

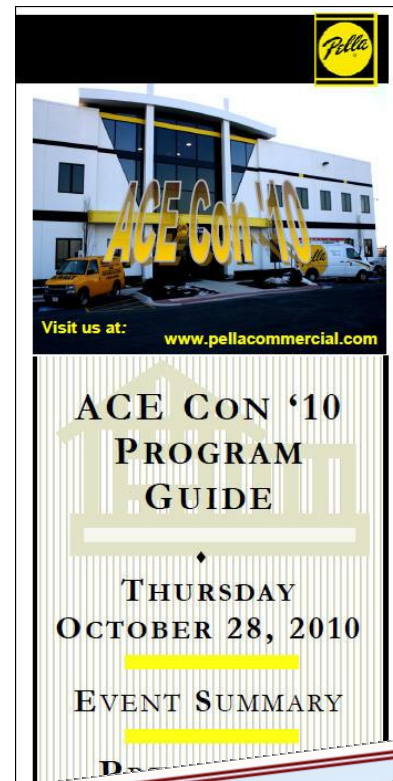
IMI promotes structural masonry at ACE Con '10

IMI delivered a seminar on Tips for Optimizing Structural Masonry to a diverse group of architects and engineers coming from all over Chicagoland at the annual ACE Con architectural conference hosted by Pella Windows in West Chicago. A few of the topics covered included self consolidating grout, loadbearing AAC, structural brick, and hybrid masonry. The attendees asked many relevant questions, and seemed to be interested in using masonry structurally. IMI has presented at this event for the past three years.



GC/CM Outreach

In October, IMI continued our involvement with top GC/CM Walsh Construction. We presented a training seminar to their project managers, project engineers, and superintendents on Cold Weather Masonry Construction. The presentation was at their Chicago headquarters office, and it was broadcast live over the internet to their other offices. Also, IMI and DCTC personnel visited Walsh's new headquarters under construction in Chicago at their request, to weigh in on masonry quality issues with respect to the re-use of common brick on this anticipated LEED Platinum project.



Featured Presentations

International Masonry Institute – Scott Conwell
Tips for Optimizing Structural Masonry

-The focus of the seminar is to give participants a clearer understanding of the interrelationship in masonry buildings between materials, architecture, engineering and construction. Seemingly simple decisions can dramatically affect the building and understanding options available in materials, design and construction methods can result in more efficient and cost effective structures.

Current and upcoming professional education seminars

Date	Audience	Location	Presentation	Attendance
03/16/11	FGM Architects	Oak Brook, IL	"Masonry for Sustainability"	25 est.
12/14/10	AIA Central Illinois	Bloomington, IL	"Cold Weather Masonry Construction"	30 est.
12/09/10	DeStefano + Partners	Chicago, IL	"AAC Case Study"	30 est.
11/29/10	Illinois State University Greenfluence chapter	Normal, IL	"Masonry for Sustainability"	35 est.
11/16/10	Northern Illinois CSI Chapter	Addison, IL	"Tour Bricklayers Training Center"	45 est.
11/09/10	Association of Licensed Architects, Illinois chapter	Rolling Meadows, IL	"Masonry for Sustainability"	70 est.
11/05/10	Globetrotters Engineering	Chicago, IL	"AAC Case Study"	20 est.
11/03/10	Larson & Darby Architects	Rockford, IL	"Introduction to AAC"	25 est.
11/02/10	Illinois State University	Normal, IL	"Masonry Design and Detailing"	35 est.
11/01/10	LZT - Larson & Darby Architects	Peoria, IL	"Masonry for Sustainability"	5 est.
10/28/10	Pella ACE-Con Architectural Conference	West Chicago, IL	"Structural Masonry Tips"	30
10/25/10	Ceramic Tile Contractors Assoc. of Chicago	Arlington Heights, IL	"Surface Preparation for Ceramic Tile"	140
10/06/10	Walsh Construction (office)	Chicago, IL	"Cold Weather Masonry Construction"	18



