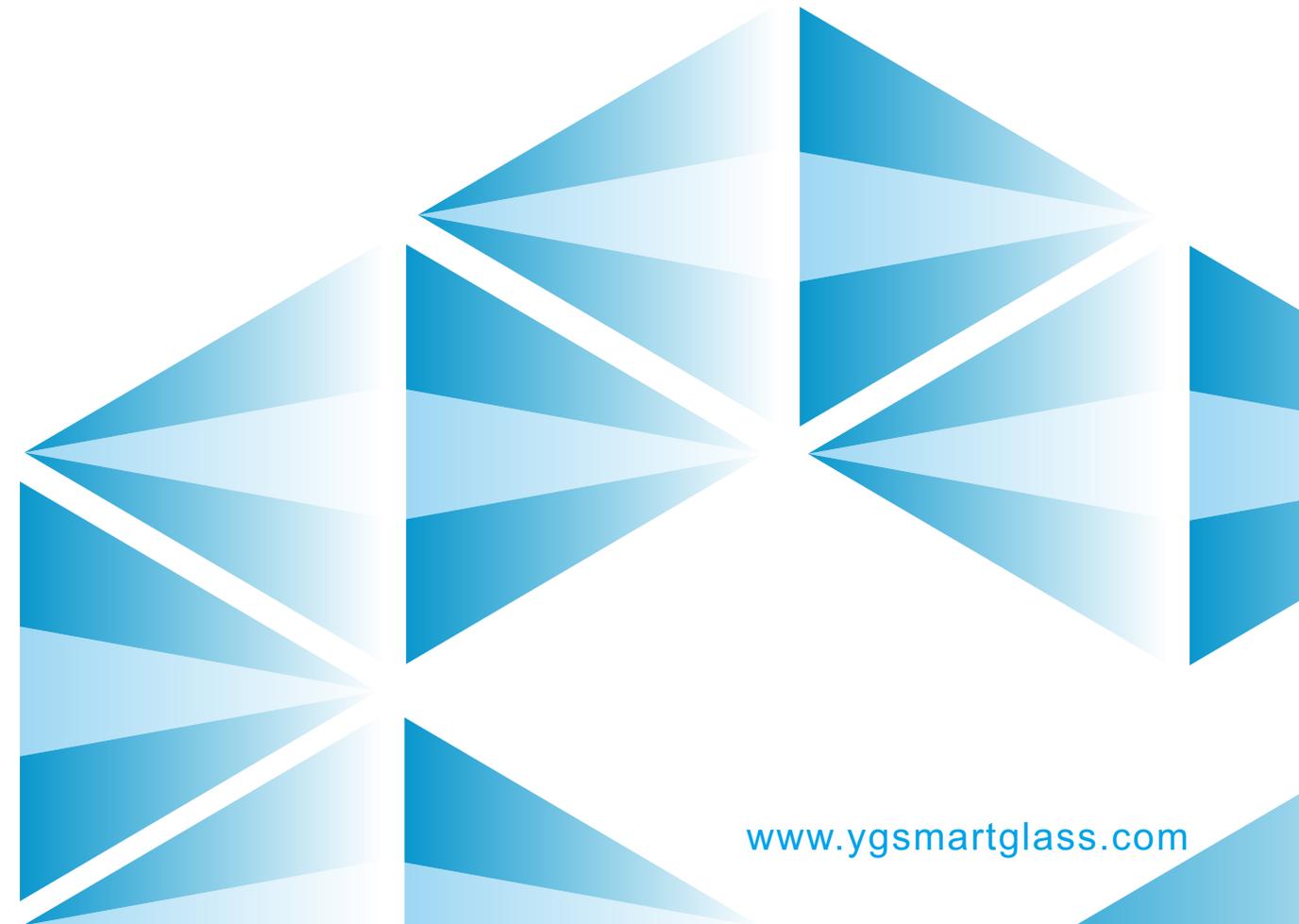




SHENZHEN YUGUANG NEW MATERIAL CO.,LTD



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## Company Profile

Shenzhen YuGuang New Material Co., Ltd is a comprehensive and professional provider of smart light control solutions. The company has accumulated more than ten years experience in the field of intelligent light control, smart home solutions, artificial intelligence and intelligent construction, devoted to provide various professional light control solution, smart products and professional technical services for global customers.

