

# AERODUCT

Ducting Accessories



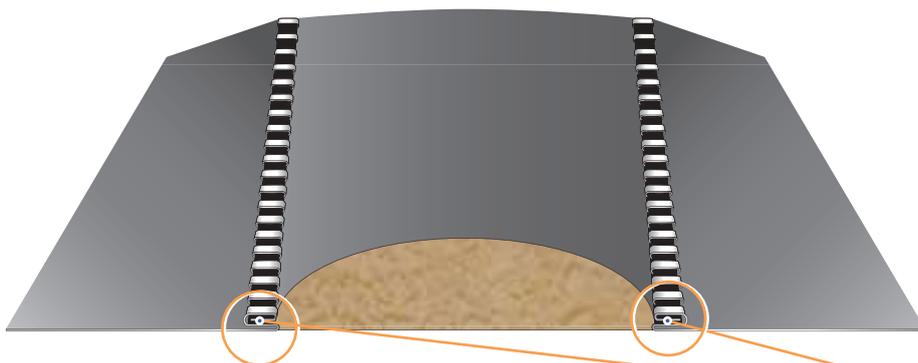
The Most Comprehensive Range of Ducting Accessories

# INSULATED FLEXIBLE DUCT CONNECTOR



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

2. Dual Lock Grip with 2 folds for 24 Gauge metal.



CE

"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<br>Metal x Fabric<br>Metal (mm) | Length<br>(Feet) | Metal<br>Gauge | Fabric Technical Specifications |  | Features   |
|--|--------------------------------------|------------------|----------------|---------------------------------|--|--|
| <b>VINYL</b>                           |                                      |                  |                |                                 |  |  |
| ISV-G8-145-100                         | 45 x 75 x 45                         | 100              | 28             | Fabric                          | Vinyl Coated Polyester Yarn                            | Vinyl is the most commonly used fabric for all air duct installation due to  |
| ISV-G8-230-100                         | 70 x 100 x 70                        | 100              | 28             | Insulation                      | Fibreglass 12 kg/m <sup>3</sup> , 25mm thickness       |  |
| ISV-G8-280-100                         | 70 x 150 x 70                        | 100              | 28             |                                 |  |  |
| ISV-G4-250-100                         | 75 x 100 x 75                        | 100              | 24             | R Value                         | 4.2  | its high tear strength and high abrasion resistance. Recommended for low to medium pressure ductwork systems.  |
| ISV-G4-300-100                         | 75 x 150 x 75                        | 100              | 24             | Weight                          | 576 gms /sq.mtr, 17oz /sq. yard                        |  |
|  |                                      |                  |                | Tear Strength                   | 45 x 45 kgs (100 x 100 lbs)                            | UV resistant   |
|  |                                      |                  |                | 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   |  |
| <b>NEOPRENE BS</b>                     |                                      |                  |                |                                 |  |  |
| ISBSN-G8-230-100                       | 70 X 100 X 70                        | 100              | 28             | Fabric                          | Neoprene Coated Woven                                  | 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-G8-290-100                       | 70 X 150 X 70                        | 100              | 28             | Insulation                      | Fibreglass 12 kg/m <sup>3</sup> , 25mm thickness       |  |
| ISBSN-G4-250-100                       | 75 X 100 X 75                        | 100              | 24             | R Value                         | 4.2  |  |
| ISBSN-G4-300-100                       | 75 X 150 X 75                        | 100              | 24             | Weight                          | 1016 gms / sq. mtr (30 oz/sq.yard)                     | UV resistant   |
|  |                                      |                  |                | Tear Strength                   | 5.5 x 5.5 kgs (12 x 12 lbs)                            |  |
|  |                                      |                  |                | Tensile Strength                | 226 x 204 kgs (500 x 450 lbs)                          | NFPA 701   |
|  |                                      |                  |                | Low Temp                        | -40 deg C (-40 deg F)                                  |  |
|  |                                      |                  |                | High Temp                       | 121 deg C (250 deg F)                                  |  |
|  |                                      |                  |                | Burst Strength                  | 800psi   |  |
| <b>SILICON</b>                         |                                      |                  |                |                                 |  |  |
| ISS-G8-230-100                         | 70 X 100 X 70                        | 100              | 28             | Fabric                          | Silicon Rubber coated                                  | 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-G8-290-100                         | 70 X 150 X 70                        | 100              | 28             | Insulation                      | Woven Fibreglass 12 kg/m <sup>3</sup> , 25mm thickness |  |
| ISS-G4-250-100                         | 75 X 100 X 75                        | 100              | 24             | R Value                         | 4.2  |  |
| ISS-G4-300-100                         | 75 X 150 X 75                        | 100              | 24             | Weight                          | 627 gms /sq.mt (18.5 oz/sq. yard.)                     | UV resistant   |
|  |                                      |                  |                | Tear Strength                   | 27 x 22 kgs (60 x 50 lbs)                              |  |
|  |                                      |                  |                | Tensile Strength                | 81 x 90 kgs (180 x 200 lbs)                            | Achieves Class 1 when tested as per ASTM - E84 - Surface Burning Characteristics   |
|  |                                      |                  |                | Low Temp                        | - 40 deg C (- 40 deg F)                                |  |
|  |                                      |                  |                | High Temp                       | 300 deg C (573 deg F)                                  |  |
|  |                                      |                  |                | Burst Strength                  | 450psi   |  |
| Rated for use at 400 deg C for 2 hours |                                      |                  |                |                                 |  |  |
| <b>POLYURETHANE</b>                    |                                      |                  |                |                                 |  |  |
| ISP-G8-230-100                         | 70 X 100 X 70                        | 100              | 28             | Fabric                          | Polyurethane Coated Woven                              | Polyurethane Coated Fabrics are fragile in construction but have a longer resistance period to high temperatures.  |
| ISP-G8-280-100                         | 70 X 150 X 70                        | 100              | 28             | Insulation                      | Fibreglass 12 kg/m <sup>3</sup> , 25mm thickness       |  |
| ISP-G4-250-100                         | 75 X 100 X 75                        | 100              | 24             | R Value                         | 4.2  |  |
| ISP-G4-300-100                         | 75 X 150 X 75                        | 100              | 24             | Weight                          | 460 gms /sq.mtr (13 oz/sq. yard)                       | Airtight and waterproof construction   |
|  |                                      |                  |                | Tear Strength                   | 16 x 14 kgs (35 x 30 lbs)                              | UV resistant.  |
|  |                                      |                  |                | 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   |  |

