

PRODUCT SHEET

INSULATED FLEXIBLE AIR DUCT FOR ENVIRONMENTAL AIR HANDLING SYSTEMS

APPLICATIONS

Kaalflex Insulated Flexible Ducts, *Thermaflex®*, are a thermally insulated, fully lined, UL 181 Class I flexible air duct designed for low to medium pressure cooling and heating HVAC systems. It can be used in either supply or return sections and provides economical means for handling misalignment between systems components and ducting around obstacles where fabricated and fitted GI ducts are difficult and costly to use. It is equally suitable for new jobs or retrofit work and is especially useful when making system extensions or for changing conditioned zones, now or in the future. Compliance to NFPA Standards allows you to install lengths longer than the 14" limitation applying to connectors for fire and flame safety in ducting systems. It is a highly efficient part of the total duct system because the smooth liner; the ample insulation and tough outer vapor barrier provide excellent airflow, thermal insulation and double air seal.



FEATURES & BENEFITS

- ✓ Underwriters Laboratories Listed Vendor
- ✓ Complies with NFPA Standards 90A & 90B
- ✓ Corrosion resistant steel wire helix
- ✓ Fully lined for efficient air delivery
- ✓ Outer vapor barrier is a jacket of fiberglass scrim reinforced metallized film laminate
- ✓ Quality manufacturing leads to quality installation that increase volume and profits
- ✓ Available through quality distributors strategically located
- ✓ Available in 4.2, 6.0, & 8.0 thermal application values
- ✓ Convenient packaging & handling of 25 foot long pipes

Insulated :	Yes
Diameter :	4 - 20 inches ID
Pressure Rating :	(W.G.)
Positive :	10 inches(4"-16" ID) 6 inches(18"-20" ID)
Negative :	1/2 inch (4"-20" ID)
Velocity :	5000 fpm
Temp. Range :	-20° F to 250° F
R-Value :	R-4.2, R-6.0, R-8.0

MAJOR ADVANTAGES OVER CONVENTIONAL GI DUCTING:

- ✓ High degree of flexibility in duct runs allows ducting around obstacles
- ✓ Quick & economical means of correcting misalignment between system components
- ✓ Eliminates the need for some fittings
- ✓ Already insulated thereby further reducing labor costs of insulating bare metal GI ducting
- ✓ Fire retardant materials used in construction
- ✓ Minimal flame spread

APPLICATIONS AND ENGINEERING DATA

Nominal Inside Diameter (Inches)	4	5	6	7	8	9	10	12	14	16	18	20
Length (Feet)	25											
Inside Bend Radius (Inches)	4	5	6	7	8	9	10	12	14	16	18	20
Operating Pressure (Inches Water Column)	Positive : 10 inches (4 -16 in. ID) & 6 inches (18 - 20 in. ID) Negative : 0.5 inches (4 - 20 in. ID)											

Operating Temperature Range (°F)	
Minimum	-20
Maximum	250
Velocity (Feet Per Minute)	5000
R-Value	4.2, 6.0, 8.0
Surface Burning Characteristics	
Maximum Flame Spread	25 feet
Maximum Smoke Developed	50 feet
Vapor Transmission Rating (U.S. Perm)	0.1

CONSTRUCTION AND MATERIALS

Strong polyester film laminated and encapsulating a heavy, corrosion resistant steel wire helix, forms the inner core and supports a thick blanket of fiberglass insulation. The outer vapor barrier is a bi-directional reinforced metallized vapor barrier that will not unravel. The smooth airtight inner core of polyester is designed for low to medium pressure systems.

KAALFLEX - *Thermaflex*® ADVANTAGES

Kaalflex Pvt Ltd. offers unique competitive advantages over other ordinary flexible duct solutions. Technology collaboration with an industry leading U.S. based manufacturer, Flexible Technologies, provides the latest and most comprehensive global customer satisfaction feedback which results in the highest quality products in the market. Only genuine *Thermaflex*® branded products manufactured by Kaalflex have the proprietary flame retardant glue properties leading to unparalleled international standards of fire safety & prevention in duct management systems. Kaalflex strives to satisfy not only the engineer, consultant or contractor but furthermore the end user and their Indoor Air Quality (IAQ).

Why go for the rest, when you can have the best?