Location: Minneapolis, Minn.

Type: Commercial office and event space

Architectural firm: RSP Architects, Minneapolis, Minn.


Situation:
Located in downtown Minneapolis, which averages 53-in. of snowfall per year—double the snowfall of the rest of the country—the historic Baker Center offers more than a million sq. ft. of mixed retail and office space. The historic structure is actually a composite of four Art Deco buildings, and the challenge was pulling them all together with a single façade that would not only look sleek, but be thermally efficient against tough northern winters.

Action plan:
Three of center’s original buildings—the Baker Building, the Roanoke Building and the Investors Building—were built in the 1920s. The fourth piece of the complex—the 730 Building—was constructed in 1968. Further complicating matters was that there were no original architectural drawings, and different construction techniques were used during the various retrofits and remodeling of each building over the past several decades.
Makeover Magic in Minneapolis

Baker Center

About the fenestration products:
The main entrance space at the corner of 8th and Marquette Street showcases a 60-ft.-long media wall and open staircase on the inside, and on the exterior, an equally sleek glass lobby highlighted by a storefront system that includes an energy-saving thermal barrier.

The latter is pour and debridge thermal barrier technology by Azon, which when added within Tubelite’s TU24000 Dual Pocket Storefront system, helps deliver the thermal performance required. The storefront system is prominently featured on the lower level, as well as for the upper story windows. The building’s dramatic corner design, from the fourth floor to the top floor, is comprised of Tubelite’s 400TU curtainwall system.

Using structural aluminum fenestration materials with polyurethane polymer thermal barriers, optimize energy savings in commercial buildings to increase comfort and lower operational costs.

“In colder climates, Therml=Block products provide superior energy and condensation resistance performance using multiple thermal barriers, while providing structural integrity and aesthetic flexibility,” explains Mary Avery, vice president of marketing at Tubelite. “Optimizing thermal performance helps lower the load on HVAC systems and reduces associated energy costs, while maintaining a comfortable interior temperature,” says Avery, adding the reduction of condensation can improve a building’s appearance and minimize moisture damage to adjacent building materials.

Outcome:
The curtainwall and storefront framing are ideal for both cold and warm conditions providing high energy efficiency and condensation resistance. The Baker Center exterior curtainwall and storefront is glazed with Vitro’s low-E, 1-in. Solarban 60 coating; the low-iron glass includes warm edge spacers and argon filling to provide further thermal performance when the weather and temperatures are extremely cold. Using structural aluminum fenestration materials with polyurethane polymer thermal barriers optimize energy savings in commercial buildings to increase comfort and lower operational costs.

Sources:
Walt Lutzke, Tubelite Inc.
Prepared by: Nancy Peterson, npeterson@azonusa.com
Photo credits: Figure 1, Figure 2 ©Paul Cosby Architectural Photography, Figure 3 © Tubelite