AERODUCT Ducting Accessories





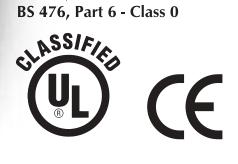
The Most Comprehensive Range of Ducting Accessories

LI MANAGER DE LA COMPANY

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FLEXIBLE DUCT CONNECTOR

ASTM E - 84 Class 1 BS 476, Part 7 - Class 1 BS 476, Part 6 - Class 0



FLEXIBLE DUCT CONNECTOR

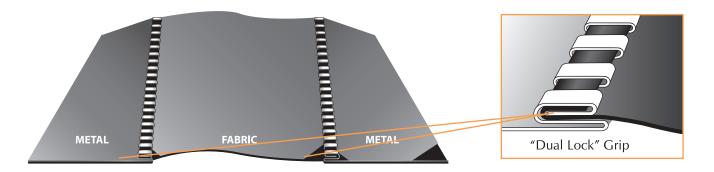
All mechanical equipments like Air Handling Units, Fan Coil Units and Ventilation Fans generate noise and vibrations when used. To eliminate the noise and vibrations from transmitting through the air ducts, it is necessary to install an airtight flexible joint between the outlet of the equipment, and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

AERODUCT offers two types of dual lock of metal-to-fabric mechanism:

- 1. Dual Lock Grip with 3 folds for 28 Gauge metal.
- 2. Dual Lock Grip with 2 folds for 24 Gauge metal.



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 Coating	: Polyester Yarn : Vinyl	Vinyl is the most commonly used fabric for all air duct installations	
V-G8-230-100	70 x 100 x 70	100	28	Weight	: 576 gms /sq.mtr	due to its high tear strength, and	
V-G8-145-150	45 x 75 x 45	150	28	Tear Strength	17oz /sq. yard : 45 x 45 kgs	its high abrasion resistance.	
V-G8-230-150	70 x 100 x 70	150	28		100 x 100 lbs	Recommended for low to medium pressure ductwork systems.	
V-G4-145-100 V-G4-225-100 V-G4-250-100 V-G4-300-100 V-G4-350-100	45 x 75 x 45 75 x 75 x 75 75 x 100 x 75 75 x 150 x 75 100 x 150 x 100	100 100 100 100 100	24 24 24 24 24 24	Tensile Strength Low Temp High Temp Burst Strength	: 108 x 100 kgs 240 x 220 lbs : -40 deg C/-40 deg F : +93 deg C/200 deg F : 400psi	Airtight and waterproof construction.	
Neoprene BS							
BSN-G8-145-100	45 x 75 x 45	100	28	Basic Fabric	: Woven Fibreglass	Neoprene is recommended for	
BSN-G8-230-100	70 x 100 x 70	100	28	Coating Weight	: Neoprene : 1016 gms /sq.mtr	use in application where high mechanical strength is required.	
BSN-G8-145-150	45 x 75 x 45	150	28	weight	: 30 oz/sq. yard	Neoprene is extremely resistant to	
BSN-G8-230-150	70 x 100 x 70	150	28	Tear Strength	: 5.5 x 5.5 kgs	most alkalies, gasoline and toxic fumes.	
BSN-G4-225-100	75 x 75 x 75	100	24	Tensile Strength	12 x 12 lbs 1 : 226 x 204 kgs 500 x 450 lbs : -40 deg C (-40 deg F) : 121 deg C (250 deg F) : 800psi	Airtight and waterproof	
BSN-G4-250-100	75 x 100 x 75	100	24			construction.	
BSN-G4-300-100	75 x 150 x 75	100	24	Low Temp High Temp		UV resistant.	
BSN-G4-350-100	100 x 150 x 100	100	24	Burst Strength		Neoprene fabric does not contain material that contribute ODP or GWP	
						NFPA 701	

