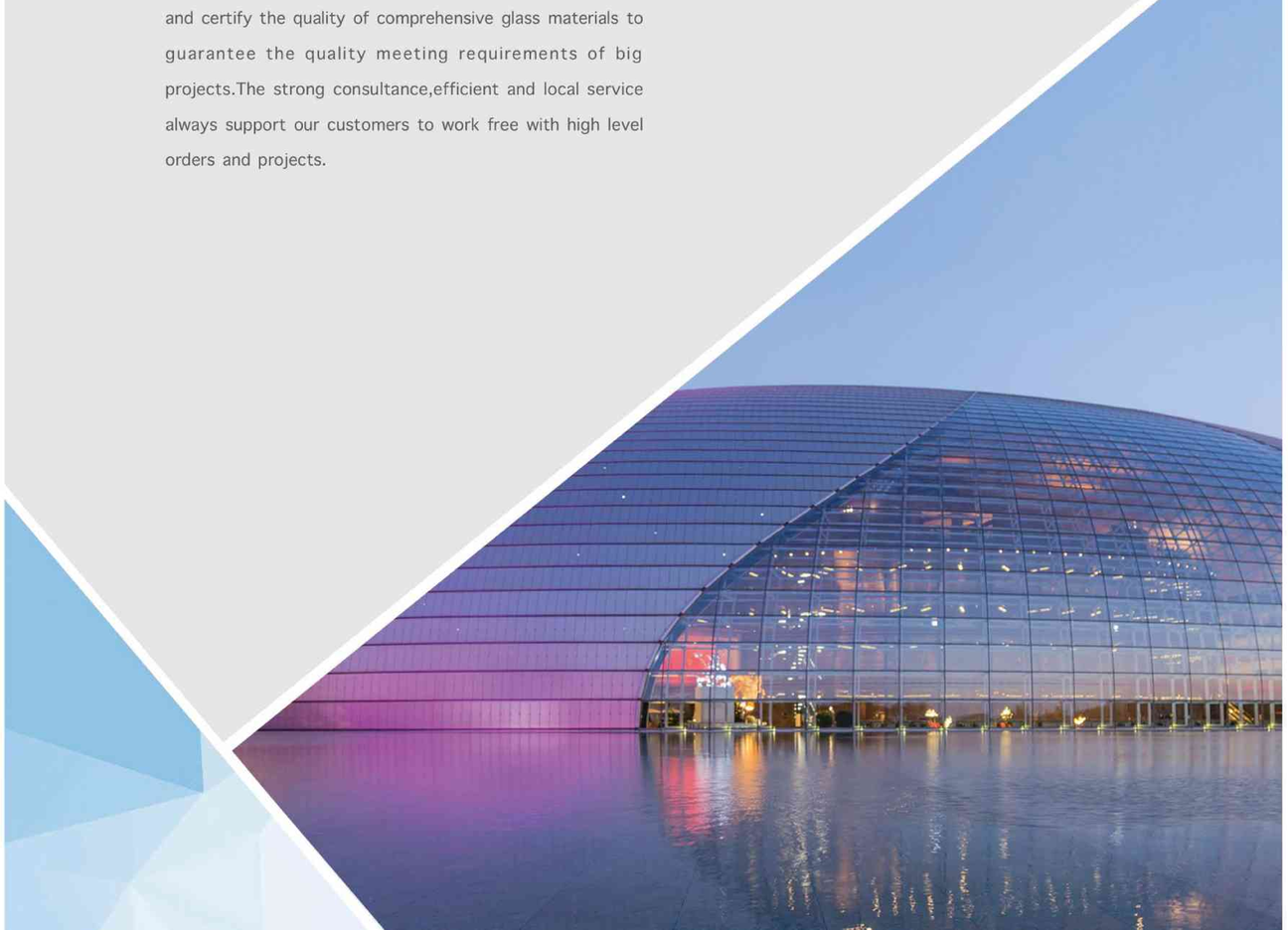
UNEX BUILDING COMPLEX CO.,LIMITED
Add: No.9-590 goverment street Beiwu town, Shunyi District, Beijing, China.
Web:www.unexbuilding.com
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Unex building complex Co.,Ltd.Is an integrated brand to promote the best Chinese building and glass materials, consumables to overseas customers.We strictly select the most reliable brands and certified quality for you.

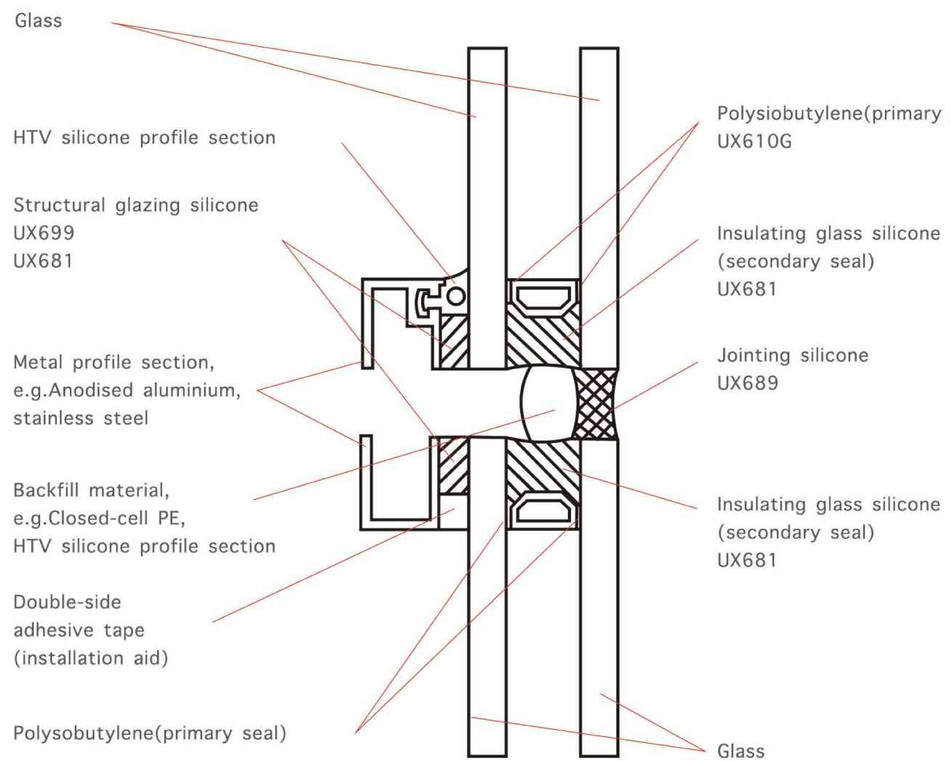
Our products mainly consists of 5 series: Insulating glass consumables,laminating glass consumables,gringing tools,hardware and glass enamel.

