SHANGHAI YAOHUA PILKINGTON GLASS GROUP CO.,LTD.
BUILDING 4-5, NO.1388 ZHANGDONG ROAD, PUDONG , SHANGHAI,CHINA
TEL: +86 21 61633599
POST CODE:201203
http://www.sypglass.com

SYP ARCHITECTURAL GLASS

SHANGHAI SYP ENGINEERING GLASS CO., LTD.
NO.75 KANGLIU ROAD, PUDONG SHANGHAI,CHINA
POST CODE:201315
TEL:+86 21 38108108

TIANJIN SYP ENGINEERING GLASS CO., LTD.
NO.1 HUATAI ROAD, HI-TECH INDUSTRIAL PARK
BEICHEN, TIANJIN, CHINA POST CODE:300409
TEL:+86 22 86880202

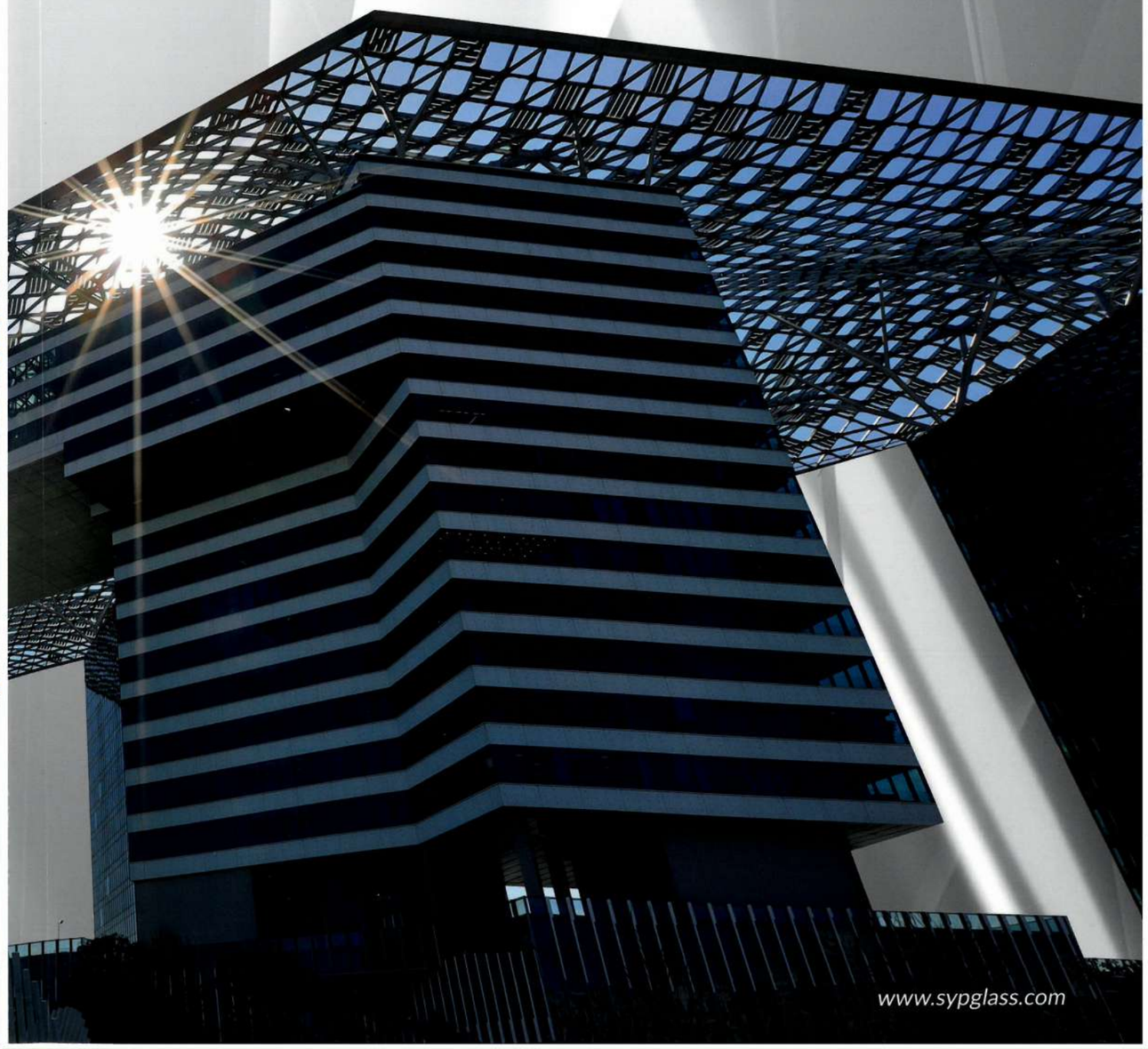
JIANGMEN SYP ENGINEERING GLASS CO., LTD.
NO.10 YINYUAN ROAD, XINHUI ECONOMICAL ZONE,
JIANGMEN, GUANGDONG PROVINCE, CHINA
POST CODE:529141
TEL:+86 750 6398999

CHONGQING SYP ENGINEERING GLASS CO., LTD.
NO.1 YAOPI ROAD, WANSHENG, CHONGQING, CHINA
POST CODE:400800
TEL:+86 23 65966666

耀皮玻璃集团
Shanghai Yaohua Pilkington Glass Group Co.,Ltd.

SYP

SYP ARCHITECTURAL GLASS



www.sypglass.com

MAKE A DIFFERENCE

STRIVE FOR EXCELLENCE

SYP GLASS

Contents

ABOUT SYP

Provide Professional Glass Solutions

Shanghai Yaohua Pilkington Glass Group Co.,Ltd. (Abbr: SYP) was founded in November 1983. It became one of the first public listed glass manufacturers in China with its IPO completed in 1993.

Currently SYP has three major Businesses , float glass, architectural processed glass and autoglass , with total assets over RMB 7.3 billion. SYP can produce 680,000 tons float glass, 50 million square meters architectural processed glass and 4 million sets of autoglass annually.

SYP has long been certified with ISO9001: 2000 quality management system and the ISO14001 international certificate of SGS in China. Moreover, SYP was awarded Shanghai Famous Trademark at the end of 2005. The float glass and IGU products were awarded the China Top Brand products. SYP architectural processed glass products have been awarded Shanghai Top 100 Brand Name products for consecutive eight years.

While maintaining a leading position in China' s glass industry, SYP is striving to establish itself as a leading multinational glass manufacturer.

MAKE A DIFFERENCE STRIVE FOR EXCELLENCE

BRAND ADVANTAGES

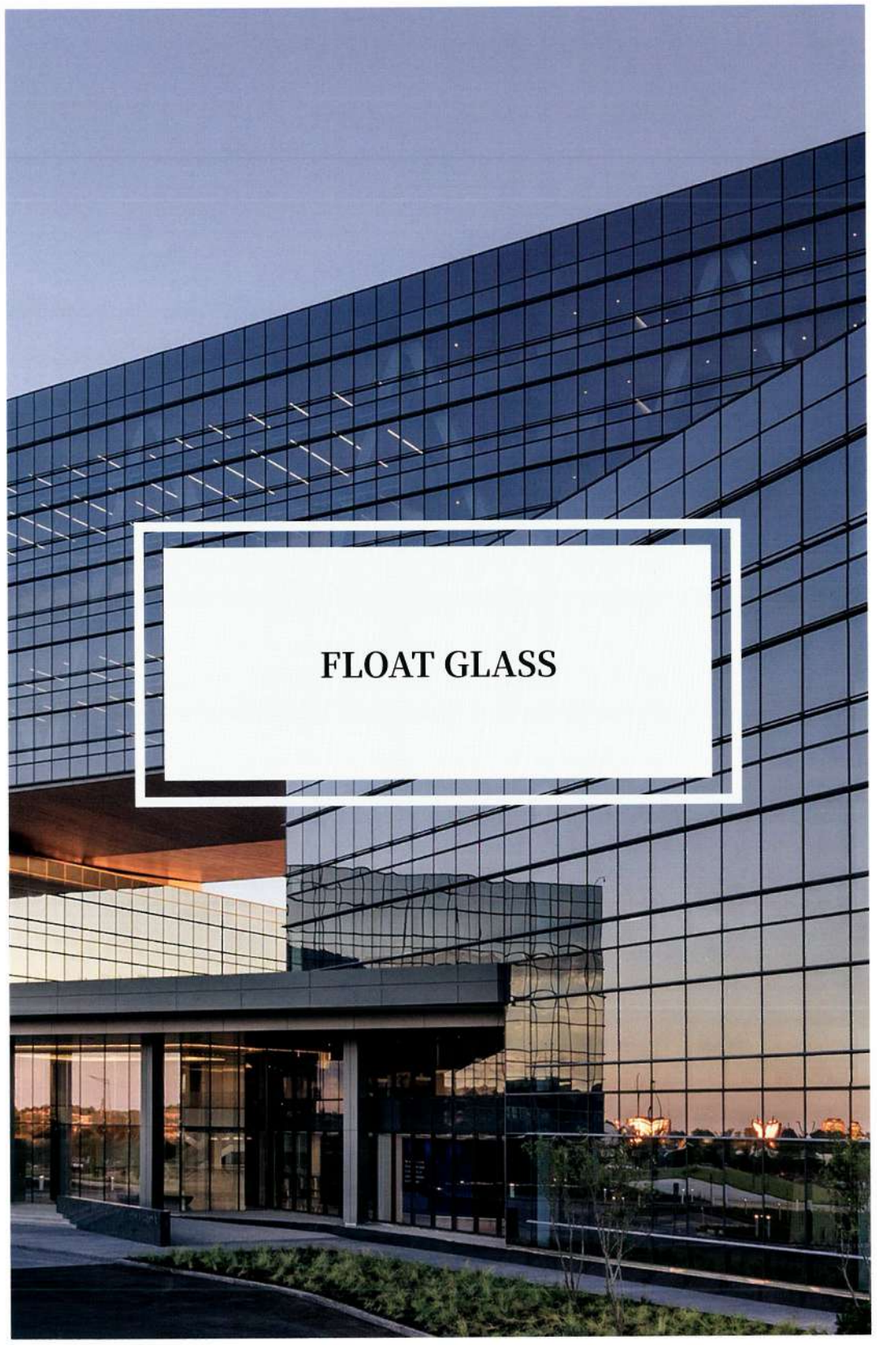
- Establish ISO9001 quality management system and ISO14000 environmental management system, and obtain the "pass" to the international market.
- The products have been certified by China 3C, US SGCC&IGCC, UK BSI, EU CE and other authoritative institutions.
- Float glass, enameled tempered glass, insulated glass unit, laminated glass, coated glass and silver mirror glass have been rated as "Shanghai Famous Glass brand products"; The float glass, enameled tempered glass, insulated glass unit, laminated glass, coated glass, silver mirror glass and tempered, bend glass for home decoration with "耀皮" brand have been won the "Shanghai Top 100 Famous brand products".
- Float glass products and insulated glass unit products are identified "China's famous brand products".
- "耀皮" trademark is identified "Shanghai famous brand product".
- Float glass, insulated glass unit, tempered glass and coated glass products were rated as "2010 Jiangsu, Zhejiang, Anhui and Jiangxi Famous brand products 50 best".
- Yaopi became one of the first batch of "Shanghai brand certification enterprises "and won the "China Green Building Materials Product AAA Certification" and "China Green Building Materials Evaluation Mark (Three Stars)".

TECHNICAL ADVANTAGES

- Technical support from UK Pilkington Company and Japan NSG Group.
- Mastered online and offline (Low-E) coating technology together and has large-scale production capacity.
- German original magnetron sputtering coating equipment and technology.
- Two municipal enterprise technology centers.

PRODUCT ADVANTAGES

- Actively develop differentiated products, including: substrate of vehicle and aviation windshield, complex-curved tempered glass, ultra-high performance Low-E glass, super energy saving IGU, digital-print enamel glass, Jumbo size glass etc.
- Self-produced original glass sheet to create an integrated industry chain.
- Focus on market and customer demand, develop, R&D and launch new products that meet market demand.
- Aviation glass, filling the gap in China' s glass industry.



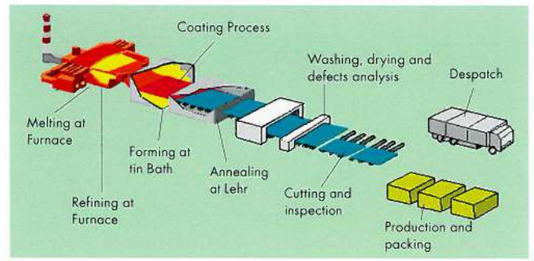
FLOAT GLASS

FLOAT GLASS

Modern float glass production technology was invented by the UK Pilkington Company in 1952. In 1987, Shanghai Yaohua Pilkington Glass Co., Ltd. introduced the UK Pilkington Glass company's "float glass production process" and became an enterprise capable of producing 1.8mm~25mm thickness various specifications of high-quality float glass.

At present, SYP has four high-quality float glass production lines, three of which use the full set of equipment and production technology of UK Pilkington Company, and one uses the production technology of Japanese NSG company to meet the different needs of the market.

Float glass is a kind of flat glass defined according to the molding process, a reasonable proportion of various raw materials, after uniform mixing into the float glass melting furnace, after high temperature melting into liquid "glass water" into the tin bath, floating on the surface of the liquid tin flat, and gradually cooling into a solid flat glass ribbon after forming, after precise annealing, on line cutting, testing, stacking, packaging into the warehouse.



PRODUCT STANDARDS

- □ GB11614-1999 Float Glass Chinese National standard
- □ EN572-2 European Standard
- □ BS952 UK Standard
- □ ASTM C 1036American Society for Testing and Materials standard
- □ JIS R3202 Japanese Standard

FEATURES

- □ The glass quality is stable, the stress is uniformly eliminated, and has low rate of spontaneous breakage for tempered glass.
- □ High processing yield, good cutting ability, excellent optical quality and good zebra screen viewing.
- □ It shows that the surface is flat, the thickness is uniform, and the reflection image distortion is small after processing.
- □ Strong continuous supply capacity of products.
- □ High quality control level.
- □ It can provide Jumbo size glass, which is characterized by high strength, strong wind resistance and wide vision, and is the choice of lobby and window of various commercial buildings.

JUMBO SIZE THICK GLASS

Jumbo size glass possess the characteristic of high strength, strong wind resistance and wide field of vision, being the best choice for commercial architecture, lobby's and show windows (thickness between 12mm-25mm)

SPECIFICATIONS

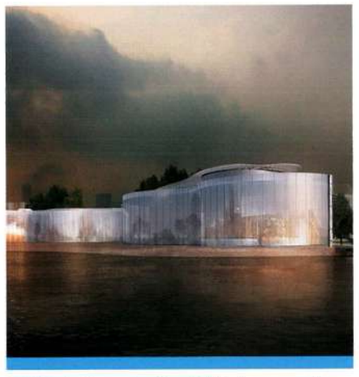
	Thickness(mm)	Maximum size(mm)	Minimun size(mm)
Normal Clear	1.8-25(1/14"~1")	3300x6500 (130"~256")	500X700(16 7/10"X27 1 / 2")
Jumbo size	12~25 (1/2" ~1")	3300X12500 (130"~492 1/8)	---

PROJECT : Huaihai Plaze(Shanghai)
PRODUCT : 19C

PROJECT:
Shanghai New International Expo Center
PRODUCT: 12C

PROJECT: Sunac • Grand Milestone Modern Art Center Xi'an
PRODUCT: 19+2.28SGP+19+2.28SGP +19+2.28SGP+19 all low iron glass

PROJECT: Changchun Liwang Lianhua Mountain Projec sales office
PRODUCT: 6YNE0168(2#)+12A+5+0.38+5



PROJECT: Hangzhou Bay Public Square and Exhibition Hall Ningbo
PRODUCT: 10YRE0652(2#)+12A+8Li b

PROJECT: Low Iron Lamianted Glass

Low Iron Float Glass

Product	Thickness mm	Visible Light%		Solar Energy%		g value ISO9050 AM=1.0	Solar Heat Gain Coefficient (SHGC)	Shading Coefficient (SC)	U Value W/(m²·K) NFRC		U Value W/m²·K EN 673	STC
		Transmi-ttance	Reflectance outside	Transmi-ttance	Reflectance outside				Summer	Winter		
Low Iron Float Glass	5	92	8	90	8	0.90	0.90	1.04	5.27	5.84	5.7	30
	6	91	8	89	8	0.90	0.90	1.04	5.24	5.81	5.7	31
	8	91	8	88	8	0.89	0.89	1.03	5.19	5.74	5.7	33
	10	91	8	88	8	0.88	0.89	1.02	5.13	5.67	5.6	34
	12	91	8	87	8	0.88	0.89	1.02	5.07	5.61	5.5	36
	15	90	8	86	8	0.87	0.88	1.01	4.99	5.51	5.4	38

※ The above data are calculated by WINDOW6.3 developed at Lawrence Berkeley National Laboratory, except for having been given clear indication of standards.
※ The glass performance data will be finalized by the performance data sheet which submitted by SYP. Above performance just for design reference.

PROJECT: Botanical House of Shanghai People's Garden
PRODUCT: 6FT Low-E+1.52PVB+10FT Spider Glass

PROJECT: Tianjin Botanical Garden
PRODUCT: 15 Point Supported Glass

Clear Float Glass

Thickness mm	Weight kg/m²	Visible Light%		Solar Energy%			g value ISO9050 AM=1.0	Solar Heat Gain Coefficient (SHGC) NFRC	Shading Coefficient (SC) NFRC	U Value W/(m²·K) NFRC		U Value W/(m²·K) NFRC	STC
		Transmi-ttance	Reflectance outside	Transmi-ttance	Reflectance outside	Absor-ption				Summer	Winter		
4	10.0	90	8	85	8	7	0.85	0.87	1.00	5.30	5.88	5.8	29
5	12.5	90	8	83	8	9	0.84	0.86	0.99	5.27	5.84	5.7	30
6	15.0	89	8	80	7	13	0.83	0.84	0.97	5.24	5.81	5.7	31
8	20.0	88	8	77	7	16	0.81	0.82	0.94	5.19	5.74	5.7	33
10	25.0	87	8	74	7	19	0.79	0.80	0.92	5.13	5.67	5.6	34
12	30.0	86	8	72	7	21	0.77	0.78	0.90	5.07	5.61	5.5	36
15	37.5	85	8	69	7	24	0.74	0.76	0.88	4.99	5.51	5.4	38
19	47.5	83	8	62	6	32	0.70	0.71	0.82	4.89	5.39	5.3	40

Tinted Float Glass

Product	Thickness mm	Visible Light%		Solar Energy%		g value ISO9050 AM=1.0	Solar Heat Gain Coefficient (SHGC)	Shading Coefficient (SC)	U Value W/(m²·K) NFRC		U Value W/m²·K EN 673	STC
		Transmi-ttance	Reflectance outside	Transmi-ttance	Reflectance outside				Summer	Winter		
F Green	5	77	7	47	6	0.60	0.62	0.71	5.27	5.84	5.7	30
	6	75	7	44	6	0.58	0.59	0.68	5.24	5.81	5.7	31
	8	69	7	36	5	0.52	0.54	0.62	5.19	5.74	5.7	33
	10	64	6	30	5	0.48	0.51	0.58	5.13	5.67	5.6	34
	12	60	6	26	5	0.45	0.48	0.55	5.07	5.61	5.5	36
Blue	6	55	6	45	5	0.58	0.61	0.70	5.24	5.81	5.7	31
	8	48	6	38	5	0.53	0.55	0.64	5.19	5.74	5.7	33
European Grey	6	44	5	43	5	0.57	0.59	0.68	5.24	5.81	5.7	31
	8	34	5	32	5	0.50	0.52	0.60	5.19	5.74	5.7	33
Crystal Grey	6	66	6	58	6	0.67	0.69	0.79	5.24	5.81	5.7	31
	8	56	6	47	6	0.60	0.62	0.71	5.19	5.74	5.7	33

※ The above data are calculated by WINDOW6.3 developed at Lawrence Berkeley National Laboratory, except for having been given clear indication of standards.
※ The glass performance data will be finalized by the performance data sheet which submitted by SYP. Above performance just for design reference.

PILKINGTON ENERGY ADVANTAGE ™

Online Low-E energy-saving glass is a low-emission coated glass produced by chemical vapor deposition (CVD) In the tin bath,In tin bath,a tin fluoride semiconductor film be formed on the upper surface of the glass ,utilizing the temperature of glass.

FEATURES

- □ It can effectively reduce the SHGC and U values of glass, reduce energy consumption and decrease expenses
- □ Even exposing to environment for a long time, coated layer won't peel off, be moldy and change color.
- □ It can be long-term storage under normal environment, shorten delivery time and accelerate the progress of project.
- □ It can not only be used as single panel glass but also be assembled to IGU glass or laminated glass. No need for edge deletion.
- □ It is easily for heat treatment such as curved, tempered or heat strengthened. Coated layer is stable and firm.
- □ It can prevent fog and moisture condensation by electrified.

