AERODUCT
Ducting Accessories

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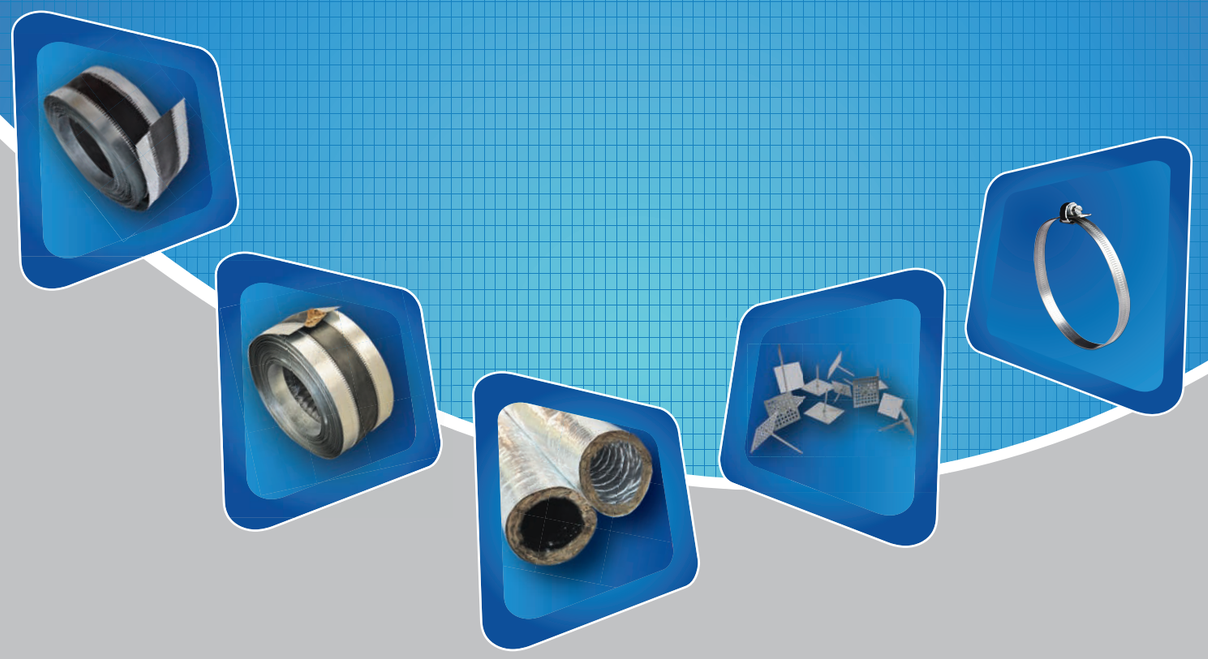
AERODUCT
Ducting Accessories



CLASSIFIED UL

International Associate MEMBER SMACNA

The Most Comprehensive Range of Ducting Accessories

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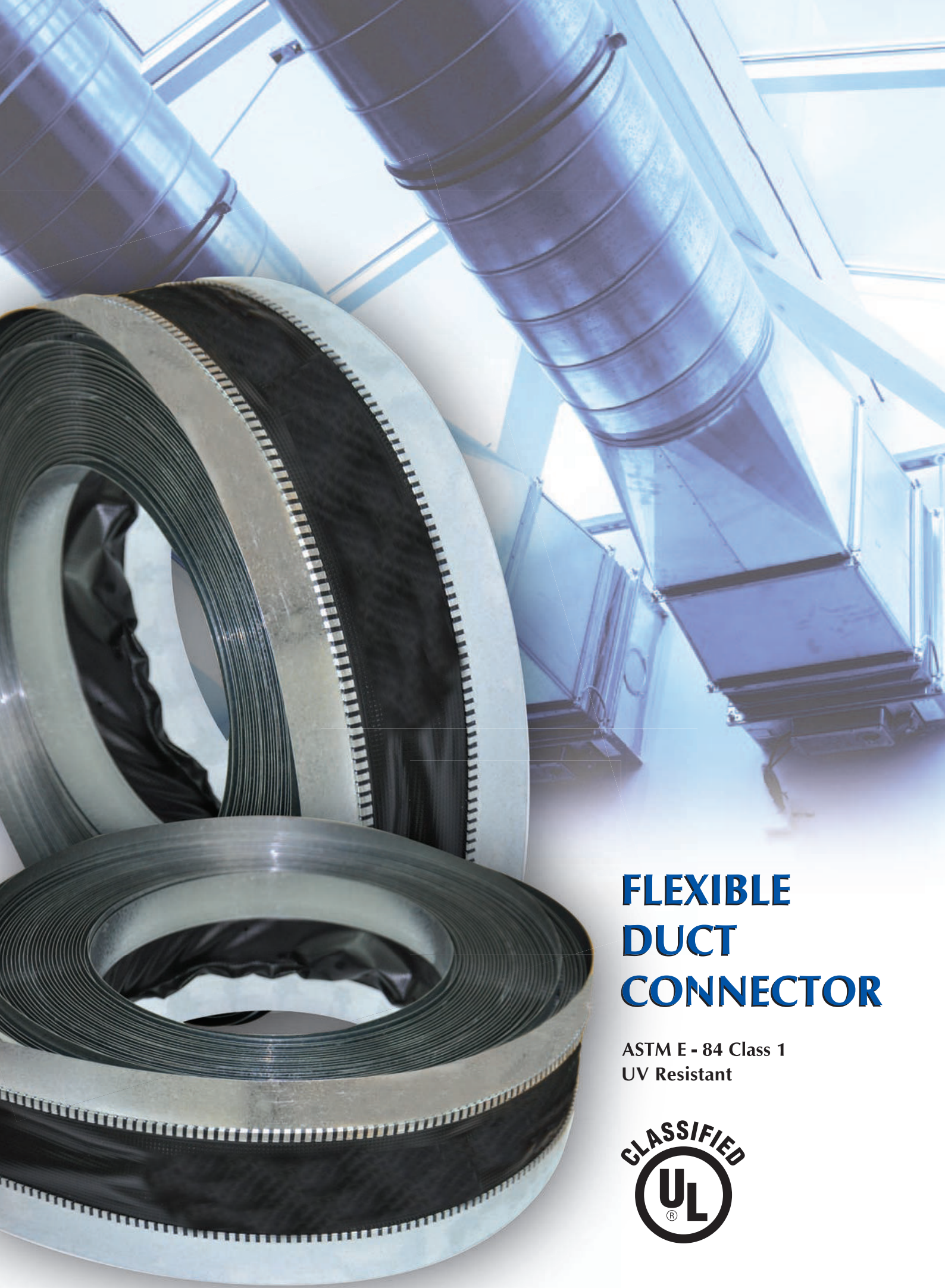


FLEXIBLE DUCT CONNECTOR

ASTM E - 84 Class 1
UV Resistant

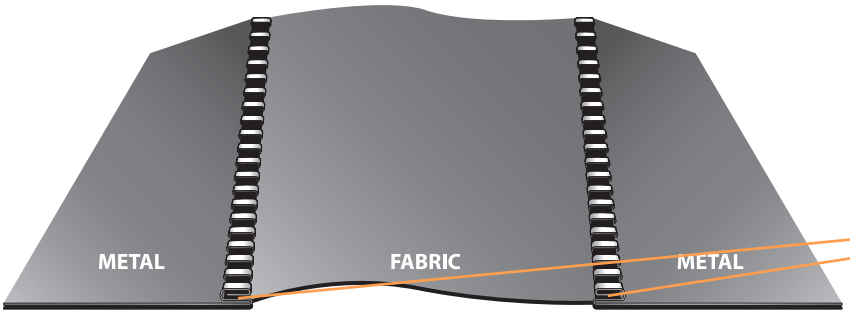
CLASSIFIED UL®

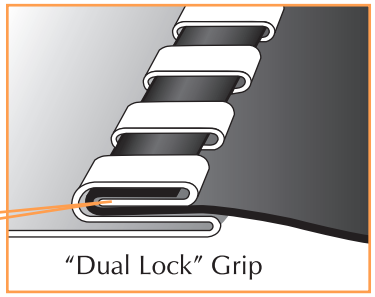
FLEXIBLE DUCT CONNECTOR

All mechanical equipments like Air Handling Units, Fan Coil Units and Ventilation Fans generate noise and vibrations when used. To eliminate the noise and vibrations from transmitting through the air ducts, it is necessary to install an airtight flexible joint between the outlet of the equipment, and the inlet of the ducts.

The joint formed by attaching a layer of fabric to two strips of metal on either side is called a "Flexible Duct Connector".