## SPECIFICATION SHEET

| Fabric  | Weight                              | Thickness          | Tensile Strength               | Tear Strength                | Low Temp         | High Temp      | Abrasion Resistance         | Leakage Resistance          | Fire Ratings   |
|---|-------------------------------------|--------------------|--------------------------------|------------------------------|------------------|----------------|-----------------------------|-----------------------------|--|
|   | 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   | 576 gms /sq.mtr<br>17oz /sq. yard   | 0.41 +/-<br>0.03mm | 108 x 100 kgs<br>240 x 220 lbs | 45 x 45 kgs<br>100 x 100 lbs | - 40°C<br>- 40°F | 93°C<br>200°F  | 15,500 cycles               | 450 psi                     | UL Listed<br>ODP, GWP  |
| Neoprene BS                                     | 1016 gms/ sq.mtr<br>30 oz/ sq.yard  | 0.43 +/-<br>0.03mm | 226 x 204 kgs<br>500 x 450 lbs | 5.5 x 5.5 kgs<br>12 x 12 lbs | - 40°C<br>- 40°F | 121°C<br>250°F | 550 cycles                  | 450 psi                     | UL Listed<br>UV Resistant<br>ODP, GWP  |
| Silicon<br>Rated for use at 400 deg C for 2 hrs | 627 gms/ sq.mtr<br>18.5 oz/ sq.yard | 0.46 +/-<br>0.03mm | 81 x 90 kgs<br>180 x 200 lbs   | 27 x 22 kgs<br>60 x 50 lbs   | - 40°C<br>- 40°F | 300°C<br>573°F | 135 cycles                  | 450 psi                     | ASTM E 84 - Class 1<br>UL Listed<br>ODP, GWP   |
| Hypalon   | 816 gms/ sq.mtr<br>24 oz/ sq.yard   | 0.58 +/-<br>0.03mm | 102 x 136 kgs<br>225 x 200 lbs | 22 x 18 kgs<br>48 x 39 lbs   | - 40°C<br>- 40°F | 121°C<br>250°F | 500 cycles                  | 250 psi                     | ASTM E 84 - Class 1  |
| Polyurethane                                    | 460 gms/ sq.mtr<br>13 oz/ sq.yard   | 0.40 +/-<br>0.03mm | 75 x 82 kgs<br>165 x 180 lbs   | 16 x 14 kgs<br>35 x 30 lbs   | - 40°C<br>- 40°F | 200°C<br>392°F | 110 cycles                  | 400 psi                     | Rated Class 1 as per BS 476, Part 7 Tests<br>Rated Class 0 as per BS 476, Part 6 Tests |
| Canvas  | 535 gms/ sq.mtr<br>16 oz/ sq.yard   | 0.41 +/-<br>0.03mm | 127 x 96 kgs<br>280 x 210 lbs  | 4 x 4 kgs<br>9 x 9 lbs       | - 40°C<br>- 40°F | 93°C<br>200°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