Pilkington Energy Adavntage™ Pyrolytic coating

Monolithic	Thickness mm	Visible Light%			Solar Energy%			U Value W/(m²K)	E Value	Solar Heat Gain Coefficient (SHGC)	Shading Coefficient (SC)
		Transmi-ttance	Reflectance outside	Reflectance inside	Transmi-ttance	Reflectance outside	UV Trans-mittance				
Pilkington Energy Advantage™	3	82	11	12	69	11	57	3.7	0.16	0.72	0.83
	4	82	10	11	68	10	55	3.7	0.16	0.71	0.82
	5	83	11	12	68	10	53	3.7	0.16	0.71	0.82
	6	82	10	11	66	10	49	3.6	0.16	0.70	0.81
	8	81	10	11	62	9	45	3.6	0.16	0.67	0.77
	10	80	10	11	59	9	42	3.6	0.16	0.65	0.75
	12	80	10	11	57	8	43	3.6	0.17	0.63	0.73
Pilkington Energy Advantage™	3	75	17	18	59	15	45	1.9	-	0.65	0.75
	4	74	16	17	56	14	42	1.9	-	0.63	0.73
	5	74	17	17	55	14	41	1.9	-	0.63	0.73
	6	73	16	17	52	13	37	1.8	-	0.62	0.71
	8	71	15	16	47	12	32	1.8	-	0.58	0.67
	10	69	15	16	43	12	29	1.8	-	0.56	0.64
	12	68	15	16	39	10	28	1.9	-	0.54	0.62

Note:
The IGU is composed of two pieces glass with equal thickness , and its air spacer is 12mm. The outer one is Energy Advantage™ coated glass with coating on the second surface, the inner is clear glass.

UVA 80 SELF-CLEANING GLASS

The self-cleaning film of UVA80 glass is produced by chemical vapor deposition on the glass in the tin bath, integrating with glass and never peeling off. Self-cleaning film help keep the glass free from dirt, giving the practical benefit not only less cleaning, but also clearer, better looking windows. Location on surface #1 of the glass, works in two stages. Firstly, it reacts with natural daylight to break down and loosen organic dirt. Secondly, when it rains, instead of forming droplets, the water spreads evenly over the surface of the glass, forming a thin film and helping to wash any dirt away, avoiding to form drying spots and streaks, and helping the glass to dry very quickly. In installations where condensation is a problem, it reduces its visibility and helps it to evaporate more quickly. The UVA80 coating works also on cloudy days and during the night. During dry spells the glass can be cleaned by simply hosing it down.

FEATURES

- □ Save glass cleaning time and cost
- □ Break down and loosen organic dirt
- □ Purified air
- □ Helping the glass to dry very quickly
- □ Environmental protection and pollution-free
- □ Has certain UV control performance
- □ Easy to install
- □ Neutral colour

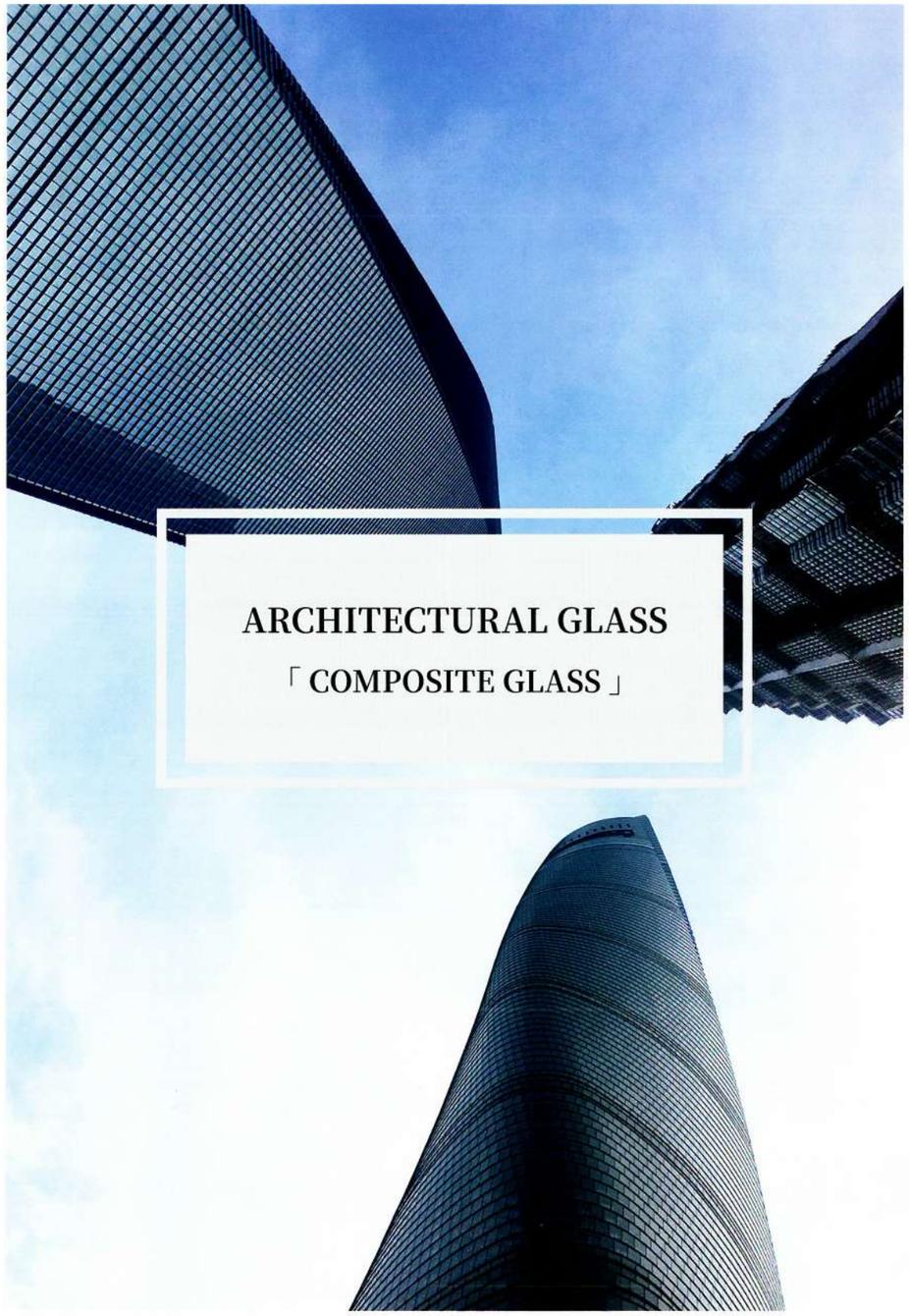



APPLICATION AREA

□ Facade and window

PROJECT : Museum of The Earth, New York
PRODUCT :Pilkington ActivTM Clear/Pilkington Energy Advantage™

PROJECT : GE PLAZA, Canada
PRODUCT :Pilkington ActivTM Clear/Pilkington Energy Advantage™



ARCHITECTURAL GLASS

「 COMPOSITE GLASS 」

LAMINATED GLASS

Laminated glass is a safety glass made by laminating two or more sheets of glass with a flexible plastic interlayer or PVB. The glass and interlayer are bonded together by heat and pressure.

FEATURES

- Safety : When damaged by external forces, the glass will only have cracks, not splashes.
- Sound reduction:PVB film can effectively absorb sound waves to reduce noise pollution.
- UV Elimination: eliminates 99% UV while allowing visible light to pass through, thereby protecting furniture,carpet and indoor decorations from color fading.
- Shielding and glare control: weakens sunlight radiation and glare.

CERTIFICATIONS

- GB15763.3 Laminated Glass
- China CCC Safety Glass Certificate
- SGCC (ANSI Z97.1, CPSC16 CFR1201)USA Safety Glass
- SAI Global AS/NZS 2208 Australian and New Zealand Safety Glass
- BSI BS 6206, BS EN 12600, BS EN ISO 12543 Safety Glass KiteMark Certificate
- ASTM 1172 American Society for Testing and Materials
- SGCC Safety Glass Certificate Council

SPECIFICATIONS

- Maximum Size : 2440 x 6000mm (96"x 236")
- Minimum Size: 300 x300mm (12"x 12")
- Substrate: 3-19mm (1/8" ~3/4")
- Interlayer: PVB, EVA, SGP
- Maximum Thickness of Laminated Glass: 60mm (2 3/8")

Sound insulation performance comparison

Product		STC (dB)
Laminated	3+0.76PVB+3	35
	5+0.76PVB+5	36
	6+0.76PVB +6	37
	6+1.52PVB+6	37
	12+1.52PVB+12	41
Laminated IGU	3+0.38PVB+3+12A+6	38
	5+0.38PVB+5+12A+8	39
	5+0.76PVB+5+12A+8	40
IGU	6+9A+6	34
	6+12A+6	35
	6+16A+6	36
Monolithic Glass	6	31
	12	36

PROJECT: Shanghai Oriental Art Center
ARCHITECT: Paul Andreu
PRODUCT: 12C+1.52SGP+0.5Metal+1.52SGP+15C

PROJECT: Suzhou Science and Cultural Arts Centre
ARCHITECT: ECADI
PRODUCT: 6C+9A+5C+1.9PVB (colour) +5C

PROJECT: Pudong Interbational Airport terminal One
ARCHITECT: Paul Andreu
PRODUCT: 10YAC0160 (2#) +0.76PVB+10C

PROJECT: Junhao Central Park Plaza Peking
ARCHITECT: MAD Architects
PRODUCT: 10grey-brown+16Ar+10YM0682 (3#)

PROJECT: Gardens by the Bay
ARCHITECT: Wilkinson Eyre, Grant Associates
PRODUCT: 10YNE0175 +12A+6C+1.52PVB+6C (with firt)
6C+1.52PVB+6YNE0175 +12A+6C+1.52PVB+6C (with firt)

Laminated Glass

Product	Color	Visible Light%			g Value	Solar Heat Gain Coefficient (SHGC) NFRC	Shading Coefficient (SC)		Raltive Heat Gain (RHG) W/m² NFRC	U Value W/(m²·K)			
		Transmi-ttance	Reflec-tance outside	Reflec-tance inside	Chinese JGJ/T 151		Chinese JGJ/T 151	NFRC		Chinese JGJ/T 151	NFRC		EN 673
											Summer	Winter	
3+0.38PVB+3	Neutral	89	8	8	0.83	0.83	0.95	0.96	645	5.14	5.19	5.75	5.7
3F+0.38PVB+3	Green	81	7	7	0.66	0.67	0.76	0.77	526	5.14	5.19	5.75	5.7
6+0.76PVB+6	Neutral	86	8	8	0.75	0.75	0.86	0.87	587	4.95	4.98	5.50	5.4
6F+0.76PVB+6	Green	72	7	7	0.54	0.56	0.62	0.65	448	4.95	4.98	5.50	5.4
6B+0.76PVB+6	Blue	63	6	6	0.58	0.60	0.67	0.69	474	4.95	4.98	5.50	5.4
6YSD0150+0.76PVB+6	Grey	52	16	11	0.55	0.57	0.63	0.66	455	4.95	4.98	5.50	5.4
6YSD0130+0.76PVB+6	Grey	33	22	13	0.40	0.44	0.46	0.51	360	4.95	4.98	5.50	5.4
6YSD0120+0.76PVB+6	Grey	21	27	20	0.32	0.35	0.38	0.41	297	4.95	4.98	5.50	5.4

※ The glass performance data will be finalized by the performance data sheet which calculated by SYP, Above performance data just for design reference.
※ The sound insulation data is calculated based on the relevant published technical literature and is for reference only.
※ The above data are calculated in accordance with WINDOW 6.3 of Lawrence Berkeley Laboratories and Glazing Design 1.3 software of Guangdong Provinical Academy of Building Research Group Co., LTD of China.
※ The tolerance of published data with respect to photometric properties is +/- 3 points. The U-value tolerance is +/- 0.1W/m²·K.
※ F stands for F green tinted glass, B stands for blue tinted glass.

INSULATED GLASS UNIT

IGU consists of two or more panels of glass separated by an air space with a spacer around the perimeter. The spacer contains a desiccant which eliminates moisture in the cavity. The combination of the two panels of glass and trapped air is what makes the IGU a superior energy efficient method of glazing. The whole unit is hermetically assembled by a double barrier sealant.

Fully Automated IGU Production Line Manufactured by Germany&Austria

PROJECT: Lifan Center Chongqing

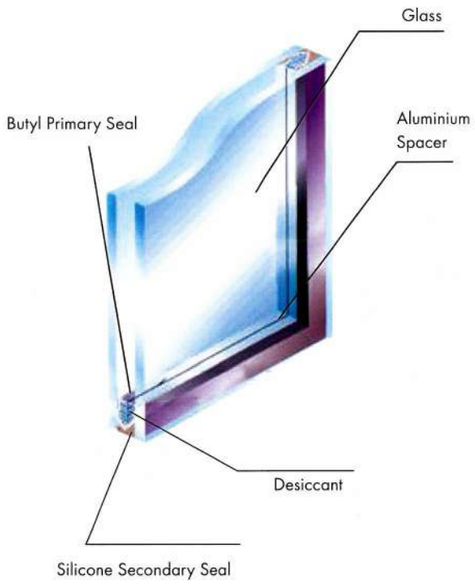
PROJECT: On the side of the water estate

PROJECT: Northeastern Illinois University

Insulating Glass Unit

An IGU with a Low-E coating effectively enhances performance. The heat insulation effect could be further improved if Argon or other special gases are filled in the cavity.

SYP adopted a fully automatic IGU line, which includes automatic coating deletion, cleaning, spacer bending , gas filling and sealing.



FEATURES

- Energy Savings
- Comfortable indoor environment
- Water condensation prevention

SPECIFICATIONS

- Maximum Size: 2700x5000mm (106 2/7" ~196 6/7")
- Minimum Size: 180x300mm (7" ~ 11 4/5")
- Spacer Width: 6mm (1/4"), 9mm (1/3"), 12mm (1/2"), 16mm (5/8"), 20mm (4/5")

CERTIFICATIONS

- GB/T 11944 Sealed insulating glass Unit
- China Insulating Glass Unit Certification
- IGCC (ASTM E2188, ASTM E 2189, ASTM E 2190, ASTM E 546) US Insulating Glass Unit Certification
- BSI BS EN 1279&BS 5713 UK Insulating Glass Unit Kitemark Certificate

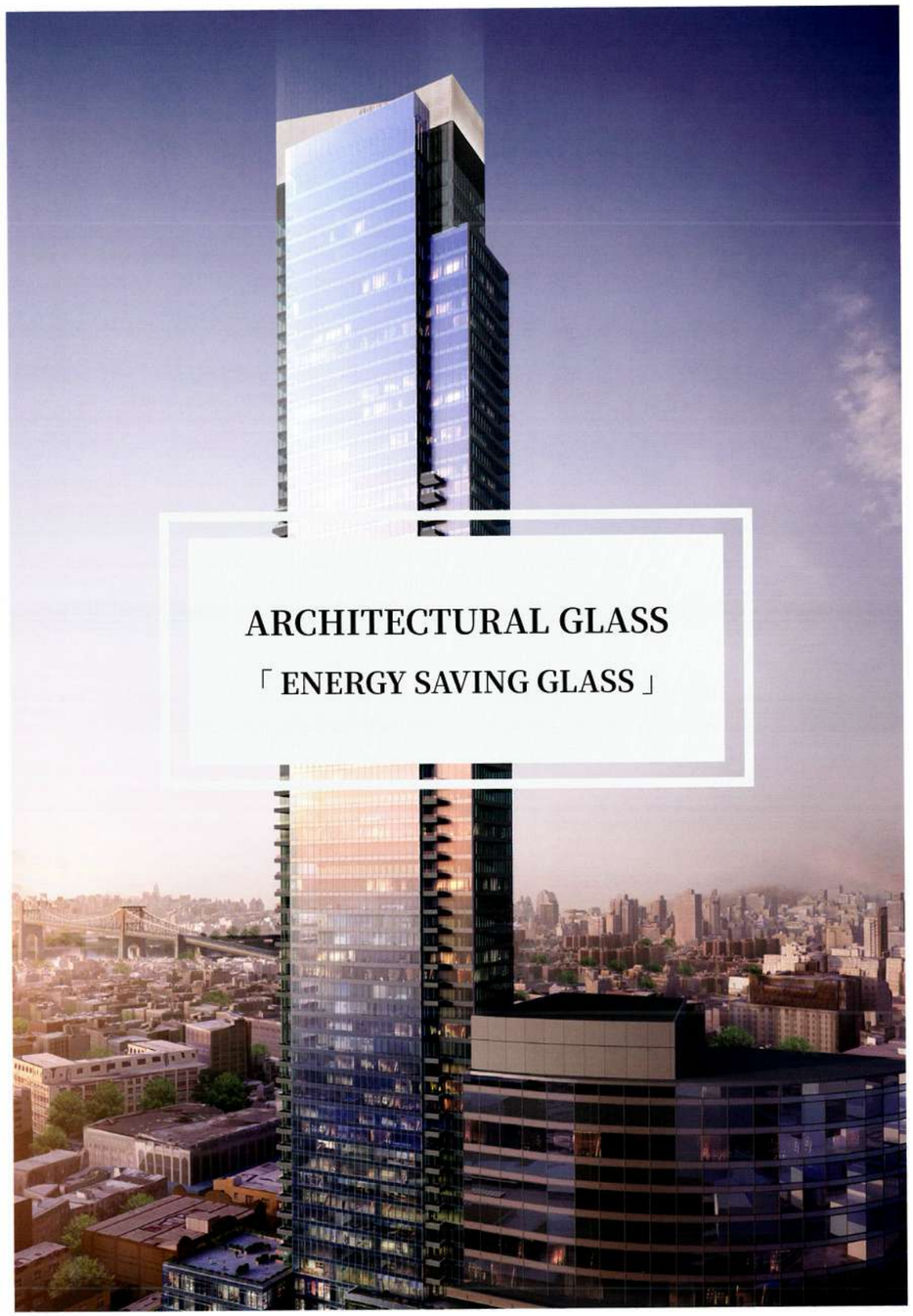
INSULATING GLASS UNIT

Series	Product	Color	Visible Light%			g Value	Solar Heat Gain Coefficient (SHGC) NFRC	Shading Coefficient (SC)		Raltive Heat Gain (RHG) W/m² NFRC	U Value W/(m²K)			
			Transmittance	Reflectance outside	Reflectance inside	Chinese JGJ/T 151		Chinese JGJ/T 151	NFRC		Chinese JGJ/T 151	NFRC		EN 673
												Summer	Winter	
Normal	6+6A+6	Neutral	80	15	15	0.73	0.73	0.84	0.84	554	2.98	3.18	3.11	3.2
	6+12A+6	Neutral	80	15	15	0.73	0.73	0.84	0.84	551	2.61	2.84	2.70	2.8
	6+16A+6	Neutral	80	15	15	0.73	0.73	0.84	0.84	550	2.61	2.73	2.69	2.7
	8+12A+8	Neutral	78	14	14	0.70	0.70	0.81	0.80	526	2.59	2.81	2.67	2.8
	10+12A+10	Neutral	77	14	14	0.68	0.68	0.79	0.78	513	2.56	2.77	2.64	2.8
	6F+12A+6	Green	67	12	14	0.48	0.48	0.55	0.55	369	2.61	2.84	2.70	2.8
	6B+12A+6	Blue	58	10	13	0.53	0.53	0.61	0.61	406	2.61	2.84	2.70	2.8
Solar Control coating IGU (Silver Grey-Blue Grey Series)	6YSD0120+12A+6	Grey	18	33	27	0.23	0.23	0.26	0.27	189	2.31	2.48	2.37	2.5
	6YSD0130+12A+6	Grey	28	25	24	0.31	0.32	0.36	0.37	253	2.39	2.58	2.46	2.6
	6YSD0136+12A+6	Grey	33	29	17	0.35	0.36	0.40	0.41	279	2.46	2.65	2.52	2.6
	6YSD0140+12A+6	Grey	37	15	24	0.41	0.41	0.47	0.48	323	2.49	2.70	2.57	2.7
	6YSD0150+12A+6	Blue Grey	46	21	24	0.49	0.51	0.57	0.58	387	2.59	2.81	2.67	2.8
Solar Control coating IGU (Light Grey Series)	6YSD0115+12A+6	Light Blue	15	27	36	0.21	0.22	0.24	0.25	177	2.27	2.44	2.33	2.4
Solar Control coating IGU (Green Series)	6YSD2250+12A+6	Green	39	16	24	0.34	0.35	0.40	0.40	274	2.59	2.81	2.67	2.8
	6YSD2236+12A+6	Green	27	22	16	0.26	0.26	0.30	0.30	210	2.46	2.66	2.53	2.7
IGU with Inert Gas Filling	6+9Ar+6	Neutral	80	15	15	0.73	0.73	0.84	0.84	551	2.54	2.80	2.62	2.8
	6+12Ar+6	Neutral	80	15	15	0.73	0.73	0.84	0.84	550	2.46	2.70	2.53	2.7
	6+12Ar+6YLE0178	Neutral	67	13	10	0.65	0.61	0.74	0.70	453	1.54	1.57	1.58	1.6
	6YNE0175+16Ar+6	Neutral	66	11	12	0.42	0.39	0.48	0.45	292	1.44	1.13	1.47	1.2

※ The glass performance data will be finalized by the performance data sheet which calculated by SYP, Above performance data just for design reference.
※ The above data are calculated in accordance with WINDOW 6.3 of Lawrence Berkeley Laboratories and Glazing Design 1.3 software of Guangdong Provinical Academy of Building Research Group Co., LTD of China.
※ The tolerance of published data with respect to photometric properties is +/- 3 points. The U-value tolerance is +/- 0.1W/m²·K.

