VENTFABRICS
INCORPORATED

Value Based On Quality

Fabrics for Flexible Connections

toll-free 800.621.1207
fax 773.775.5065
www.ventfabrics.com

Ventglas® Recommended for Conventional HVAC Systems

Description:

Ventglas®, a heavy glass fabric, double-coated with duPont's Neoprene® (polychloroprene), is air-tight, water-tight, and fire retardant. In addition, Ventglas® is resistant to abrasion and damage from flexing.

Ventglas® is accepted by the National Fire Protection Association for vibration isolation connectors in duct systems, in accordance with ANSI/NFPA 701.

Physical Characteristics:

Weight:	30oz./sq.yd ± 3oz.
Thickness:	.024"
Tensile Strength:	475 lbs/inch in the warp; 375 lbs/inch in the fill.
Heat Resistance:	up to 200°F E.I. duPont's brochure #E-41875 states that Neoprene can be used continuously at temperatures up to 200°. It also states that at this temperature it displays good physical characteristics and resists long-term degradation.
Cold Resistance:	down to -40°F The cold resistance of the fabric was tested by placing specimens in a bath of isopropyl alcohol at -40°F for a period of 24 hours. There were no changes detected in the fabric after the cold exposure, and it remained fully flexible.
Flame Retardancy:	Flame spread 20; Smoke development 40. The flame-retardant qualities of this fabric were determined by the Underwriters Laboratories, in accordance with their test procedures outlined in their NFPA 701 Standard.
Air-Tight and Waterproof:	10" ± Static Pressure In this test, the fabric was subjected to a column of water 48" high and 4 1/2" wide. No leakage occurred after a 24-hour period.
Bonding Agent:	Ventfabrics #655 Adhesive

Ventflex Recommended for Conventional HVAC Systems

Description:

Ventflex, a heavy woven fabric with a double coating of polymer, is air-tight, water-tight, and fire retardant. In addition, Ventflex is resistant to abrasion and damage from flexing.

Ventflex is accepted by the National Fire Protection Association for vibration isolation connectors in duct systems, in accordance with ANSI/NFPA 701.

Physical Characteristics:

Weight:	22oz./sq.yd ± 2oz.
Thickness:	.023"
Tensile Strength:	260 lbs/inch in the warp; 300 lbs/inch in the filling
Heat Resistance:	up to 180°F Continuous exposure; 200°F Intermittent exposure E.I. duPont's brochure #E-41875 states that polymer can be used continuously at temperatures up to 180°, and up to 200° intermittent. It also states that at this temperature it displays good physical characteristics and resists long-term degradation.
Cold Resistance:	down to -40°F The cold resistance of the fabric was tested by placing specimens in a bath of isopropyl alcohol at -40°F for a period of 24 hours. There were no changes detected in the fabric after the cold exposure, and it remained fully flexible.
Flame Retardancy:	2 Second flame out. The flame-retardant qualities of this fabric were determined by the Underwriters Laboratories, in accordance with their test procedures outlined in their Standard #701.
Air-Tight and Waterproof:	10" ± Static Pressure In this test, the fabric was subjected to a column of water 48" high and 4 1/2" wide. No leakage occurred after a 24-hour period.
Bonding Agent:	Urethane based adhesive

Ventlon®

Recommended for Installations
Exposed to Sun and Weather

Description:

Ventlon®, a heavy glass fabric, double coated with Hypalon®/CSM (chlorosulfurated polyethylene), is air-tight, water-tight and fire retardant. Fabrics coated with Hypalon® have superb resistance to sunlight, ozone and weather. In fact, duPont's brochure #E11875 states that the ability of Hypalon® synthetic rubber to resist the long term effects of weathering is documented by 30 year old exposure tests.

Ventlon® is accepted by the National Fire Protection Association for vibration isolation connectors in duct systems, in accordance with ANSI/NFPA 701

Physical Characteristics:

Weight:	26oz./sq.yd ± 2oz.
Thickness:	.019"
Tensile Strength:	500 lbs/inch in the warp; 500 lbs inch in the fill.
Heat Resistance:	up to 275°F E.I. duPont's brochure #E-41875 states that Hypalon performs satisfactorily while continuously exposed to temperatures up to 275°F.
Cold Resistance:	down to -50°F The cold resistance of the fabric was tested by placing specimens in isopropyl alcohol at -50°F for a period of 24 hours. There were no changes detected in the fabric after the cold exposure and it remained fully flexible.
Flame Retardancy:	U.L. file #R3629(N) and their standard NFPA 701 The flame-retardant qualities of this fabric were determined by the Underwriters Laboratories who tested this material in accordance with test procedures outlined in their Standard NFPA 701.
Air-Tight and Waterproof:	10" ± Static Pressure In this test, the fabric was subjected to a column of water 48" high and 4 1/2" wide. No leakage occurred after a 24-hour period.
Bonding Agent:	Ventfabrics #655 Adhesive

Ventsil™

Recommended for Installations where Resistance to Temperatures up to 500°F is Required

Description:

Ventsil™, a heavy glass fabric coated with silicone rubber, is air-tight, water-tight, and fire retardant. In addition, Ventsil™ is resistant to abrasion and damage from flexing.