Unex is committed to supply the best building consumebles with professional quality control for glass processors.We have a professional team specially to test and certify the quality of comprehensive glass materials to guarantee the quality meeting requirements of big projects.The strong consultance,efficient and local service always support our customers to work free with high level orders and projects.



INSULATING GLASS CONSUMABLES

For insulating glass production, Unex supply all the necessary consumables including Silicone,Polvsulfice. Buty Hot-melt sealant. Spacer and 3A Desiccant. All of our products have obtained the most strict testing and international Certificates.



- UX681 Two Component Silicone Structural Sealant
- UX699 Silicone Structural Sealant
- UX689 Slicone Weatherproofing Sealant
- UX610G Hot Applied Butyl Sealant for I.G

UX681

Two Component Silicone Structural Sealant

Insulating Glass, Structural Glazing, Facade, Curtain Wall System



APPLICATION FLELD

UX681 is a two-component neutral cured silicone sealant specifically developed for the manufacturer of high performance insulating glass units used in residential and commercial use of curtain wall systems and used in structural glazing applications such as factory glazing of curtain wall units and modules for unitized and panelized systems.



FEATURES

- Two component, neutral cured silicone structural sealant.
- Excellent adhesion to a wide range of substrates including coated, enamelled and reflective glasses, anodised and polyester paint coated aluminium and stainless steel.
- Excellent temperature stability: - 80℃ to 180℃.
- High level of mechanical properties.
- High elasticity and high modulus.
- Joint movement: ±25%


Evidence of Performance

APPLICABLE STANDARDS

- ASTM C920. Type M. Grade NS. Class 12.5. Use G and A
- EU Specification: EN1279 - part 2. 4
- China Specification: Gb16776
- IGCC-IGMA Approved.

TEST ITEMS		UNIT	MEASURED VALUE
Base (ComA)	Appearance	/	White /Grey Ropy Paste
	Density	g/cm³	1.41
	Viscosity	mPa.S	170 , 000
Base (ComB)	Appearance	/	Black/White
	Density	g/cm³	1.03
	Viscosity	mPa.S	80,000
Mixture By weight (A:B=12:1)	Appearance	/	Black/White /Grey
	Density	g/cm³	1.40
	Viscosity	mPa.S	340,000
	Application Time(23℃.50%)	Mins	30-50
	Tack-free Time(23℃,50%)	h	0.5~1.0
Sagging	Placed Vertical (50℃)	mm	0
	Placed Horizontal	/	No deformation
Hardness	Shore A- 24h	Shore A	35
	Shore A-14 days	Shore A	44
After 14 days at 23℃ and 50% RH			
Tensile Adhesion Property	23℃	MPa	0.97
	90℃	MPa	0.85
	-30℃	MPa	1.84
	AfterAging in Hot Air	MPa	1.01
	After Water-UV Immersion	MPa	0.97
	Adhesive Failure Area	%	100
	23℃ Elongation Under Max.Tensile Strength	%	140
Temperature Resistance		℃	-60~180
Resistance to UV-Ozone		/	Continuous irradiation under water-UV2500 hrs, no change
Moisture Vapour Transmission Rate(MVTR)		17.7 ±1.1[gr/㎡·24hrs.2mm]-EN1279/4	
Gas Permeation Rate(Ar)		(755±22) x10^{-3}[gr/㎡·hrs]-EN1279/4	

SHELF AND STORAGE

12 months from the date of production below 30℃

PACKAGEING

Pump Application:
Drum Package: Com A 268ka/metal drum
Com B 19 kg/barrel

Hand application:
Barrel Package: Com A 25ka/barrel
Com B 310ml/cartridge x 8 purchase

UX682

Two Component Silicone Sealant for Insulating Glass



APPLICATION FLELD

UX682 is a two-component neutral cured silicone sealant specifically developed for the manufacturer of insulating glass units used for window and door, vehicles and refrigeration, also can be used for edge frame curtain wall system.



FEATURES

- Two component, neutral cured silicone structural sealant.
- Excellent adhesion to a wide range of substrates including coated, enamelled and reflective glasses, anodised and polyester paint rostod rinim ord etrinless stool
- Excellent temperature stability: - 80°C to 180°C.
- High level of mechanical properties.
- High elasticity and high modulus.
- Joint movement: +25%





ITEMS		UNIT	MEASURED VALUE
Base (ComA)	Appearance	/	White /Grey
	Density	g/cm³	1.45
	Viscosity	mPa.S	180 , 000
Base (ComB)	Appearance	/	Black/White
	Density	g/cm³	1.03
	Viscosity	mPa.S	80,000
Mixture By weight (A:B=12:1)	Appearance	/	Black/White /Grey
	Density	g/cm³	1.40
	Viscosity	mPa.S	360,000
	Application Time(23℃.50%)	Mins	30-50
	Tack-free Time(23℃,50%)	h	0.5~1.0
Sagging	Placed Vertical (50℃)	mm	0
	Placed Horizontal	/	No deformation
Hardness	24h	Shore A	40
	14 days	Shore A	46
After 14 days maintenance at a temperature of 23℃ and at 50% humidity			
Elastic Recovery Ratio		%	94
Viscosity at definite elongation		/	No damage
Tensile Adhesion Property	23℃	MPa	0.92
	After aging in Hot Air	MPa	0.82
	After Water-UV	MPa	1.10
	Cohesive Failure Area	%	100
	Elongation under maximum tensile strength at 23℃	%	93
TGA		%	3.6
Moisture Vapour Transmission Rate(MVTR)		15.1±0.3[gr/㎡·24hrs·2mm]-EN1279/4	
Gas Permeation Rate(Ar)		(849±6) x10 [gr/㎡·hrs]-EN1279/4	

SHELF AND STORAGE

12 months from the date of production below 30℃

PACKAGEING

Pump Application:
Drum Package: Com A 300kg/metal drum
Com B 19 kg/barrel

APPLICABLE STANDARDS

EU Specification: EN1279 - part 2, 4
China Specification: GB16776, GB/T 29755, JC/T 471, GB/T 13477
IGCC-IGMA Aoproved

UX640

Two Component Polysulfide Sealant for Insulating Glass



APPLICATION FLELD

- Secondary sealant for the manufacturer of insulating glass
- Two component, room temperature cured polysulfide sealant
- Excellent adhesion to most building materials such as glass, aluminum alloy, and gavanized-steel,stainless steel etc.
- Solvent free, primers are not required.
- High strength and elasticity.