RIGHTON PARK COMMUNITY CENTER: A CASE STUDY IN LOADBEARING AAC

Scott Conwell, AIA, CS

Abstract

This case study of the new Richton Park (Illinois) Community Center will document the first use of loadbearing AAC in the metropolitan Chicago area. It will look at how loadbearing AAC satisfied the Owner's criteria, and how installer certification training and an aggressive quality control plan satisfied the A/E's requirements for contractor selection. It will also take a close look at the masonry wall construction, especially the 30-ft (9.14 m) high, 12-in. (300 mm) thick loadbearing AAC gymnasium walls. This case study will make extensive use of photographs and illustrations to show placement of grout and reinforcement, truss beams and lintels, thinset mortar application, and architectural detailing of the AAC. The paper will also document the unique interface between the AAC and the Applied Exterior Finish System (DEFS) used to finish the walls.

Figure 10a

Electrical Coordination

As is common with AAC construction, all of the Community Center's electric conduit and boxes were recessed into the walls (see Figure 10a). AAC's ease of workability enabled the workers to cut chases, niches, and grooves quickly and accurately using a router or grinder. This is an important characteristic of AAC, as it precludes the need to fur out the wall finish for the sole purpose of containing the electrical components. By recessing the electrical elements into the AAC, additional floor area was gained, and the Owner will benefit from the superior durability of a plaster coating direct applied to a masonry finish, unequalled by wallboard on studs or furring channels.

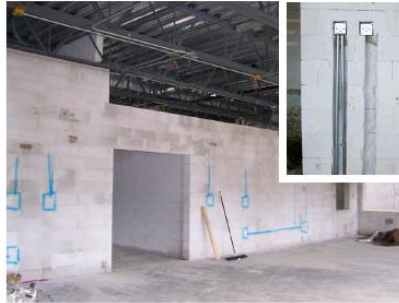


Figure 10a. Electricians marked locations for their conduit and boxes on the AAC; bricklayers routed electrical chases into the AAC for recessed conduit and boxes (inset).

Architectural Relief Details

The Architect added visual interest and relief in the building elevations by designing simulated brick projections, soldiers, and rowlocks. These features were created by adhering thin pieces of AAC onto the newly-built walls as an appliqué to the AAC (see Figure 10b). These pieces would later be coated with the DEFS to resemble clay brick.



Figure 10b. AAC appliqué were adhered to the walls to form a projected soldier course, a rowlock sill, and projected medallions, all to resemble clay brick after the coating is applied.

Finish Application

The DEFS was designed to match the color and visual texture of the brick on the existing Village Hall building. Several variations of the finish were evaluated on the project's sample panel before the Architect made a final decision.



Figure 11a. DEFS is applied in three coats, with the final product matching the brick color on the existing Village Hall building.

The Richton Park Community Center met or exceeded the expectations of the design and construction teams with respect to simplicity of design, cost, and low maintenance requirements. The Owner is especially pleased with the results. All team members are looking forward to future projects based on their experience with the Richton Park Community Center will serve as a fine example for generations to come.



Figure 11b. Richton Park Community Center, loadbearing AAC construction, completed 2010.

11th North American Masonry Conference

October saw the final completion of IMI's 12-page manuscript submitted to the 11th North American Masonry Conference, entitled: RIGHTON PARK COMMUNITY CENTER: A CASE STUDY IN LOADBEARING AAC. After numerous reviews among IMI's technical staff and all members of the design and construction teams, the manuscript is currently undergoing final review by The Masonry Society and is expected to be published in June 2011.



IMI ILLINOIS MONTHLY UPDATE

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Project Involvement, October

