



BETTER GLASS

20 YEARS EXPERIENCE

PRODUCT BROCHURE

General Catalogue

BUILDING GLASS

General Catalogue



COMPANY PROFILE

Dongguan Better Glass Technology Co., Ltd., is a large-scale glass enterprises, which focus on glass deep processing and related technology research and development. the company team has more than 20 years of experience in the field of architecture, furniture, glass processing, and company has professional imported glass processing equipment, products range cover architectural glass, glass furniture , electronic glass, architectural aluminum profiles and related hardware and aluminum profiles accessories to serve private homes and commercial buildings around the world.

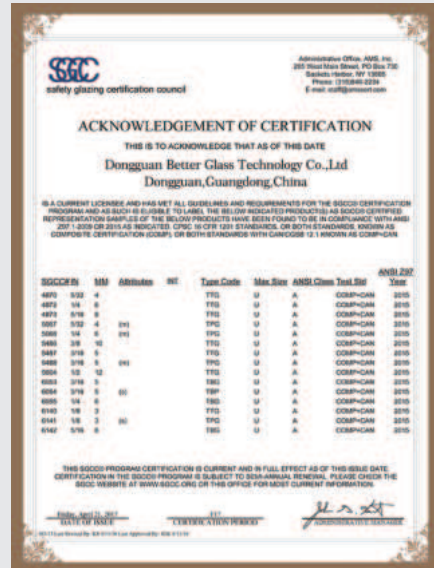
Our company has outstanding production capacity in the regular flat tempered glass(ESG), laminated glass(VSG), insulating glass(IGU),the average daily production capacity of 8,000 square meters. At the same time with the production of hot-bending glass, curved tempered glass, UV printing glass, off-line coated glass, extra size (up to 18 meters long, 3.3 meters wide),jumbo size glass, SGP laminated safety glass processing ability.

We are committed to providing high quality products and excellent one-stop service. Customers can get glass, aluminum and relevant hardware from our company as well as technique support since the beginning of your project.

Products qualified with ISO9001: 2008 quality management system standards, all the glass we produced complied with China's CCC certification, the European Union CE certification, the British BS certification, and SGS ROHS environmental standards.

C ONTENTS

| | |
|---------------------------------------|----|
| Flat tempered glass | 1 |
| | 3 |
| Heat-strengthened glass | |
| Curved tempered glass | 5 |
| | 7 |
| Hot bending glass | |
| PVB laminated glass | 9 |
| | 11 |
| EVA laminated glass | |
| SGP laminated glass | 13 |
| | 15 |
| Insulated glass | |
| Silkscreen printing glass | 17 |
| | 19 |
| Retlective glass | |
| Low-E glass | 21 |
| | 23 |
| Glass parameter | |
| Hot soaked tempered glass | 27 |
| | 29 |
| Smart switchable glass | |
| Temperature controlled sunshade glass | 31 |
| | 33 |
| Laminated LED luminous glass | |
| Ultra clear glass | 35 |
| | 37 |
| Tinted flooat glass | |
| Anti-slip glass | 39 |
| | 41 |
| Digital printing glass | |
| Anti-reflective glass | 43 |
| | 45 |
| One-way mirror glass | |
| Compound fireproof glass | 47 |
| | 49 |
| Wire glass | |
| Snower screen glass | 51 |
| | 53 |
| Glass railing system | |
| Float glass parameter | 55 |



C COOPERATIVE PARTNER



T ECHNOLOGICAL PROCESS



1 Float Glass



2 Line of Production



5 Tempering



6 Insulating



3 Cutting



4 Grinding



7 Laminating



8 Finished Product

Tempered glass

Tempered glass(also called toughened glass,full tempered glass,short for FT)is a type of glass with even compressive stress on the surface which is made by heating float glass to nearly softening point and then cooling it down rapidly by air.During the instant cooling process,the exterior of glass is solidified due to rapid cooling while the interior of glass is cooled down relatively slowly.This process will bring the glass surface compressive stress and the interior tensile stress which can improve the mechanical strength of glass by germination and result in good thermal stability.

Characteristic

© Safety

When the glass is impacted, it is not easy to break. When the glass is broken, it is similar to honeycomb-shaped small obtuse-angle particle fragments, and will not cause serious harm to human body.

© High Intensity

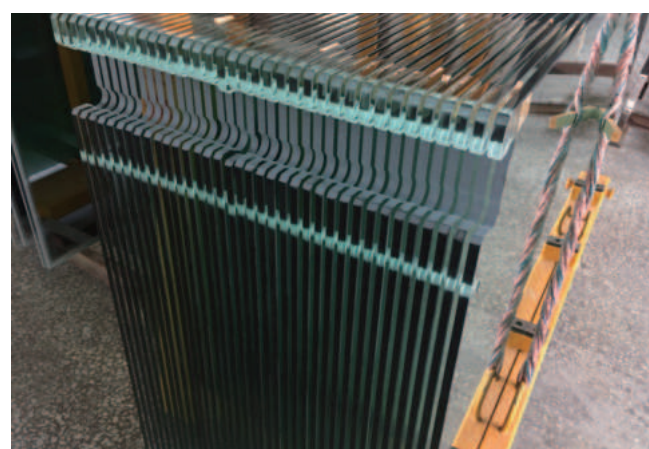
Toughened glass has 3-5 times higher impact strength than float glass of the same thickness.

© Large Deflection

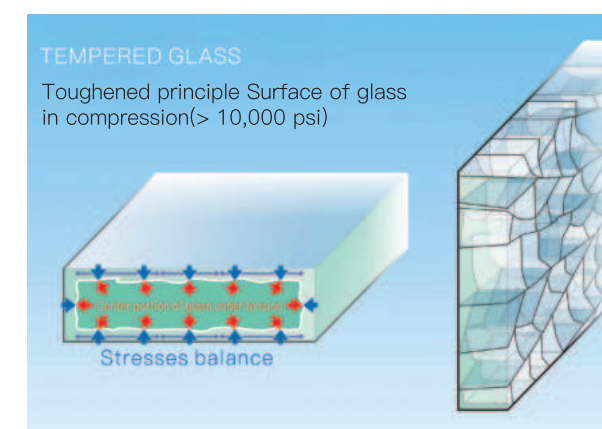
Compared with ordinary glass of the same thickness, the deflection of tempered glass is 3-4 times larger than that of ordinary glass. When the tempered glass is subjected to load, its maximum tensile stress is not located on the surface of the glass as ordinary glass, but in the center of the tempered glass plate.

© Thermal Stability

Tempered glass has good thermal stability. Compared with ordinary glass of the same thickness, the thermal impact strength of tempered glass is three times higher, and the temperature range of abrupt change is 220 - 250. Compared with ordinary glass, the temperature range of tempered glass is only 70 - 100. When tempered glass is subjected to a certain quench temperature, the compressive stress on the surface of the tempered glass is opposite to the tensile stress direction and cancels each other. Tempered glass is subjected to extreme heat, the surface produces compressive stress, because the glass compressive stress is several times the tensile stress, so tempered glass can also withstand a certain degree of hot temperature.



| Product | Tempered Glass |
|----------------|--|
| Thickness | 3mm,4mm,5mm,6mm,8mm,10mm,12mm,15mm,19mm,22mm,25mm |
| Available Size | Min size: 300x300mm,max size: 3300x13000mm |
| Color | Clear,ultra clear,euro gray,dark grey,F green,dark green,Ford blue,dark blue,etc |
| Edge | Polished edge(c edge,pencil edge),flat edge,drill hole,etc |
| Application | Building Curtain wall,Windows,Doors,Exhibition Hall,Shower Room,Furniture Glass |



Compare normal glass with toughened glass

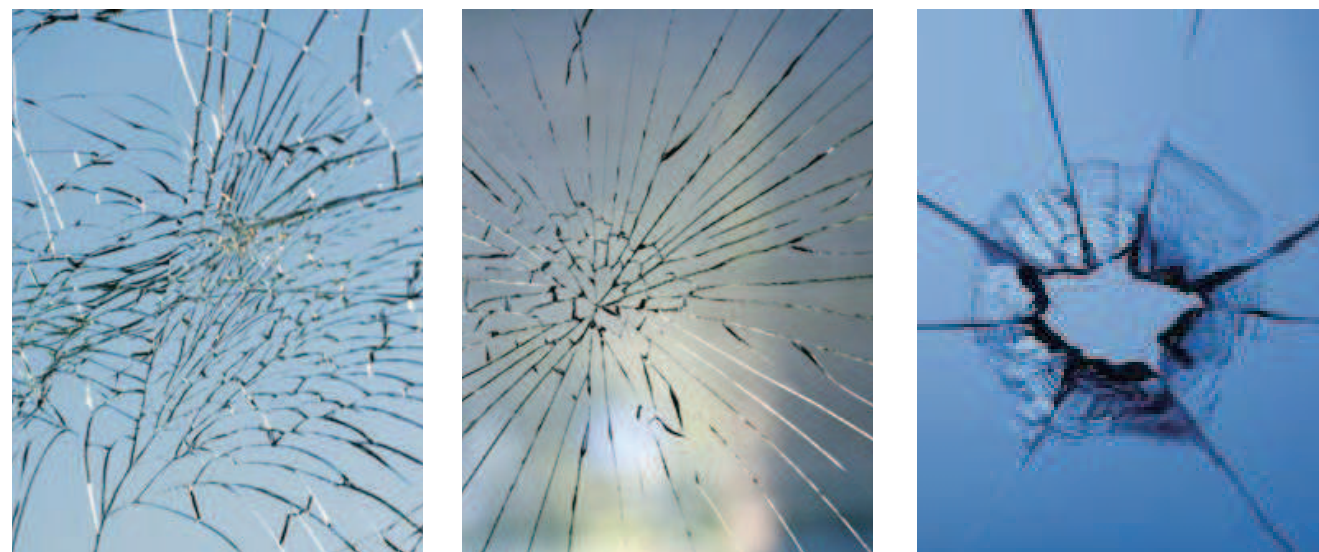
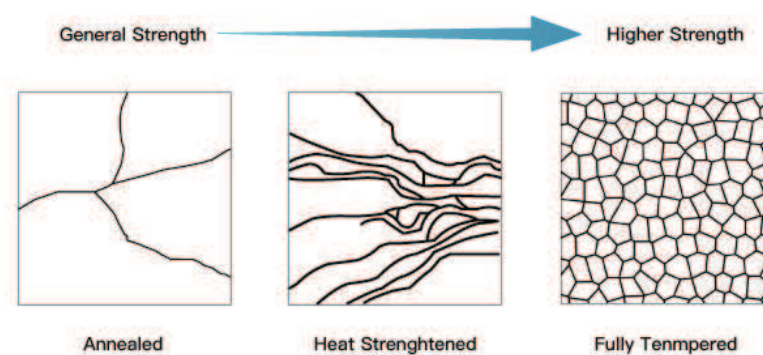


The comparison between tempered glass,heat strengthened glasss and normal glass

| Feature | Tempered | Heat strengthened | Normal |
|-------------------|--------------------|-------------------|----------|
| Safety | best | general | none |
| Intensity | 150mpa | 100-1520mpa | 30-90mpa |
| Thermal stability | 250-320℃ | 100℃ | 2-100℃ |
| Surface stress | 95mpa | 24-69mpa | |
| Broken state | obtuse-angle grain | shooting broken | sharp |
| Self-destruction | sometimes | seldom | never |

H EAT-STRENGTHENED GLASS

Heat-strengthened glass (HS) has the same production method as tempered glass, to heat the glass to the softening point, then rapidly cooled down. During the instant cooling process, cooling rate caused by wind pressure is slower than tempered glass. therefore, temperature variance between intermediate level and superficial level is relatively smaller, stress is relatively smaller.



Heat Strengthened Glass Fragment Status

Characteristic

© High intensity

Mechanical strength of heat-strengthened glass is 1.5-2 times than annealed glass.

© Thermal ability

Variance of the heat-strengthened glass heat resistant is 130°C -170°C , which can fully withstand the impact of temperature difference in middle glass and side glass from intense solar, keeping unbroken.

© Prevention from self destruction

Compared with tempered glass, can reduce self explosion, which is its biggest advantage.

© Stress residue

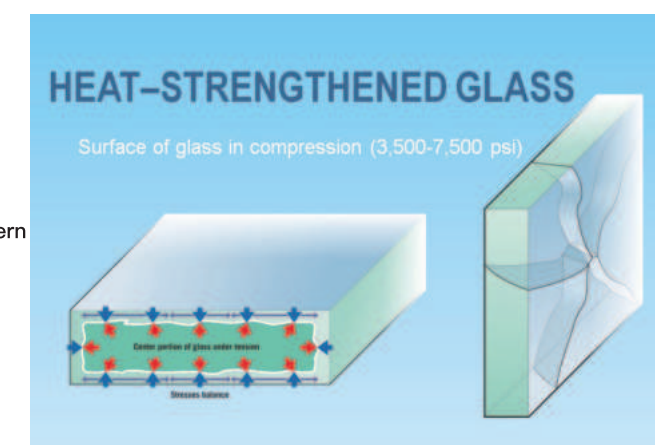
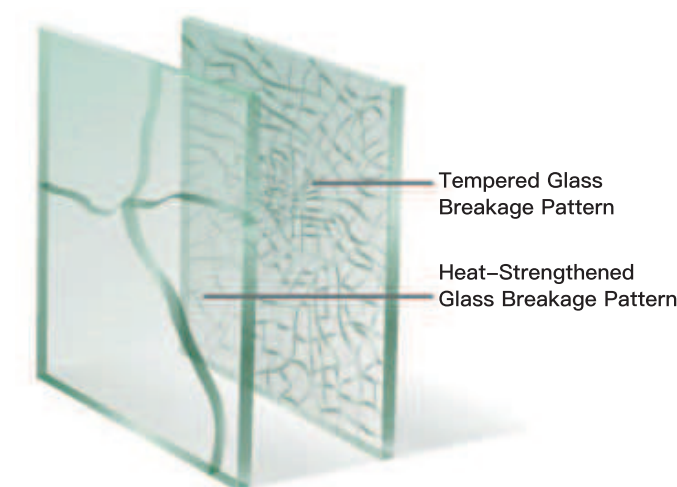
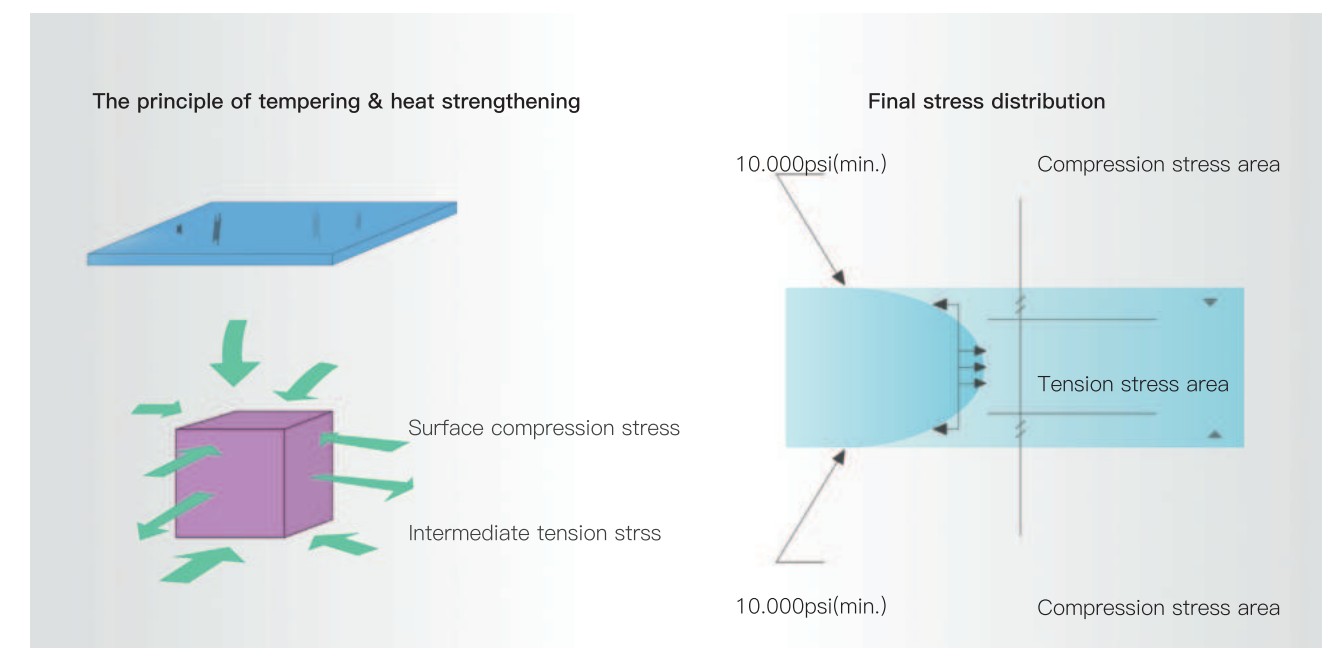
When heat-strengthened glass is destructed, its special stress structure enables fragments maintain in the frame, unlike tempered glass that will become particle falling down. This advantage of heat-strengthened glass saves time for replacement. And after being destructed, every fragment remains a certain residual stress.

© High plainness

Compared with tempered glass, because of small cooling stress and slow cooling rate during production, plainness of heat-strengthened glass is close to annealed glass but better than tempered glass.

Applications

Widely used in curtain glass wall, greenhouse, internal partition, especially suitable for compound laminated glass.



Toughened principle Surface of glass in compression(> 10,000 psi)

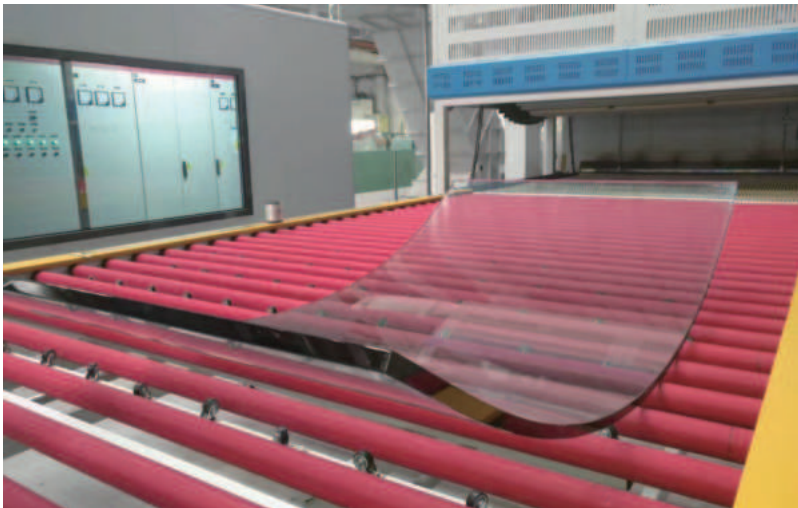
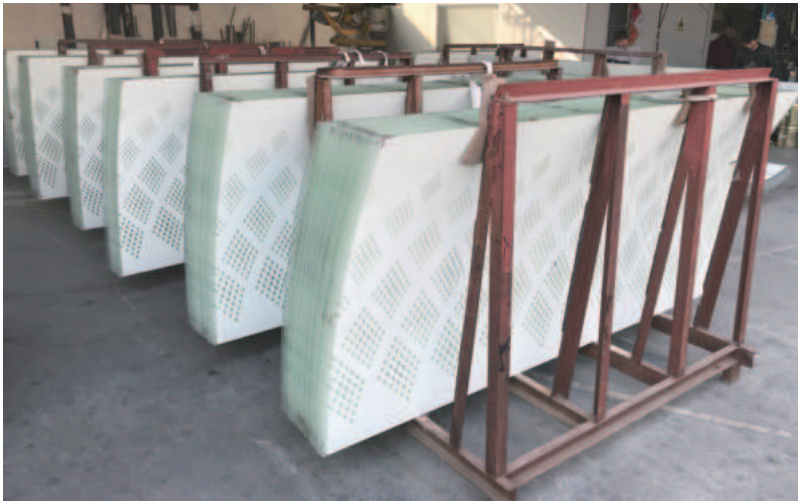
| Product | Heat-strengthened glass |
|----------------|--|
| Thickness | 3mm, 4mm, 5mm, 6mm, 8mm, 10mm, 12mm, 15mm, 19mm, 22mm, 25mm |
| Available Size | Min size: 300x300mm, max size: 3300x13000mm |
| Color | Clear, ultra clear, euro gray, dark gray, F green, dark green, Ford blue, dark blue, etc |
| Edge | Polished edge (c edge, pencil edge), flat edge, drill hole, etc |

© Curved tempered glass

Curved tempered glass is shaped by mould controlled by computer, rapidly and uniformly cooled immediately after it is heated to the designed shape. This glass has all the good properties of flat tempered glass.