Thanks to professional technology and excellent after sales service, the company has successively launched a series of high-quality products such as smart light control products, interactive digital signage, and smart home products, which have attracted wide attention and favor from the industry and the market.

### Our Spirits= Focus & Innovation

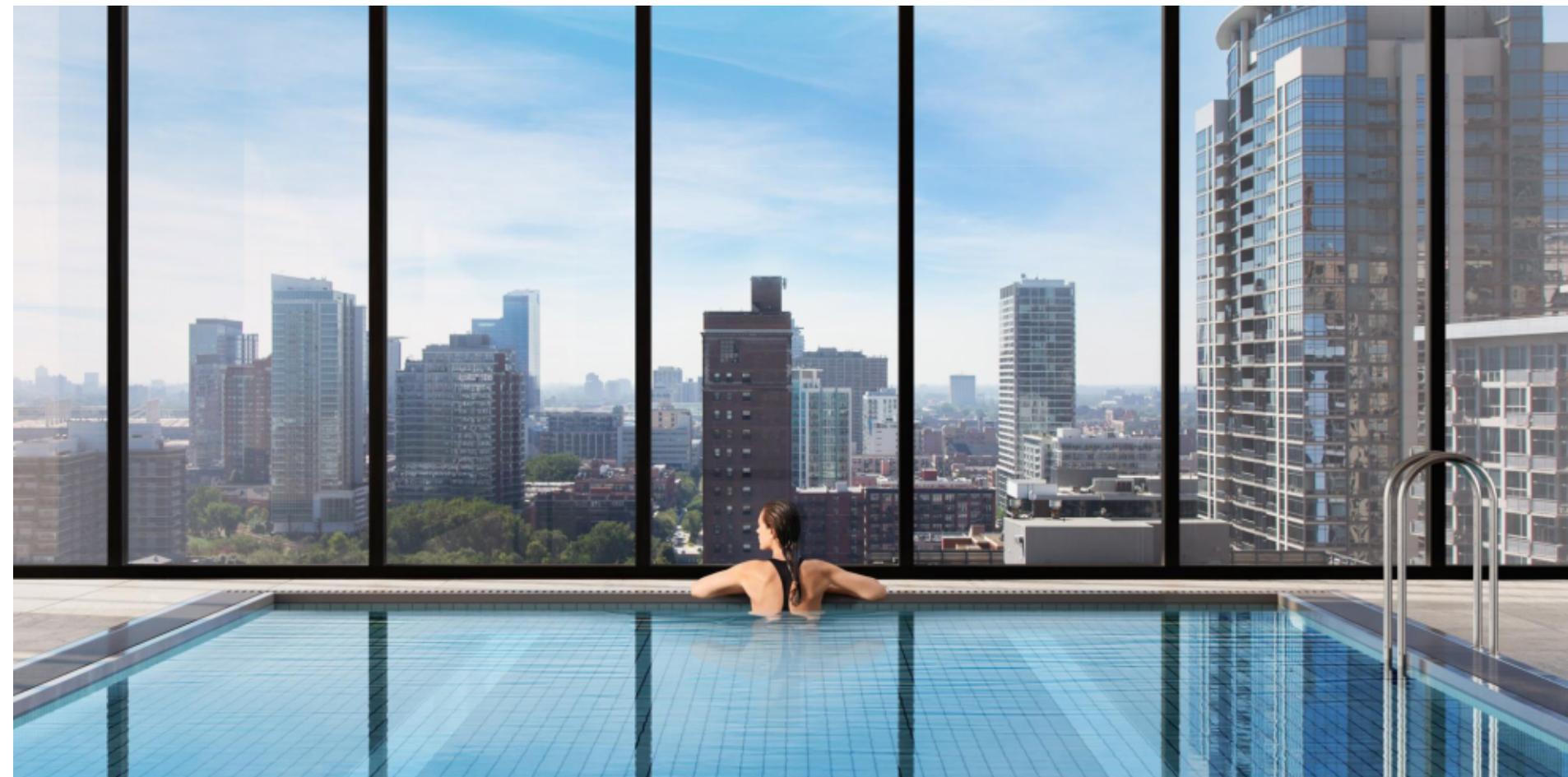
YuGuang's R & D and design team focuses on intelligent light control solutions, providing each customer with the most suitable comprehensive solution, and growing with customers. Our vision is to become a brand service provider with its distinctive features and powerful influence in the intelligent light control display industry.

