NKOSITHANDILEB SOLAR

Determination of projection ratio of solar laminated glass

Overview

Does solar radiation affect the behavior of laminated glass with PVB interlayer?

In this paper the consequences of solar radiation on the behavior of laminated glass with PVB interlayer are experimentally evaluated. The experimental campaign reported is based on the repetition of four point bending tests in creep condition, on laminated glass beams while subjected to increasing exposition time to artificial solar radiation.

How does UV radiation affect laminated glass?

Based on previous research [11], the influence of UV radiation produced by the direct exposition to sunlight has been identified as the main cause ofdegradation of laminated glass to weathering, also in consideration of the exposition time that some glass structures can experience through their life.

Does Exposition time affect mechanical properties of laminated glass?

In order to evaluate the evolution of the consequences of exposition time on the mechanical properties of laminated glass, it was decided to use four point bending tests in which the specimens, exposed to UV radiation, were tested in creep several times while the exposition time grew.

What are the characteristics of laminated glass?

Laminated glazing materials may incorporate multiple plies of heat-treated (e.g. heat-strengthened, tempered) glass in order to achieve high levels of resistance to thermally and mechanically applied loads. Bow (warp), roll wave distortion and picture frame distortion are inherent characteristics of heat-treated glass.

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Laminated products: The Performance Calculator allows the user to model a wide variety of laminated glass makeups using different float glass substrates, coatings and ...

In particular, solar radiation seems to produce the strongest effects on the bulk properties of PVB, modifying the coupling capability of laminated glass plates exposed to the direct sunlight.

A review on the main hypothesis for the optical and energy modeling of multilayer systems will be presented, in particular regarding the null reflectivity of glass-film interfaces in ...

This document was prepared by Technical Committee ISO/TC 160, Glass in building. Any feedback or questions on this document should be directed to the user's national ...

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This document specifies a test method of light transmittance for the laminated solar photovoltaic glass for use in building. This document is applicable to flat modules with light ...

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Applications may also require desirable properties such as sound reduction, fade resistance, and solar & thermal control. Laminated glazing materials (see Figure 1 and Figure ...

oSIST prEN 410:2025 - This document specifies methods of determining the luminous and solar characteristics of glazing in buildings. These characteristics can serve as a basis for lighting, ...

INTERNATIONAL STANDARD ISO 23237 First2023-11 Glass in building -- Laminated solar photovoltaic glass for use in buildings -- Light transmittance measurement ...

Contact Us

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