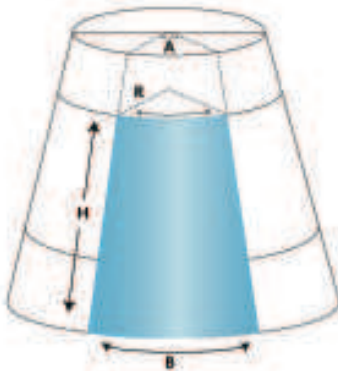
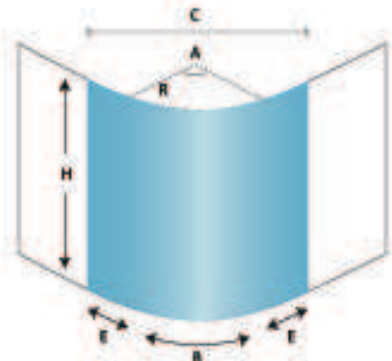
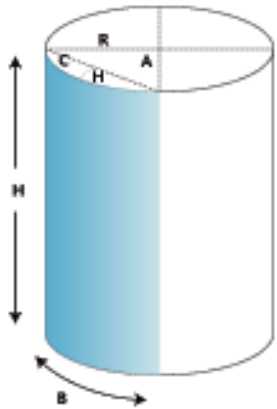
© Applications

Construction, Furniture, Light System, Guardrails, Vehicles.

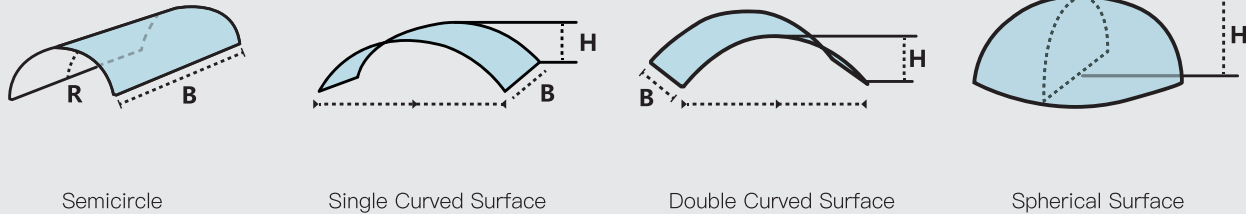


© Characteristic

Safety, mechanical attack resistance and thermal stability are as good as those of flat tempered glass. It belongs to safety glass which anti-wind pressure ability and deflection performance are better than those of flat tempered glass.



Curved Glass Types
Various types can be produced.



Specification

| | |
|----------------------|---|
| Products name | Curved Tempered Glass |
| Thickness | 4-19mm |
| Maximum size | 2440mm*8000mm |
| Minimun Radius Range | 5-6mm R > =450mm; 8mm-10mm R > =650mm; 12mm-19mm R > =1200 |
| Features | It has same safety and ability of anti-impact with flat tempered glass,but has a higher intensity for the wind pressure and bending than the flat tempered glass. |
| Certification | BS, CSI, CCC, ISO, CE, AS/NZS2208 |



HOT BENDING GLASS

Hot Bending(curved) glass

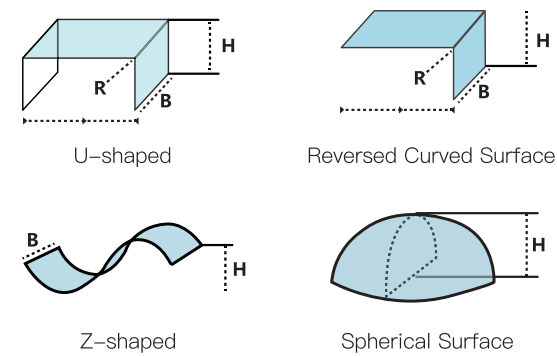
Hot Bending(curved) glass is made of float glass which is firstly heated to soften point and then bent to shape by weight of glass itself or outside forced, and finally cooled down.

Characteristic

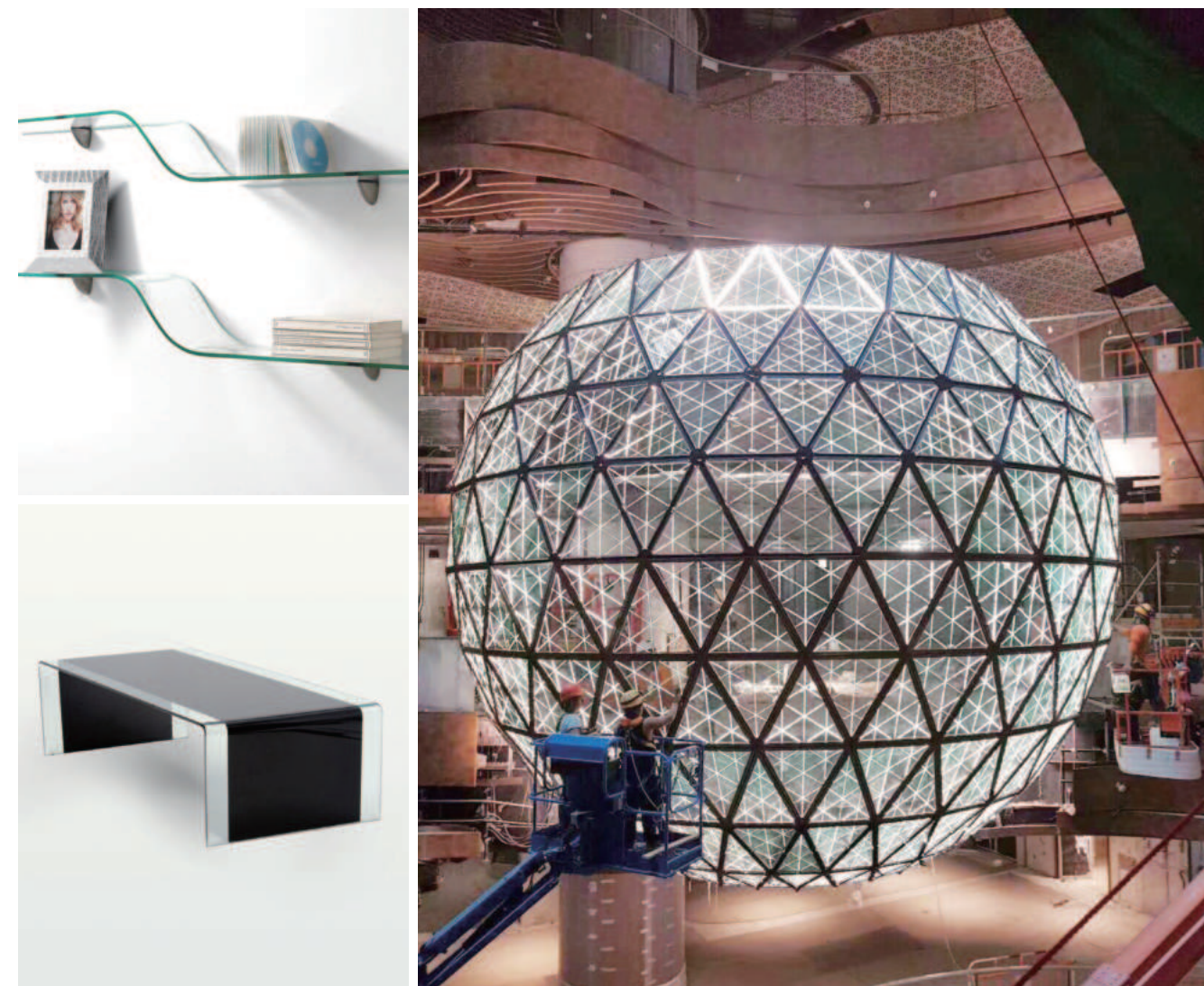
- ◎ More accuracy in arc.
- ◎ Less light aberration.
- ◎ It's not safety glass.

Applications

Glass curtain wall, doors and windows, automobile, canopy, tea table, partitions and decoration industry.



| | |
|---------------|--|
| Product name | Hot bending glass |
| Thickness | 3mm, 4mm, 5mm, 6mm, 8mm, 10mm, 12mm, 15mm, 19mm,22mm |
| Standard size | 2440mm×3660mm, 2400mm×3300mm, 2100mm×3300mm, max size:2540mm×4600mm, mini size:300mm×800mm |
| Color | Clear green blue grey |
| Edge | Polished edge (c edge, pencil edge), flat edge, drill hole, etc |





PVB is also called as polyvinyl butyral, is currently the most widely used interlayer material for architectural glass and automotive glass. PVB laminated glass has good safety, sound insulation and resistance to ultraviolet light, but PVB water resistance is not well, long-term wet soak easy to delaminating. Has a high transparency, cold resistance, impact resistance, resistance to ultraviolet radiation. Compared with EVA, PVB storage and processing technology to be more complex. PVB generally requires the film temperature between 18–23 °C, relative humidity of 18–23%, PVB moisture content of 0.4% –0.6%, after preheating rolling or vacuum, you also need to use the autoclave in the 120–130 °C and 1.0–1.3MPa in the insulation holding for 30–60 minutes. Our company own advance laminated glass professionals for our equipment's production. In recent years, domestic PVB developed rapidly, usually with the use of Kingboard PVB, imported PVB mainly from the United States DuPont, Saflex and Japan's kuraray company.

PVB laminated glass has the following five characteristics

◎ Safety

In the external impact, due to the elastic layer of the role of the impact of absorption Can prevent the impact of penetration, even the glass is broken, but only produce spider-like crushing cracks Its debris firmly adhered to the middle layer will not fall off and scattered and can continue to use until more change.

◎ Anti-theft

PVB laminated glass is very tough, even if the thieves broken glass. because the middle Layer with the glass firmly together to keep the integrity.

◎ Sound insulation

PVB film because of the damping function of the acoustic wave, PVB laminated glass can have Effectively suppress the spread of noise, especially in the airport, station, downtown and roads on both sides of the building After the installation of laminated glass, the sound insulation effect is very obvious.

◎ Anti-ultraviolet performance

PVB film can absorb more than 99% of the UV, thus protecting the Indoor furniture, plastic products, textiles, carpets, artwork, ancient artifacts or goods from UV Radiation of the line and the occurrence of fading and aging.

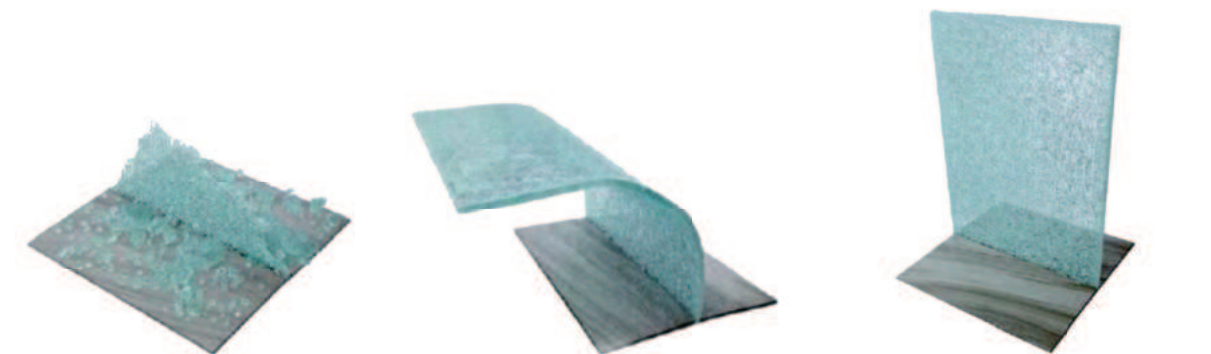
◎ Energy-saving

PVB film made of building laminated glass can effectively reduce the sunlight through. with The thickness of the use of dark low light transmittance PVB film made of laminated glass to block the heat more powerful. At present, domestic production of laminated glass with a variety of colors.



Applications

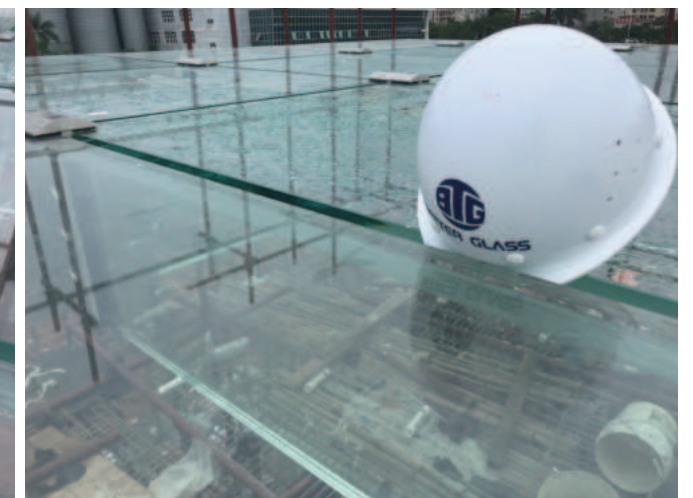
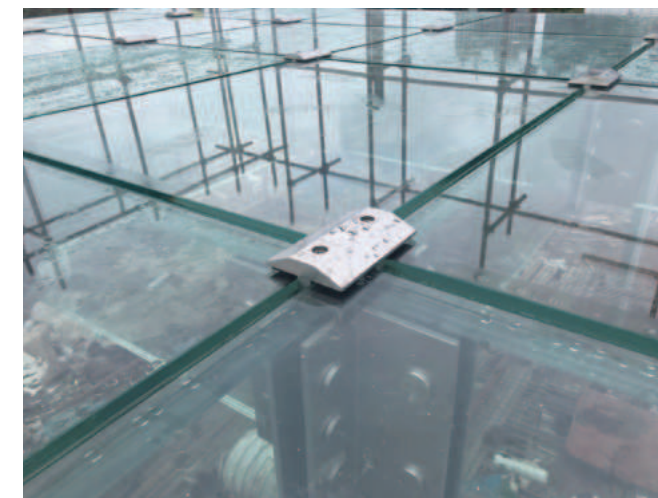
PVB film can absorb the impact energy, does not produce broken pieces, this safety glass is widely used in automobiles, commercial buildings, bank counters, all kinds of bullet-proof glass. At the same time in the construction of curtain walls, recruiting, window, bank counters, prison visits, steel stove screen and a variety of bullet-proof glass and other construction areas are also widely used.



12mm Tempered Glass

6+1.14+6mm Laminated Glass
with PVB Interlayer

6+0.89SGP+6mm
Laminated Glass with SGP Interlayer



EVA LAMINATED GLASS

EVA full name is the ethylene – vinyl acetate copolymer, with water resistance, corrosion resistance. When the EVA film used in laminated glass, EVA melt temperature is low and fluidity is better relative to PVB or SGP. Difference in ordinary transmission and high transmission. Suitable for film in the film, folder roll, cloth, etc., and can be made into patterns, materials, rich decorative glass. EVA water resistance is good, but the resistance to UV performance is normal, in the sun prone to yellow aging. At present, EVA laminated glass is mainly used for indoor partition, shower room, etc., generally decorated more.

Characteristic

- ◎ Water resistance.
- ◎ Corrosion resistance.
- ◎ Safety

Tenacity of EVA is fairly good. It can quickly absorb and weaken a mass of striking energy when laminated glass is attacked by outside force. Therefore, laminated glass is hard to be penetrated and can remain integrally in the frame even when it is broken. Therefore, laminated glass is the true safety glass.

◎ Sound Insulation

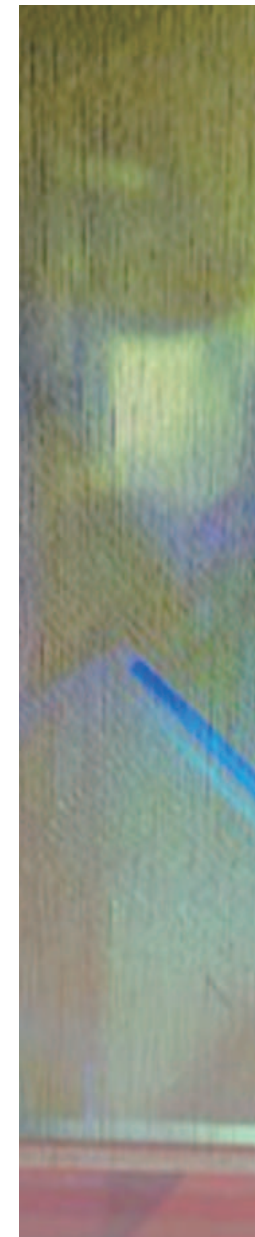
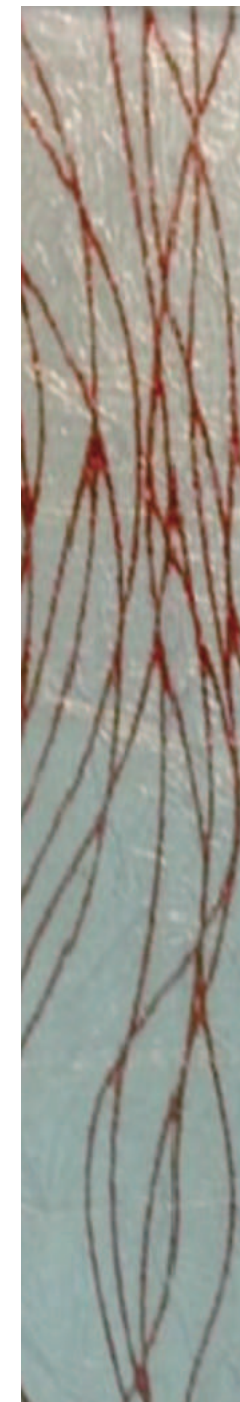
EVA can effectively prevent sound wave. Sound wave can be obviously weakened when it goes through laminated glass so that noise disturbance in office or living environment is reduced.

◎ Anti-UV

Laminated glass can effectively prevent UV (more than 99% of UV) which can protect the valuable furniture, exhibit and artwork etc. from discoloring from UV.

Applications

Indoor partition, shower room, etc.





SGP also called Sentry glass plus, which is one kind of high performance laminated materials developed by Dupont, Kuraray in the end of 2014 acquired.

SGP laboratory. SGP has a very high strength, SGP laminated glass carrying the same thickness of the PVB sandwich bearing capacity of 2 times; the same time load and thickness of the case, SGP laminated glass bending deflection only 1/4 of PVB laminated glass.

The SGP folder film tear strength is 5 times than PVB folder film, even if the glass broken, SGP can also stick broken glass breakage after the formation of a temporary structure, the bending deformation is small, but also can withstand a certain amount of load And not the whole piece of fall.

SGP film has a good edge stability, moisture is not sensitive, SGP folder film itself colorless translucent, and good weather resistance, not yellowing. SGP film yellowing coefficient is less than 1.5, while the PVB film yellowing coefficient of 6-12, so the use of ultra-white mezzanine more.

SGP production process and PVB through the same production line. The higher price is the reason why SGP is slow to be accepted, Solutia (which has been acquired by Eastman Chemical) has a product close to SGP DG film, low awareness in the country.

Characteristic

SGP film, with a transparent, high mechanical strength, good impact resistance, is the safety of high glass varieties, with explosion-proof, bulletproof, anti-typhoon and other high security.

Applications

Glass barriers of public buildings, balcony doors and windows, indoor partition staircase between the glass and shield, a typical building airport terminal, glass roof, glass patio, tilt installation of the windows.

Floor, glass corridor. SGP laminated glass can withstand greater pressure and can meet the needs of transparent observation, can be used as submarine windows, deep water peep mirror, watch aquarium and so on.

High-rise buildings, large public buildings safety glass.

Oversized architectural glass. The use of SGP film production of more than 10 meters in length of architectural glass or glass column, its safety, ornamental to meet the needs of this architectural glass, typical applications such as Zhangjiajie glass plank road.



HONGKONG
TONGLUOWAN
APPLE MOBILE PHONE
STORE

INSULATED GLASS

Insulated glass

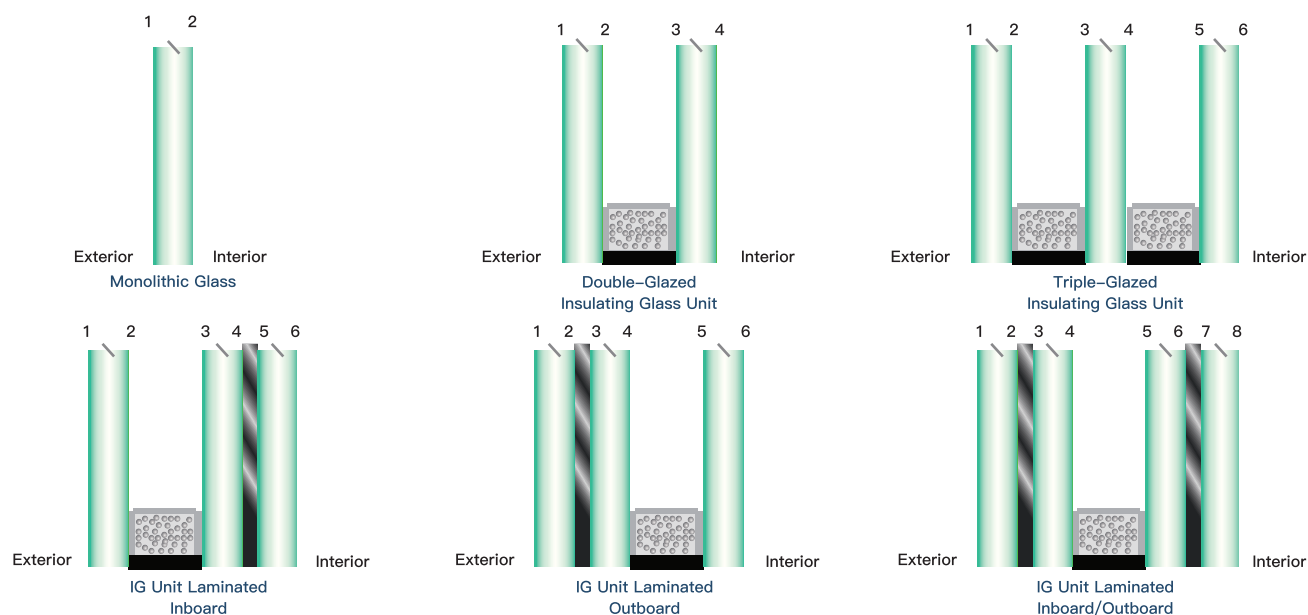
Insulated glass consists of two or more pieces of glass. The different pieces of glass are isolated through aluminum tubes whose insides are filled with desiccant. The hollow space is inflated with dry air or inert gas and sealed with butyl rubber, polysulphide sealant, or structural adhesive, to form glass with dry space.