Ventsil™ is distinguished by its ability to withstand high temperatures and by its retention of flexibility within its temperature range.

Physical Characteristics:

Weight:	16 oz./sq. yd. ± 1 oz.
Thickness:	.017"
Tensile Strength:	285 lbs/inch in the warp; 185 lbs/inch in the filling
Heat Resistance:	up to 500°F Qualified Testing Laboratory #QLL-5220 of the Department of Defense, Defense Supply Agency states that this fabric will withstand continuous heat of 500°F (By continuous is meant exposure upwards of 1,000 hours, not continuous endless exposure.)
Cold Resistance:	down to -25°F The cold resistance of the fabric was tested by placing specimens in a bath of isopropyl alcohol at -25°F for a period of 24 hours. After the cooling period, there were no changes detectable in the fabric and its flexibility was unaffected.
Flame Retardancy:	The flame-retardant qualities of this fabric were determined by the Underwriters Laboratories who tested this material in accordance with test procedures outlined in their Standard #701.
Air-Tight and Waterproof:	8" ± Static Pressure In this test, the fabric was subjected to a column of water 48" high and 4 1/2" wide. No leakage occurred after a 24-hour period.
Bonding Agent:	Dow Corning Company Silicone adhesive sealant.

Ventel™

Recommended for Installations in a Corrosive Environment

Description:

Ventel™ is a glass fabric coated with duPont's Teflon® fluorocarbon resins, is air-tight, water-tight and flame resistant.

When installing this material, be certain that the distinctly gray coated side is facing inward towards the air stream.

The table (opposite page) is taken from duPont's brochure #E-21623 and is reproduced with permission of E. I. du Pont Company.

Physical Characteristics:

Weight:	14 oz./sq. yd. ± 1 oz.
Thickness:	.014"
Tensile Strength:	450 lbs./inch in the warp; 340 lbs./inch in the filling
Heat Resistance:	up to 500°F A brochure published by Chemical Fabrics Corporation states that glass fabrics coated with Teflon retain their dimensional stability and integrity in operating temperatures up to 500°F.
Cold Resistance:	down to -20°F The cold resistance of the fabric was tested by placing specimens in a bath of isopropyl alcohol at -20°F for a period of 24 hours. There were no changes detected in the fabric after the cold exposure, and it remained fully flexible.
Flame Retardancy:	This fabric was tested by hanging 2" x 12" strips of the fabric and igniting the bottom of the piece for 12 seconds with a propane torch. The sample did not transmit flame once the source was removed, and even during the application of the torch the fabric did not produce any flames. Therefore, the fabric coated with Teflon should be considered flame-resistant.
Air-Tight and Waterproof:	8" ± Static Pressure In this test, the fabric was subjected to a column of water 48" high and 4 1/2" wide. No leakage occurred after a 24-hour period.

Typical Chemicals with Which Teflon Resins Are Compatible[1]

Abietic acid	Cyclohexane	Hydrazine	Phthalic acid
Acetic acid	Cyclohexanone	Hydrochloric acid	Pinene
Acetic anhydride	Dibutyl phthalate	Hydrofluoric acid	Piperidene
Acetone	Dibutyl sebacate	Hydrogen peroxide	Polyacrylonitrile
Acetophenone	Diethyl carbonate	Lead	Potassium acetate
Acrylic anhydride	Dimethyl ether	Magnesium chloride	Potassium hydroxide
Allyl acetate	Dimethyl formamide	Mercury	Potassium permanganate
Allyl methacrylate	Di-isobutyl adipate	Methyl ethyl ketone	Pyridine
Aluminum chloride	Dimethylformamide	Methacrylic acid	Soap and detergents
Ammonia, liquid	Dimethyl hydrazine, unsymmetrical	Methanol	Sodium hydroxide
Ammonium chloride	Dioxane	Methyl methacrylate	Sodium hyprochlorite
Aniline	Ethyl acetate	Naphthalene	Sodium peroxide
Benzonitrile	Ethyl alcohol	Naphthois	Solvents, aliphatic and aromatic[2]
Benzoyl chloride	Ethyl ether	Nitric acid	Stannous chloride
Benzyl alcohol	Ethyl hexoate	Nitrobenzene	Sulfur
Borax	Ethylene bromide	2-Nito-butanol	Sulfuric acid
Boric acid	Ethylene glycol	Nitromethane	Tetrabromoethane
Bromine	Ferric chloride	Nitrogen tetroxide	Tetrachloroethylene
n-Butyl amine	Ferric phosphate	2-Nitro-2-methyl propanol	Trichloroacetic acid
Butyl acetate	Fluronaphthalene	n-Octadecyl alcohol	Trichorethylene
Butyl methacrylate	Fluoronitrobenzene	Oil, animal and vegetable	Tricresyl phosphate
Calcium chloride	Formaldehyde	Ozone	Triethanolamine
Carbon disulfide	Formic acid	Perchlorethylene	Vinyl methacrylate
Cetane	Furane	Pentachlorobenzamide	Water
Chlorine	Gasoline	Perfluoroxylene	Xylene
Chloroform	Hexachloroethane	Phenol	Zinc chloride
Chlorosulfonic acid	Hexane	Phosphoric acid	
Chromic acid		Phosphorus pentrachloride	

