

#### The #1 Flexible Duct in the World.

# **M-KC FLEXIBLE AIR DUCT**

## Thermaflex<sup>®</sup> M-KC non-insulated flexible air duct is designed for use in all pressure cooling and heating systems.

Thermaflex<sup>®</sup> is a global leader in the flexible ducting industry for commercial and residential HVAC applications.

Thermaflex® M-KC is used in either supply or return sections: for branch ducts and branch connections to or between mixing units, induction units, control or terminal units and diffusion devices, including light troffers. It provides economical means for handling misalignment between systems components and ducting around obstacles where fabricated and fitted ducts are difficult and costly to install. It is equally suitable for new jobs or refit work and is especially useful when making systems extensions or for changing zones, now or in the future. Compliance with NFPA Standards lets you install lengths longer than the limitation applying to connectors. It is a highly efficient duct in higher pressure systems because the liner, in combination with the reinforced, metallized vapor barrier, provides a double air seal.

Increase productivity and profitability with innovative products by Thermaflex<sup>®</sup>. Contact us today at 1-800-459-4822.



The Pink Panther™ & © 1964-2008 Metro-Goldwyn-Mayer Studios Inc. All Rights Reserved. The color PINK is a Registered trademark of Owens Corning. ©2008 Owens Corning.

### **M-KC Flexible Air Duct**

#### **Features and Benefits:**

- Underwriters Laboratories listed as Class 1 air duct, UL Standard 181 and CUL S110 with no limitations to 14' runs.
- Core material will not support mold and mildew growth.
- Highly resistant to rust and corrosion.
- Fully lined for efficient air delivery.
- Large diameter, heavy, spring steel wire helix assures dimensional stability, resists mechanical abuse and provides more efficient air delivery.
- Bi-directional reinforced metallized jacket resists tearing reduces chance of damage to vapor barrier.
- Heavy woven and coated fiberglass cloth core assures quiet performance. Core is almost impossible to puncture or tear.
- No more concern about fiber in the air stream or loss of conditioned air.

- Uniquely constructed core will not unravel when cut.
- All components of M-KC are self-extinguishing and will not support flame (see oxygen index figures under application and engineering data). Core will not deteriorate in a fire until the temperature reaches the melting point of glass.
- "Outward cast" of helix keeps duct core from shrinking up inside insulation and jacket, resulting in less waste.
- Heavy woven and coated fiberglass cloth core will not "blow-out" and eliminates costly call-backs.
- Lower installed cost.
- Available through broad national distribution.
- · Meets California Department of Health Standards OSHPD.
- GreenGuard Certified for children and schools.

Application a Engineering Bata														
Nominal Inside Diameter (inches)	3	4	5	6	7	8	9	10	12	14	16			
Length (feet)	25	25	25	25	25	25	25	25	25	25	25			
Inside Bend Radius (inches)	3	4	5	6	7	8	9	10	12	14	16			
Operating Pressure (inches water column)	Positive: 16 inches (3-10in. ID) 10 inches (12-216in. ID) Negative: 2 inch													
Internal Operating Temperature Range (°F)	Minimum: -20							Maximum: 250						
Velocity (ft/minute)	6000													
Surface Burning Characteristics	Max. Flame Spread: 25							Max. Smoke Developed: 50						
Vapor Transmission Rating (US Perm)	0.05													
Oxygen Index Ratings	Woven Fiberglass Fabric Core: 35.60													

#### **Application & Engineering Data**

#### **Construction & Materials**

Inner liner provides an air seal constructed of woven and coated fiberglass fabric permanently bonded to a coated spring steel wire helix. Inner liner supports a thick fiberglass insulation blanket. Vapor barrier for the assembly is an outer jacket of a fiberglass reinforced metallized film laminate.

#### **Suggested Specification**

Flexible duct for connections between \_\_\_\_\_\_ and \_\_\_\_\_\_ shall be Thermaflex M-KC air duct rated for a maximum pressure of 16" (3-10 in. ID) or 10" (12-16 in. ID) water column positive and 2" water column maximum negative pressure and 6000 FPM maximum velocity and Listed by Underwriters Laboratories, Inc., under UL Standard 181 and CUL S110 as a Class 1 air duct and complying with NFPA Standards 90A and 90B. Thermaflex M-KC air duct shall be factory made and composed of: an inner duct of woven and coated fiberglass providing an air seal and permanently bonded to coated steel wire helix, a fiberglass insulating blanket and low permeability outer vapor barrier of fiberglass reinforced metallized film laminate.

Warranty Thermaflex warrants that all insulated and non-insulated products will be free from defects in materials and factory workmanship for the lifetime of the product. This warranty covers the flexible duct, materials and labor. This warranty applies only to ducts properly installed in accordance to Thermaflex's written installation instructions and under conditions specified in published performance data. Thermaflex shall not be liable to buyer or any third party for any special, secondary, incidental or consequential damages however arising.

#### 1-800-459-4822 · www.thermaflex.net

**Corporate Headquarters**: 381 Carwellyn Road • Abbeville, SC 29620 Phoenix, AZ • Cairo, GA • Mississauga, ON Canada Coated spring steel wire helix Special coating prevents corrosion

Coated

woven fiberglass

Fiberglass reinforced

metallized

film vapor barrier

liner

Fiberglass

insulation