Characteristic

Insulated glass can well heat-proof, sound-proof and lower self-weight of buildings.

Applications

Doors, windows, large scale curtain walls, train windows, freezers.

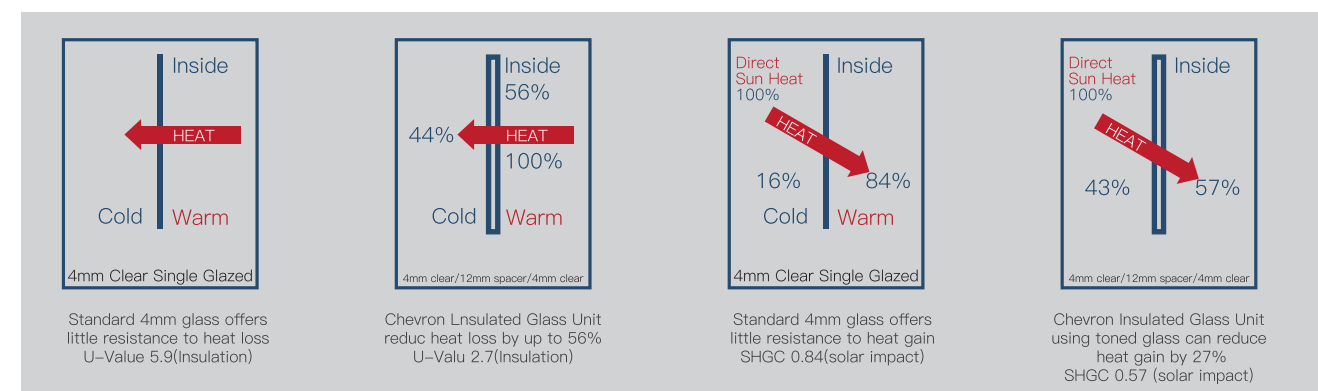
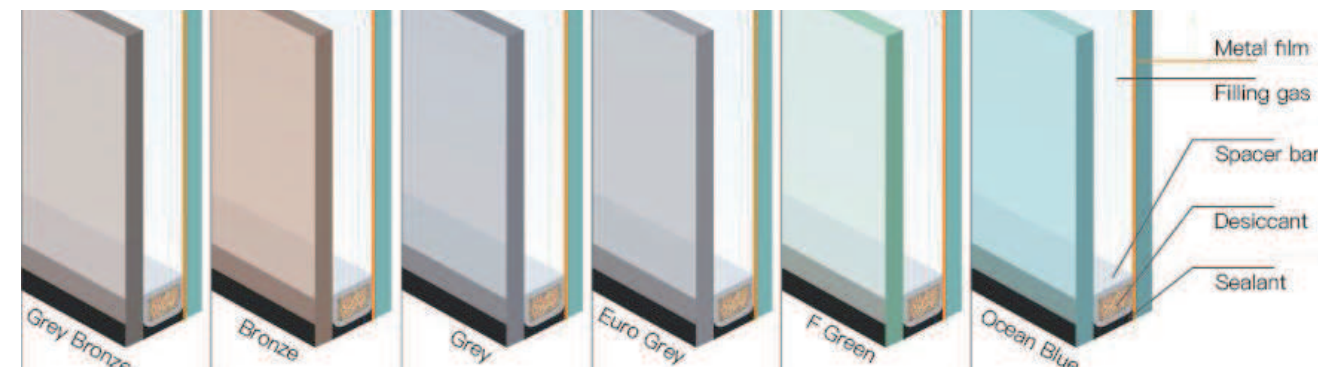


Specification

| | |
|--------------|--|
| Product name | Insulated glass |
| Color | Clear, Green, Grey, Blue, etc. |
| Size | According to customer's demand |
| Thickness | 5mm+9A+5mm, 6mm+9A+6mm, 6mm+12A+6mm, 8mm+12A+8mm |

Parameter Introduction

| Combination structre | Thickness | Transmission property | | | | | Heat transfer rate(w/m2.k) | Coeffici ent% |
|-------------------------|-----------|-------------------------|-----------------------|-----------------------|--------------------------------|----------------------|-------------------------------|------------------|
| | | Visible light | | Solar radiation | | | | |
| | | Transmission Ratio % | Reflection Ratio % | Absorption Ratio % | Direct transmission Ratio % | Reflection Rate % | | |
| 5mm+6A+5mm | 16mm | 80 | 14.1 | 21.5 | 66 | 12.2 | 3.61 | 0.83 |
| 6mm+6A+6mm | 18mm | 79.1 | 14 | 25.1 | 63 | 11.6 | 3.35 | 0.82 |
| 8mm+6A+8mm | 22mm | 77.1 | 13.6 | 31.2 | 57.5 | 11.1 | 3.31 | 0.76 |
| 10mm+12A+10mm | 32mm | 75.4 | 13.6 | 36.5 | 53.1 | 10.5 | 2.87 | 0.73 |



SILKSCREEN PRINTING GLASS

Silkscreen printing glass

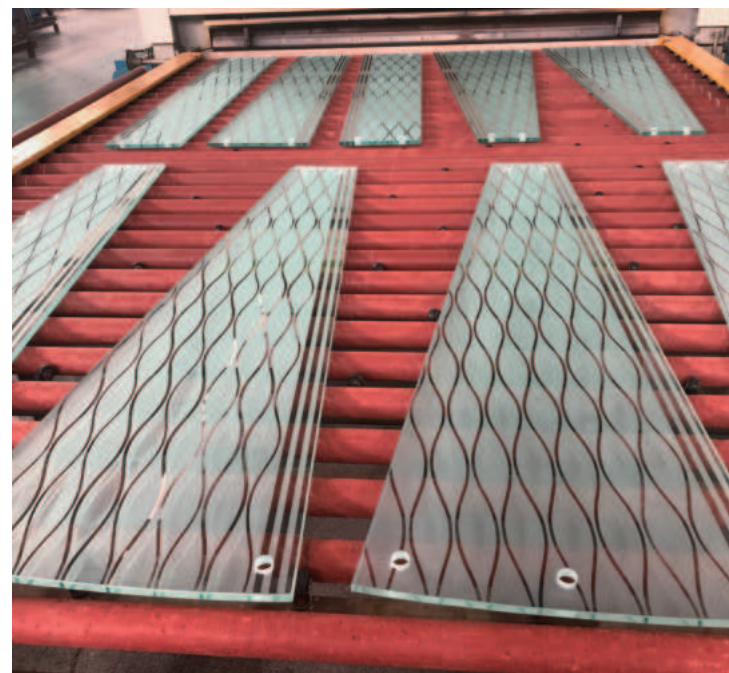
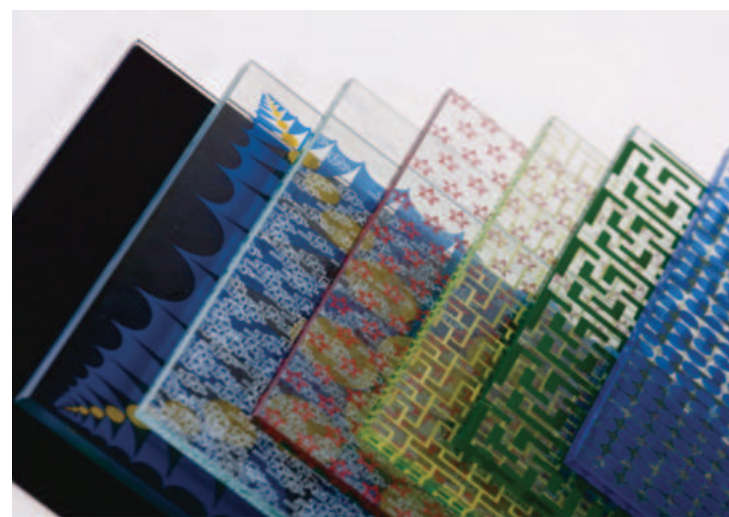
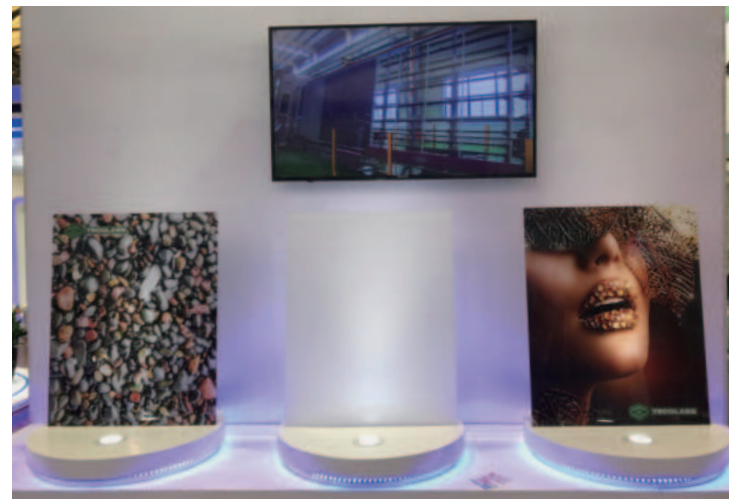
The procedure of silkscreen printing glass is printing the needed design on the glass surface with inorganic glaze which has high temperature resistance. After process of drying and agglomeration, the silkscreen pattern designs will be agglomerated permanently on the glass surface. For the similar process of tempered glass, silk screen printing glass has all the characteristics of toughened glass. Meanwhile, silkscreen glass is a kind of safe anti-acid and anti-alkaline decoration material.

Characteristic

- ◎ Painted surface is smooth, easy cleaning; can maintain permanent.
- ◎ Special resistance to humidity making it suitable for use in high humidity rooms like kitchens and bathrooms.
- ◎ Use lead free safety paint, human harmless and environmental protection.
- ◎ Various colors and patterns (customizable), durable outstanding effect.
- ◎ Absorbing and reflecting solar energy, improving solar control.
- ◎ Optimal concealing effect, protecting privacy.

Applications

Interior partitions and office enclosures.
Shower doors and kitchen splashbacks.
Balustrades and railings.
Flooring and staircases.
Furniture like table tops, cabinet doors.



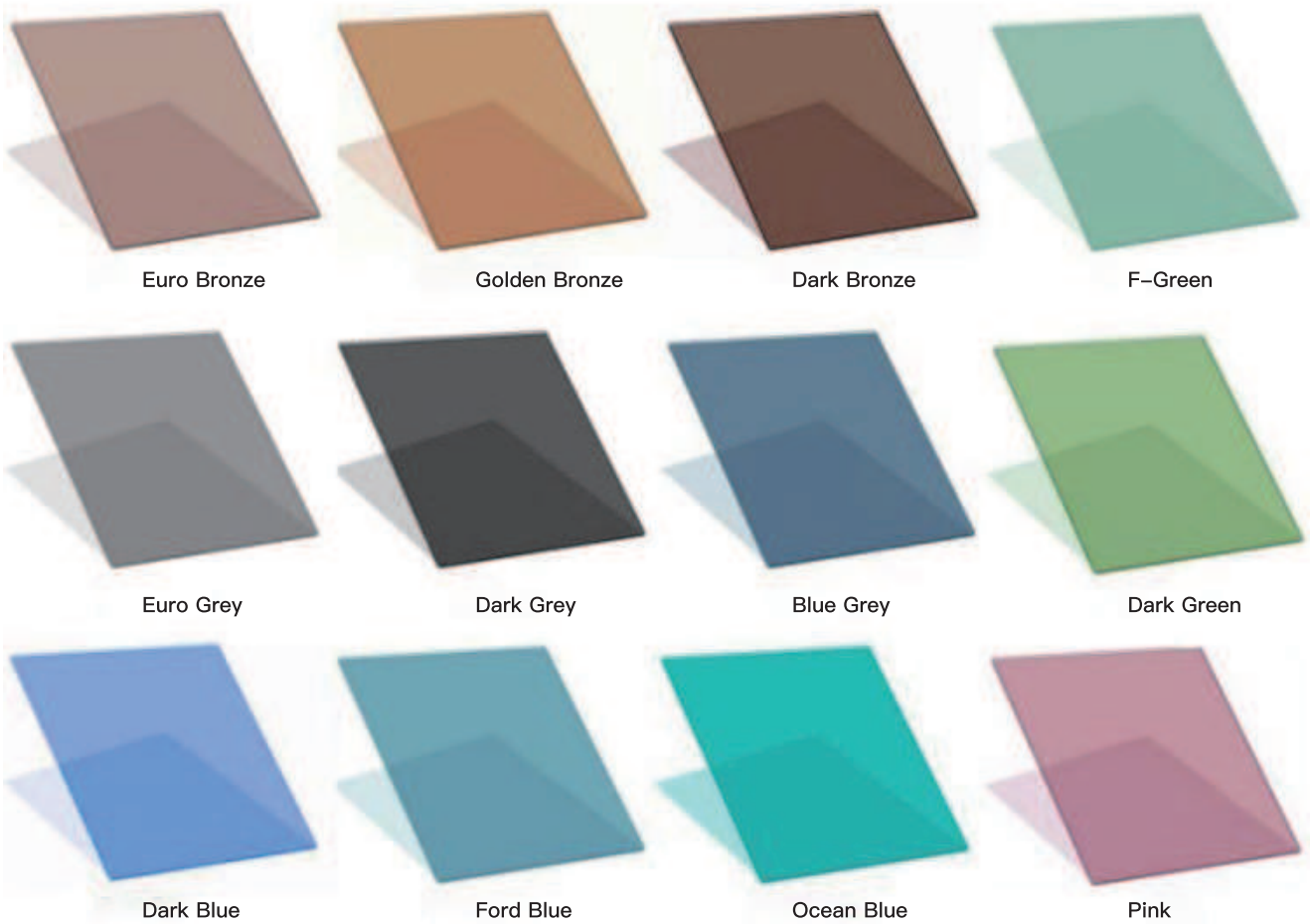
Reflective glass
The reflective glass is also called coated glass . It is coated with one or more layers of metal, alloy or metal compound film on the glass surface to change the optical properties of the glass to meet certain requirements.According to the different characteristics of the product reflective glass can be divided into the following categories: heat reflective glass, Low-E glass, conductive film glass.

- Characteristic
- ◎ Reflect the sunshine, reducing indoor heat.
 - ◎ Saving energy.
 - ◎ Prevent UV transmission.
 - ◎ Prevent furniture fabric from fading.



Specification

| | |
|---------------|--|
| Product | Reflective glass |
| Thickness | 3mm, 4mm, 5mm, 5.5mm, 6mm, 8mm, 10mm, 12mm |
| Specification | 1650*2140mm, 1830*2440mm, 2140*3300mm, 2140*3660mm, etc |
| Colors | Bronze, gray, blue, green, white, pink, etc |
| Application | Building, window, door, decorative, furniture, wall, etc |



L

OW-E GLASS

Single silver Low-E glass

Single silver Low-E glass is a kind of glass whose surface is coated with low emissivity coating silver and metal-oxide film so that the glass takes on different colors. Its mainly functions are to reduce the U value of glass, selectively reduce Sc and comprehensively improve energy saving property of glass.

Characteristic

- ◎ Single silver Low-e glass have 2 types:offline Low-e and online Low-e.
- ◎ Very high far infrared reflective – low heat transfer. coefficient U value, excellent insulation properties.
- ◎ Its thermal insulation characteristics make it suitable for cold areas in the north, effectively reducing the energy consumption of heating.

Applications

Used in doors, windows, large-scale curtain wall.

Double silver Low-E glass

Double silver Low-E glass coating on high quality flat glass with double silver film and Oxide, Nitride etc. The double silver film further enhances the ability of the glass to control the solar radiation, while maintaining the same light transmittance as the ordinary single silver LOW-E, with better heat transfer coefficient and shading coefficient.

Feature

- ◎ Higher visible light through the light – visible light band to maintain a high light transmittance, natural lighting is good.
- ◎ Extremely low solar transmittance – effectively limits the transmission of solar thermal radiation, especially near infrared heat radiation, lower SC values.
- ◎ Lower U value – effectively limit the summer outdoor heat radiation into the indoor, excellent winter insulation performance.
- ◎ Lower solar transmittance than monolithic LOW-E glass with the same visible light transmittance.

Application

Used in doors, windows, large-scale building curtain wall.



Triple silver Low-E glass

Triple silver Low-E glass is in the off-line coating process of plating three layers of silver meanwhile printing the material which can achieve its excellent thermal performance on the center layer, which called Triple silver low -E glass which own a better energy-saving effect than double silver Low-E, it's the future development trend of the architectural materials.

Characteristic

- ◎ Higher visible light transmittance: visible light band to maintain a high transmittance, natural lighting is good.
- ◎ Very low solar transmittance: a lower shading coefficient SC, effectively prevent the heat of solar radiation, especially near infrared heat radiation through.
- ◎ Better insulation performance: a lower thermal conductivity U value, more effectively limit the summer outdoor heat radiation into the room, better winter insulation performance.
- ◎ Free from regional restrictions, suitable for different climatic characteristics of the vast areas.

Applications

Used in doors, windows, large-scale building curtain wall.



