



Use of heat-soaked TSG in Germany

EN 14179 defines the minimum requirements for the building product heat-soaked TSG. In addition, increased requirements were defined in the past by the building regulations list.

The TSG-H product had to meet the following criteria according to the building regulations list:

- 280°C ±10°C Holding temperature
- 4 hours holding time
- Annual external monitoring
- Certification of the manufacturing company

In the Ruling C-100/13 of the European Court of Justice of 16 October 2014, it was determined that the quality requirements of the construction product are specified at European level and that national regulations may not change these requirements. For this reason, the previously known TSG-H

according to the building rules list is no longer permitted and no longer exists.

Since then, the following criteria have been required for the production and sale of heat-soaked TSG according to EN 14179:

- 280°C ±10°C Holding temperature
- 2 hours holding time

There is disagreement among experts as to whether the increased holding time has a positive effect on the probability of failure of heat-soaked TSG. It is undisputed that, due to external monitoring, manufacturing companies are

increasingly encouraged to carry out the process without errors.

The current MVV-TB and DIN 18008-2:2020 require that monolithic single glass or outer monolithic IG panes made of toughened safety glass (TSG) and heat-soaked TSG may only be installed for vertical glazing if their upper edge is less than 4 metres above traffic areas, due to the likelihood of failure due to nickel sulphide inclusions.

Deviating from this, heat-soaked TSG may be used as monolithic single glass or outer monolithic panes from IG without limitation of the installation height if the probability of failure due to nickel sulphide inclusions is reduced accordingly and the reliability class according to EN 1990/NA:2010-12, table NA.B.2, RC 2 is reached.

This results in the de facto need for external monitoring when using heat-soaked toughened safety glass over 4 metres.

All suppliers and companies performing are advised to explain this detail to their customers in advance and to state this in the contract.