

The ideal glass combination for glass conservatory

Glass conservatory, also named as glass sun room, glass winter garden. The sun room adopts a non-traditional building constructed with glass and metal frames to achieve the purpose of enjoying the sun and being close to nature.



Features of glass conservatory:

1. It realizes the intimate contact between the room and the sun, even in the cold winter, you can also enjoy the warmth of the sun.
2. Due to the unique thermal insulation effect of the sun room, the function of the greenhouse can be realized, even in the cold winter, it can also create a warm room environment for the family.

Many people use the glass conservatory as a place to relax and rest with friends, drink tea, and chat. When they are in this area, they will involuntarily relax and bask in the warm winter sun. And getting Relax for a moment.

The ornamentation of green plants and natural-style home decoration contribute to this atmosphere. Green plants are not only decorative, but the vitality and affinity they bring to the room also add a lot of color.



Perfect glass performance requirement for conservatory

The perfect glass applied in the glass conservatory should comply with below requirement:

1. Thermal insulation. Good thermal insulation glass will not only save your energy costs in air to prevent indoor temperature too high, but also keep warm in winter.
2. Sound proof. A silent living environment is perfect for your relax.
3. No Condensation. Keep away from the boring glass condensation in winter, especially when your sun rooms has a glass roof.
4. UV block to prevent fading. Keep your furniture and clothes away from fading.
5. Good lighting. Taking the most advantage of natural daylight.
6. Easy cleaning. The almost all glass winter garden need to be easy cleaning to keep clean and free from dusts, dirt, and ideal visual appearance.

In some areas solar shading is required in hot summers, extra solar shading facilities or functions should be added to the glass conservatory.



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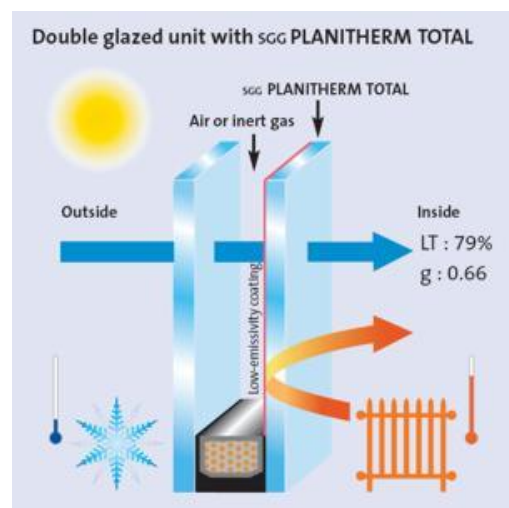


World famous glass manufacturers has developed low-E coatings specialized applied in glass conservatory and glass greenhouse, the feature is extremely high light transmittance -80% and extremely low thermal conductivity-U value can reach 1.1W/M2.K combining with 16mm Argon spacer, in addition warm edge spacers which will contribute to the further decreasing of overall windows U value.

These products include Pilkington Optitherm S series, AGC Iplus total series and Saint Gobain Planitherm series. As China glass manufacturers and suppliers in China, Morn also developed similar products, W1.1 and W1.16. Typical glass combination for glass sunrooms are:

4 low-e+16ar+4, clear tempered insulated glass

6 low-e +16ar+6, clear tempered insulated glass



No.	Glass option	Thick	Visible Light			Solar Energy			U value(W/2.K)		SC	SHGC	UV
		(mm)	LT %	Ref %	In %	Tsol %	Rsol %	Abs %	Summer	Winter			
1	6 iplus top 1.1 T on clear+12AR+6 C FT	24	80	12	12	50	27	23	1.31	1.4	0.67	0.58	41
2	6 W1.1 T on clear+12AR+6 C FT	24	80	13	12	49	27	24	1.37	1.44	0.62	0.54	41
3	6 W1.16 T on clear+12AR+6 C FT	24	79	12	12	49	25	26	1.38	1.45	0.65	0.57	44



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Click here to learn about the glass comparison with world glass manufacturers:

