

Submittal Record

Job: _____

Location: _____

Submitted To: _____

Submittal Prepared By: _____

Approved By: _____

Date: _____



Flexible Duct Connector Specification Form



City of Los Angeles approval RR #8434

Metal/Fabric Sizes

Commercial/Lt. Comm.	3"	3"	3"
Super Commercial	3"	6"	3"
TDC/TDF	4"	3"	4"
Residential	2"	3"	2"
Fab-Guard Residential	1½"	4"	1½"
Fab-Guard Lt. Commercial	2¼"	4"	2¼"

Fabric Comparisons

<input type="checkbox"/> Neoprene	<p>Basic Fabric: Fiberglass Weave Coating: Neoprene (Chloroprene) Weight: 29 oz./yd.² (983 g/m²) Thickness: .027 inches (.68mm) Tensile Strength: 475 x 375 lbs. (2112x1668N) Burst Strength: 750+ psi (5171 kPa) Tear Strength: 25 x 20lbs. (111x89N) Heat Range: -35°F + 235°F (-37°C + 113°C) Applications:</p> <p> <input type="checkbox"/> Commercial <input type="checkbox"/> Light Commercial <input type="checkbox"/> Super Commercial <input type="checkbox"/> TDC/TDF <input type="checkbox"/> Residential </p>	<p>Fire Rating: Self-Extinguishing Fabric Surpasses all requirements for Duct Connectors as per National Fire Protection Association Standard 90A and 90B. Meets ULC-S109, 1969 standards of Flame Tests of Flame Resistant Fabrics. Fabric is tested in accordance with ANSI/UL-214 for flame propagation of fabrics and films.</p> <p> <input type="checkbox"/> Fab Guard Lt. Commercial <input type="checkbox"/> Fab Guard Residential </p>
<input type="checkbox"/> Vinylflex™	<p>Basic Fabric: Polyester Scrim Coating: Polyvinyl Chloride Weight: 20 oz. / yd.² (678 g/m²) Thickness: .023 inches (.58mm) Tensile Strength: 220 x 195 lbs. (979x868N) Burst Strength: 300+ psi (2069kPa) Tear Strength: 70 x 45lbs. (312x200N) Heat Range: -35°F + 200°F (-37°C + 93°C) Applications:</p> <p> <input type="checkbox"/> Commercial <input type="checkbox"/> Light Commercial <input type="checkbox"/> Super Commercial <input type="checkbox"/> TDC/TDF <input type="checkbox"/> Residential </p>	<p>Fire Rating: Self-Extinguishing Fabric Exceeds Safety Standards for flame tests of flame resistant fabrics, ULC-S109-1969. Meets specifications for duct connector as per the National Fire Protection Association, Standard 90A and 90B.ARL Listed and tested in accordance with ANSI/UL-214 for flame propagation of fabrics and films.</p> <p> <input type="checkbox"/> Fab Guard Lt. Commercial <input type="checkbox"/> Fab Guard Residential </p>
<input type="checkbox"/> Hypalon	<p>Basic Fabric: Woven Fiberglass Coating: Hypalon (C.S.M.) Weight: 24 oz. / yd.² (814 g/m²) Thickness: .020 inches (.51 mm) Tensile Strength: 475 x 375 lbs (2112x1668N) Burst Strength: 750+ psi (5171 kPa) Tear Strength: 20 x 15 lbs (89x67N) Heat Range: -50°F + 260°F (-46°C + 127°C) Applications:</p> <p> <input type="checkbox"/> Commercial <input type="checkbox"/> Super Commercial <input type="checkbox"/> TDC/TDF </p>	<p>Fire Rating: Self-Extinguishing Fabric Meets requirements for duct connectors as per National Fire Protection Association Standard 90A. Meets ULC-S109 standards of Flame Tests of Flame Resistant Fabrics. Fabric is UL Listed (UL-214)</p>
<input type="checkbox"/> Silicon Hi-T™	<p>Basic Fabric: Fiberglass Weave Coating: Silicone Rubber Weight: 19 oz. / yd.² (645 g/m²) Thickness: .020 inches (.51 mm) Tensile Strength: 200 x 150 lbs (890x668N) Burst Strength: 400+ psi (2758kPa) Tear Strength: 50 x 40 lbs (223x178N) Applications:</p> <p> <input type="checkbox"/> Commercial <input type="checkbox"/> Light Commercial <input type="checkbox"/> Super Commercial </p>	<p>Heat Range: -60°F + 500°F (-51°C + 260°C) Continuous Fire Rating: Nonflammable Does not support combustion. Meets UL-214, N.F.P.A. Standard 90 A and 90 B classifications.</p>

Seams



Double Fold Offset Seam

- Eliminates Need for 90° Bends
- Pressure Controlled During Manufacture
- Tear Resistant
- Structural Strength
- Structurally Sound, Yet Cuts Easily



