PTM Dual-Tech® Submittal Sheet

DEC 2018

Description

PTM **Dual**-**Tech®** is a pre-fabricated double-layer ducting system with an .032″ aluminum jacket (multiple finishes available) that uses Kingspan KoolDuct panels that are UL listed as a Class 1 Air Duct System meeting the standard UL 181. CFC/HCFC-free, using a blowing agent that has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP).

PTM **Dual**-**Tech®** has a single install application; eliminating the need to install insulation as a second operation, thus reducing time onsite and improving overall construction schedules through faster installation speeds. PTM **Dual**-**Tech®** improves energy efficiency and is backed by a **PTM 20-year** limited warranty.
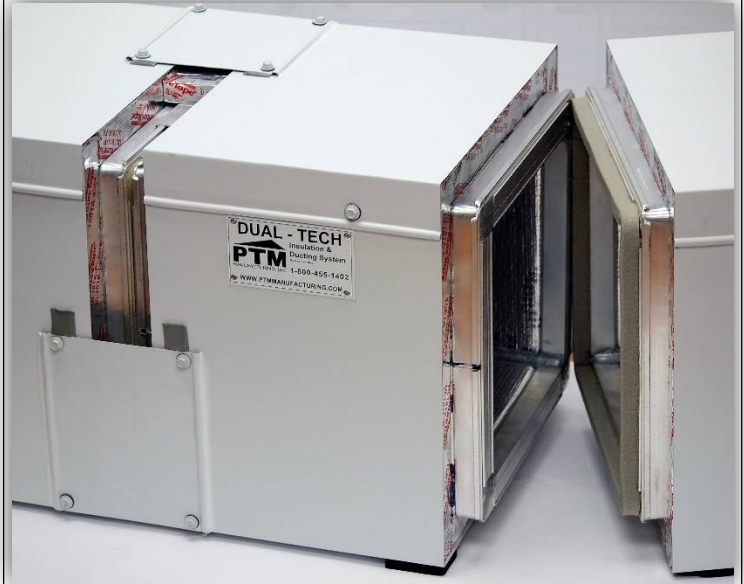
Recommended Uses

PTM **Dual**-**Tech®** is primarily designed for exterior HVAC ducting applications on new construction and existing HVAC upgrades. PTM **Dual**-**Tech®** is also suitable for interior applications in lieu of a jacketed insulation system (e.g. exposed ducting in mechanical equipment rooms, gymnasiums, etc.). PTM **Dual**-**Tech®** is the perfect choice for all HVAC Supply, Return, Exhaust, Fresh Air, and Outside Air ducting needs, providing long term energy efficiencies that will also improve the IAQ of the building.

Features and Benefits

- **Fully assembled and factory sealed**
- **Single trade installation**
- Improves installation speed (2x that of sheet metal and insulation)
- Superior strength (double-layer construction)
- **R-16 thermal rating** (greater values available)
- White heat reflective finish standard (others available)
- Low air leakage: Less than 1%
- Inner layer fabricated to **SMACNA 2015 Phenolic Duct Construction Standard**, UL-181 Listed Class 1 Ducting
- Whole life cost savings up to 30% over 30 years
- Eliminates fiber glass from the air stream
- Reduces weight loads (1/3 the weight of sheet metal & insulation), less than 2 lbs. per sq. ft.
- Reduction in CO2 emissions (1.79 lb./sq. ft. of bldg. floor area)
- Ductwork fabricated from the Kingspan KoolDuct system can contribute points towards achieving credits, including pilot credits, in many of the LEED (Leadership in Energy & Environmental Design) rating systems, developed by the USBGC (United States Green Building Council)
- **20 Year Limited Warranty**

General Properties

Mean Air Velocity (Max.)	5000 fpm/ 25.4 m/s
Design Pressure (Higher Pressure Gauges Available Upon Request)	Positive: 6 in. w.g. / 1500 Pa Negative: 6 in w.g. / 1500 Pa
Nominal Density Range of Insulation	3.43-3.75 pcf/55-60 kg/m³
Closed Cell Content	>90%
Specific Heat Capacity of Insulation	0.45 Btu/lb·°F / 1.88 kJ/kg·°C
Minimum Compressive Strength at 10% Compression (BS EN 826: 1996)	29 psi / 200kPa
Thermal Conductivity (k-value) at 50-74°F Mean (ASTM C 518)	0.146 Btu·in/ft²·hr·°F
Thermal Resistance (Material R-Value: Installed & Out of Package) (ASTM C 518)	(2) 1 3/16" layers 16.2 ft²·hr·°F/Btu
Internal Air Temperature	-15 °F to +185°F

Fire & Smoke Performance: The panels successfully pass the Burning Test (UL 181) and do not exceed flame spread / smoke developed indices 25/50 (ASTM E 84 / UL 723).

Patent # 9,371,941

Available only through:

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