ICC-ES PMG Product Certificate

PMG-1496

Effective Date: October 2024

This listing is subject to re-examination in one year.

www.icc-es-pmg.org | (800) 423-6587 | (562) 699-0543 *A Subsidiary of the International Code Council®*

CSI: DIVISION: 23 00 00—HEATING, VENTILATING, AND AIR-CONDITIONING (HVAC)
Section: 23 33 46—Flexible Ducts

Product certification system:

The ICC-ES product certification system includes testing samples taken from the market or supplier's stock, or a combination of both, to verify compliance with applicable codes and standards. The system also involves factory inspections, and assessment and surveillance of the supplier's quality system.

Product: Thermaflex Flexible Air Ducts

Listee: Flexible Technologies, Inc.
381 Carwellyn Road
Abbeville, SC 29620
www.Thermaflex.net

Compliance with the following codes:

2024, 2021, 2018, 2015, 2012 and 2009 *International Mechanical Code*® (IMC)
2024, 2021, 2018, 2015, 2012 and 2009 *International Residential Code*® (IRC)
2024, 2021, 2018, 2015, 2012 and 2009 *Uniform Mechanical Code*® (UMC)*

**Uniform Mechanical Code is a copyrighted publication of the International Association of Plumbing and Mechanical Officials.*

Compliance with the following standards:

ASTM C518-2021, Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus
UL 181-2013 (11th Edition), Factory-made Air Ducts and Air Connectors

Identification:

Thermaflex Flexible Air Ducts described in this listing must be identified by a label bearing the manufacturer's name, the product name, and the ICC-ES PMG listing mark. The ICC-ES evaluation report number (PMG-1496) is optional. Each package containing Thermaflex Flexible Air Ducts described in this listing must be labeled with the manufacturer's name and the ICC-ES PMG listing mark.

Installation:

Thermaflex Flexible Air Ducts must be installed in accordance with the manufacturer's published instructions and the applicable code(s).

Models:

Thermaflex Flexible Air Ducts are classified by type, diameter and R-value. Each of the types described in this listing are designated as Class 1 air ducts. Table 1 shows the duct types covered under this listing. Each type is further defined below.

Air Duct Type	Diameters	R-Values
Flexvent KM-FC	4" through 14"	R6, R8
Flexvent KPE-FC	4" through 14"	R6, R8
Flexvent KP-FC	4" through 14"	R6, R8
Flexvent RKD-FC	4" through 14"	R6, R8

- *Maximum Air Velocity: 5,000 fpm.*
- *Maximum Positive Pressure: 10" w.g.*
- *Maximum Negative Pressure: 0.5" w.g.*
- *Maximum Operating Temperature: 250˚F.*

General (All Types):

Each duct type consists of a wire helix and polyester film liner covered with an oversized loose wire (spacer) helix. The spacer creates an internal channel occupied by the liner. Flood-coated MET PET (metalized polyester) low-emissivity film is used on the outer layer of the duct liner. The spacer is covered with one layer of glass fiber insulation and a vapor barrier.

The low-emissivity surface on the exterior of the duct liner (in combination with the air space between the liner and spacer) creates an asymmetric reflective insulation system within the installed duct wall. The two insulation materials – reflective and fibrous – function together to provide the total thermal resistance (R-value) of the duct.

Flexvent KM-FC: Exterior vapor barrier is a polyester / metalized polyester film laminate with glass fiber reinforcement.

Flexvent KPE-FC: Exterior vapor barrier is a polyester / polyester film laminate with glass fiber reinforcement.

Flexvent KP-FC: Exterior vapor barrier is extruded tubular polyethylene utilized with (R6) or without (R8) a separate layer of glass fiber reinforcement.

Flexvent RKD-FC: Exterior vapor barrier is extruded tubular polyethylene for outdoor applications utilized with (R6) or without (R8) a separate layer of glass fiber reinforcement.

Conditions of Listing:

1. The models described in this listing must be installed in accordance with manufacturer's published installation instructions.
2. The maximum air velocity for all models listed on this report shall be 5,000 fpm.
3. The maximum positive pressure for all models listed on this report shall be 10" w.g.
4. The maximum negative pressure for all models listed on this report shall be 0.5" w.g.
5. The maximum operating temperature for all models listed on this report shall be 250˚F.
6. The Thermaflex Flexible Air Duct types described in this listing are under a quality control program with an annual inspection by ICC-ES.