PROJECT: Sunrise Kempinski Hotel Beijing

PROJECT: China Huaneng Shanghai



SUPER ENERGY-SAVING IGU

SYP Super energy-saving IGU is a green energy-saving glass with currently the best thermal performance.

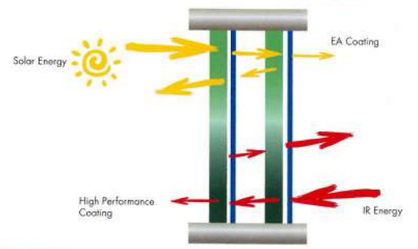
It combines both the advantage of online coated Low-E glass and offline coated Low-E glass to maximize the thermal performance.

SYP Super energy-saving IGU can reduce over 15% of U value compared with double or triple offline Low-E IGUs, with the durable online coating side towards the interior side reflecting the IR radiation of indoor objects. It can also meet the different color, transmission, reflection and shading requirements by selecting different kinds of high performance offline coated Low-E glass. SYP Super energy-saving IGU is a best energy-saving glass product applicable under any climatic conditions.

FEATURES

- SYP Super energy-saving IGU can reduce over 15% of U value compared with double or triple offline Low-E IGUs. If the indoor and outdoor temperature difference is over 20, over 36,000 KWH of electricity can be saved in every 1000sqm curtain wall; and over 1000KWH of electricity can be saved in every 100sqm residentialhouse.
- The combination of different color and performance of both online and offline Low-E can meet the requirementsof different climate and color appearance.
- Under the same conditions of thermal insulation, it can replace triple IGUs with minimum materials and less weight.

ENERGY SAVING SCHEMATIC DIAGRAM

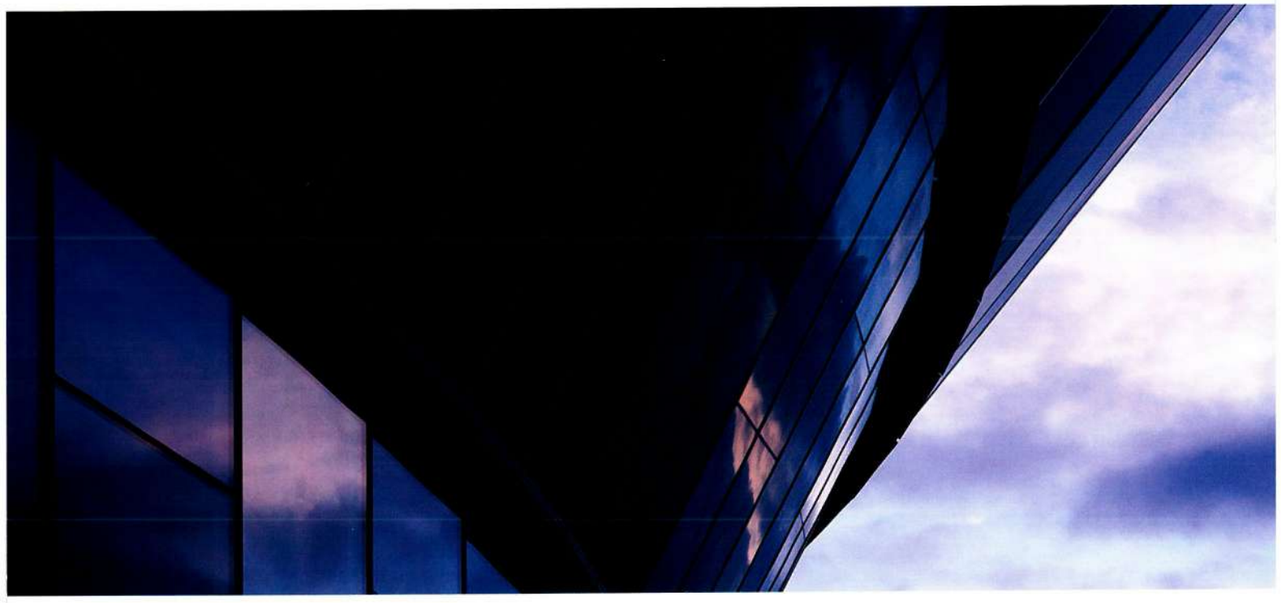


PROJECT: LOTTE WORLD TOWER

SUPER ENERGY-SAVING IGU

Series	Product	Color	Visible Light%			g Value	Solar Heat Gain Coefficient (SHGC) NFRC	Shading Coefficient (SC)		Raltive Heat Gain (RHG) W/m² NFRC	U Value W/(m²·K)			
			Transmittance	Reflectance outside	Reflectance inside	Chinese JGJ/T 151		Chinese JGJ/T 151	NFRC		Chinese JGJ/T 151	NFRC Summer	NFRC Winter	EN 673
High Visible Light Transmission	6YME0185+12A+6 +12A+6	Neutral	68	17	18	0.53	0.51	0.61	0.59	382	1.27	1.32	1.27	1.3
	6YME0185+12A +6YEA(4#)	Neutral	70	14	15	0.55	0.53	0.63	0.61	394	1.42	1.25	14.36	1.4
	6YBE0180N-HT+12A+6 +12A+6	Neutral	58	18	17	0.46	0.45	0.53	0.52	339	1.34	1.43	1.34	1.4
	6YBE0180N-HT+12A +6YEA(4#)	Neutral	60	16	14	0.47	0.46	0.54	0.53	344	1.51	1.35	1.45	1.5
	6YNE0175+12A+6 +12A+6	Blue grey	60	15	18	0.38	0.36	0.44	0.41	268	1.26	1.30	1.26	1.3
	6YNE0175+12A +6YEA(4#)	Blue grey	62	12	15	0.39	0.37	0.45	0.43	281	1.41	1.24	1.34	1.4
	6YKE0166+12A+6 +12A+6	Blue grey	55	14	18	0.36	0.34	0.41	0.39	256	1.26	1.30	1.26	1.3
	6YKE0166+12A +6YEA(4#)	Blue grey	57	12	15	0.37	0.35	0.42	0.40	262	1.40	1.23	1.34	1.4
Middle Visible Light Transmission	6YBE0160N-HT+12A+6 +12A+6	Blue grey	48	17	17	0.41	0.40	0.47	0.46	301	1.35	1.43	1.35	1.4
	6YBE0160N-HT+12A +6YEA(4#)	Blue grey	50	15	14	0.42	0.41	0.48	0.47	307	1.51	1.35	1.45	1.5
	6YRE0159N-HT+12A+6 +12A+6	Silver grey	47	30	20	0.35	0.34	0.41	0.39	256	1.29	1.35	1.29	1.3
	6YRE0159N-HT+12A +6YEA(4#)	Silver grey	49	28	17	0.36	0.35	0.42	0.40	262	1.45	1.28	1.38	1.4

※ The above data are calculated by WINDOW6.3 developed at Lawrence Berkeley National Laboratory, except for having been given clear indication of standards.
※ The glass performance data will be finalized by the performance data sheet which submitted by SYP. Above performance just for design reference.



LOW EMISSIVITY COATED GLASS

The Low-E energy saving glass is a kind of coated glass that uses vacuum magnetron sputtering (PVD) technology and special equipment to plating multiple layers of inorganic materials, such as metals, metal compounds, etc. on the glass substrate, which contains at least one or more layers of nano-silver materials, giving ordinary glass materials controllable reflective color, visible light transmittance and reflectivity, as well as energy-saving performance and other new functions.

FEATURES

- Reduce the thermal emissivity of glass from 0.84 to ≤ 0.15, and the material heat transfer coefficient (U value) from 3.0W/m²·k to ≤ 2.0W/m²·k, Effectively reduce energy consumption caused by indoor and outdoor temperature differences.note
- The total solar energy gain coefficient (SHGC) is reduced from close to 1 to ≤ 0.6, effectively controlling the radiant heat transfer.note
- The visible light transmittance of the glass can be controlled at any point between 0.2 and 0.8, and the visible light reflectance can be controlled at any point between 0.07 and 0.50, effectively controlling the effect of glare.note
- The color of coated glass can be changed as needed. Single-silver, double-silver and triple-silver offline low-E energy-saving glass, SHGC is reduced step by step, spectral selectivity is optimized step by step under the condition of close to the same visible light transmittance. Better climate suitability.
- In order to facilitate off-site reprocessing, some products that can be reprocessed off-site are developed to meet the energy-saving requirements of buildings at different levels.
- All offline Low-E energy-saving glass must be protected by effective measures to avoid failure caused by silver oxidation in the natural environment.
- Combined with online Low-E energy-saving glass, it can be made into a SYP patented product "super energy-saving insulating glass" with lower heat transfer coefficient (U value).

Note:
1、Glass configuration: 6+12A+6
2、Reference standards: GB/T 2680 2021, JGJ/T 151-2008

Low-E glass can be used in combination with tinted glass, solar reflective coated glass or enameled glass to achieve a unique and personalized design effect in color and pattern, while further enhancing the thermal insulation performance of the glass.

SPECIFICATIONS

- Glass Thickness: 3-19mm (1/8"~ 1/2")
- Maximum Size: 3300x13000mm (130"~511 4/5")
- Minimum Size: 300x800mm (11 4/5"~31 1/3")

COLOUR

Neutral, Various shades of grey, blue, green, blue green, and gold.

STANDARDS

- GB/T 18915.2《Coating Glass Part2: Low Emissivity Coated Glass》Chinese National standard
- BS EN 1096 European Standard
- ASTM C-1376 American Society for Testing and Material

COLOR EXPLANATION OF FACADE

The appearance of a glass facade is a combination of reffection of the colors of the glass + sky and the background +transmission of light and colors from the indoors". Therefore, the glass color will change with the environment. SYP suggests that customers should evaluate glass color outdoors, in the natural sunlight.

25 Targets Coating Line(Applied Film)

ULTRA HIGH PERFORMANCE Low-E GLASS

The ultra-high performance Low-E Glass is a new Low-E coated glass, be developed by combination with the upgrading of offline coating equipment and production process research, with high visible light transmission and Low total solar transmission. At least three functional layers (e.g., silver) are superimposed in the film material, which has better spectral selectivity.

FEATURE

- SHGC is about 80% of double-silver Low-E coated glass when similar visible light transmittance, further improving the sunshade performance of façade in summer.
- It has lower visible light reflectivity and weakens the harmful light reflection effect of facade .
- Proper film material selection and structure design, some triple-silver Low-E coated glass can be off-site reprocessed.

PROJECT: ICC WUHAN
ARCHITECT: Woods Bagot
PRODUCT: 6 Low-iron+1.14PVB+6 Low-iron with Ultra high performance Low-E coating special for ICC+12A +10 Low-iron+16A+6C+1.52PVB+6C

PROJECT: Forte Financal Center Chengdu China
ARCHITECT: Hellmuth Obtat Kassabaum (HOK)
PRODUCT: 6C ultra high performance Low-E (2#) +12A+6C

PROJECT: Block 17-4 along the Huangpu River
ARCHITECT: HPP architects
PRODUCT: 8 Li+1.52PVB+8YTE0655C (4#) +12Ar+10 Li

ULTRA HIGH PERFORMANCE Low-E GLASS

Series	Product	Color	Visible Light%			g Value	Solar Heat Gain Coefficient (SHGC) NFRC	Shading Coefficient (SC)		Raltive Heat Gain (RHG) W/m² NFRC	U Value W/(m²K)			
			Transmittance	Reflectance outside	Reflectance inside	Chinese JGJ/T 151		Chinese JGJ/T 151	NFRC		Chinese JGJ/T 151	NFRC Summer	NFRC Winter	EN 673
Normal	6YTE0170T+12A+6	Neutral	64	11	11	0.34	0.31	0.39	0.36	239	1.63	1.60	1.65	1.6
	6YTE0170C+12A+6	Neutral	62	9	11	0.33	0.31	0.38	0.35	234	1.62	1.56	1.63	1.6
	6YTE0670T+12A+6Li	Neutral	65	11	13	0.34	0.31	0.39	0.36	239	1.63	1.60	1.65	1.6
	6YTE0670C+12A+6Li	Neutral	66	10	12	0.34	0.31	0.39	0.36	239	1.62	1.56	1.63	1.6
	6YTE0156T+12A+6	Blue Grey	50	15	15	0.26	0.24	0.30	0.28	188	1.61	1.55	1.62	1.5
	6YTE0656T+12A+6Li	Blue Grey	52	16	16	0.26	0.24	0.30	0.28	188	1.61	1.55	1.62	1.5
	6YTE0155C+12A+6	Grey	47	8	11	0.29	0.27	0.33	0.31	206	1.63	1.59	1.65	1.6
	6YTE0154C+12A+6	Blue Grey	48	17	16	0.26	0.24	0.30	0.28	189	1.63	1.58	1.64	1.6
	6YTE0654C+12A+6Li	Blue Grey	51	17	16	0.27	0.24	0.31	0.28	189	1.63	1.58	1.64	1.6
	6YTE0149T+12A+6	Grey	46	19	19	0.24	0.22	0.27	0.25	170	1.64	1.59	1.65	1.6
	6YTE0149C+12A+6	Grey	45	20	15	0.24	0.22	0.27	0.25	170	1.62	1.57	1.63	1.6
	6YTE0649T+12A+6Li	Grey	48	20	19	0.24	0.22	0.27	0.25	170	1.64	1.59	1.65	1.6
	6YTE0649C+12A+6Li	Grey	47	21	15	0.24	0.21	0.27	0.25	170	1.62	1.57	1.63	1.6
	6YTE0148C+12A+6	Silver Grey	42	26	28	0.23	0.22	0.27	0.25	170	1.62	1.57	1.63	1.6
	6YTE0138C+12A+6	Grey	34	14	14	0.20	0.19	0.23	0.22	151	1.65	1.61	1.66	1.6
Post Temperable Series	6YTE0178C-HT +12A+6	Neutral	66	10	11	0.34	0.31	0.39	0.35	233	1.61	1.56	1.62	1.6
	6YTE0678C-HT +12A+6Li	Neutral	69	11	12	0.35	0.31	0.39	0.36	239	1.61	1.56	1.62	1.5
	6YTE0165C-HT +12A+6	Grey	61	15	17	0.29	0.27	0.34	0.31	207	1.61	1.55	1.62	1.6
	6YTE0665C-HT +12A+6Li	Grey	63	15	17	0.30	0.27	0.34	0.31	207	1.61	1.55	1.62	1.6

※A represents air,Ar represents argon.
※Li stands for Low iron float glass substrate.
※The glass performance data will be finalized by the performance data sheet which calculated by SYP, Above performance data just for design reference.
※The above data are calculated in accordance with WINDOW 6.3 of Lawrence Berkeley Laboratories and Glazing Design 1.3 software of Guangdong Provinical Academy of Building Research Group Co., LTD of China.
※The tolerance of published data with respect to photometric properties is +/- 3 points. The U-value tolerance is +/- 0.1W/m²·K.

01=Clear float glass substrate
06=Low iron float glass substrate
22=F green tinted float glass substrate
25=Blue tinted float glass substrate
58=Euro Grey tinted float glass substrate
68=Crystal grey tinted float glass substrate

PROJECT: The Springs Center
ARCHITECT: HenningLarsenArchitects (HLA)
PRODUCT:
6C+1.14PVB+6YTE0155C (4#) +12A+8C
6C+1.14PVB+6YDF0148+12A+8C

PROJECT: Metropolis Twin Tower
ARCHITECT: Atkins Architects UK
PRODUCT: 6C+1.52PVB+ 6YTE0145 (4#) +12Ar +8C

PROJECT: Park view Tower US
ARCHITECT: Hill west
PRODUCT:
6YRE0646 (2#)+16Ar+8C
6YTE0670 (2#)+16Ar+8C

PROJECT: Shanghai Tian Financial Center
ARCHITECT: Tongji Architectural Design Group Co.,LTD(TJAD)
PRODUCT: 6C+1.52PVB+6 ultra high performance Low-E(4#)+12A+8C

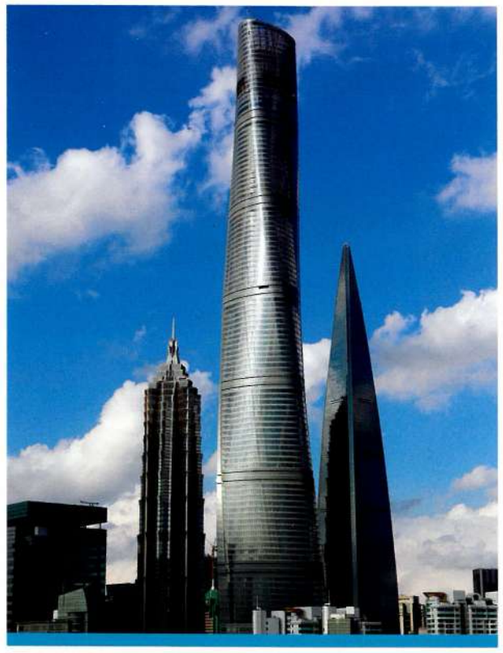
PROJECT: All Aboard Flordia
ARCHITECT: SOM
PRODUCT: 6YTE0170 (2#) +12A+6C

HIGH PERFORMANCE Low-E GLASS

The high performance Low-E Glass (Double-Silver Low-E) is to improve single-silver low-E coated glass, combination with upgrading offline coating equipment and production process research, with high visible light transmission and Low total solar transmission. At least two functional layers (e.g., silver) are superimposed in the film material, which has better spectral selectivity.

FEATURE

- A breakthrough in offline Low-E coated glass technology, which uses the superposition of functional silver layers to significantly reduce SHGC without affecting the visible light transmittance.
- Improve the thermal performance of offline Low-E coated glass, effectively reduce the outdoor reflectivity of visible light, and weaken the impact of harmful light reflection of facade.
- Proper film material selection and structure design, some double-silver Low-E coated glass can be off-site reprocessed
- Develop products with visible light antireflection function by selecting special coating materials and coating structure design.