### Our Promise= Green & Quality

Environmental protection and safety is the commitment of YuGuang to each customer. The quality first is the truth of YuGuang. Our products strictly implement the ISO9001 and ISO14001 standards from product planning and design, material inspection to production and manufacturing process control, and then to finished products. Shipment and recycling of waste materials all require environmental protection and meet EU ROHS standards.

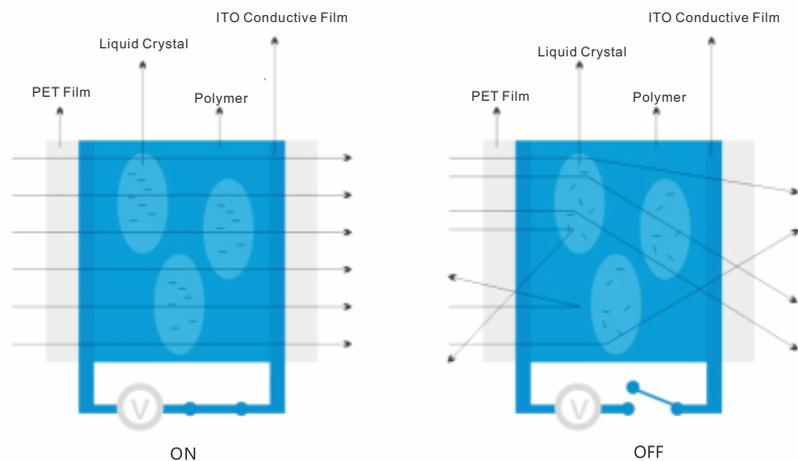
### Our Creed = Win-Win

The management creed of YuGuang is: Only win-win, can coexist. Take advantage of the company's comprehensive advantages, conduct in-depth communication with client at the beginning of the project planning and design, understand all requirements of the client, provide more useful suggestions for client, and recommend suitable schemes to achieve win-win cooperation.



How smart glass works

In short, PDLC is a liquid crystal flat capacitor, which relies on the application or withdrawal of an electric field to orient or disorderly arrange polar liquid crystal molecules, so as to achieve a transparent or shielding effect. The effect is shown in the figure below:

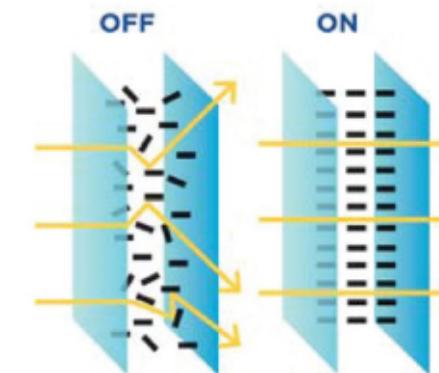
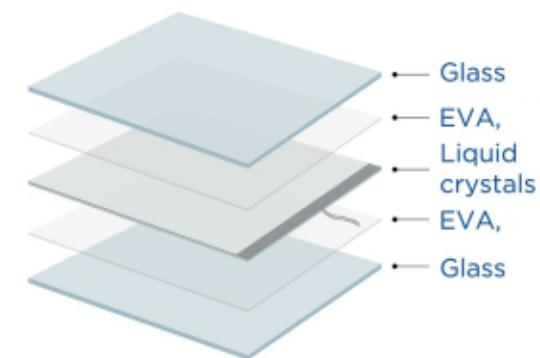


