

China factory superb 5-19mm heat soaked glass suppliers



It is inevitable that during the production of float glass, there will be contaminants inclusion such as NiS, etc. This imperfection NiS will later cause **glass spontaneous breakage** after glass toughening. Here we are going to introduce you to a method that can dramatically reduce the glass spontaneous breakage rate – **heat soaked test**.

So here we start:

1, What is heat soaked glass?

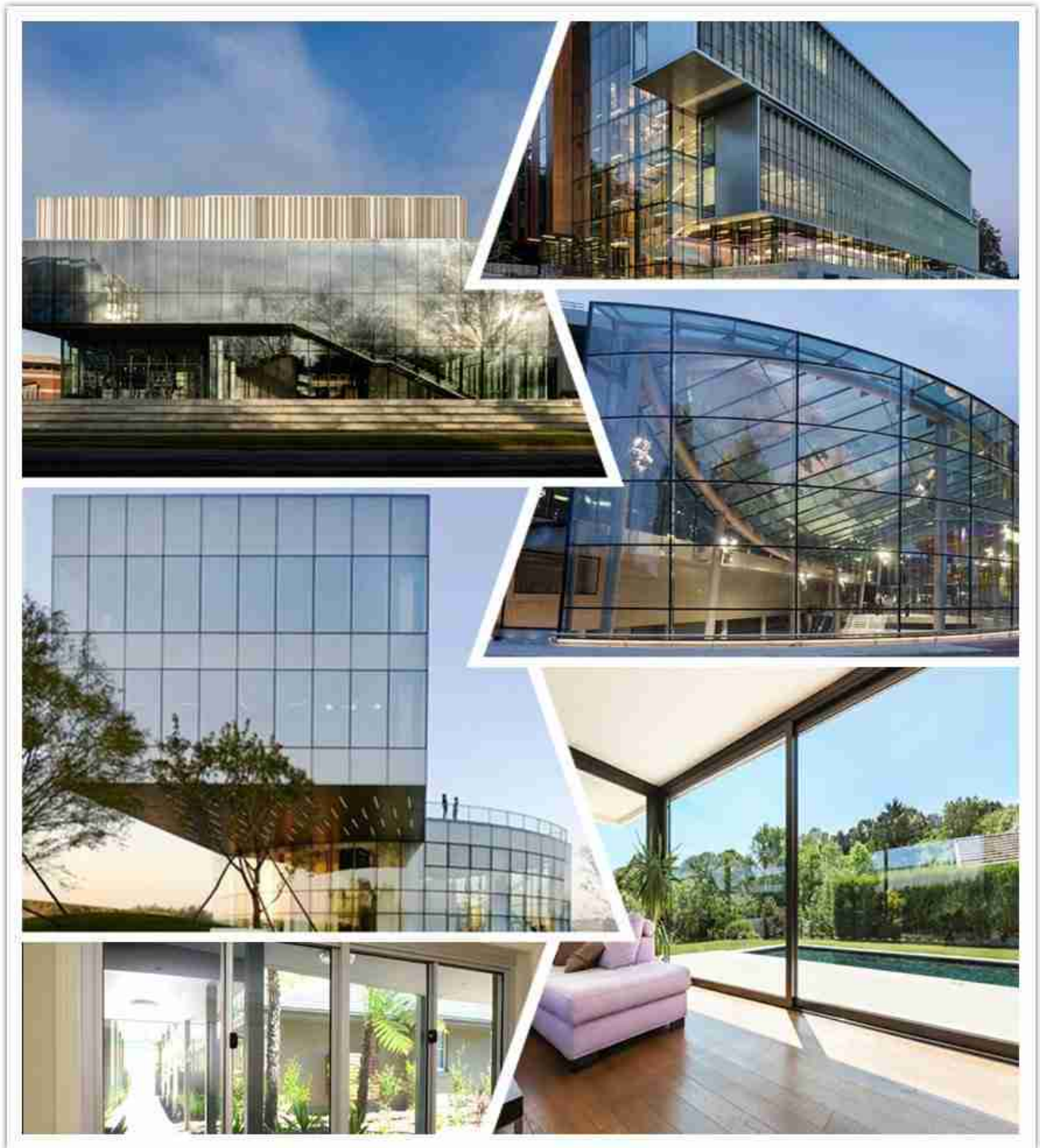
As we formerly know, the contaminant NiS is the main reason for the glass spontaneous breakage. This is because, for NiS, there will be two phases: α NiS & β NiS, the volume between α NiS & β NiS is about 4 times. After glass tempering, the α NiS will slowly turn to β NiS, resulting in volume increase dramatically, which is the reason tempered glass breakage. For this 'slowly turning' is no sign, it may cause some huge damages. Therefore, the heat soak test process is adopted to [reduce this spontaneous breakage rate](#).