PROJECT: Shanghai Tower
ARCHITECT: Gensler
PRODUCT:
External Skin(A): 12YSD0680(with frit)(2#)+1.52SGP+12Li
12YSD0680(2#)+1.52SGP+12 Li
Internal Skin(B): 6 Li+0.89SGP+6YNE0659(frit)(4#)+12A+8Li fire-proof
8YNE0659(2#)+12A+8 Li

PROJECTC:Chow Tai Fook (Guangzhou)
ARCHITECT: KPF
PRODUCT: 8 Li+1.52PVB+8YNE0655(4#)+12A+8Li

HIGH PERFORMANCE Low-E GLASS

Series	Product	Color	Visible Light%			g Value	Solar Heat Gain Coefficient (SHGC) NFRC	Shading Coefficient (SC)		Raltive Heat Gain (RHG) W/m² NFRC	U Value W/(m²·K)			
			Transmittance	Reflectance outside	Reflectance inside	Chinese JGJ/T 151		Chinese JGJ/T 151	NFRC		Chinese JGJ/T 151	NFRC		EN 673
												Summer	Winter	
	6YNE0180J+12A+6	Neutral	66	15	15	0.38	0.35	0.44	0.41	271	1.65	1.60	1.66	1.6
	6YNE0680J+12A+6Li	Neutral	67	16	15	0.39	0.36	0.45	0.42	277	1.65	1.60	1.66	1.6
	6YNE6880J+12A+6	Light Grey	47	10	14	0.30	0.29	0.35	0.33	220	1.65	1.60	1.66	1.6
	6YNE0175+12A+6	Neutral	66	11	12	0.42	0.40	0.49	0.46	303	1.67	1.64	1.68	1.6
	6YNE0175T+12A+6	Neutral	67	11	12	0.42	0.40	0.49	0.46	303	1.67	1.64	1.69	1.6
	6YNE0175J+12A+6	Neutral	66	11	12	0.42	0.38	0.47	0.44	289	1.64	1.60	1.66	1.6
	6YNE0175C+12A+6	Neutral	68	11	12	0.42	0.39	0.48	0.45	296	1.64	1.60	1.65	1.6
	6YNE0675+12A+6	Neutral	68	11	12	0.44	0.41	0.51	0.47	309	1.67	1.64	1.68	1.6
	6YNE0675+12A+6Li	Neutral	68	11	12	0.45	0.42	0.52	0.48	315	1.67	1.64	1.68	1.60
	6YNE0675J+12A+6Li	Neutral	67	11	13	0.43	0.40	0.49	0.46	302	1.64	1.60	1.66	1.6
	6YNE0675C+12A+6Li	Neutral	71	11	12	0.44	0.41	0.51	0.47	309	1.64	1.60	1.65	1.6
	6YNE2275+12A+6	Green	56	9	11	0.33	0.31	0.38	0.36	240	1.67	1.64	1.68	1.6
	6YNE2575+12A+6	Blue	42	7	11	0.30	0.29	0.35	0.33	221	1.67	1.64	1.68	1.6
	6YNE5875+12A+6	Dark Grey	33	6	10	0.27	0.26	0.31	0.30	202	1.67	1.64	1.68	1.6
	6YNE6875+12A+6	Light Grey	48	8	12	0.32	0.31	0.37	0.35	233	1.67	1.64	1.68	1.6
	6YNE0168+12A+6	Neutral	60	13	15	0.36	0.34	0.41	0.39	258	1.64	1.60	1.66	1.6
	6YNE0668+12A+6	Neutral	61	14	15	0.38	0.35	0.43	0.40	264	1.64	1.60	1.66	1.6
	6YNE0668+12A+6Li	Neutral	62	14	15	0.39	0.36	0.44	0.41	271	1.64	1.60	1.66	1.6
	6YNE2268+12A+6	Green	50	9	14	0.29	0.28	0.33	0.32	214	1.64	1.60	1.66	1.6
	6YNE2568+12A+6	Blue	38	8	14	0.27	0.26	0.31	0.30	201	1.64	1.60	1.66	1.6
High Performance NE Series	6YNE5868+12A+6	Dark Grey	31	6	13	0.23	0.23	0.27	0.26	176	1.64	1.60	1.66	1.6
	6YNE6868+12A+6	Light Grey	43	9	14	0.28	0.27	0.32	0.30	201	1.64	1.60	1.66	1.6
	6YNE0159+12A+6	Neutral	53	14	17	0.34	0.31	0.38	0.36	239	1.65	1.61	1.66	1.6
	6YNE0159T+12A+6	Light Grey	53	13	17	0.34	0.32	0.39	0.37	246	1.65	1.62	1.67	1.6
	6YNE0159J+12A+6	Grey	53	14	18	0.33	0.30	0.38	0.35	233	1.64	1.59	1.65	1.6
	6YNE0659+12A+6	Neutral	54	15	17	0.35	0.32	0.40	0.37	246	1.65	1.61	1.66	1.6
	6YNE0659+12A+6Li	Neutral	55	15	17	0.36	0.33	0.41	0.38	252	1.65	1.61	1.66	1.6
	6YNE0659J+12A+6Li	Neutral	54	15	18	0.34	0.31	0.39	0.36	239	1.64	1.59	1.65	1.6
	6YNE2259+12A+6	Green	45	11	16	0.27	0.25	0.31	0.29	195	1.65	1.61	1.66	1.6
	6YNE2559+12A+6	Blue	33	8	16	0.24	0.23	0.27	0.26	176	1.65	1.61	1.66	1.6
	6YNE5859+12A+6	Dark Grey	27	7	15	0.22	0.21	0.25	0.24	164	1.65	1.61	1.66	1.6
	6YNE6859+12A+6	Light Grey	40	9	15	0.28	0.26	0.32	0.30	202	1.65	1.61	1.66	1.6
	6YNE0152+12A+6	Light Blue	46	15	17	0.30	0.28	0.35	0.32	214	1.64	1.60	1.65	1.6
	6YNE0152T+12A+6	Blue grey	44	14	17	0.29	0.27	0.33	0.31	208	1.64	1.60	1.65	1.6
	6YNE0652+12A+6	Light Blue	48	16	18	0.33	0.31	0.37	0.35	233	1.64	1.60	1.65	1.6
	6YNE0652+12A+6Li	Light Blue	49	16	18	0.34	0.32	0.38	0.36	239	1.64	1.60	1.65	1.6
	6YNE2252+12A+6	Green	40	11	16	0.27	0.26	0.30	0.29	195	1.64	1.60	1.65	1.6
	6YNE2552+12A+6	Blue	30	9	16	0.25	0.24	0.28	0.27	183	1.64	1.60	1.65	1.6
	6YNE5852+12A+6	Dark Grey	24	7	16	0.22	0.21	0.25	0.24	164	1.64	1.60	1.65	1.6
	6YNE6852+12A+6	Light Grey	35	9	16	0.27	0.26	0.31	0.29	195	1.64	1.60	1.65	1.6
	6YNE0148J+12A+6	Blue Grey	44	20	19	0.29	0.27	0.33	0.31	208	1.65	1.61	1.66	1.6
	6YNE0648J+12A+6Li	Blue Grey	45	21	19	0.30	0.28	0.34	0.32	214	1.65	1.61	1.66	1.6
	6YNE6848J+12A+6	Light Grey	32	12	18	0.24	0.23	0.27	0.26	176	1.65	1.61	1.66	1.6

HIGH PERFORMANCE Low-E GLASS

Series	Product	Color	Visible Light%			g Value	Solar Heat Gain Coefficient (SHGC) NFRC	Shading Coefficient (SC)		Raltive Heat Gain (RHG) W/m² NFRC	U Value W/(m²·K)			
			Transmittance	Reflectance outside	Reflectance inside	Chinese JGJ/T 151		Chinese JGJ/T 151	NFRC		Chinese JGJ/T 151	NFRC		EN 673
												Summer	Winter	
	6YNE0145+12A+6	Light Blue	41	17	19	0.26	0.24	0.30	0.28	189	1.64	1.59	1.65	1.6
	6YNE0645+12A+6	Light Blue	42	18	20	0.28	0.26	0.32	0.30	201	1.64	1.59	1.65	1.6
	6YNE0645+12A+6Li	Light Blue	43	18	20	0.29	0.27	0.33	0.31	208	1.64	1.59	1.65	1.6
	6YNE2245+12A+6	Green	35	13	18	0.22	0.21	0.26	0.24	164	1.64	1.59	1.65	1.6
	6YNE2545+12A+6	Blue	26	10	18	0.21	0.20	0.24	0.23	157	1.64	1.59	1.65	1.6
High Performance NE Series	6YNE5845+12A+6	Dark Grey	21	8	18	0.18	0.18	0.21	0.21	145	1.64	1.59	1.65	1.6
	6YNE6845+12A+6	Light Grey	32	11	18	0.23	0.22	0.26	0.25	170	1.64	1.59	1.65	1.6
	6YKE0169J+12A+6	Neutral	61	11	13	0.39	0.35	0.45	0.40	265	1.66	1.61	1.66	1.6
	6YKE0669J+12A+6Li	Neutral	63	12	14	0.40	0.39	0.46	0.43	283	1.66	1.61	1.66	1.6
	6YKE6869J+12A+6	Blue	44	8	12	0.31	0.29	0.35	0.33	220	1.66	1.61	1.66	1.6
	6YKE0167T+12A+6	Neutral	61	9	11	0.39	0.36	0.44	0.42	277	1.66	1.62	1.67	1.6
	6YKE0166+12A+6	Neutral	62	11	12	0.39	0.37	0.45	0.42	277	1.66	1.63	1.67	1.6
	6YKE0166C+12A+6	Neutral	61	11	12	0.38	0.35	0.43	0.40	265	1.66	1.62	1.67	1.6
	6YKE0666+12A+6	Neutral	63	12	13	0.41	0.39	0.47	0.45	296	1.66	1.63	1.67	1.6
	6YKE0666+12A+6Li	Neutral	64	12	13	0.40	0.38	0.46	0.44	285	1.67	1.64	1.68	1.6
High Performance KE Series	6YKE0666C+12A+6Li	Neutral	64	12	12	0.40	0.37	0.45	0.42	277	1.66	1.62	1.67	1.6
	6YKE0160+12A+6	Light Blue	52	15	12	0.32	0.30	0.37	0.35	233	1.66	1.63	1.67	1.6
	6YKE0660+12A+6	Light Blue	53	16	12	0.34	0.32	0.39	0.37	246	1.66	1.63	1.67	1.6
	6YKE0660+12A+6超白	Light Blue	54	16	12	0.35	0.33	0.40	0.38	252	1.66	1.63	1.67	1.6
	6YKEJ0159+12A+6	Blue grey	53	11	11	0.36	0.34	0.40	0.38	252	1.67	1.64	1.68	1.6
	6YKEJ0659+12A+6	Blue grey	54	12	11	0.37	0.35	0.41	0.39	258	1.67	1.64	1.68	1.6
	6YKEJ0659+12A+6Li	Blue grey	55	12	11	0.38	0.36	0.42	0.40	265	1.67	1.64	1.68	1.6
	6YKE0157+12A+6	Neutral	51	11	14	0.35	0.33	0.39	0.37	246	1.65	1.63	1.68	1.6

PROJECT: Heartland 66 (Wuhan)
ARCHITECT: Aedas
PRODUCT: 6C+1.52PVB+6Low-E (4#)
+12A+8C

HIGH PERFORMANCE Low-E GLASS

Series	Product	Color	Visible Light%			g Value	Solar Heat Gain Coefficient (SHGC) NFRC	Shading Coefficient (SC)		Raltive Heat Gain (RHG) W/m² NFRC	U Value W/(m²·K)			
			Transmittance	Reflectance outside	Reflectance inside	Chinese JGJ/T 151		Chinese JGJ/T 151	NFRC		Chinese JGJ/T 151	NFRC Summer	NFRC Winter	EN 673
High Performance KE Series	6YKE0156J+12A+6	Grey	50	16	15	0.30	0.28	0.35	0.32	214	1.64	1.60	1.66	1.6
	6YKE0656J+12A+6Li	Grey	51	17	15	0.31	0.29	0.36	0.33	220	1.64	1.60	1.66	1.6
	6YKE6856J+12A+6	Grey	35	10	14	0.25	0.23	0.28	0.27	183	1.64	1.60	1.66	1.6
	6YKE0153T+12A+6	Silver Grey	45	30	26	0.31	0.30	0.36	0.34	227	1.64	1.60	1.65	1.6
	6YKE0152+12A+6	Blue	45	19	13	0.31	0.29	0.35	0.33	220	1.64	1.61	1.66	1.6
	6YKE0652+12A+6	Blue	46	20	13	0.32	0.30	0.36	0.34	227	1.64	1.61	1.66	1.6
	6YKE0652+12A+6Li	Blue	47	20	13	0.33	0.31	0.37	0.35	233	1.64	1.61	1.66	1.6
	6YKE0151J+12A+6	Grey	46	19	11	0.28	0.26	0.32	0.30	201	1.64	1.60	1.65	1.6
	6YKE0651J+12A+6Li	Grey	49	19	14	0.28	0.27	0.33	0.31	208	1.64	1.60	1.65	1.6
	6YKE6851J+12A+6	Blue Grey	33	12	13	0.23	0.20	0.26	0.24	164	1.64	1.60	1.65	1.6
	6YKE0148+12A+6	Blue	43	23	12	0.26	0.24	0.30	0.28	189	1.64	1.59	1.65	1.6
	6YKE0148J+12A+6	Blue Grey	42	25	14	0.25	0.23	0.29	0.26	176	1.63	1.58	1.64	1.6
	6YKE0148C+12A+6	Blue Grey	42	20	12	0.25	0.23	0.29	0.27	183	1.63	1.59	1.65	1.6
	6YKE0648+12A+6	Blue	44	24	12	0.28	0.26	0.32	0.30	201	1.64	1.59	1.65	1.6
	6YKE0648+12A+6Li	Blue	45	24	12	0.29	0.27	0.33	0.31	208	1.64	1.59	1.65	1.6
	6YKE0648J+12A+6Li	Blue Grey	43	26	14	0.25	0.23	0.29	0.26	176	1.63	1.58	1.64	1.6

PROJECT: Alibaba South China Operations Center (Guangzhou)
ARCHITECT: Guangzhou Design Institute Group CO.LTD
PRODUCT: 6C+1.14PVB+6YKE0147(4#)+12A+8C

PROJECT: CSDC headquarter in Shanghai
ARCHITECT: Murphy/Jahn, Inc. Architects
PRODUCT: 6 Li+1.52PVB+6YKEJ0659 (4#) +16Ar+8Li
10 Li+1.52SGP+10YKE0667 (4#) +16Ar+10 Li+1.52PVB+10 Li

HIGH PERFORMANCE Low-E GLASS

Series	Product	Color	Visible Light%			g Value	Solar Heat Gain Coefficient (SHGC) NFRC	Shading Coefficient (SC)		Raltive Heat Gain (RHG) W/m² NFRC	U Value W/(m²·K)			
			Transmittance	Reflectance outside	Reflectance inside	Chinese JGJ/T 151		Chinese JGJ/T 151	NFRC		Chinese JGJ/T 151	NFRC Summer	NFRC Winter	EN 673
High Performance KE Series	6YKE0648C+12A+6Li	Blue Grey	45	21	12	0.26	0.24	0.30	0.28	189	1.63	1.59	1.65	1.6
	6YKE6848J+12A+6	Light Grey	30	15	14	0.21	0.20	0.24	0.22	151	1.63	1.58	1.64	1.6
	6YKE0147C+12A+6	Light Blue	44	20	14	0.26	0.24	0.30	0.28	189	1.64	1.60	1.66	1.6
	6YKE0647C+12A+6Li	Light Blue	46	21	15	0.27	0.25	0.31	0.29	195	1.64	1.60	1.66	1.6
	6YKE0145+12A+6	Blue	42	28	16	0.26	0.24	0.30	0.28	189	1.66	1.62	1.67	1.6
	6YKE0145J+12A+6	Blue Grey	41	17	14	0.26	0.24	0.30	0.28	189	1.64	1.60	1.66	1.6
	6YKE0645+12A+6	Blue	43	29	16	0.28	0.26	0.32	0.30	202	1.66	1.62	1.67	1.6
	6YKE0645+12A+6Li	Blue	44	29	16	0.29	0.27	0.33	0.31	208	1.66	1.62	1.67	1.6
	6YKE0645J+12A+6Li	Blue Grey	43	17	16	0.27	0.26	0.31	0.30	202	1.64	1.62	1.67	1.6
	6YKE0143J+12A+6	Blue	40	19	12	0.24	0.22	0.28	0.27	183	1.65	1.61	1.66	1.6
	6YKE0643J+12A+6Li	Blue	41	20	12	0.25	0.23	0.29	0.28	189	1.65	1.61	1.66	1.6
	6YKE6843J+12A+6	Blue	27	12	11	0.20	0.17	0.23	0.21	145	1.65	1.61	1.66	1.6
	6YKE0130J+12A+6	Grey	28	20	15	0.20	0.19	0.23	0.22	151	1.66	1.62	1.67	1.6
	6YKE0630J+12A+6Li	Grey	29	21	15	0.20	0.19	0.23	0.22	151	1.66	1.62	1.67	1.6
	6YKE6830J+12A+6	Grey	20	12	15	0.17	0.17	0.20	0.19	132	1.66	1.62	1.67	1.6
High Performance GE Series	6YGE0157+12A+6	Grey	50	15	13	0.32	0.30	0.37	0.35	233	1.67	1.63	1.68	1.6
	6YGE0157C+12A+6	Grey	50	13	17	0.31	0.29	0.36	0.34	227	1.67	1.64	1.68	1.6
	6YGE0657+12A+6	Grey	51	16	13	0.34	0.32	0.39	0.37	246	1.67	1.63	1.68	1.6
	6YGE0657+12A+6Li	Grey	52	16	13	0.35	0.33	0.40	0.38	252	1.67	1.63	1.68	1.6
	6YGE0657C+12A+6Li	Grey	52	14	17	0.33	0.30	0.38	0.35	233	1.67	1.64	1.68	1.6
	6YGE0151+12A+6	Grey	45	15	13	0.29	0.27	0.33	0.31	208	1.67	1.63	1.68	1.6
	6YGE0151C+12A+6	Grey	44	13	16	0.29	0.27	0.33	0.31	208	1.68	1.65	1.69	1.6
	6YGE0651+12A+6	Grey	46	16	13	0.31	0.29	0.35	0.33	221	1.67	1.63	1.68	1.6
	6YGE0651+12A+6Li	Grey	47	16	13	0.32	0.30	0.36	0.34	227	1.67	1.63	1.68	1.6
	6YGE0651C+12A+6Li	Grey	46	14	17	0.30	0.28	0.34	0.32	214	1.68	1.65	1.69	1.6
	6YGE0149+12A+6	Grey	42	20	12	0.27	0.25	0.31	0.29	195	1.66	1.62	1.67	1.6
	6YGE0649+12A+6	Grey	43	21	12	0.29	0.27	0.33	0.31	208	1.66	1.62	1.67	1.6
	6YGE0649+12A+6Li	Grey	44	21	12	0.30	0.28	0.34	0.32	214	1.66	1.62	1.67	1.6
High Performance DE Series	6YDE0159T+12A+6	Blue Grey	54	16	15	0.36	0.34	0.41	0.39	258	1.66	1.62	1.67	1.6
	6YDE0157T+12A+6	Blue Grey	52	20	14	0.32	0.30	0.37	0.35	233	1.63	1.60	1.65	1.6
	6YDE0150T+12A+6	Silver Grey	45	24	26	0.30	0.28	0.34	0.33	220	1.63	1.58	1.64	1.6
High Performance PE Series	6YPE0151C+12A+6	Silver Grey	46	21	27	0.31	0.29	0.35	0.33	221	1.66	1.63	1.68	1.6
	6YPE0651C+12A+6Li	Silver Grey	48	21	28	0.32	0.30	0.37	0.35	233	1.66	1.63	1.68	1.6
High Performance DF Series	6YDF0145+12A+6	Blue Grey	41	7	15	0.28	0.26	0.32	0.30	202	1.69	1.65	1.70	1.7
	6YDF0645+12A+6Li	Blue Grey	43	8	15	0.30	0.28	0.34	0.32	214	1.69	1.65	1.70	1.7

