (ASTM E-84-80) Test Data:

Flame Spread: 5
Fuel Contribution: 0
Smoke Density: 0

TYPICAL PHYSICAL PROPERTIES AND TECHNICAL INFORMATION

| | |
|--------------------------|--|
| Solids: | 90% |
| Color: | Off White |
| Wt. / Gal: | 12.3 Pounds \pm .3 |
| Flash Pt.: | 128°F - Penske Martens CC (ASTM E-134) |
| Life Expectancy: | 20 yrs, minimum |
| Service Temp: | -65°F to +200°F |
| Oil Migration: | None (applied to galvanized steel and subjected to a temperature of 158°F for one week) |
| Flexibility: | No cracks when bent around a 1/4" mandrel after being subjected to 3 weeks at 75°F, 24 weeks at -40°F and 3 weeks at 158°F |
| Adhesion: | Excellent to most non-porous surfaces |
| Application Consistency: | Hand or power pump equipment |
| Specifications: | AAMA 802.2; NAAMM SS-Ia-68 |

ORDERING INFORMATION

| PART # | PACKAGING | Shipping Weight |
|-------------|---------------------|-----------------|
| 5511 M-55 W | 55 gal (208 liters) | 735 lbs/drum |
| 5511M5 | 5 gal (19 liters) | 75 lbs/drum |

Gaskets

DM440™ BUTYL GASKET



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

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:

| | |
|-----------------------|---|
| Solids: | 99.8% |
| Color: | Off White |
| Density: | 1.45 gm/cc \pm .05 |
| Flash Point: | 400 °F - Penske Martens CC (ASTM E-134) |
| Shelf Life: | 1 yr. minimum |
| Life Expectancy: | 20 yrs. minimum |
| Service Temperature: | -65 °F to 220 °F |
| Oil Migration: | None (applied to galvanized steel and subjected to a temperature of 158 °F for one week) |
| Flexibility: | No cracks when bent around a 1/4" mandrel after being subjected to 3 wks at 75 °F, 24 wks at -40 °F and 3 wks at 158 °F |
| Adhesion: | Excellent to most non-porous surfaces |
| Specifications: | MIL-C 0 18969 B, Type 2, Class B |
| Elongation (%min): | Over 300% |
| UL 723 (ASTM E-84-84) | |
| Test Data: | Flame Spread: 10 Fuel Contribution: 0 Smoke Density: 10 |
| VOC Content: | 0 g/L Meets LEED® E.Q. 4.1 |

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): | -40 °F |
| High continuous: | 200 °F |
| High intermittent: | 250 °F |
| UL 94 HF-1-Passes | |

ORDERING INFORMATION

| PART # | PACKAGING |
|--|--|
| NEO 5/16 X 3/4 (RECOMMENDED FOR SPIRALMATE, OVALMATE, & 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 | (16) 50 ft rolls 800 ft/case @ 21 lbs/case |

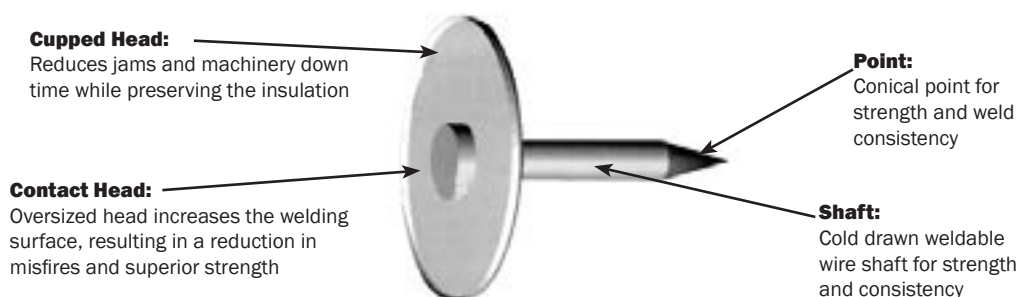
ORDERING INFORMATION

| 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 |

SPECIALTY GASKETS

- F.D.A. GRADE FOR FOOD PROCESSING SYSTEMS
 - POLYETHYLENE FOR ABRASIVE MATERIALS
 - SILICONE, FIBERGLASS & CERAMIC FIBER ROPE FOR HIGH-TEMP APPLICATIONS
- MINIMUM QUANTITIES & EXTRA LEAD TIME NEEDED.
CONSULT FACTORY FOR MORE INFORMATION.