UNCURE PROPERTIES

TEST	Component A		Component B
COLOR	White		Black
SPECIFIC GRAVITY, G/ML	1.75±0.05		1.65±0.05
VISCOSITY, PA*S	80~200		30~150
MIX RATIO BY WEIGHT	8 : 1~12 : 1		8 : 1~12 : 1
TEST	METHOD	UNIT	RESULT
COLOR			Black
SPECIFIC GRAVITY		g/ml	1.74±0.05
WORKING TIME		min	≥20
TACK FREE TIME		h	≤2
SAG/SLUMP	ASTM D2202	mm	≤1
	CURED PROPERTIES (7 DAYS AFTER MIXING, 23℃,50% RH)		
HARDNESS, SHORE A	ISO 7619		≥30
ULTIMATE TENSILE STRENGTH	ASTM C 1135	MPA	≥0.6
ULTIMATE ELONGATION	ASTM C 1135	%	≥50
HEAT WEIGHT LOSS	ASTM C 1184	%	≤3
APPLICATION TEMPERATURE RANGE		℃	0~40
SERVICE TEMPERATURE RANGE (AFTER CURE)		℃	-55~150
MVTR	EN1279-4	g/(㎡*24h)	5.0(*1)
GAS PERMEATION RATE	EN1279-4	g/(㎡*24h)	0.01(*1)
ADHESION AND AGING	EN1279-4		Pass(*1)
MOISTURE PENETRATION (WITH UX610)	EN1279-2		Pass(*1)
GAS LEAKAGE RATE (WITH UX610)	EN1279-3		Pass(*1)

*1:The marked result is tested by TUV Rheinland Nederland B.V.

SHELF AND STORAGE

12 months from the date of production below 30℃

APPLICABLE STANDARDS

- ASTM C920. Type M. Grade NS. Class 12.5. Use G and A
- EU Specification: EN1279 - part 2. 4
- China Specification: GB-T29755

PACKAGEING

Pump Application:
Drum Package: Com A 300kg/drum
Com B 30kg/drum
Hand Application:
Barrel Package: Com A 30kg/drum
Com B 3kg/barrel

UX610G

Hot Applied Butyl Sealant for Insulating Glass

Primary sealant for the manufacturer of insulating glass



APPLICATION FLELD

- One component,solvent free,non-fogging, permanently plastic butyl sealant,formulated for primary sealing of insulating glass units.
- it can keep its plastic and sealing properties in a wide temperature range.
- Excellent adhesion properties on glass, aluminum alloy,galvanized steel and stainless steel.
- Minimum moisture vapor and gas permeation.







TECHNICAL DATA - CHEMICAL CHARACTERISTICS

BASE	Polyisobutylene(PIB)
COLOUR	Black,White,Transparent
CONSISTENCY	Solid mass
DENSITY	approx.1.05[gr/cm^3]
VOLATILE CONTENT	max.0.02%
FOGGING	Without visual fogging

STORAGE

12 months stored in cool,dry and ventilated places

PACKAGEING

Paper Drum: 7 kg/barrel

APPLICABLE STANDARDS

- EU Specification: EN1279 - part4
- China Soecification: GB16776
- IGCC-IGMA Approved


Evidence of Performance

ift ROSENHEIM

Sealant based on Silicone, MF 882, made by Zhongshou Zhongguan.
Sealant has following properties according to DIN EN 1279-4:

6.1 Adhesion — The requirements of DIN EN 1279-4, chapter 5.1, stress-strain behaviour, are fulfilled

6.2 Moisture vapour transmission rate — MVTR = (15.1 ± 0.3) Grams H2O / m² · 24h · 2 mm

6.3 Gas permeation rate — (849 ± 8) × 10⁻¹⁵ g/m² s

ift Rosenheim
11.02.2013

UX610H

Hot Melt Sealant For Insulating Glass



APPLICATION FLELD

UX610H is a hot applied sealant formulated for single sealing of insulating glass units. This product has been designed for insulating glass manufacturers running hand applied, semi-automated,and linear extruded operations.

APPLICATION INSTRUCTION

UX610H shall be applied at a temperature betwen 160℃~190℃ using appropriate extruders.



ADVANTAGE

- Immediate high strength development for superior handling and transportation capabilities.
- Excellent slump resistance, resulting in reduced after-application tooling.
- Low after-application tack for ease of handling.
- Excellent adhesion to glass and metal.

TECHNICAL DATA

PERFORMANCE PROPERTIES		
MOISTURE VAPOUR TRANSMISSION RATE	(0.39±0.04) $\frac{Gramm H_2O}{m^2 \cdot 34h \cdot 2mm}$	EN1279-4
GAS PERMEATION RATE	(1.48±0.19)x10^{3}g(m^{2}h)	EN1279-4
SHEAR STRENGTH	0.2Mpa	25X25X2mm
LOW TEMPERATURE FLEXIBILITY	Flexible-at-29℃	
PHYSICAL PEROPERTIES		
COLOR	Black	
SOLIDS CONTENT	100%	
SPECIFIC GRAVITY(20℃)/68°F	Approx.1.25g/cm³	
ELONGATION AT YIELD	Approx.20(%)	
STRESS AT YIELD	Approx.0.2(Mpa)	
VOLATILE CONTENT(130℃).50HR	Max0.3(%)	
SUGGESTED APPLICATION TEMPERATURE	160℃~190℃	

STORAGE

24 months stored in cool,dry and ventilated places.

PACKAGEING

6.5kg/box. Please inquire if other packaging required.



Evidence of Performance

LIMITATION

UX610H is not for use in structural or sloped glazing.

TRANSPORT

Non-dangerous,can be transported by train ship automobile and plane.

UX689

Silicone Weatherproofing Sealant

UNEX UX689 Silicone Weatherproofing Sealant, a one-part, RTV neutral-cure, architectural grade sealant, is a specified, premium performance weather sealing product specifically designed for general glazing and weather sealing in curtain wall and building facades.



TEST ITEMS	TECHNICAL DATA	TEST RESULT	STANDARD
Test Conditions: T (2342) °C, (50±5) % R.H.			
Density, g/cm³	/	1.49	GB/T 13477.2
Sag, mm	≤3	0	GB/T 13477.6
Extrusion Property, ml/min	≥80	360	GB/T 13477.3
Application Time, min	/	30	/
Tack-free Time, h	≤3	2.5	GB/T 13477.5
Curing Time, d	/	7~14	/
Range of Application Temperature, ℃	/	5-40	/
Test Conditions: 28d placed at T (23±2)C, (50+51% R.H.			
Hardness. Shore A	20~60	45	GB/T 531.1
Movement Capability, %	35	35	GB/T 22083
Range of Temperature Resistance, ℃	/	-60~180	/
Modulus at 100% Elongation, MPa	/	0.5	GB/T 13477.8
Elongation at Break, %	/	350	GB/T 13477.8
Tensile Strength, Mpa	/	1.10	GB/T 13477.8

TYPICAL PERFORMANCE

- Excellent adhesion to a wide range of substrates including coated glass, galvanized steel, masonry, anodized and polyester paint coated aluminium and stainless steel.and other porous and non- porous substrates.
- Ideal for expansion, connection, perimeter and other movement joints
- Suitable for use on extension/compression movement capability of up to ±35% of the original joint width.
- Excellent temperature stability: - 50°C to 180°C.
- High level of mechanical properties.
- High elasticity and high modulus.
- Resistant to ozone.