HIGH PERFORMANCE Low-E GLASS

Series	Product	Color	Visible Light%			g Value	Solar Heat Gain Coefficient (SHGC) NFRC	Shading Coefficient (SC)		Raltive Heat Gain (RHG) W/m² NFRC	U Value W/(m²·K)			
			Transmi-ttance	Reflec-tance outside	Reflec-tance inside	Chinese JGJ/T 151		Chinese JGJ/T 151	NFRC		Chinese JGJ/T 151	NFRC		EN 673
												Summer	Winter	
Bendable and Post-temperable High Performance HE series	6YHE0170-HT+12A+6	Light Blue	62	12	15	0.37	0.35	0.43	0.40	265	1.67	1.64	1.69	1.6
	6YHE0670-HT+12A+6	Light Blue	63	12	15	0.39	0.37	0.45	0.42	277	1.67	1.64	1.69	1.6
	6YHE0670-HT+12A+6Li	Light Blue	64	13	15	0.40	0.38	0.46	0.43	284	1.67	1.64	1.69	1.6
	6YHE2270-HT+12A+6	Green	51	9	14	0.31	0.29	0.36	0.33	221	1.67	1.64	1.69	1.6
	6YHE5870-HT+12A+6	Dark Grey	28	6	13	0.25	0.23	0.29	0.26	177	1.67	1.64	1.69	1.6
	6YHE6870-HT+12A+6	Light Grey	45	8	14	0.31	0.28	0.35	0.32	214	1.67	1.64	1.69	1.6
	6YHE0161-HT+12A+6	Blue Grey	54	12	14	0.33	0.31	0.38	0.35	233	1.66	1.64	1.68	1.6
	6YHE0661-HT+12A+6	Blue Grey	55	12	14	0.35	0.33	0.40	0.37	246	1.66	1.64	1.68	1.6
	6YHE0661-HT+12A+6Li	Blue Grey	56	13	14	0.36	0.34	0.41	0.38	252	1.66	1.64	1.68	1.6
	6YHE2261-HT+12A+6	Green	46	9	14	0.30	0.27	0.33	0.30	202	1.66	1.64	1.68	1.6
	6YHE5861-HT+12A+6	Dark Grey	26	6	13	0.25	0.22	0.28	0.25	170	1.66	1.64	1.68	1.6
	6YHE6861-HT+12A+6	Silver Grey	40	8	14	0.29	0.26	0.33	0.30	202	1.66	1.64	1.68	1.6
	6YHE0160NJ-HT+12A+6	Blue Grey	60	17	19	0.34	0.31	0.40	0.36	239	1.63	1.59	1.64	1.6
	6YHE0660NJ-HT+12A+6Li	Blue Grey	61	17	19	0.35	0.32	0.40	0.37	246	1.63	1.59	1.64	1.6
	6YHE6860NJ-HT+12A+6	Silver Grey	42	10	18	0.27	0.25	0.31	0.29	195	1.63	1.59	1.64	1.6
	6YHE0152NJ-HT+12A+6	Blue Grey	52	23	24	0.30	0.29	0.35	0.33	220	1.64	1.59	1.65	1.6
	6YHE0652NJ-HT+12A+6Li	Blue Grey	53	24	24	0.32	0.29	0.37	0.34	227	1.64	1.59	1.65	1.6
	6YHE6852NJ-HT+12A+6	Silver Grey	37	14	24	0.25	0.24	0.29	0.27	183	1.64	1.59	1.65	1.6
	6YHE0145NJ-HT+12A+6	Blue Grey	47	15	20	0.28	0.26	0.32	0.30	202	1.66	1.62	1.67	1.6
	6YHE0645NJ-HT+12A+6Li	Blue Grey	49	15	21	0.29	0.26	0.32	0.31	208	1.66	1.62	1.67	1.6
	6YHE6845NJ-HT+12A+6	Silver Grey	34	10	20	0.23	0.22	0.26	0.24	164	1.66	1.62	1.67	1.6
	6YHE0143NJ-HT+12A+6	Blue Grey	43	15	23	0.26	0.24	0.30	0.28	189	1.67	1.63	1.68	1.6
	6YHE0643NJ-HT+12A+6Li	Blue Grey	44	16	23	0.27	0.24	0.31	0.28	189	1.67	1.63	1.68	1.6
	6YHE6843NJ-HT+12A+6	Silver Grey	31	10	23	0.22	0.20	0.25	0.23	158	1.67	1.63	1.68	1.6
Bendable and Post-temperable High Performance YD series	6YDT0174C-HT+12A+6	Neutral	66	12	15	0.42	0.39	0.48	0.45	296	1.66	1.62	1.67	1.6
	6YDT0674C-HT+12A+6Li	Neutral	69	12	15	0.44	0.41	0.51	0.47	309	1.66	1.62	1.67	1.6
	6YDT0170T-HT+12A+6	Neutral	66	11	14	0.40	0.37	0.46	0.42	277	1.63	1.58	1.64	1.6
	6YDT0170C-HT+12A+6	Neutral	68	12	13	0.41	0.39	0.48	0.44	291	1.65	1.61	1.66	1.6
	6YDT0167C-HT+12A+6	Light Blue	60	11	12	0.36	0.34	0.41	0.39	258	1.66	1.63	1.68	1.6
	6YDT0162C-HT+12A+6	Blue Grey	58	15	17	0.33	0.30	0.38	0.35	233	1.65	1.62	1.67	1.6
	6YDT0662C-HT+12A+6Li	Blue Grey	61	15	18	0.34	0.31	0.39	0.36	239	1.65	1.62	1.67	1.6
	6YDT0158C-HT+12A+6	Blue Grey	50	21	25	0.29	0.27	0.34	0.31	208	1.66	1.63	1.68	1.6
	6YDT0156T-HT+12A+6	Silver Grey	52	22	23	0.32	0.30	0.37	0.34	226	1.62	1.57	1.64	1.6
	6YDT0156C-HT+12A+6	Silver Grey	53	23	20	0.33	0.31	0.38	0.36	239	1.63	1.59	1.65	1.6
	6YDT0656C-HT+12A+6Li	Silver Grey	56	23	21	0.34	0.31	0.39	0.36	239	1.63	1.59	1.65	1.6
	6YDT0152T-HT+12A+6	Blue	47	13	13	0.28	0.26	0.33	0.30	202	1.65	1.61	1.66	1.6
	6YDT0152C-HT+12A+6	Blue Grey	48	23	24	0.29	0.27	0.33	0.30	201	1.64	1.60	1.65	1.6
	6YDT0151C-HT+12A+6	Neutral	44	29	23	0.24	0.22	0.28	0.25	170	1.64	1.60	1.65	1.6
	6YDT0651C-HT+12A+6Li	Blue Grey	46	30	24	0.24	0.22	0.28	0.25	170	1.64	1.60	1.65	1.6
	6YDT0150C-HT+12A+6	Blue	48	13	13	0.33	0.31	0.38	0.35	234	1.65	1.62	1.67	1.6
	6YDT0146C-HT+12A+6	Light Blue	43	30	26	0.24	0.22	0.27	0.26	176	1.66	1.62	1.67	1.6

※ HT indicates that the product must be tempered or heat-strengthened, so the above performance data are post-heat treatment data.
※ The glass performance data will be finalized by the performance data sheet which calculated by SYP, Above performance data just for design reference.
※ The above data are calculated in accordance with WINDOW 6.3 of Lawrence Berkeley Laboratories and Glazing Design 1.3 software of Guangdong Provinical Academy of BuildingResearch Group Co., LTD of China.
※ The tolerance of published data with respect to photometric properties is +/- 3 points. The U-value tolerance is +/- 0.1W/m²·K.

PROJECT: Xi'an International convention &Exhibition Center
ARCHITECT: gmp&Tongji Architectural Design Group Co.,LTD(TJAD)
PRODUCT: 12YKE-0666T(2#)+16Ar+12 Li

PROJECT: Asian Infrastructure Investment Bank
ARCHITECT: Arechitectural Design and Research Institute of Tsinghua University
PRODUCT: 10YKE0667T(2#)+12Ar+10 Li

PROJECT: Howard Johnson Caexpo Plaze Naning
ARCHITECT: ECADI
PRODUCT: 6C+1.14PVB+6C Low-E (4#)+12A +6C

PROJECT: HanYu Gold Valley Yunding Building
ARCHITECT: CCDI
PRODUCT: 8 Li+1.52PVB+8YDE0657 (4#) +12A+12 Li

PROJECT: New Development Bank(Shanghai)
ARCHITECT: ECADI
PRODUCT: 6 Li+1.52SGP+6YDF0648 (4#) +12A+6 Li+1.52SGP+6 Li

PROJECT: Qingdao Haitian hotel
ARCHITECT: AA (Archilier Architecture) America
PRODUCT:
8 Li+1.52PVB+8YKE0657T (4#)+12A+8 Li
8 Li+1.52PVB+8YKE0657 (4#)+12Ar+8 Li+12Ar+8Li

01=Clear float glass substrate
06=Low iron float glass substrate
22=F green tinted float glass substrate
25=Blue tinted float glass substrate
58=Euro Grey tinted float glass substrate
68=Crystal grey tinted float glass substrate

Low-E GLASS

Offline single-silver (Low-E) energy-saving glass is a Low-E coating glass developed to improve the infrared barrier performance of glass, under the condition that the technology of offline solar control coated glass is mature and widely recognized in the market. A layer of functional silver layer is introduced into the film material for the first time, with good spectral selectivity.

FEATURE

- A breakthrough in offline coated glass technology, which uses the superposition of functional silver layers to significantly and U value without affecting the visible light transmittance.
- Proper film material selection and structure design, some Low-E coated glass can be off-site reprocessed.

PROJECT: RBC Waterpark Place
ARCHITECT: WZMH Architects
PRODUCT: 8YRE0146 (2#) +12Ar+6C

PROJECT: MNP Tower, Vancouver
ARCHITECT: Kohn Pedersen Fox Associates (KPF)
PRODUCT: 6YRE0146 (2#) +12Ar+6C

Low-E GLASS

Series	Product	Color	Visible Light%			g Value	Solar Heat Gain Coefficient (SHGC) NFRC	Shading Coefficient (SC)		Raltive Heat Gain (RHG) W/m² NFRC	U Value W/(m²·K)			
			Transmittance	Reflectance outside	Reflectance inside	Chinese JGJ/T 151		Chinese JGJ/T 151	NFRC		Chinese JGJ/T 151	NFRC Summer	NFRC Winter	EN 673
High Light Transmittance Series	6YME0185+12A+6	Neutral	76	11	11	0.58	0.56	0.66	0.64	417	1.73	1.72	1.75	1.7
	6YME0185T+12A+6	Neutral	76	11	11	0.56	0.54	0.65	0.62	404	1.69	1.67	1.71	1.7
	6YME0685+12A+6	Neutral	77	12	11	0.60	0.58	0.68	0.66	429	1.73	1.72	1.75	1.7
	6YME0685+12A+6Li	Neutral	78	12	11	0.62	0.60	0.70	0.68	442	1.73	1.72	1.75	1.7
	6YME2285+12A+6	Green	62	9	10	0.41	0.39	0.47	0.45	297	1.73	1.72	1.75	1.7
	6YME2585+12A+6	Blue	46	7	10	0.40	0.38	0.46	0.44	291	1.73	1.72	1.75	1.7
	6YME5885+12A+6	Dark Grey	37	6	9	0.38	0.36	0.43	0.41	272	1.73	1.72	1.75	1.7
Solar Control Series	6YRE0159T+12A+6	Silver Grey	54	30	21	0.37	0.36	0.43	0.41	271	1.67	1.64	1.68	1.6
	6YRE0152T+12A+6	Silver Grey	47	30	15	0.34	0.32	0.39	0.37	246	1.69	1.67	1.71	1.7
	6YRE0146T+12A+6	Silver Grey	42	30	14	0.30	0.29	0.34	0.33	221	1.69	1.67	1.71	1.7
Bendable BE Series	6YBE0186-HT+12A+6	Neutral	75	12	12	0.59	0.57	0.67	0.65	424	1.83	1.88	1.86	1.8
	6YBE0686-HT+12A+6	Neutral	77	12	12	0.61	0.59	0.69	0.67	437	1.83	1.88	1.86	1.8
	6YBE0686+12A+6Li	Neutral	78	12	12	0.62	0.60	0.70	0.68	443	1.83	1.88	1.86	1.8
	6YBE2286-HT+12A+6	Green	60	9	11	0.39	0.37	0.44	0.42	279	1.83	1.88	1.86	1.8
	6YBE2586-HT+12A+6	Blue	45	7	11	0.38	0.36	0.43	0.41	273	1.83	1.88	1.86	1.8
	6YBE5886-HT+12A+6	Dark Grey	36	6	11	0.36	0.34	0.41	0.39	260	1.83	1.88	1.86	1.8
Bendable ST Series	6YST0180C-HT+12A+6	Neutral	72	11	12	0.56	0.54	0.64	0.62	405	1.78	1.80	1.81	1.8
	6YST0680C-HT+12A+6Li	Neutral	76	11	12	0.62	0.60	0.71	0.69	449	1.78	1.80	1.81	1.8
Bendable BE-N Series	6YBE0180N-HT+12A+6	Neutral	66	15	12	0.53	0.50	0.61	0.57	373	1.83	1.84	1.84	1.8
	6YBE0180NT-HT+12A+6	Neutral	64	15	11	0.50	0.48	0.57	0.55	361	1.81	1.81	1.83	1.8
	6YBE0180NJ-HT+12A+6	Neutral	71	11	14	0.57	0.58	0.67	0.64	418	1.81	1.85	1.86	1.8
	6YBE0180NC-HT+12A+6	Neutral	65	16	12	0.49	0.47	0.56	0.54	351	1.75	1.76	1.77	1.7
	6YBE0680N-HT+12A+6	Neutral	68	15	11	0.56	0.53	0.64	0.61	399	1.83	1.84	1.84	1.8
	6YBE0680N-HT+12A+6Li	Neutral	69	15	11	0.57	0.54	0.65	0.62	405	1.83	1.84	1.84	1.8
	6YBE0680NJ-HT+12A+6Li	Neutral	75	11	15	0.64	0.63	0.74	0.72	468	1.81	1.85	1.86	1.8
	6YBE0680NC-HT+12A+6Li	Neutral	69	17	12	0.53	0.51	0.61	0.59	385	1.75	1.76	1.77	1.7
	6YBE2280N-HT+12A+6	Green	52	10	11	0.35	0.33	0.40	0.38	254	1.83	1.84	1.84	1.8
	6YBE2580N-HT+12A+6	Blue	38	8	10	0.34	0.32	0.39	0.37	247	1.83	1.84	1.84	1.8
	6YBE5880N-HT+12A+6	Dark Grey	31	6	10	0.32	0.30	0.37	0.35	235	1.83	1.84	1.84	1.8
Bendable BE-N Series	6YBE0165NJ-HT+12A+6	Blue Grey	60	15	11	0.49	0.47	0.56	0.54	356	1.76	1.77	1.78	1.8
	6YBE0665NJ-HT+12A+6Li	Blue Grey	61	16	11	0.53	0.51	0.61	0.59	383	1.76	1.77	1.78	1.8
	6YBE6865NJ-HT+12A+6	Light Grey	43	10	10	0.37	0.36	0.43	0.42	275	1.76	1.77	1.78	1.8
	6YBE0163NT-HT+12A+6	Silver Grey	56	24	15	0.42	0.41	0.49	0.47	309	1.69	1.67	1.71	1.7
	6YBE0163NC-HT+12A+6	Silver Grey	54	25	16	0.40	0.38	0.46	0.44	292	1.73	1.73	1.75	1.7
	6YBE0160N-HT+12A+6	Blue Grey	53	15	10	0.47	0.44	0.54	0.51	336	1.83	1.85	1.84	1.8
	6YBE0160NT-HT+12A+6	Blue Grey	53	15	10	0.43	0.41	0.49	0.48	314	1.81	1.84	1.84	1.8
	6YBE0160NJ-HT+12A+6	Blue Grey	54	16	10	0.44	0.43	0.51	0.50	328	1.83	1.87	1.86	1.8
	6YBE0160NC-HT+12A+6	Blue Grey	56	16	10	0.43	0.42	0.50	0.48	317	1.81	1.84	1.83	1.8
	6YBE0660N-HT+12A+6	Blue Grey	55	15	11	0.49	0.46	0.56	0.53	348	1.83	1.85	1.84	1.8
	6YBE0660N+12A+6Li	Blue Grey	56	15	11	0.50	0.47	0.57	0.54	355	1.83	1.85	1.84	1.8
	6YBE0660NJ-HT+12A+6Li	Blue Grey	55	17	10	0.48	0.46	0.55	0.53	351	1.83	1.87	1.86	1.8
	6YBE0660NC-HT+12A+6Li	Blue Grey	59	17	10	0.47	0.46	0.55	0.52	342	1.81	1.84	1.83	1.8
	6YBE2260N-HT+12A+6	Green	44	11	11	0.33	0.31	0.38	0.36	241	1.83	1.85	1.84	1.8
	6YBE2560N-HT+12A+6	Blue	33	8	10	0.32	0.30	0.37	0.35	235	1.83	1.85	1.84	1.8
	6YBE5860N-HT+12A+6	Dark Grey	27	7	10	0.29	0.27	0.33	0.31	210	1.83	1.85	1.84	1.8
	6YBE6860NJ-HT+12A+6	Light Grey	38	11	10	0.34	0.34	0.39	0.39	257	1.83	1.87	1.86	1.8

Low-E GLASS

Series	Product	Color	Visible Light%			g Value	Solar Heat Gain Coefficient (SHGC) NFRC	Shading Coefficient (SC)		Raltive Heat Gain (RHG) W/m² NFRC	U Value W/(m²·K)			
			Transmittance	Reflectance outside	Reflectance inside	Chinese JGJ/T 151		Chinese JGJ/T 151	NFRC		Chinese JGJ/T 151	NFRC Summer	NFRC Winter	EN 673
Bendable BE-N Series	6YBE0152N-HT+12A+6	Blue Grey	46	21	10	0.39	0.37	0.45	0.43	285	1.78	1.78	1.79	1.8
	6YBE0152NT-HT+12A+6	Blue Grey	46	21	10	0.36	0.35	0.41	0.40	265	1.76	1.77	1.78	1.7
	6YBE0152NJ-HT+12A+6	Blue Grey	45	22	10	0.37	0.36	0.43	0.42	279	1.80	1.82	1.82	1.8
	6YBE0152NC-HT+12A+6	Blue Grey	46	20	10	0.37	0.36	0.42	0.41	273	1.83	1.87	1.86	1.8
	6YBE0652N-HT+12A+6	Light Blue Grey	47	22	10	0.41	0.39	0.47	0.45	297	1.78	1.78	1.79	1.8
	6YBE0652N+12A+6Li	Light Blue Grey	48	22	10	0.42	0.40	0.48	0.46	304	1.78	1.78	1.79	1.8
	6YBE0652NJ-HT+12A+6Li	Blue Grey	46	23	10	0.39	0.38	0.45	0.43	285	1.80	1.82	1.82	1.8
	6YBE0652NC-HT+12A+6Li	Blue Grey	48	20	11	0.40	0.39	0.46	0.44	292	1.83	1.87	1.86	1.8
	6YBE2252N-HT+12A+6	Green	38	15	10	0.28	0.26	0.32	0.30	203	1.78	1.78	1.79	1.8
	6YBE2552N-HT+12A+6	Blue	28	11	10	0.27	0.25	0.31	0.29	197	1.78	1.78	1.79	1.8
	6YBE5852N-HT+12A+6	Dark Grey	23	8	9	0.26	0.24	0.30	0.28	190	1.78	1.78	1.79	1.8
	6YBE0142N-HT+12A+6	Silver Grey	40	27	10	0.33	0.31	0.38	0.36	240	1.74	1.72	1.75	1.7
	6YBE0142NC-HT+12A+6	Silver Grey	39	26	11	0.31	0.30	0.36	0.35	232	1.76	1.77	1.78	1.7
	6YBE0642N-HT+12A+6Li	Silver Grey	41	30	10	0.36	0.34	0.41	0.39	259	1.74	1.72	1.75	1.7
	6YBE0642NC-HT+12A+6Li	Silver Grey	41	27	12	0.34	0.32	0.39	0.37	247	1.76	1.77	1.78	1.7
	6YBE2242N-HT+12A+6	Green	36	19	10	0.26	0.24	0.30	0.28	190	1.74	1.72	1.75	1.7
	6YBE2542N-HT+12A+6	Blue	27	12	10	0.25	0.23	0.29	0.27	184	1.74	1.72	1.75	1.7
	6YBE5842N-HT+12A+6	Dark Grey	22	9	10	0.24	0.22	0.28	0.26	177	1.74	1.72	1.75	1.7
	6YBE0140N-HT+12A+6	Silver Grey	36	33	12	0.29	0.27	0.33	0.31	208	1.70	1.67	1.71	1.7
	6YBE0140NT-HT+12A+6	Silver Grey	35	30	10	0.28	0.28	0.33	0.32	212	1.71	1.70	1.73	1.7
	6YBE0640N-HT+12A+6Li	Silver Grey	38	34	12	0.32	0.30	0.36	0.34	227	1.70	1.67	1.71	1.7
Bendable RE-N Series	6YRE0159N-HT+12A+6	Silver Grey	52	28	15	0.39	0.37	0.45	0.43	284	1.74	1.73	1.75	1.7
	6YRE0159NJ-HT+12A+6	Light Grey	51	30	20	0.37	0.36	0.43	0.41	271	1.66	1.63	1.67	1.6
	6YRE0159NC-HT+12A+6	Silver Grey	51	31	21	0.37	0.35	0.43	0.41	269	1.68	1.66	1.70	1.6
	6YRE0659N-HT+12A+6	Silver Grey	54	29	15	0.42	0.40	0.48	0.46	303	1.74	1.73	1.75	1.7
	6YRE0659N+12A+6Li	Silver Grey	55	29	15	0.43	0.41	0.49	0.47	310	1.74	1.73	1.75	1.7
	6YRE0659NJ-HT+12A+6Li	Light Blue	53	30	19	0.39	0.38	0.45	0.44	285	1.66	1.63	1.67	1.6
	6YRE0659NC-HT+12A+6Li	Silver Grey	54	32	22	0.40	0.38	0.46	0.44	290	1.68	1.66	1.70	1.7
	6YRE2259N-HT+12A+6	Green	43	20	14	0.29	0.27	0.33	0.31	209	1.74	1.73	1.75	1.7
	6YRE2559N-HT+12A+6	Blue	32	13	14	0.28	0.26	0.32	0.30	202	1.74	1.73	1.75	1.7
	6YRE5859N-HT+12A+6	Dark Grey	26	10	14	0.26	0.24	0.30	0.28	190	1.74	1.73	1.75	1.7
	6YRE2252N-HT+12A+6	Green	39	21	12	0.27	0.25	0.31	0.29	197	1.78	1.78	1.79	1.8
	6YRE2552N-HT+12A+6	Blue	29	14	12	0.27	0.25	0.31	0.28	190	1.78	1.78	1.79	1.8
	6YRE5852N-HT+12A+6	Dark Grey	23	10	12	0.25	0.23	0.29	0.27	184	1.78	1.78	1.79	1.8
Colourful Series	6YHE Bronze-HT+12A+6	Brown	28	20	11	0.21	0.19	0.24	0.22	152	1.69	1.66	1.72	1.6
	6YHE T-Grey-HT+12A+6	Light Grey	28	20	15	0.19	0.18	0.22	0.21	145	1.67	1.65	1.69	1.6
	6YHE T-Blue-HT+12A+6	Blue	30	19	14	0.23	0.21	0.27	0.24	164	1.68	1.66	1.70	1.6
	6YHE Gold-HT+12A+6	Gold	14	34	54	0.14	0.14	0.17	0.16	113	1.63	1.59	1.64	1.6

※ YBE-N series, the width is up to 3300mm, the width of other single silver Low-E coating products is generally not more than 2440mm
※ A represents air, Ar represents argon, and argon fill rate is 85%.
※ HT indicates that the product must be tempered or heat- strengthened, so the above performance data are post-heat treatment data.
※The glass performance data will be finalized by the performance data sheet which calculated by SYP, Above performance data just for design reference
※ The above data are calculated in accordance with WINDOW 6.3 of Lawrence Berkeley Laboratories and Glazing Design 1.3 software of Guangdong Provinical Academy of Building Research Group Co., LTD of China.
※ The tolerance of published data with respect to photometric properties is +/- 3 points. The U-value tolerance is +/- 0.1W/m²·K

01=Clear float glass substrate
06=Low iron float glass substrate
22=F green tinted float glass substrate
25=Blue tinted float glass substrate
58=Euro Grey tinted float glass substrate
68=Crystal grey tinted float glass substrate

PROJECT: Waihonua
ARCHITECT: Pappageorge Haymes Partner
PRODUCT: 8YRE2538 (2#) +12A+6C

PROJECT: CITIC Tower
ARCHITECT: KPF(Kohn Pedersen Fox)
PRODUCT: 6 Li+1.52PVB+6 LI Low-E (4#) 12A+8C+12A+8C

PROJECT: One Bloor
ARCHITECT: Hariri Pontarini Architects
PRODUCT: 6YRE0159 (2#) +12Ar+6C

PROJECT: 505 Church Street
ARCHITECT: Solomon Cordwell Buenz
PRODUCT: 8YRE0146 (2#) +12A+6C

Ultra-Low-E 1.16 GLASS

The dual-carbon strategy is the main line of the national environmental protection strategy and one of the main themes of the country's economic development in the coming decades.