BTG Single double triple silver layer LOW-E insulating glass performance data

| Produce Name | Visible Light(%) | | | Solar Energy | | | | | | NFRC | | | JGJ151 | | Color |
|------------------------------|------------------|----------|------|--------------|---------|---------|------|--------------------|--|--------------------------------------|------------------------------------|---------------------|------------------------------|---------------------|------------------|
| | Trans.% | Reflect. | | Refl.% | Absor.% | Trans.% | SHGC | Total Energy Trans | | Winter Nighttime W/m ² ·k | Summer Daytime W/m ² ·k | Shading Coefficient | Winter-K W/m ² ·k | Shading Coefficient | |
| | | out.% | in.% | | | | | | | | | | | | |
| Single Low-E | | | | | | | | | | | | | | | |
| IL(CLR-PLÉ40E-6+12A+CLR-6) | 42 | 27 | 11 | 26 | 47 | 27 | 34 | 259 | | 1.82 | 1.82 | 0.39 | 1.82 | 0.41 | Silver blue |
| IL(CLR-PLÉ48E-6+12A+CLR-6) | 45 | 30 | 13 | 37 | 37 | 26 | 32 | 244 | | 1.69 | 1.64 | 0.37 | 1.69 | 0.39 | Silver grey |
| IL(CLR-PLÉ60B-6+12A+CLR-6) | 57 | 19 | 11 | 24 | 40 | 35 | 43 | 322 | | 1.76 | 1.75 | 0.49 | 1.80 | 0.52 | Blue grey |
| IL(CLR-PLÉ62C-6+12A+CLR-6) | 51 | 22 | 11 | 25 | 44 | 31 | 38 | 288 | | 1.76 | 1.75 | 0.44 | 1.75 | 0.47 | Blue |
| IL(CLR-PLÉ70B-6+12A+CLR-6) | 58 | 16 | 11 | 22 | 41 | 36 | 44 | 330 | | 1.80 | 1.80 | 0.50 | 1.75 | 0.56 | Light blue |
| IL(CLR-PLÉ78A-6+12A+CLR-6) | 63 | 13 | 12 | 18 | 40 | 41 | 49 | 371 | | 1.82 | 1.82 | 0.56 | 1.82 | 0.59 | Light blue |
| IL(CLR-PLÉ85A-6+12A+CLR-6) | 75 | 12 | 13 | 19 | 31 | 50 | 58 | 432 | | 1.85 | 1.86 | 0.66 | 1.86 | 0.70 | Neutral color |
| IL(CLR-PDE40D-6+12A+CLR-6) | 34 | 26 | 18 | 37 | 48 | 15 | 20 | 155 | | 1.65 | 1.59 | 0.23 | 1.65 | 0.24 | Silver grey |
| IL(CLR-PDE42D-6+12A+CLR-6) | 41 | 21 | 33 | 26 | 53 | 21 | 27 | 207 | | 1.65 | 1.59 | 0.31 | 1.65 | 0.33 | grey |
| IL(CLR-PDE48D-6+12A+CLR-6) | 36 | 24 | 31 | 21 | 60 | 18 | 24 | 187 | | 1.59 | 1.51 | 0.28 | 1.60 | 0.30 | Silver blue |
| IL(CLR-PDE50C02-6+12A+CLR-6) | 48 | 21 | 21 | 27 | 50 | 23 | 29 | 220 | | 1.65 | 1.60 | 0.33 | 1.67 | 0.34 | Blue grey |
| IL(CLR-PDE60B-6+12A+CLR-6) | 58 | 16 | 20 | 34 | 38 | 26 | 31 | 238 | | 1.59 | 1.65 | 0.36 | 1.65 | 0.39 | Blue |
| IL(CLR-PDE70B-6+12A+CLR-6) | 61 | 15 | 17 | 35 | 36 | 28 | 33 | 252 | | 1.65 | 1.59 | 0.38 | 1.65 | 0.42 | Light blue |
| IL(CLR-PDE80A-6+12A+CLR-6) | 65 | 10 | 11 | 28 | 40 | 32 | 38 | 290 | | 1.69 | 1.64 | 0.44 | 1.69 | 0.48 | Neutral color |
| IL(CLR-TTE60B-6+12A+CLR-6) | 46 | 17 | 12 | 41 | 40 | 19 | 23 | 180 | | 1.63 | 1.56 | 0.27 | 1.63 | 0.29 | Blue grey |
| Double Low-E | | | | | | | | | | | | | | | |
| IL(CLR-PLÉ45E-6+12A+CLR-6) | 38 | 27 | 11 | 28 | 48 | 24 | 31 | 235 | | 1.71 | 1.67 | 0.35 | 1.71 | 0.35 | Silver grey |
| IL(CLR-PLÉ48E-6+12A+CLR-6) | 44 | 29 | 13 | 28 | 44 | 28 | 35 | 265 | | 1.69 | 1.65 | 0.40 | 1.70 | 0.40 | Blue silver |
| IL(CLR-PLÉ48E03-6+12A+CLR-6) | 44 | 29 | 12 | 29 | 45 | 26 | 33 | 249 | | 1.73 | 1.70 | 0.37 | 1.75 | 0.40 | Blue silver |
| IL(CLR-PLÉ51C-6+12A+CLR-6) | 45 | 22 | 10 | 26 | 48 | 26 | 32 | 246 | | 1.70 | 1.66 | 0.37 | 1.70 | 0.39 | Silver grey |
| IL(CLR-PLÉ52C-6+12A+CLR-6) | 46 | 22 | 10 | 24 | 49 | 27 | 35 | 264 | | 1.72 | 1.69 | 0.40 | 1.72 | 0.42 | Blue |
| IL(CLR-PLÉ58C03-6+12A+CLR-6) | 52 | 21 | 11 | 24 | 44 | 32 | 39 | 299 | | 1.71 | 1.68 | 0.45 | 1.64 | 0.45 | Blue |
| IL(CLR-PLÉ60B-6+12A+CLR-6) | 53 | 17 | 10 | 19 | 47 | 34 | 42 | 300 | | 1.74 | 1.72 | 0.45 | 1.74 | 0.48 | Blue |
| IL(CLR-PLÉ61B-6+12A+CLR-6) | 55 | 15 | 11 | 17 | 48 | 35 | 43 | 324 | | 1.78 | 1.76 | 0.46 | 1.78 | 0.48 | Grey blue |
| IL(CLR-PLÉ70A02-6+12A+CLR-6) | 64 | 11 | 11 | 17 | 42 | 41 | 48 | 363 | | 1.73 | 1.70 | 0.52 | 1.75 | 0.56 | Light blue |
| IL(CLR-PLÉ82A04-6+12A+CLR-6) | 72 | 10 | 13 | 15 | 38 | 47 | 56 | 418 | | 1.79 | 1.78 | 0.60 | 1.79 | 0.64 | Neutral color |
| IL(CLR-PDE43B-6+12A+CLR-6) | 40 | 14 | 31 | 20 | 60 | 20 | 26 | 202 | | 1.62 | 1.55 | 0.30 | 1.63 | 0.32 | Grey blue |
| IL(CLR-PDE60B02-6+12A+CLR-6) | 53 | 16 | 20 | 29 | 45 | 26 | 31 | 239 | | 1.63 | 1.57 | 0.36 | 1.64 | 0.39 | Neutral color |
| IL(CLR-PDE61B-6+12A+CLR-6) | 54 | 19 | 19 | 37 | 41 | 22 | 27 | 207 | | 1.67 | 1.62 | 0.31 | 1.67 | 0.34 | Blue |
| IL(CLR-PDE66A-6+12A+CLR-6) | 60 | 10 | 11 | 26 | 47 | 27 | 33 | 250 | | 1.65 | 1.59 | 0.38 | 1.66 | 0.41 | Ink grey |
| IL(CLR-PDE66B03-6+12A+CLR-6) | 54 | 10 | 12 | 26 | 49 | 25 | 30 | 232 | | 1.62 | 1.56 | 0.35 | 1.63 | 0.40 | Blue |
| Triple Low-E | | | | | | | | | | | | | | | |
| IL(CLR-PLÉ35D02-6+12A+CLR-6) | 36 | 27 | 13 | 33 | 45 | 22 | 28 | 213 | | 1.68 | 1.64 | 0.32 | 1.69 | 0.34 | Silver grey |
| IL(CLR-PLÉ40D-6+12A+CLR-6) | 43 | 26 | 10 | 26 | 46 | 28 | 34 | 262 | | 1.85 | 1.86 | 0.39 | 1.85 | 0.41 | Silver blue grey |
| IL(CLR-PLÉ48E-6+12A+CLR-6) | 40 | 25 | 11 | 29 | 46 | 25 | 31 | 237 | | 1.79 | 1.78 | 0.35 | 1.79 | 0.37 | Silver grey |
| IL(CLR-PLÉ57C-6+12A+CLR-6) | 51 | 20 | 10 | 23 | 45 | 32 | 38 | 292 | | 1.82 | 1.83 | 0.44 | 1.83 | 0.46 | Light blue |
| IL(CLR-PLÉ60B-6+12A+CLR-6) | 54 | 18 | 10 | 22 | 42 | 36 | 43 | 323 | | 1.83 | 1.83 | 0.49 | 1.83 | 0.51 | Blue grey |
| IL(CLR-PLÉ70B-6+12A+CLR-6) | 59 | 18 | 11 | 19 | 41 | 40 | 46 | 351 | | 1.85 | 1.86 | 0.53 | 1.85 | 0.56 | Blue grey |
| IL(CLR-PLÉ78A-6+12A+CLR-6) | 62 | 15 | 11 | 18 | 40 | 42 | 48 | 365 | | 1.83 | 1.83 | 0.56 | 1.83 | 0.58 | Blue grey |
| IL(CLR-PDE48E-6+12A+CLR-6) | 42 | 28 | 36 | 33 | 46 | 20 | 25 | 194 | | 1.64 | 1.59 | 0.29 | 1.65 | 0.31 | Silver grey |
| IL(CLR-PDE56D-6+12A+CLR-6) | 50 | 28 | 33 | 34 | 41 | 25 | 29 | 224 | | 1.63 | 1.57 | 0.34 | 1.64 | 0.36 | Grey |
| IL(CLR-PDE60B-6+12A+CLR-6) | 54 | 25 | 23 | 29 | 44 | 28 | 33 | 250 | | 1.67 | 1.62 | 0.38 | 1.68 | 0.41 | Blue |
| IL(CLR-PDE68A-6+12A+CLR-6) | 61 | 15 | 17 | 21 | 44 | 35 | 41 | 308 | | 1.70 | 1.66 | 0.47 | 1.71 | 0.50 | Blue grey |
| IL(CLR-PDE72A-6+12A+CLR-6) | 63 | 9 | 11 | 24 | 46 | 31 | 36 | 275 | | 1.68 | 1.63 | 0.42 | 1.68 | 0.45 | Grey |
| IL(CLR-PTE55B-6+12A+CLR-6) | 48 | 12 | 19 | 42 | 39 | 19 | 23 | 179 | | 1.63 | 1.57 | 0.26 | 1.64 | 0.29 | Grey |
| IL(CLR-PTE70A-6+12A+CLR-6) | 62 | 10 | 13 | 35 | 40 | 25 | 29 | 223 | | 1.62 | 1.55 | 0.34 | 1.63 | 0.37 | Light blue grey |



Offline Low E reflective glass Performance Parameter

| Type | NO. | Product Name | Reflect Color | Visible Trans | Visible Reflect | | Solar Heat | | ASHRAE NFRC | | | | JGJ151 | | | Remarks |
|---------------|-----|-------------------|---------------|---------------|-----------------|----|------------|-----|-------------|-------------------------------------|---------------------|-------------------------------------|-------------------------------------|---------------------|-----|---------|
| | | | | | | | | | U-Value | | Shading Coefficient | U-Value | | Shading Coefficient | | |
| | | | | | | | | | SHGC | Relative Heat Gain W/m ² | | Winer Nighttime W/m ² /k | Winer Nighttime W/m ² /k | | | |
| Offline LOW E | 1 | CLR-6-PSL20F-02-T | Grey | 21 | 33 | 22 | 0.32 | 266 | 4.94 | 4.31 | 0.37 | 4.62 | 4.48 | 0.34 | | |
| | 2 | CLR-6-PSL30B-T | Grey | 31 | 14 | 25 | 0.45 | 366 | 5.37 | 4.78 | 0.49 | 4.77 | 4.68 | 0.46 | | |
| | 3 | CLR-6-PSL30C-T | Silver grey | 31 | 22 | 22 | 0.43 | 347 | 5.37 | 4.78 | 0.49 | 4.75 | 4.65 | 0.46 | | |
| | 4 | CLR-6-GOLD32-T | Gold | 32 | 35 | 8 | 0.40 | 329 | 5.42 | 4.83 | 0.46 | 4.90 | 4.85 | 0.43 | | |
| | 5 | CLR-6-PSL40D-T | Blue | 36 | 22 | 23 | 0.50 | 402 | 5.82 | 5.26 | 0.57 | 5.19 | 5.23 | 0.56 | | |
| | 6 | CLR-6-PSL40E-T | Silver grey | 42 | 25 | 9 | 0.50 | 396 | 5.38 | 4.79 | 0.57 | 4.87 | 4.81 | 0.52 | Hot | |
| | 7 | CLR-6-PSL41E-T | Silver | 41 | 26 | 12 | 0.47 | 379 | 5.37 | 4.78 | 0.56 | 4.86 | 4.80 | 0.53 | | |
| | 8 | CLR-6-PSL41E02-T | Silver blue | 38 | 25 | 11 | 0.47 | 376 | 5.47 | 4.88 | 0.54 | 4.94 | 4.89 | 0.50 | Hot | |
| | 9 | CLR-6-GOLD45-T | Gold | 45 | 22 | 13 | 0.48 | 385 | 5.34 | 4.75 | 0.55 | 4.84 | 4.77 | 0.52 | | |
| | 10 | CLR-6-PSL45C-T | Blue | 46 | 19 | 13 | 0.52 | 417 | 5.59 | 5.02 | 0.60 | 5.03 | 5.01 | 0.58 | | |
| | 11 | CLR-6-PSL50C02-T | Silver | 51 | 18 | 16 | 0.56 | 444 | 5.55 | 4.97 | 0.64 | 5.00 | 4.97 | 0.62 | Hot | |
| | 12 | CLR-6-PSL51C-T | Light blue | 51 | 20 | 17 | 0.58 | 474 | 6.09 | 5.53 | 0.68 | 5.38 | 5.46 | 0.66 | | |
| | 13 | CLR-6-PSL51D-T | Grey | 50 | 22 | 14 | 0.57 | 454 | 6.04 | 5.48 | 0.65 | 5.09 | 5.10 | 0.62 | | |
| | 14 | CLR-6-PSL53D-T | Blue | 52 | 19 | 9 | 0.53 | 423 | 5.33 | 4.73 | 0.61 | 4.92 | 4.88 | 0.60 | | |
| | 15 | CLR-6-PSL55B-T | Grey | 55 | 13 | 13 | 0.58 | 459 | 5.26 | 4.65 | 0.67 | 5.26 | 5.31 | 0.66 | | |
| | 16 | CLR-6-PSL55C-T | Blue | 56 | 18 | 14 | 0.61 | 485 | 5.78 | 5.21 | 0.70 | 5.16 | 5.18 | 0.65 | | |
| | 17 | CLR-6-PSL60B02-T | Light grey | 61 | 11 | 17 | 0.68 | 538 | 6.13 | 5.57 | 0.78 | 5.01 | 4.99 | 0.75 | | |
| | 18 | CLR-6-PSL60C-T | Light blue | 52 | 15 | 15 | 0.64 | 506 | 5.56 | 4.98 | 0.74 | 5.00 | 4.98 | 0.72 | | |
| | 19 | CLR-6-PSL65C02-T | Light grey | 64 | 18 | 18 | 0.66 | 519 | 5.55 | 4.97 | 0.76 | 4.99 | 4.97 | 0.75 | Hot | |
| | 20 | CLR-6-PSL68C-T | Light blue | 69 | 16 | 17 | 0.71 | 557 | 5.76 | 5.19 | 0.83 | 5.15 | 5.17 | 0.80 | | |
| | 21 | CLR-6-PSL72C-T | Light grey | 72 | 17 | 19 | 0.74 | 581 | 6.20 | 5.64 | 0.85 | 5.46 | 5.57 | 0.83 | | |
| | 22 | CLR-6-PSL78C-T | Light grey | 79 | 13 | 15 | 0.78 | 606 | 6.12 | 5.57 | 0.89 | 5.41 | 5.50 | 0.88 | | |
| | 23 | CLR-6-PBLUE54D-T | TG blue | 57 | 19 | 6 | 0.56 | 445 | 5.17 | 4.56 | 0.65 | 4.70 | 4.59 | 0.63 | | |
| | 24 | CLR-6-CHS30-T | Gold | 37 | 36 | 29 | 0.45 | 362 | 5.55 | 4.62 | 0.52 | 5.25 | 4.58 | 0.51 | | |

Sound insulation parameter

| Glass structure | | Glass thickness | | Sound insulation value (db) | | | | | | | | | | | | | | | | Noise frequency(Hz) | | | | Ultrasonic | | | |
|---------------------------|-----------------------------------|-----------------|--|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|---------------------|------|------|------|------------|------|------|------|
| | | | | 100 | 125 | 160 | 200 | 250 | 315 | 400 | 500 | 630 | 800 | 1000 | 1250 | 1600 | 2000 | 2500 | 3150 | 4000 | 5000 | 5000 | 5000 | 5000 | 5000 | 5000 | 5000 |
| Sheet glass | 3 | | | 19 | 17 | 18 | 21 | 23 | 22 | 24 | 27 | 28 | 30 | 30 | 32 | 34 | 35 | 36 | 33 | 26 | 30 | 30 | | | | | |
| | | | | 23 | 25 | 25 | 24 | 28 | 26 | 29 | 31 | 33 | 34 | 34 | 35 | 34 | 30 | 27 | 32 | 37 | 31 | | | | | | |
| | | | | 26 | 27 | 27 | 30 | 32 | 31 | 34 | 35 | 36 | 35 | 33 | 30 | 30 | 35 | 38 | 41 | 46 | 48 | | | | | | |
| | | | | 26 | 30 | 26 | 30 | 33 | 33 | 34 | 36 | 37 | 35 | 32 | 32 | 36 | 40 | 43 | 46 | 50 | 51 | | | | | | |
| | 6 | | | 27 | 23 | 27 | 24 | 27 | 28 | 29 | 31 | 33 | 35 | 35 | 35 | 33 | 31 | 32 | 37 | 41 | 45 | | | | | | |
| | | | | 25 | 26 | 28 | 27 | 29 | 29 | 30 | 32 | 34 | 35 | 35 | 36 | 36 | 35 | 35 | 38 | 43 | 46 | | | | | | |
| | | | | 27 | 25 | 26 | 30 | 31 | 31 | 33 | 35 | 35 | 35 | 35 | 33 | 33 | 37 | 41 | 44 | 48 | 51 | | | | | | |
| | | | | 27 | 27 | 27 | 30 | 31 | 31 | 33 | 34 | 35 | 36 | 36 | 35 | 34 | 37 | 41 | 45 | 49 | 52 | | | | | | |
| | Sandwich glass | | | 25 | 25 | 27 | 30 | 32 | 32 | 34 | 35 | 35 | 35 | 33 | 32 | 35 | 40 | 43 | 46 | 49 | 51 | | | | | | |
| | | | | 25 | 29 | 28 | 30 | 33 | 33 | 34 | 36 | 37 | 37 | 37 | 36 | 37 | 41 | 45 | 48 | 51 | 53 | | | | | | |
| | | | | 26 | 29 | 28 | 30 | 33 | 33 | 35 | 36 | 37 | 38 | 38 | 37 | 38 | 41 | 44 | 47 | 51 | 54 | | | | | | |
| | | | | 29 | 30 | 28 | 32 | 34 | 35 | 36 | 38 | 38 | 38 | 36 | 38 | 42 | 46 | 49 | 52 | 55 | 57 | | | | | | |
| Hollow glass | 3+0.38PVB+3 | | | 29 | 32 | 29 | 32 | 34 | 35 | 36 | 39 | 38 | 37 | 37 | 41 | 44 | 47 | 50 | 53 | 56 | 57 | | | | | | |
| | | | | 26 | 21 | 23 | 23 | 26 | 21 | 19 | 24 | 27 | 30 | 33 | 36 | 40 | 44 | 46 | 39 | 34 | 45 | | | | | | |
| | | | | 26 | 23 | 23 | 20 | 23 | 19 | 23 | 27 | 29 | 32 | 35 | 39 | 44 | 47 | 48 | 41 | 36 | 53 | | | | | | |
| | | | | 27 | 24 | 29 | 22 | 22 | 25 | 30 | 33 | 35 | 38 | 40 | 42 | 42 | 37 | 37 | 43 | 46 | 49 | | | | | | |
| | 6+0.76PVB+6 | | | 22 | 19 | 27 | 23 | 31 | 30 | 35 | 35 | 36 | 39 | 41 | 42 | 41 | 36 | 37 | 46 | 51 | 56 | | | | | | |
| | | | | 28 | 29 | 33 | 29 | 32 | 36 | 37 | 40 | 43 | 42 | 42 | 43 | 42 | 37 | 40 | 44 | 48 | 53 | | | | | | |
| | | | | 26 | 24 | 24 | 31 | 24 | 32 | 32 | 35 | 37 | 39 | 39 | 38 | 36 | 38 | 42 | 44 | 46 | 49 | | | | | | |
| | | | | 27 | 27 | 26 | 24 | 22 | 28 | 32 | 35 | 38 | 38 | 39 | 40 | 42 | 43 | 41 | 45 | 52 | 57 | | | | | | |
| | 3+0.76+3+25A+5 | | | 22 | 27 | 27 | 28 | 31 | 35 | 38 | 41 | 42 | 43 | 44 | 45 | 47 | 47 | 45 | 50 | 58 | 51 | | | | | | |
| | | | | 24 | 25 | 34 | 33 | 34 | 40 | 41 | 44 | 44 | 46 | 47 | 47 | 48 | 48 | 46 | 50 | 55 | 56 | | | | | | |
| | | | | 28 | 20 | 29 | 24 | 26 | 30 | 34 | 36 | 39 | 42 | 43 | 44 | 44 | 41 | 40 | 47 | 52 | 56 | | | | | | |
| | | | | 32 | 27 | 29 | 28 | 31 | 35 | 37 | 39 | 41 | 42 | 43 | 44 | 43 | 42 | 45 | 50 | 53 | 54 | | | | | | |
| Sandwich insulating glass | 5+0.76+5+12A+6 | | | 31 | 29 | 32 | 30 | 32 | 35 | 38 | 40 | 42 | 42 | 44 | 46 | 47 | 46 | 47 | 52 | 56 | 61 | | | | | | |
| | | | | 28 | 29 | 36 | 32 | 34 | 39 | 41 | 41 | 41 | 43 | 44 | 45 | 45 | 46 | 47 | 52 | 56 | 61 | | | | | | |
| | | | | 25 | 31 | 38 | 33 | 37 | 39 | 42 | 43 | 43 | 42 | 40 | 40 | 41 | 56 | 50 | 55 | 58 | 61 | | | | | | |
| | | | | 26 | 21 | 29 | 28 | 30 | 34 | 36 | 40 | 42 | 44 | 44 | 44 | 45 | 46 | 47 | 52 | 57 | 58 | | | | | | |
| | 6+0.76+6+12A+5+1.52+5 | | | 32 | 25 | 29 | 31 | 33 | 35 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 43 | 43 | 44 | 45 | 46 | | | | | | |
| | | | | 21 | 23 | 31 | 35 | 37 | 40 | 42 | 42 | 43 | 42 | 42 | 42 | 42 | 48 | 51 | 55 | 57 | 59 | | | | | | |
| | | | | 21 | 23 | 31 | 35 | 37 | 40 | 42 | 42 | 43 | 42 | 42 | 42 | 44 | 48 | 51 | 55 | 57 | 59 | | | | | | |
| | | | | 21 | 23 | 31 | 35 | 37 | 40 | 42 | 42 | 43 | 42 | 42 | 42 | 44 | 48 | 51 | 55 | 57 | 59 | | | | | | |
| | Double laminated insulating glass | | | 21 | 23 | 31 | 35 | 37 | 40 | 42 | 42 | 43 | 42 | 42 | 42 | 44 | 48 | 51 | 55 | 57 | 59 | | | | | | |
| | | | | 21 | 23 | 31 | 35 | 37 | 40 | 42 | 42 | 43 | 42 | 42 | 42 | 44 | 48 | 51 | 55 | 57 | 59 | | | | | | |
| | | | | 21 | 23 | 31 | 35 | 37 | 40 | 42 | 42 | 43 | 42 | 42 | 42 | 44 | 48 | 51 | 55 | 57 | 59 | | | | | | |
| | | | | 21 | 23 | 31 | 35 | 37 | 40 | 42 | 42 | 43 | 42 | 42 | 42 | 44 | 48 | 51 | 55 | 57 | 59 | | | | | | |



HOT SOAKED TEMPERED GLASS



Heat soak treatment

Spontaneous breakage of tempered glass may occur even without external force .The major cause is due to grain growth during phase change if nickel sulfide (Nis) inclusions and other impurities present like aluminum oxide (Al₂O₃) in the glass.