(PDLC Schematic Diagram)

Smart glass product advantage

Yuguang smart glass is made of high-transparency film developed for smart glass and high-quality automotive-grade float glass, which is processed by advanced laminated glass production technology. It is advanced in technology and excellent in performance. The product has passed various stringent tests, ensuring the high quality of the product. When the power is turned on, the total light transmission rate is as high as 83%, the haze is less than 3%, when the power is off, the haze is as high as 96%, and the power consumption is less than 4w / square meter. The photoelectric performance is excellent and reaches the international advanced level.

Structural diagram



Smart glass Parameters

Parameter set		Mode	Parameter
Optical parameter	180 ° visible light transmittance	(ON)	83%
		(OFF)	>60%
	Parallel transmittance	(ON)	75%
		(OFF)	<2%
	Atomization rate	(ON)	<4%
(OFF)		96%	
Maximum perspective	(ON)	160°	
Operating Voltage	(ON)	AC48V ~ 65V/50Hz	
Electrical parameters	Response Time	(OFF-ON)	<10ms
	Power consumption	(ON-OFF)	<5W/m²

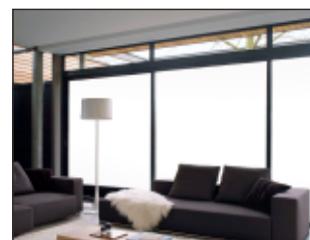
Parameter set		Project	Parameter
Size	Thickness	Glass	Glass thickness*2+2mm
	Max Size	Film	50m x 2m
	Operating temperature	—	-20 °C~ 90 °C
	Storage temperature	—	-30 °C~ 70 °C
Working frequency		—	30Hz~ 400Hz
Switch parameters		—	> 2 Millions

Product Features

1. Privacy and Safety:  
The main function of smart glass is the privacy and safety, the transparent and opaque state of the glass can be controlled at any time, and the response speed is fast, can exchange states in an instant.
2. Sound insulation:  
The laminated smart film and eva film between the smart glass can partially block noise. If processed into a hollow smart glass, the effect is better.
3. High intelligence:  
It can be combined with intelligent home system and intelligent building system to achieve unified intelligent management and improve efficiency.
4. Stable performance and long service life:  
It can be used more than 2 million times, and more than 80,000 hours in the open state, life time is 15 years.
5. Energy saving and environmental protection:  
Block more than 99% of the uv and more than 98% of the infrared, insulation performance reaches level 2 or above.
6. Power saving:  
The film is transparent when power on, but the light is still very good when power off, not only comfortable, but also save energy consumption.
7. Safety:  
It has the advantages of safety glass, good impact resistance, eva film and laminated smart film firmly adheres the glass, so that the smart glass can prevent debris from hurting people after being broken by impact.
8. Diversified control methods:  
Manual switch, remote control, trigger control, voice control, APP control, timing control, remote network control, etc., can be customized according to customer needs.
9. Projection function:  
The smart glass can be used as a projection screen in power-off state. In a light-friendly environment, use a high-lumen projector, the projection imaging is very clear. (It is recommended to use rear projection imaging)



通电状态 (ON)



断电状态 (OFF)



Smart glass is different from ordinary glass. It is a special architectural decorative glass, its transparency can be adjusted, also known as electrochromic smart glass and switchable smart glass. It is a revolution about glass light transmittance. It is an inevitable product of the development of glass processing in the direction of high technology, electronics and intelligence.

