Gate Precast to Produce Precast Concrete Wall System for new Fort Hood Hospital
HILLSBORO, TEXAS

Gate Precast Company has been selected by the Balfour Beatty / McCarthy joint venture design build team to provide a thermally efficient, pre-insulated, brick inlaid architectural precast concrete system for the U.S. Army Corps of Engineers’ replacement hospital at Fort Hood.

The new $503 million, 944,000-square-foot medical facility is designed by HKS Architects and Wingler & Sharp. The facility will replace the existing Carl R. Darnall Army Medical Center.

Gate Precast in Hillsboro, Texas, will produce the blast-resistant precast concrete wall panels for the hospital. Presently, Gate is in the design and engineering phase of the precast elements which are being modeled in BIM. Gate Precast is 100% BIM compliant with 69 licensed users who have designed over 70 structures companywide.

The medical campus is designed to achieve the LEED Gold level. One of the sustainable measures includes a 30% reduction in energy use over ASHRAE Standard 90.1. The innovative precast wall panels feature a continuous layer of insulation between the building’s interior and exterior preventing thermal bridging that can nullify the effect of the insulation.

Production of the precast components should begin April 2012 with installation of the precast slated to begin December 2012. Construction is expected to be complete in May 2014.

Fинфrock Awarded Five Design-Build Parking Projects
ORLANDO, FLORIDA

Fинфrock Construction, Inc. has recently been awarded five new parking structure projects. Design-build services will be provided for three new projects in Central Florida: a 617 stall garage for Adventist Health System/Sunbelt Healthcare Corp. in Altamonte Springs, Fla.; a 330 stall garage for Osceola Regional Medical Center in Kissimmee, Fla.; and an 808 stall garage serving the new Cruise Terminal 6 for the Canaveral Port Authority.

Additionally, complete design-build services will be provided to Alta Congress, LLC for a 587 stall garage project in Del Ray Beach, Fla., and to Metropolitan Life Insurance Co. for a 1,452 stall expansion to an existing Fинфrock garage in Tampa, Fla. Construction costs for the five garages are expected to total nearly $30,000,000. Design work is underway on each project with all projects scheduled to begin construction in 2012.
Fabcon Celebrates 40 Years of Innovation in Precast Manufacturing
SAVAGE, MINNESOTA

Fabcon, a manufacturer of high-quality precast concrete solutions, is celebrating 40 years of innovation. Founded in 1971, Fabcon provides wall panels, highway traffic barriers, columns and sound walls for commercial and residential construction.

Heldenfels Names New Division VPs
SAN MARCOS, TEXAS

San Marcos-based Heldenfels Enterprises, Inc. has named Gary Gunter as Vice President and General Manager of its Highway and Bridge Division.

Blaine Withers, formerly Vice President of Operations, has been named Vice President and General Manager of the Marine and Industrial Division overseeing the Heldenfels’ plant in Corpus Christi, Tex.

Gil Heldenfels continues serving as Vice President and General Manager of the Building Systems division.

U.S. Debut of BubbleDeck® Technology at the University of Wisconsin-Madison’s La Bahn Arena
MADISON, WISCONSIN

The La Bahn Arena, currently under construction in the heart of the University of Wisconsin-Madison’s downtown campus, premiered the use of BubbleDeck® technology in the United States. BubbleDeck® is a unique patented integration system of linking air, steel and concrete in a two-way structural slab. The system is especially unique in the way it incorporates recycled plastic bubbles to eliminate concrete. The result radically improves building design and performance while reducing overall construction cost. Spancrete is the precast producer for the project’s BubbleDeck® system.

The La Bahn Arena is a 98,250 assignable square feet (ASF)/ 120,000 gross square feet (GSF), four level facility adjacent to UW-Madison’s Kohl Center Arena. The arena will house a 90 by 200 foot ice sheet for men’s and women’s hockey practice and women’s hockey games as well as team locker rooms for both home and visiting teams. It will also feature office suites and support spaces for women’s hockey and locker and team room functions for the men’s and women’s swimming programs. The arena will seat approximately 2,400 spectators.

The BubbleDeck® system virtually eliminates dead weight concrete from the middle of a floor slab by incorporating recycled plastic bubbles as a void. The system can facilitate up to 50 percent longer spans between columns, and the construction does not require beams, which allows architects greater design freedom. The slab is connected directly to cast-in-place concrete columns, producing a wide range of cost and construction benefits.

In addition to time and cost benefits, BubbleDeck® technology also reduced La Bahn Arena worksite risk through off-site manufacturing and a simple installation process, as well as supported the project’s LEED Silver building specifications by reducing carbon emissions that typically arise from traditional construction methods.

The project, which officially broke ground in May 2011, has a projected completion and occupancy date of October 2012.

HEADLINES
Carl Walker, Inc. Announces Completion of Detroit Arsenal Parking Structure

WARREN, MICHIGAN

Carl Walker, Inc., a consultant in the parking industry, announced the completion of a 1,802-space parking structure located at the Detroit Arsenal facility in Warren, Michigan. This parking structure supports a new administration building that was built to house 1,100 federal employees. The precaster for this project was International Precast Solutions, LLC, River Rouge, Michigan.

The six-level, 583,750-square-foot precast parking structure provides parking for personnel employed at the new administration building and replaces surface parking spaces displaced by the new development. The design not only had to meet the requirements of the Michigan Building Code but also special criteria regarding security engineering. Additionally, this project incorporated sustainable design measures to achieve LEED Gold Certification.

This project was selected by CAM Magazine (Construction Association of Michigan) as one of the Top 12 projects of 2010 in the state of Michigan.

Thermomass® Achieves Four-Hour ASTM E-119 Fire Resistance Rating

BOONE, IOWA

Thermomass®, a manufacturer of building insulation systems for the concrete industry, has announced the successful completion of the ASTM E-119 fire test.

The fire test was conducted on a sandwich wall panel consisting of a 2-in exterior wythe of concrete, 2-in insulation core, and a 5-in interior wythe of concrete. The interior wythe was loaded to 4,000 pounds per foot gravity load and exposed to fire for a duration of four hours, with temperatures reaching 2,000 °F.

“During the four-hour test, the temperature on the exterior wythe of concrete increased by only 130 °F, which is only 50% of the allowed temperature increase per ASTM E-119,” said Darryl Dixon, Director of Technical Services at Thermomass.

According to Thermomass, the successful four-hour mark is the first and only ASTM E-119 test on an integrally insulated sandwich wall using an energy-efficient FRP wythe connector.