

# TWIGA FLEXIBLE DUCT

A Modular and Economical Air Distribution System with Maintenance Free Life

- Reduces Total Installed Cost Fast and Easy to Install
- Air Tight No Air Leakage, No Fiber Erosion
- Insulation "Twiga Insul" Class 'O' rated Glass Wool
- Core Material Low Friction Loss, Strong and Flame Resistant
- Vapour Barrier Reinforced for Maximum Toughness and Tear Resistance
- Wire Strong and Non Corrosive









# **Product Overview**

- "Twiga Flexible Duct" designed for HVAC systems is strong, light weight, fully flexible, compressible yet dimensionally stable.
- Inner core is made of laminated films permanently bonded to a coated tough steel wire helix.
- Thermal efficiency is provided by wrapping exterior of the inner core with a blanket of fiberglass wool insulation in various density and thickness as per the required thermal resistance.
- Outer jacket which acts as a vapor barrier is tear and abuse resistant and is made of double laminated film with fiberglass yarn reinforcement.

### **Application and Benefits**

- Ideal for all air-conditioning and ventilating systems in hospitals, hotels, industrial, residential, commercial and office buildings.
- Available as bare and pre insulated.
- Due to high degree of flexibility, allows ducting around obstacles where prefabricated metal ducts would be difficult and costly to install.
- A quick and economical means of correcting misalignment between system components.

#### **Specifications**

Specification for Flexible Duct	
Standard Length	7.62 m (25 ft.)
Diameter Range	100 mm to 500 mm (4 inch to 20 inch)
Maximum Rated Velocity	20.32 m/s (4000 ft/min)
Temperature Range	0°C-90°C (32°F - 194°F)
Maximum Rated Positive Pressure	253.99 mm w.g. (10 inch w.g.)
Maximum Rated Negative Pressure	25.39 mm w.g. (1 inch w.g.)
Fire Rating	Certified as per BS 476 Part 5 and 6
For Insulated Ducts	
Standard Insulation Density	16 Kg/m³ (1 lb/ft³)
Standard Insulation Thickness	25mm (0.98 inch)
Insulation R Value	0.64m²K/W (3.63°Fft²hr/Btu)

NOTE: Alternate insulation density and thickness are available upon request for higher thermal resistance

### **Material of Construction**

#### Inner Core – Available Configurations

- Metalised polyester film on inside and outside
- Clear polyester film on inside and metalised film on outside.
- Clear polyester film on inside and outside.
- Metalised polyester film on inside and Aluminium film on outside.
- Aluminium film on inside and outside.

### <u>Outer Sleeve – Available Configurations</u>

- Metalised polyester with fiberglass yarn reinforcement.
- Other customised configurations available upon request.

## **Friction Loss Diagram**



