

## Heat soaked test glass suppliers heat soaked toughened safety glass manufacturer

[Heat soak test](#) is also called "detonation." Heat soak test is to heat the tempered glass to  $280^{\circ}\text{C} \pm 10^{\circ}\text{C}$ , and keep it for a certain time. Promote the rapid completion of crystal phase transformation of nickel sulfide in tempered glass, so that it can be self-explosive after the original use. The tempered glass is artificially broken in the hot dip furnace of the factory in advance, thereby reducing the self-explosion of the tempered glass in use after installation. This method generally uses hot air as a heating medium, called "Heat Soak Test", referred to as HST. Widely used for high rise glass facades, overhead glazing, balconies and [balustrades](#).



## Heat Soak Test Process

### Warming up

The warming phase begins at the ambient temperature at which all of the glass is located, ending at the time when the last glass surface temperature reaches  $280^{\circ}\text{C}$ . Keep the temperature of the glass surface below  $320^{\circ}\text{C}$ , and try to shorten the time when the glass surface temperature exceeds  $300^{\circ}\text{C}$ .

### Keep warm

The holding phase begins at a time when all glass surface temperatures reach  $280^{\circ}\text{C}$  and the holding time is at least 2 hours. During the entire incubation period, it should be ensured that the temperature of the glass surface is maintained within the range of  $290^{\circ}\text{C} \pm 10^{\circ}\text{C}$ .

### Cool down

When the glass that finally reached  $280^{\circ}\text{C}$  was finished for 2 hours, the cooling phase was started. At this stage the glass temperature drops to ambient temperature. When the furnace temperature drops to  $70^{\circ}\text{C}$ , the cooling phase is considered to be terminated. The cooling rate should be controlled to minimize the damage caused by the thermal stress of the glass.



## Applications of heat soaked glass

Heat soaked tempered glass, it could make superior quality HST toughened laminated glass, HST tempered insulated glass, heat soaked tempered laminated double glazed units, widely used for:

- High rise glass [facades](#)
- Glass balustrade, glass balcony railings, glass handrails, glass pool fence
- Overhead glazing, glass roof, glass skylight, etc.
- Any applications where safety is required.

## Heat soak test package in Kunxing Glass