[Low-E coating performance -Pilkington VS China Morn](#)

[Insulated Glass performance -Saint Gobain Glass](#)

Advantage of greenhouse W1.1 and W1.16 double silver low-E coatings:

- Temperable: The coating is processed with vacuum sputtering low-E coating line, the tough coating can resist the 700 degrees high temperature and make the glass work as safety glass. The glass can be tempered, heat strengthened and bendable to fit the design, in addition coating can be further processed, such as laminating insulating glass.
- Various sub-glass options. The coating can be coated on clear glass and low iron glass for different visual effect. Coating on low iron glass will offer higher light transmittance and higher solar energy transmittance.
- High light transmittance. The insulated glass made with W1.1 and W1.16 can reach 82% , If both glass are clear , light transmittance is 79%.
- Excellent thermal insulation effect. The insulated glass made with W1.1 and W1.16 keeps low U value which equal or better than double silver low-E. When argon was filled, and warm edge spacer was used, the U value can decrease again to lowest 1.1 and 1.16 W/M2.K. That 's also the name source of W1.1 and W1.16.



Even though the double silver low-E coating has satisfy most requirement of glass conservatory, and suitable for cold areas for examples Europe, North America, while there're still points need further enhancement.

1. UV blocking. Most double silver low-E coatings can block about 15% Ultraviolet. Extend: [Ultraviolet blocking function of low-E coating](#), to further increase the UV blocking performance, laminated glass should be used to prevent interior furniture, leather, clothes color fading, laminated glass will also help increasing the soundproof performance by 5-7Dbs.

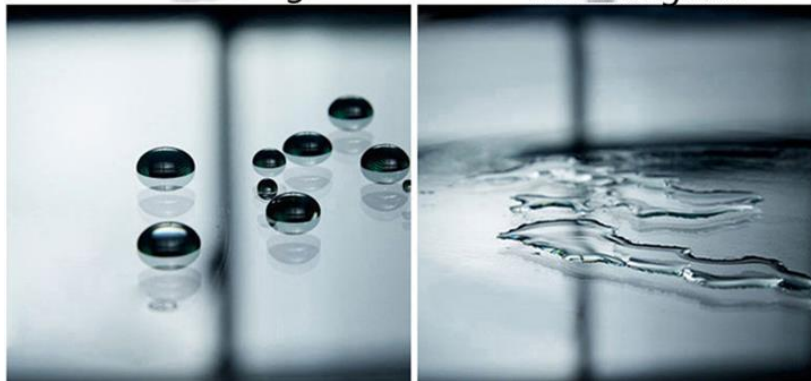


2. Easy cleaning. The precondition of high light transmittance is to keep glass clean, while it's always difficult for conservatory owners to clean it regularly, especially greenhouse roofs. Self-cleaning function should be added to keep your house clean. [EnduroShield®](#) for Glass is an optically clear protective coating that chemically bonds to the surface, creating a non-stick barrier resistant to corrosion, etching, and staining, it can be applied in exterior glass and offer 10 years warranty.



Nano coated glass

Normal glass



3. Solar shading. In hot areas, solar shading low-E is priority because higher light transmittance means high SC value, which allows more solar energy transmitted through the glass. House owners can select low transmittance low-E coatings instead, or select [thermochromic glass](#) which can change the glass color with different glass



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Your turnkey China tempered glass/laminated glass/insulated glass supplier temperature. Thermochromic is special PVB, it helps glass color change from light to dark when temperature goes high, block solar radiation and help energy saving, it's awesome for you to have a glass conservatory which can change color all day time.



Of course there're many other measures to further increase solar shading effect for already existing conservatories, for example stick solar film on glass surface, or adding internal or external shading facility, or even using blind glass to adjust the light transmittance as you want.

Morn is your turnkey conservatory glass manufacturers and suppliers in China, our double silver low-E coating specialized designed for greenhouse will help building your fantastic winter garden, meanwhile our EN1279 certified insulated glass will help offering up to 10 years warranty, kindly contact us for your greenhouse buildings.

Contact us:

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