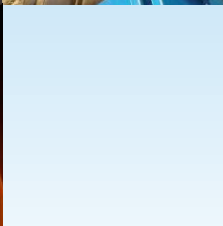
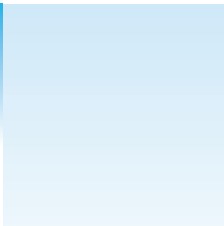




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## || Silicone Coated Fiberglass Fabric

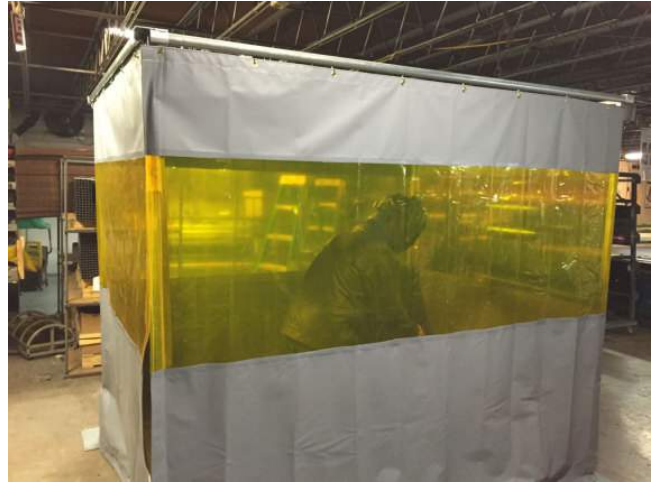


Silicone Coated Fiberglass Fabric is a fiberglass basic fabric which has been coated for impregnated with our specially formulated silicone rubber compound. It has a lot of advantages such as high strength, fire retardant, high temperature resistance, chemical resistance and so on.



### Properties & Applications

1. Hi-Temp Resistant (Up to 260 °C)
2. Excellent Release Properties
3. Good Chemical Resistance
4. Low Thermal Conductivity
5. Welding Blankets and Curtains
6. Thermal Insulation Jackets



Item No.	Thickness mm	Weight g/m <sup>2</sup>	Width mm	Strength N/50mm	Flammability	Color	Coating Sides
UPSE-8732S40	0.43	480	0--1550	2000/1600	≤25%	Grey/Red/Blue/Green	1&2
UPSE-8732D80	0.45	510	0--1550	2000/1600	≤25%	Grey/Red/Blue/Green	1&2
UPSE-8732S80	0.45	520	0--1550	2000/1600	≤25%	Grey/Red/Blue/Green	1&2
UPSE-8732D160	0.46	590	0--1550	2000/1600	≤25%	Grey/Red/Blue/Green	1&2
UPSC-8660S100	0.64	760	0--1550	2400/2200	≤25%	Grey/Red/Blue/Green	1&2
UPSC-8660D200	0.65	860	0--1550	2400/2200	≤25%	Grey/Red/Blue/Green	1&2
UPSC-8784S100	0.85	950	0--1550	2600/2400	≤25%	Grey/Red/Blue/Green	1&2
UPSC-8784D200	0.88	1050	0--1550	2600/2400	≤25%	Grey/Red/Blue/Green	1&2
UPSC-8788S150	1.8	1850	0--1550	3700/3000	≤25%	Grey/Red/Blue/Green	1&2
UPSC-8788D300	1.85	2000	0--1550	3700/3000	≤25%	Grey/Red/Blue/Green	1&2

Weight tolerance g/m<sup>2</sup> = ±5%    Thickness Tolerance mm = ±0.01



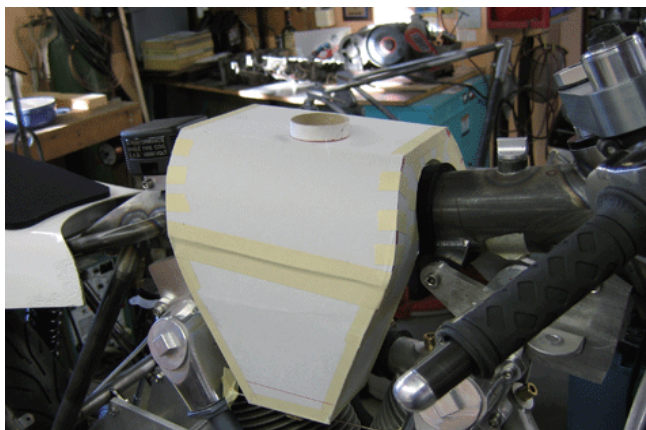
## || Fiberglass Needle Mat

Fiberglass Needle Mat is a mechanically bonded glass fiber insulation blanket of uniform density. It is manufactured from a well-controlled assortment of long textile glass fibers to ensure uniform mechanical bonding with no additional binders. The resulting product has excellent insulation efficiency for extended exposure at high temperatures. Also good for sound insulation and filtration applications



