

Trosifol® SentryGlas®

Iconsiam, Bangkok, Thailand

ICONSIAM is a landmark complex on the banks of the Chao Phraya River in Bangkok, combining luxury residences, hotels, dining, and one of the largest high-end shopping malls in Asia. It houses over 7,000 fashion and lifestyle brands from Thailand and around the world — many of which launched their first Thai stores at this destination.

The mall's stunning glass façade is a fusion of modern architecture and Thai cultural inspiration. Spanning 300 meters in length and rising 24 meters high, the self-supporting structure extends across three floors and projects 4 meters upward to serve as a balustrade for the rooftop garden. Composed of 333 glass panels and 333 glass fins, the pleated façade covers an area of over 5,300 square meters, making it the world's longest pleated glass façade.

Each glass panel is suspended from above and tilted in two directions, forming a zigzag pattern that enhances both visual impact and structural stability. The glass fins reach up to 24 meters high and act as the main structural elements of the façade. To ensure durability, strength, and optical clarity in this highly complex system, the glass fins were constructed using multi-layered laminates — with up to 8 layers of glass interlayered with SentryGlas®. This high-performance ionoplast interlayer provides outstanding stiffness and post-breakage performance, essential for this suspended façade system.

The ICONSIAM project received global recognition for its technical innovation and striking design, winning several prestigious awards in 2019, including Best Store Design of the Year by the Retail Congress and an accolade from the International Council of Shopping Centers' Asia Pacific Awards Program.

Interlayer: SentryGlas®

Application: Fins

Owner: ICONSIAM Co. Ltd. Architect: Urban Architects

Main Contractor: Thai Obayashi Corp., Ltd.

Engineer: KCS & Associates Co., Ltd.

Facade Contractor: seele

Laminator: sedak GmbH & Co. KG

Year: 2018

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