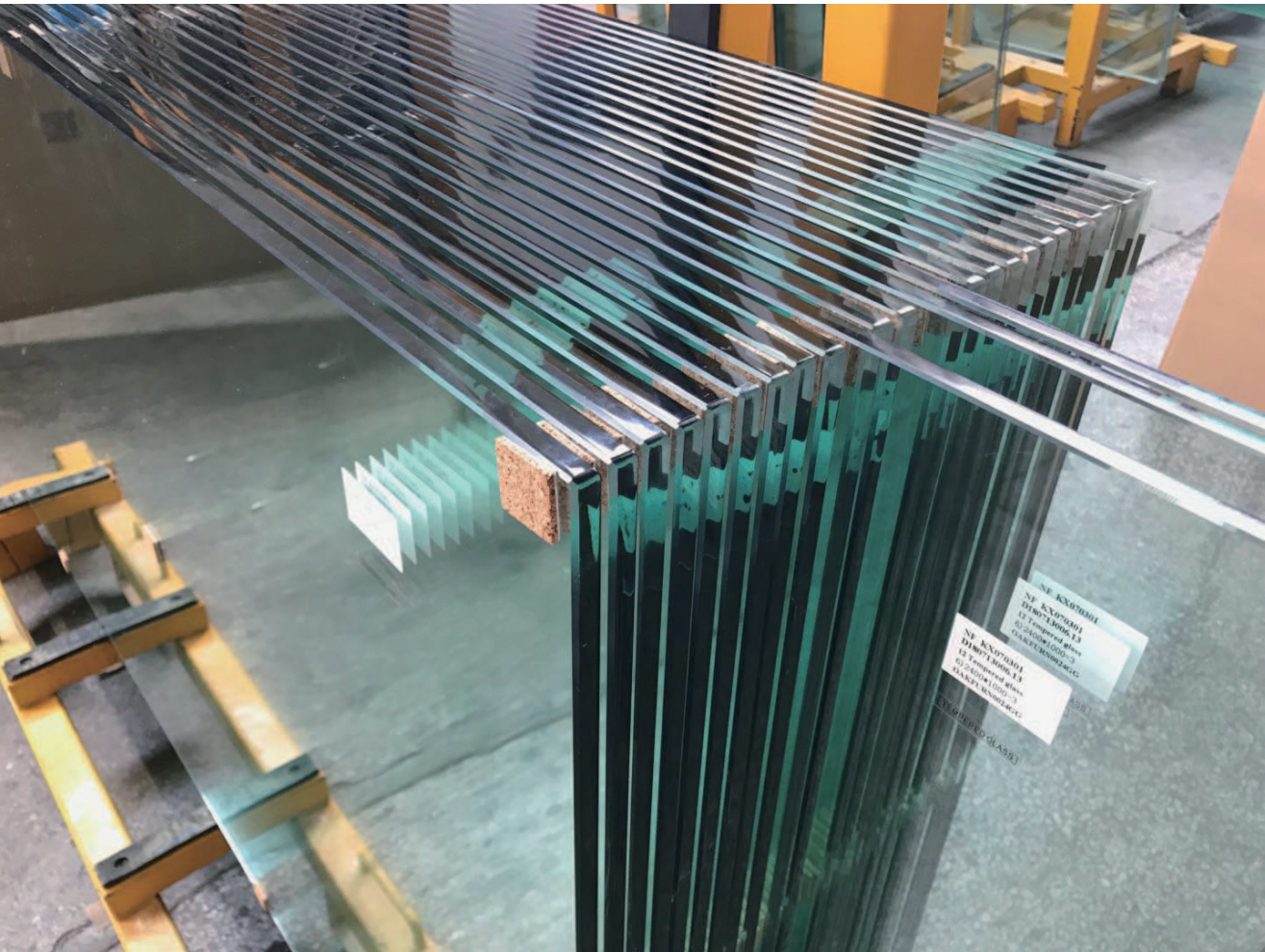
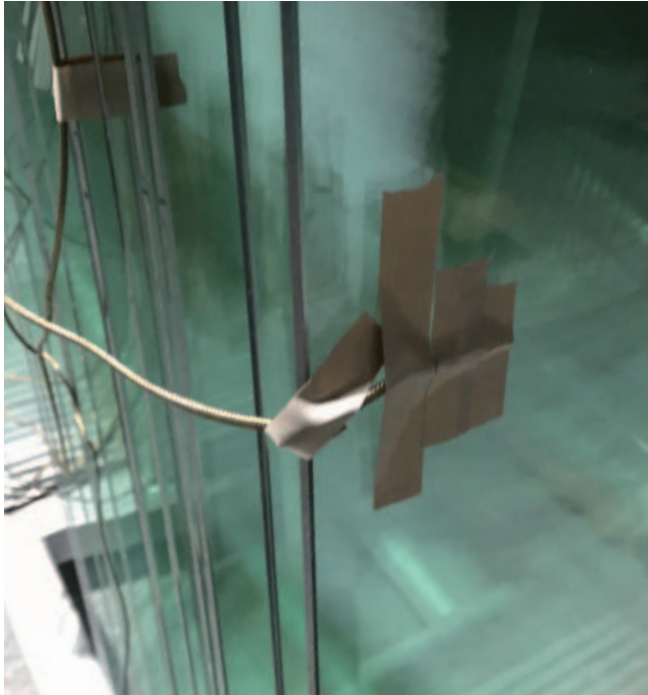
Heat soak test process by heating the tempered glass to 290℃ ±10℃ and holding for enough time and then cooling down . The phase change of nickel (Nis) inclusions will be accelerated .Tempered glass with nickel sulfide (Nis) inclusions may break during the process rather than after installation.thus,this will reduce the spontaneous breakage rate of tempered glass.

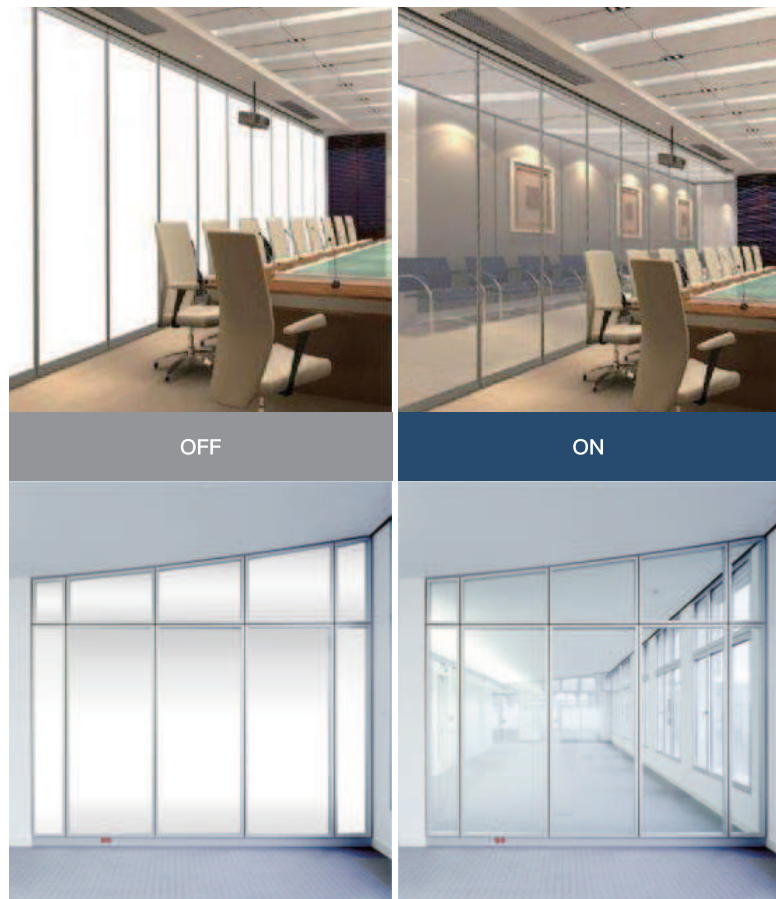
Our company has advanced technology of large heat soak furnace .The heat soak furnace also authentication by Hongkong third party .For ensure the tempered glass after heat soaked test is reliability.

Notes

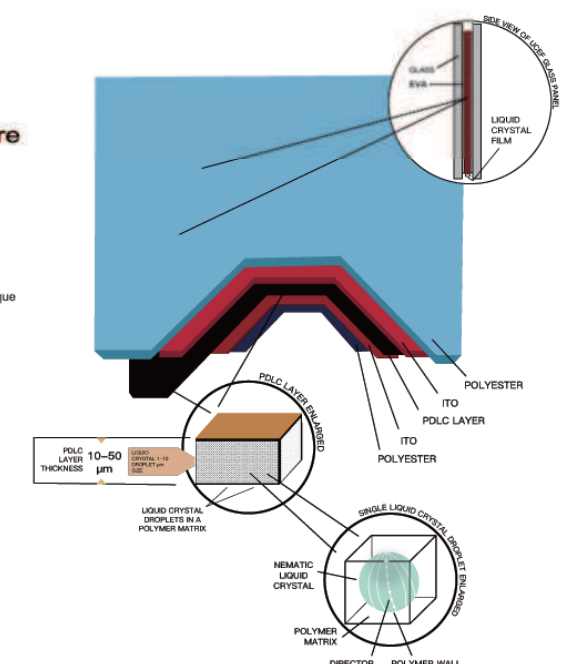
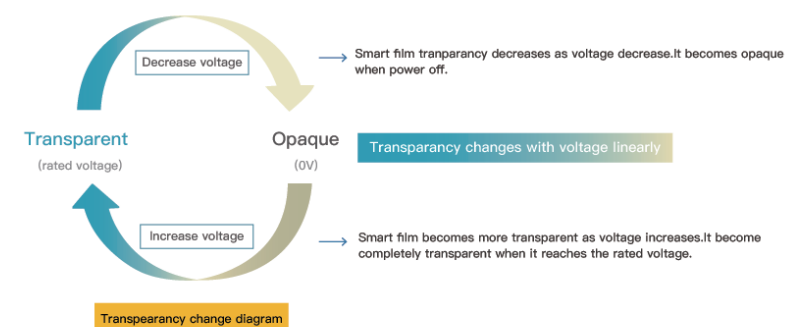
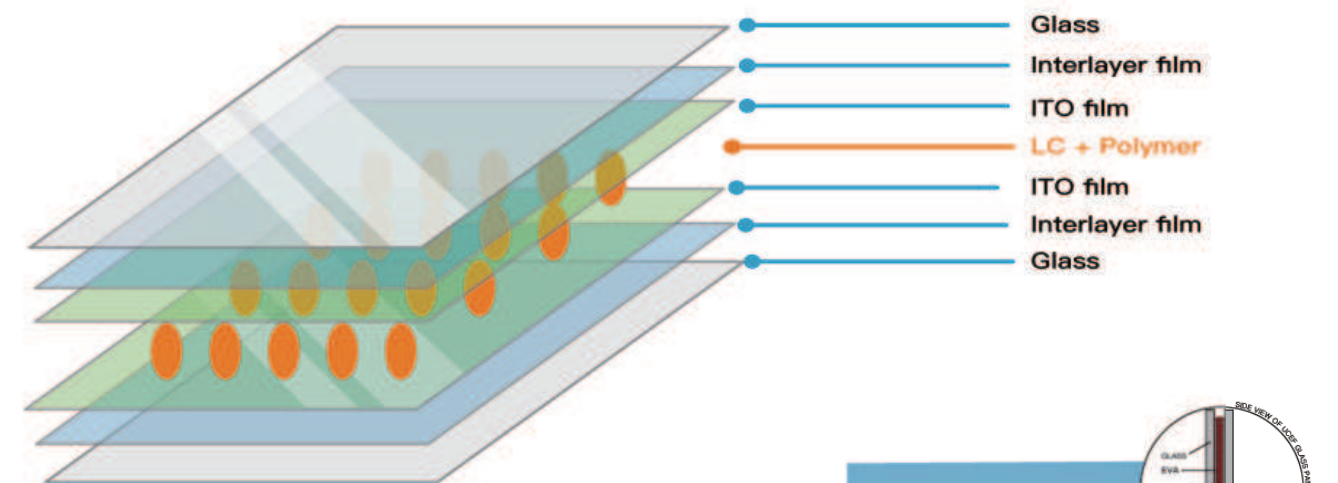
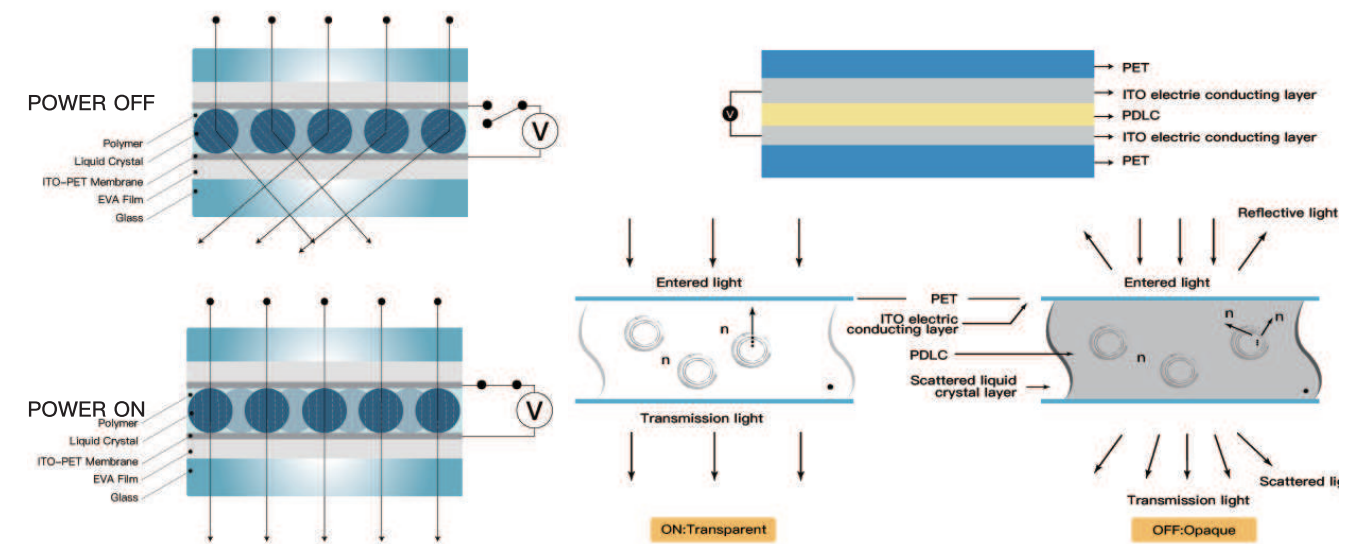
- 1.Due to the inside of the toughened glass vitreous material nickel sulfide (Nis), may lead to explosive, toughened glass tempered glass for homogeneous (dip) processing, can greatly reduce the explosive rate of toughened glass.
- 2.The damage on the surface of the toughened glass, side blasting are easy to damage the stress and induce blowout of toughened glass, toughened glass so during the installation process to avoid the edge is impacted by the hardware, keep the surface is not subject to abuse.
- 3.The tempered glass of drilling or cutting is easier crack than without drilling and cutting.
- 4.After tempering of glass, then can't be cut, drilled, etc.

| | |
|------------------|--------------------------------|
| Thickness | 4-25mm |
| Max Size | 2440mmX15000mm, 13000mmX3300mm |
| Min Size | 100mmX300mm |
| Quality Standard | BS/EN 14179 |





| | | | |
|-----------------------|------------------------------|--|-----------|
| Optical Properties | Light Transmission | ON | >80% |
| | | OFF | >50% |
| | Visual Angle | ON | >140 ° |
| | UV Blocking | ON/OFF | >98% |
| | Haze | ON <6% | OFF >90% |
| Electrical Properties | Operating Voltage | ON | 48 or 60V |
| | Power Consumption | ON | 4W / m2 |
| | Supply Voltage | 110V/220V | |
| | Switching Speed | <45ms | |
| Specification | Thickness of PDLC smart film | 0.4mm | |
| | Minimum privacy distance | 3cm when power off | |
| | Max Width | Self –adhesive | Laminated |
| | | 1500mm | 1920mm |
| | Color | Milk white, Bronze, dark grey ,light grey etc. | |
| | Life Time | >50000hrs | |
| | Working temperature | -20~70 °C | |



TEMPERATURE SUNSHADE GLASS

It is a kind glass that can automatically adjust between clear and frosted with ambient temperature and solar radiation intensity. Intelligent dimming glass with sunlight transmission rate applied to building doors and windows state dimming, sunshade insulation, sound insulation, anti-glare and other functions, to achieve summer shade Mechanism: When the temperature is higher than the design temperature change point, the temperature sensitive material molecules condense into micro Sphere, blocking ultraviolet, visible, infrared transmission in sunlight, when the temperature is low When designing the temperature change point, the temperature sensitive material molecules stretch into a line and return to transparency state, sunlight can pass directly

Features and functions

- 1. Automatically adjust the intensity of sunlight; No need for external power supply, it can be quickly adjusted with the ambient temperature Luminosity, which allows the glass to be freely converted between transparent and shaded Warm in winter and cool in summer; the shading coefficient when transparent is $SC \geq 0.60$, ensuring environmental charging Divided light, sunshade coefficient when shading $SC \leq 0.20$, can make the ambient temperature Decrease by more than $10^{\circ}C$ to achieve maximum use of solar energy, Significantly enhance the comfort of living.
- ◎ Eliminate indoor solar red heat and visible glare in summer
- ◎ Keep the brightness of the room while shading
- ◎ The interior is soft and cool
- ◎ High light transmission in winter, can be used to replenish light.

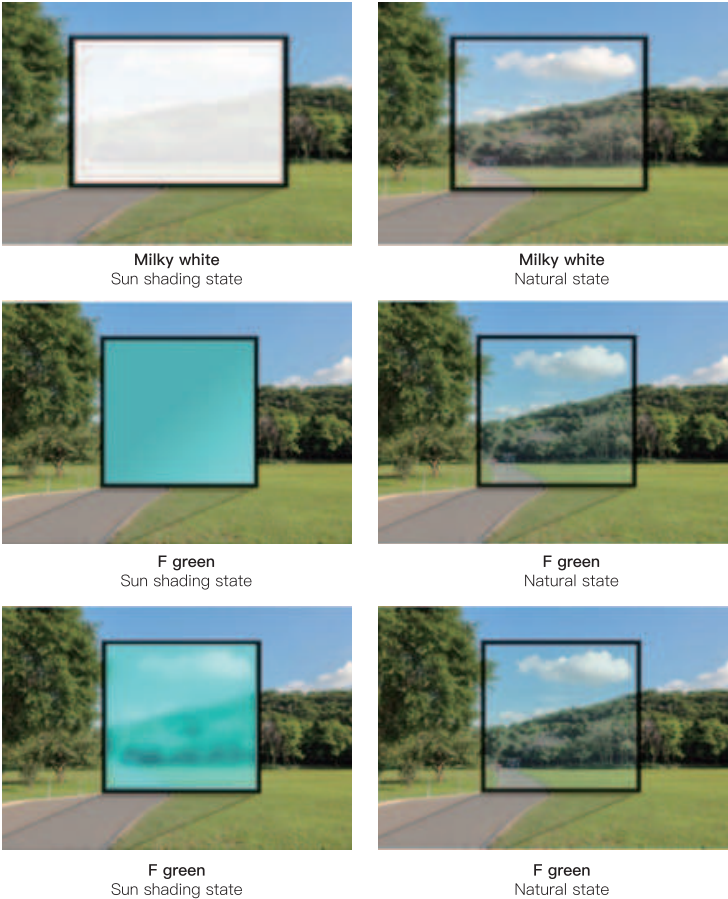
Long service life

Boiled in boiling water at $100^{\circ}C$ for 4 hours without air intake; hot and cold cycle (30 minutes at $-20^{\circ}C$, 30 minutes at $75^{\circ}C$) greater than 2000 times; High temperature and high humidity ($70^{\circ}C$, 85% RH) for 2000 hours The rate of change of shading rate is less than 5%, no spots, patterns and gas bubble generation, satisfying $-25^{\circ}C$ to $+80^{\circ}C$ environment for more than 15 years outdoor service life.