The most critical part of this Flexible Duct Connector is the fabric which has to be selected to suit the typical requirements of each installation.




"Dual Lock" Grip

Part No.	Size Metal x Fabric x Metal (mm)	Length (Feet)	Metal Gauge	Fabric Technical Specifications	Features
Vinyl					
V-G8-145-100	45 x 75 x 45	100	28	Basic Fabric : Polyester Yarn Coating : Vinyl 28 Gauge Weight : 576 gms /sq.mtr 17oz /sq. yard 24gauge 745 gms /sq.mtr 22oz /sq. yard Tear Strength : 45 x 45 kgs 100 x 100 lbs Tensile Strength : 108 x 100 kgs 240 x 220 lbs Low Temp : -40 deg C/-40 deg F High Temp : +93 deg C/200 deg F Burst Strength : 400psi	Vinyl is the most commonly used fabric for all air duct installations due to its high tear strength, and its high abrasion resistance. Recommended for low to medium pressure ductwork systems. Airtight and waterproof construction.
V-G8-230-100	70 x 100 x 70	100	28		
V-G8-145-150	45 x 75 x 45	150	28		
V-G8-230-150	70 x 100 x 70	150	28		
V-G4-225-100	75 x 75 x 75	100	24		
V-G4-250-100	75 x 100 x 75	100	24		
V-G4-300-100	75 x 150 x 75	100	24		
V-G4-350-100	100 x 150 x 100	100	24		
CLASSIFIED UL					
Neoprene BS					
BSN-G8-145-100	45 x 75 x 45	100	28	Basic Fabric : Woven Fibreglass Coating : Neoprene Weight : 1016 gms /sq.mtr : 30 oz/sq. yard Tear Strength : 5.5 x 5.5 kgs 12 x 12 lbs Tensile Strength : 226 x 204 kgs 500 x 450 lbs Low Temp : -40 deg C (-40 deg F) High Temp : 121 deg C (250 deg F) Burst Strength : 800psi	Neoprene is recommended for use in application where high mechanical strength is required. Neoprene is extremely resistant to most alkalies, gasoline and toxic fumes. Airtight and waterproof construction.
BSN-G8-230-100	70 x 100 x 70	100	28		
BSN-G8-145-150	45 x 75 x 45	150	28		
BSN-G8-230-150	70 x 100 x 70	150	28		
BSN-G4-225-100	75 x 75 x 75	100	24		UV resistant.
BSN-G4-250-100	75 x 100 x 75	100	24		
BSN-G4-300-100	75 x 150 x 75	100	24		
BSN-G4-350-100	100 x 150 x 100	100	24		
CLASSIFIED UL					

Part No.	Size Metal x Fabric x Metal (mm)	Length (Feet)	Metal Gauge	Fabric Technical Specifications	Features
Silicon					
S-G8-145-100	45 x 75 x 45	100	28	Basic Fabric : Woven Fibreglass Coating : Silicon Rubber Weight : 627 gms /sq.mtr : 18.5 oz/sq. yard : 895 gms /sq.mtr : 26 oz/sq. yard Tear Strength : 27 x 22 kgs 60 x 50 lbs Tensile Strength : 81 x 90 kgs 180 x 200 lbs Low Temp : -40 deg C (-40 deg F) High Temp : 300 deg C (573 deg F) Burst Strength : 450psi	Silicon fabric has a special Silicon Rubber coating that has excellent resistance to high and low temperatures. Silicon is extremely resistant to chemicals and ozone, and emits very low smoke when burnt. Recommended for applications where high temperature is of main concern in both indoor and outdoor installations. Airtight and waterproof construction.
S-G8-230-100	70 x 100 x 70	100	28		
S-G4-225-100	75 x 75 x 75	100	24		
S-G4-250-100	75 x 100 x 75	100	24		
S-G4-300-100	75 x 150 x 75	100	24		
S-G4-350-100	100 x 150 x 100	100	24		
Rated for use at 400 deg C for 2 hours CLASSIFIED UL					ASTM E84
Hypalon					
H-G8-145-100	45 x 75 x 45	100	28	Basic Fabric : Woven Fibreglass Coating : Hypalon Weight : 816 gms /sq.mtr : 24 oz/sq. yard Tear Strength : 22 x 18 kgs 48 x 39 lbs Tensile Strength : 102 x 136 kgs 225 x 200 lbs Low Temp : -40 deg C (-40 deg F) High Temp : 121 deg C (250 deg F) Burst Strength : 800psi	Hypalon coated fabric has the best resistance to ozone layer, and is the first choice for outdoor applications. It has excellent resistance to weathering, acids and is recommended for roof top applications. Airtight and waterproof construction.
H-G8-230-100	70 x 100 x 70	100	28		
H-G4-225-100	75 x 75 x 75	100	24		
H-G4-250-100	75 x 100 x 75	100	24		
H-G4-300-100	75 x 150 x 75	100	24		
H-G4-350-100	100 x 150 x 100	100	24		
Polyurethane					
P-G8-145-100	45 x 75 x 45	100	28	Basic Fabric : Woven Fibreglass Coating : Polyurethane Weight : 460 gms /sq.mtr : 13 oz/sq. yard Tear Strength : 16 x 14 kgs 35 x 30 lbs Tensile Strength : 75 x 82 kgs 165 x 180 lbs Low Temp : -40 deg C (-40 deg F) High Temp : 200 deg C (392 deg F) Burst Strength : 400psi	Polyurethane coated fabrics are fragile in construction but have a longer resistance period to high temperatures. Airtight and waterproof construction
P-G8-230-100	70 x 100 x 70	100	28		
P-G4-225-100	75 x 75 x 75	100	24		
P-G4-250-100	75 x 100 x 75	100	24		
P-G4-300-100	75 x 150 x 75	100	24		
P-G4-350-100	100 x 150 x 100	100	24		

FLEXIBLE DUCT CONNECTOR

Part No.	Size Metal x Fabric x Metal (mm)	Length (Feet)	Metal Gauge	Fabric Technical Specifications	Features
Canvas					
C-G8-145-100	45 x 75 x 45	100	28	Basic Fabric : Canvas Weight : 535 gms /sq.mtr : 16 oz/sq. yard Tear Strength : 4 x 4 kgs 9 x 9 lbs Tensile Strength : 127 x 96 kgs 280 x 210 lbs Low Temp : -40 deg C (-40 deg F) High Temp : 93 deg C (200 deg F)	Traditional Canvas cloth used for air conditioning and ventilating applications, indoors and outdoors. Airtight and waterproof construction
C-G8-230-100	70 x 100 x 75	100	28		
C-G8-280-100	70 x 150 x 70	100	28		
C-G8-300-100	75 x 150 x 75	100	28		
C-G4-300-100	75 x 150 x 75	100	24		UV resistant.
					Fire rated as per EN 532 and EN 533.

All AERODUCT Connectors utilise galvanised steel meeting ASTM A-525-G90 standards.
All AERODUCT Connectors are designed to meet NFPA 90A and 90B standards.
All AERODUCT Connectors have ODP = 0 & GWP < 5.
Sizes other than the above can be manufactured on request.

Duct Fabric

The complete range of AERODUCT fabrics are also available without metal for customers who have the need for only the fabric. Standard roll widths are given in the table and are available in lengths of 100 feet. Other widths and lengths are available on request.