### Properties & Applications

1. Thermal Properties
  - Completely Incombustible
  - Softening Temperature: 850°C
  - Refractive Index 25°C : 1.55
2. Mechanical Properties
  - High Tensile Strength: 350kg/mm<sup>2</sup>
  - Modules of Elasticity: 7300kg/mm<sup>2</sup>
  - Elongation at 25°C : 4.8%
  - Flexible – Conforms to Irregular Surfaces



Heat Insulation		Sound Insulation	
Temperature (C°)	Thermal Conduction Coefficient (kal/mhr°C)	Frequency (Hz)	Noise Isolation Coefficient (Db)
25	0.03	125	0.32
100	0.037	250	0.76
200	0.048	500	0.94
300	0.058	1,000	0.96
400	0.076	2,000	0.95
500	0.094	4,000	0.98

Item No.	Thickness mm	Weight g/m2	Density kg/m3	Width mm	Length m
UPE-NM8120	3	360	120	0-3200	40
UPE-NM8130	4	520	130	0-3200	40
UPE-NM8140	5	700	140	0-3200	30
UPE-NM8140	6	840	140	0-3200	30
UPE-NM8140	8	1120	140	0-3200	20
UPE-NM8150	10	1500	140	0-3200	20
UPE-NM8150	12	1800	150	0-3200	20
UPE-NM8160	15	2400	160	0-3200	10
UPE-NM8176	20	3500	176	0-3200	10
UPE-NM8200	25	4800	200	0-3200	10

Special products according to customers' requirements, width up to 3200mm

Density & Gram Tolerance  $\pm 10\%$  Thickness Tolerance  $\pm 5\%$



## High Silica Needle Mat

High Silica Needle Mats are used as insulation in high temperature applications like heaters, furnaces, foundry devices, exhaust systems, catalytic converters etc. High silica needled mat starts where other fiber glass mats have their limits. It is designed to be used in high temperature surroundings of up to 1800°F (982 °C) continuous heating. It can even last temperature peaks up to 2300°C (1260 °C).

Furthermore the high silica needled mat offers enhanced tensile strength, stiffness, and radar transparency to standard E-Glass mats. Of course it embraces all the benefits of our line such as excellent thermal, acoustic, and electric insulation features, incombustibility, and no decomposition.



### Properties & Applications

1. Insensible to High Continuous Operating Temperatures Up to 1800°F (982°C)
2. Will Endure Short Temperature Peaks Up to 2300°F (1260°C)
3. Higher Tensile Strength and Stiffness Than E-Glass
4. Listed 0-Flame Spread, 0-Smoke Generated
5. Excellent Thermal, Acoustic, and Electric Insulation Features
6. Excellent Vibration Resistance, Will Not Powder
7. Non-Alkaline (<0.01%), Low Chlorides and Fluorides

Item No.	SiO2 Content %	Thickness mm	Weight g/m2	Density kg/m3	Width mm	Length m	Thermal Shrinkage (980°C, 30min)
UPHS-NM8650	≥96	6.5	845	120	0-920	35	≤12.5
UPHS-NM8125	≥96	12.5	1650	130	0-920	20	≤12.5
UPHS-NM8250	≥96	25	3150	130	0-920	10	≤12.5

Thermal Conductivity (K = Btu x in / hr / sq.ft. x ft. / deg F)	
500 °F / 260 °C	0.44
1000 °F / 538 °C	0.79
1500 °F / 816 °C	1.38
1800 °F / 980 °C	1.91

Special products according to customers' requirements.  
Density & Gram Tolerance ± 10%    Thickness Tolerance ± 5%



## Ceramic Fiber Blanket



Ceramic Fiber Blanket is composed of long flexible, interwoven fibers manufactured by the “spun” process yielding a strong, lightweight, durable product. This material can be used for applications with temperatures from 1000°F (538°C) to 2600°F (1425°C).

Unionfull Blankets have high tensile strength for longer life and durability. Unionfull Ceramic Fiber Blankets contain no binders and are completely inorganic.

