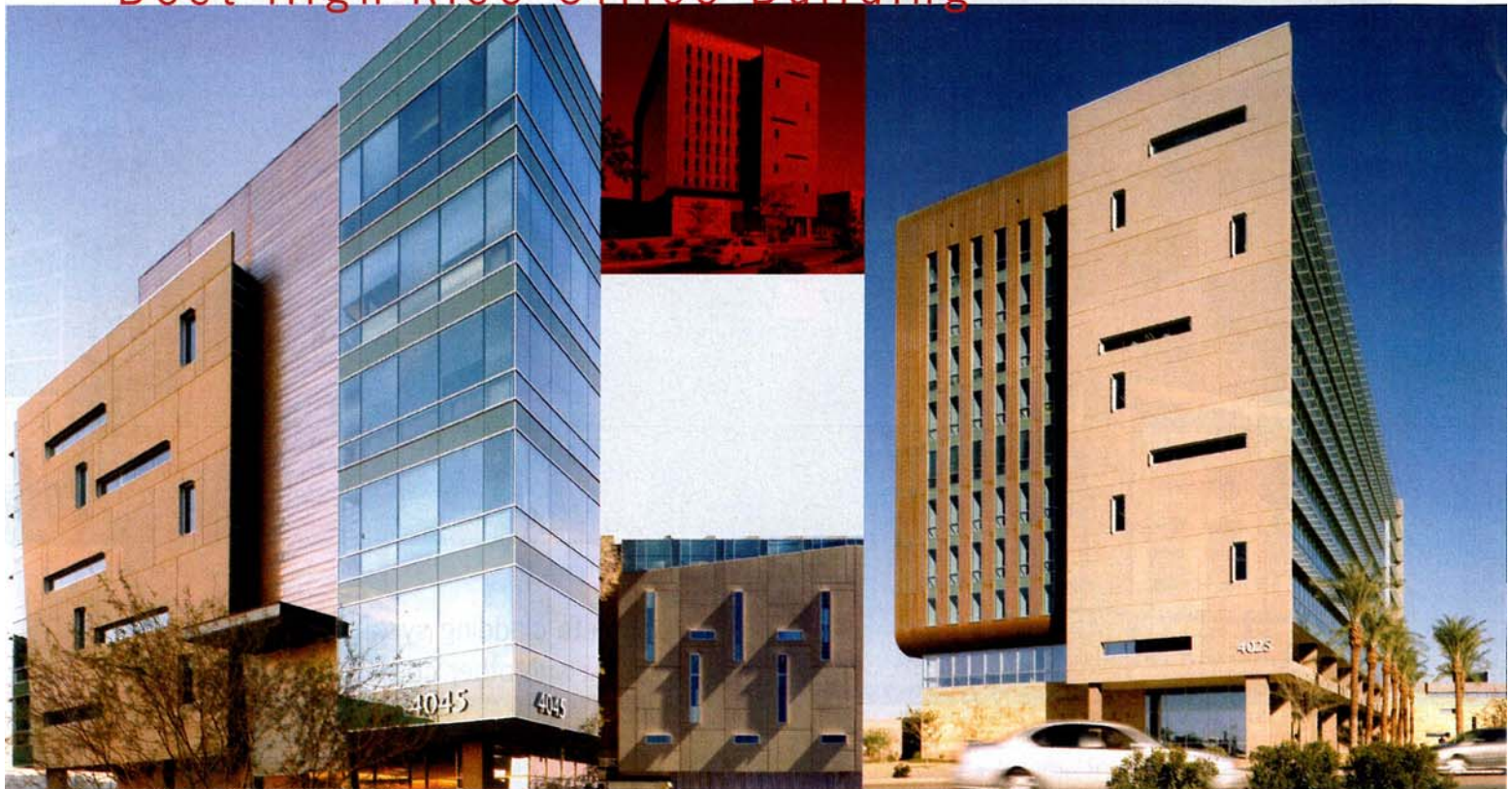


# BUILDING

## Best High-Rise Office Building



Courtesy of Carpenter Sellers Architects and Bill Timmerman.

### University of Phoenix Riverpoint Center, Phoenix, Ariz.

In addition to providing strong aesthetics, the designers of the new University of Phoenix office building focused on achieving a variety of sustainable-design concepts that will help reduce costs and lower maintenance needs through the structure's service life.

"The owners weren't looking to achieve LEED [Leadership in Energy and Environmental Design] certification, but they did want a project that was sustainable and environmentally friendly," says Stacey Howell at Carpenter Sellers Architects, which worked on the project in conjunction with SmithGroup. "The owners asked for a design that responded to the region and was easily maintainable." To achieve that, the designers used precast concrete structural elements and spandrel panels in conjunction with a cast-in-place concrete structure.

The projects feature precast concrete double-tees for flooring units, along with precast concrete columns, beams, and shear walls. Each structure uses precast concrete spandrels to achieve a distinctive look that blends the three buildings without allowing them to overwhelm the space. Glazing was maximized on the southern exposure but was completed with horizontal shading devices that protect against high summer sun while allowing low winter sun to heat the building.

"The advantage to using precast concrete was the thermal mass that was provided on the east and west exposures, where we used small, narrow windows," Howell says. The panels feature integral color that, combined with the material's durability, will eliminate the need to repaint or stain the facade. Locally manufacturing the components also helped minimize transportation energy while aiding the local community, she notes.

An under-floor air-distribution system allows each occupant to control thermal comfort. The under-floor plenum significantly reduces the amount of ductwork that was needed, and it also was used to run line and low-voltage cabling, reducing conduit. The elimination of ductwork also reduced floor-to-floor height requirements, minimizing the materials needed for construction.

Concrete has a quality to it that other materials don't.

#### Judges' comments:

"The overall composition of the different volumes, treated in different ways, created an outstanding appearance. The use of precast concrete was thoughtfully and simply detailed, and yet there is a lot of artistic quality. The rustication joints and the arrangement of the windows capture interest and differentiate it from other buildings in this context."

**Architect:** Carpenter Sellers Architects, Las Vegas, Nev., in association with SmithGroup, Phoenix, Ariz.

**Engineer:** Caruso Turbey Scott, Tempe, Ariz.

**Owner:** Apollo Group, Phoenix

**General contractor:** Sundt Construction, Tempe

**Precaster:** Tpac-a Division of Kiewit Western Co., Phoenix

**Precast concrete components:** 160 components, comprising double tees, beams, columns, shear walls, and spandrel panels

