



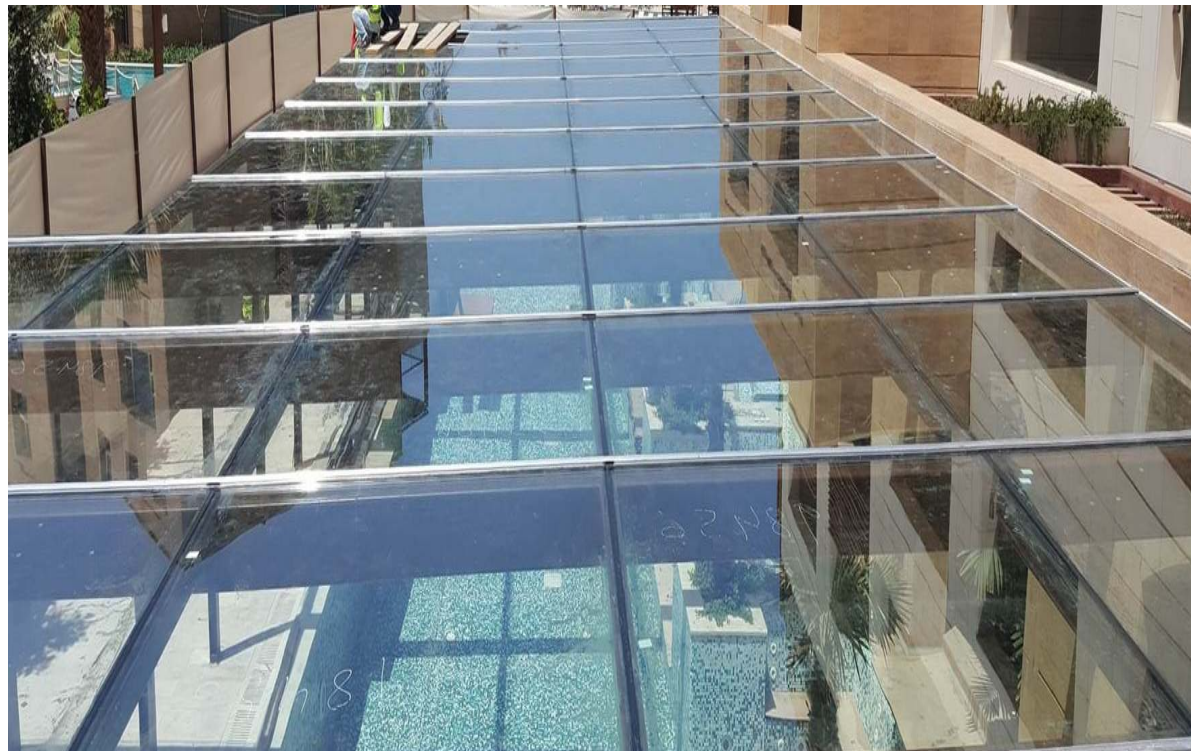
**evguard<sup>®</sup> laminating film**  
**Artificial UV aging (3,000 hours)**

# Description



Understanding the performance of Laminated Safety Glass (LSG) under the influence of long-term ultraviolet (UV) radiation is essential for processors as it may affect the final optical properties such as colour and haze. With the support of the well-known testing institute of Friedmann & Kirchner, the resistance to long-term UV radiation of different laminating films has been evaluated.

Picture: Project with evguard<sup>®</sup> laminating film in Kempinski Hotel, Lebanon.



# Facts

- Laminated glass samples were tested.
- In accordance with the norm DIN EN ISO 12543-4, the artificial aging by UV irradiation was carried out by means of a xenon-arc solar simulation spectrum with a power of  $50 \text{ W} / \text{m}^2$  in total UV wavelength.
  - The examined samples have been continuously irradiated for 3,000 hours. In this case, a control measurement of the haze values and the light transmission was carried out for every 500 h.



Picture: Project with evguard® laminating film in Downtown tower of commercial bay development, New Zealand.

# Conclusion



The artificial aging by UV radiation was carried out by Friedmann & Kirchner testing institute (Germany) on laminated glass samples made from a series of different laminates.

Both the LSG made with evguard<sup>®</sup> laminating film and evguard<sup>®</sup> laminating film + MPE interlayer passed the test successfully. No visual change of the quality of the laminate was observed.

Series	Laminate construction	Results
evguard <sup>®</sup> laminating film	44.2	No failures
evguard <sup>®</sup> laminating film + MPE interlayer	44.2 / 0.2 mm MPE	No failures
EVA 1	44.2	Discoloration. Turned yellow already after 500 h
EVA 2		No failures
EVA 3		Discoloration. Turned yellow already after 500 h

\*In total, three samples were tested. For more information, please refer to the testing report number:2017-04-4738-05, dated 19th March 2019 from Friedmann & Kirchner institute.