APPLICABLE STANDARDS

- ASTM C920, Type S, Grade NS, Class 35, NT, G, A
- China Specification: JC/T 882 25HM
  GB/T 14683 G.F 25HM
  GB/T 22083 G, G 35HM ISO 11600 F, G 25HM

COLOR

Black / Grey / White

Custom colors may be ordered to match virtually any substrate.

SHELF LIFE AND STORAGE

12 months from the date of manufacture, store in a low moisture, dark place below 30°C in the original unopened packing.

PACKAGEING

Cartridge: 300 ml / 25 pcs/carton

Sausage: 592 ml / 20 pcs/carton

UX689F

Fireproofing Silicone Weatherproofing Sealant

UX689F Fireproofing Silicone Weatherproofing Sealant, a one-part, RTV, neutral-cure, architectural grade sealant, designed specifically for the fireproofing and flame retardant sealing for various win-doors and different layers of curtain walls,waterproofing,decoration, anti-humidity of public constructions.

It easily extrudes in any weather and cure at ambient temperature by reaction with moisture in the air to form a durable, flexible silicone rubber seal.



FEATURES

- Excellent fireproofing and flame retardant performance.
- Ideal adhesion to a wide range of substrates including coated glass, enamelled and reflective glass, anodized and polyester paint coated aluminium and stainless steel and other porous and non-porous substrates.
- Suitable for use on extension/compression movement capability of up to ±20% of the original joint width.
- Excellent weather sealing and temperature stability: -60℃ to 180℃.
- Ideal for expansion, connection, perimeter and other movement joints.
- High level of mechanical performance.
- High elasticity and high modulus.
- Resistant to ozone.

APPLICABLE STANDARDS

- GB/T 24267 SR 20HM
- GB/T 14683 G.F 20HM
- ASTM C 920 Type S, Grade NS, Class 20, NT, G,A
- ISO 11600 F, G 20HM

TEST ITEMS	TECHNICAL DATA	TEST RESULT	STANDARD
Test Conditions: T (2342) °C, (50±5) % R.H.			
Density, g/cm³	/	1.55	GB/T 13477.2
Sag, mm	≤3	0	GB/T 13477.6
Extrusion Property, ml/min	≥80	260	GB/T 13477.3
Tack-free Time,h	≤3	2	GB/T 13477.5
Curing Time, d	/	7~14	/
Range of Application Temperature, ℃	/	5~40	/
Test Conditions: 28d placed at T (23±2)C, (50+51% R.H.			
Movement Capability, %	20	20	GB/T 24267
Range of Temperature Resistance, ℃	/	-60~180	/
Modulus at 100% Elongation, MPa	/	0.75	GB/T 13477.8
Elongation at Break, %	/	135	GB/T 13477.8
Tensile Strength, Mpa	/	0.81	GB/T 13477.8
Fire Resistance Property,h	/	3	GB23864
Vertical Flammability Property	FV-0	FV-0	GB/T 2408

LIMITATIONS

UX689F should not be applied to:Not suitable for structural glazing application.

- In design where the silicone is encapsulated and without access to atmosphere moisture.
- Do not use when application surface temperature below 4℃ or exceed 50℃.
- Surface which will be painted, as painting over rubber is not recommended.
- Do not use water for tooling and do not apply to wet or damp surface.
- On surfaces that are continuously immersed in water.

SHELF LIFE AND STORAGE

12 months from the data of manufacture, store in a low moisture, dark place below 30C in the original unopened packing.

COLOR

Black / Grey / White

Custom colors may be ordered to match virtually any substrate.

PACKAGEING

Cartridge: 300 ml / 25 pcs/carton

Sausage: 592 ml / 20 pcs/carton

UX690

RTV,Neutral,One-Part Silicone Sealant

UNEX UX690 Silicone Sealant is a onepart , RTV neutral-cure, architectural grade sealant. It easily extrudes in any weather and cures at ambient temperature by reaction with moisture in the air to form a durable, flexible silicone rubber seal.

UNEX UX690 may also be used to sealfor housing window and door, freight container, car glass, metal cladding, ducting and interior sealing in building and housing, also designed for use in sealing for general glazing and showroom glazing ans weatherproofing applications.



TYPICAL PERFORMANCE

- Excellent adhesion to a wide range of substrates including coated glass, galvanized steel, masonry, anodized and polyester paint coated aluminium and tainless steel, and other porous and non- porous substrates.
- Ideal for expansion, connection, perimeter and other movement joints.
- Suitable for use on extension/compression movement capability of up to 25% of the original joint width.
- Excellent temperature stability: -50°C to 180°C.
- High level of mechanical properties.
- High elasticity and high modulus.
- Resistant to ozone.

APPLICABLE STANDARDS

- ASTM C920, Type S, Grade NS, Class 25
- China Specification: GB/T 14683 G,F 25HM

TEST ITEMS	TECHNICAL DATA	TEST RESULT	STANDARD
Test Conditions: T (23±2) °C, (50±5) % R.H.			
Density, g/cm³	/	1.49	GB/T 13477.2
Extrusion Property, ml/min	≥80	285	GB/T 13477.3
Sag, mm	≤3	0	GB/T 13477.6
Tack-free Time,h	≤3	2.5	GB/T 13477.5
Curing Time, d	/	7~14	/
Range of Application Temperature, ℃	/	5~40	/
Test Conditions: 28d placed at T (23±2)C, (50+5)% R.H.			
Hardness ,Shore A	20~60	53	GB/T 531.1
Elastic Recovery,%	≥80	90	GB/T 13477.17
Range of Application Temperature, ℃	/	-60~180	/
Weight Lose Rate,%	≤10	3.1	GB/T 13477.19
Modulus at 100% Elongation, MPa	/	0.8	GB/T 13477.8
Elongation at Break,%	/	135	
Tensile Strength,Mpa	/	1.2	

LIMITATIONS

- UX690 is not suitable for structural glazing use.
- UX690 should not be applied to:DO NOT USE when application surface temperatures below 4°C or exceed 50°C,Surface which will be painted, as painting over rubber is not recommendedDo not use water for tooling and do not apply to wet or damp surface.On surfaces that are continuously immersed in water.

SHELF LIFE AND STORAGE

12 months from the date of manufacture, store in a low moisture, dark place below 30 C in the original unopened packing.

COLOR

Black / Grey / White

Custom colors may be ordered to match virtually any substrate.

PACKAGEING

Cartridge: 300 ml / 25 pcs/carton

Sausage: 592 ml / 20 pcs/carton

UX699

RTV, Neutral, One-Part Silicone Sealant for Structural Glazing

Sealant, a one-part, RTV neutral-cure, architectural grade sealant, designed specifically for the structural bonding of glass, metal, and other building components. It can also be used to adhere stiffening elements to building panels and for other similar adhesive applications.It easily extrudes in any weather and cures at ambient temperature by reaction with moisture in the air to form a durable, flexible silicone rubber seal.