WELD PINS



FEATURES

- Can be used with multi-head, automatic-feed, single-head, 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

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

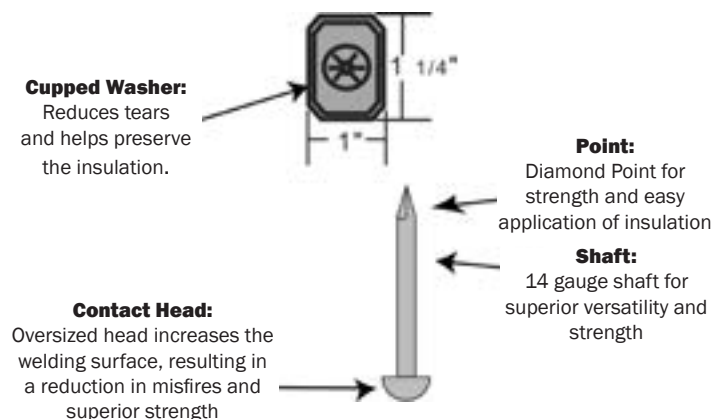
All equipment should be well maintained and operated within the machines's specifications. The first time Ductmate weld pins are used on a new machine, it is recommended that the user examine the first fifty welds for contact and strength. Adjustments may need to be made to the machine's electrical current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

| Fastener Sz. | 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 |

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 |

SPOTTER PINS



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

- Nail is manufactured from 14 gauge for excellent strength
- Nail is manufactured with a diamond point for easy application of insulation
- Strong and consistent washers sold separately
- Washer is cupped to reduce tears in insulation
- Washer is constructed from 28 gauge for ease of application
- Available in a variety of lengths
- Galvanized coating is standard for corrosion resistance
- Manufactured in the USA

PACKAGING & ORDERING INFORMATION

| Part No. | Description | Packaging |
|-------------|--------------------|--------------|
| SWP.75GA15M | .75" Spotter Pin | 15,000 / Box |
| SWP1.25GA1M | 1.25" Spotter Pin | 1,000 / Box |
| SWP1.5GA1M | 1.5" Spotter Pin | 1,000 / Box |
| SWP1.5GA15M | 1.5" Spotter Pin | 15,000 / Box |
| SWP2GA1M | 2" Spotter Pin | 1,000 / Box |
| SWP2GA15M | 2" Spotter Pin | 15,000 / Box |
| SWP2.5GA1M | 2.5" Spotter Pin | 1,000 / Box |
| SWP2.5GA15M | 2.5" Spotter Pin | 15,000 / Box |
| SWPS125GA | 1" x 1 1/4" Washer | 1,000 / Box |



HiTex™

self-drilling fasteners

NEW

Part Number: WSDS31034

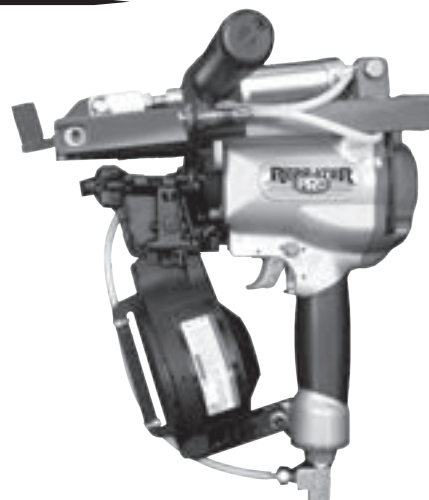
Box Quantity: 5000

- 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



Advantages of the new Repeater PRO:

- Lightweight—drive more fasteners without fatigue!
- Sequential Trigger Mechanism—Ensures accurate, safe fastener placement
- On-Tool Regulator—Adjust driving pressure with a dial on tool...
Set the pressure on the air line only once!



