Metal Architecture

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Southwestern Flair

By Marcy Marro

The Riverpoint Center in Phoenix is the new home of the Apollo Group Inc.'s corporate campus. The 37-acre (15-hectare) campus is home to more than 6,000 people, half of which work for Apollo's corporate headquarters and half of which are employed with its online operations supporting the University of Phoenix and other educational programs throughout the world. The Riverpoint Center won a 2007 AIA Nevada Merit Award.

Located at Interstate 10 and 32nd Street, the campus features one 10-story and two six-story office buildings totaling 630,000 square feet (58,527 m²), in addition to two large parking garages and landscaping that echoes the nearby Salt River riverbed.

Apollo chose a joint venture design team of Carpenter Sellers Architects, Las Vegas, and SmithGroup, Phoenix. Sundt Construction, Tempe, Ariz., was the general contractor, and KT Fabrication, Chandler, Ariz., was the glazing contractor. Together, they chose Wausau Window and Wall Systems, Wausau, Wis., to complete the curtainwall and window system team.

Apollo's design team gave careful consideration to the productivity and comfort of its workforce, along with the performance demands and natural aesthetic of the Arizona climate. The design team also wanted the Riverpoint Center to celebrate the desert region's natural colors and materials. Wausau was challenged to help control the Southwest sun and reduce energy consumption while maximizing daylight.

"The land is actually an old, old riverbed, so the flow of the buildings is like the flow of the former river," said Rick Mason, director of construction for subsidiary Apollo Development Corp. "We also incorporated the Southwestern flavor using a lot of copper on the building. After all, we are the copper state."

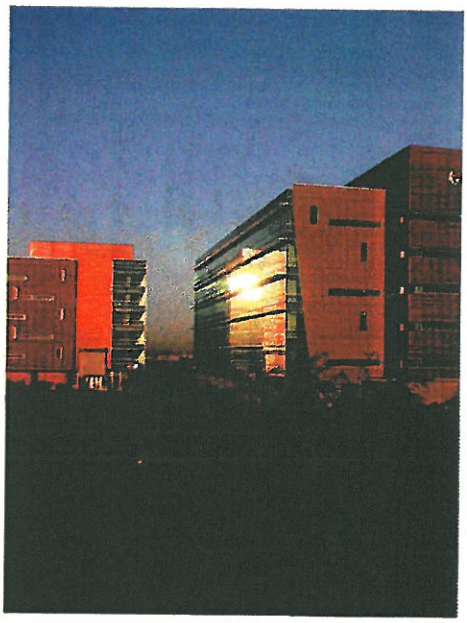
In creating a uniquely regional building that highlights the desert Southwest, the natural materials of stone, copper, glass, concrete and steel were all used in the building's design.

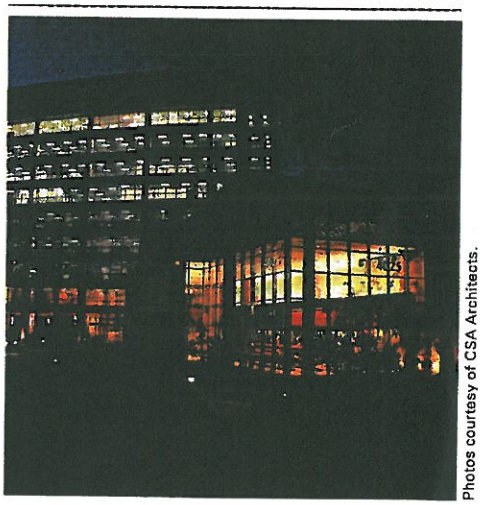
The buildings were designed on the site's east-west axis to maximize natural light flowing into the open office spaces. On the west and east sides of each building, where the sunlight is more direct, pre-cast concrete and copper cladding were predominately used. Shading on those sides was accomplished with narrow, deep-set vertical windows and small apertures that allow views to the outside while minimizing the amount of exposure to the low sun. KT Fabrication fabricated horizontal metal sunshades for the south side of the buildings that shield the openings from the harsh summer sunlight and invite solar light and warmth during the winter. The north side has glazing areas maximized to welcome year-round daylighting, significantly reducing reliance on artificial illumination and its associated energy costs. Copper was also used as a border around the north curtainwall of each building, designed to evoke a giant computer screen.

Kovach Inc., Chandler, manufactured and installed 170,000 pounds (76,500 kg) of copper supplied by Revere Copper Products Inc., Rome, N.Y., between the three buildings. Vertical standing-seam, vertical flat-seam and horizontal flat-seam panels were all used. The vertical standing-seam and vertical flat-seam panels were used as the "wrapper" element of the 10-story building. The flat panels were used for soffits and sills, while the vertical standing-seam panels were used to accentuate the verticality of the building facades. On the six-story buildings, the flat horizontal panels were used to provide a simpler expression that complemented the iconic form of the adjacent 10-story anchor building.

Wausau manufactured a total of 186,000 square feet (17,279 m²) of window systems ranging from 4 3/4- to 8 3/4-inch (121- to 222-mm) depths to meet the performance and aesthetic needs of the building. The majority of the window systems were factory fabricated in Wisconsin as vertical silicone-glazed curtainwall and shipped to KT Fabrication as knocked-down framing members for installation on-site. Pre-assembled units were also provided for the lower levels, punched openings, vertical strip and glazed wall system.

Viracon, Owatonna, Minn., provided high-performance insulated glass that was used throughout the Riverpoint Center to mitigate unwanted solar heat gain and adjacent freeway noise. Complementing the systems' high performance, all the aluminum has a durable, clear anodized finish by Linetec, Wausau. MA





Photos courtesy of CSA Architects.

Riverpoint Center, Phoenix

Award: 2007 AIA Nevada Merit Award

Owner: Apollo Group Inc., Phoenix

Architects: Carpenter Sellers Architects, Las Vegas, and SmithGroup, Phoenix

General contractor: Sundt Construction, Tempe, Ariz.

Glazing and curtainwall fabricator: KT Fabrication, Chandler, Ariz.

Metal fabricator and installer: Kovach Inc., Chandler

Window systems: Wausau Window and Wall Systems, Wausau, Wis., www.wausauwindow.com, Circle #83

Copper: Revere Copper Products Inc., Rome, N.Y., www.reverecopper.com, Circle #84

Insulated glass: Viracon, Owatonna, Minn., www.viracon.com, Circle #85

Anodize finish: Linetec, Wausau, www.linetec.com, Circle #86