TYPICAL PERFORMANCE

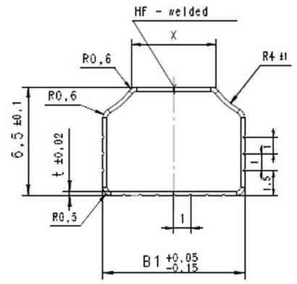
- Excellent adhesion to a wide range of substrates including coated glass, galvanized steel, masonry, anodized and polyester paint coated aluminium and stainless steel and other porous and non- porous substrates.
- High ultimate tensile strength makes it ideally suited for structural bonding application.
- Excellent weathering characteristics and high resistance to ultra-violet radiation, heat and humidity.
- Excellent temperature stability: - 50℃ to 180℃.
- High level of mechanical properties.
- High elasticity and high modulus.
- Resistant to ozone.

APPLICABLE STANDARDS

- ASTM C920
- GTAG 002
- GB 16776
- JC/T 475

TEST ITEMS			TECHNICAL DATA	RESULT	STANDARD
Test Conditions: T (23±2) °C, (50±5) % R.H.					
Density, g/cm³			/	1.43	GB/T 13477.2
Sag, mm			≤3	0	GB/T 13477.6
Extrusion Property,s			≤10	1.8	GB/T 16776
Tack-free Time,h			≤3	2.5	GB/T 13477.5
Curing Time, d			/	7~14	/
Adhesion Time,d			/	14~21	/
Application Time,min			/	20	/
Test Conditions: 28d placed at T (23±2) °C, (50±5) % R.H.					
Range of Application Temperature, ℃			/	-50~180	/
Hardness,Shore A			20~60	45	GB/T 531
10% Moudulus			/	0.15	GB16776
20% Moudulus			/	0.23	
40% Moudulus			/	0.39	
Thermal Aging	Thermal Weight Lose,%		≤1	3.1	
	Fracturing		No	No	
	Pulverizing		No	No	
Tensile Adhesion Property	Tensile Adhesion Strength	23℃ , MPa	≥0.60	1.05	
		90℃ , MPa	≥0.45	0.87	
		-30℃ , MPa	≥0.45	1.45	
		Immersion in Weater,MPa	≥0.45	0.98	
		Weater-UV Radiation,MPa	≥0.45	0.95	
	Adhesion Failure Area,%		≤5	0	
	Elongation Under Max.Tendile Strength at 23℃,%		≥100	325	
Test Conditions: 28d placed at T (23±2) °C, (50±5) % R.H.					
Adhesion after Radiation of Artificial Light through Glass and Immersion in Water	△Xmean		≥0.75	0.8	ETAG 002 JG/T 475
	XmeanCohesion Faliure Area,%		≥90	95	
NaCl Atmosphere	△Xmean		≥0.75	0.92	
	XmeanCohesion Faliure Area,%		≥90	100	
SO Atmosphere	△Xmean		≥0.75	0.9	
	XmeanCohesion Faliure Area,%		≥90	100	
Adhesion after Cleaning Detergent	△Xmean		≥0.75	0.82	
	XmeanCohesion Faliure Area,%		≥90	98	

Remarks: △Xmean means the specific value of the Adhesion Strength after Aging and that at standard condition.



ALUMINUM SPACER
Brief Introduction

- Roll forming line for aluminum window spacer profiles imported from Germany with the most advanced technology adopted European standard.
- Aluminium strip thickness 0.35mm, EN-AW-3003 H26,mirror, anti-corrosion.
- Unique design profiles, excellent bending property.
- Unique surface treatment. better sealing properties with selants.
- High-frequency induction welded,continuous welding seam quality monitoring by eddy current system.
- No burr and no deformation after cutting,better for connected.
- Marking LOGO as customer special requirement.

ITEM									
SIZE	Width (±0.1mm)	Meter /ctn	Length (±2mm)		Height (±0.1mm)	Thickness (Standard)(±0.005mm)		Thickness (Bendable)(±0.005mm)	
6A	5.5	3000	5M	6M	6.5	0.25	0.30	0.30	0.34
8A	7.5	2295	5M	6M	6.5	0.25	0.30	0.30	0.34
9A	8.5	2700	5M	6M	6.5	0.25	0.30	0.30	0.34
10A	9.5	2550	5M	6M	6.5	0.25	0.30	0.30	0.34
12A	11.5	2100	5M	6M	6.5	0.25	0.30	0.30	0.34
14A	13.5	1800	5M	6M	6.5	0.25	0.30	-	0.34
15A	14.5	1625	5M	6M	6.5	0.25	0.30	-	0.34
16A	15.5	1500	5M	6M	6.5	0.30	-	-	0.34
17A	16.5	1500	5M	6M	6.5	0.30	-	-	0.34
18A	17.5	1375	5M	6M	6.5	0.30	-	-	0.34
19A	18.5	1250	5M	6M	6.5	0.30	-	-	0.34
20A	19.5	1250	5M	6M	6.5	0.30	-	-	0.34
22A	21.5	1170	5M	6M	6.5	0.34	-	-	0.34
23A	22.5	1125	5M	6M	6.5	0.34	-	-	0.34
24A	23.5	1000	5M	6M	6.5	0.34	-	-	0.34
25A	24.5	1040	5M	6M	6.5	0.34	-	-	0.34
27A	26.5	910	5M	6M	6.5	0.34	-	-	0.34
30A	29.5	720	5M	6M	6.5	0.34	-	-	0.34

STEEL CONNECTOR & CORNER KEY





COLORFUL ALUMINUM SPACER

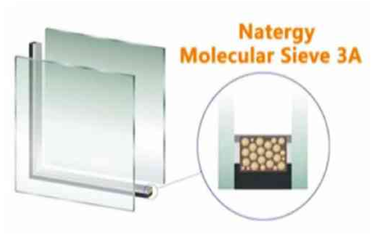


THERMAL SPACER FOR GREEN BUILDING



DESICCANT

UNEX Building Complex 23/24



APPLICATION INSTRUCTION

MOLECULAR SIEVE NS-N
Professional molecular sieve 3A
None of calcium oxide, calcium chloride and other corrosive materials.
Appearance: beige or brown beads
Size: 0.5-0.9mm; 1.0-1.5mm; 1.5-2.0mm

ADVANTAGE

IG DESICCANT
Molecular sieve 3A is developed specially for insulating glass desiccant. It can deeply co-adsorb resident moisture and organics in the IG unit,keep the IG clear and transparent.






