

A Cut Above



Project Facts:

Location: 201 Waterfront Street,
National Harbor, MD

Completed: 2008

Owner: Gaylord Hotels

Architect: Gensler, Washington, D.C.

Glazing Contractor:

- Ridgeview Glass, Inc., Marlboro, MD
- Naturalite Skylight (skylights), Terrell, Texas

Glass Fabricator: Viracon, Owatonna, MN

Viracon Glass Products:

- Clear Insulating Glass with VE1-2M coating #2
- Clear Insulating Laminated Glass with VE1-2M coating #2

Glass Atrium Provides “Year-Round Summer” for Gaylord National Resort & Convention Center

by Janet Ryan

Billed as the largest combined hotel and convention center on the East Coast, the new Gaylord National Resort and Convention Center in National Harbor, Md., was designed to be a distinctive, luxury destination just minutes outside of Washington, D.C. With a location overlooking the historic Potomac River, owner Gaylord Hotels wanted to create a building that would welcome business travelers, conventions and tourists alike to a luxury hotel experience.

To combine 2,000 luxury hotel rooms with 470,000 square feet of meeting space, architects at Gensler designed a striking 18-story glass atrium to be the focal point of the new development. According to Jeff Barber, AIA, LEED® AP, managing director at Gensler, the space was designed to be “a soaring, open, expansive space between the building wings, focusing all attention to the activity of the atrium and beyond the atrium to the river.”

From inside the barrel-vaulted glass dome, guests are treated to not only views of the Potomac and Old Towne Alexandria, but also to winding pathways through lush indoor gardens, a sparkling indoor river and recreations of

historic streetscapes. This picturesque setting was designed to be enjoyed year-round in perfect 72-degree temperatures.

In order for this design to work, architects needed glass that would let enough light in for the lush gardens to grow but simultaneously provide enough solar control to maintain the comfortable interior environment.

A Clear Solution

To let the light in without the heat, architects specified Viracon’s insulating VE1-2M glass, a clear glass with a Viracon low-E coating. The overhead glazing has a laminated interlayer for added safety.

“We used clear low-E because we wanted a clear, open airspace and because we did a careful sun study and found that the atrium planting actually required all the sunlight it would get during the year with a clear low-E,” says Barber. “If we had used fritted glass (which we studied for the skylight) we would not have received enough sunlight for the health of the plants.”

The VE-2M low-E coating offers a balance between light transmission and solar energy control. Combined with a clear substrate, as was used in Gaylord National, the coating offers high visible light transmittance, low exterior reflectance and the lowest U-values available, thereby reducing radiant heat transfer.

With glass selected, the team at Ridgeview Glass Inc. in Upper Marlboro, Md., began installation of the curtainwall. The 18-story height of the atrium made installation of the upper portions of the curtainwall challenging, says Matt Canter, vice president and project manager at Ridgeview.

“The team had to design special equipment to work at that height and around obstacles including the skylight and the structural steel below them,” he says.

While Ridgeview Glass worked on the curtainwall, Naturalite Skylight installed the overhead glazing. With crane access available only on the north side of the hotel, the north end glass was set by crane and the south half of the glass had to be set by manpower.

The end result is striking. Thanks in part to its clear glass solution, by day, the glass and steel structure sparkles on the banks of the Potomac; by night, it glows. ■

the author

Janet Ryan is the public relations officer for Viracon. Ms. Ryan’s opinions are solely her own and not necessarily those of this magazine.