In the construction industry, more than 50% of building energy consumption is caused by doors and windows. Developing high-performance energy-saving glass is the only way to effectively improve the energy consumption of building doors and windows and reduce building carbon emissions

Aiming at the key point of building energy conservation, SYP developed the special energy saving product YLU-0116, which is suitable for "zero carbon building" and "low consumption household appliances", Its technical parameters such as thermal performance and process ability have reached perfect.

Increasing the binding force between the film layers by optimizing the structure of the film introducing new lubricating materials, adding a lubricating film on the surface of the basic rigid film layer, reducing the friction coefficient, and effectively solving the problems of scratch and film oxidation during processing. By analyzing the influence of film continuity and roughness on the emissivity, the appropriate formula proportion and quality factor are found to ensure high visible light transmittance and low thermal emissivity.

FEATURE

- High visible light transmittance, visible light transmittance is more than 88% when coating on 3.2mm clear glass substrate.
- Ultra-low U-value, the IGU with 16mm air spacer fulling Argon, the U value is equal or less than 1.16W/m²·K.
- High SHGC can obtain more solar radiation energy.

APPLICATION AREA

- Building doors and Windows glass, freezer and other home appliance doors.

YLU0116 Low-E Glass

Series	Product	Colour	Visible Light%			g Value	Solar Heat Gain Coefficient (SHGC)	Shading Coefficient (SC)		Raltive Heat Gain (RHG)	U Value W/(m²·K)			
			Transmi-ttance	Reflec-tance outside	Reflec-tance inside	Chinese JGJ/T 151	NFRC	Chinese JGJ/T 151	NFRC	NFRC	Chinese JGJ/T 151	NFRC Summer	NFRC Winter	EN 673
High visible light trans-mission	3.2YLU0116+16Ar+3.2	Neutral	79	14	13	0.58	0.56	0.66	0.64	412	1.47	1.10	1.46	1.1
	3.2YLU0616+16Ar+3.2Li	Neutral	81	15	13	0.60	0.58	0.68	0.66	424	1.47	1.10	1.46	1.1
	6+12Ar+6YLU0116(3#) +19Ar+6	Neutral	70	17	19	0.55	0.53	0.63	0.61	392	1.05	1.05	1.04	1.0
	6Li+12Ar+6YLU0616(3#) +19Ar+6Li	Neutral	73	18	19	0.61	0.59	0.69	0.67	430	1.05	1.05	1.04	1.0
	6+12Ar+6YLU0116(3#) +19Ar+6YEA(6#)	Neutral	65	19	20	0.52	0.50	0.60	0.58	372	0.89	0.86	0.88	0.9
	6Li+12Ar+6YLU0616(3#) +19Ar+6Li(YWT-90)(6#)	Neutral	75	17	18	0.60	0.58	0.69	0.67	429	0.92	0.90	0.91	0.9
	6YLU0116(2#)+12Ar+6 +19Ar+6YEA(6#)	Neutral	65	20	20	0.49	0.47	0.56	0.54	347	0.89	0.86	0.88	0.9
	6YLU0616(2#)+12Ar+6Li +19Ar+6Li(YWT-90)(6#)	Neutral	75	18	17	0.55	0.53	0.63	0.61	391	0.92	0.90	0.91	0.9

※ A represents air.
※ Li stands for Low iron ffoat glass substrate.
※ The glass performance data will be ffnalized by the performance data sheet which calculated by SYP, Above performance data just for design reference.
※ The above data are calculated in accordance with WINDOW 6.3 of Lawrence Berkeley Laboratories and Glazing Design 1.3 software of Guangdong Provinical Academy of Building Research Group Co., LTD of China.
※ The tolerance of published data with respect to photometric properties is +/- 3 points. The U-value tolerance is +/- 0.1W/m²·K.

Low-E LAMINATED GLASS

Low-E laminated glass: It is a kind of laminated glass product consisting of Low-E coated glass and another piece of uncoated glass or Low-E coated glass, which is permanently bonded into a whole after high temperature and high pressure, through the interlayer. Low-E coating (offline Low-E coating) film is directly bonded with the interlayer and be protected.

The climate characteristics between the Tropic of Cancer and around are as follows: the outdoor temperature of the four seasons basically has change very little, which is between 25 °C and 35 °C, and the temperature difference between day and night is also relatively little between 5 °C and 10 °C; the indoor and outdoor temperature difference in such areas is small (about 10 °C) all year. the most comfortable temperature is 20°C~28°C for Human, cooling is required for indoor air conditioning all year. In energy saving design, the control of shading performance (SC) is the key of curtain wall glass, while thermal insulation performance (U value) become secondary factor, Low-E coated glass has excellent performance of reflecting radiating infrared rays, so it has excellent sunshade performance; take account of local climate characteristics, Low-E coated laminated glass was born.

FEATURE

- Excellent shade performance
- Excellent soundproof performance
- UV insulation
- colorful
- Products can be adjusted according to requirements

APPLICATION AREA

- Facade
- Building doors and Windows
- Greenhouse garden and other garden enclosure

PROJECT: Leedon Heightd Singapore
ARCHITECT: Zaha Hadid
PRODUCT: 5 Crystal Grey YBE68N52 (2#)+1.52PVB+5C, 5YSD0140 (2#)+1.52PVB+5Crystal Grey (4#) with frit

Low-E LAMINATED GLASS

Product	Visible Light%			Solar Energy%		Solar Heat Gain Coefficient (SHGC)	Shading Coefficient (SC)	U Value W/(m²·K) NFRC		
	Transmittance	Reflectance outside	Reflectance inside	Transmittance	Reflectance outside			Summer	Winter	EN 673
6YBE0152(2#)+0.76PVB+6C	46	19	9	29	25	0.44	0.50	4.98	5.49	5.4
6YBE0152(2#)+0.76PVB+6YSC0160(4#)	31	21	14	21	26	0.32	0.37	2.94	3.69	3.7
8YBE0152(2#)+0.76PVB+8C	43	20	10	26	24	0.42	0.48	4.87	5.37	5.3
8YBE-0152(2#)+1.52PVB+8YEA-0182(4#)	40	23	15	23	27	0.33	0.38	2.64	3.40	3.4

※ The above data are calculated by WINDOW6.3 developed at Lawrence Berkeley National Laboratory, except for having been given clear indication of standards.
※ The glass performance data will be finalized by the performance data sheet which submitted by SYP. Above performance just for design reference.

SOLAR REFLECTIVE GLASS

Solar reflective Glass is produced by depositing one or more layers of nanoscale metal or (metal) compound thin films on float glass by magnetron sputtering under high vacuum. The main function of this film is to control the direct solar radiation and produce different visual effects and optothermal performance.

PR OJEC T: Shanghai Wo rld Financial Center
ARCHITECT: KPF
PRODUCT: 6YSS0116 +0.76PVB+6 C
6 YSS0116+0.76PVB+6C+12A+6C

PROJECT: AL-Hamra Tower Kuwait
ARCHITECT: SOM
PRODUCT: 8 silver20+1.52PVB+6C+16A+6YLE0178

PROJECT: Plaza 66 Shanghai
ARCHITECT: KPF
PRODUCT: 8SGAC2221+12A+8YLE0181

FEATURE

- Comfortable interior environment: effectively block the direct radiation of sunlight and ultraviolet rays, and create a comfortable interior space.
- Energy saving: products with different shading effects can reduce the costs of the air conditioning system to different degrees and achieve better return of investment.
- Colorfulness It can provide coated glass of various colors accord with design concept.
- Privacy: Due to the reflection of the film, it is difficult to see the interior scene outside the building.
- Composite products: various composite glass processing products can be made by tempering, laminated, IGU, hot bending and other composite processing.

SPECIFICATIONS

Thickness: 3~19mm (1/8"~ 3/4")
Maximum size:2440~3660mm(96"~ 144")
Minimum size:300~800mm (12"~ 36")

COLOR

Various shades of blue, green, blue green, silver grey and gold.

STANDARDS

GB/T 18915.1 for Coating Glass Standard
BS EN 1096 European Standard
R3221 Japanese Industrial Standard
ASTMC 1376 American Society of Testing and Materials

PROJECT: Shenzhen Great China International Exchange Plaza
ARCHITECT: Archurban Designs
PRODUCT: 6DGBD3312+9A+6C
8DGBD3312+1.14PVB+8C

SOLAR REFLECTIVE GLASS

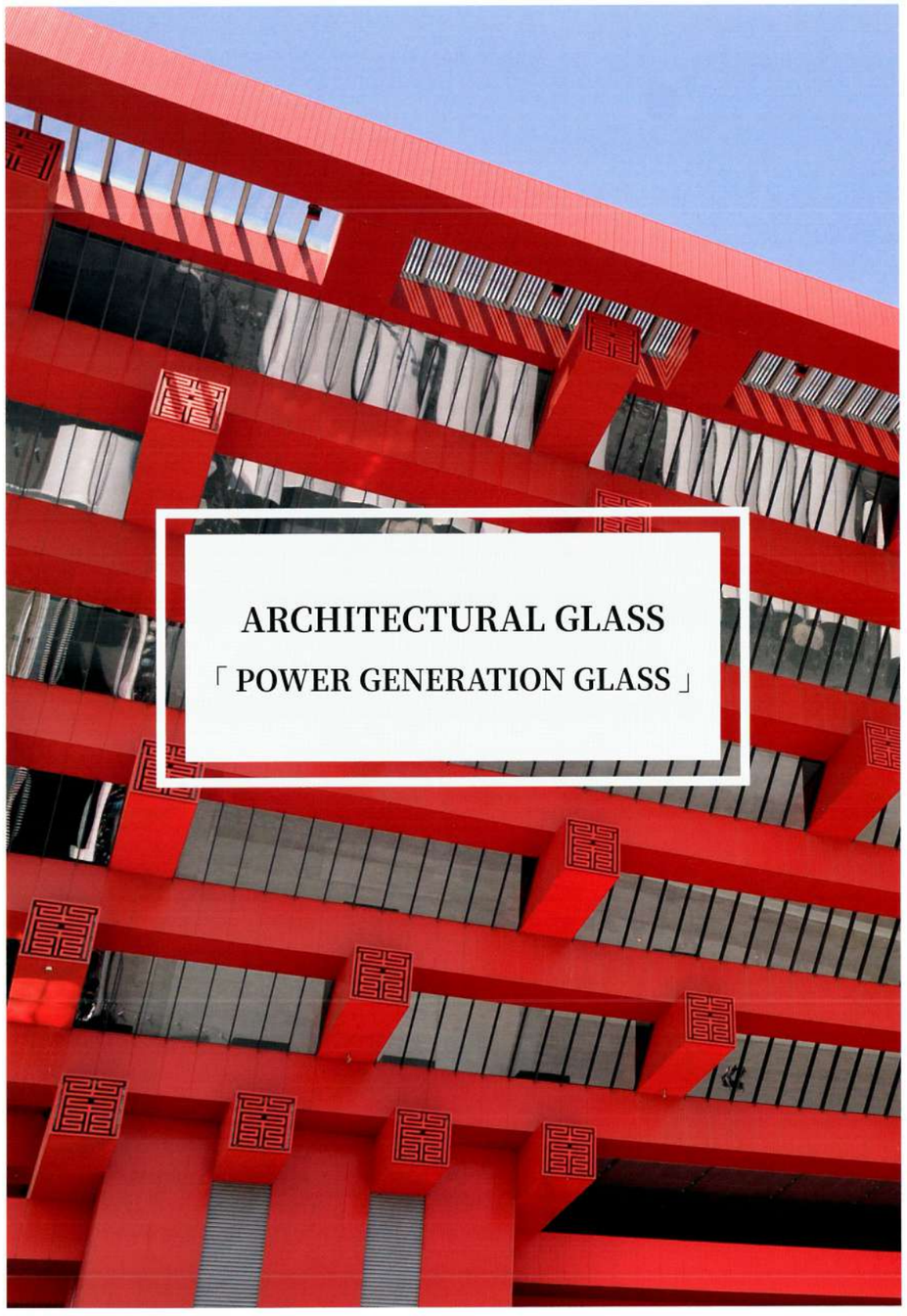
Series	Product	Color	Visible Light%			g Value	Solar Heat Gain Coefficient (SHGC) NFRC	Shading Coefficient (SC)		Raltive Heat Gain (RHG) W/m² NFRC	U Value W/(m²·K)			
			Transmittance	Reflectance outside	Reflectance inside	Chinese JGJ/T 151		Chinese JGJ/T 151	NFRC		Chinese JGJ/T 151	NFRC		EN 673
												Summer	Winter	
SDSeries	6YSD0178T	Neutral	78	11	13	0.77	0.78	0.88	0.89	602	5.18	5.24	5.18	5.7
	6YSD0170T	Neutral	60	8	14	0.64	0.66	0.74	0.76	520	5.18	5.24	5.18	5.7
	6YSD0160	Grey	57	14	18	0.63	0.66	0.73	0.76	519	5.13	5.17	5.74	5.7
	6YSD0160T	Blue Grey	59	11	12	0.64	0.65	0.73	0.75	513	5.18	5.24	5.18	5.7
	6YSD0160J	Blue Grey	61	10	16	0.65	0.67	0.75	0.77	523	5.09	5.10	5.67	5.6
	6YSD0151T	Blue Grey	53	13	14	0.60	0.62	0.68	0.71	488	5.18	5.24	5.18	5.7
	6YSD0150	Grey	51	19	20	0.58	0.61	0.67	0.70	481	5.12	5.15	5.72	5.7
	6YSD0150T	Blue Grey	53	19	18	0.59	0.61	0.68	0.71	488	5.13	5.17	5.74	5.6
	6YSD0150J	Blue Grey	51	20	20	0.58	0.60	0.67	0.70	479	5.16	5.23	5.79	5.7
	6YSD0150C	Silve Grey	47	18	15	0.54	0.56	0.62	0.65	447	5.03	5.02	5.59	5.5
	6YSD0140	Grey	41	13	20	0.49	0.51	0.57	0.60	415	4.86	4.80	5.39	5.4

SOLAR REFLECTIVE GLASS

Series	Product	Color	Visible Light%			g Value	Solar Heat Gain Coefficient (SHGC) NFRC	Shading Coefficient (SC)		Raltive Heat Gain (RHG) W/m² NFRC	U Value W/(m²·K)			
			Transmittance	Reflectance outside	Reflectance inside	Chinese JGJ/T 151		Chinese JGJ/T 151	NFRC		Chinese JGJ/T 151	NFRC		EN 673
												Summer	Winter	
SD Series	6YSD0140T	Neutral	47	12	19	0.55	0.57	0.63	0.66	453	4.86	4.78	5.37	5.3
	6YSD0140J	Grey	42	14	18	0.50	0.53	0.58	0.61	419	4.87	4.78	5.37	5.4
	6YSD0136	Grey	36	29	10	0.42	0.45	0.48	0.52	364	4.78	4.66	5.26	5.3
	6YSD0136T	Silver Grey	42	28	6	0.47	0.49	0.54	0.56	388	4.71	4.56	5.17	5.1
	6YSD0136C	Blue Grey	40	25	10	0.45	0.47	0.51	0.54	374	4.65	4.49	5.11	5.0
	6YSD0130	Grey	31	24	19	0.38	0.41	0.44	0.47	330	4.60	4.41	5.03	5.0
	6YSD0130T	Silver Grey	37	20	14	0.46	0.48	0.53	0.56	389	4.78	4.66	5.27	5.2
	6YSD0130C	Silver Grey	37	19	16	0.44	0.46	0.50	0.53	370	4.66	4.48	5.10	5.0
	6YSD0125T	Silver Grey	27	22	22	0.39	0.42	0.45	0.48	343	5.18	5.24	5.81	5.7
	6YSD0120	Grey	20	33	24	0.29	0.31	0.33	0.36	259	4.41	4.13	4.78	4.8
	6YSD0120T	Silver Grey	20	29	31	0.30	0.33	0.35	0.38	273	4.52	4.28	4.92	4.9
	6YSD0115	Light Grey	16	27	34	0.26	0.30	0.30	0.35	252	4.32	4.00	4.67	4.7
AC Series	6YAC0140J	Light Grey	42	26	7	0.48	0.49	0.55	0.57	392	4.75	4.61	5.22	5.2

※ The glass performance data will be finalized by the performance data sheet which calculated by SYP, Above performance data just for design reference.
※ The above data are calculated in accordance with WINDOW 6.3 of Lawrence Berkeley Laboratories and Glazing Design 1.3 software of Guangdong Provinical Academy of Building Research Group Co., LTD of China.
※ The tolerance of published data with respect to photometric properties is +/- 3 points. The U-value tolerance is +/- 0.1W/m²·K

PROJECT: Pudong Interbational Airport terminal One



ARCHITECTURAL GLASS

「 POWER GENERATION GLASS 」

BIPV GLASS

BIPV (Building Integrated Photovoltaic) is a technology that integrates photovoltaic system into building materials or buildings, which is a type of distributed photovoltaic power station. BIPV Module is solar cell be embedded in two pieces' glass of Façade, while maintaining the functions of enclosure, lighting, viewing and decoration, also, can generate power for building or power grid. changing passive energy saving into active power generation, and further improving the energy saving function, shielding function and decoration function of facade.

BIPV Module is the basic building element to realize distributed power generation, Power generation is used locally and simultaneous, effective peak shaving and valley leveling.

FEATURE

- No land demand: only setting up photovoltaic devices on building curtain walls.
- Long service life: 20-50 years .
- Zero emissions: no fuel, no noise, no pollution, no toxic and harmful gas emissions.
- Reliable work: no mechanical movement, safe, maintenance free, unmanned.
- Inexhaustibility: Solar energy are never used up (at least 5 billion years), and no significant difference among regions.
- 'Golden Power': Overlapping with peak load, playing a peak shaving role.
- Suitable in size: 10W-100GW, can be built and installed in a "building block" style.
- Easy installation: The installation structure is simple.

