

CONCRETE HOMES

August 2002

Multi-family Housing Project Features Precast

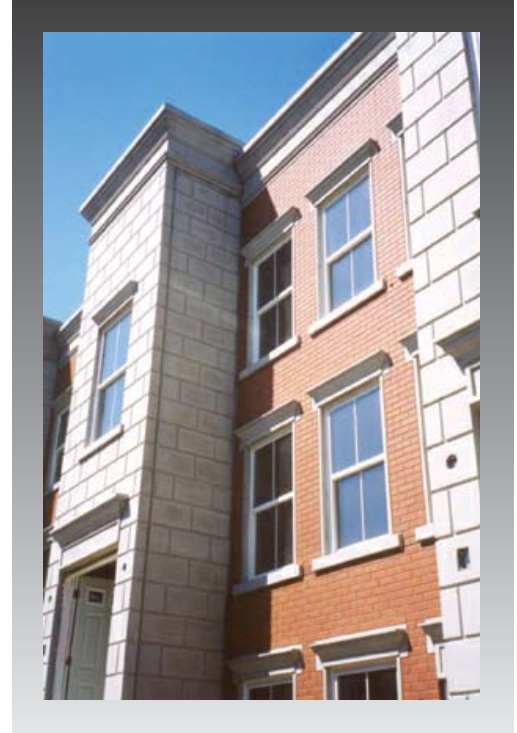
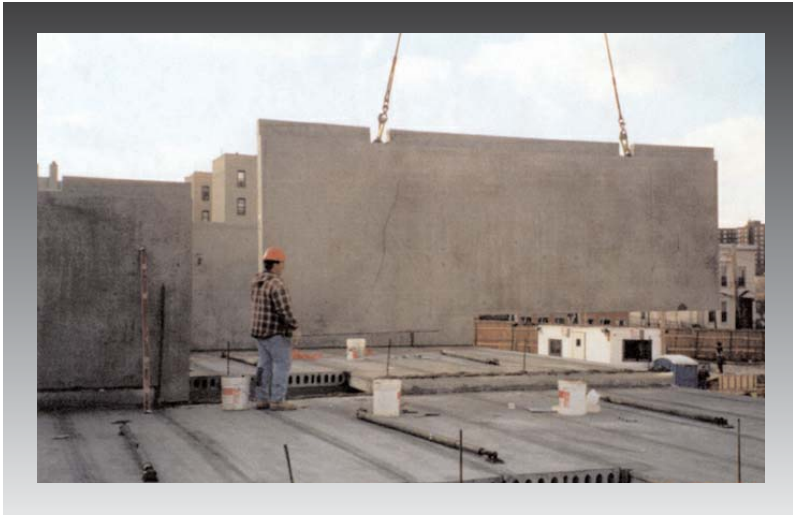
Gated development provides Energy Star homes in the Bronx



Melrose Commons II features precast concrete structures that provide the energy savings of an Energy Star home.

Located in the Bronx, New York, Melrose Commons II is a gated development of affordable housing units built entirely of structural precast concrete. The three-story project features 30 units, with a total living space of 88,200 sq. ft. and development costs of approximately \$12 million. Construction began in December 2001, but building in winter was a non-issue due to the use of plant-produced, precast concrete elements by Oldcastle Precast of North Brookfield, Massachusetts. These materials required less labor on site, allowing for safer and easier management of construction procedures during inclement weather. Melrose Commons II includes 30 buildings, each providing 3 homes. The all precast concrete structures were manufactured with self-compacting concrete mixes consisting of hollowcore floors and roof planks; weight-bearing and non-weight-bearing wall panels; interior and exterior steps; U-shaped channels; and cornices, sills, and lintels cast into the exterior panels. The exterior wall panels have an attractive thin brick inlay cast into them matching the brownstone look of the neighborhood. Every home in Melrose Commons II is an Energy Star.

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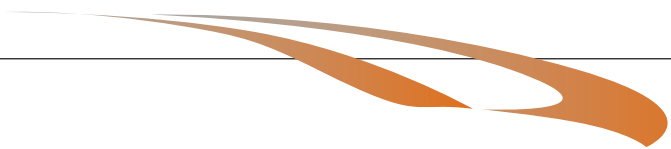
Top left: Interior wall panels are set in place with the help of a workman on the hollowcore floor.

Bottom left: Exterior wall panels feature the look of the community and are assembled with minimal labor.

Top right: The completed exterior panels provide an attractive finished product.

The owner/developer is MCII Associates, New York, NY; architect/engineer, Danois Architects, New York, NY; and architect, Equus Design Group, Belmont, MA. Sponsor for the project is NYC Housing Partnership in conjunction with the New York City Department of Housing Preservation and Development, and New York State Affordable Housing Corporation. For more information on Melrose Commons II, contact Harold Messenger of Oldcastle Precast at 508.336.7600.





