

FLEXIBLE DUCTS & CONNECTORS









SUPER VENT – INSULATED FLEXIBLE DUCTS

SUPER VENT **Insulated Flexible Ducts** is a tough, flexible and low weight duct which is extensively employed in ventilation and air conditioning structures for residential, commercial and industrial applications. They are suitable for connecting supply air outlets to rigid ductwork.

SUPERVENT SV-IFD model is made with double laminated clear polyester film bonded with strong black adhesive permanently to the corrosion resistant steel wire helix. Thermal efficiency is provided by wrapping the exterior with Ecose technology fiberglass insulation. Strong vapour barrier is made with metallized polyester film cover.



SUPER VENT SV-IFDM model is made with double laminated metallized polyester clear film bonded with strong adhesive permanently to the corrosion resistant steel wire helix. Thermal efficiency is provided by wrapping the exterior with Ecose technology fiberglass insulation. Strong vapour barrier is made with metallized polyester film laminate.





SUPER VENT SV-IFDA model is made with triple laminated aluminium clear polyester film bonded with strong adhesive permanently to the corrosion resistant steel wire helix. Thermal efficiency is provided by wrapping the exterior with Ecose technology fiberglass insulation. Strong vapour barrier is made with triple laminated aluminum polyester.



Product Specifications:

| Standard length | : 25 Feet |
|---------------------------|---|
| Diameter | : 4" to 20" |
| Maximum air velocity | : 5000 fpm |
| Maximum positive pressure | : 10" w.g- 4" to 16" |
| Maximum negative pressure | : ¾" w.g all diameters |
| Operating temperature | : -30° C to +150° C (-20° F to +300° F) |
| Insulation thickness | : 25mm to 50mm |
| Insulation density | : 16 Kg/m ³ , 24Kg/m ³ , 32Kg/m ³ - BS 476 & UL approved |
| Insulation R. value Max | : 4.2 |
| Applications | : Recommended to insulate rigid duct, HVAC ducting in |
| | applications such as AC ventilation, cold air supply, |
| | blowers and more. |



SUPER VENT – UNINSULATED FLEXIBLE DUCTS

SUPER VENT uninsulated flexible ducts are made of polyester film casing and reinforced with polyester spirally wound steel wire. The steel spring wire helix structure ensures that the duct is stable even when fully stretched and can withstand any mechanical abuse, thereby providing efficient air distribution.



When correctly installed the SUPERVENT uninsulated flexible ducts are proven to be highly efficient.

SUPERVENT SV-UIFDB model is made with **double laminated clear polyester film** bonded with strong black pigment adhesive permanently to the corrosion resistant steel wire helix.

SUPERVENT SV-UIFDM model is made with double laminated metallized polyester film bonded with strong adhesive permanently to the corrosion resistant steel wire helix

SUPERVENT SV-UIFDA model is made with triple laminated aluminum polyester film bonded with strong adhesive permanently to the corrosion resistant steel wire helix.



Product Specifications:

| Standard length | : 25 Feet |
|---------------------------|---|
| Diameter | : 4" to 16" |
| Maximum air velocity | : 5000 fpm |
| Maximum positive pressure | : 10" w.g- 4" to 16" |
| Maximum negative pressure | : ¾" w.g all diameters |
| Operating temperature | : -30° C to +150° C (-20° F to +300° F) |
| Standard color | : Metallic silver |
| Insulation density | : 16 Kg/m ³ , 24Kg/m ³ , 32Kg/m ³ - BS 476 & UL approved |
| Applications | : Air-conditioning and ventilating system including |
| | commercial, residential and institutional applications |
| | such as schools and hospitals. |

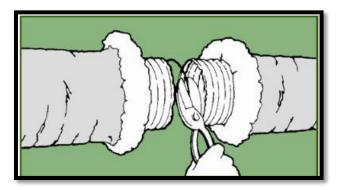
Note: Custom –made lengths available on request.

Sizes and properties are as per industry norms

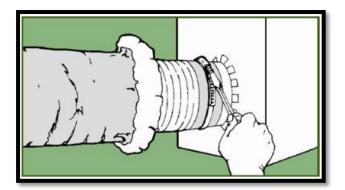


RECOMMENDED INSTALLATION PROCEDURE

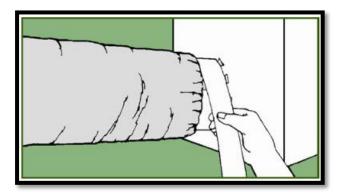
Connections: Using Tape and Fasteners



1) After desired length is determined, cut completely around and through duct with knife or scissors. Cut wire with wire cutters. Fold back jacket and insulation.