CLASSIFIED UL

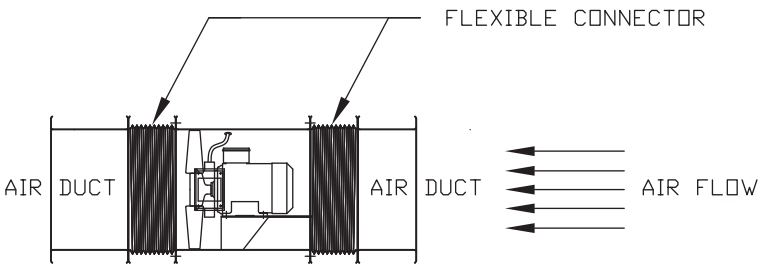
Fabric	Model No.	Width of Fabric	Length
Vinyl	V-75-100	3″ (75 mm)	100 feet
Vinyl	V-100-100	4″ (100 mm)	100 feet
Vinyl	V-150-100	6″ (150 mm)	100 feet
Neoprene BS	BSN-75-100	3″ (75 mm)	100 feet
Neoprene BS	BSN-100-100	4″ (100 mm)	100 feet
Neoprene BS	BSN-150-100	6″ (150 mm)	100 feet
Silicon	S-75-100	3″ (75 mm)	100 feet
Silicon	S-100-100	4″ (100 mm)	100 feet
Silicon	S-150-100	6″ (150 mm)	100 feet

AERODUCT ADHESIVE GEL

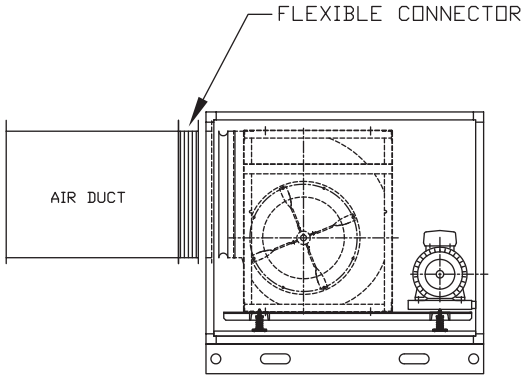
Application:
for Duct Connector fabric

Property:
Cyanoacrylate adhesive

Typical Application

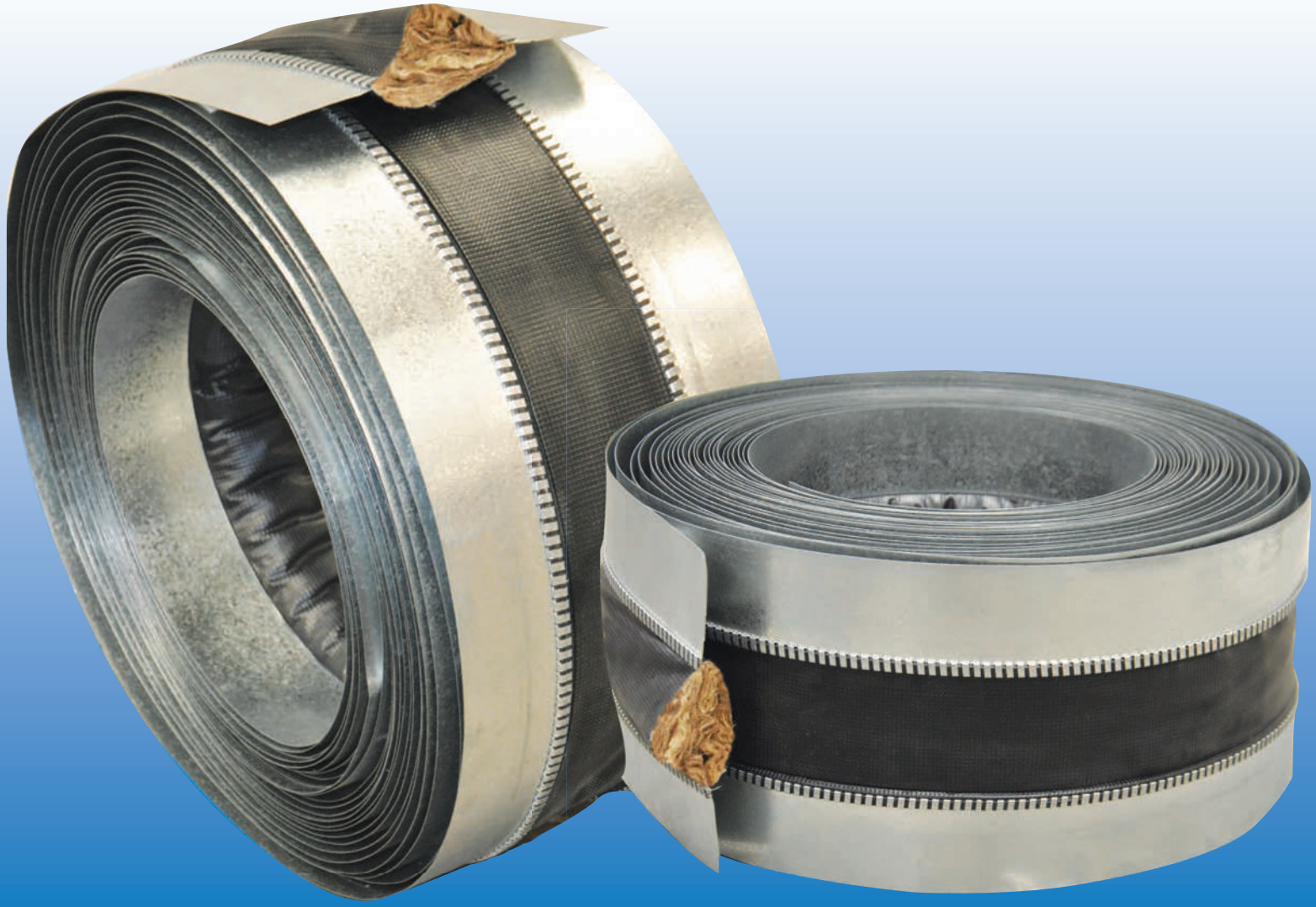


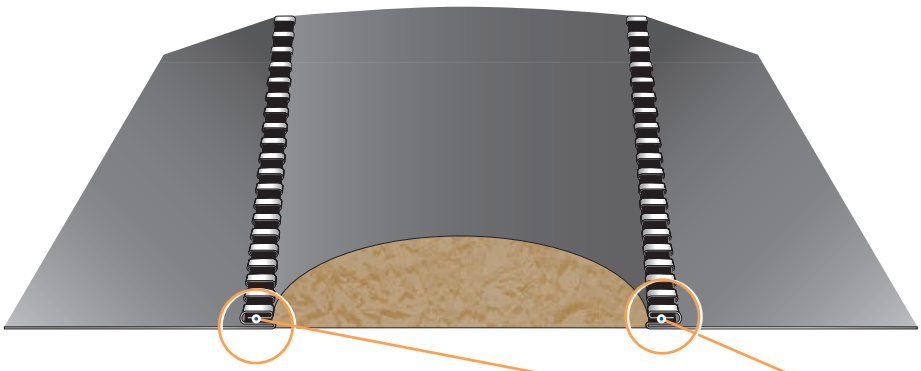
EXHAUST FANS



FAN COIL / AIR HANDLING UNITS

INSULATED FLEXIBLE DUCT CONNECTOR





"Dual Lock" Grip

For acoustically treated ductwork and supply ducts, it is important that the fabric of the connector is also insulated in addition to the insulation fixed on the ducting. This enables the Flexible Duct Connector to achieve maximum effectiveness.

Externally insulating the fabric, may damage the coating on it, and also make it stiff thereby affecting the noise and vibration absorption properties of the fabric. AERODUCT has a complete range of "Insulated Duct Connectors" which use a 25mm thick fibreglass insulation of R Value 4.2, sandwiched between two layers of fabric. The various options of fabrics offered in insulated models, ensure that the Flexible Duct Connectors can be used for all possible types of ductwork installations. Thicker and higher density fibreglass can be provided on request.

All models of Insulated Duct Connectors from AERODUCT are available in 24 Gauge and 28 Gauge Steel.

*Fibreglass specifications on page 11.