The dimming principle of smart glass is: in the natural state, the arrangement of liquid crystal molecules inside it is irregular, the refractive index of the liquid crystal is lower than that of the polymer outside, and the incident light is scattered in the polymer, and it is milky white, that is, opaque. After the current is applied, the liquid droplets in the dispersed liquid crystal polymer are rearranged, and the liquid crystal changes from disorder to directional orderly arrangement, so that the refractive index of the liquid crystal is the same as that of the polymer, and the incident light can pass through completely and form a transparent state.

Smart glass can change the state of the glass in an instant according to different occasions, moods, functions, etc., and truly achieve the effect of "light moves with me". Its magic is that the state can be controlled by the user with the touch of a switch or remote control, you can create the privacy space and effectively protect the privacy of your personal space.

# Main Application ▶



- 1 Office meeting room application
- 2 Business center application
- 3 High-speed rail subway aircraft application
- 4 Bath center bar KTV application
- 5 Factory workshop console laboratory
- 6 Hospital clinic application
- 7 Hotel room application
- 8 Window advertising projection
- 9 Special agency application
- 10 Home interior application
- 11 Station ticket office application

## Office Conference room

When the office area is partitioned by a number of walls or frosted glass, it will inevitably result in small slits, If all use transparent glass design then must lack of privacy. With the smart glass, you can easily switch the glass between transparent and opaque by simply pressing a remote controller, making the space open or closed as your will. can be controlled by the user with the touch of a switch or remote control, you can create the privacy space and effectively protect the privacy of your personal space.



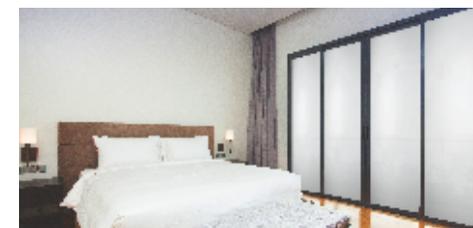
ON



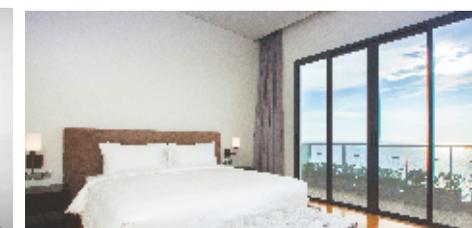
OFF

## The Hotel application

A variety of convenience design for guest is necessary for a warm place to rest, a place that strives to give people a sense of "home away from home". And Smart Glass is novelty, beautiful, practical to win warm praise from star hotels. Its "powered transparent, power-off matte" feature allows the space to be freely retracted, which not only enlarges the narrow space, but also protects privacy when it is necessary; it makes a lot of fun and convenience to the guest.



OFF



ON



### Projection touch

When the smart glass power is off, control the ambient light and project it through a projector can make the smart glass display clear image, and combined with the infrared touch frame to form a large-sized "tablet computer" (can be made up to 130 inches). Created a new field of projection. Suitable for meeting, science and education configuration.

180 degree viewing, no image distortion.

No glare from traditional lighting.

Saves a lot of useful space instead of expensive LED displays.



### Subway Aircraft

The intelligent smart glass is transparent and clear, which resolves the rigid lines of the space shape. It is noble ,elegant, fresh ,natural, soft , beautiful, fully embodies the charm of its application. At present, some special high-speed rail lines in China (such as Hada High-speed Rail) are using smart dimming glass.



### Special institution

Intelligent smart glass has efficient openness and privacy, can be used in prison visit rooms, interrogation rooms, isolation rooms etc.



