

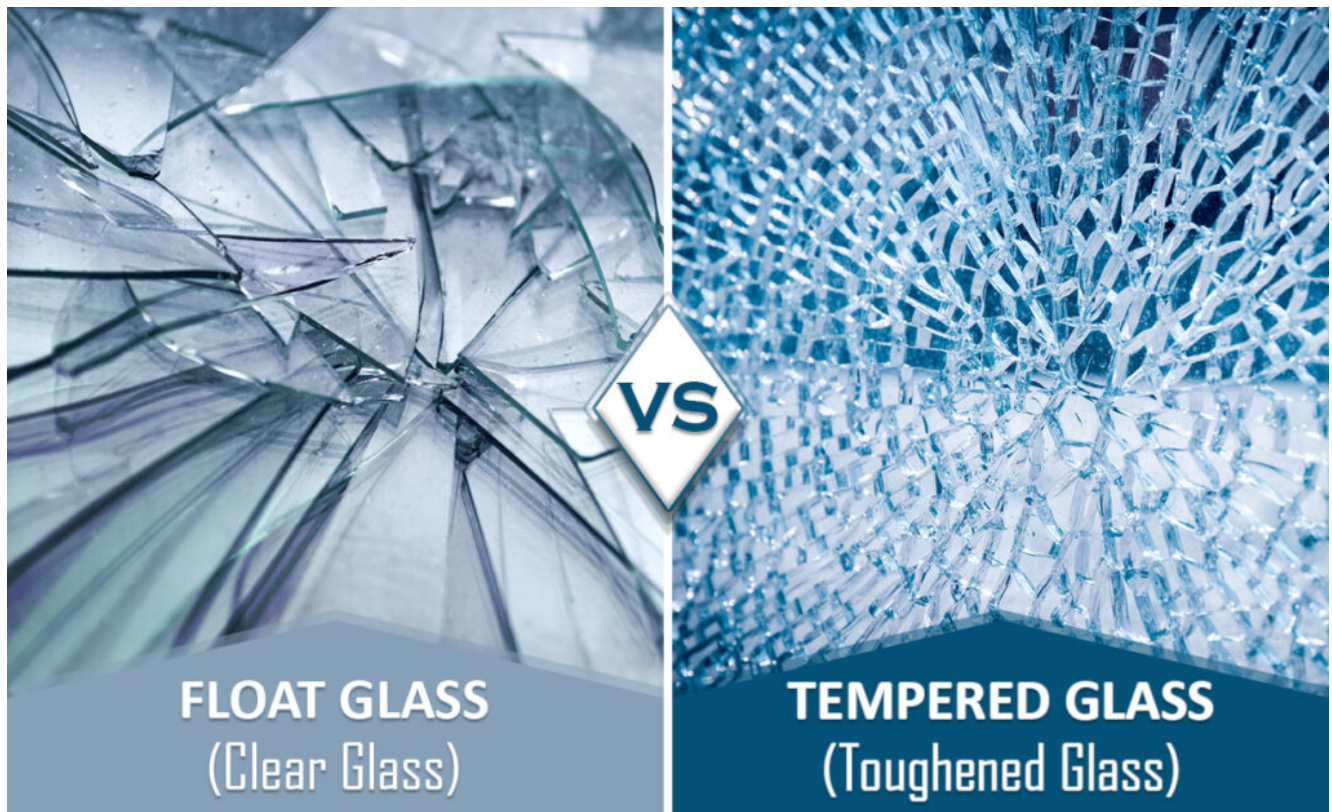
# Expert in Tempering Glass – Experience the difference of high-quality fully tempered glass



**What is Tempered Glass&fully  
tempered glass&toughened glass&heat  
treated glass?**

Tempered Glass&fully tempered glass&toughened glass&heat treated glass are all the same glass, just called differently. They are all safety glass.