CLASSIFICATION

- Thin film solar module
- Crystalline silicon solar module

SPECIFICATIONS

600×1200~2400×3600 (mm)

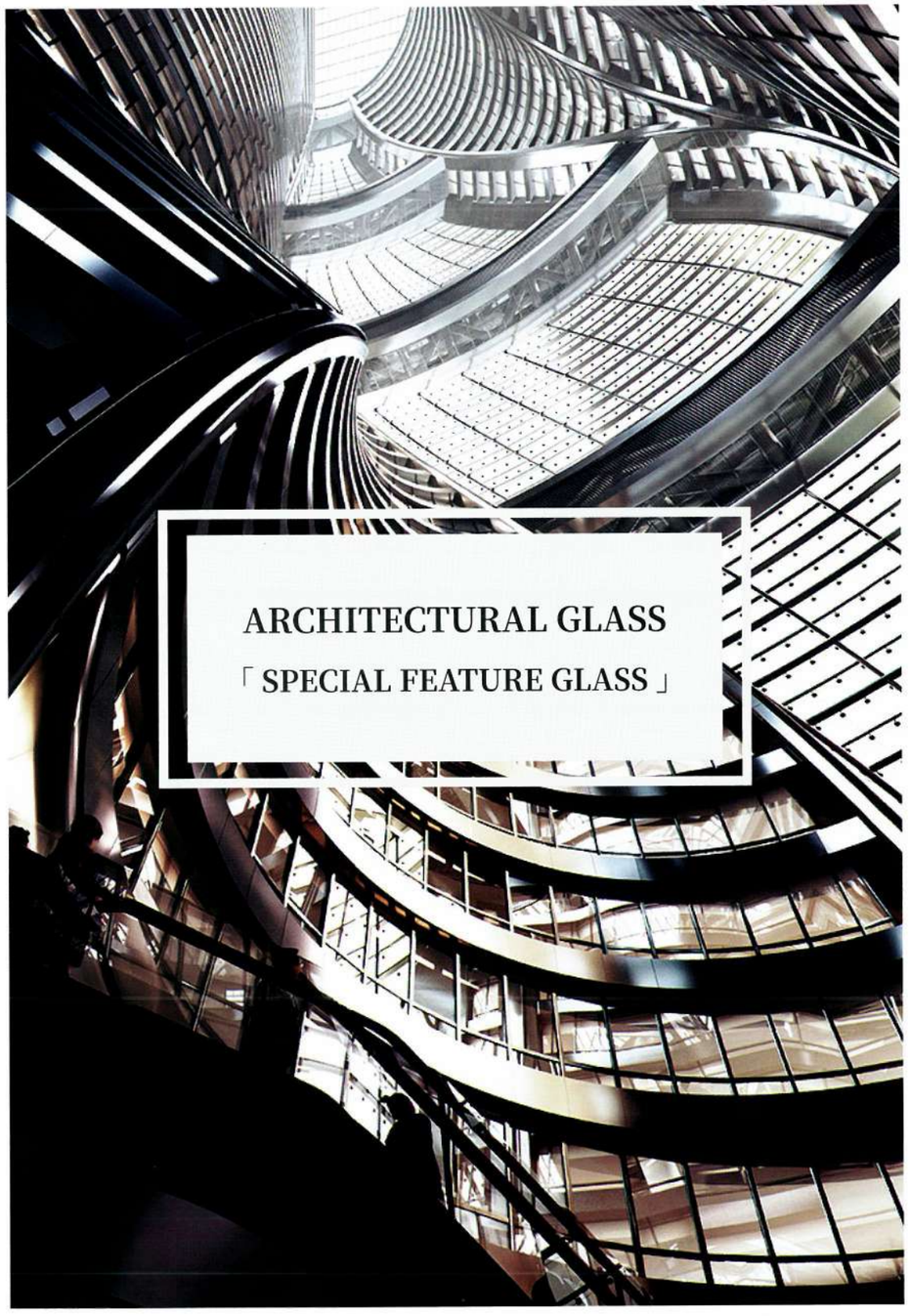
APPLICATION AREA

- Facade, lightroof or canopy
- corridors, pedestrian overpasses, sunshades

PROJECT: Cisen Pharmaceutical Co., Ltd. R&D Center
ARCHITECT: SIGEE
PRODUCT: 8 Li+1.52PVB+3.2CdTe+1.52PVB+8Li with digital print frit

PROJECT: China Yellow Sea Wetland Museum(Yancheng Jiangsu)
ARCHITECT: Shanghai Dushe Architectural Design Co., Ltd.
PRODUCT: 12C+1.52SGP+3.2mm CdTe(50%)+1.52SGP+12C

PROJECT: China Life Insurance Company Ltd.Data Center
ARCHITECT: HENN-GmbH Germany
PRODUCT: 6C+1.52PVB+3.2CIGS+1.52PVB+6C



ARCHITECTURAL GLASS

「 SPECIAL FEATURE GLASS 」

TEMPERED GLASS

Tempered Glass is produced by heating annealed glass in a furnace to approximate softening point then cool the glass quickly and uniformly by blow cool air onto its surface. Uniform compressive stress is formed on its surface, while tensile stress is formed inside, Therefore, it is more resistant to thermal breakage and is capable of withstanding higher wind loads and impact.

2-Stage Tempered Furnace Manufactured By Tamglass

FEATURE

- Safety: when broken, it will break into obtuse small particles, which is difficultly hurt people.
- High strength: the strength of tempered glass is 4 times that of anneal glass.
- Thermal stability: withstanding 200°C temperature difference at least.

SPECIFICATIONS

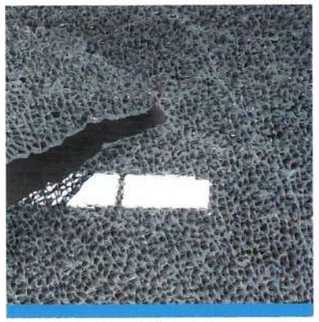
Maximum size:3300~12000mm (130"~ 472 9/20")
Minimum size:250~250mm (9 9/10" ~ 9 9/10")
Thickness: 3~19mm (1/8" ~ 3/4")

STANDARDS

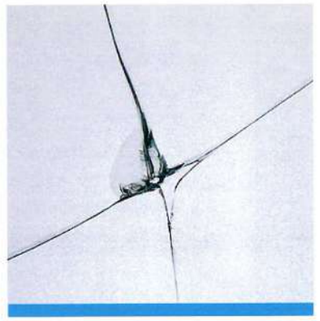
GB/T 18915.1 for Coating Glass Standard
GB15763.2 Safety glazing materials in building - part 2: Tempered Glass
China CCC Safety Glass Certification
SGCC (ANSI Z97.1, CPSC16 CFR1201, ASTM 1048) US Safety Glass Certification
Global AS/NZS2208 Australia and New Zealand Safety Glass Certification
BSI BS 6206, BS EN1215 UK safety Glass Kite mark Certification

HEAT STRENGTHENED GLASS

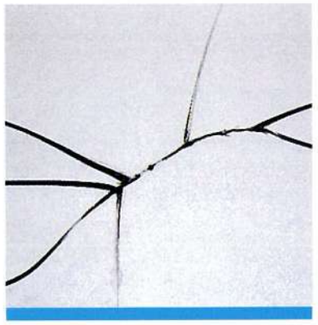
The process of Heat Strengthening is similar to that of temped glass, however, in this instance the glass is quenched at a slower rate. The result is the glass tension is less than that of the tempered Glass.



Tempered glass fragment



Annealed glass fragment



Heat Strengthened glass fragment

FEATURE

- It is obviously superior to ordinary annealed glass in mechanical strength, wind pressure resistance, impact resistance and thermal shock resistance
- Low probability of spontaneous break
- Better flatness than tempered glass
- Non-safety glass

SPECIFICATIONS

Maximum size:3000~6000mm
Minimum size:250~250mm
Thickness: 4~12mm

STANDARDS

Comply with GB/T 17841 for Coating Glass Standard
Comply with BS EN 1863 European Standard
Comply with ASTM C 1048-18 American Professional Association standards

COMPLEX-CURVED GLASS

Complex curved glass: A curved glass product made by heating flat glass to a softening temperature and bending. The profile of the glass forms curved appearance with two or more Radius, or the same radius is bent in two or more axes. Compared to single curved profile and single radius curved glass, the equipment structure, process complexity, and dimensional accuracy are quite high request for producing complex curved glass. Such products typically have two variations: different axial and coaxial with different Radius. Complex curved glass is mostly tempered glass, which can ensure variable shapes, as well as high strength and safety; it can achieve complex appearance, sound proof, heat insulation, and noise reduction functions after Low-E coating, laminated, or IGU process, is a new type of building curtain wall glass.

FEATURES

- Various shapes: spherical, ellipsoidal, conical, and annular shapes
- Personalized production: meet the individual requirement of Client or architect
- Reprocess: For functional requirements such as decoration, energy saving, safety, sound proof, and privacy protection, Low E coating, ceramic frit, laminated, and IGU can be processed.

CLASSIFICATION

Complex curved glass with different axes: J Type、U Type、S Type and etc.

Complex curved glass with different radii: conical, ellipsoidal, etc.

SPECIFICATIONS

Thickness for single glass: 5~19mm

Maximum size: 2400X5000mm

Arch height ≤ 500mm

APPLICATION AREA

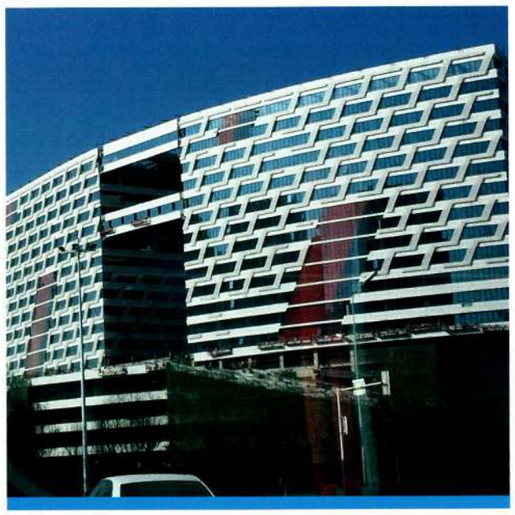
Civil buildings: commercial and residential buildings.

Home furnishing: shower room, vestibule, sunlight room, etc.

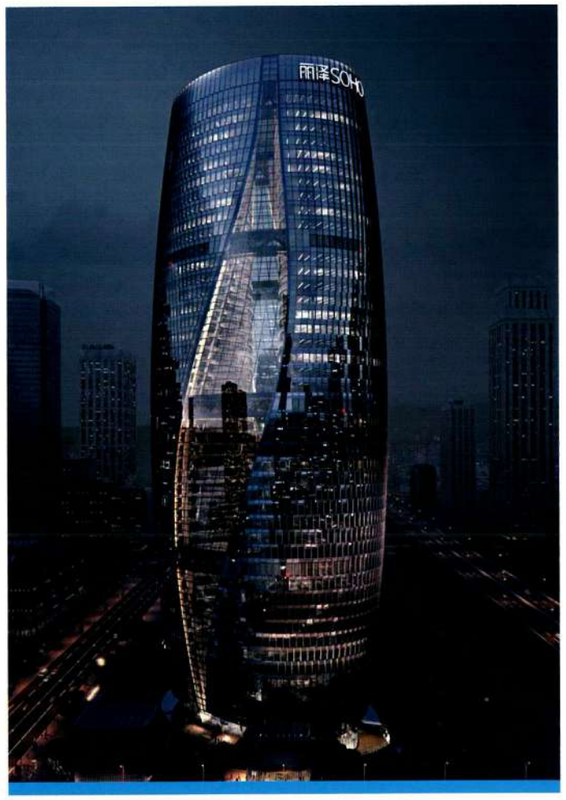
Household appliances: panels of refrigerators, freezers, etc.

PROJECT: BSB(Baoshang Bank Limited) Plaze
ARCHITECT: Beijing Institute of Architectural Design
PRODUCT: 8 Li Low-E(2#) +12 Ar+8 Crystal Grey+12 Ar+8 Li
8 Li Low-E(2#) +12Ar+8 Crystal Grey+12Ar+8 Li (Bend)
12 Li+3.04PVB+12 Li+14 Ar+10 Li Low-E(6#) +12Ar+12 Li (Bend)

PROJECT: Xiamen Qudian Technology Financial innovation Park
ARCHITECT: Ximen Baidi Jianzhu Sheji Youxian Gongsi
PRODUCT: 5YSD0673 (2#) +1.52PVB+5YDT0648 (4#) +12A+6 Li
6YSD0673 (2#) +1.52PVB+6YDT0648 (4#) +12A+10 Li
6YSD0673 (2#) +2.28PVB+6YDT0648 (4#) +12A+10 Li(Bend)
10YSD0673 (2#) +1.9PVB+10YDT0648 (4#) +12A+12 Li
10YSD0673 (2#)+2.28PVB+10YDT-0648 (4#) +12A+12 Li(Bend)



PROJECT: CSPC Antitumor High tech Industrial Par
ARCHITECT: China IPPR International Engineering Co.,LTD.
PRODUCT: 6C Low-E(2#)+12Ar+6C
6C+2.28PVB+6C (Bend)
8Low-E(2#)+12Ar+8C (Bend)
12Low-E(2#)+12Ar+12C (Bend)



PROJECT: LIZE SOHO
ARCHITECT: Zaha Hadid
PRODUCT:
8 Li+1.52PVB+8 Li Low-E(4#)+12Ar+10 Li
5 Li+1.52PVB+5 Li Low-E(4#)+12Ar+6 Li

JUMBO SIZE GLASS

SYP Glass Group can process flat and curved Jumbo thick plate glass up to 14-meter long. through new technology research and development and the equipment of advanced ultra-long focused convection combined flat and curved two-way tempered furnace, meeting the special needs of customers for ultra- long and ultra large plate requirement.

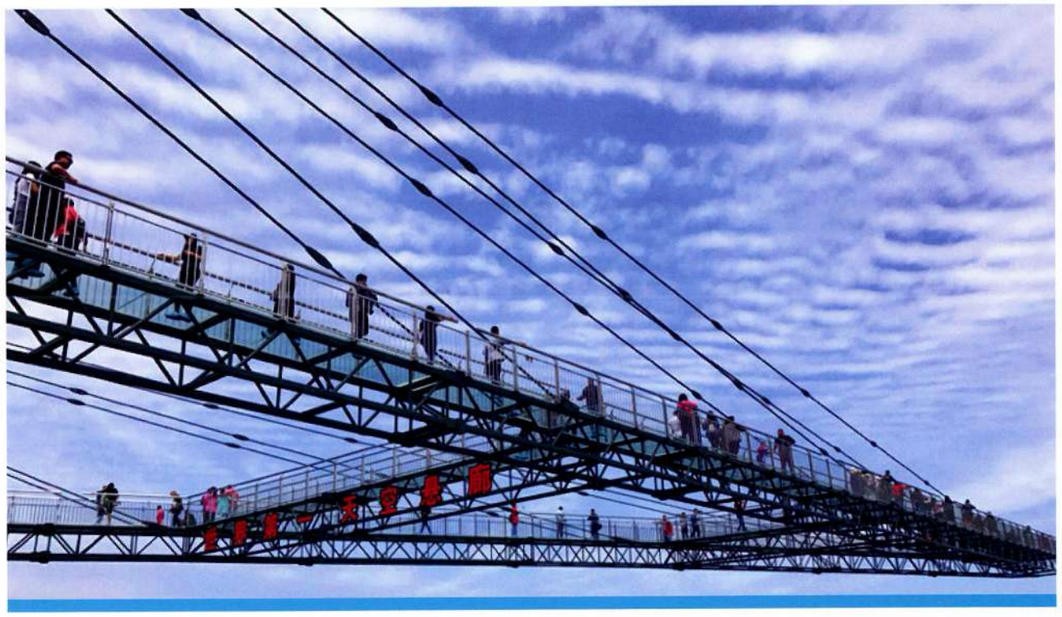
FEATURES

- Flat or curved with 14 meter length can be tempered or heat strengthened.
- Meet the demand for large-scale safety glass in modern buildings.

Size Range

flatness			curve		
Thickness(mm)	Maximum size(mm)	Remark	Maximum size(mm)	Radius(mm)	Remark
4	2100*3000	HS/FT	3000*1600arc	750~25000	HS
5	3000*5000	HS/FT	3000*1600arc	750~25000	HS/FT
		HS/FT	3000*3000arc	1500~25000	HS
		HS/FT	4000*2000arc	1500~14000	HS
6	3000*5000	HS/FT	3000*1600arc	750~25000	HS/FT
		HS/FT	3000*3000arc	1500~25000	HS/FT
		HS/FT	4000*2000arc	1500~14000	HS
8	3000*5000	HS/FT	3000*1600arc	1000~25000	HS/FT
		HS/FT	3000*3000arc	1500~25000	HS/FT
		HS/FT	14000*2000arc	1000~14000	HS
10	2400*14000	HS/FT	3000*1600arc	1000~25000	HS/FT
		HS/FT	3000*3000arc	1500~25000	HS/FT
		HS/FT	14000*2000arc	2000~14000	HS/FT
12	2400*14000	HS/FT	3000*1600arc	1500~14000	HS/FT
		HS/FT	3000*3000arc	2000~14000	HS/FT
		HS/FT	14000*2000arc	2500~14000	HS/FT
15	2400*14000	FT	14000*2000arc	2500~14000	FT
19	2400*14000	FT	14000*2000arc	2500~14000	FT

HS: heat strengthened, FT: full toughened



PROJECT: Dream Ordovician Overhanging Corridor
ARCHITECT: chongqingaotaojilyuyeyouxiangongsi
PRODUCT: 12 Li+1.52SGP+12 Li+1.52SGP+12 Li (frit)

PROJECT: Oriental Pearl TV Tower Hanging Sightseeing Corridor
ARCHITECT: Jiang Architects & Engineers (JAE)
PRODUCT: 12 Li+2.28SGP+12 Li+2.28SGP+12 Li

PROJECT: Suzhou International Financial Center
ARCHITECT: KPF(Kohn Pedersen Fox)
PRODUCT: 8 Li+1.52PVB+8YRE0146+12A+8C

FIRE RESISTANCE GLASS

Monolithic SYP Fire Resistance Glass meets the corresponding fire resistance rating requirements. It can maintain its integrity during specified fire resistance tests. Fire resistance integrity means a ability to prevent flame penetration or prevent flaming on the back fire surface within a certain period of time when one side of fire resistant glass is exposed to fire under standard fire resistance test conditions. Monolithic fire resistance glass can be divided into following levels according to Chinese Fire Resistance Integrity Standards Level I (≥90min), Level II (≥60min), Level III (≥45min), Level IV (≥30min). SYP Monolithic fire resistance glass can reach C class, Level I.

PROJECT : Addington Street Hotel London, UK

FEATURES

- Fire resistance: Monolithic fire resistant glass belongs to Class C fire resistant glass according to fire resistance glass standard, which meet the fire resistance integrity requirements.
- Safety: When broken, it breaks into small particles with uniform obtuse angles that are not easy to hurt people.
- Strength: The strength of monolithic fireproof glass is higher than that of full toughened glass.
- Thermal stability: Single piece fireproof glass has a higher ability to withstand temperature changes than tempered glass.
- Processability: It can also be made into composite processed glass products through different processing methods, such as coating, IGU, laminated and etc.

SPECIFICATIONS

Maximum size:2000~2500mm

Minimum size:250~250mm

STANDARDS

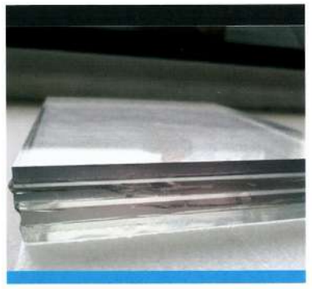
Comply with GB 15763.1 《Safety glazing material in building-part 1:Fire-resistant glass》

LIGHTWEIGHT BULLET-PROOF GLASS

Bulletproof glass is a composite material made of glass (or Plexiglas) and high-quality engineering plastics through special processing. It is usually a transparent material that has the appearance of ordinary glass and the ability to transmit light, and has certain protective against small arms fire; Traditional bulletproof glass is made of Multi-layer glass and PVB after a certain temperature and pressure treatment. The lightweight bulletproof glass of SYP Glass Group introduces new materials such as PC, PMMA, and TPU on the basis of traditional bulletproof glass. The product is more lightweight, transparent except the excellent performance of traditional bulletproof glass, and will be applied in a wider range of fields.

FEATURES

- Thinner and lighter - with the same level of bulletproof capability, the thickness and weight per unit area are significantly reduced
- More transparent - higher visible light transmittance
- Excellent durability, UV insulation, sound proof and noise reducing performance



Shanghai World Reception Hall

APPLICATION AREA

- Security sentry box
- Transparent protective screen for leaders' podium
- Key building doors and windows
- Superior Presidential Suite Glass
- Bank counter, 24-hour convenience store (self-service)

WATER-STABILITY LAMINATED GLASS

Water stability laminated glass is a composite glass product consisting of two or more pieces of glass, every two pieces' glass with one or multiple interlayer, which are special waterproof organic polymer. After special high-temperature pre pressing (or vacuum pre pressing) and high-temperature high-pressure processing, the glass and interlayer are permanently bonded into one body. The biggest difference between this interlayer and PVB is that it is not affected by water vapor, and is particularly suitable for use in high-temperature and humid environments for a long time, or for laminated glass that requires exposed edges.

FEATURES

- Better water and humidity resistance.
- Better chemical stability, non-toxic, plasticizer free, and better compatibility with other building materials.
- Better UV and weather stability.
- Better sound proof performance, especially in the high-frequency range, better than PVB laminated glass.
- Strong adhesion at high and low temperatures, strong resistance to high temperature creep.
- It has high strength characteristics, higher static load strength than PVB laminated glass, and better anti-combustion performance than PVB and SGP laminated glass.
- It is bonded to many materials and can be used for decorative glass and art glass.

APPLICATION AREA

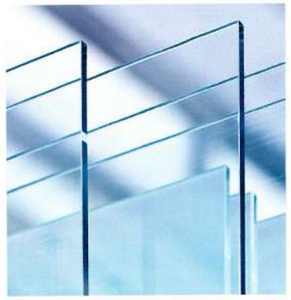
- Shower room, kitchen decorative glass.
- Indoor and outdoor handrail, stair handrail glass.
- Outdoor escalator handrail glass.
- Building curtain wall glass and exterior decorative glass (glass shutter), roof glass, etc.
- Telephone booths, bus stop shelters, canopies, etc.