Sunshade color effect:

According to summer heat, cold winter, hot summer cold, hot summer warm, etc. Area, providing shade glass with different temperature change points

| Season | Start sunshade time | Restore transparency time |
|------------------------------|---------------------|---------------------------|
| Summer | 7:00–8:00 am | 5:00–6:00 pm |
| Late spring,early autumn | 8:00–9:00 am | 4:00–5:00 pm |
| Early spring and late autumn | 10:00–11:00 am | 3:00–4:00 pm |
| Winter | no discoloration | always transparent |
| Overcast/rainy days | no discoloration | always transparent |



LAMINATED LED LUMINOUS GLASS

This is a special, patented technology that incorporates LEDs, light sources or electronic materials into glass panels to create distinctive patterns, images, and logos. It serves as an excellent promotional tool in creating attention-getting displays. High-performing LEDs conserve energy while being very bright. LED Glass is available in special flat or curved glass with LEDs to match your applications without any distracting wires.

With LED Glass, you will find innovative ways to use your imagination! This product helps to provide creative designs for architects and other innovative users. Some application examples are:

- ◎ lightnings
- ◎ bathrooms/shower enclosures,
- ◎ conference rooms,
- ◎ tables/benches,
- ◎ window displays,
- ◎ inner doors/shop windows,
- ◎ facades
- ◎ residential effects,
- ◎ shelf displays,
- ◎ skylights,
- ◎ boutiques/specialty counter displays, and more.



Specification

- ◎ Max size: 1600*3810mm
- ◎ LED Color: red, blue, ivory, green, white, shine on both sides
- ◎ Thickness: 8.5mm (3mm+3mm) to 40.5mm (19mm+19mm)
- ◎ Shape: Various kinds of shapes even with holes anywhere
- ◎ Operating environment: -20°C to 80°C (- 4 °F to 186 °F)
- ◎ Operating voltage: 3、6、9、12、24、48VDC(subject to the design)
- ◎ Light transmittance: more than 80%
- Visible angle: around 160°
- Ultraviolet rays isolation rate: 99%
- Infrared ray isolation rate: 40%
- Life-time: For LED light, more than 10 years

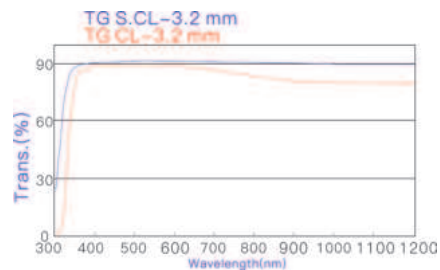
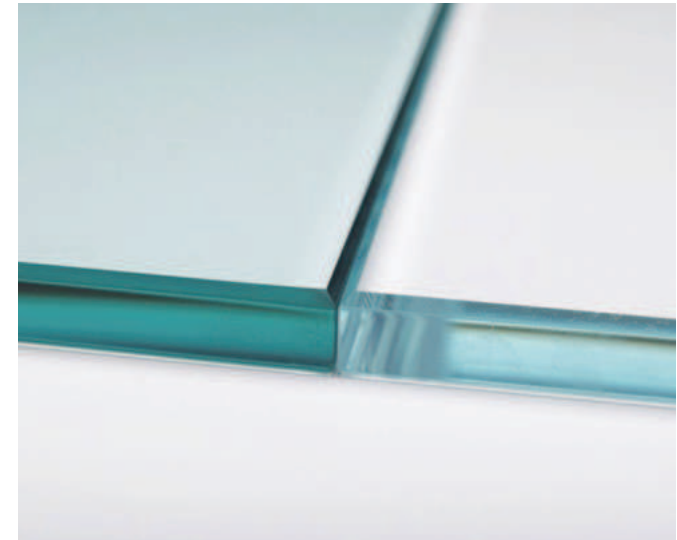


ULTRA CLEAR GLASS

Ultra clear glass is low iron glass with high light transmittance. It is high grade, multifunctional new glass, and generally its light transmittance is higher than 91%. It is crystal clear and is crowned as “crystal prince” of glass family.

Better Glass ultra clear glass has super physical, mechanical and optical characteristics. Like regular glass it can be fabricated, e.g., being tempered, coated, silk printed, heat bended, laminated, and being made into double glazing units. Better Glass successfully developed two series ultra clear glass product; (one is solar energy series, and the other is architectural or else.) This is the first time to classify ultra clear glass as two series according to its main functions.

With its crystal clear appearance, Better Glass ultra clear glass has become a highlight in world architectural industry. It not only brings benefit on energy saving and environment protection, but also has modern fashionable style, and can arouse designers’ creation and inspiration. Combining its excellent optical character with PE technology, Better ultra clear glass has been applied in a new area, or on PE glass curtain. PE glass curtain has many functions, e.g., power generating, sound insulation, heat obstructing, safety, and decoration. We have very high expectation on the outlook of this king of PE curtain.



Optical Parameters

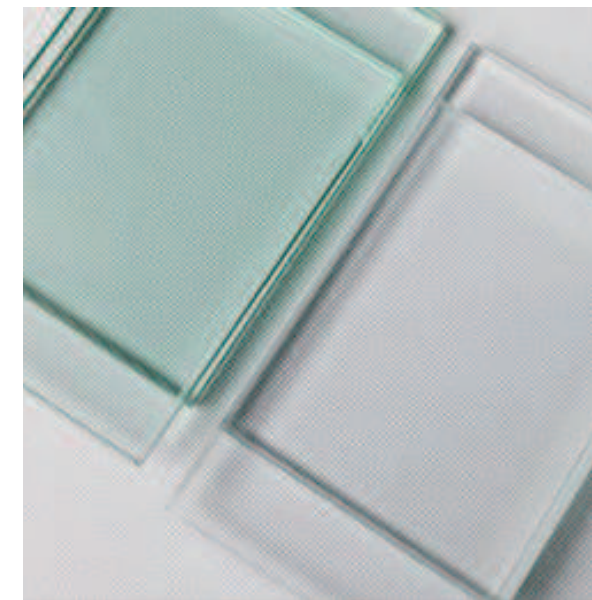
| Thick-ness | Visible Light Transmittance | Visible Light Reflectivity | Direct Penetrate | Solar Radiant Heat | | | Shading Coefficient | | | U Value (W/m2K) | Sound Insulation | | UV Penetration | |
|------------|-----------------------------|----------------------------|------------------|--------------------|--------|-----------------|---------------------|-----------|-------|-----------------|------------------|---------|-------------------|------------------------------|
| | | | | Reflect | Absorb | Total Penetrate | Short Wave | Long Wave | Total | | Rm (dB) | Rw (dB) | Solar Energy Seri | Architec ture Series or else |
| 3mm | 91.6% | 8% | 90% | 8% | 1% | 91% | 1.05 | 0.01 | 1.05 | 5.8 | 26 | 30 | 88% | 76% |
| 3.2mm | 91.6% | 8% | 90% | 8% | 2% | 91% | 1.03 | 0.01 | 1.05 | 5.8 | 26 | 30 | 88% | 75% |
| 4mm | 91.4% | 8% | 90% | 8% | 2% | 91% | 1.03 | 0.01 | 1.05 | 5.8 | 27 | 30 | 87.5% | 73% |
| 5mm | 91.3% | 8% | 90% | 8% | 2% | 90% | 1.03 | 0.01 | 1.03 | 5.8 | 29 | 32 | 87% | 71% |
| 6mm | 91.1% | 8% | 89% | 8% | 3% | 90% | 1.02 | 0.01 | 1.03 | 5.7 | 29 | 32 | 86.5% | 70% |
| 8mm | 91.0% | 8% | 88% | 8% | 4% | 89% | 1.01 | 0.01 | 1.02 | 5.7 | 31 | 34 | 85.4% | 68% |
| 10mm | 90.6% | 8% | 88% | 8% | 4% | 89% | 1.01 | 0.02 | 1.02 | 5.6 | 33 | 36 | 84% | 66% |
| 12mm | 90.4% | 8% | 87% | 8% | 5% | 88% | 1.00 | 0.02 | 1.01 | 5.5 | 34 | 37 | 82.5 | 64% |
| 15mm | 90.1% | 8% | 86% | 8% | 6% | 87% | 0.99 | 0.02 | 1.00 | 5.5 | 35 | 38 | 81% | 61% |
| 19mm | 89.7% | 8% | 84% | 8% | 7% | 86% | 0.97 | 0.02 | 0.99 | 5.5 | 37 | 40 | 80% | 59% |
| 22mm | 89.6% | 8% | 82% | 8% | 9% | 85% | 0.95 | 0.02 | 0.97 | 5.5 | 38 | 43 | 80% | 58% |
| 25mm | 89.0% | 8% | 81% | 8% | 9% | 84% | 0.93 | 0.02 | 0.95 | 5.5 | 39 | 45 | 79% | 56% |

Characteristic

- ◎ Smooth surface, good perspective.
- ◎ Specifications can be used as elastic fit to reduce chip loss.
- ◎ Provides material for making various levels of processing.

Applications

- Architecture and furniture.
- Mirrors.
- Automobile glass.
- Photovoltaic and optical instrument.



Mechanical Parameters

| | |
|--|------------|
| Elasticity Modulus | 73.1Gpa |
| Rupture Modulus(Tensile Strength-ultimate) | 41.4Mpa |
| Knoop hardness | 456kgf/mm2 |

Physical Parameters

| | |
|---|--------------------------|
| Density | 2.5076 g/cm ³ |
| Linear Coefficient of Expansion 20-300℃ | 9.28×10 ⁻⁶ /℃ |
| Linear Coefficient of Expansion 20-450℃ | 9.75×10 ⁻⁶ /℃ |
| Transformation Temperature | 556℃ |
| Intenerate Temperature or Yield Point | 606℃ |
| Softening Point | 710℃ |
| Annealing Point | 547℃ |
| Strain Point | 513℃ |
| High Temperature Viscosity log2 | 1392℃ |
| High Temperature Viscosity log3 | 1152℃ |
| High Temperature Viscosity log4 | 996℃ |
| Liquid Phase Temperature | 1008℃ |

TINTED FLOAT GLASS

Tinted float glass

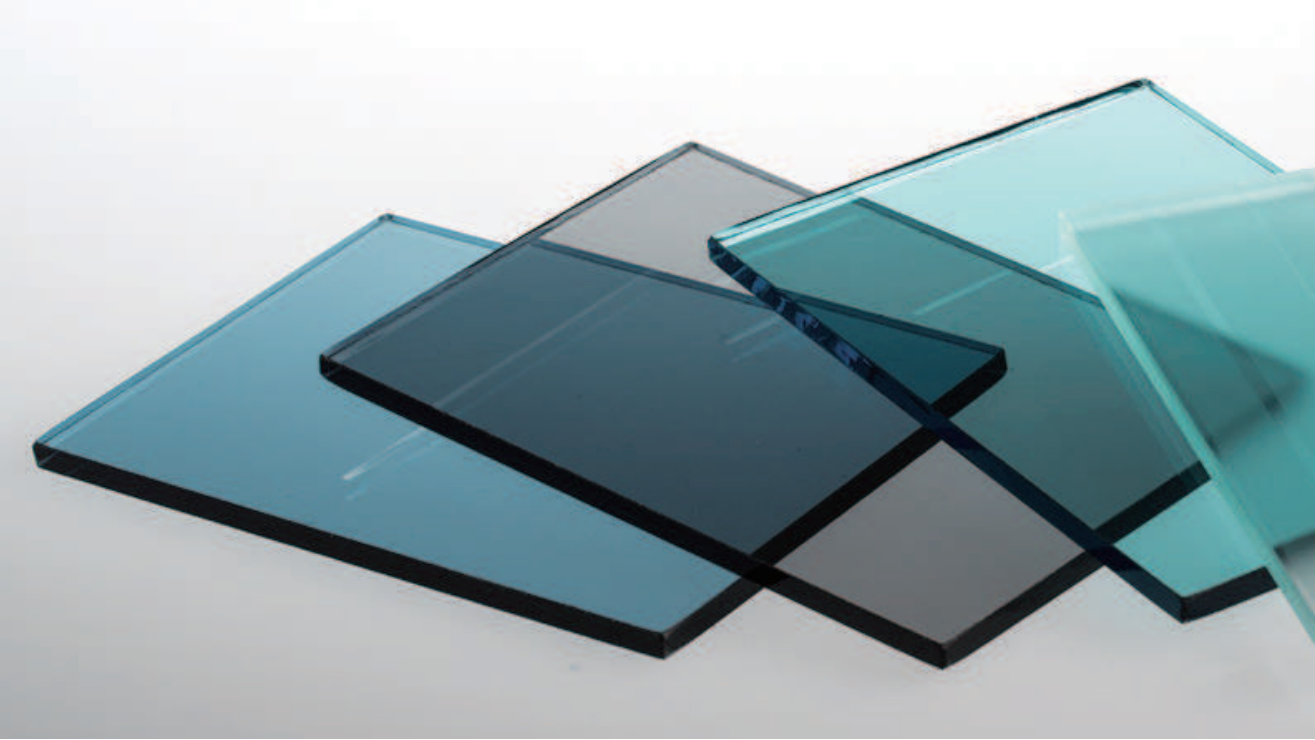
Tinted float glass is made of molten glass mixed with a prescribed quantity of tint agent, which flows through tweel to tin bath and then to lehr.While floating through the molten tin,the glass under the works of gravity and surface tension becomes smooth and flat at both sides.Tints available are dark green,light green,dark blue,light blue ,Bronze,Grey,etc.

Characteristic

- ◎ Energy saving through good heat absorption and reflection which reduce the transmission of solar heat radiation.
- ◎ High value creation by color variety of building’s exterior appearance.
- ◎ Substrate for each level of glass processing.

Applications

Architecture,Automobile,Furniture.



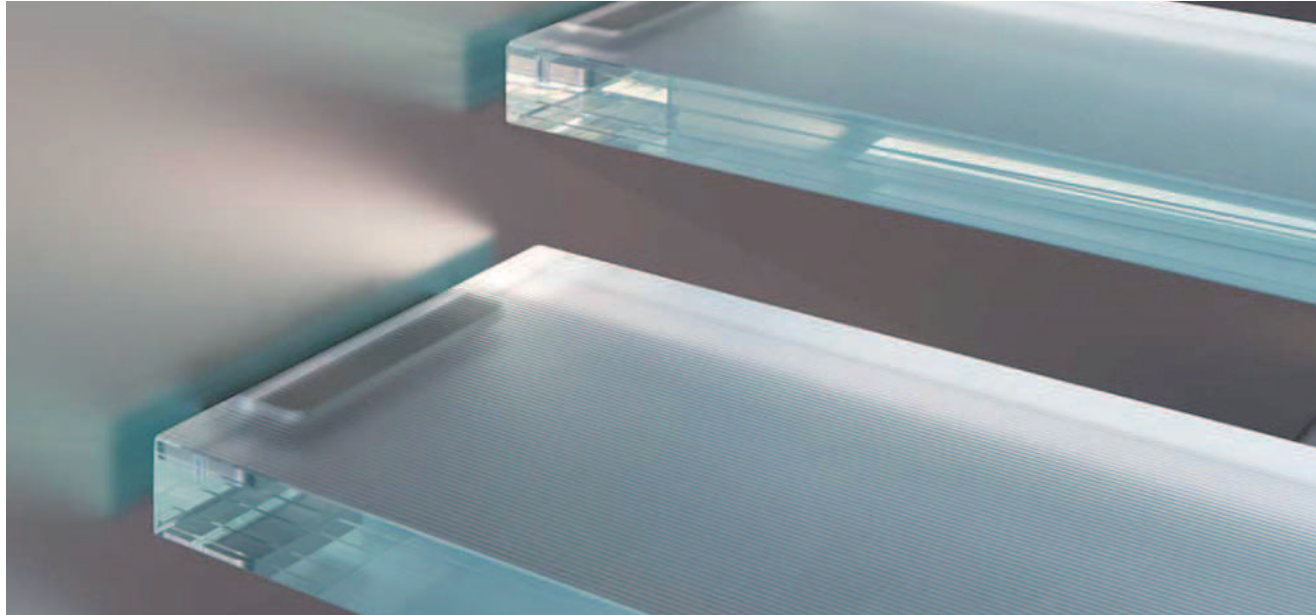
| NO | Product Name | Visible light Transmittance | Visble light Reflectivity | U Value summer | U Value Winter | SC | SHGG |
|----|-------------------------|-----------------------------|---------------------------|----------------|----------------|-------|-------|
| 1 | 6mm golden bronze glass | 45.36 | 12.03 | 5.134 | 5.878 | 0.605 | 0.588 |
| 2 | 6mm grey bronze glass | 47.16 | 6.73 | 5.243 | 5.808 | 0.606 | 0.66 |
| 3 | 6mm light green glass | 74.9 | 6.8 | 5.398 | 5.981 | 0.674 | 0.581 |
| 4 | 6mm Dark green glass | 65.5 | 6.4 | 5.243 | 5.244 | 0.785 | 0.66 |
| 5 | 6mm light grey glass | 65.2 | 6.4 | 5.822 | 5.995 | 0.768 | 0.664 |
| 6 | 6mm Dark grey glass | 44.12 | 5.4 | 5.248 | 5.983 | 0.684 | 0.556 |
| 7 | 6mm ford blue glass | 55.5 | 6.79 | 5.243 | 5.808 | 0.640 | 0.592 |
| 8 | 8mm black glass | 34.4 | 35.6 | 5.620 | / | / | / |
| 9 | 10mm black glass | 13.7 | 35.6 | 5.580 | / | / | / |
| 10 | 12mm black glass | 5.6 | 35.7 | 5.540 | / | / | / |
| 11 | 15mm black glass | 2.1 | 36 | 5.300 | / | / | / |
| 12 | 19mm black glass | 0.3 | 34.2 | 4.960 | / | / | / |

| Clear Float Glass | |
|-------------------|--|
| Thickness | 2mm 3mm 4mm 5mm 6mm 8mm 10mm 12mm 15mm 19mm 22mm 25mm |
| Color | Grey,Green,Blue,Black,Bronze |
| Size | 1650*2140mm, 1220*1830mm, 1830*2440mm, 2440*3660mm, 2140*3300mm, 2140*3660mm, 2250*3660mm, 2440*3300mm, 2440*3660mm. |