INSULATED FLEXIBLE DUCT CONNECTOR

Part No.	Size Metal x Fabric Metal (mm)	Length (Feet)	Metal Gauge	Fabric Technical Specifications		Features
VINYL						
ISV-G8-230-100 ISV-G8-280-100	70 X 100 X 70 70 X 150 X 70	100 100	28 28	Fabric Insulation	Vinyl Coated Polyester Yarn Fibreglass 12 kg/m³, 25mm thickness	Vinyl is the most commonly used fabric for all air duct installation due to its high tear strength and high abrasion resistance. Recommended for low to medium pressure ductwork systems.
ISV-G4-250-100 ISV-G4-300-100	75 x 100 x 75 75 x 150 x 75	100 100	24 24	R Value Weight	4.2 576 gms /sq.mtr, 17oz /sq. yard	
CLASSIFIED UL				Tear Strength Tensile Strength Low Temp High Temp Burst Strength	45 x 45 kgs (100 x 100 lbs) 108 x 100 kgs (240 x 220 lbs) - 40 deg C / - 40 deg F 93 deg C / 200 deg F 400psi	
NEOPRENE BS						
ISBSN-G8-230-100 ISBSN-G8-280-100	70 X 100 X 70 70 X 150 X 70	100 100	28 28	Fabric Insulation	Neoprene Coated Woven Fibreglass Fibreglass 12 kg/m³, 25mm thickness	Neoprene is recommended for use in application where high mechanical strength is required. Neoprene is extremely resistant to most alkalies, gasoline and toxic fumes.
ISBSN-G4-250-100 ISBSN-G4-300-100	75 X 100 X 75 75 X 150 X 75	100 100	24 24	R Value Weight	4.2 1016 gms / sq. mtr (30 oz/sq.yard)	UV resistant
CLASSIFIED UL				Tear Strength Tensile Strength Low Temp High Temp Burst Strength	5.5 x 5.5 kgs (12 x 12 lbs) 226 x 204 kgs (500 x 450 lbs) -40 deg C (-40 deg F) 121 deg C (250 deg F) 800psi	
SILICON						
ISS-G8-230-100 ISS-G8-280-100	70 X 100 X 70 70 X 150 X 70	100 100	28 28	Fabric Insulation	Silicon Rubber coated Woven Fibreglass Fibreglass 12 kg/m³, 25mm thickness	Silicon fabric has a special Silicon coating that has excellent resistance to high and low temperatures. Silicon is extremely resistant to chemicals and ozone, and emits very low smoke when burnt. Recommended for applications where high temperature is of main concern in both indoor and outdoor installation.
ISS-G4-250-100 ISS-G4-300-100	75 X 100 X 75 75 X 150 X 75	100 100	24 24	R Value Weight	4.2 627 gms /sq.mt (18.5 oz/sq. yard.)	
Rated for use at 400 deg C for 2 hours CLASSIFIED UL				Tear Strength Tensile Strength Low Temp High Temp Burst Strength	27 x 22 kgs (60 x 50 lbs) 81 x 90 kgs (180 x 200 lbs) - 40 deg C (- 40 deg F) 300 deg C (573 deg F) 450psi	Achieves Class 1 when tested as per ASTM - E84 - Surface Burning Characteristics
POLYURETHANE						
ISP-G8-230-100 ISP-G8-280-100	70 X 100 X 70 70 X 150 X 70	100 100	28 28	Fabric Insulation	Polyurethane Coated Woven Fibreglass Fibreglass 12 kg/m³, 25mm thickness	Polyurethane Coated Fabrics are fragile in construction but have a longer resistance period to high temperatures.
ISP-G4-250-100 ISP-G4-300-100	75 X 100 X 75 75 X 150 X 75	100 100	24 24	R Value Weight	4.2 460 gms /sq.mtr (13 oz/sq. yard)	Airtight and waterproof construction
				Tear Strength Tensile Strength Low Temp High Temp Burst Strength	16 x 14 kgs (35 x 30 lbs) 75 x 82 kgs (165 x 180 lbs) -40 deg C (-40 deg F) 200 deg C (392 deg F) 400psi	

SPECIFICATION SHEET

Fabric	Weight	Thickness	Tensile Strength	Tear Strength	Low Temp	High Temp	Abrasion Resist-ance	Leakage Resista-nce
	TEST METHOD							
	ASTM D751-89	ASTM D1777-96	ASTM D751-89	ASTM D751-89	ASTM D573	ASTM D573	Federal Test Std.191 # 5306	Federal Test Std.191 # 5512
Vinyl	28 gauge 576 gms /sq.mtr 17oz /sq. yard 24 gauge 745 gms /sq.mtr 22oz /sq. yard	0.41 +/- 0.03mm 0.46 +/- 0.03mm	108 x 100 kgs 240 x 220 lbs	45 x 45 kgs 100 x 100 lbs	- 40°C - 40°F	93°C 200°F	15,500 cycles	450 psi
Neoprene BS	1016 gms/ sq.mtr 30 oz/ sq.yard	0.43 +/- 0.03mm	226 x 204 kgs 500 x 450 lbs	5.5 x 5.5 kgs 12 x 12 lbs	- 40°C - 40°F	121°C 250°F	550 cycles	450 psi
Silicon Rated for use at 400 deg C for 2 hrs	627 gms/ sq.mtr 18.5 oz/ sq.yard 895 gms/ sq.mtr 26 oz/ sq.yard	0.46 +/- 0.03mm	81 x 90 kgs 180 x 200 lbs	27 x 22 kgs 60 x 50 lbs	- 40°C - 40°F	300°C 573°F	135 cycles	450 psi
Hypalon	816 gms/ sq.mtr 24 oz/ sq.yard	0.58 +/- 0.03mm	102 x 136 kgs 225 x 200 lbs	22 x 18 kgs 48 x 39 lbs	- 40°C - 40°F	121°C 250°F	500 cycles	250 psi
Polyurethane	460 gms/ sq.mtr 13 oz/ sq.yard	0.40 +/- 0.03mm	75 x 82 kgs 165 x 180 lbs	16 x 14 kgs 35 x 30 lbs	- 40°C - 40°F	200°C 392°F	110 cycles	400 psi
Canvas	535 gms/ sq.mtr 16 oz/ sq.yard	0.41 +/- 0.03mm	127 x 96 kgs 280 x 210 lbs	4 x 4 kgs 9 x 9 lbs	- 40°C - 40°F	93°C 200°F	70 cycles	400 psi

INTERNATIONAL TEST CERTIFICATES

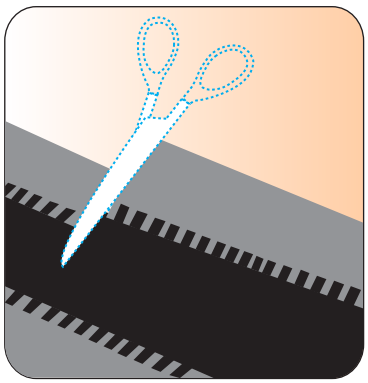
CLASSIFIED UL

Flexible Duct Connectors
(Vinyl, Neoprene, Silicon)
In accordance with
ANSI / NFPA 701

RECOMMENDED INSTALLATION PROCEDURE

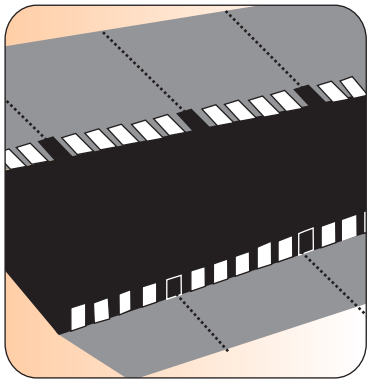
Ensure that the notched side of the connector faces outward and position the joint in the middle of a side rather than at a corner.

1.



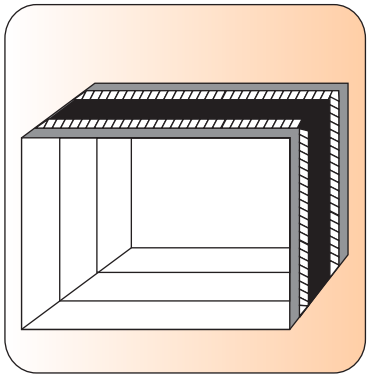
Remove the roll from the box, and cut the connector to the required length.

2.



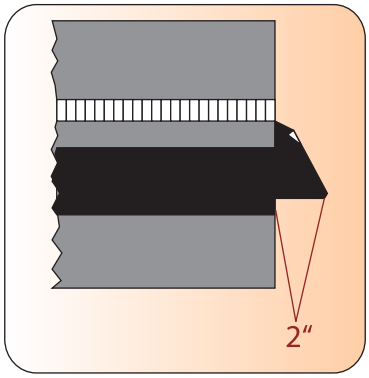
Holding the seam portion upwards to an angle of 90 degrees , make notches at the points where bending is required.

3.



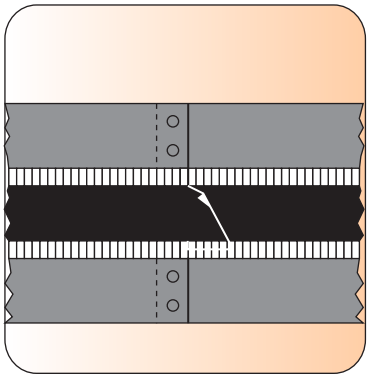
Bend the connector to form the required shape.

4.



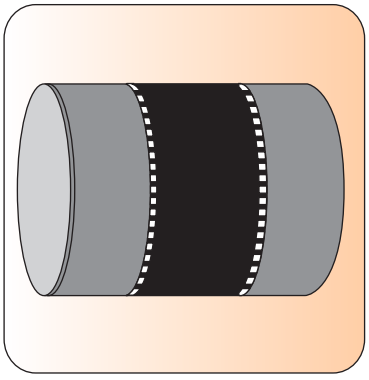
From the end of the connector, cut away the metal portion exposing only the fabric, with length of around 2 inches.

5.



Join the two ends of the sheet metal by using rivets or screws. Apply a liberal amount of adhesive on the fabric portion under the tongue , and hold the joint for few seconds to ensure the seal.