Fab-Guard Seam

- Protects Fabric During Fabrication
- Available in 4" Fabric
- Available in Open Position for easy scribing
- Available Exclusively in 28 Gauge, Black Vinyl Fabric Lengths of 100' and 150'
- Residential 1 1/2" x 4" x 1 1/8"
- Light Commercial 2 1/4" x 4" x 2 1/4"



Hardcast Hardware Connector Fabrics Chemical Resistance Chart

A = little or no effect B = moderate effect C = severe effect Blank = no data available

Chemical	Neoprene	Hypalon	Vinylflex™	Silicone Hi-T™	Chemical	Neoprene	Hypalon	Vinylflex™	Silicone Hi-T™	Chemical	Neoprene	Hypalon	Vinylflex™	Silicone Hi-T™
Acetic Acid (30%)	A	A	C	B	Disodium Phosphate	-	-	A	-	Naphtha	B	B	-	A
Acetone	B	B	C	B	Ethyl Acetate	C	C	C	-	Naphthalene	C	C	-	C
Aluminum Chloride	A	A	A	A	Ethyl Alcohol	A	A	C	B	Nickel Chloride	A	A	A	-
Aluminum Sulfate	A	A	A	A	Ethylene Dichloride	C	C	C	B	Nickel Sulfate	A	A	A	A
Ammonia (ANHYD)	A	A	B+	A	Ethylene Glycol	A	A	C	A	Nitric Acid (40%)	C	A	A	C
Ammonium Hydroxide	A	A	A	A	Ferric Chloride (40%)	A	A	A	A	Nitrobenzene	C	C	C	C
Ammonium Sulfate	A	A	A	A	Ferric SulfateA	A	A	A	A	Oleic Acid	B	B	A	B
Amyl Acetate	C	C	C	C	Fluroboric Acid	A	A	A	-	Oleum	C	A	C	-
Barium Sulfide	A	A	A	-	Formaldehyde (40%)	A	A	A	-	Oxalic	A	A	A	A
Benzene	C	C	C	C	Formaldehyde (over 100°F)	C	C	C	-	Petroleum Oils	B	B	B	B
Black Sulfate Liquor	A	A	A	B	Formic Acid	A	A	A	-	Phosphoric Acid (85%)	A	A	B	A
Boric Acid	A	A	A	A	Gasoline	B	C	C	C	Pickling Solution	B	A	A	-
Bromine	C	B	C	C	Glucose	A	A	A	A	Potassium Chloride	A	A	A	-
Butyl Acetate	C	B	C	C	Glycerine	A	A	C	A	Potassium Cyanide	A	A	A	-
Butyl Alcohol	A	A	C	B	Hepatane	A	A	-	-	Potassium Dichromate	A	A	A	-
Cadmium Plating Solution	-	-	A	-	Haxane	A	A	-	-	Potassium Hydroxide (40%)	A	A	A	A
Calcium Chloride	A	A	A	A	Hydrobromic Acid (40%)	A	A	C	-	Potassium Sulfate	A	A	A	-
Calcium Hypochlorite	B	A	B+	-	Hydrochloric Acid (conc)	A	A	C	B	Propyl Alcohol	A	A	C	B
Carbon Disulfide	C	C	C	-	Hydrofluoric Acid (100%)	A	A	B	C	Skydrol	B	B	C	B+
Carbon Tetrachloride	C	C	C	C	Hydrogen Peroxide	B	A	A	A	Skydrol 500	B	B	C	B+
Chlorinated Solvents	C	C	C	C	Hydrogen Sufide	A	A	A	-	Sodium Chloride	A	A	A	A
Chloroform	C	C	C	-	Isopropyl Ether	C	C	C	-	Sodium Hydroxide (40%)	A	A	B	A
Chlorine Water	C	C	B+	C	Kerosene	B	B	C	B	Sodium Hypochlorite	B	A	B	B
Chromic Acid	C	A	A	-	Lactic Acid	A	A	B	-	Steam	A	B	B	-
Chromium Plating Solution	-	-	A	-	Linseed Oil	A	A	B	A	Sulfur Dioxide (Liquid)	A	A	B	A
Citric Acid	A	A	A	A	Lubricating Oil	B	B	B	B	Sulfuric Acid (50%)	C	A	A	C
Copper Chloride	A	A	A	-	Magnesium Chloride	A	A	-	B	Sulfuric Acid (over 50%)	C	A	C	C
Copper Sufate	A	A	A	-	Magnesium Hydroxide	A	A	-	B	Sulfurous Acid	C	B	C	C
Cotton Seed Oil	A	A	B+	A	Maleic Acid	B	A	A	A	Tannic Acid	A	A	A	-
Creosote Oil	B	B	C	-	Methyl Alcohol	A	A	C	B	Toluene	C	C	C+	C
Cyclohexane	C	C	C	C	Methyl Cellosolve	A	A	C	C	Trichloroethylene	C	C	C	B+
Diacetone Alcohol	A	A	C	-	Methyl Chloride	C	C	-	C	Turpentine	C	C	C	-
Dowthern (A & E)	B	B	C	B	Mineral Oil	A	A	A	B	Vinegar	A	A	A	A