Anti-slip glass

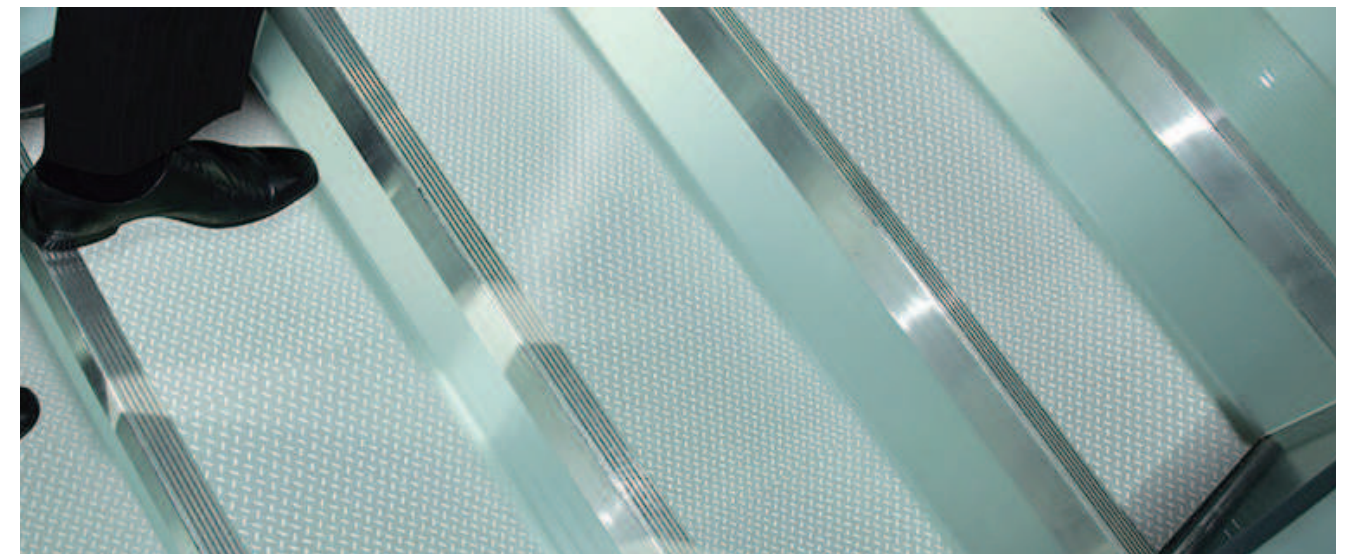
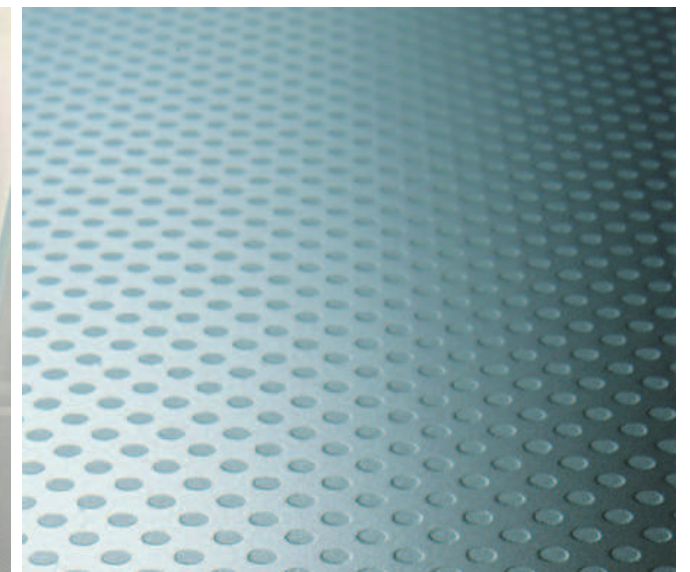
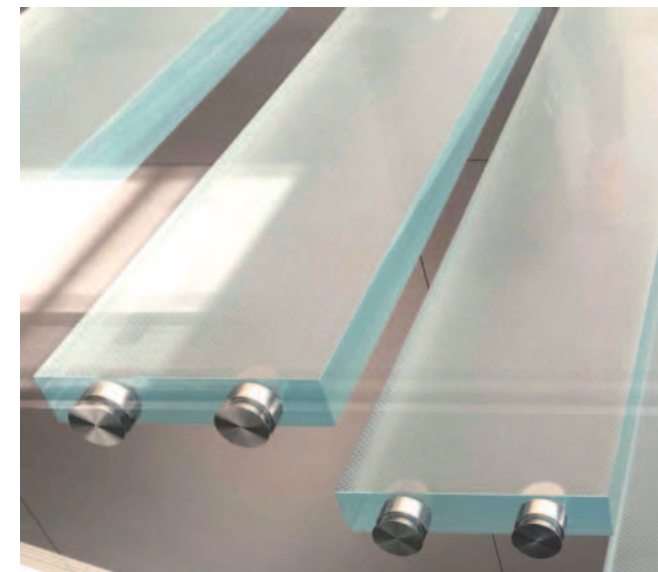
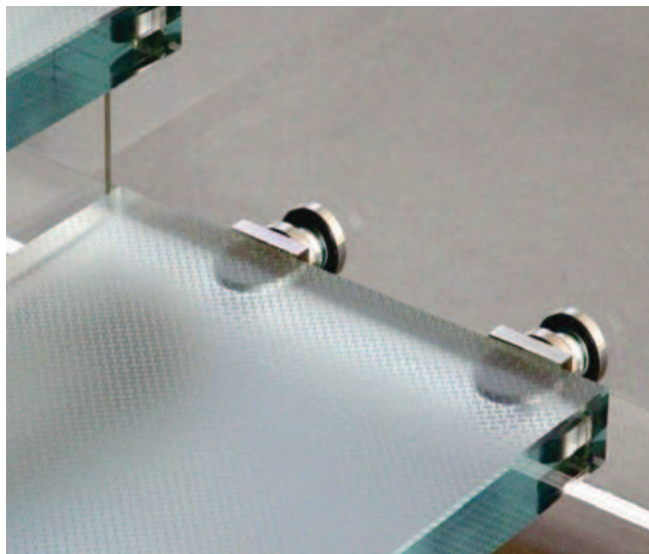
Anti-slip glass is an innovative floor material with superior performance and safety. It is made of multi-interlayer process. The surface tempered glass slip resistant properties of non-slip glass are entirely derived through acid etching, where by portions of the glass surface are removed to varying depths by a controlled process.

Characteristic

- © Anti-skid: anti-slip glass surface of the non-slip layer with a high coefficient of friction for the anti-skid glass floor anti-skid performance provides a guarantee.
- © Transparent: anti-skid treatment of the glass floor can still maintain the permeability characteristics, the full realization of sight unimpeded, visual integration.
- © Safety: non-slip glass flooring substrate has a high strength, can withstand large loads without breaking, through the sandwich made of non-slip glass floor can withstand greater load.
- © Anti-skid layer does not fall off: anti-skid layer has been sintered into the glass as a whole, it can be long-term friction without falling off.

Applications

Cafes, stage, exhibition hall, KTV and dance venues, supermarkets, large shopping malls, museums, landscape corridors and other places need to anti-slip.



DIGITAL PRINTING GLASS

Digital printing glass

Digital printing glass is a high technology by using multi colors to print pattern in many colors at same time. Then it go through tempered glass furnace to get tempered digital printed glass. The machinery we use is the Diptych from Israel that is the best top quality in the world.

Characteristic

- ◎ A wide range of silk screen printed glass products. It can be produced by applying various customers required patterns, with multi colors.
- ◎ Scratch resistant, acid and alkali resistant.
- ◎ High color stability, durable and without color fading.
- ◎ Safety glass with tempered glass desirable properties.
- ◎ Effective in providing solar shading.

Applications

Facade; interior decoration; opacified area; furniture; metro station; electronic products; partition; building; wall cladding; etc. The digital printing glass always express a vivid and colorful image that is liked by architects.



ANTI-REFLECTIVE GLASS

Anti-Reflective Glass

Anti-Reflective glass (AR) is also called add-transmissivity glass. Adopting advanced magnetron sputtering vacuum coating technology, make the Nano optics multilayer film coated on the glass surface. It can enhance the transmissivity of glass from 89% to more than 96% and reflectivity from 8% to less than 2%, for examples, four layers AR film on double surfaces, the transmissivity can be over 98%, the reflectivity can be lower 1%, no reflect and anti giddy light. It makes image more clear with the strong light and improves the screen brightness to protect your eyes.

Characteristic

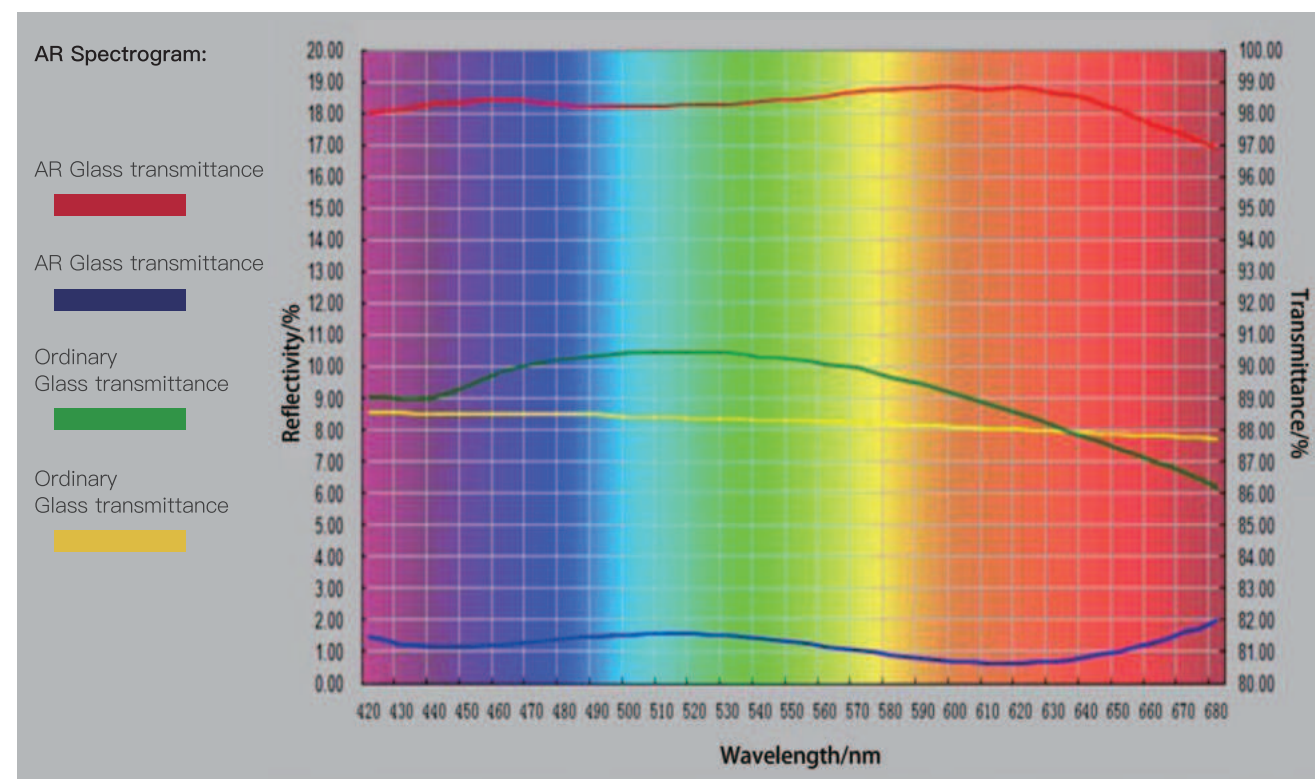
© Transmission rate is up to more than 96% (Max: 99.5%) from common glass 89% and it's the most transparent glass in the world.

© Reflectivity from 8% of the common glass fell below 2% (Min: 0.2%) Effectively weaken the defects caused by strong light behind the picture. Enjoy a more clear image. UV spectral transmittance < 3%, which can effectively block the ultraviolet ray injuries to the eyes.

© Excellent scratch resistance and hardness $\geq 7H$. Excellent environmental performance, pass the acid and alkali resistance, solvent resistance, temperature cycle, high temperature test and membrane layer has no obvious change.

Applications

AR glass is mainly used for display device and screen protector, such as LCD TV, PDP TV, laptop, desktop computer monitor, instrument panel, touch screen, picture frame glass.



One-way mirror

One-way mirror glass looks like a mirror in a well-lit room, but also looks like an ordinary reflective glass from the other side.

Characteristic

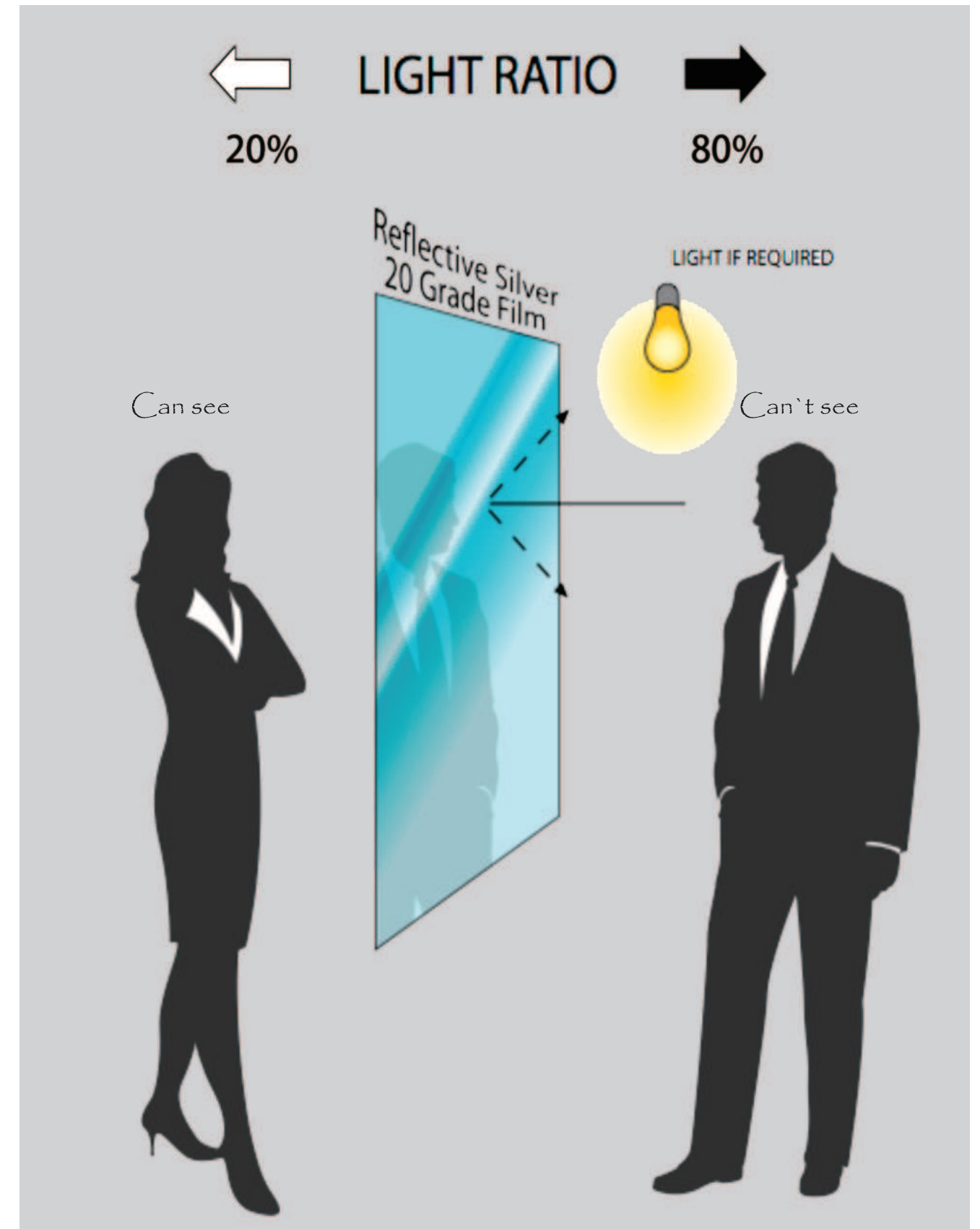
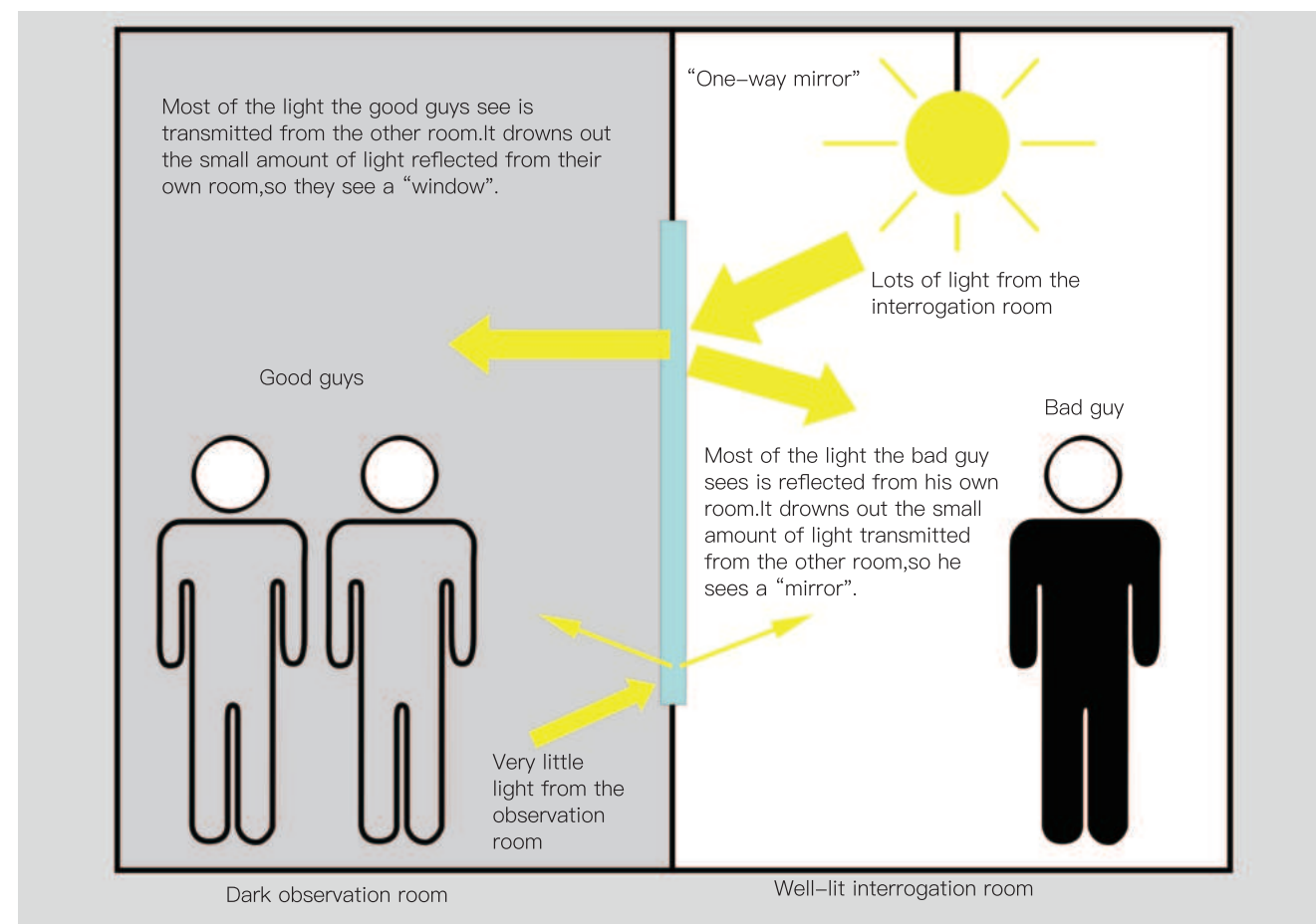
- © Coated by chemical vapor on glass, especially for scratch and abrasion.
- © High reflectivity and light transmittance, both concealed and clearly visible.
- © Easy to access, store and replace.

Applications

Internet cafes ,office, entertainment, building and so on.



How a "one-way mirror" works, The mirror actually transmits and reflects light equally in both directions. The effect comes from different lighting conditions in the two adjacent rooms – one has to be much brighter than other for this to work.



C

OMPOUND FIREPROOF GLASS

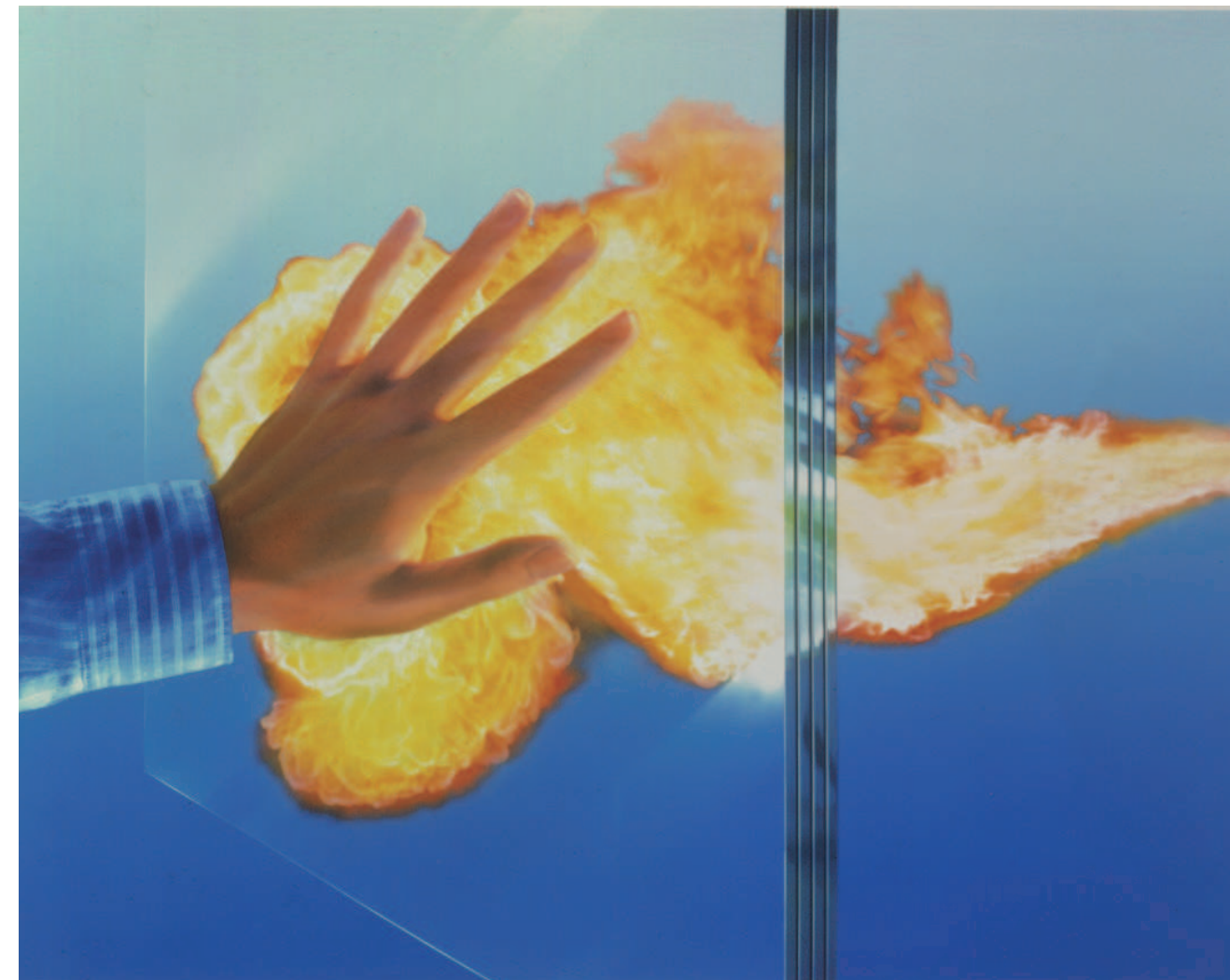
By using two or more glass of the original film, glass is surrounded by a special flame retardant tape seal. The middle of the perfusion of plastic spray, after curing for the transparent jelly and glass into one. Fireproof principle: in the case of high temperature, the middle of the glass transparent jelly-like fire adhesive layer will quickly induration, forming an opaque fire insulation board. To prevent the spread at the same time, but also to prevent the high temperature to the back surface conduction. This kind of fireproof glass not only has the fire insulation performance, but also the outstanding sound insulation . Can be processed into arc.