### Properties & Applications

- 1.Low Thermal Conductivity
- 2.Low Heat Storage
- 3.High Tensile Strength
- 4.Thermal Shock Resistance
- 5.Sound Absorption
- 6.Refining and Petrochemical
- 7.Reformer and Pyrolysis Furnaces
- 8.Tube Seals, Gaskets and Expansion Joints
- 9.High Temperature Pipe, Duct and Turbine Insulation
- 10.Crude Oil Heater Linings



Item No.	Thickness mm	Density kg/m3	Tensile Strength Kpa / kg/m3	Width mm	Length m	Temperature °C
UPCB-8220-6	6	96 / 128 / 160	75 / 128	610	28	≤1150
UPCB-8220-10	10	96 / 128 / 160	75 / 128	610	15	
UPCB-8220-20	20	96 / 128 / 160	75 / 128	610	7.2	
UPCB-8220-25	25	96 / 128 / 160	75 / 128	610	7.2	
UPCB-8220-30	30	96 / 128 / 160	75 / 128	610	5	
UPCB-8220-50	50	96 / 128 / 160	75 / 128	610	3.6	≤1250
UPCB-8320-20	20	96 / 128 / 160	75 / 128	610	7.2	
UPCB-8320-25	25	96 / 128 / 160	75 / 128	610	7.2	
UPCB-8320-50	50	96 / 128 / 160	75 / 128	610	3.6	≤1300
UPCB-8420-20	20	96 / 128 / 160	75 / 128	610	7.2	
UPCB-8420-25	25	96 / 128 / 160	75 / 128	610	7.2	
UPCB-8420-50	50	96 / 128 / 160	75 / 128	610	3.6	
UPCB-8520-20	20	96 / 128 / 160	40 / 128	610	7.2	≤1500
UPCB-8520-25	25	96 / 128 / 160	40 / 128	610	7.2	
UPCB-8520-50	50	96 / 128 / 160	40 / 128	610	3.6	



## High Silica Cloth



High Silica Cloth is made by silica fiberglass. It is inorganic fiber, that contains more than 96% of SiO<sub>2</sub>. It's resistant to high temperature, softening point 1700°C, long time service temperature 900°C. It can work 10 minutes at 1450°C and keeps good state at 1600°C for 15 seconds, for its properties of chemical stability, high temperature resistance and ablation resistance. It is widely used in aviation and aerospace, metallurgy, chemical, building materials and fire fighting industry etc.



### Properties & Applications

1. SiO<sub>2</sub> ≥ 96%
2. Low Thermal Conductivity.
3. Low Thermal Shrinkage.
4. Non-Asbestos Product Without Pollution.
5. Fireproof Materials
6. Distinguisher, Insulation Materials, Filtration of Automobile.



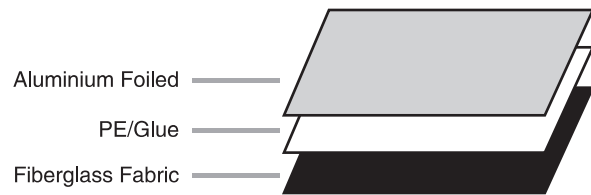
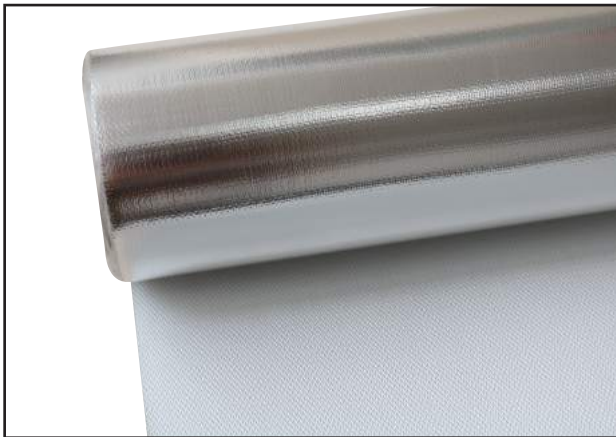
Item No.	Thickness mm	Weight g/m <sup>2</sup>	Width mm	Weave	SiO <sub>2</sub> %	Color
UPS-860-92	0.6	500	920	Satin 8HS	≥96	White / Brown
UPH-860-92	0.7	600	920	Satin 8HS	≥96	White / Brown
UPS-8120-92	1.3	1050	920	Satin 12HS	≥96	White / Brown
UPH-8120-92	1.3	1150	920	Satin 12HS	≥96	White / Brown
UPH-860-100	0.7	650	1000	Satin 8HS	≥96	White / Brown
UPH-8120-100	1.3	1250	1000	Satin 12HS	≥96	White / Brown