6.



Round Flexible connections can also be fabricated using the same procedure.

One side of the connector to be fixed with rivets on the mouth of the equipment and the other side to be fixed with rivets onto duct.

FLEXIBLE DUCTS

INSULATED & UNINSULATED MODELS
R VALUE : 4.2
VELOCITY : 5000 fpm

Children & Schools GREENGUARD® Indoor Air Quality Certified

Formaldehyde FREE

LEED Eligible Product
Use of this product may help building projects meet green building standards as set by the Leadership in Energy and Environmental Design (LEED) Green Building Rating System.
Credit 4.1 - 4.2 Recycled Content
Credit 5.1 - 5.2 Regional Materials

Specification Data




Specifications	Insulated	Insulated	Insulated - Reinforced Barrier	Insulated - Reinforced Barrier
MODEL No	ADI1	ADI2	ADIR-1	ADIR-2
Inner Core	Double laminated polyester film, with black pigmented adhesive, permanently bonded to corrosion resistant steel wire helix.	Triple laminated aluminum foil, polyester film, permanently bonded to corrosion resistant steel wire helix.	Double laminated polyester film, with black pigmented adhesive, permanently bonded to corrosion resistant steel wire helix.	Triple laminated aluminum foil, polyester film, permanently bonded to corrosion resistant steel wire helix.
Outer Core	Strong vapour barrier made from metallized polyester film laminate.	Strong vapour barrier made from metallized polyester film laminate.	Triple laminated aluminum foil, polyester and metallized polyester film with fibreglass scrim reinforced vapour barrier.	Triple laminated aluminum foil, polyester and metallized polyester film with fibreglass scrim reinforced vapour barrier.
Insulation thickness	25mm / 38mm / 50mm	25mm / 38mm / 50mm	25mm / 38mm / 50mm	25mm / 38mm / 50mm
Density	16kgm^3 / 24kgm^3	16kgm^3 / 24kgm^3	16kgm^3 / 24kgm^3	16kgm^3 / 24kgm^3
R value	4.2	4.2	4.2	4.2
Maximum Positive Pressure	10″ w.g.- 4″ to 16″	10″ w.g.- 4″ to 16″	10″ w.g.- 4″ to 16″	10″ w.g.- 4″ to 16″
	6″ w.g. - 18 to 20″	6″ w.g. - 18“ to 20″	6″ w.g. - 18“ to 20″	6″ w.g. - 18“ to 20″
Maximum Negative Pressure	3/4″ w.g. All diameters	3/4″ w.g. All diameters	3/4″ w.g. All diameters	3/4″ w.g. All diameters
Maximum Velocity	5000 fpm	5000 fpm	5000 fpm	5000 fpm
Operating Temperature	-30 deg C to +150 deg C -20 deg F to +300 deg F	-30 deg C to +150 deg C -20 deg F to +300 deg F	-30 deg C to +150 deg C -20 deg F to +300 deg F	-30 deg C to +150 deg C -20 deg F to +300 deg F
Standard Length	25 feet	25 feet	25 feet	25 feet
Diameter	4“ to 20″	4“ to 20″	4“ to 20″	4“ to 20″

Customised lengths available on request.

Specification Data

Specifications	Uninsulated	Uninsulated	Uninsulated
MODEL No	ADUI3	ADUI4	ADUI5
Inner Core	Triple laminated aluminum foil, polyester film, permanently bonded to corrosion resistant steel wire helix.	Double laminated metallized film, permanently bonded to corrosion resistant steel wire helix.	Double laminated polyester film, with black pigmented adhesive, permanently bonded to corrosion resistant steel wire helix.
Maximum Positive Pressure	10″ w.g.- 4″ to 16″	10″ w.g.- 4″ to 16″	10″ w.g.- 4″ to 16″
	6″ w.g. - 18“ to 20″	6″ w.g. - 18“ to 20″	6″ w.g. - 18“ to 20″
Maximum Negative Pressure	1″ w.g. All diameters	1″ w.g. All diameters	1″ w.g. All diameters
Maximum Velocity	5000 fpm	5000 fpm	5000 fpm
Operating Temperature	-30 deg C to +150 deg C -20 deg F to +300 deg F	-30 deg C to +150 deg C -20 deg F to +300 deg F	-30 deg C to +150 deg C -20 deg F to +300 deg F
Standard Length	25 feet	25 feet	25 feet
Diameter	4“ to 20″	4“ to 20″	4“ to 20″

Customised lengths available on request.

All Aeroduct Flexible Ducts are designed to meet NFPA 90A and NFPA 90B Standards.

Fibreglass Specifications:
Latest technology based on rapidly renewable bio-based materials.
Complies with the following standards:
American - ASTM, UL723, NFPA255, ASHRAE 90.1 requirements
British - BS476 (part 4,6 and 7)
ISO - ISO1716, 1182

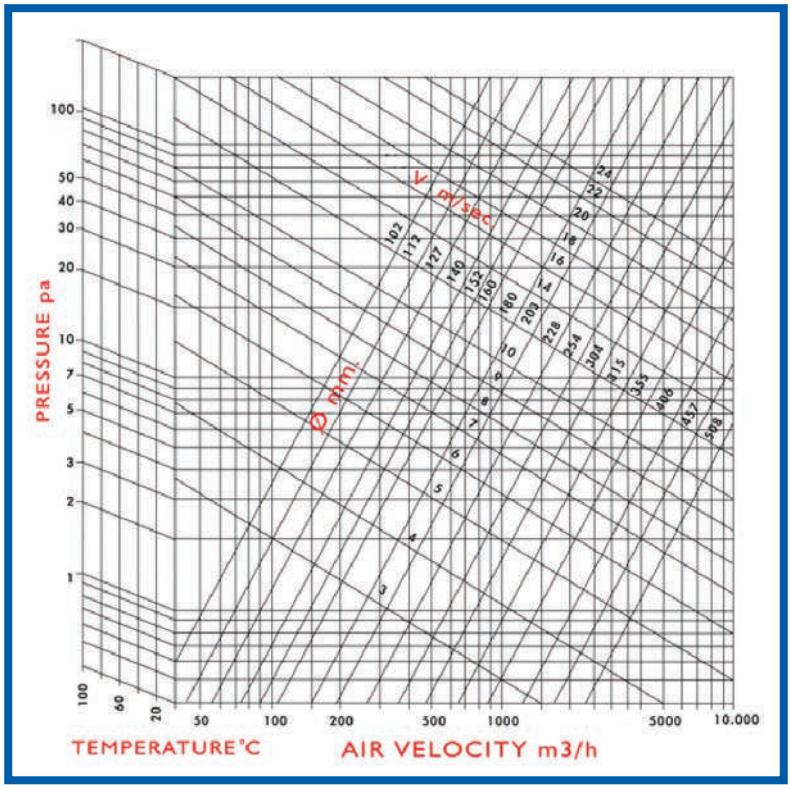
Children & Schools GREENGUARD® Indoor Air Quality Certified

Formaldehyde FREE

Main Features

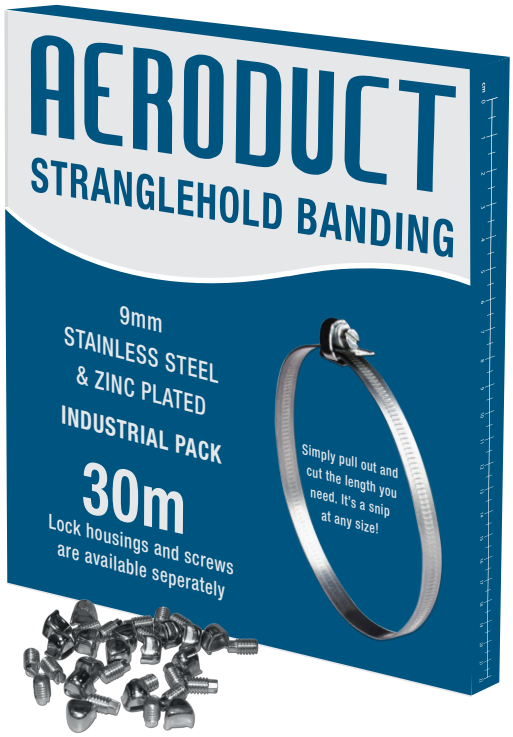
- Economical solution to connecting equipment in air conditioning and ventilation systems, across a broad spectrum of applications such as residential, commercial and industrial projects
- Flexible construction renders ease of installation in areas where rigid ducts cannot be fixed
- Ideal for use in low to medium pressure ductwork systems
- Options for insulated and uninsulated models
- Tear and puncture resistant construction

