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Guardian SunGuard® SNX solar control glass brings aesthetics, comfort and light to CSMART Campus

Bertrange, Luxembourg, May 9, 2017 – Advanced solar-control glass from the Guardian SunGuard® eXtra selective range was selected to create the curtain walls for the recently completed CSMART Campus in Almere, the Netherlands.

Designed by Paul de Ruiter Architects and built on behalf of Carnival Corporation, the world's largest cruise operator, the Campus consists of a five-storey state-of-the-art Center for Simulator Maritime Training (CSMART), offering high quality professional training, and the 12-storey CSMART Hotel to accommodate Carnival Cruise Lines employees during their annual trainings.

CSMART offers a range of highly advanced facilities and is located in a dune-landscape, where water, sky and land meet. In order to reflect these various aspects, maximum transparency was desirable – obviously without loss of indoor comfort.

For the curtain walls, 242 IGUs featuring Guardian SunGuard® SNX 60/28 glass were created in aluminium frames, the largest measuring 5730mm x 2854mm. The final IGU construction for these large panels is 10 SNX 60/28 - 14 - 1010.2 with a total thickness of 45mm. The exceptional thickness is necessary to meet the safety requirements of the glass: as the IGUs run from floor to ceiling and are located in a windy, coastal, environment, they need to comply with Dutch safety standards NEN6702 (load bearing) and NEN3569 (injury protection).

SunGuard is a high-performance solar protective glass helps create a comfortable indoor environment thanks to its selectivity. When used in a standard double glazing unit it lets in 60% of the natural daylight combined with only 28% of the solar heat and delivers a U-value of 1.0 W/m²K. This helps to save energy costs because of a lower demand for artificial light and climate control. SunGuard SNX 60/28 offers attractive neutral appearance and low reflection for superior aesthetics, making it the ideal choice for completely glazed facades.

The IGUs were produced by Hero Glas. The company's Account Manager Harry van Uum, highlights that this project was extremely challenging because of the unique size and thickness of the panes and the required just-in-time delivery.

“Once we received the specification from the installers, we recommended Guardian SunGuard SNX 60/28, because of previous good experiences. Once agreed, we worked closely with the Guardian team, so they could meet our deadlines – which they did. Therefore we were able to produce the glass according to order, which was important because the 10mm SunGuard SNX 60/28 is not a standard stock material in this thickness.”

Whereas Hero Glas’ customers usually calculate their own statistics, in this exceptional case Hero did this in collaboration with Peter van Dijk of Kennis Centrum Glas. In addition, Hero and Guardian cooperated on a thermo stress analysis, important because, once installed, the windows are difficult to replace.

The installation was performed by Alkondor, a leading Dutch façade specialist. According to Jan Bergman, Head of Sales, this was not an everyday installation: “Each of the 242 IGU panels weighs around 1200 kilos, and it required a great deal of precision and good weather conditions to get the job done safely.”

The entrance doors to the hotel are also a particularly unique feature: from the outside of the building, only glass is visible, so the symmetry of the façade is not interrupted. This is achieved by using stepped glazing IGUs – also with SunGuard SNX 60/28. The glass is structurally bonded to the profiles and installed using a frame hidden in the cavity, which is also used for the mechanical devices that automatically open and close the doors.

Harry van Uum and Jan Bergman both agreed: “The Guardian SunGuard glass looks great and delivers the required properties. Moreover, Guardian provided an excellent logistics service, delivering the right glass at the right time, every time.”

About Guardian Industries Corp.:

Based in Auburn Hills, Michigan, Guardian Industries is a diversified, global company with a vision to create value for customers and society through constant innovation using fewer resources. Guardian, its subsidiaries and affiliates employ 17,000 people and operate facilities throughout North America, Europe, South America, Africa, the Middle East and Asia. Guardian Glass is a leading international manufacturer of float, value-added coated, and fabricated glass products and solutions for architectural, residential, interior, transportation and technical glass applications. SRG Global is one of the world’s largest manufacturers of advanced, high value coatings on plastics for the automotive and commercial truck industries, providing solutions for greater surface durability, structural integrity, functionality, vehicle efficiency and design flexibility. Guardian Building Products is a leading U.S. based distributor of specialty building products. For more information, visit www.guardian.com.





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(Photos Guardian Industries Corp., GRDPR051)

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Alternatively for very high resolution pictures please contact Sophie Weckx (sweckx@guardian.com, +352 28 111 210) or Siria Nielsen (snielsen@emg-pr.com, +31 164 317 036).