## Aluminium Coated Fiberglass Fabric



Aluminium Coated Fiberglass Fabric which is coated with 7/18/25 micron aluminium foil in order to reduce fraying in a variety of applications. The reflective properties of the aluminium coating on the fibreglass fabric effectively reduces loss of heat via radiation. Its continuous working temperature is 550°C and its short-term working temperature is 600°C. These properties make it ideal for applications such as making protective, fire-proof wear, as well as use in boilers and foundries, and in vehicles, e.g. cars and motorbikes.



Fiberglass Fabric	Specification
Aluminium Foiled	7/18/25 Microns
Composite	PE/Glue
Fiberglass Fabric	0.43mm

### Property & Applications

1. Light Reflectivity
2. Waterproof
3. Transverse Tensile
4. Smooth Surface
5. Air Conditioning
6. HVAC Equipments
7. Pipe Insulation and Building Materials
8. Oil Pipes, Steam Pipes



Item No.	Thickness mm	Weight g/m <sup>2</sup>	Width mm	Tensile Strength N/5cm	Temperature °C	Coating Sides
UPCAL-8628	AL 7/18/25 Micron	200	0-1550	2025 / 1620	550 / 330	1
UPCAL-8732	AL 7/18/25 Micron	420	0-1550	6000 / 4500	550 / 330	1
UPEAL-8732	AL 7/18/25 Micron	430	0-1550	6000 / 4500	550 / 330	1
UPCAL-8784	AL 7/18/25 Micron	880	0-1550	8000 / 6000	550 / 330	1

# INSULATION MATERIALS

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## E Glass Woven Rovings

E Glass Woven Rovings are bidirectional fabric made by interweaving direct rovings. Can be compatible with unsaturated polyester, vinyl ester, epoxy and phenolic resins. With high-performance reinforcement, widely used in hand lay up and robot processes to manufacture boats, vessels, plane and automotive parts, furniture and sports facilities. The area weight is from 200g/m<sup>2</sup> to 1200g/m<sup>2</sup>, the width is from 50mm-3000mm.



### Properties & Applications

1. Multi-Resin-Compatible
2. Easy Shape Adaptation
3. Easy Impregnation
4. Good Transparency
5. Excellent Mechanical Properties
6. Pultrusion for The Production of Boats
7. Automotive Parts, Furniture
8. Sport Facilities and Other Fields



Item No.	Warp / Weft cm	Warp x Weft Tex	Width mm	Length m	Moisture %	Lgnition Loss %	Resin Compatibility
UPWR-8200	4.6 x 4.6	200 x 200	50-3000	40-200	≤ 0.15	0.4-0.8	UP / VE / EP
UPWR-8270	4.6 x 4.1	300 x 300	50-3000	40-200	≤ 0.15	0.4-0.8	UP / VE / EP
UPWR-8300	5.0 x 5.0 / 3.2 x 1.8	300 x 300	50-3000	40-200	≤ 0.15	0.4-0.8	UP / VE / EP
UPWR-8360	3.2 x 1.8	600 x 900	50-3000	40-200	≤ 0.15	0.4-0.8	UP / VE / EP
UPWR-8400	3.6 x 3.2	600 x 600	50-3000	40-200	≤ 0.15	0.4-0.8	UP / VE / EP
UPWR-8500	2.2 x 2.0	1200 x 1200	50-3000	40-200	≤ 0.15	0.4-0.8	UP / VE / EP
UPWR-8580	2.6 x 2.2	1200 x 1200	50-3000	40-200	≤ 0.15	0.4-0.8	UP / VE / EP
UPWR-8600	2.6 x 2.4	1200 x 1200	50-3000	40-200	≤ 0.15	0.4-0.8	UP / VE / EP
UPWR-8800	2.0 x 1.6	2400 x 2400	50-3000	40-200	≤ 0.15	0.4-0.8	UP / VE / EP



## Teflon Coated Fiberglass Fabric



PTFE/Teflon Coated Fiberglass Fabric is high quality glass cloth soaked in suspending emulsion. It is a new composite product with high performance and multifunction.