Pressure Loss Diagram

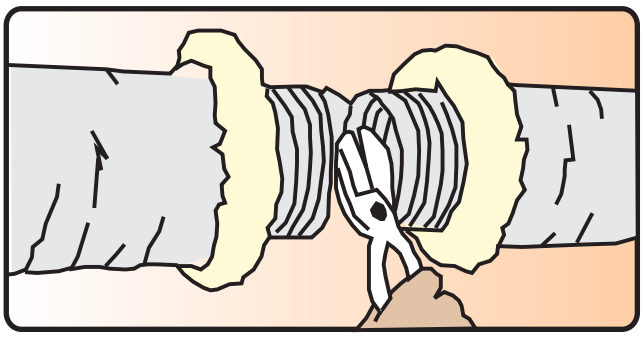


Accessories

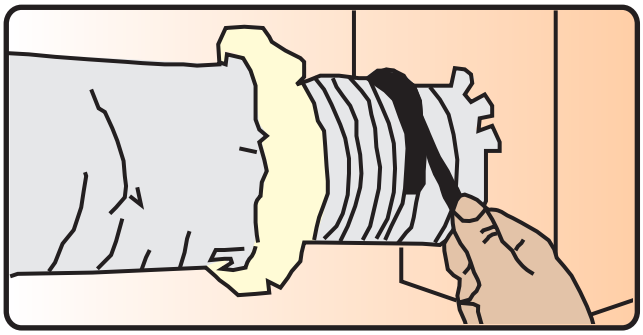
- Stranglehold Banding
- Standard Hose Clip
- Captive Screws



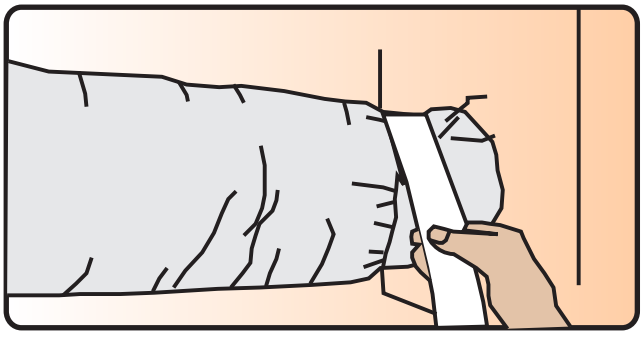
CONNECTIONS



Cut completely around and through the duct with knife or scissors. Cut the wire with wire cutters. Fold back the jacket and insulation

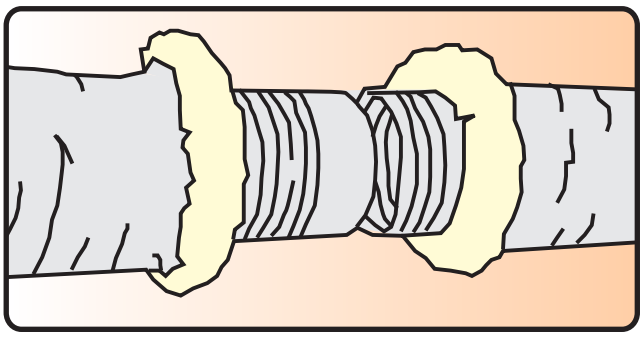


Slide at least 1″ (25mm) of core over fitting and past the bead. Seal core to cover with 2 wraps of duct tape. Secure the connection with clamp placed over the core and tape and past the bead.

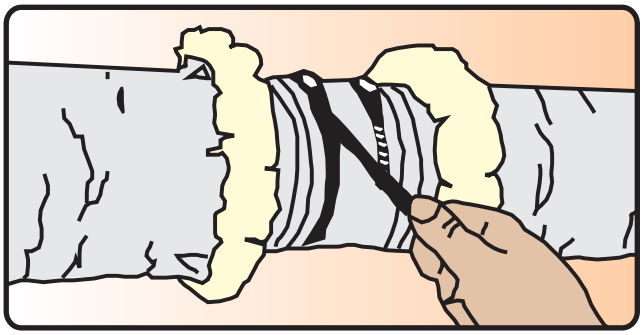


Pull jacket and insulation back over the core. Use atleast 2 wraps of duct tape to tape the jacket. You may use a clamp along with or instead of the duct tape.

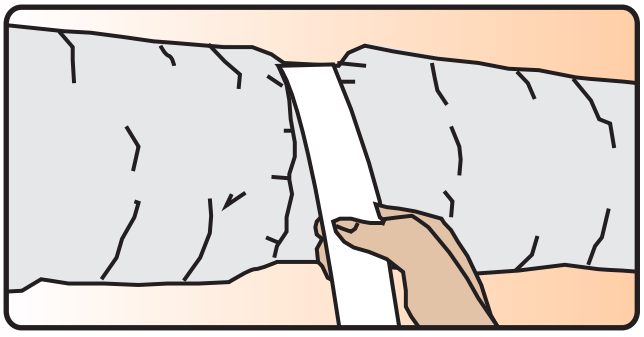
SPLICES



Fold back jacket and insulation from core. Butt 2 cores together on a standard 4″ (100mm) length metal sleeve.



Use atleast 2 wraps of duct tape to tape the jacket. Secure the connection with clamp placed over the core and tape and past the bead.



Pull jacket and insulation back over cores. Use atleast 2 wraps of duct tape to tape the jacket.

Precautions during installation:
Aeroduct insulated ducts use fibreglass insulation which is classified as a possible cancer hazard by inhalation. In addition fibreglass insulation may cause temporary irritation to the eyes and skin. Kindly ensure that protective clothing, face mask and gloves are used while handling or installing the flexible ducts. Wash hands properly with soap and water after use.

CERTIFICATE OF COMPLIANCE

Certificate Number	20180627-R39560
Report Reference	R39560-20180625
Issue Date	2018-JUNE-27
Issued to:	HIRA TECHNOLOGIES PVT. LTD PLOT #1-02, PART 2 KHED INDUSTRIAL PARK, DTA ZONE KANHERSAR PUNE, MAHARASHTRA 410505 INDIA
This is to certify that representative samples of	AIR DUCT VIBRATION ISOLATION CONNECTORS Models AERODUCT VINYL, SILICON COATED FIBERGLASS, NEOPRENE COATED FIBERGLASS
	Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.
Standard(s) for Safety:	NFPA 701- Standard Methods of Fire Tests for Flame Propagation of Textiles and Films – Methods 1 and 2
Additional Information:	See the UL Online Certifications Directory at www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.

Bruce Mahrenholz, Director North American Certification Program

UL LLC

INSULATION FASTENERS

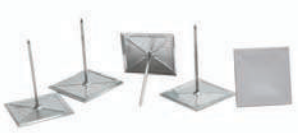
Designed to meet SMACNA Standards utilizing steel as per ASTM-A 591

Insulation Fasteners (IF) / PERFORATED BASE HANGERS (PIF)

Base : 28 Gauge Metal
Size : 50mm x 50mm
Pin : 12 Gauge Zinc Plated
Packaging : 500 pieces per box with SW Washers

Self Adhesive Type - Steel Model No.	Self Adhesive Type - Aluminium Model No.	Perforated Base Type Model No.	Pin Length (inches/mm)	Use for Insulation size
IF 34	IFA 34	PIF 34	0.75″ / 19mm	½″
IF 114	IFA114	PIF 114	1.25″ / 32mm	1″
IF 134	IFA 134	PIF 134	1.75″ / 45mm	1½″
IF 200	IFA 200	PIF 200	2.0″ / 51mm	1½″
IF 250	IFA 250	PIF 250	2.5″ / 65mm	2″
IF 300	-	PIF 300	3.0″ / 75mm	3″
IF 80M	-	PIF 80M	80mm	3″
1F 400	-	PIF 400	4.0″ / 100mm	4″
IF 450	-	PIF 450	4.5″ / 110mm	4″
IF 120M	-	PIF 120M	120mm	4“
IF 130M	-	PIF 130M	130mm	5″
IF 140M	-	PIF 140M	140mm	5“
IF 150M	-	PIF 150M	150mm	6″
IF 160M	-	PIF 160M	160mm	6″

Note: 1 inch is equivalent to 25mm.