PROJECT INVOLVEMENT						
Date	Owner	Project	Location	Masonry Issue	Architect / Contractor	Action / Status
10/29/10	State of Illinois CDB	Governors State University	Matteson, IL	\$12M remodeling project; remove and replace brick	LCM Architects; W. Dean Walker spec-consultant	tech info to spec-writer
10/21/10	Condo association	2401 W. Ohio	Chicago, IL	masonry restoration and repointing	Tom Riker, JT Living Architects; James Jordan, James D. Jordan Architects	site visit w/ architect, owners reps, and BAC rep.; tech info & contractor list to owner & architect
10/21/10	Pinnacle Development	Woodworkers Training Center renovation	500 N. Sacramento, Chicago, IL	masonry restoration and cleaning	Lisec & Biederman, Adam Baumgartner; Pinnacle Development, Dino Damato	site visit w/ architect, GC, and BAC rep.; tech info & contractor list to GC
10/19/10	Peoria Library Board	Peoria Main Library Addition	Peoria, IL	air barrier application, thin adhered stone veneer	PSA-Dewberry Architects; Farnsworth Architects; M.R. Masonry	assist BAC Local 6 President Dave Fleury in gathering documentation for jurisdictional dispute re. air barrier
10/19/10	Prairie Ridge Homes	Sustainable housing development	New Lenox, IL	ICF construction	non-union carpentry contractor installing ICFs	job site visit w/ Tim Rossborough & Greg Posch, BAC
10/19/10	not specified	Park Place	Schaumburg, IL	CMU fire-rated column enclosures	Bovis Construction - William Hoop	tech info to GC
10/18/10	Federal Express	O'HareSORT facility	Chicago, IL	1 x 1 mosaic tile floor over newly-installed defective (color-inconsistent) 1 x 1 DalTile floor	Mike Petritis, BAC Local 21; Jeff Werstak, Power Construction	letter to GC on behalf of Local 21
10/06/10	not specified	school addition	Chicago, IL	add new wythe of face brick to existing painted wall	Sue, Matrix Engineering	tech info to engineer

SITE VISIT REPORT



Meeting Date: 10/19/10

Location: Prairie Ridge Estates, New Lenox, IL

Topic: ICF homes

Attendees: Tim Rossborough and Greg Posch, BAC ADC 1; Phil, Prairie Ridge Homes; Scott Conwell, IMI

Summary:

Tim Rossborough asked IMI to look at this sustainable housing project under construction using insulated concrete forms (ICF) construction. The ICFs are currently being installed by non-union carpenters. Tim has been watching the job for four weeks, since they began the ICF work, and he said production is very slow, and the carpenters are really struggling with the forms. This may be a good opportunity for us to promote AAC to the developer.

I first learned about this project at the Central Illinois Green Expo. The first houses were supposed to be complete by the Greenbuild show in Chicago November 18, but it looks like they won't make that deadline. There is an architectural tour planned of the site during Greenbuild.

Phil from the developer's office (pgr28@aol.com) said the Logix ICF panels came from Canada, and the crew of carpenters spent 3 weeks at a Canadian training facility learning how to work with them. We told him about IMI training in AAC. He said he investigated using AAC, but decided to go with ICFs for this job, and is now committed to using ICFs.

Tom Nagy has been in touch with Greg and Tim about the IMI event in Ohio that covered ICF construction. At this point, DCTC is evaluating whether to promote AAC as an alternative to this developer, or pursue training our members in ICF construction.



International Masonry Institute

2140 W. Corporate Drive
Addison, Illinois 60101
Phone: (630) 396-3144
Fax: (630) 953-2106
www.imiweb.org

October 18, 2010

RE: FedEx SORT Locker Room

Jeff Werstak
Power Construction Company, LLC
2360 Palmer Drive
Schaumburg, IL 60173

Dear Jeff,

In my conversations with Michael Petritis, Business Agent with Tile Setters BAC District Council #1, he briefed me on the defective tile installed in the Locker Room at the FedEx SORT facility.

It is the opinion of the International Masonry Institute that new 1" x 1" mosaic floor tile can be installed directly over the existing floor tile using a latex-modified Portland cement thinset setting method. It is my understanding that the existing tile floor has been skim-coated with thinset mortar, and it meets requirements set forth in the TCNA Handbook. If this is the case, the floor may be re-tiled over the existing tile, and will perform as well as it would if it was installed over concrete.

Please contact me if you wish to discuss this further. Thank you.

