

HEAT SOAK



Service and Quality
beyond expectation.

PFG Glass Industries Ltd. is certified in the process of heat soak testing tempered glass to the European Standard EN 14179-1: 2016 – TC.

BS EN 14179-1:2016 - TC
Tracked Changes. Glass in building.
Heat-soaked thermally toughened soda
lime silicate safety glass

As per the Standard:

This European Standard specifies the heat soak process system together with tolerances flatness, edgework, fragmentation and physical and mechanical characteristics of monolithic flat heat soaked thermally toughened soda lime silicate safety glass for use in buildings.

Other requirements, not specified in this European Standard, can apply to heat soaked thermally toughened soda lime silicate safety glass which is incorporated into assemblies, e.g. laminated glass or insulating units, or undergo an additional treatment, e.g. coating. The additional requirements are specified in the appropriate product standard. Heat soak thermally toughened soda lime silicate safety glass, in this case, does not lose its mechanical or thermal characteristics

Heat soaking is the process of treating tempered safety glass in a specially designed oven.

The heating phase commences with all of the glass at an ambient temperature and concludes when the surface temperature of all of the glass reaches 250°C. The minimum duration at this temperature, known as the holding phase, is 2 hours.

This process is designed to reduce the potential for spontaneous breakage due to nickel sulfide inclusion.

Nickel sulfide inclusions are undissolved particles formed in the manufacturing of float glass that can cause imperfections smaller than the human eye can detect. Although rare, these inclusions are an ever-present possibility in the glass and, when that glass is tempered, these inclusions can expand over time and lead to spontaneous breakage.

As tempered safety glass is installed in locations where guardrail load is a factor, spontaneous breakage due to nickel sulfide inclusions can lead to exposed areas, such as floor-to-ceiling windows or balcony railings, where risk of falling may lead to injury or death.

Heat soaking tempered safety glass does not eliminate the potential for spontaneous breakage, but it does reduce the likelihood through the process, thus providing your clients with a greater degree of assurance whatever the application.

Heat soaking is a value-added service. Ask your PFG Sales Representative for pricing with your next quote. We would be happy to discuss pricing and provide information you can pass along to your clients regarding the benefits of this service.