



# DUAL WALL E-FREE

## APPLICATION

Eastern dual wall spiral duct with our new E-Free insulation, specially designed to keep fiberglass out of the airstream, is the cost effective answer to the expensive and cumbersome use of Mylar barriers or rubber insulation in dual wall applications.

E-Free Insulation has a smooth and durable black mat bonded to the light yellow insulation blanket. The durable black 12 mil thick polyester and rayon is installed facing the airstream, isolating the fiberglass substrate from the airstream. This unique mat facing is treated with flame retardant, antimicrobial, and water repellent agents.

## SPECIFICATION COMPLIANCE

NFPA 90A/90B

Conforms to ASHRAE 62-2001

## AVAILABILITY AND THERMAL PERFORMANCE

THICKNESS		R-VALUE		K-VALUE	
IN	MM	IP	SI	IP	SI
1	25	4.2	0.74	0.24	0.035
2	51	8	1.41	0.24	0.035

## TYPICAL PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	VALUE
Operating Temp	ASTM C 411	250°F / 121°C
Maximum Air Velocity	ASTM C 1071	5,000 fpm / 25.4 m/s
Water Vapor Sorption	ASTM C 1104	<3% @ 120°F/49°C 95% RH
Fungi Resistance	ASTM C 1338	Meets Requirements
Fungi Resistance	ASTM G 21	Meets Requirements
Corrosiveness	ACTM C 665	Meets Requirements
Thermal Conductivity	ACTM C 518	Btu·in/hr·°F = .24
Thermal Conductivity	ACTM C 518	W/m·°C = .035

## Surface Burning Characteristics

Flame Spread	ASTM E84	25
Smoke Developed	AND UL723	20

## SOUND ABSORPTION COEFFICIENTS

THICKNESS		OCTAVE BAND CENTER FREQUENCIES (Hz)						
IN	MM	125	250	500	1000	2000	4000	NRC
1	25	0.06	0.33	0.73	0.99	1.06	1.05	0.8

## LIMITATIONS

Do not use with wood or coal fired equipment, or equipment of any type that does not include maximum temperature controls and where operating temperatures of 250°F / 121°C may be exceeded.

Do not use in kitchen or fume exhaust ducts, or any ducts conveying solids or corrosive gases.

Do not use in any application where the duct liner may come in direct contact with liquid water, such as cooling coils, humidifiers, and evaporative coolers, unless protected from the water source.

Do not use adjacent to high temperature heating coils.