ICC, NSSA to develop standard for storm shelters

The International Code Council (ICC) and National Storm Shelter Association (NSSA) will create a joint standard for the design and construction of storm shelters. The ICC/NSSA Standard on Design, Construction and Performance of Storm Shelters will regulate the design, construction, and installation of safe, reliable, and economical storm shelters. Shelters built under the new standard will help protect people from personal injury when hurricanes and tornados strike.

"Public safety is a priority of the ICC and the members we serve," says ICC Chief Executive Officer, Bob Heinrich. "Creating a storm shelter standard is an example of how code enforcement officials, architects, engineers, contractors, and others in our industry can work together to set new standards for building safety."

It is estimated that 100,000 shelters were built in the United States in the last three years. NSSA's comprehensive industry standard, Association Standard for the Design, Construction, and Performance of Storm Shelters, is consistent with design criteria outlined by FEMA. NSSA also established procedures for conformity assessment.

"The primary purpose of the National Storm Shelter Association is to foster quality in the shelter industry and to distinguish those products and producers that meet or exceed the high levels of quality represented by widely recognized standards," says NSSA Executive Director, Ernst W. Kiesling. "Our partnership with the Southern Building Code Congress International of the International Code Council in evolving a consensus

standard represents a significant step toward achieving NSSA's goals. This is a proud moment in our history."

FEMA currently publishes two documents concerning storm shelters that show designs for masonry and ICF wall systems. Taking Shelter from the Storm (FEMA 320) details in-residence shelters and Design and Construction for Community Shelters (FEMA 361) addresses community shelters. "When the National Weather Service warns of severe weather, people need a safe place to go," says Anthony Lowe, Federal Insurance Administrator Nominee of FEMA. "A storm shelter provides not only safety, but also the peace of mind that one's family and friends will be safe. FEMA is committed to helping protect our neighbors and communities from natural and man-made threats. I commend the ICC and NSSA for collaborating to develop a national standard for storm shelters."

For more information contact Ernst W. Kiesling, P.E., Ph.D., Executive Director, National Storm Shelter Association at ernst.kiesling@WIND.TTU.EDU, or visit www.nssa.cc.

Fall promotion venues offered

The Promotion Plus Forums and Concrete Summits are sponsored by the Concrete Alliance and coordinated by the National Ready Mixed Concrete Association (NRMCA). Each of the nine promotion regions will hold a Forum, and in addition, each will host an annual Concrete Summit—a promotion event designed to attract public officials, developers, owners, and other decisionmakers. To learn more about the

Concrete Alliance's fall programs, visit www.NRMCA.org. For a specific meeting agenda and to register, contact Michelle Barringer of NRMCA at mbarringer@nrmca.org.

Great Lakes	Chicago, IL	September 12–13
Pacific Southwest	Sacramento, CA	September 25–26
South Central	St. Louis, MO	Sept. 30–Oct. 1
Southeast (during INCON)	Orlando, FL	October 3
Rocky Mountain	Albuquerque, NM	October 9–10
Eastern (South)	Baltimore, MD	October 15–16
Eastern (North)	Mystic, CT	October 16–17
Pacific Northwest	Vancouver, WA	November 5–6



Tools of our trade



Thermal Performance Comparison of Wall Systems investigates the energy efficiency differences of eleven different wall systems in all climatic zones throughout the U.S. and southern Canada. The analysis includes concrete masonry, AAC, ICF, and insulated removable form systems, as well as wood and steel frame walls. The data was

modeled of Department of Energy software to account for insulation levels, thermal mass, and air infiltration. Not surprisingly, concrete wall systems outperformed both types of frame construction in most of North America.

The 49-page report is only available on a mini-CD in Adobe Acrobat format, which is included on the CD.

Thermal Performance Comparison of Wall Systems
(CD-026) Mini-CD format only, \$20 plus shipping

To place your order, call 1.800.868.6733, or visit our Web site at www.concretehomes.com.

Share your ideas for a chance to win \$100

Are you one of those MacGyver-type contractors who always have a quick fix for troublesome jobs? Do you know someone who is? Permanent Buildings & Foundations (PB&F) magazine offers \$75 for each tip published in the new TechTips column, or if you include a clear picture or diagram it is worth \$100. In addition, if PB&F publishes your idea, your name will be entered in a drawing for a free hot knife to be given away each issue of the magazine.

TechTips is column of reader ideas featuring practical and profitable tips and techniques related to concrete contractors in the residential and light commercial industry. Send your TechTip to 350 E. Center St., Suite 201, Provo, Utah, 84606; fax to 801.373.0015; or e-mail kgadd@pbf.org.

CONCRETE HOMES

Concrete Homes is a monthly newsletter published by the Residential department of the Portland Cement Association to communicate ideas for promoting the use of concrete in homebuilding. We are:

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The Portland Cement Association is an organization of cement manufacturers to improve and extend the uses of portland cement and concrete through market development, engineering, research, education, and public affairs work.


CONCRETE
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PCA

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