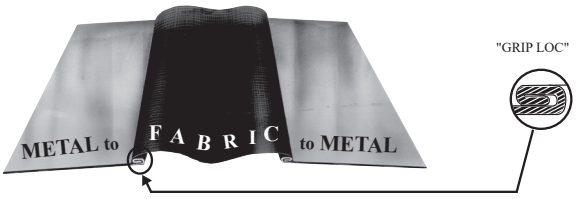
SUBMITTAL RECORD
JOB _____
LOCATION _____
SUBMITTED TO _____
SUBMITTAL PREPARED BY _____
APPROVED BY _____
DATE _____

Submittal Form
Neoprene
MFN333 (#10003)
Flexible Duct Connector
Metal-Fab® 3" x 3" x 3"

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".



Continuous Temp. Range	-40°F. to 200°F
Color	Black
Weight Per Square Yard	30 oz
Abrasion Resistance [1]	600 cycles
Leakage Resistance [2]	595
Tear Strength [3]	12/12
Tensile Strength [4]	500/450
ASTM E84 Rating (Flame/Smoke)	0/10
NFPA 701	Yes

FEATURES

- Extremely resistant to alkalies & gasoline
- Excellent on systems exposed to toxic fumes
- Good general purpose fabric
- Unaffected by mildew

Notes:

1. Abrasion resistance as per Federal Test Standard 191 Method #5306 using CS 17 wheel with 250 Gram load.
2. 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.).
3. Tear strength in tongue pounds as per Federal Test Standard 191 Method #5134.1 (warp/fill).
4. Tensile strength in grab pounds as per Federal Test Standard 191 Method #5100 (warp/fill).

SGS GOVMARK

Program: ASTM E84 (Version 1.61)

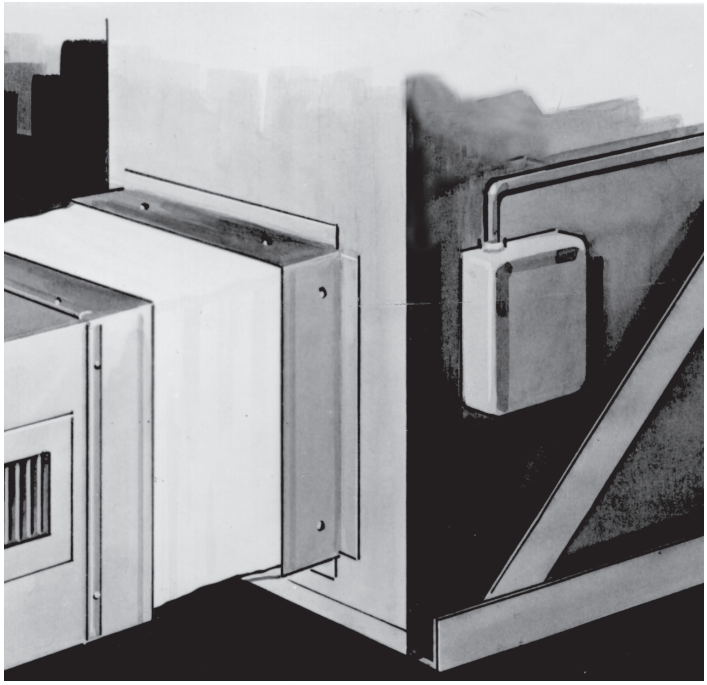
Test Method	: ASTM E84
Test Report #	: 3-33153-0-A
Date	: 6/27/2019
Client	: Duro Dyne
Operator	: Jimmy Rosinsky
Details of Preparation	: The specimen was not adhered to any substrate, Instead it was laid over a 2" hexagonal wire mesh screen and 1/4" rods. The 24 ft. length was comprised of four 12 ft. sections rolled out alongside one another filling 22" wide.
Observations	: No unusual observations
Area Under Flame Curve (ft min)	: 1.11
Raw Flame Spread Index (ft min)	: 0.57
Rounded Flame Spread Index (ft min)	: **0**
Ignition Time	: **00:35 mm:ss**
Area Under Smoke Curve (%A min)	: 9.82
Raw Smoke-Developed Index	: 9.74
Rounded Smoke-Developed Index	: **10**
Total Gas Flow(L)	: 1436.1
Total Gas Flow(ft^3)	: 50.7
Maximum Flame Front Achieved(ft)	: 0.2 (@291s)

All Metal-Fab, Super Metal-Fab and TDC/TDF Flexible Duct Connectors are manufactured with 24 gauge galvanized steel.
Duro Dyne meets or exceeds the SMACNA steel requirements for flexible duct connector.

SUGGESTED SPECIFICATION

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

At the inlet and discharge of all air handling equipment (unless otherwise noted) furnish and install vibration isolators. Vibration isolators shall be a coated woven fabric named Neoprene and shall be "Underwriters Laboratories Classified". Vibration isolators shall have a tear strength of not less than 12/12, and a continuous temperature range of -40°F. to 200°F. Vibration isolators shall be preassembled metal to exposed fabric to metal. Fabric and metal shall be joined by means of a double lock seam. Vibration isolators shall be code **MFN333** (called Flexible Duct Connectors) as manufactured by Duro Dyne Corporation, Bay Shore, N.Y.



Specifications

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).
3. NFPA701 Tests for Flame Propagation of Fabrics and film (except Teflon).
4. California State Fire Marshal Approved.
5. Denver City Approved.

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

Duro Dyne Flexible Duct Connectors are also available with 300 series stainless steel or 3003 aluminum upon request.

CHEMICAL RESISTANCE

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

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

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