Characteristic

- © When used for building windows or external walls, the insulation of fire-resistant glass can be combined with other such as float glass, sunlight control glass, low-radiation glass, etc., made of fire with a multi-functional insulating glass.
- © Can be made according to the design requirements of curved glass.
- © High noise reduction function.

Applications

Fire doors, windows, building, sklight, atrium, shared space, computer room fire partition wall.



MONLITHIC FIREPROOF GLASS

Monolithic cesium potassium fire glass is a wall with a fire glass door and windows. It uses special technology, the float glass for chemical, physical and other comprehensive enhancement of the way. It can be maintained 80–120 minutes without cracking at 1000 °C flame, which effectively prevents the spread of flames and smoke. There are conducive to find the fire in time, so that people have enough time to escape and spread away from the scene, for disaster relief work.

Characteristics

- © The strength of Monolithic cesium potassium fire glass is 6–12 times than the float glass, 1.5–3 times than tempered glass.
- © Fire resistance, burning in the flame at 1000 °C 90–120 minutes do not burst, do not penetrate.
- © Compared with the traditional grouting fire glass, except high strength, easy to installation, the outstanding feature is high weather resistance.
- © Permeability: Monolithic cesium potassium fire glass in the ultraviolet and flame still remain transparent, without any change and without any air bubbles in production process.
- © Can be processed into laminated, insulated and other composite fire glass.

Applications

Senior hotels, theaters, exhibition halls, airports, gymnasiums, hospitals, libraries, commercial buildings, Public building fire doors, fire windows and fire partitions.

WIRE GLASS

Wire glass

Wire glass, also known as wired glass, shatterproof glass explosion-proof glass. It is the float glass heated to softening state, and then preheated wire or barbed wire into the middle of the glass.

Characteristic

© Fire resistance:

mesh glass can also be used as a secondary doors and windows fireproof material. Ordinary glass will be broken when meet the heating in a fire, resulting in air flow and fire spread. Folder wire glass in the fire even if there is a burst, because the support of metal wire or mesh without the collapse of the hole to wear, to a considerable extent to maintain the integrity, even when the flame wear, can block the flame and fire powder intrusion, There is an effect of preventing the spread from spreading from the opening.

© Safety:

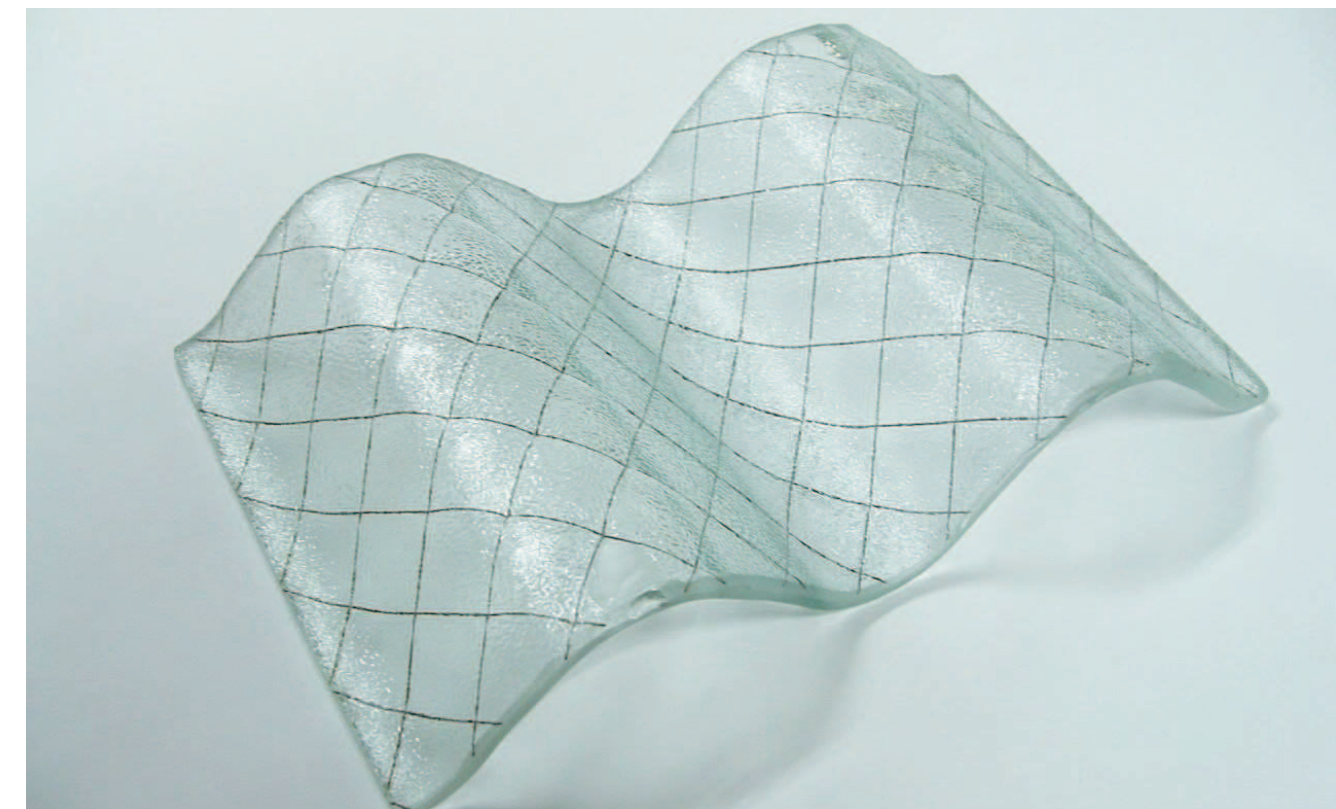
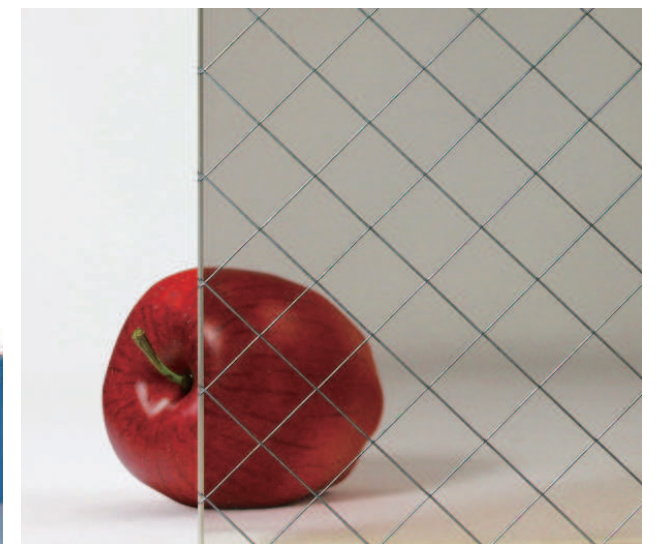
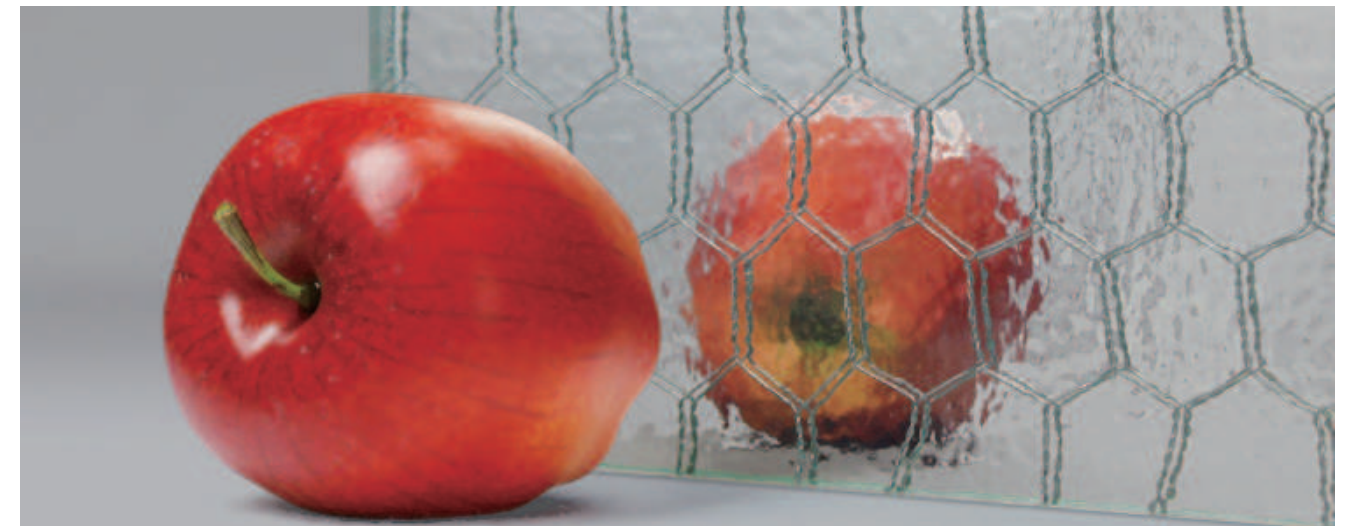
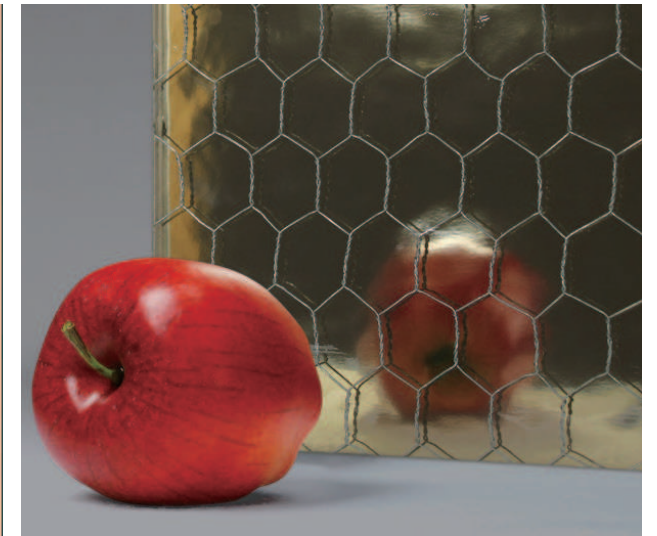
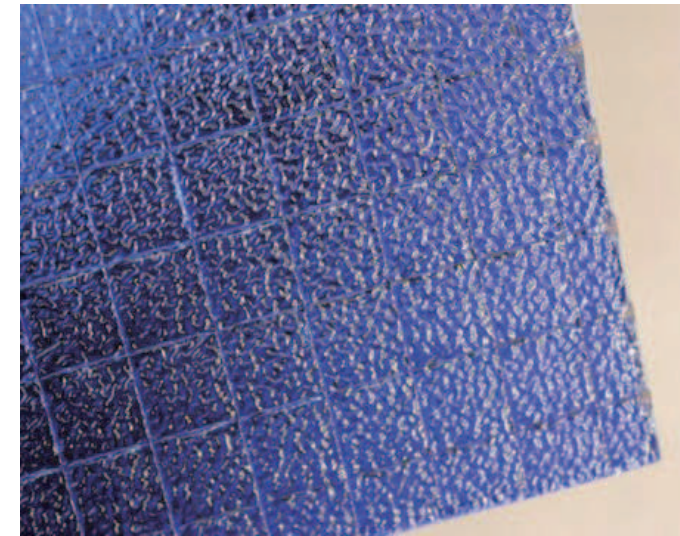
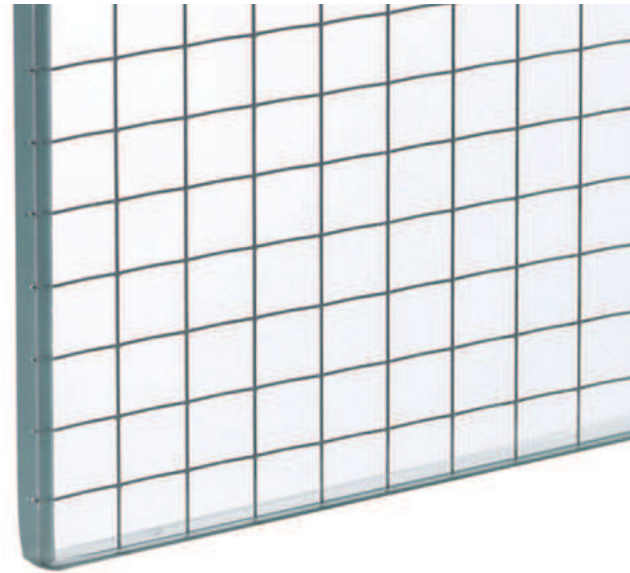
folder glass safety is reflected in the destruction of the integrity, the glass fragments will be distracted in the silk, reducing the harm to the human body. cabinets.

© Anti-theft:

folder wire mesh is not easy to penetrate, even broken, line or network can also support debris, it is difficult to collapse and broken, for doors and windows also have a certain anti-theft function. Folder glass is also suitable for shock occasions, such as the seismic protection requirements of higher construction and industrial vibration of the plant and other buildings.Clamps Glass Improved brittle properties of flat glass.

Applications

Skylight, balcony windows, roof, indoor partitions and so on commercial buildings, fire prevention, fire doors, power control







FLOAT GLASS PARAMETER



Product Specifications

| | | |
|--|--|--|
| Remark:The other thickness and sizes may be available upon request | | |
| Thickness | 2mm,2.5mm,2.8mm,3mm,3.2mm | 4mm,5mm,6mm,8mm,10mm,12mm |
| Specification | 1830*2134mm;1830*2440mm;1650*2134mm;1650*2440mm;650*1830mm;1500*2000mm;920*1016mm; | 1830*2134mm;1830*2440mm;1650*2134mm;1650*2440mm;3660*2134mm;3660*2440mm;3300*2134mm;3300*2440mm;3050*2134mm;3300*5000mm;3300*6500mm;3300*6000mm. |

Optical Parameters

| Thickness | Visible Light Transmittance | Visible Light Reflectivity | Solar Transmittance | Solar Reflrctivity | Visible–infrared Transmittance | Ultravioet Transmittance |
|-----------|-----------------------------|----------------------------|---------------------|--------------------|--------------------------------|--------------------------|
| 2mm | 90.69 | 8.3 | 87.22 | 7.9 | 84.15 | 83.44 |
| 2.5mm | 90.47 | 8.3 | 86.14 | 7.8 | 82.31 | 81.97 |
| 2.8mm | 90.34 | 8.3 | 85.51 | 7.7 | 81.22 | 81.15 |
| 3mm | 90.25 | 8.3 | 85.09 | 7.7 | 80.51 | 80.62 |
| 3.2mm | 90.17 | 8.3 | 84.67 | 7.7 | 79.80 | 80.11 |
| 4mm | 89.82 | 8.3 | 83.04 | 7.6 | 77.03 | 78.18 |
| 5mm | 89.39 | 8.2 | 81.07 | 7.4 | 73.71 | 76.02 |
| 6mm | 88.96 | 8.2 | 79.17 | 7.3 | 70.54 | 74.08 |
| 8mm | 88.31 | 8.1 | 76.51 | 7.1 | 66.14 | 70.60 |
| 10mm | 87.47 | 8.1 | 73.61 | 6.9 | 61.56 | 67.15 |
| 12mm | 86.25 | 8.0 | 68.53 | 6.6 | 53.09 | 66.23 |

Physical Properties

| | |
|--------------------------|--------------------------|
| Density | 2.5g/cm ³ |
| Linear Coefficient | 8.6×10 ⁻⁶ /°C |
| Softening Point | 723°C |
| Annealing Point | 544°C |
| Stran Point | 504°C |
| Hemispherical Emissivity | 0.84°C |
| Specifi Heat | 0.205 |
| Thermal Conductivity | 36.9 |

Mechanical Properties

| | |
|-----------------------|---------------------------------|
| Modulus of Elasticity | 10.6E ⁶ psi(73.1Gpa) |
| Modules of Rupture | 6000psi(41.4Mpa) |
| Knoop Hardness | 470kgf/mm ² |

Glass Terminology

Visible light transmittance
In the visible spectrum (range from 380 nm to 780 nm), the percentage of intensity of light through the glass.

Visible light reflection rate
In the visible spectrum (range from 380 nm to 780 nm), the percentage of glass is the reflection of the light intensity.

Solar penetrating rate
In the solar spectrum (range from 280 nm to 2500 nm), the percentage of UV light and near–infrared light energy through the glass.

Solar reflection rate
In the solar spectrum (range from 280 nm to 2500 nm) within the scope of glass reflection ultraviolet, visible and near–infrared light the percentage of energy through the glass.

U–Value
ASHRAE standard conditions, due to heat transfer of glass and indoor and outdoor temperature difference, the formation of air to air heat transfer. Its English units are: English calorie per hour per square foot per fahrenheit. Metric units are: watts per square meter per Kelvin temperature. The lower the U value, the lower the heat transfer through the glass.

Winter U value
The conditions of outdoor air temperature of 90 ° F (18 ° C), the indoor air temperature of 70 ° F (21 ° C), outdoor air flow rate is 15 MPH (24 km/h), indoor air natural convection, the sunlight intensity 0 (night).

Summer U value
The conditions of outdoor air temperature of 90 ° F (32 ° C), the indoor air temperature of 75 ° F (24 ° C), outdoor air flow rate of 7 MPH (12 km/h), indoor air natural convection, the sunlight intensity of 248 BTU/h – ft² (OW/ m²) (day).

Shading coefficient
Under the same conditions, the amount of solar radiation energy through a glass component is the shading coefficient of the component by the ratio of the amount of the transparent glass through 3 mm, which is represented by SC.The smaller the shading coefficient, the better the performance of direct sunlight.

Relatively heat gain
The moment the solar energy passes through the window, it heats up.These include solar radiation heat gain (shading coefficient) and conduction heat (U).Relatively lower heat gain, the better the performance, according to the ASHRAE standard, during the day in the summer, the sun radiation intensity of 200 BTU/h – ft² (630 W/ m²), no shade outdoor indoor temperature for 14 ° F , relatively increased heat gain =summer U value by temperature difference between indoor and outdoor +shading coefficient,the relative heat gain = 14 * shading coefficient of summer U + 200 BTU/h – ft² or, relative heat gain = 7.8 * summer U value + 630 * shading coefficient (W/ m²).

ANTI-PRESSURE PERFORMANCE OF THE GLASS

| Glass Type | Tempered glass | | Heat Strengthened glass | | Common glass | |
|------------|--------------------------------|---------------------------|--------------------------------|---------------------------|--------------------------------|---------------------------|
| Thickness | (Kpa) Maximum wind pressure | (mm) Maximum flexivity | (Kpa) Maximum wind pressure | (mm) Maximum flexivity | (Kpa) Maximum wind pressure | (mm) Maximum flexivity |
| 6 | 11.2 | 34.3 | 4.1 | 19.3 | 2.1 | 12.3 |
| 8 | 16.5 | 30.2 | 5.6 | 13.9 | 3.2 | 9.2 |
| 10 | 18.6 | 22.7 | 7.5 | 11.1 | 4.8 | 7.4 |
| 12 | 21.5 | 17.5 | 10.4 | 9.2 | 6.8 | 6.1 |

Supportingfrom:four-edge support,glass panel:2000×1000mm





BETTER GLASS

DONGGUAN BETTER GLASS TECHNOLOGY CO.,LTD

ADD: Zhaolin Village,Xiegang Town,
Dongguan City,Guangdong,China

WEB: www.better-glass.com

TEL: +86-0769-23661002

E-mail: marketing@better-glass.com

24 HOURS SERVICE: +86-13500019198