FLEXIBLE DUCT CONNECTOR

Part No.	Size Metal x Fabric x Metal (mm)	Length (Feet)	Metal Gauge	Fabric Technical Specifications		Features
Silicon						
S-G8-145-100 S-G8-230-100 S-G4-225-100 S-G4-250-100 S-G4-300-100 S-G4-350-100 Rated for use at 400 deg C for 2 hours	45 x 75 x 45 70 x 100 x 70 75 x 75 x 75 75 x 100 x 75 75 x 150 x 75 100 x 150 x 100	100 100 100 100 100	28 28 24 24 24 24 24	Basic Fabric Coating Weight Tear Strength Tensile Strength Low Temp High Temp Burst Strength	 : Woven Fibreglass : Silicon Rubber : 627 gms /sq.mtr : 18.5 oz/sq. yard : 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 	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. UV resistant. Achieves Class A when tested as per ASTM - E84 Surface Burning Characteristics.
Hypalon H-G8-145-100 H-G8-230-100 H-G4-225-100 H-G4-250-100 H-G4-350-100	45 x 75 x 45 70 x 100 x 70 75 x 75 x 75 75 x 100 x 75 75 x 150 x 75 100 x 150 x 100	100 100 100 100 100 100	28 28 24 24 24 24 24 24	Basic Fabric Coating Weight Tear Strength Tensile Strength Low Temp High Temp Burst Strength	 : Woven Fibreglass : Hypalon : 816 gms /sq.mtr : 24 oz/sq. yard : 22 x 18 kgs 48 x 39 lbs : 102 x 136 kgs 225 x 200 lbs : -40 deg C (-40 deg F) : 121 deg C (250 deg F) : 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. UV resistant.
Polyurethane	9					
P-G8-145-100 P-G8-230-100 P-G4-225-100 P-G4-250-100 P-G4-300-100 P-G4-350-100	45 x 75 x 45 70 x 100 x 70 75 x 75 x 75 75 x 100 x 75 75 x 150 x 75 100 x 150 x 100	100 100 100 100 100	28 28 24 24 24 24 24	Basic Fabric Coating Weight Tear Strength Tensile Strength Low Temp	 : Woven Fibreglass : Polyurethane : 460 gms /sq.mtr : 13 oz/sq. yard : 16 x 14 kgs 35 x 30 lbs : 75 x 82 kgs 165 x 180 lbs : -40 deg C (-40 deg F) 	Polyurethane coated fabrics are fragile in construction but have a longer resistance period to high temperatures. Airtight and waterproof construction UV resistant.
				High Temp Burst Strength	: 200 deg C (392 deg F) : 400psi	

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	Traditional Canvas cloth used for
C-G8-230-100	70 x 100 x 70	100	28	Weight	: 535 gms /sq.mtr	air conditioning and ventilating applications, indoors and outdoors
C-G8-280-100	70 x 150 x 70	100	28	Tear Strength	: 16 oz/sq. yard : 4 x 4 kgs	Airtight and waterproof
C-G8-300-100	75 x 150 x 75	100	28	Tear Strength	9 x 9 lbs : 127 x 96 kgs 280 x 210 lbs	construction
C-G4-300-100	75 x 150 x 75	100	24	Tensile Strength		UV resistant.
				Low Temp : -40 deg C (-40 deg	: -40 deg C (-40 deg F) : 93 deg C (200 deg F)	Fire rated as per EN 532 and EN 533.

All AERODUCT Connectors utilise galvanised steel meeting ASTM A525 G90 and ASTM A653 G60 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.

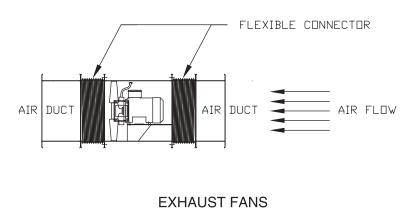
Duct Fabric

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.