Evidence of Performance

Physicochemical characterizations as per prEN 1279-6:2014, clause 5.2
- Water vapour sorption
- X-ray Photoelectron Spectroscopy (XRF)
- X-ray Diffraction (XRD)
- Bulk density
- AWMC, LOI and Ts-value
- Water Induced Temperature (ΔT)
- Gas desorption


IGCC/IGMAB LIST OF REVIEWED DESICCANTS

ITEM	UNIT	TARGET
Bulk density	g/lm	0.75-0.85
Size ratio up to grade	%	≥98.0
Water adsorption capacity	% (RH10%,25℃)	≥15.0
Delta T vaue ℃	℃(10g MS-3A/10ml H O) 2	≥35
Nitrogen adsorption	ml/g(250ml-MS 3a,70℃,4hs)	≤0.5
Dew point	℃	≤-60
Dust drops	NTU	≤50
Ignition loss	%(540℃)	≤1.7

PROPERTIES

- No corrosiveness
- High compressive strength
- High adsorption capacity
- High Delta T value
- Good capacity in controlling adsorption-speed
- Low moisture residence
- Low nitrogen adsorptior
- Low electrostatic load
- Low dust level


Mixing


Rolling(Sphere)


Drying


Cooling


Packaging

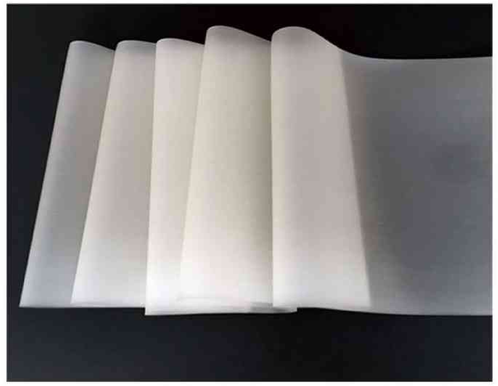

The finished product

PACKAGEING

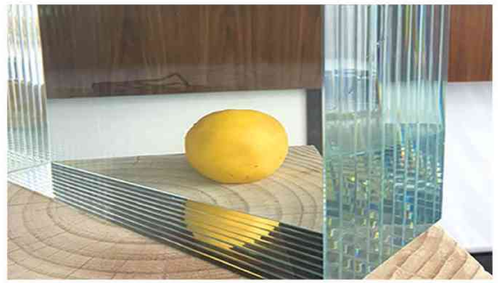
20'GP container can be loaded :
600 cartons, net weight 15000kg;
or 80 fiber drums, net weight 11200kg;
or 80steel drums, net weight 12000kg.

40'GP container can be loaded :
1000 cartons, net weight 25000kg;
or 160 fiber drums, net weight 22400kg;
or 160steel drums, net weight 24000kg.

PVB FILM



UNEX supply high quality PVB film used in architectural glass,automotive glass and solar pv modules.Our manufacturer apply the advanced international production technology and own high quality fresh resin material production.





ITEMS	0.38mm	0.76mm	1.14mm	1.52mm
Length	400M/roll	200M/roll	150M/roll	100M/roll
Width	600-3300mm			
Roughness Rz	15-70			
Moisture content (%)	0.35-0.55			
Heat shrinkage rate(60℃/15min) (%)	≤12.0	≤8.0	≤6.0	≤5.0
Pummel value	≥7			
Visible light transmittance (%)	≥88 (clear)			
Haze (%)	≤0.6 (clear)			
Tensile strength (MPa)	≥20.0			
Tensile elongation (%)	≥200			
Yellowness index (%)	≤10			

PROPERTIES

SECURITY
PVB interlayer film has strong adhesive force,shattering glass, glass fragments will firmly adhere to the PVB film will not debris splashed harm to others, especially for high-level architectural glass.



BURGLARY PROOF
PVB interlayer film is very shock resistant,the laminated glass still keeps its structure integrity when the burglar cracks the glass,the laminated glass with PVB film has much strength to resist shock. It also helps reduce outside visibility.

BULLET PROOF
The multi-layer PVB film between glasses can effectively absorb the bullets impact pressure, keep people safe against terrorist attack.



SOUND PROOF
PVB interlaver will generate sound waves through the vibration damping,which can effectively block the propagation of sound and reduce noise.

INSULATION
PVB interlaver con filter infrared,reduce heat conduction indoor and outdoor,and thus able to achieve the energy saving effect.



UV RESISTANCE
PVB interlayer can cut off 99% of the UV radiation in sunlight,protect indoor furniture from ultraviolet radiation caused by fading and aging,reduce the risk of carcinogenicity in humans and sunburn.

EVA FILM

EVA is ethylene (E)-vinyl acetate (VA) copolymer. Its full name is ethylene-vinyl acetate copo, referred as EVA or E/VAC.
UNEX is not only supplying EVA film, but also the EVA furnace and full laminating glass machinery. So we acknowledge very well the film feature and alterent end products processing technology.



EVA FILM FEATURES

- Adopt best raw material from the world-leading company, advanced technology,obtained international testing. guarantee the stable quality.
- High transparency and excellent environmental performance for outdoor use.
- High viscosity and UV radiation level.
- Strong research team on different variety for different use.





FEATURES	Test Method	SUPER CLEAR
Light Transmittance	ISO 13468-1:1996	> 91. 3%
Maze	GB/T 2410	≤0.20%
Yellow change	ultraviolet irradiation 2000 hours	<3. 0
Light transmittance decrease	ultraviolet irradiation 2000 hours	<0. 45%
Adhesion with glass	GB/T 2790:1996	≥95N/cm
Cross linking rate	148degree, keeping time 30minutes	>96%
Water Absorption	GB/T 1034:2008	<0. 1%
Tensile Strength	GB/T 528:2009	>20. 3mpa
Heat & humidity Resistance	85degree, 85%humidity, 1000hours	qualified
Impact Resistance Against Shot bag	GB-15763.3:2009	qualified
Ball Impact Peeling Resistance	GB-15763.3:2009	qualified
Pendulum Resistance	EN ISO 12543-2:1998	qualified
2 hours in the 100℃ water	4.5mm glass+0.76mm EVA+4.5mm glass	qualified

CONSTRUCTION UN-A SERIES

PRODUCTS FEATURES

UN-A series high temperature extra clear EVA film is specially used for outdoor building. It adopts hest raw material and auxiliaries,the transparency reaches up 91% and better adhesive.

Low temperature segment	Warm keeping time	High temperature segment	Warm keeping time
70℃	20min	130-140℃	45min

LED,SWITCHABLE UN-E SERIES

PRODUCTS FEATURES

UN-E series film specially used in LED, switchable laminated glasit has high transparency, high compatibility, physical properties ancother advantage to achieve high performance.

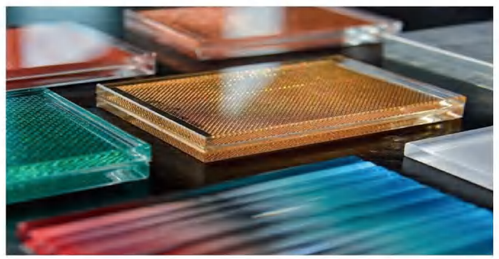
Low temperature segment	Warm keeping time	High temperature segment	Warm keeping time
70℃	20min	130-140℃	45min

INDOOR UN-D SERIES

PRODUCTS FEATURES

UN-D series is specially used for inner decorative laminated glassThis type apply low temperature and shorter time to process withhigh efficiency and lower cost.