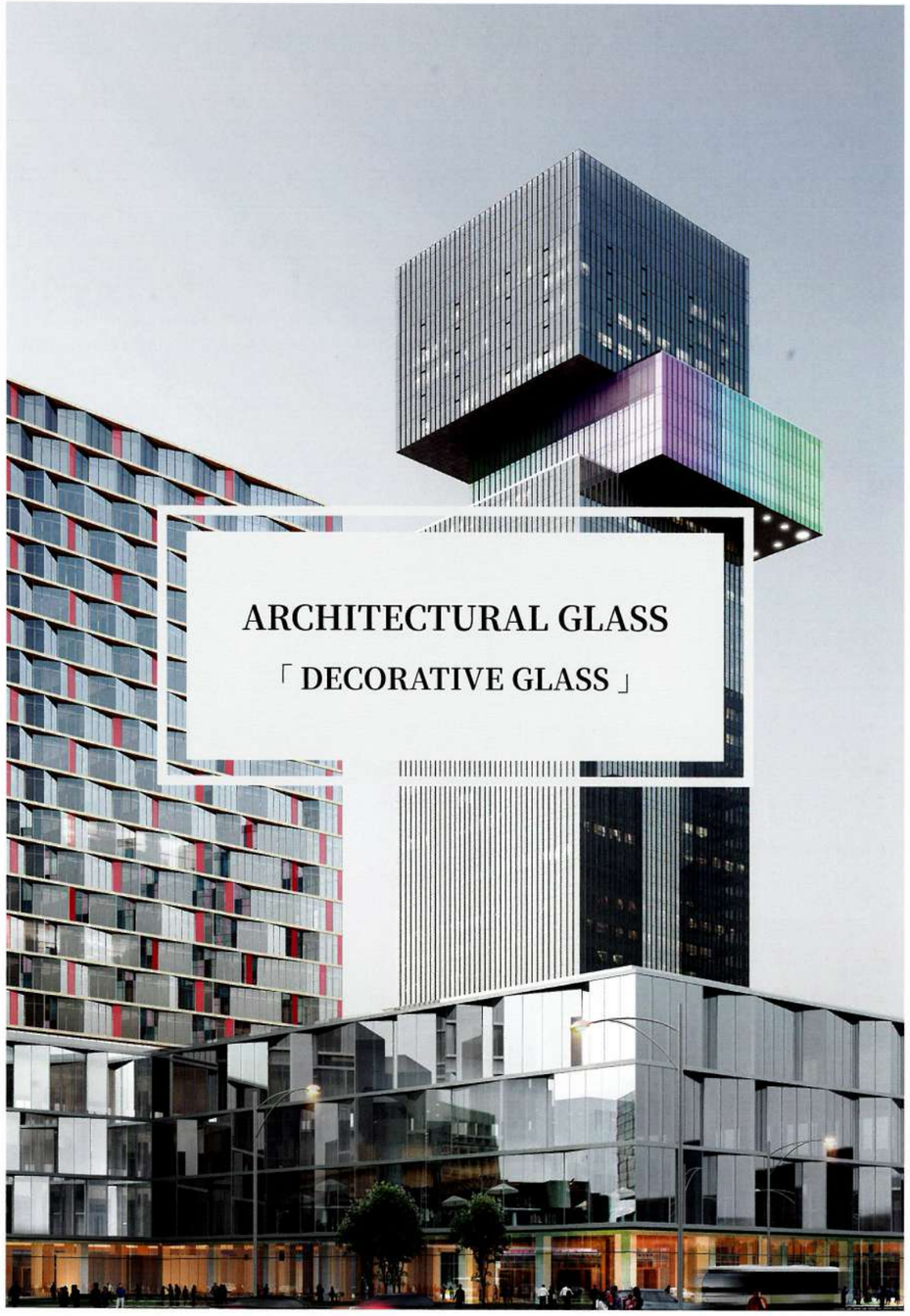
FORCED ENTRY RESISTANT GLASS

Forced entry resistance glass is a safety glass that has the ability to resist force penetration or cracking by impact. The product has good moisture resistance, high temperature creep resistance, high strength, UV resistance, environment resistance, sound insulation, and other properties. Force entry resistance glass is mainly used in facades, shop windows, doors and windows, indoor partitions, guardrails, and other parts of key protective areas with security and technical requirements, such as banks, government agencies, commercial and office buildings, residential buildings, vehicles, and ships.

STANDARD

- BS EN 356 Glass in building - Security glazing - Testing and classification of resistance against manual attack
- GA 844 Forced entry resistant transparent material





ENAMELED TEMPERED GLASS

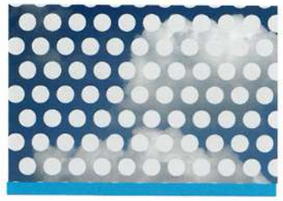
Enameled Glass is produced by silk-screening a selected color and pattern onto the surface of the glass, then either tempering or heat strengthening, enabling the frit to firmly adhere to the glass surface.

Modern designs need opaque, translucent, and special patterned glass for decorative use. Enameled Glass has gained more and more popular in architecture, creating unique styles.

PROJECT: New Zealand Telephone booth
PRODUCT: 6FT with frit

PROJECT: Chongqing Library
ARCHITECT: Perkins Eastman Architects

PRODUCT: 8YCE0180+12A+8C/8YCE0164 with frit+12A+8C



DOTS

LINES

WHOLE COVER

FEATURES

- □ Indestructible enamel bonding, non - porous surface with excellent scratch resistance, easy for cleaning.
- □ Variety of colors and patterns that can be customized on request.
- □ Sun Shielding.
- □ Spandrel Blocking.

SPECIFICATIONS

Maximum Size: 2440 x4500mm(96"x177 1/6")
Minimum Size: 250x250mm(9 5/6" x 9 5/6")
Thickness: 3 ~ 19mm(1/8" ~ 3/4")

STANDARDS

GB15763.2 Safety glazing materials in building-part2:Tempered Glass
China Compulsory Certificate (CCC) Safety Glass Certification
ASTM C-1048 American Society for Testing and Materials

PROJECT: DonganLake SportsPark Stadium
PRODUCT: 8 Li(Frit 2#)+1.52PVB+8 Li(Frit 4#) different two colour

PROJECT: COUNTRY GARDEN Sales Office (Yibin)
PRODUCT: 10C digital print frit (2#) +12Ar+10C LOW-E(3#)

PROJECTP: Paciffc Design Center/Red Building
PRODUCT: 6YNE0175(2#)(red frit)+12A+6C

PROJECT: Sino-Ocean Taikoo Li, Chengdu
ARCHITECT: The Oval Partnership (Hongkong) MAKE Architects (England)
CSWADI(China Southwest Architectural Design and Research Institute Corp.,LTD.
PRODUCT: 6YBE0152(2#) with frit+12A+6C+1.52PVB+6C

PROJECT: Shanghai Youyou Plaze
ARCHITECT: B+H
PRODUCT: 6SCLET0181(2#) frit+12A+6C
6SCLET0181(2#)+12A+5C+0.38PVB+5C
8SCLET0181(2#)Frit+12A+6C
6C(2#)+12A+6C(4#) frit

SYP MARBLE GLASS

SYP Marble Glass is a new product developed by SYP, using a variety of glass reprocessing processes, for example glass surface treatment technology, inorganic nano frit print and firing program. The product is made of float glass as the basic material, which has the appearance of marble, but has many advantages over stone. For example, with good process ability, corrosion resistance, and high cost performance, it can replace stone as a widely used reproduce building material, helping buildings obtain LEED certification and other sustainable environmental protection building certifications.

FEATURES

- Low cost: typically, around 50% of natural marble
- Large size: single marble glass size over 8 square meters
- More secure: diverse and secure fixation methods
- More flat: The flatness of a large area can be controlled at the millimeter level
- Curved surface: marble glass can be processed various curved surfaces
- Weather stability: acid and alkali resistance, temperature difference resistance, Non-water absorption, no deformation
- More environmentally friendly: no pollution, no radiation, recyclable
- Lightweight: lighter than marble
- Maintenance easy: stable performance, convenient cleaning

APPLICATION AREA

Marble glass can satisfy various personalized needs with rich color patterns and many reprocessing methods, it widely used in various personalized decoration fields such as building curtain walls (both inside and outside), doors and windows, interior decorative partitions, background walls, furniture panels, decorations, and home appliance panels. According to different surface treatment methods, it can be divided into two types: smooth surface and matte surface.

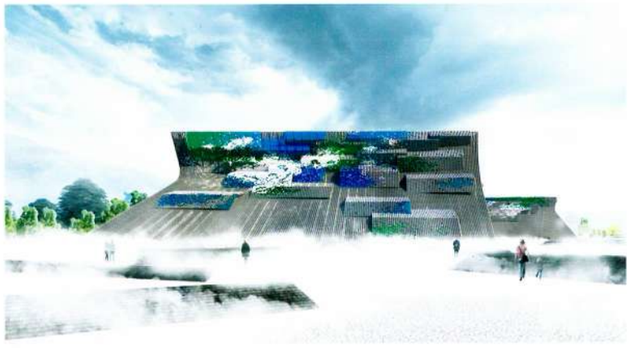
※ Patterns can be freely selected or individually customized

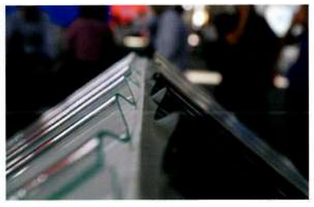
COLOURED GLASS TILES

Traditional tiles are mostly ceramic products. Due to problems with the materials themselves and the manufacturing process, traditional ceramic tiles have more defects, such as loose structure, easy penetration, poor durability, relatively thick and heavy, small single piece area, few colour, and difficulty in cleaning; With the progress of glass processing technology and equipment, SYP has developed colour glass tiles, overcoming various problems with traditional tiles and giving them new functions and character.

FEATURES

- Multi-style: Many types of products are available for selection, and suitable models can be selected based on the roof structure to achieve the optimal installation, construction, and use of building roofs
- High strength: tempered or heat strengthened glass, dense material, high strength, temperature difference and impact resistance
- Lightweight: Same density as ceramic tile, with a thickness of only 1/5-1/3 of ceramic tile
- Long life: The service life of glass can be said to be permanent if without being object impacted broken;
- Large area: single colored glass tile with an area of 0.45 square meters or more, one piece is equal to six pieces of ceramic tile
- Colorful: can provide almost all natural colors according to demand





PRODUCT CATEGORY

MONOLITHIC COLORED GLASS TILE

Also known as "tempered or heat strengthened enamel colored glass tile", be proceeded such as "screen printing, roller printing, or digital printing" to print inorganic high-temperature frit onto the surface of flat glass, and then be curved full toughened or heat strengthened to produce glass products with three-dimensional complex curved surface shapes of traditional tiles.

MONOLITHIC COATED COLORED GLASS TILE

Also known as "tempered or heat strengthened colored coated glass tile", it is a glass product that uses a vacuum magnetron sputtering process to coat the surface of flat glass, and then curved full toughened or heat strengthened to form a three-dimensional complex curved surface shape of traditional tiles.

LAMINATED COLORED GLASS TILE

A composite glass product consisting of two " Monolithic colored glass tile ", be adhered one or more layers of waterproof interlayer, After high-temperature and high-pressure treatment, permanently bonded together. Its biggest feature is its high safety. The broken glass fragments are bonded to the intermediate membrane, and will not peel off and splash to hurt people. Generally, when impacted by external objects, laminated colored glass tiles will not be penetrated.

MIRROR GLASS

Mirror glass is a new type of coating glass product independently developed by Shanghai Yaohua Pilkington Glass Group Co., Ltd. through vacuum magnetron sputtering (PVD) technology which can significantly achieve the ultra-exterior reflectance It is a unique green product without back paint.

FEATURES

- Durable pyrolytic coating
- Easily fabricated
- Bendable
- Durable pyrolytic coating
- Available on Clear substrate
- Durable and robust coatings
- Large stock sizes up to 6000 x 3050 mm depending on product type and thickness
- One way transparent

APPLICATION AREA

- Bathroom mirror,
- Furniture, cabinet doors
- Room partition
- Doors, partitions wall, partitions
- Decorative mirror
- Facades

ANTI-REFLECTIVE COATED GLASS

Anti-reflective glass (also known as AR glass) is produced by Shanghai Yaohua Pilkington Glass Group Co., Ltd. which applies vacuum magnetron sputtering (PVD) technology to coat on glass through special coating craft. The AR glass with the special coating either on the exterior surface of outboard lite or both sides of the outboard lite. The AR coating bases the principle of the light interference between different optical materials to eliminate light reflection, thereby the reflectance of exterior light reduced significantly meanwhile, the transmittance of visible light advanced significantly. It is a new type of coated glass product independent developed by us. The image of the surrounding reference objects is almost impossible to be viewed no matter how the glass be placed, horizontally, vertically, or obliquely. And the objects behind it can be viewed much more clearly than any other type of glass.

FEATURES

- The coating film is firm, corrosion resistant, non-oxidizing, and can be used as a single piece lite
- Ultra low reflectivity, ultra-high transmittance, effectively weaken the light reflectivity
- Single side coated product can be curved bent and heat-treated (the coating surface is put on the side in non-contact with the roller of the furnace
- Can be laminated (the film coating surface cannot be laminated on the side that contact with the interlayer

APPLICATION AREA

Anti-reflective coated glass is particularly suitable for applications that require a high level of clarity, for example, ultra-low reflective curtain walls, doors and windows, museums, display windows, device touch screen cover plate and other fields.

Its ultra-low reflection and ultra-high transmittance characteristics can bring you clear visual enjoyment.

Product configuration	Performance data T%	Rout%
6mm low iron+AR(2#)	94.00	5.20
6mm low iron+AR(1#, 2#)	97.00	1.10
6mm online AR(1#)+0.76PVB+6mm online AR(2#)	89.00	1.60

※ The above data are calculated by WINDOW6.3 developed at Lawrence Berkeley National Laboratory, except for having been given clear indication of standards.
※ The glass performance data will be finalized by the performance data sheet which submitted by SYP. Above performance just for design reference.

AR glazing

Normal glazing

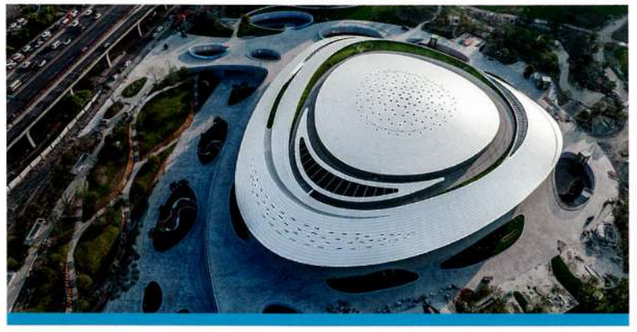
ELECTROCHROMIC GLASS

Electrochromic glass also called, Smart glass is a new type of intelligent glass product developed based on intelligent color changing technology, which combines an organic thin film intermediate layer compounded with color changing materials or a sandwich glass sheet compounded with color changing materials; It is superimposed by a special interlayer with glass and then adhere under high temperature and pressure.

Currently, the mainly technical ways such as electrochemical color change, colourant liquid crystal color change, and Nano-particle dispersion color change. Color changing glass (similar to color changing glasses) is colorless and transparent when powered off, its color depth and visible light transmittance can be step less adjusted when power on. This intelligent electrochromic glass can adjust the color depth and light transmission as needed, integrating viewing scenery and energy-saving.

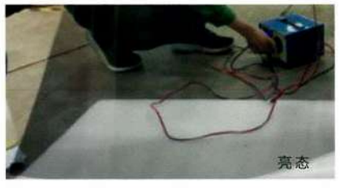
FEATURES

- According to customers' request to change the light transmittance and color of the glass, avoid the glare and improve the comfort.
- Intelligent energy-saving, according to the outdoor light and thermal environment and indoor functional requirements, adjusting the color and light transmittance of glass.
- It can be combined with photosensitive and temperature sensitive devices to automatically adjust the color and transmittance of glass, achieving dynamic energy saving in the meantime to balance the indoor and outdoor environment.
- Excellent durability, UV insulation, sound insulation, noise reduction, and safety.



PROJECT: Hangzhou E-sports Center
ARCHITECT: Zhejiang Zhongnan Construction Group
PRODUCT: 8 Li+Electrochromic film+8 Li+16A+8 Li Low-E(5#)+1.52PVB+8 Li

暗态



亮态

APPLICATION AREA

- Building façade, doors and windows, transparent roof system, and canopy.
- Home and appliance panels.
- Vehicle skylights, side windows, anti-glare mirrors, etc.
- Sightseeing elevator protective cover and box.

PDLC GLASS

PDLC glass is a new type of smart glass product developed based on PDLC (polymer dispersed liquid crystals) film technology. which is processed by laminated the switchable film between two pieces of glass, using high-grade laminated technology. The PDLC film Is opaque when powered off, and transparent when powered on, allowing PDLC glass to appear transparent and opaque as needed, integrating transparent viewing and privacy protection functions, display Unique and novel impression.

FEATURES

- According to the need to instantly change the transparent and opaque state of the glass, adjust the space perception, protect privacy.
- Excellent durability, UV insulation, sound insulation, noise reduction, and safety.
- Both transparent display and digit show screen functions, used for publicity and display.
- Scattering and reflection solar, energy Saving.
- Scatters light, light transmits but opaque, improves comfort.

APPLICATION AREA

- Enclosure materials for privacy spaces.
- Commercial display window.
- Meeting rooms, training houses, etc. in office environments, with spacing partitions and projection screen functions.
- Home and appliance panels.

Before

After

TERMS AND DEFINITIONS

Solar spectral composition

The solar spectrum consists of visible, ultraviolet, and infrared light.

The energy distribution is:

UV light2%

Visible light47%

Infraredlight 51%

visible light transmittance

In the range of visible spectrum (380nm~780nm) and under the condition of CIE D65 standard illuminating body, the ratio of transmittance flux to incident flux that meet the requirement of CIE standard visual acuity function.

visible light reflectance

In the range of visible spectrum (380nm~780nm) and under the condition of CIE D65 standard illuminating body, the ratio of reflectance flux to incident flux that meet the requirement of CIE standard visual acuity function.

solar direct transmittance

The ratio of the luminous flux of the solar radiation passing through the measured object to the incident radiation flux with the wavelength range of 300nm~2500nm.

solar direct reflectance

The ratio of the reflected flux of the measured object to the incident flux of the solar radiation with a wavelength range of 300nm~2500nm.

U value

U value (K value is used in some countries) U value

A parameter that describes the heat transfer through the central area of the glass in unit area , within unit period of time and unit temperature difference between interior and exterior side, without considering the edge effect under the steady-state condition.

The unit of U value is watt Kelvin per square meter Kelvin temperature degree (W/m2 · K).

Total solar energy transmittance (solar factor, g value)

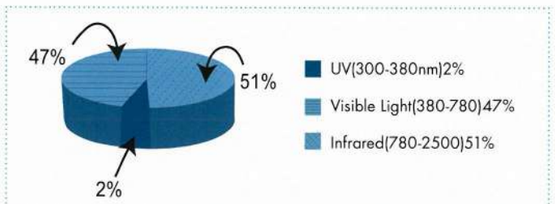
In the solar spectrum range (300 nm to 2500 nm), the sum of the solar direct transmittance of glass and the energy ratio of secondary radiation to the interior of the room after absorbing solar energy.

S.C. shading coefficient

The ratio of the total solar energy transmittance of one kind of glass to that of 3mm clear glass under the same boundary condition.

Heat transfer mode

conduction, convection, radiation



RELEVANT CERTIFICATES

Hi-tech Enterprises Shanghai

Green Product Shanghai

Shanghai brand certiffcation2021-2024

KM 542086

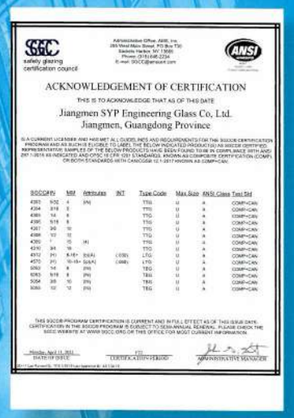
ISO9001 Shanghai Plant

Certificate of China Classification Society

ISO Chongqing Plant

IGCC Chongqing Plant

AS/NZS 2208 Jiangmen Plant



SGCC F22 PlantCertiffcate Jiangmen Plant

ISO 14001

ISO 45001

Energy Management System

CE

CONTACT US

OPERATION MANAGEMENT DEPARTMENT

ADD: Building 4-5, No.1388 Zhangdong Road,

Pudong , Shanghai, China.

TEL: +86 21 61633599

POSTCODE: 201203

E-MAIL: marketing@sypglass.com

WEBSITE: http://www.sypglass.com