Collated Fasteners for the Repeater PRO:

Helical grip-shank fasteners easily pierce and engage multiple sheets of metal.

- Part No. RPF3000
- Pins per Roll: 200
- Rolls per Case: 15
- Pins per Case: 3,000

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

| PART# | DESCRIPTION | PACKAGING |
|------------|---------------------------------|-----------|
| SDS31034MB | 10-16 X 3/4 #3 SELF DRILL SCREW | 1,000/BOX |



Self-Piercing (Slotted hex Washer) with Serrations

| PART# | DESCRIPTION | PACKAGING |
|----------|--------------------------------|-----------|
| SPS812MB | 8-15 X 1/2 SELF PIERCING SCREW | 1,000/BOX |

DUCTMATE®

CERTIFIED QUALITY ASSURANCE

DUCTMATE REPUTATION

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.

DETAILED PRODUCT INFORMATION

All product specification sheets, material safety data sheets, and submittal packets are available on our website. Products should be used only after consulting the product specification and MSDS. To learn more about any of the products in this catalog, visit us online: www.ductmate.com.

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.

CHART LEGEND

- Finished product is normally in stock
 - Made to order—raw material is normally stocked
 - Made to order—minimum quantity & lead time needed
 - x Not available
 - * PVC Coated sandwich access doors are available in uninsulated models only. 24" x 18" sandwich access doors are only available in galvanized and 316 stainless steel.
- (Chart is subject to change without notice.)

| Material Availability Chart | | | | | | | | |
|-----------------------------|------------|------------|--------------|------------|---------------|---------------|------------|----------|
| Products | Galvanized | Black Iron | Galvannealed | PVC Coated | 316 Stainless | 304 Stainless | Aluminized | Aluminum |
| Ductmate 25® Flange | ● | x | x | x | x | x | x | x |
| Ductmate 35® Flange | ● | ■ | ● | ○ | ● | ● | ○ | ● |
| Ductmate 45® Flange | ● | x | x | x | ● | x | x | x |
| W.D.C.I. "J" Flange | ● | x | ■ | ■ | ○ | ● | ○ | ● |
| W.D.C.I. "H" Flange | ● | x | x | x | x | x | x | x |
| W.D.C.I. "J" Corner | ● | x | ○ | x | ○ | ● | ○ | ● |
| W.D.C.I. "H" Corner | ● | x | ■ | x | x | x | x | x |
| D C IIIA™ Corners | ● | ○ | ○ | ○ | ● | ● | ● | x |
| D C IIIB™ Corners | ● | ■ | ● | ■ | ○ | ● | ● | x |
| D C 45™ Corners | ● | x | x | x | ● | x | x | x |
| D C 35™ Corners | ● | ■ | x | x | ● | ● | ○ | ● |
| D C 25™ Corners | ● | x | x | x | x | x | x | x |
| Ductmate TDC Corners | ● | ■ | ○ | ■ | ○ | ● | ● | ● |
| Ductmate TDF Corners | ● | ■ | ○ | ■ | ○ | ● | x | ● |
| W.D.C.I. TDC Corners | ● | x | x | x | x | ○ | ○ | ○ |
| W.D.C.I. TDF Corners | ● | x | ○ | x | x | ○ | ○ | ○ |
| Ductmate Cleat | ● | ■ | ○ | ■ | ○ | ● | ● | x |
| TDC Cleat | ● | x | ■ | ■ | ● | x | ■ | x |
| TDF Cleat | ● | x | ■ | ■ | ■ | ● | ■ | x |
| Bullnosing | ● | x | x | ■ | ■ | x | ■ | ■ |
| 1/2" Standing S | ● | x | x | x | x | x | x | x |
| 1" Standing S | ● | x | ○ | x | ■ | ● | ■ | ● |
| 1 5/8" Standing S | ● | x | ■ | x | ■ | ■ | ■ | ■ |
| Hemmed S | ● | x | ■ | ■ | ■ | ● | ■ | ● |
| Standing Drive Slip | ● | x | ■ | ■ | x | x | ■ | ■ |
| Drive Slip | ● | x | ■ | ■ | ■ | ● | ■ | ● |
| Spiralmate® | ● | x | ○ | ○ | ○ | ○ | ○ | x |
| ECONOflange™ Round | ● | x | ○ | ○ | ○ | ○ | ○ | ○ |
| ECONOflange™ Oval | ● | x | ○ | ○ | ○ | ○ | ○ | ○ |
| QuickSleeve™ | ● | x | ■ | x | ○ | ○ | ■ | x |
| PROflex™ | ● | x | ■ | ■ | ○ | ○ | ○ | ○ |
| Access Doors Rectangular * | ● | ○ | ■ | ■ | ○ | ○ | ○ | x |
| Access Doors Framed | ● | x | ○ | x | ○ | ○ | x | ○ |
| Access Doors Round * | ● | ○ | ○ | ■ | ○ | ○ | ○ | x |
| Ultimate Door™ | x | ● | x | x | x | ■ | x | x |
| Trapeze Hanger | ● | x | ■ | x | x | ■ | ■ | x |
| "Z" Bar | ■ | x | x | x | x | x | x | x |
| Angle Iron | ● | x | x | x | x | x | x | x |
| PROrail™ | ● | x | ■ | ■ | ■ | ● | ○ | ● |
| Turning Vane | ● | x | ■ | ■ | ■ | ● | ■ | ● |
| MONOrail™ | ● | x | ■ | ■ | ○ | ○ | ■ | ■ |
| ECONOrail™ | ● | x | ■ | ■ | ■ | ○ | ■ | ■ |
| Acoustical Vane | ● | x | x | x | x | ○ | x | x |
| Versa-Cleat™ | ● | x | ○ | x | ● | x | ● | x |