Low temperature segment	Warm keeping time	High temperature segment	Warm keeping time
70℃	20min	130-140℃	45min



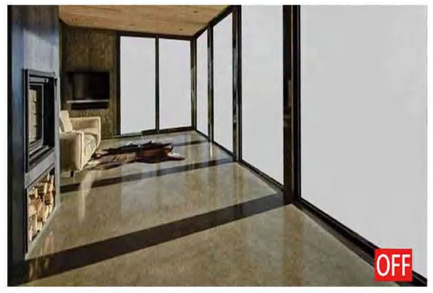




SMART FILM

Smart film is a new electronic controlled optica product,with a scientific name of polymer dispersed liquid crystal film(PDLC FILM).In the switchable privacy film,small dronlets of liquid crystal at micron meter level is dispersed in a polymer matrix,which is kept between two films.In order to produce this PDLC film, special process is required

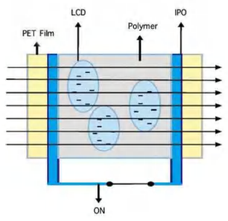


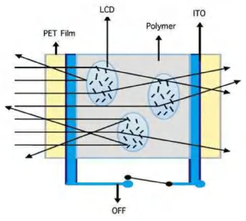


WORKING PRINCIPLE

When the power is turned off. the liauid crystal molecules in the PDLC film distributes irregularly.

At this state,the PDLC fim is opaque. When the power is on, the liquid crystal molecules can get arranged quite requlary and the PDLC film can get transparent instantly.





TEST PARAMETER		STATE	RESULTS
Optics	Transmittance (parallel light)	Power on	About:75%(+/-3%)
		Power off	< 1%
	Haze	Power on	< 7%
		Power off	> 90%
	Visual angle	Power on	About:150°
	Screening of UV light	Power on	< 99%
		Power off	< 99%
	Screening of IR light	Power on	> 30%
		Power off	> 90%
Electri-city	(Power adapter)Vop	Power on	70VAC
	Response time	Power on Power off	200(ms)
		Power off Power on	10(ms)
	Power	Power on	About:5W/㎡
Size	Thickness	/	0.44mm
Environment	Operating temperature	/	-10℃ to 60℃
	Storage temperature	/	-20℃ to 70℃
Life	Life time	Power on	More than 50000Hr

TPU/SGP FILM

TPU FILM/SGP INTERMEDIATE FILM

- The main component of TPU film is polyurethane elastomer, which is made by special process. Widely used in armor protection, aerospace, automotive, construction, information technology, new energy, high-end equipment and other fields.
- SGP film is a new polymer material with high shear modulus and high polymer bonded by ionic bond.





No.	Test Item	Test Method	Result	Conclusion
1	Density	ASTM D792-20 Method B	1.06g/cm3	/
2	Shore Hardness	With reference to ASTM D2240-15(2021)	A/71/1	/
3	Tear Strength	ASTM D1004-21	72 5N	/
4	Tensile Test	ASTM D638-14	See result	/
5	Yellowness Index	ASTM E313-20	5.16	/
6	Total Luminous Transmittance/Haze	ASTM D1003-21 Procedure A	Total Luminous Transmittance:91.7% Haze: 0.7%	/
7	Glass Transition Temperature (Tg)	ASTM D3418-91	See result	/





SMART GLASS

The smart glass is a new type of serial photovoltaic glass. The polyvison switchable privacy film was glued into two slabs of glass at high temperature and pressure to form sandwich structure. The user can control the glass to be transparent or opaque through power on or power off The glass not only has all the characteristics of safety protecting the privacy through the controlling of the transmittance Due to the existence of liquid glass interlayer, the polyvison switchable privacy glass can also be applied as a projection screen, instead of the ordinary screen. High resolution image can be presented on this glass.





ADVANTAGE

- Privacy protection.
- Projection function.
- Safety: polyvison switchable privacy glass has all the characteristic of safety glass, which can prevent the flyingof debris after rupture of glass. On the other hand,the strenath of this glass is also excellent.
- polyvison switchable privacy glass can block the beat,more than 99 of UV light and more than 98 of IR light.
- Soundproofing features.





APPLICATION

1. Business Region
Projection screen
Partition wall in the office space
conference rooms and control rooms

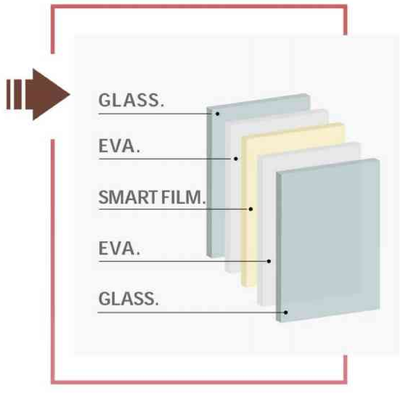
2. Residential Region
Partition wall of inner rooms
Small home theater curtain
Intelligent windows and doors

3. Medical institutions
The replacement of curtain by polyvison switchable privacy glass can help to blocking regions, protect privacy and reduce the noise

4. Guard Against
The polyvison switchable privacy glass is recommended to be applied in the showcases in the shopping malls, banks, jewelry stores and museums.