1 Based on experiments conducted up to the boiling points of the liquids listed. Absence of a specific chemical does not mean that it is incompatible with TEFLON resins.
2 Some halogenated solvents may cause moderate swelling. Note: Values are averages only and not for specification purposes.

Wire-Inserted Glass Cloth

Recommended for Installations where Resistance to Temperatures up to 1,000°F is required.

Description:

Wire-Inserted Glass Cloth is a heavy cloth fabric with brass wire inserted throughout. Its outstanding characteristic is its ability to withstand temperatures up to 1000° F for 1,000 hours and still retain 75% of its strength.

This material, neither waterproof or airtight, can be made so by layering it with our Ventsil fabric. The inner layer should be made from two thicknesses of wire-inserted glass cloth, then covered with Ventsil. This enables the connection to be both waterproof and airtight.

Physical Characteristics:

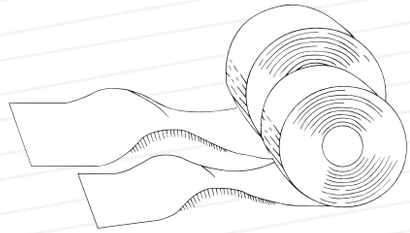
Weight:	50 oz./sq. yd.
Thickness:	.072"
Tensile Strength:	300 lbs/inch in the warp; 300 lbs/inch in the filling
Heat Resistance:	up to 1000°F

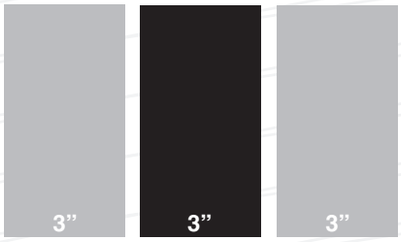
VENTFABRICS FLEXIBLE CONNECTIONS

Our fabrics for flexible connections are available with or without metal attached.

Plain Fabrics

All of our fabrics are available for immediate shipment in widths of 6, 8, 10 or 12 inches. They can also be furnished in other widths up to 36 inches, but only in full rolls of 150 feet.





Standard Metaledge Fabrics

Standard Metaledge Fabrics

All of our fabrics, with the exception of Ventel™ are available in 100 foot rolls with metal attached.

This standard form of connection is commonly know as 3-3-3, stretching out to approximately 9 inches.

Available in 24ga. galvanized steel, .032 ga. aluminum, and 304 stainless steel.

Extra-wide Metaledge Fabrics

Extra-wide Metaledge Fabrics

Ventglas® and Ventlon® are available in extra-wide form know as 3-6-3. The overall width is approximately 12 inches.

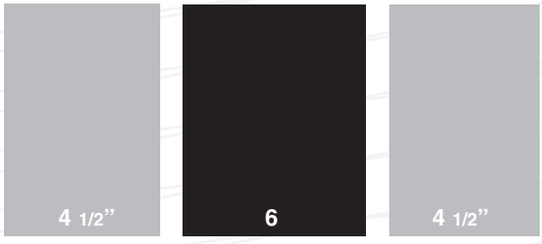
Available in 24ga. galvanized steel, .032 ga. aluminum, and 304 stainless steel.

Transverse Metaledge Fabrics

Transverse Metaledge Fabrics

Ventglas®, Ventflex, Ventlon® and Ventsil™ are available with a wide metal form for use on roll-forming machines made by Lockformer and Engel. These are commonly know as TDC and TDF. The metal is approximately 4 1/2 inches, and the fabric is 4 1/4 inches wide for an overall width of approximately 13 inches.

Available in 24ga. galvanized steel and 304 stainless steel.



Transverse Extra-Wide Metaledge Fabrics

Transverse Extra Wide Metaledge Fabrics

Ventglas®, Ventlon® and Ventsil™ are available in a transversed extra-wide metal form. The metal is 4 1/2 inches and the fabric is 6 inches wide for an overall width of approximately 15 inches.

Available in 24ga. galvanized steel and 304 stainless steel.