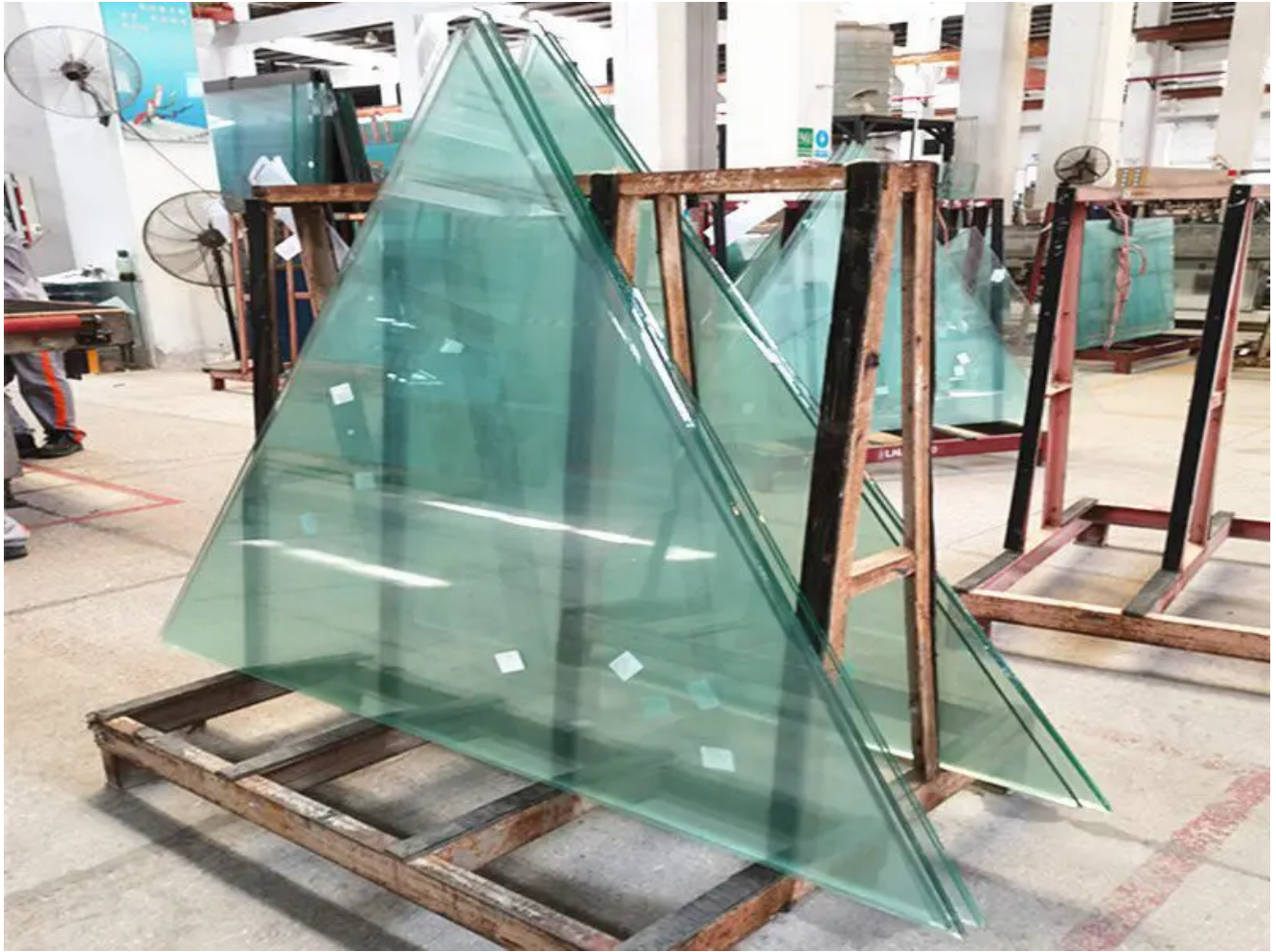
Discover the power of safety glass panels – a highly durable and strengthened form of glass. Through meticulous thermal or chemical treatments, the glass's strength is significantly enhanced. The production process involves intense heating to over 1,000 degrees F, followed by rapid cooling. This unique method locks the glass surfaces in a compressed state, while the core remains under tension.



## **Is it possible to cut safety glass panels without shattering it?**

Once glass is tempered, cutting it again may cause it to shatter or become too fragile for its intended use.





## Causes of Spontaneous Glass Breakage?

Small nickel sulfide concretions may form within the glass during tempered glass sheet production for no specific reason, this is a random but rare occurrence. Known as nickel sulfide inclusions, this small impurity can lie dormant for weeks or even years after fabrication and installation.

As the glass cools, these inclusions shrink and become enclosed within the glass, remaining contracted. Over time, these inclusions try to expand back to their original state, and sometimes they succeed in causing the glass to “spontaneously” shatter.

If these stresses exceed the strength of the glass, the safety glass panels can shatter, causing the glass to crack. Nickel sulfide inclusion damage often has a distinctive pattern resembling a butterfly or figure-eight.



## How to Prevent Spontaneous Glass Breakage?

By Heat soaking

Soaking is an additional step that can be included in the glass manufacturing process. It involves a controlled heating cycle that accelerates the expansion of the nickel sulfide, which expands over time, putting any brittle glass at risk of shattering the nickel sulfide.



The process can remove about 95% of the problem glass, but no process can eliminate 100% of the nickel sulfide inclusions.



[Shenzhen Dragon Glass](#) is one of the leading glass manufacturers in China, offering a variety of customized glass. Are you looking for a reliable glass manufacturer in China? Please contact us now to get the best quote!