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	

Typical Application

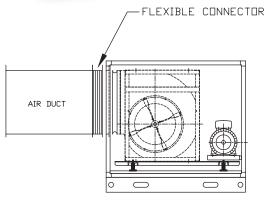


AERODUCT ADHESIVE GEL



Application: for Duct Connector fabric

Property: Cyanoacrylate adhesive



FAN COIL / AIR HANDLING UNITS

SPECIFICATION SHEET

Fabric	Weight	Thickness	Tensile Strength	Tear Strength	Low Temp	High Temp	Abrasion Resist- ance	Leakage Resista- nce	Fire Ratings
	ASTM D751-89	ASTM D1 <i>777</i> -96	ASTM D751-89	ASTM D751-89	ASTM D573	ASTM D573	Federal Test Std.191 # 5306	Test Std.191	
Vinyl	576 gms /sq.mtr 17oz /sq. yard	0.41 +/- 0.03mm	108 x 100 kgs 240 x 220 lbs	45 x 45 kgs 100 x 100 lbs	- 40 ^o C - 40 ^o F		15,500 cycles	450 psi	UL Listed ODP, GWP
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 ^o C - 40 ^o F		550 cycles	450 psi	UL Listed UV Resistant ODP, GWP
Silicon Rated for use at 400 deg C for 2 hrs	627 gms/ sq.mtr 18.5 oz/ sq.yard	0.46 +/- 0.03mm	81 x 90 kgs 180 x 200 lbs	27 x 22 kgs 60 x 50 lbs	- 40 ^o C - 40 ^o F	300 ^o C 573 ^o F	135 cycles	450 psi	ASTM E 84 - Class 1 UL Listed ODP, GWP
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 ^o C - 40 ^o F	121 ^o C 250 ^o F	500 cycles	250 psi	ASTM E 84 - Class 1
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		110 cycles	400 psi	Rated Class 1 as per BS 476, Part 7 Tests Rated Class 0 as per BS 476, Part 6 Tests
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 ^o C - 40 ^o F	93 ⁰ C 200 ⁰ F	70 cycles	400 psi	EN 532, EN 533

INTERNATIONAL TEST CERTIFICATES



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



PSB Singapore

Bodycote

Flexible Duct Connectors ASTM E-84 (Vinyl, Neoprene, Silicon, Polyurethane) BS 476 part 7, Class 1 (Polyurethane) BS 476 part 6, Class O (Polyurethane)







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ODP =0 GWP<5 **Flexible Ducts** BS 476 part 7, Class 1 BS 476 part 6, Class O

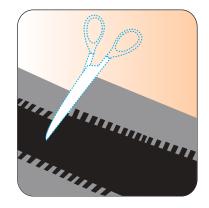
RECOMMENDED INSTALLATION PROCEDURE

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.

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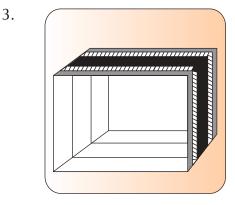
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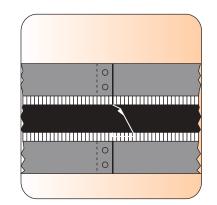
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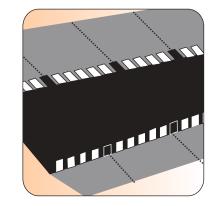
Remove the roll from the box, and cut the connector to the required length.



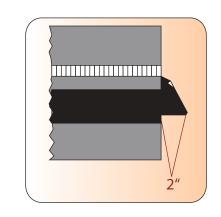
Bend the connector to form the required shape.



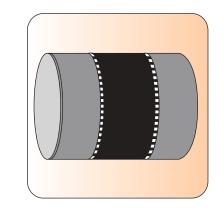
Join the two ends of the sheet metal by using rivets or screws. Apply a liberal amount of adhesive on the fabric portion under the tongue , and hold the joint for few seconds to ensure the seal.



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



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



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.

PROJECTS



MANILA BAY RESORT, PHILIPPINES



BLUE WATER DUBAI PROJECT



HARTLAND GREEN – SOBHA, DUBAI - UAE



ABU DHABI INTERNATIONAL AIRPORT 1



COLOMBO CITY CENTRE, SRI LANKA

PROJECTS



OMANTEL HEADQUARTER



BAHRAIN AIRPORT PROJECT



REEM MALL, ABU DHABI, UAE



DUBAI PARKS AND RESORTS



PALM TOWER PROJECT



MARINA GATE TOWER, DUBAI - UAE



CERTIFICATE OF REGISTRATION

This is to certify that the management system of:

Hira Industries LLC

Main Site: Plot No 118 to 123, 307, 309 & 311, Al Ghail Industrial Park – RAKEZ, P.O. Box 9013, Ras Al Khaimah, United Arab Emirates

has been registered by Intertek as conforming to the requirements of:

ISO 9001:2015

The management system is applicable to:

Manufacture of Molded & Extruded Rubber Products, Ducting Accessories, Smoke and Fire Curtains, Pipe Support Systems, Adhesive Tapes and Aerofoam Closed Cell Polyolefin & Elastomeric Insulation Products. Certificate Number: 0112982

Initial Certification Date: 07 May 2018

Date of Certification Decision: 28 June 2022

Issuing Date: 28 June 2022

Valid Until: 06 May 2024



Calin Moldovean President, Business Assurance

Intertek Certification Limited, 10A Victory Park, Victory Road, Derby DE24 8ZF, United Kingdom

Intertek Certification Limited is a UKAS accredited body under schedule of accreditation no. 014.





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