Sincerely,

Scott Conwell

Scott M. Conwell, AIA, CDT, LEED AP BD+C
Director of Market Development and Technical Service
Illinois area office

IMI ILLINOIS MONTHLY UPDATE

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SITE VISIT REPORT



Meeting Date: 10/21/10

Location: 2401 W. Ohio, Chicago, IL

Topic: masonry restoration assessment

Attendees: Steve Vanderpoel, condo association president; Tom Riker, JT Living Architects; James Jordan, James D. Jordan Architects (not present); Jeff Bloom, BAC Tuckpointers; Scott Conwell, IMI

Summary:

This lead came from Pat Conway who knows one of the architects in the condominium association. This building was originally built in the early 1900s and was converted to condos about 20 years ago. It is a solid triple-wythe brick construction, with face brick at the exterior on two facades, and common brick on the other two facades.

The association wanted us to help them sort through the multiple scope recommendations and cost estimates they have gathered from tuckpointing contractors recommended to them by their management company. Upon review, these contractors are all non-union. Jeff and I walked around the building from the ground and from the roof, looking at the improperly-installed clay tile copings, unprotected unflashed watertable, and deteriorated brick and mortar joints. We all agreed that there is much work to be done, and a comprehensive building assessment would need to be conducted either by an architect specializing in masonry restoration, or a BAC restoration contractor. We gave them a PCC contractor list, and Jeff circled several contractors on that list who he knew to be well-suited for this work. We also gave them IMI construction briefs and other technical literature so they would understand the complexity of the work, and the importance of a BAC contractor employing trained, skilled tuckpointers.



SITE VISIT REPORT



Meeting Date: 10/21/10

Location: 500 N. Sacramento, Chicago, IL

Topic: masonry restoration assessment

Attendees: Dino Damato, Pinnacle Development; Adam Baumgartner, Lisec & Biederman Architects; Jeff Bloom, BAC Tuckpointers; Scott Conwell, IMI

Summary:

The GC and the architect requested that IMI visit this restoration project to assess the workmanship. I had Jeff Bloom of BAC Local 21 Tuckpointers come with me on the site visit. A warehouse originally built in 1904 with additions in the 1960s and 1970s is currently being converted to a training center for woodworkers. The building is about 55,000 s.f.; The entire project budget was only \$4.5M. The GC, Pinnacle Development, is having their payment withheld because the Owner objects to some workmanship issues in the tuckpointing. The tuckpointing contractor is Newbirth Tuckpointing, a non-union contractor. This was a city-subsidized job requiring minority subcontractors, and paid prevailing wages.

The roof membrane was run over the back of the parapets and up over the top of the coping stones, to save money on removing the coping and flashing below the copings. There was scattered efflorescence at the parapet. There were about 26 new calcium silicate pilasters between the windows, where decorative wood pilasters had been removed and Renaissance Stone had been installed. The vertical joint between the calcium silicate and the brick was an excessively wide mortar joint, 1-in. in some places, and tapered out to a feather edge at the inside corners. Some of these joints had already begun to crack. The tuckpointers had smeared mortar onto the surface of the brick, that did not come off despite attempts at cleaning. At one location, a new opening was saw cut into a common brick wall, exposing the porous bodies of the common brick. The overall tuckpointing job was marginally acceptable.

The GC asked IMI to write a letter stating our assessment of the work. Jeff and I think this is a good opportunity to promote BAC tuckpointing contractors to the GC and the Owner for their future work. We gave them technical information and a PCC contractor list.



PCC / Masonry Restoration

IMI and Jeff Bloom from the Tuckpointers made a couple of job site visits with the architects and owners of two buildings in need of masonry restoration. We shared technical literature, tuckpointing contractor lists, and other resources. These types of services position IMI and BAC as solid resources in the industry, and increase work opportunities for BAC members and contractors.



IMI ILLINOIS MONTHLY UPDATE

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Ceramic Tile Contractors
Association of Chicago
www.ctcaa.org



SURFACE PREPARATION FOR TILE & STONE

WHO SHOULD ATTEND

This program is for architects, designers, GCs, and BAC tile, marble, and terrazzo contractors.

