



Guardian SunGuard™ High Durable coated glass in contact with SentryGlas® Xtra™ interlayers obtains a DTA for the French market

Guardian Glass and Kuraray have partnered to obtain a Document Technique d'Application (DTA) for the compatibility of Guardian SunGuard™ High Durable (HD) coatings (coating against interlayer) and SentryGlas® Xtra™ interlayer material. This combination offers architects and façade consultants a new opportunity to design a building envelope with high strength and energy performance.

Laminated Guardian SunGuard™ HD glass with SentryGlas® Xtra™ interlayer is particularly suitable for monolithic applications such as the outer envelope of double skin facades, canopies or atriums, as well as applications that require high resistance to mechanical and/or wind loads. The DTA validates all glass compositions where SentryGlas® Xtra™ is in direct contact with Guardian SunGuard™ HD coatings.

Combination of benefits

SentryGlas® Xtra™ is part of SentryGlas® ionoplast interlayers which are five times more tear resistant and up to 100 times stiffer than conventional PVB interlayers. Aside from its strength, SentryGlas® is much less susceptible to moisture exposure. Due to the structural properties of the interlayer, the use of SentryGlas® can also reduce overall glazing thickness, typically, by up to 30%. In addition, this reduction in glazing thickness can result in lowering the embodied carbon by approximately 27%*.

Guardian SunGuard™ HD coatings are made from highly resistant materials, which make them particularly suitable for monolithic applications. Guardian SunGuard™ HD solar control glass offers

various aesthetics and external reflectivity, as well as different levels of light transmission and solar factor.

Matthieu Laude, Product Manager at Guardian Glass in Europe comments: "We are delighted to announce this product partnership with Kuraray which further positions our Guardian SunGuard™ HD solar control products as an ideal solution for monolithic applications. Laminated Guardian SunGuard HD glass with SentryGlas® Xtra™ interlayer offers several advantages for customers, not only from the combination of material properties. Having a readily available French DTA certification can save customers time and effort in applying for a certification specific to their project and can reduce the costs associated with this."

Environmental stewardship and product certification

Both SentryGlas® and SunGuard™ HD products have Environmental Product Declarations (EPDs) available. FDES (Fiches de Déclaration Environmental et Sanitaire - Environmental and Health Declaration Sheets) are available for the Guardian coated glass. SunGuard™ HD products are bronze level v3.1 Cradle to Cradle certified®, as are all Guardian float glass, laminated glass and coated glass products manufactured in Europe.

*Figure based on a reduction in the thickness of the base glass (Guardian ExtraClear™ glass) of 16mm (2x8mm) to 12mm (2x 6mm), interlayer and laminated glass process not included. The embodied carbon (calculated in the Guardian Glass Performance Calculator) for the 2x6mm base glass is 31.56 CO₂ eq. kg/m² A1-A3, approximately 27% lower compared to the 2x8mm base glass (43.52 CO₂ eq. kg/m² A1-A3). The embodied carbon data is the CO₂ equivalent in kg per square meter of glass (CO₂ eq.), emitted during the glass production (A1-A3, A1: raw materials supply, A2: transport, A3: manufacturing). The calculation is an estimation based on the material's Embodied Carbon Factor (ECF) derived from the Regional EPD, third-party, independently verified document that communicates transparent information about the lifecycle environmental impacts of a product.

Photo: Copyright: Guardian Glass, LLC.

About Guardian Glass

Guardian Glass, a major business unit of Guardian Industries, is one of the world's largest manufacturers of float, coated and fabricated glass products. At its 24 float lines around the globe, Guardian Glass produces high performance glass for use in exterior (both commercial and residential) and interior architectural applications, as well as transportation and technical products. Guardian glass can be found in homes, offices, cars and some of the world's most iconic architectural landmarks. The Guardian Glass Science & Technology Center continuously works to create new glass products and solutions using the most advanced technology to help customers see what's possible™. Visit guardianglass.com.

About Guardian Industries

Guardian Industries, a global company headquartered in Auburn Hills, Michigan, operates facilities throughout North and South America, Europe, Africa, the Middle East and Asia. Guardian companies employ 11,800 people and manufacture high-performance float glass; coated and fabricated glass products for architectural, residential, interior, transportation and technical glass applications; and high-quality chrome-plated and painted plastic components for the automotive and commercial truck industries. Guardian's vision is to be a preferred partner to our customers, suppliers, employees and communities based on a foundation of mutual benefit. This drives our relentless focus on improving people's lives by providing products and services they value more highly than their alternatives and doing so responsibly while consuming fewer resources. Guardian is a wholly owned subsidiary of Koch Industries, Inc. Visit guardian.com.

About The Advanced Interlayer Solutions Division

The Advanced Interlayer Solutions Division of the Kuraray Group is a leading global specialist in the development, manufacturing and supply of Trosifol® PVB and SentryGlas® ionoplast interlayers for laminated glass applications in the architectural, automotive and photovoltaic industries. The Advanced Interlayer Solutions Division of the Kuraray Group offers the world's broadest portfolio of innovative glass-laminating solutions, including structural and functional interlayers for bird friendly glazing, decorative glazing, safety & security applications, sound insulation and UV protection.

About Kuraray Group

Founded in 1926, Kuraray is a world leader in performance-based polymer and specialty materials technologies, including resins, chemicals, fibers, and textiles. The Company operates many subsidiaries around the world. The Kuraray Group is committed to developing new fields of business using pioneering technology that improves the environment and enhances the quality of life throughout the world.

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