SMART GLASS STRUCTURE







GRINDING TOOLS SERIES

Dimaond grinding wheel series



Resin wheel series



Drilling Bits for CNC or Semi-automatic Drilling Machine



Milling tools/Drill bits series



Polishing wheel series



Low-E glass coating deletion wheel series







HARDWARE

For Open Suspension System















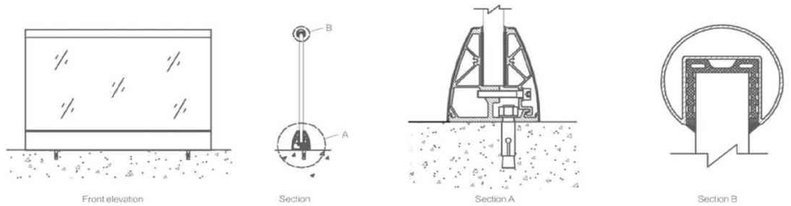


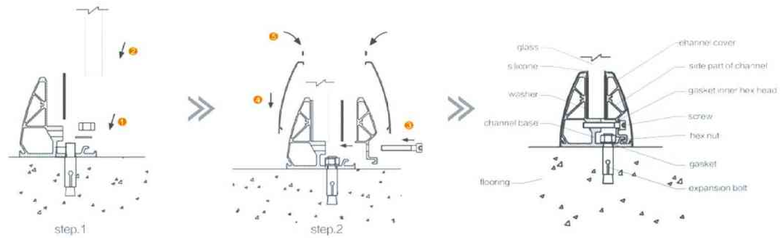


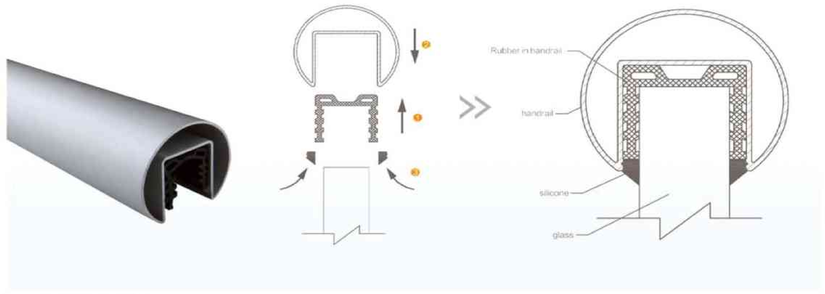




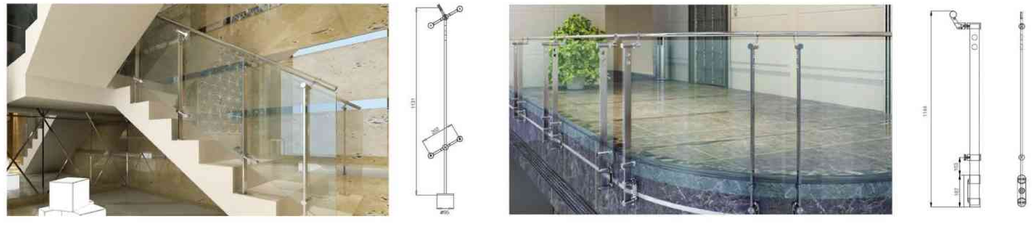
ALUMINUM ALLOY RAILING





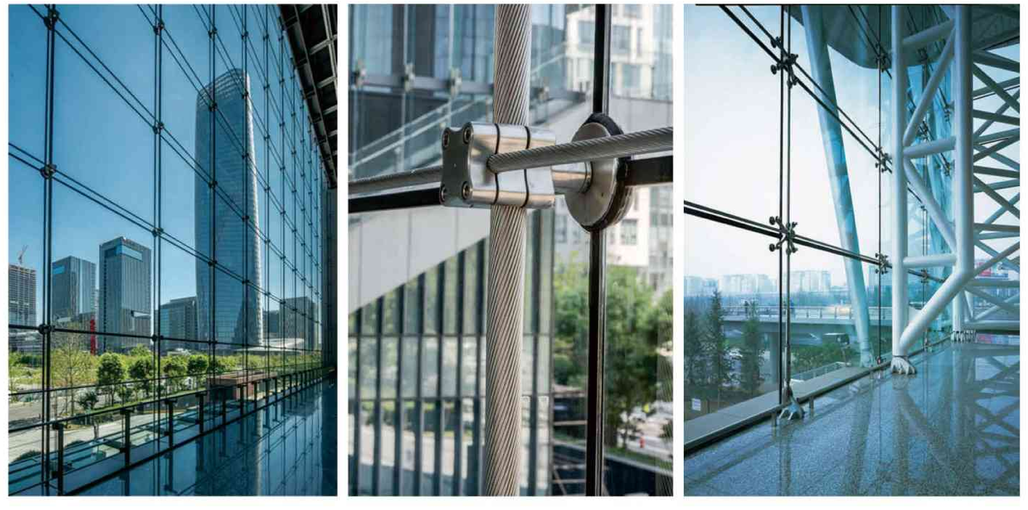


GLASS RAILING



POINT SUPPORT GLASS CURTAIN WALL ACCESSORIES





GLASS ENAMEL

The colored glass market is setting as one of the safest and growing activities these days, as customers appreciate upgraded value. UNEX offers integra solutions for coloring glass ranging from cold process resins to tempered glass enamels for customerized color production.

Tempered Glass Enamels are mainly used for decorative glass, appliance glass automotive glass. furniture glass, and architectural alass processing. It is feature of high glossiness, excellent acid and alkali resistance, and strong hiding power.UNEX supply both the high quality enamels and a unique system do it by yourself which is based on 12 pure pigments and our exclusive formulation system you can produce your own RAL colors at home. The different formulas are serving perfectly on screen printing machine, digital printing, roller painting and other spraying machines tempered enamels applicable



Tempering temperature: 680-720℃

Firing temperature: 600-650℃

Coefficient of Thermal Expansion(CTE):(75-95)x10-7/K(50-300℃)

Acid and alkali resistance:

Acid resistance: No sharp trace on the surface after dipping in 3.5% Hydrochoric acid solution for 10-15min at room temperature.

Alkali resistance: No sharp trace on the surface after dipping in 10% causticsoda solution for 10-15min at room temperature.

Supply Mode: Powder, Printing enamel



Color	4000 series Lead contain		2000 series Lead free		2500 series Lead free	
	Oil base	Water base	Oil base	Water base	Oil base	Water base
Pink	4100P	4100W	24100P	24100W		
Red	4101P	4101W	24101P	24101W	25101P	25101W
Yellow	4201P	4201W	24201P	24201W	25201P	25201W
White	4310P	4310W	24310P	24310W	25310P	25310W
Sand White	4395P	4395W	24395P	24395W	25395P	25395W
Green	4401P	4401W	24401P	24401W	25401P	25401W
Blue	4501P	4501W	24501P	24501W	25501P	25501W
Brown	4601P	4601W	24601P	24601W	25601P	25601W
Black	4705P	4705W	24705P	24705W	25705P	25705W

DIRECT SCREEN PRINTING OIL BASE MEDIUM OIL(8008)

This kind of medium oil can be used for direct screen-printing decoration of ceramics, glass and glass ceramic panel.



Suggested Service Condition

Drying Method: Natural drying in the air or infrared drying

Drying Time: Medium drying rate

Viscosity: 300 m/Pa.S

laterial-oil ratio: 1: 0.2-0.25(Depends on the density and usage of pigment)

Operating temperature: 20-25℃

Operating humidity: 50-70%

Shelf life: Under drying condition and room temperature,there is at least eight-months guarantee if unopened

DIRECT WATER-BASE SCREEN PRINTING MEDIUM OIL(9018)

Description: Water-based medium oil can be applied to screen printing of architectural glass and glassware.lcan be cleaned by water

Features: Drying

Method: Natural drying in the air or infrared drying

Drying Time: Medium drying rate

Material-oil ratio: 1: 0.3-0.35 (Depends on the density and usage of pigment)

Operating temperature: 20-25℃

Operating humidity: 50-70%

Shelf life: Under drying condition and room temperature.there is at least eight-months guarantee if unopened





PROJECT CASE

UNEX
Building Complex
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