WHEN & WHERE

Monday, October 25, 2010
Wellington of Arlington restaurant
2121 S. Arlington Heights Rd.
Arlington Heights, IL 60005

SCHEDULE

5:00 – 6:00 Reception and Supplier Exhibits
6:00 – 7:00 Dinner
6:30 – 7:30 Presentation

CONTINUING EDUCATION

This program meets state of Illinois and AIA/CES requirements for continuing education, and qualifies for 1.0 learning units.

COST

Free to architects, designers, and GCs (limited space available). Reception and dinner are sponsored by IMI.

PROGRAM

This seminar addresses industry standards and guidelines regarding substrate preparation for installation of concrete based underlayments and toppings. Whether the topping is used as the floor finish, or part of the system prior to subsequent installations of ceramic tile and stone, designers should have a working knowledge of this important floor component. Participants will be exposed to the correct process of inspecting a substrate to determine required preparation (repairs), moisture vapor emission analysis and testing methods, and methods of mechanical preparation prior to the installation of an underlayment or topping.

PRESENTERS

Heather Yario, Midwest Regional Sales Manager, and Tyler Barton, Territory Manager of MAPEI.



Please register me for *Surface Preparation for Tile & Stone*

Name: _____

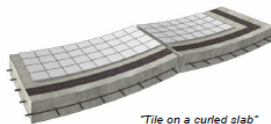
Company/Organization: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____

E-mail: _____



"Tile on a curved slab"
from Masonry Detailing Series,
www.masonrydetailing.org

To register, please e-mail sconwell@imiweb.org or fax this form to (630) 396-3136; or mail to International Masonry Institute, 2140 W. Corporate Drive, Addison, Illinois 60101. Phone (630) 396-3144 for more info.

SPACE IS LIMITED. PLEASE RESPOND BY OCTOBER 22, 2010.

IMI co-hosts Tile Presentation

IMI and the Ceramic Tile Contractors Association of Chicago co-hosted the annual architectural seminar this month in Arlington Heights, Illinois. Over 60 architects, general contractors, interior designers, and BAC Tile Marble Terrazzo officers and staff attended, in addition to the regular group of tile contractors and tile suppliers. IMI gave the introduction and a brief presentation on TMT training, Trowel of Excellence certification, and mud floors. Representatives from Mapei gave the technical seminar. This event is always met with great reviews and comments by the architects and attendees who appreciate the valuable information delivered by the best design and installation experts in the city.



SURFACE PREPARATION FOR TILE & STONE



Ceramic Tile
Contractors Assoc.
of Chicago



BAC Local 21
Tile, Marble
and Terrazzo



Retailer Sears Holdings sent several designers to IMI's program on Surface Preparation for Ceramic Tile. They were specifically interested in IMI's Masonry Detailing Series, and requested follow-up.

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October activities & programs

Oct 1	meet w/ Dave Collins, IMI and Ted Champ, BAC re. Indianapolis training center	Indianapolis, IN
Oct 5	Association of Licensed Architects / CSI Architectural Expo	Oak Brook, IL
Oct 6	Cold Weather Masonry Construction seminar at Walsh Construction	Chicago, IL
Oct 6	job site visit at Walsh Construction Headquarters w/ Bob Arnold, Stoltzner Masonry	Chicago, IL
Oct 7-8	NTMA Annual Technical meeting	Chicago, IL
Oct 12	meet w/ Steve Beck, professor at IIT College of Architecture for 1:50 IPRO class	Chicago, IL
Oct 14	meet w/ Margaret Lehto and Anant "Raj" Rajguru, Globetrotters Engineering Inc. re. Richton Park Case Study 11NAMC	Chicago, IL
Oct 15	IMI Market Development staff teleconference	Addison, IL
Oct 15	meet w/ Jim Allen, BAC ADC 1 re. IMI programs	Elmhurst, IL
Oct 19	meet w/ Greg Posch & Tim Rossborough, BAC ADC 1 IL at Prairie Ridge Estates re. Insulated Concrete Forms	New Lenox, IL
Oct 20	meet w/ Christian Metz, Rauch Clay Products re. glazed block vs. structural glazed facing tile on William Jones High School project	Addison, IL
Oct 20	meet w/ Steve Schwarz, S.S. Schwarz Construction re. thin stone panels, cement fiberboard, and MVAA installation handbook	Addison, IL
Oct 21	meet w/ Jeff Bloom, BAC Local 21 and Dino D'mato, Pinnacle Development at 500 N. Sacramento re. tuckpointing	Chicago, IL
Oct 21	meet w/ Jim Jordan, JDJ Architects and Jeff Bloom, BAC re. tuckpointing at 2401 W. Ohio	Chicago, IL
Oct 25	Illinois market development teleconference w/ Joan Calambokidis, Dave Sovinski	Addison, IL
Oct 25	IMI-sponsored Tile Design program with Ceramic Tile Contractors Association of Greater Chicago meeting	Arlington Heights, IL
Oct 26	Cold Weather Masonry Construction seminar at O'Shea University, O'Shea Builders	Springfield, IL
Oct 27	meet w/ Steele Crissman, Earthworks Gold re. University of Chicago Performing Arts Center	Chicago, IL
Oct 28	Structural Masonry Tips presentation at ACE-Con conference	West Chicago, IL

