

SCOTT
SYSTEM

INFORMER

THE ART OF CONCRETE TEXTURES

Australian University Zigzags a New Course for Brick

Burwood, Victoria, Australia – The contemporary architectural firm, H2o has added another neoteric structure to their impressive portfolio, the Deakin University Central Precinct, East Building. Completed in 2005, the East Building features brick, a traditional building material, but in an

intriguingly unconventional design. Scott's Brick Snap® system (a method for integrally-casting thin brick into precast concrete) was utilized along with varying brick colors to create a dramatic artistic element on the East Building's façade. According to H2o Director, Mark O'Dwyer, The result of H2o's

vision is the "graphic reference of geological layering and provides a relationship with the building's environmentally sensitive creek location. Instead of

Continued on page 5...

Brick Snap®

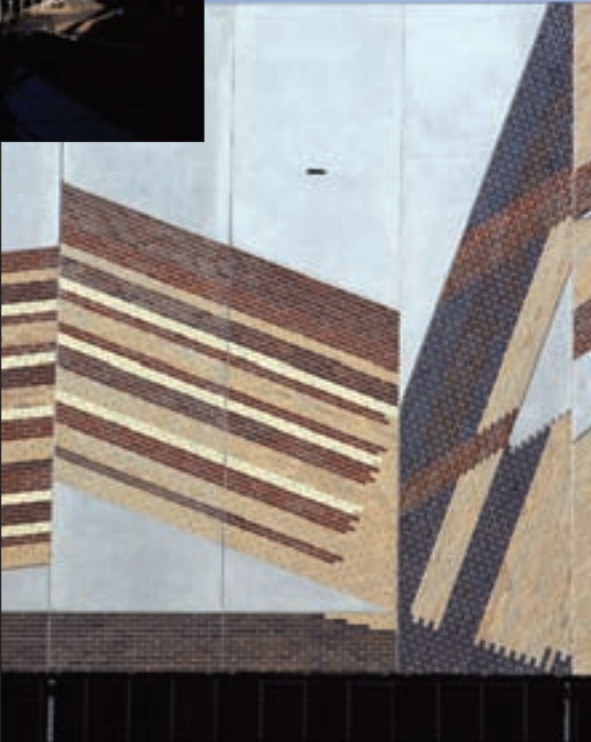
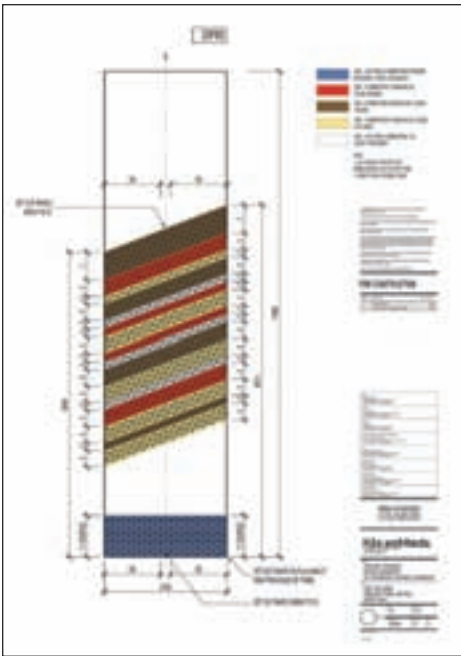
The best brick inlay system for precast and site-cast concrete.



Above: Deakin University Central Precinct's East Building in Burwood, Victoria, Australia

Flex-Liner™

Unique and unlimited textures for architectural concrete.



Above: A geological layering effect is created using multiple colors of brick set at different angles.

Left: A technical rendering of the project.

**News from
Scott System, Inc.**

www.scottsystem.com
303.373.2500

FORMLINER FORUM

■ ■ ■ www.scottsystem.com ■ ■ ■

Over the Road with SEMA Construction

Founded in 1991 by Thomas Ames, SEMA Construction, Inc. is a full service construction firm specializing in public works projects, including highway, industrial and utility ventures. To meet the needs of its expanding business, SEMA Construction has added a few subsidiaries, including a division called SEMA Precast.

SEMA Precast designs and produces architectural precast panels, precast retaining wall systems, industrial wall panels and two-sided architectural precast sound walls. One of SEMA's recent and largest contracts is for the COSMIX highway expansion in Colorado Springs. COSMIX stands for Colorado Springs Metro Interstate Expansion and encompasses a 150 million dollar joint venture between SEMA Construction and CH2M Hill. The two firms have formed a separate company called Rockrimmon Constructors to oversee the job.

COSMIX will feature nearly 110,000 square feet of precast noise walls with prairie and mountain scenes created with Scott System form liners along with 260,000 square feet of MSE precast panels. According to SEMA Precast division manager, Brian Carberry, COSMIX is on schedule with an expected completion date of December 2007.