Self Adhesive Type
- Steel Nail
Reinforced and plain base options

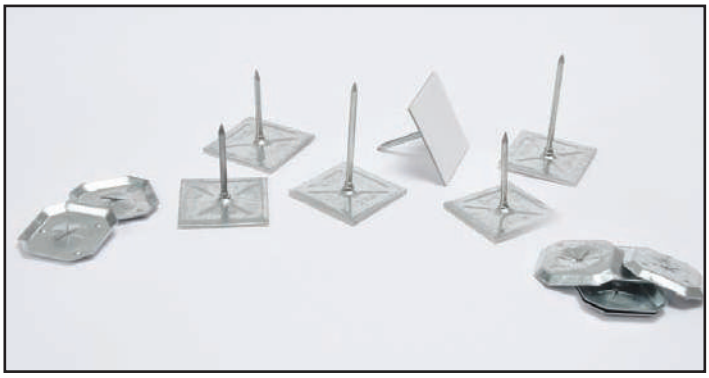
Self adhesive type-
Aluminium nail
Easy to bend and cut

Perforated Base Type
Available in both Steel and Aluminium nail.

Insulation Fasteners Compact (IFC)

Base : 28 Gauge Metal
Size : 35mm x 35mm
Pin : 12 Gauge Zinc Plated
Packaging : 1000 pieces per box with two boxes of SW Washers

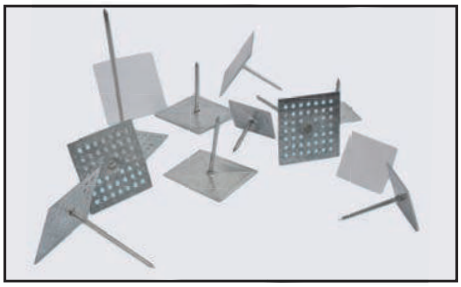
Model No.	Pin Length (inches)	Use for Insulation size
IFC 114	1.25	1″
IFC 134	1.75	1½″
IFC 200	2.0	1½″
IFC 250	2.5	2″



SS Insulation Fasteners for Offshore, Oil & Gas Fields

Standards SS304 and 316

Nail Size: 0.75″, -2.5″, Base 2″x2″



SW Washers

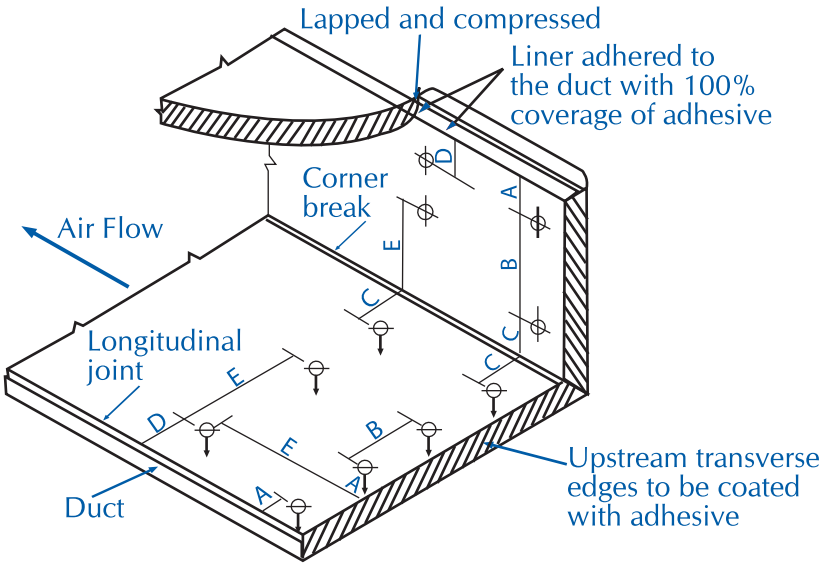
Model No.	Description	Pieces per box
SW	Steel Washers 28 Gauge Galvanized	500

The steel base is made from 28 Gauge metal, a steel pin and double sided self adhesive tape having high shear strength. The use of this pin prevents corrosion on the sheet metal which is caused by the welding fasteners.

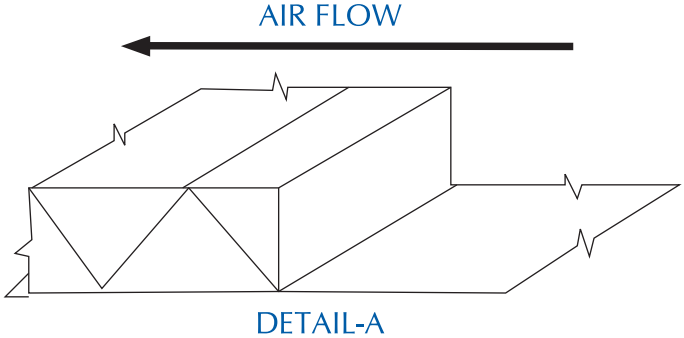
Adhesive Tape Technical Details

Base Material : Polyethylene foam with aggressive pressure sensitive rubber resin adhesive
Service Temperature : - 40 deg C to + 70 Deg C.
Highly resistant to abrasion, corrosion and moisture.
Confirms to European Directive 2000/53 (Lead, Chromium VI, Mercury, Cadmium free)
10 Minute 180 degree Peel Adhesion : 30 N/25mm
500 Hour Static Shear (Stainless Steel) : 0.8 kg/cm^2

Duct Liner Installation



Velocity	Dimensions				
	A	B	C	D	E
0-2500 FPM	3″	12″	4″	6″	18″
(0-12.7 MPS)	(76.2)	(305)	(102)	(152)	(457)
2501-6000 FPM	3″	6″	4″	6″	16″
(12.7-30.5 MPS)	(76.2)	(152)	(102)	(152)	(406)



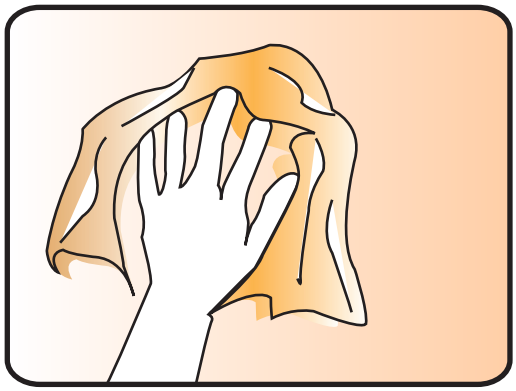
DETAIL-A

Metal Nosing Channel or Zee

Interior width of 8″(200mm) and less does not require pins

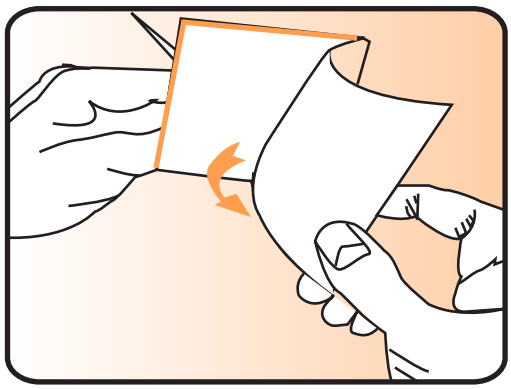
RECOMMENDED INSTALLATION PROCEDURE

1.



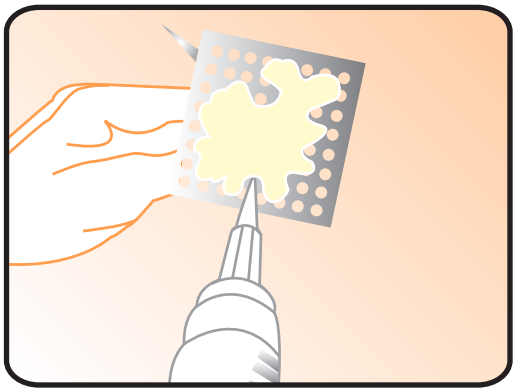
Ensure that the surface is clean and dry, free from oil, grease or any dust particles

2.



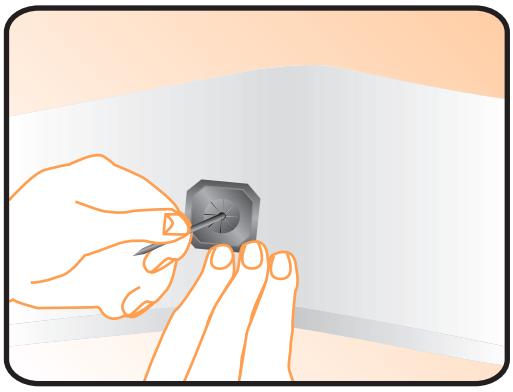
Remove protection paper from the base of the insulation fastener.

3.