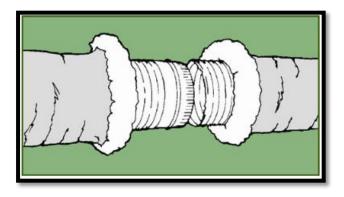
2) Slide at least 1" [25 mm] of core over fitting and past the bead. Seal core to collar with at least 2 wraps of duct tape. Secure connection with clamp placed over the core and tape and past the bead.



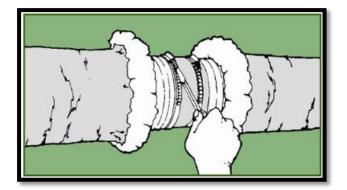
3) Pull jacket and insulation back over core. Tape jacket with at least 2 wraps of duct tape. A clamp may be used in place of or in combination with the duct tape.



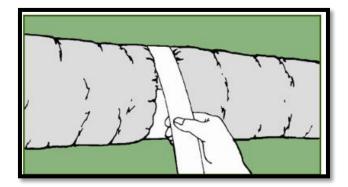
SPLICES: Using Tape and Fasteners



1) Fold back jacket and insulation from core. Butt two cores together on a 4" [100 mm] min. length metal sleeve.



2) Tape cores together with at least 2 wraps of duct tape. Secure connection with 2 clamps placed over the taped core ends and past the beads

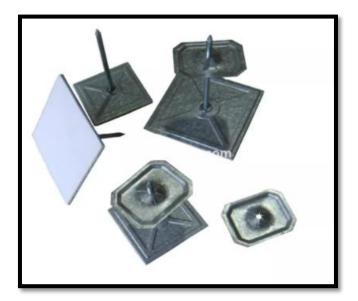


3) Pull jacket and insulation back over cores. Tape jackets together with at least 2 wraps of duct tape



INSULATION PINS (SVIP)

These pins are intended to meet industrial standards utilizing steel as per ASTM A653 grade.



Base metal with 28 gauge galvanized steel

Size: 50mm X 50mm, Pin: Soft un-nailed Zinc plated steel wire nails and aluminium wire nails with alloy 1100.Washers are rectangular in size with structural steel SS30 grade, 0.37 to 0.4mm thickness.

Self-adhesive type Pins with steel and aluminium nails:

Insulation Pins with self-adhesive fasteners which are generally used in HVAC system to fix thermal insulation or acoustic liner on to the duct surface, internally or externally. Function of these Pins is to hold the insulation firmly, not allowing any slump and avoid any condensation.



| PRODUCT CODE | BASE SIZE | NAIL LENGTH | QTY/BOX | SUGGESTED INSULATION THICKNESS |
|-----------------|--------------|----------------|---------|-----------------------------------|
| SVIP 25MM | 2" | 25mm | 500 | 20mm |
| SVIP 32MM | 2" | 32mm | 500 | 25mm |
| SVIP 45MM | 2" | 45mm | 500 | 38mm |
| SVIP 50MM | 2" | 50mm | 500 | 38mm |
| SVIP 65MM | 2" | 65mm | 500 | 50mm |
| SVIP 75MM | 2" | 75mm | 500 | 75mm |
| SVIP 90MM | 2" | 90mm | 500 | 75mm |
| SVIP 100MM | 2" | 100mm | 500 | 100mm |
| SVIP 110MM | 2" | 110mm | 500 | 100mm |
| SVIP 120MM | 2" | 120mm | 500 | 100mm |
| SVIP 130MM | 2" | 130mm | 500 | 125mm |
| SVIP 140MM | 2" | 140mm | 500 | 125mm |
| SVIP 150MM | 2" | 150mm | 500 | 150mm |

Installation Instruction: Important instruction to comply in order to achieve prime performance from **SUPERVENT** Insulation Pins.

- Ensure the surface is clean and dry, free from oil and dust particles
- Remove the release paper from the back of the insulation pins and fix on the surface
- Firmly press the base of the pin at the required position, fix the insulation over the pins and lock the insulation roll to steel surface using the steel washer provided.



SUPERVENT DUCT CONENCTOR

All mechanical equipment 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.

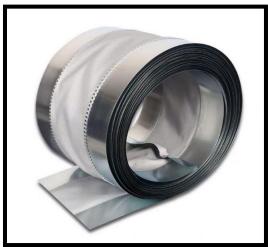
During manufacturing, the joint formed by attaching a layer of fabric to two strips of metal on either side is called a "Flexible Duct Connector".

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.