"SEMA Precast delivered over 43,000 square feet of noise wall last Fall and over 46,000 square feet of MSE panels in 2006 required to build the connector-distributor frontage roads for the Nevada/Rockrimmon interchange. The frontage roads will enable Rockrimmon Constructors to keep two lanes of traffic flowing in each direction on I-25, while the old mainline bridges are demolished and rebuilt. The first major phase of the construction of the interchange (including design, panel delivery, installation, backfilling, and final bridge construction) took only the first six months of 2006. Coordination between SEMA Precast and the MSE wall designer, Reinforced Earth Co. and the wall installer, Slaton Brothers, was essential to meet Rockrimmon Constructors aggressive schedule," noted Carberry.

With over \$150 million in revenue in 2005, SEMA is a dominant force in the state of Colorado for heavy/highway construction. Approximately 500 employees contribute to the success of the company lead by hands-on founder, Thomas Ames and president, Brad Spies. Ames, who began his 42 year construction career as a heavy equipment operator, can often be found on the jobsite working alongside everyone else. Spies, who has a diverse background in heavy civil construction, is



SEMA's team ready to break ground on Colorado Springs' COSMIX highway project.

involved in estimating, administrative and safety policies in addition to overseeing the Division and District Managers for SEMA Construction.

SEMA Construction, Inc. also has an office in Lake Forrest, CA plus other divisions including SEMA Golf in Phoenix, AZ and SEMA International in Mexico. Visit SEMA's website at www.semaconstruction.com.



Colorado Springs Metro Interstate Expansion (COSMIX) includes precast concrete panels with patterns suggesting the Rocky Mountains.



NEW JERSEY BRIDGE

■ ■ ■ www.scottsystem.com ■ ■ ■

Rim Snaps™ Connect on Bridge Projects

The new Rim Snap™ product is being installed currently on two highway bridge projects: one in New Jersey and the other in Minnesota.

The New Jersey DOT proposed a pedestrian bridge as part of a reconstruction plan for Routes 30 and 130 near Camden. Integrally-cast thin brick for cast-in-place concrete was

specified, and Scott's Rim Snap™ product fit the design nicely.

The Collingswood bridge is currently under construction by JPC Group of Philadelphia. According to project manager, John Prince, "This will be the Cadillac model in an area of town that well-deserves an upgrade." The structure rises to a height of 24 feet over Rt. 130 with alternating ramps to accommodate wheel chairs, strollers and bicycles. "We are testing the limits of Scott's cast-in brick system by installing the material on 14 different columns that are approximately 3 feet wide and 24 feet tall."

The Rim Snaps™ will be attached to the column forms on all 4 sides (with L-shape brick in the corners) in 8 foot tall sections. The forms will be craned up and over the rebar supports and set in place for the concrete pour.



Above: Rim Snaps™ are attached to vertical forms with staples. Brick is inserted into the templates and form ties are set. A foam blockout fills the brick pocket to accommodate the form tie. A thin-set brick patch fills in after the forms are removed.



Left: Corner bricks are set in place to make the brick column.



Left: Brick, ties and rebar are set. Workers make final adjustments before closing up the form.



Vertical forms with Rim Snaps™ have been removed, exposing the brick façade finish.

Continued on next page..

MINNESOTA BRIDGE

■ ■ ■ www.scottsystem.com ■ ■ ■

Rim Snaps Connect

Continued

On the east side of the Twin Cities, another bridge is under construction using poured-in-place concrete with cast-in brick. The **Valley Creek Road** structure is a 2-span bridge that goes over I-494 and serves as a main entrance into the city of Woodbury. The city was active in the design process and selection of materials and chose brick with stone to fit the existing complexion of Woodbury. Instead of hand-set brick and limestone, the project called for Rim Snaps® and a form liner to achieve a cut stone look in the concrete.

According to MNDOT bridge architectural specialist, Dave Hall, the stone and brick upgrades did not impact the original budget set by the state. Hall explained that the Valley Creek bridge will carry 6 lanes of traffic up and over the busy Interstate 494.

"The difficulty," he said, "is that we need this project built in one season." Contractor, Lunda Construction is meeting the challenge and plans to finish the bridge by September 1, having begun the job in April. MDOT has included incentives for Lunda to finish the job quickly and the contractor is on track to receive their prize.

Most impressive on the Valley Creek Bridge are the 5' x 5' x 7' four-sided columns, with brick set inside the form on all four sides!



Above: The Valley Creek Bridge in Woodbury, MN features a blend of brick with a hand-crafted finish on piers and abutments. A limestone base created with form liners complete the traditional design. Brick will be thin-set in the voids where form ties were located. Then remaining concrete residue will be washed off.



Above: A worker details a brick column on the Valley Creek project. This is a fast track construction job on the six-lane bridge that spans over Interstate 494 east of the Twin Cities.