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Upcoming Programs

Nov 1	Masonry for Sustainability presentation at LZT - Larson & Darby Architects	Peoria, IL
Nov 2	masonry lecture at Illinois State University College of Construction Management	Normal, IL
Nov 2	meet w/ Dr. Park, Construction Management Program Coordinator at Illinois State University re. masonry in curriculum	Normal, IL
Nov 3	IMI presentation on Introduction to AAC at Larson & Darby Architects	Rockford, IL
Nov 5	meet w/ Dave Sovinski & Rob Huetten, Illinois Brick re. New Products	Palos Hills, IL
Nov 5	AAC presentation to Globetrotters Engineering	Chicago, IL
Nov 8	meet w/ Mike Hooper, BAC Plastering, Jim Slawnikowski, RG Construction, and reps from General Growth Properties re. plaster coatings at Oak Brook Mall	Oak Brook, IL
Nov 9	IMI presentation on Masonry for Sustainability for Association of Licensed Architects meeting	Rolling Meadows, IL
Nov 12	IMI Market Development staff teleconference	Addison, IL
Nov 12	Formal opening reception, Richton Park Community Center	Richton Park, IL
Nov 17	National Building Museum reception at Greenbuild	Chicago, IL
Nov 16	IMI hosts tour of District Council Training Center for Northern Illinois Construction Specifications Institute	Addison, IL
Nov 18	USGBC GreenBuild (attend only)	Chicago, IL
Nov 19	multiple-firm architecture visits w/ Michael Kiple re. RCT Terrazzo	Chicago, IL
Nov 29	Masonry for Sustainability presentation at Greenfluence student chapter , ISU College of Construction Management	Normal, IL
Dec 9	IMI presentation of Richton Park Community Center case study at DeStefano + Partners Architects	Chicago, IL
Dec 9	IMI - AIA Chicago Young Architects Annual Plastering Event and Holiday Party	Chicago, IL
Dec 10	IMI Market Development staff teleconference	Addison, IL
Dec 14, '10	Cold Weather Masonry Construction seminar at AIA Central Illinois	Bloomington, IL
Feb 16, '11	Natural Stone in Architecture , IMI 2011 Architectural Seminar Series, 1 of 5 (tentative)	Addison, IL
Feb 22	Illinois Brick architectural conference, seminar proposal submitted	Oak Brook, IL
March 16	Masonry for Sustainability seminar at FGM Architects	Oak Brook, IL
April 6	TBD, IMI 2011 Architectural Seminar Series, 2 of 5 (tentative)	Addison, IL
June 5-8	Eleventh North American Masonry Conference (tentative)	Minneapolis, MN
June 15	TBD, IMI 2011 Architectural Seminar Series, 3 of 5 (tentative)	Addison, IL
Sept 7	TBD, IMI 2011 Architectural Seminar Series, 4 of 5 (tentative)	Addison, IL
Sept 14-16	Construct 2011 - CSI National Conference (tentative)	Chicago, IL
Nov 16	TBD, IMI 2011 Architectural Seminar Series, 5 of 5 (tentative)	Addison, IL