



## ***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



 **TWIGA**  
Insulating India

## 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/m <sup>3</sup> (1 lb/ft <sup>3</sup> )
Standard Insulation Thickness	25mm (0.98 inch)
Insulation R Value	0.64m <sup>2</sup> K/W (3.63°Fft <sup>2</sup> hr/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.

#### Outer Sleeve – Available Configurations

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

### Friction Loss Diagram