The heat soak test involves placing the tempered glass inside a chamber and raising the temperature to approximately 290°C to accelerate nickel sulfide NiS expansion. This causes glass containing nickel sulfide inclusions to break in the heat soak chamber in advance, thus reducing the risk of potential field breakage.



2, When is heat soaked glass required?

Heat soaked glass is adopted where large human traffic you never want any tempered glass spontaneous breakage occurs, such as mall glass, curtain wall glass, canopy glass, skylight glass, etc. For these places, even a small breakage of glass, it will influence the work or life until you have to finish doing the replacement. It will be time consuming and cost will increase too much. Therefore, a heat soak test will be necessary to prevent damage in advance.

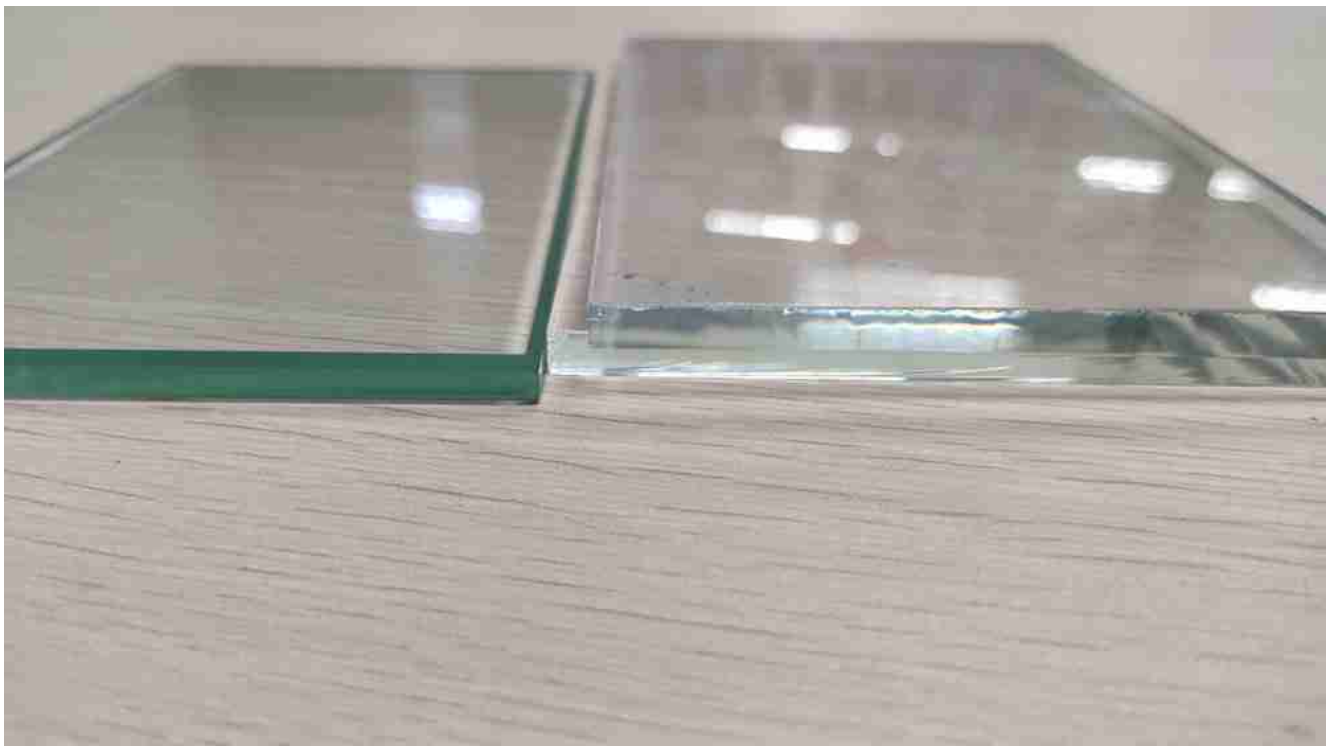


Heat soaked tempered glass applications

3, What is the benefit of heat

soaked glass?

Heat soaked tempered glass accurately can not avoid spontaneous breakage 100% but will dramatically reduce the rate of happening. Generally speaking, the spontaneous breakage rate for tempered glass is about 0.3%, but after the heat soak test process, the spontaneous rate will decrease below 0.1%. If you need safer consideration, using **low iron glass** or make the heat soaked glass into the [laminated glass](#) will be a good option.



