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Specification Form JFF Excelon Flexible Duct Connector

DESCRIPTION

All air duct installations for heating, cooling or ventilation are attached to mechanical equipment containing a fan or blower. Vibrations, noises and rattles resulting from operation of the fan or blower are transmitted into the metal ducts which carry the noises throughout the system.

In order to isolate the vibration and noises to the source, an air - tight flexible joint, consisting of a fabric which is attached to sheet metal on both side, must be inserted between the equipment and the ductwork. This vibration isolator is called a "Flexible Duct Connector".



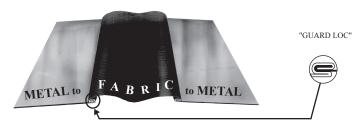
RELATED NFPA 90A & 90B STANDARDS

2-3.2.2 Vibration isolation connectors in duct systems shall be made of an approved flame-retardant fabric or shall consist of sleeve joints with packing of approved material, each having a maximum flame spread index of 25 and a maximum smoke developed index of 50. Exception: Approved flame-retardant fabric having a maximum length of 10 in. (45.4 cm) in the direction of airflow-NFPA No. 90A 1999

2-1.1.1 Exception No. 3: Vibration isolation connectors in duct systems shall be made of approved flame-retardant fabric or shall consist of sleeve joints with packing of approved noncombustible material. The fabric shall not exceed 10 in. (254 mm) in length in direction of airflow-**NFPA No. 90B 1999**

FABRIC	Excelon ⁴		
Continuous Temp. Range	-40°F. to 180°F.		
Color	Black		
Weight Per Square Yard	10/12 oz.		
Hydrostatic Burst ¹	390		
Tear Strength ²	110/125		
Tensile Strength ³	220/190		
Base Fabric	Woven Nylon/Polyester Blend		
Coating	Vinyl		
Features	High Tear Strength		
	High Weather Resistance		
	Unaffected by Mildew		
	Gaurd Loc Fold		
	28 Gauge G60 Galvanized		
Meets NFPA 90A and NFPA 90B	214 For Flame Retardancy		
Codes	JFF JR LT Excelon(#10031)		
Junior			
1 3/4 x 3 x 1 3/4			
Guard Loc			

All Metal-Fab, Super Metal-Fab and TDC/TDF Flexible Duct Connectors are manufactured with 24 gauge galvanized steel.



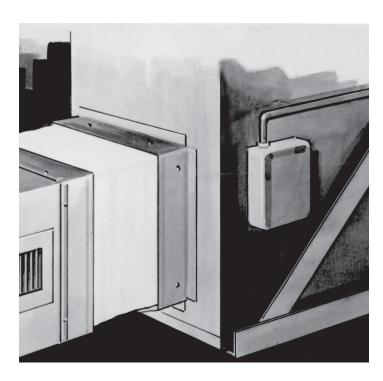
Notes:

- 1. Leakage resistance as per Federal Test Standard 191 Method #5512. Results in P.S.I. (To convert inches of water multiply P.S.I. x 27.176.).
- 2. Tear strength in tongue pounds as per Federal Test Standard 191 Method #5134.1 (warp/fill).
- 3. Tensile strength in grab pounds as per Federal Test Standard 191 Method #5100 (warp/fill).
- 4. Standard Excelon is not LA city approved. Use Excelon-LA when LA city approval is necessary. (See Specification Form Excelon-LA 203)

SUGGESTED SPECIFICATION

Vibration Isolating Flexible Duct Connector For Heating, Cooling & Exhaust Supplies & Returns.

At the inlet and discharge of all air handling	equipment(unless otherw	rise noted) furnish and in	nstall vibration isolators.	Vibration isolators shall be
a coated woven fabric named				
Vibration isolators shall have a tear strength of	of not less then	, and a continuous ten	nperature range of	Vibration isolators
shall be preassembled metal to exposed fabric	to metal. Fabric and meta	al shall be joined by me	ans of a double lock sear	n.
Vibration isolators shall be code	(called Flexible Duct C	Connectors) as manufact	tured by Duro Dyne Corp	poration, Bay Shore, N.Y.





All Listed Duro Dyne Flexible Duct Connector Fabrics are designed to meet the following specifications:

- 1. MIL-C-20696B Para. 4.4.3. (Oil Resistance).
- 2. MIL-C-20696B Para. 4.4.4. (Hydro Carbon Resistance).
- NFPA 90A Installation of Air Conditioning and Ventilating Systems Para. 2-3.2.2 1999 Edition.
- 4. NFPA 90B Warm air heating and air conditioning systems. Para. 2-1.1.1 exc. no 3 1999 Edition.

All Duro Dyne Flexible Duct Connectors utilize galvanized steel meeting ASTM-A-525 G 60 or better.

CHEMICAL RESISTANCE

- (X = Extremely Resistant)
- (~ = Not Recommended)
- (O = No Data Available)

Chemical	Excelon	Chemical	Excelon		
Acetic Acid	~	Hydrofluoric Acid (100%)	Hydrofluoric Acid (100%) ~		
Aluminum Chloride	X	Hydrogen Peroxide	X		
Aluminum Sulfate	X	Hydrogen Sulfide	X		
Ammonia (Anhyd)	X	Lactic Acid	~		
Ammonium Hydroxide	X	Linseed Oil	~		
Ammonium Sulfate	X	Magnesium Chloride	~		
Barium Sulfide	X	Maleic Acid	X		
Black Sulfate Liquor	X	Methyl Alcohol	~		
Boric Acid	X	Methyl Cellosolve	~		
Butyl Alcohol	~	Mineral Oil	X		
Cadmium Plating Solution	X	Naptha	~		
Calcium Chloride	X	Nickel Chloride	X		
Calcium Hypochlorite	X	Nickel Sulfate	X		
Chlorine Water	X	Nitric Acid (40%)	X		
Chromic Acid	X	Oleic Acid	X		
Chromium Plating Solution	X	Oleum	~		
Citric Acid	X	Oxalic Acid	X		
Copper Chloride	X	Phosphoric Acid (85%)	~		
Copper Sulfate	X	Pickling Solution	X		
Cottonseed Oil	X	Potassium Chloride	X		
Diacetone Alcohol	~	Potassium Cyanide	X		
Disodium Phosphate	X	Potassium Dichromate	X		
Ethyl Alcohol	~	Potassium Hydroxide (40%)	X		
Ethylene Glycol	~	Potassium Sulfate	X		
Ferric Chloride	X	Propyl Alcohol	~		
Ferric Sulfate	X	Sodium Chloride	X		
Fluroboric Acid	X	Sodium Hydroxide (40%)	~		
Formaldehyde (40%)	X	Sodium Hypochlorite	~		
Formic Acid	X	Steam	~		
Glucose	X	Sulfur Dioxide (Liquid)	~		
Glycerine	~	Sulfuric Acid (50%)	X		
Heptane	~	Sulfuric Acid (over 50%)	~		
Hexane	~	Tannic Acid	X		
Hydrobromic Acid (40%)	~	Vinegar	X		
Hydrochloric Acid (conc)	~				