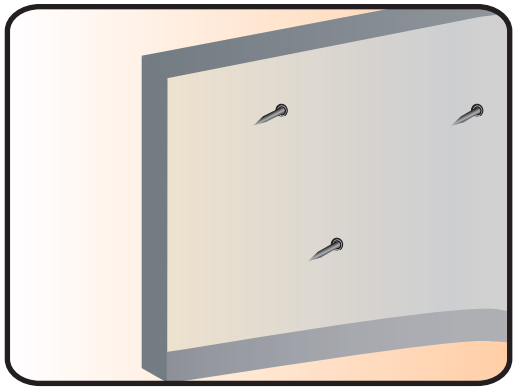
Apply glue to the base of the perforated hanger and fix to the surface

4.



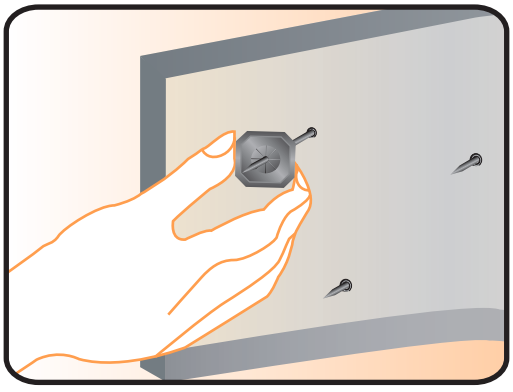
Firmly press the base of the pin at the required position on to the steel surface.

5.

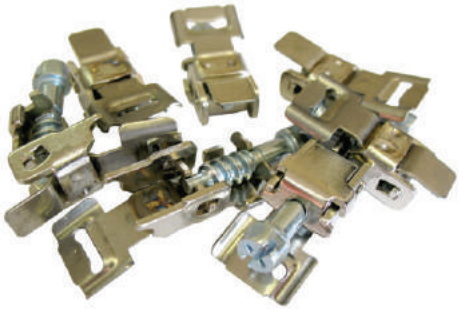


Fix the insulation over the pins

6.



Lock the insulation firmly to the steel surface using the steel washers provided.



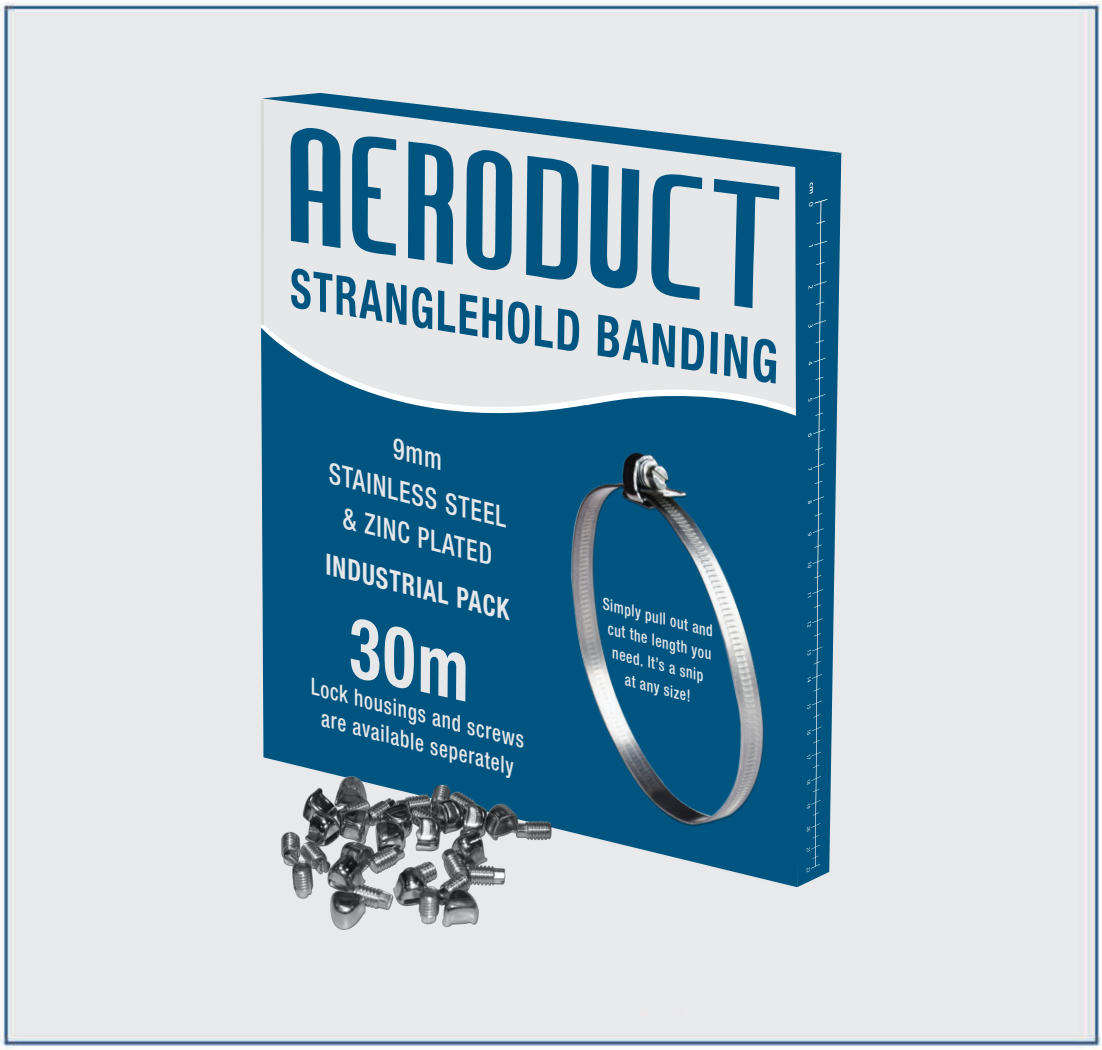
Mild Steel Zinc Protected

Aeroduct Stranglehold Banding are zinc protected mild steel. This is most popular clip in our range. Ideally suited for most day requirements for joining hose in areas such as the HUAL industry and the automotive aftermarket, agricultural application, such as irrigation and farm machinery, pneumatic and hydraulic application in the industrial sector, hardware/DIY applications and in construction.

Thickness: = 0.6 mm, Width: 9 mm

STAINLESS STEEL AISI430ss

The most versatile of clips in the Aeroduct Stranglehold Banding range, our Original Range Jubilee hose clip in 304 (18/8) stainless steel are widely used across all industries where hose clips are usedto secure hoses, as well as for other applications. Their corrosion resistance enables their use in the marine, oil and gas and food sectors, as well as the agricultural, hardware and industrial sectors, where higher corrosion resistance is required.


AERODUCT
STRANGLEHOLD BANDING
9mm
STAINLESS STEEL
& ZINC PLATED
INDUSTRIAL PACK
30m
Lock housings and screws
are available seperately
Simply pull out and
cut the length you
need. It's a snip
at any size!

BSCIC Certifications BSCIC Private Limited

BSCIC

Certificate

QUALITY MANAGEMENT SYSTEM

HIRA TECHNOLOGIES PVT. LTD.

PLOT : 1-02, PART 2, KHED INDUSTRIAL PARK, DTA ZONE
KANHERSAR, TALUKA-KHED, PUNE – 410 505
MAHARASHTRA, INDIA

Hereby granted the Certificate Number: **BN17246/16957**

Subsequent to the **Assessment** of the organization it has been found to be operating a Quality Management System which complies with the requirements of

ISO 9001:2015

For the following scope:

Manufacturing of Ducting Accessories

Originally Registered: **19-Feb-2018**

Latest issue: **19-Feb-2018**

Expiry Date: **18-Feb-2021**

For
BSCIC CERTIFICATIONS PVT.LTD.

Sanjay Seth
Managing Director

Validity of this Certificate is subject to Annual Surveillance Audits to be done Successfully on or before 19-Feb-2019 and 19-Feb-2020 resp.
(In case if Surveillance Audit is not allowed to be conducted; this Certificate shall be Suspended/Withdrawn).

Please Re-validate this certificate's status at www.bsc-icc.com at REGISTRATION STATUS.
This Certificate of Registration is granted subject to relevant provisions of the BSCIC Certifications PVT. LTD. Contract Terms & Scheme for Registration Form B018 (Latest Version). Please see B018 at our website www.bsc-icc.com
The certificate of Registration remains the property of BSCIC Certifications Pvt. Ltd. and shall be returned immediately upon request.
BSCIC Headquarters: IInd Floor, SCO 150, Sector - 21.C. Faridabad 121001 Haryana. India.

Registered

BSCIC

JAS-ANZ

www.jas-anz.com.au/register

INTERNATIONAL ACCREDITATION FORUM IAF