clear glass VS low iron glass

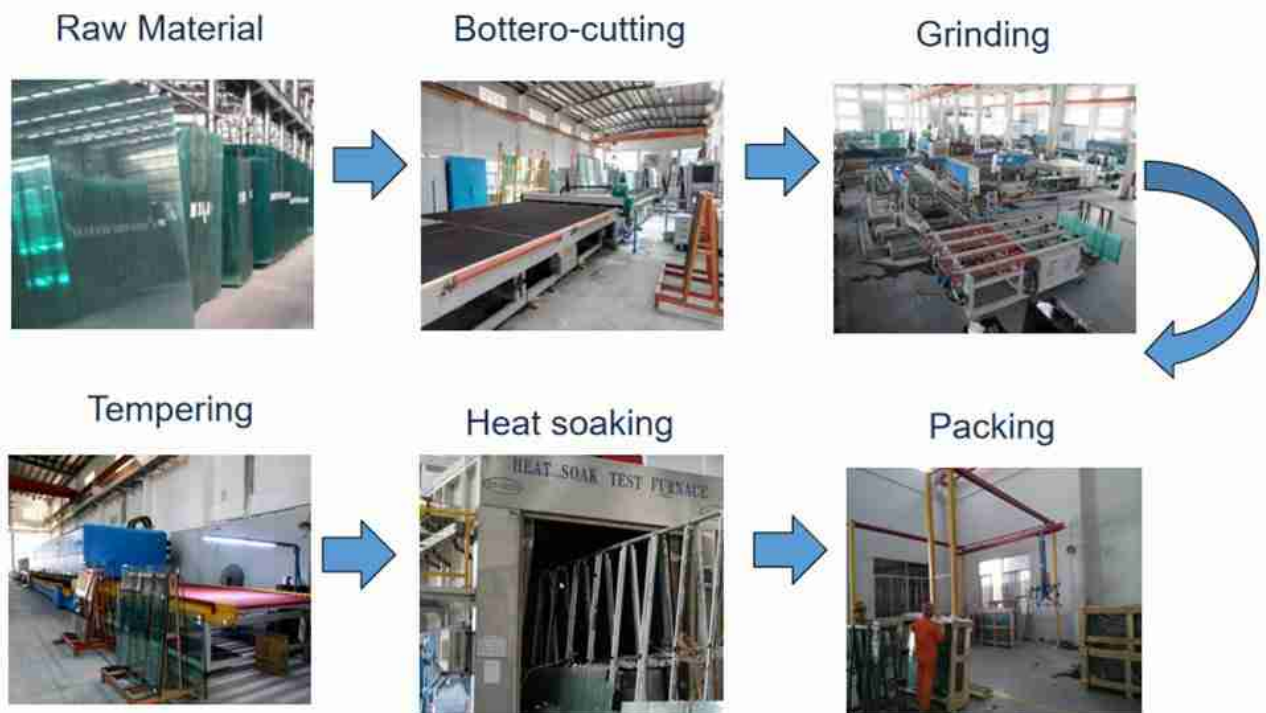
4, Heat soaked glass process?

Here below is our heat soaked tempered glass process:

1. Firstly, cut the glass subject to your final sizes (with due tolerance);

2. Secondly, grind the glass accurately (erasing the tolerance);
3. Put the edge-worked glass to tempering machine;
4. Transfer the tempered glass to heat soak test chamber, enduring 2~3 hours of 290 degrees, and then bring the heat soaked tempered glass out;
5. Packing with strong plywood crates.

Heat soaking process



[Shenzhen Dragon Glass](#) heat soaking process

5, What is the difference between heat soaked glass vs heat strengthened?

Generally speaking, both heat soaked glass and [heat](#)

[strengthened glass](#) is considered to decrease or avoid the glass spontaneous breakage.

However, due to its completely different processing, heat soaked glass is about 5 times stronger than normal annealed glass. Whereas heat strengthened glass is only about 2 times higher strength than normal annealed glass. **Heat soaked glass** is adopted where requires higher strength & less breakage danger and heat strengthened glass is used where less strength or higher glass surface flatness required. Usually heat strengthened is used as laminated glass to enhance its safety.

6, [Shenzhen Dragon Glass](#) as one of the best heat soaked glass suppliers can provide you as follows:

- **Product name:** Heat soaked glass;
- **Glass raw material:** Top A grade;
- **Glass thickness:** 5-19mm;
- **Glass color:** Low iron, clear, blue, gray, green, pink, bronze, etc;
- **Glass shape:** Flat/curved;
- **Further process:** coating, digital printing, laminating, insulating, etc;
- **Heat soaked process:** subject to BS EN 14179-1:2005;
- **Quality standard:** Subject to CE & ASTM & CCC, etc;
- **Packing:** Strong plywood crates;
- **Capacity:** 2000SQM/day.

7, How much will heat soaked glass cost?

Generally speaking, it will depend on your **size and quantity** as it will influence the cutting rate or loading rate of the heat soak chamber. And the **glass thickness** will influence the heat soaked glass cost too.

So if you need accurate pricing, please feel free to [Get Free Quote Now!](#)