PROJECT SPOTLIGHT

Endo Health Solutions headquarters

Precast concrete reduced time and cost on this pharmaceutical company construction project. The new corporate headquarters for Endo Health Solutions, 20 miles (32 km) outside Philadelphia, Pa., provides a warm, inviting space—for both cars and people—thanks to the innovative use of precast concrete solutions.

The \$65 million project features two 150,000 ft² (14,000 m²) buildings linked by an atrium and a one-story precast concrete parking deck.

What a facade

The exterior of the building is covered in insulated precast concrete panels made by Universal Precast Concrete in Stowe, Pa. Universal worked with Thermomass insulation to create the sandwich panels, which brought cost efficiency in construction and operation.

"Unlike hollow-core, the insulation in these panels goes edge to edge, which eliminates cold spots and thermal bridges," says Don Evans, estimating sales manager for Universal.

That edge-to-edge insulation design makes the building easier and cheaper to heat and cool.

"It's got a much higher continuous *R*-value [the measure of thermal resistance], which will allow the owner to operate using a smaller heating and cooling system," Evans says.

By choosing panels that are insulated prior to construction, the contractor eliminated the need for an insulation vendor on-site, which cut time and cost from the project.

Along with adding operational benefit, the panels also add a light, graceful beauty to the structure. On the upper floors, the panels feature a smooth, light sandblast finish, while the panels on the lower floors have exposed aggregate, mimicking the stone surrounding the adjacent quarry lake.

"It's a very attractive mix design, and the owners absolutely loved the look," Evan says.

But what about the cars?

The parking deck also took advantage of the benefits of precast concrete to lower construction costs while creating an open, friendly space to park cars and transition into the building.

The curved one-level precast concrete structure is three bays wide and more than 900 ft (270 m) long, says Joe Sharkey, retired salesman for High Concrete Group in Denver, Pa., the precaster for this part of the project. Initially, the design called for two expansion joints, but Sharkey's team showed the architect how they could convert the 30 ft (9.1 m) bays to 45 ft (14 m) bays using 15 ft (4.6 m) MEGA-Tee double tees.

"The MEGA-Tees gave us an edge in winning this project because we were able to reduce the number of pieces needed in the substructure. The fewer the pieces you need to use, the more economical the structure will be."

Joe Sharkey, High Concrete Group

MEGA-Tees reduce the number of joints needed in a parking structure to create more open spaces with reliable, stable performance.

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—Sarah Fister Gale J