### Properties & Applications

1. Outstanding Temperature Resistance(-170°C to + 260°C)
2. 100% Non Stick Surface
3. Resistance to UV, IR & HF
4. Microwave Gasket, BBQ mat
5. Toaster Bag
6. Flexible Compensator, Friction Materials, Grinding Wheel

Item No.	Thickness mm	Weight g/m <sup>2</sup>	Width mm	Tensile Strength N/5cm	Color
UPTB-8008JK	0.08	155	0-4200	550 / 450	Black/Brown/White
UPTB-8013JK	0.13	255	0-4200	1100 / 1000	Black/Brown/White
UPTB-8018JK	0.18	380	0-4200	1800 / 1700	Black/Brown/White
UPTW-8025JK	0.25	480	0-4200	2100 / 1800	Black/Brown/White
UPTB-8030JK	0.3	620	0-4200	2400 / 2000	Black/Brown/White
UPTB-8035JK	0.35	680	0-4200	2600 / 2300	Black/Brown/White
UPTB-8040JK	0.4	820	0-4200	3000 / 2500	Black/Brown/White
UPTB-8050JK	0.5	1050	0-4200	4400 / 4000	Black/Brown/White
UPTB-8070JK	0.7	1550	0-4200	6000 / 5000	Black/Brown/White
UPTW-8190JK	1	1680	0-4200	6000 / 5000	Black/Brown/White

Weight Tolerance ± 5% ; Thickness Tolerance 1 %  
Width can be customized and Color also.

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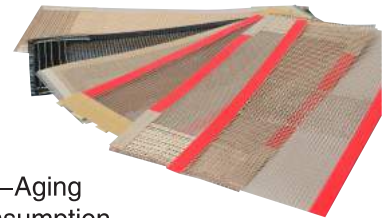


## Teflon Open Mesh Conveyor Belt

Teflon Open Mesh Conveyor Belt is made of glass fiber fabric impregnated with polytetrafluoroethylene (PTFE/Teflon) emulsion. The mesh size 1mm\*1mm, 2mm\*2.5mm, 4mm\*4mm and 10mm\*10mm, and according to the different warp and weft, there are single weft Teflon open mesh conveyor belt and double weft Teflon open mesh conveyor belt.

### Properties & Applications

- 1.High Temperature Resistance, Continuous Operating Resistance -140°C ~260°C
- 2.Non-Stick Surface and Easy to Clean
- 3.Low Friction Coefficient(0.05~0.1)
- 4.Food Grade and Non Toxicity
- 5.Light Transmittance Up to 6~13%
- 6.Excellent Dimensional Stability and High Strength
- 7.Good Mechanical Characteristics
- 8.Corrosion Resistance, Resistance to Strong Acid Corrosion, Not Burning, Anti-Aging
- 9.Permeability, Air Permeability of Conveyor Belt Can Reduce Heat Source Consumption



Item No.	Mesh Size mm	Weight g/m2	Width mm	Tensile Strength N/5cm	Color
UPTM-8091	1x1	520	0-4200	310 / 290	Black
UPTM-8092	2x2	640	0-4200	350 / 310	Black
UPTM-8090	Single Weft	480	0-4200	390 / 320	Black
UPTMB-8091	1x1	520	0-4200	310 / 290	Brown
UPTMB-8092	2x2	640	0-4200	350 / 310	Brown
UPTM-8090A	Double Weft	580	0-4200	560 / 370	Black
UPTMW-8090	Double Weft	580	0-4200	560 / 370	White
UPTMB-8090	Single Weft	480	0-4200	390 / 320	Brown
UPTMK-8090	4X4 Kevlar	580	0-4200	900 / 600	Brown
UPTMB-8090A	Double Weft	580	0-4200	560 / 370	Brown
UPTMB-81010	10X10	470	0-4200	400 / 320	Brown
UPTMHK-8090	4X4 F+Kevlar	645	0-4200	895 / 370	Brown

Weight Tolerance  $\pm 5\%$  ; Thickness Tolerance  $\pm 1\%$

## Fiberglass Adhesive Tape



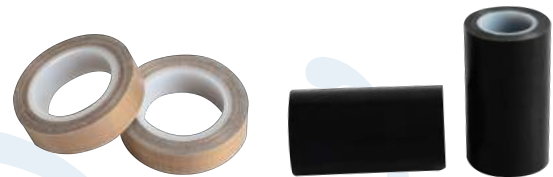
Teflon Coated Fiberglass Adhesive Tape is made of high performance fiber glass fabric impregnated with polytetrafluoroethylene(PTFE/Teflon) emulsion solution, and use the film as base material, single surface treated and coated with silicone pressure sensitive adhesive.