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



ODP = 0  
GWP < 5



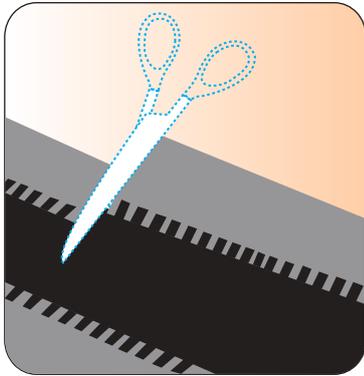
**Flexible Ducts**  
BS 476 part 7, Class 1  
BS 476 part 6, Class O



# RECOMMENDED INSTALLATION PROCEDURE

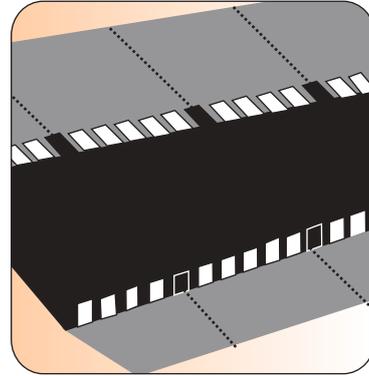
Ensure that the notched side of the connector faces outward and position the joint in the middle of a side rather than at a corner.

1.



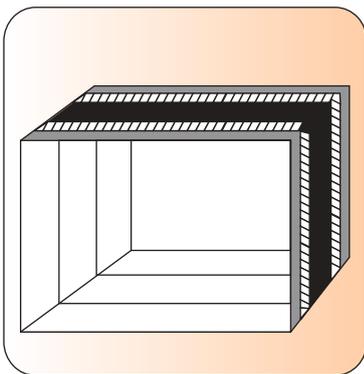
Remove the roll from the box, and cut the connector to the required length.

2.



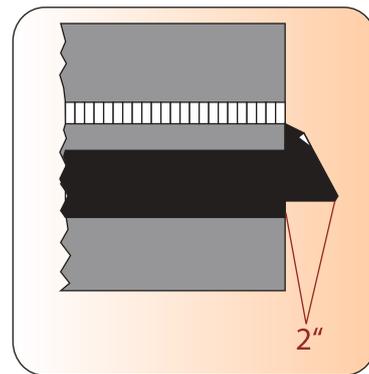
Holding the seam portion upwards to an angle of 90 degrees, make notches at the points where bending is required.

3.



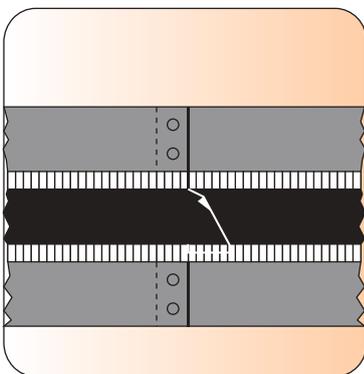
Bend the connector to form the required shape.

4.



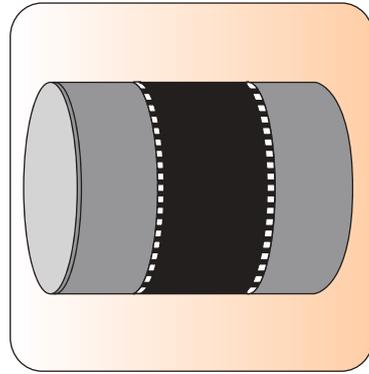
From the end of the connector, cut away the metal portion exposing only the fabric, with length of around 2 inches.

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.



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.



# AERODUCT

Ducting Accessories



**Manufactured By: Hira Industries LLC (AERODUCT DIVISION)**

P.O.Box: 113462, Dubai - U.A.E.

Tel : +971 4 884 8414

Fax : +971 4 884 8434

Email: [enquiry@rhira.com](mailto:enquiry@rhira.com)

[www.rhira.com](http://www.rhira.com)

## **U.A.E.**

Dubai (Showroom)

Tel : +971 4 2288988

Fax : +971 4 2233983

Abu Dhabi

Tel : +971 2 6347815

Fax : +971 2 6347825

## **Qatar**

P.O.Box 31179,

Doha - State of Qatar

Tel : +974 4467 6046 / 4779

Fax : +974 4467 3514

## **Kuwait**

Tel : +965 60046670

## **Oman**

P.O.Box 167, P.C.102, Sultanate of Oman

Tel : +968 2449 5919/+968 92591004

Fax : +968 2449 6649

## **Saudi Arabia**

Riyadh:

Tel/Fax: +966 1 14631749

Jeddah:

Tel: +966 56 9393148

## **India**

HIRA HVAC Tradelinks Pvt. Ltd.

Unit No.103/104, City Industrial Estate

Ground Floor, Vasai Phata, Vasai (E)

Dist Thane (Maharashtra), India - 401208

Tel : +91 250 321 1963 / 64 / 65

## **Sri Lanka**

Tel:+94 7737 10104

## **Australia**

Tel:+614 09 646 747

[www.aeroduct.ae](http://www.aeroduct.ae)