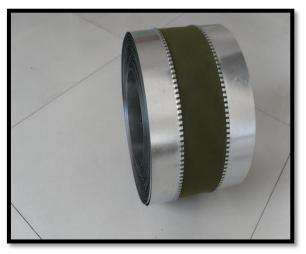
| Base fabric/ Coating | Code | Metal Width | Fabric Width | Metal Width | Packing |
|-------------------------|-------------|----------------|-----------------|----------------|---------|
| | SV-PV-3-134 | 1 ¾" | 3" | 1 ¾" | 100/150 |
| Polyester/Vinyl | SV-PV-4-300 | 3" | 4" | 3" | 100/150 |
| | SV-PV-4-400 | 4" | 4" | 4" | 100/150 |
| | SV-PV-6-300 | 3" | 6" | 3" | 100/150 |
| | SV-PV-3-300 | 3" | 3" | 3" | 100/150 |
| Glassfibre/Neoprene | SV-GN-3-134 | 1 ¾" | 3" | 1 ¾" | 100/150 |
| diassible/ webpicite | SV-GN-4-300 | 3" | 4" | 3" | 100/150 |
| | SV-GN-4-400 | 4" | 4" | 4" | 100/150 |
| | SV-GN-6-300 | 3" | 6" | 3" | 100/150 |
| | SV-GN-3-300 | 3" | 3" | 3" | 100/150 |
| Glassfibre/Silicone | SV-GS-4-300 | 3" | 4" | 3" | 100/150 |
| Glassificie/ sincolle | SV-GS-4-400 | 4" | 4" | 4" | 100/150 |
| | SV-GS-6-300 | 3" | 6" | 3" | 100/150 |
| | SV-GS-3-300 | 3" | 3" | 3" | 100/150 |



PVC DUCT CONNECTOR



SILICONE DUCT CONNECTOR



NEOPRENE DUCT CONNECTOR





| TECHNICAL DATA SHEET | | | | | | | | |
|--------------------------------------|----------------|--------------------|-------------------------|---------------------|----------------|-------------|--------------|--|
| Fabric (Code) | Color | Weight | Base Fabric | Tensile Strength | Tongue Tear | Low Temp | High Temp | Features |
| Vinyl (SV-PV-IN) | Black | 22 ozs/sq yd | Woven Polyster | 500/400 lbs | 150/150 lbs | -40°F | 200°F | Economically all purpose fabric with excellent resistance to cuts, tears or abrasions. Flame retardant coating with non-combustible fabric Not affected to mildew. Resistant to weather and most chemicals, grease & oil. Complying with UL214 Complying with BS 5438/2A for fire retardancy. |
| Neoprene Commercial (SV-GN-IN) | Black | 27 ozs/sq yd | Woven Fibre glass | 500/500 lbs | 25/20 lbs | -58°F | 225°F | Ideal for kitchen exhaust & fume hoods. Flame retardant coating with non- combustible fabric Not affected to mildew. Resistant to weather and most chemicals, grease & oil. Complying with UL214 Complying with BS 476 Part 7 (Class 1) |
| Silicone (SV-Gs-IN) | Silver Grey | 22 ozs/sq yd | Woven Fibre glass | 500/500 lbs | 50/40 lbs | -60°F | 500°F | Ideal for high temp applications. Flame retardant coating with non-combustible fabric Adversely affected by gas, toluene, acetone, grease Not affected to mildew. Resistant to weather and most chemicals. Complying with UL214 |



SUPER VENT ALUMINIUM TAPE

SUPER VENT Aluminium Foil Tape is a soft malleable Aluminium foil coated with an aggressive solvent acrylic adhesive. It can be used at normal as well as elevated and super low temperatures. It provides an excellent vapour seal and is ideally used for sealing joints, seams against moisture and vapour on foil jacketing insulation.

Foil tapes are used mostly in the HVAC industry, sealing & patching hot & cold air ducts, metal repairs and much more.



Product Specifications

- Construction : Substrate-soft aluminium / Adhesive-solvent acrylic
- Foil thickness : 25-30 microns
- Standard color : Metallic silver
- Temp resistance : 30°F to +250°F
- Peel adhesion : 83 oz/inch width
- Roll back tack : 4" (7/16")
- Elongation at break : 4%
- Tensile strength : 17 lbs/inch width
- Standard sizes : 2" (48mm) & 3" (72mm)



Notes: Length and width can be customized as per customer requirements. Sizes and properties are as per the industrial norms

Applications instruction: Before application the surface must be cleaned and should be free from dust, oil, water or any other solvents. For best results, the tape should be applied in normal room temperature.

Storage: The tape should be stored in room temperature and 50%RH in company packing.

Shelf life: 12 months from manufacturing date.