The Ductmate® Advantage



DUCTMATE SOLID TECHNICAL SUPPORT

Whenever you have a difficult or critical HVAC project, Ductmate's professional support team is available to you. 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.



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!



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. 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 www.ductmate.com.

Do the math: The reasons to use GreenSeam+ add up fast.

Material Cost

Sealant applied: 1/16" 2" wide band

8" diameter 5' length

Sealant cost \$12.00/gallon

Total material cost \$.56

Labor Cost

In time studies, it took 2 1/2 minutes of labor
to seal a single 8" 5' piece of pipe.

Unless you're building the world's smallest duct system, the costs associated with sealing ductwork on site add up fast – and so do all the reasons to use Ductmate's GreenSeam+ snap lock pipe and GreenSeam Sealed Fittings. With its factory-applied gasket, GreenSeam+ pipe and GreenSeam Fittings give you a SMACNA Class A Seal just by snapping the pieces together. That saves you tape or sealant costs, labor costs and a lot of headaches.

To find out more, just scan
the code below. Or go to
<http://qrs.lyjd3ey5v>



ductmate.com/sustainability



One Source. *Infinite solutions.*

DUCTMATE®



Rubik's Cube® is not affiliated with Ductmate Industries, Inc.

Sealants & Adhesives

- High quality commercial-grade line up
- Meet the most stringent building codes
- LEED® compliant water-based and solvent-based products
- Exceptional performance for indoor and outdoor applications
- Resistant to water, UV, mold and mildew

PolyArmor™ Duct Liner Insulation

- 1" material has an extremely high thermal resistance of R-5
- 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 of 25% recycled content
- Mildew and mold resistant
- Light weight design with excellent rebound

Fire Dampers & CRDs



- Most orders ship within 24 hours
- Engineered and manufactured for superior quality and consistency
- Available in boots, sleeves, or register boxes
- Meets UL, ARL, and MEA requirements
- Union-made in the USA by Aire Technologies, Inc., a DMI company

GreenSeam® + Pipe & Fittings

- Union made in the USA
- Factory sealed pipe and fittings
- Dampered fittings feature Ductmate's proprietary low-leakage hardware
- HETOs are now available with the tough 3/8" solid rod damper option



*For more information about our complete line of products and services,
call or visit us online.*

1-800-245-3188 | www.ductmate.com