Right: Column forms utilize Rim Snaps™ and brick including corner brick on all 4 sides of the form. Columns are 5'x5'x7' and 3'x3'x7'.



The columns are placed on their side so the brick is inserted overhead and upside down (see photos). The forms will be picked up by crane and placed over the rebar.

The Rim Snap™ has to be strong enough to fight gravity and the affects of lifting, setting, pouring and vibrating concrete.

Karlson Forming Specialties of Amery, WI supplied the Rim Snap™ system on Valley Creek. www.formliner.com

Construction by Lunda of Rosemont, MN, www.lundaconstruction.com

JPC Group of Philadelphia headed up construction on the Collingswood, MN Bridge, www.jpccgroupinc.com.

ANOTHER BRICK IN THE WALL...

■ ■ ■ www.bricksnap.com ■ ■ ■

Boise State University Gets New Practice Facility FAST and Under Budget!

The Boise State University Indoor Practice Facility is a design/build project that was designed and completed within 11 months. Tilt-up construction with brick-embedded concrete panels was employed on the 102,000 square-foot structure that features a practice field with a 70-foot clear height. The building includes practice areas for athletes, cheerleaders, dancers and the marching band as well as 24,000 square feet of office space. A state-of-the-art sound system, motorized nets, indirect lighting and an elevated filming platform complete the design.

The \$9 million project began last May and was delivered to BSU and the Idaho Division of Public Works under budget and in time for the BSU Broncos to practice for the January 2006 MPC Bowl Game.



General Contractor: McAlvain Construction, Inc., Boise, ID

Owner: Boise State University and Department of Public Works

Architect: Hummel Architects

Engineers: Musgrove Engineering; EHM Engineers, Inc.; Jensen-Belts Associates; Pinnacle Engineers

Source: Idaho Business Review, "Idaho Top Projects", May 15, 2006

Most Innovative Product: RIM SNAPS™



We are pleased and honored to receive the Editors' Choice award for Most Innovative Product at this year's World of Concrete expo. Scott System's Rim Snap™ was recognized in the category of Formwork and Forming Products by *Hanley-Wood* and *Concrete Construction Magazine*.



Another view of Deakin University Central Precinct's East Building



Above: In addition to slanting the brick patterns, H2O Architects' design utilized precast panels set at varying angles.

Australian University

Continued from page 1...

replicating the appearance of a brick wall, we were able to utilize the Brick Snap® system to create a graphic image."

O'Dwyer sited other benefits of the precast and brick-inlay system for the Deakin University project. He noted increased speed of construction (due to ease of precast fabrication), a self-finished surface on both sides of the panels (no additional costs, like scaffolding, are required to apply finish), little to no ongoing maintenance and the optimal energy and environmental characteristics of concrete.

H2o's clever design proves that brick-in-precast can easily shift away from masonry's typical look. The zigzag finish should inspire other artistic facades in brick as the Brick Snap® template can be attached to the concrete form to suit ANY graphic idea. Because the bricks do not need to be stacked and mortared like conventional brick, designers can be free to create thin brick murals using different colors and sizes of materials to complete their vision. Think of a concrete wall as an artist's canvas whereby a "confetti" pattern or other images like mountain scenes, logos or abstract art is not only possible but is also easy to achieve.

Thin brick and the Brick Snap® system was provided by Daniel Robertson, Ltd, a notable masonry producer of Australia founded in 1853. www.danielrobertson.com.au.

Construction Team: H2o Architects, Daniel Robertson Brick and Tile, WorleyParsons, Melbourne Precast Concrete, Deakin University Project Design & Construction Management, Victoria, AUS.



SYSTEM

the art of concrete textures

**10777 East 45th Avenue
Denver, CO 80239**

■ ■ ■ **in this issue** ■ ■ ■

**Australian University Zigzags
a New Course for Brick**



**Over the Road with SEMA
Construction**



**Rim Snaps® Connect on
Bridge Projects**



**BSU Practice Facility Completed
in Record Time**

PRSR STD
US POSTAGE
PAID
DENVER, CO
PERMIT NO. 455 I

INFORMER

**News from
Scott System, Inc.**



Modern | Artistic | Structural | Sustainable

The Mass Appeal of Tilt-Up

**Register Now for Denver Convention
October 4th – 7th**

The annual Tilt-Up Association expo will be held October 4-7 at the Inverness Hotel and Conference Center Resort in Englewood, CO. The property is located on a spectacular golf course with views of the Rocky Mountains. The convention will include educational tracks for engineers, contractors, managers and architects as well as building tours, exhibits and demonstrations. Plus, there will be plenty of opportunity for FUN in the way of city and mountain tours, golf, and social events.

For more information, call Dana Scott, local co-chair, at 303-373-2500, danas@scottsystem.com, or visit the Tilt-Up Association's website at www.tilt-up.org.