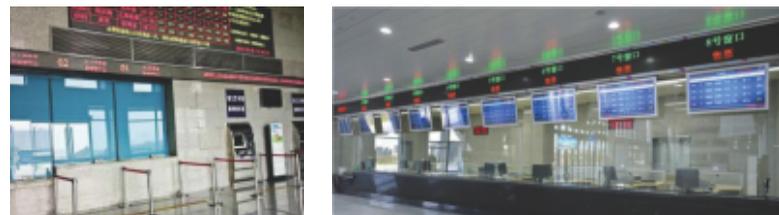
### Service counter

Smart glass creates a new field of modern bank openness and privacy functionality , its high-privacy functions make the working environment safer. The bulletproof smart glass partition for bank counter, can easily switch from transparent state for service time and the atomization state for off time.



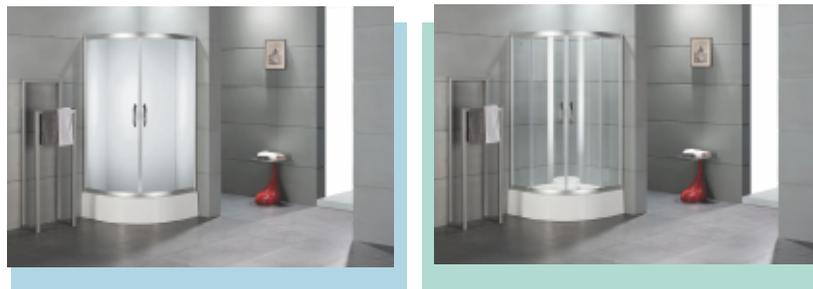
The station ticket office applications

In some places such as public area and stations, you can also customize some privacy spaces. For example: ticket window, nursing room, emergency room, etc.



Shower Room, Washroom

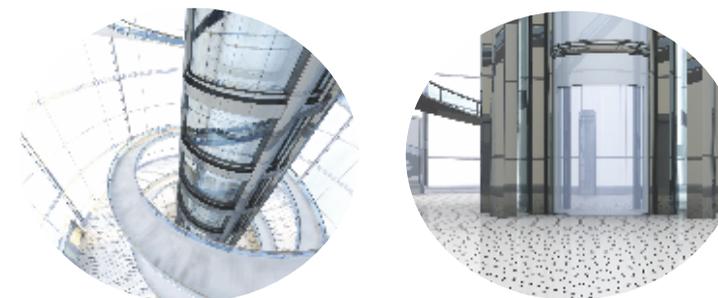
The transparent and opaque shower room always gives a sense of mystery. If you combine these two mysteries into one, the mystery will multiply. Intelligent dimming glass can instantly control the opening and privacy of the space. It can be used in shower rooms and toilets without occupying too many places, but it can add a mysterious taste to our life.



Elevator application



Special perspective lift  
Advantages: Elevator glass changes transparency can make people feel safer



Product accessories

Yu Guang smart glass transformer power supply

The main technical parameters	
Input AC	220V
Output AC	60V
Frequency	50-60HZ
Rated power	<5W/m <sup>2</sup>
Scope of application	Limited to smart glass smart glass film
Features	Has moisture-proof protection, short circuit protection function

Control method:  
1, Switch control  
2, Remote control  
3, Mobile phone App control