It is widely used in packaging, thermoplastic, composite, sealing heat, electrical and electronic industries, for those who require a release heat resistant insulation and other parts can be pasted, and has repeatedly paste function.



### Properties & Applications

- 1.High Temperature Resistance(-70℃~260℃)
- 2.Surface Smooth, Non-Stick and Easy to Clean
- 3.Fire Retardant
- 4.Excellent Dimensional Stability and High Strength
- 5.High Insulation, Anti-Ultraviolet, Anti-Static
- 6.Resistant to Chemical Corrosion, Strong Acid, Alkali and Various Organic Solvents
- 7.Easy to Use, Long Service Life



Item No.	Thickness mm	Adhesive Type	Width mm	Adhesion N/cm	Color
UPTTB-8013	0.13	Silicone	0-4000	4.3	Brown/White
UPTTB-8016	0.16	Silicone	0-4000	5.2	Brown/White
UPTTB-8018	0.18	Silicone	0-4000	5.3	Brown/White
UPTTB-8019	0.19	Silicone	0-4000	5.5	Brown/White
UPTTB-8025	0.25	Silicone	0-4000	5.8	Brown/White

Weight Tolerance  $\pm 5\%$  ; Thickness Tolerance  $\pm 1\%$

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## Save Money, Save Energy

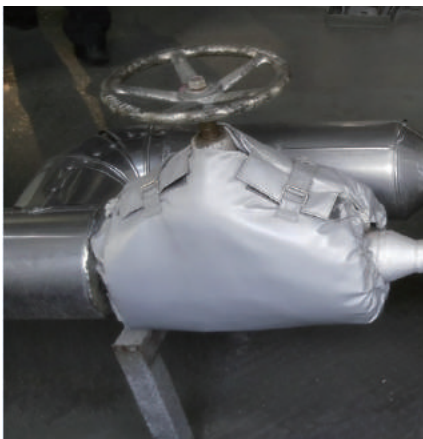
Unionfull Thermal Insulation Materials for all the insulation jackets, protect pipes, valves and machinery in all types of environments, dramatically reducing energy costs



**Ball Valve**  
**Gate Valve**  
**Check Valve**  
**Globe Valve**



**Butterfly Valve**  
**Plug Valve**  
**Strainer**  
**Bellows Sealed Valve**



### Properties & Applications

1. Hot Water and Steam Pipelines
2. Refineries and Gas Processing Plants
3. Petro-Chemical Plants
4. Power Plants
5. Military Establishments
6. Food and Oil Mills
7. Textile Industry
8. Plastic Plants
9. Oil and Gas Processing Industry
10. Pharmaceutical Plants

## Fireproof Fiberglass Curtain



Product Type Item		Glass Curtain Fabric	Unit	Reference standard
base fabric		Glass CurtainFabric		
weight		500	g/m <sup>2</sup>	
Tensile Strength	Warp Direction	1600	N/5cm	DIN53354
	Weft Direction		N/5cm	
Tear Strength	Warp Direction	1200	N/5cm	DIN53363
	Weft Direction		N/5cm	
Peeling Strength	Warp Direction	≥5	N/5cm	DIN53357
	Weft Direction		N/5cm	
Flame retardant properties		Shall comply with GB17591-2006 class B2		
Heavy metal content		Cadmium ≤50mg/kg Lead ≤20mg/kg		
Width		1.85—3.20m	m	
Remark: The company can meet special demands of customers according to regulation of the contract.				

Fireproof Fiberglass Curtain has the characteristics of self cleaning, environmental friendliness, flaming resistance, mould and bacteria prevention, static resistance, high flatness, etc.



## Architecture Membrane

We offer a variety of industry leading materials including PVC coated membranes, Teflon Coated Fiberglass (PTFE) fabrics all being available in many colors and base weights. The membrane fabrics are virtually maintenance-free and when under tension or in the tensile state, these fabric membranes offer durability and fire resistance to meet building codes.



Warp yarn	Weft yarn	Warp count(inch)	Weft count(inch)	Basic Weight (gsm)	Thickness(mm)	Parttern
BC150	BC150	13	12	380	0.30	Plain
BC150	BC150	24.5	19.5	400	0.35	Plain
BC150	BC150	24.5	19.5	500	0.45	Plain
BC150	BC150	20	19	680	0.6	Plain



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