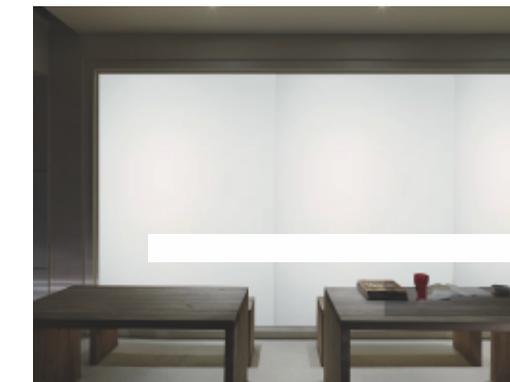
Product comparison



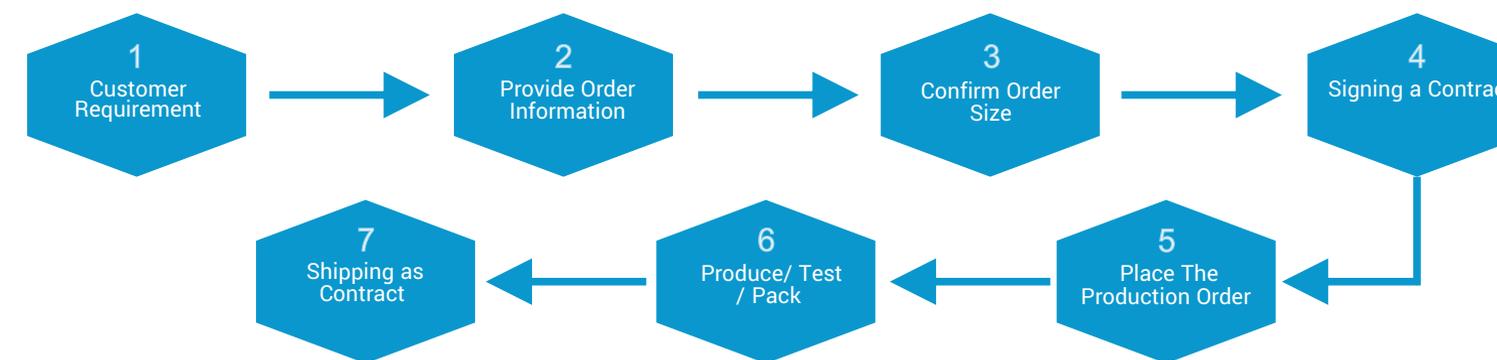
Smart glass	Blinds	Roller blind
Advantage		
Clear and bright, clean and simple, durable, soundproof, looming, and can be individually designed	Low Price	—
Low Price		
Cost-effective	Not clear and bright, single control, difficult to clean, easy to wear down	Single regulation, clean and complex, easy to wear out

Benefits of smart glass?

1. Instant construction and control of private space
2. effectively protect the personal safety
3. improve the comfort of space
4. More efficient use of building area
5. beautiful and eye-catching
6. save energy, reduce air conditioning
7. low power consuming
8. block 99% of ultraviolet light and 98% of infrared rays to protect human health
9. high quality projection image.
10. excellent optical quality
11. years of research and development experience, reliable technology
12. professional pre-sales and after-sales service, 2 years warranty



Cooperation process



## Product service

### 1,product warranty

Beginning the dimming glass product arrives at the customer's location, the quality problem will occur under normal use within two years. Our company will provide after-sales service free of charge and replace it if necessary.

Special statement: Quality assurance is limited to through the glass internal interlayer and dedicated power supply. The exterior glass is fragile and not covered by the warranty.

### 2, quality assurance services

The quality of each dimming glass produced by Yuguang New Materials Co., Ltd. during the warranty period and under normal use and maintenance. If the product is damaged within the scope of warranty, Yuguang New Materials promises to reply within 2 working days.

3. Under the agreed implementation plan, solve the problem for the customer within 14 working days. After two years of use of the dimming glass, it is still available to provide customers for accessories and repair services.



## After-sales service

1. After receiving the report, our after-sales service personnel will arrange technical personnel to solve the problem immediately.

2. If it is a product quality problem, and under warranty, we will provide free repair to ensure your safe use; if the product exceeds the warranty period, we will provide on-site service, only charge for maintenance costs.

3. If the product damage caused by violation of safe use or daily maintenance precautions, as well as man-made, irresistible external force, is not covered by our product warranty, we will be responsible for the repair or replacement for value.

4. You can also contact us for product use, maintenance and other related issues through our website. It is our pleasure for you to make reasonable suggestions or comments on our products. .

5. In order to ensure your safe use, we will follow up the products after-sale usage. Please cooperate and support our job.cy space and effectively protect the privacy of your personal space.

OMNI-DIRECTIONAL AFTER  
-SALE TECHNICAL SUPPORT



YuGuang Factory



Certification



YuGuang Factory

Win-Win Cooperation Create Resplendence

