The strongest first impressions and the longest lasting memories are built of brick and stone.

Beauty, strength, comfort, craftsmanship and tradition all intersect in the Cranbrook series of custom homes. **Lombardo Homes** perfected their Cranbrook brand in their native state of Michigan before introducing the series to Saint Louis this year.

Stunning design and subtle color combinations of stone and brick merge to create bold new definitions of luxury, quality and value.

“Lombardo Homes understands the power and impact brick and stone add to the homes they build,” said **Brett Lampkin**, President of **Lampkin Masonry**.
The Lombardo Homes approach to custom home design involves offering customers a wide range of options. Mike Van Pamel, of Lombardo Homes, refers to them as “memory points”. Masonry features create a strong first impression and leave a solid lasting impression — particularly at the “Villanueva” model Cranbrook home in Wentzville.

A first glimpse of the new house is more color than form, as the warm tones of stone and brick radiate through the cool green leaves of surrounding shade trees. Texture follows this warm first impression as the expertly set brick and stone is framed by the sharp diagonal lines of multiple front gables. Complimentary styles of masonry products wrap the home in a welcoming veneer of brick, fieldstone and split face block.

The house is deceptively large. It utilizes the ground’s elevation to mask the spaciousness of a two-story home behind a ranch style brick front. Two wood columns set on stone piers support the front entry overhang. This feature of wood column on stone base is a design motif that is repeated throughout the house. Recurring elements like this help to build a strong memory of the entire home.
Rooms where family and friends gather to make memories — the kitchen, patio, sitting room and recreation room — all feature signature stone elements. “The Cranbrook Renaissance and Cranbrook Vintage style homes are intended to reflect the versatility, flexibility and quality of construction we are capable of producing,” said Van Panem of Lombardo Homes. “People are impressed by all the brick and stone in the exterior and interior of the home. These features linger with visitors long after their tour of the model home.”

Masonry makes a seamless transition from indoor life to outdoor fun as the home opens to a covered rear outdoor kitchen and patio. From cook space to countertop, stone gives this kitchen style. The patio offers woodland and pool deck views through frames of stone and brick walls and column bases. Anchoring this three-season space is a working fireplace set in a beautiful fieldstone hearth.

A fieldstone staircase leads from the patio to the pool deck. The home’s western face exhibits another beautiful view of a memorable masonry home.
Masonry is the smart choice for building construction. The top academic campuses in the world choose brick and stone for their stately halls. Smart people make smart choices.

Locally, Mary Institute and Country Day School (MICDS) propelled its brick building tradition into the 21st century with the newest addition to its campus. A timeline of brick buildings dating back nine decades stretches nearly half a mile north on Warson Road in Ladue. The latest entry in this cavalcade of brick beauties is the new 86,000 sq. ft. building housing the Science, Technology, Engineering and Math (STEM) Center, as well as an expanded Community Center for the Upper School.

“Brick was a major player in our design from the outset, as we needed to honor the campus tradition and the existing buildings,” said Todd Andrews, Principal at Centerbrook Architects of Centerbrook, Connecticut.

The new building is the major masonry component of a campus overhaul that includes exterior common spaces and entry plazas defined and accented by brick and limestone construction.

The MICDS campus resembles a small New England liberal arts college. Its multi-story brick buildings are adorned with Greek revival porticos, clock towers and cupolas. The new building housing Brauer and McDonnell Halls presents a modern approach to building design, while holding tight to tradition.

A considerable amount of glass, incorporated for natural day lighting, marries very well with the surrounding masonry. A superb color match of the new and existing bricks extends the traditional look seamlessly into a new century.

“It was very important to MICDS to get a really good color match,” said Mark Wellen, Vice President/Senior Project Manager for BSI Construction. “The existing buildings are over sixty years old. JDS Masonry and all their suppliers went above and beyond to find the best match.”

Smart design and brick buildings go hand in hand — especially in one combining STEM education with community gatherings. Tschudy Plaza is one of the entry points to the newest campus addition. A semi-circular brick wall welcomes visitors, funneling into campus via a walkway flanked by carved limestone capitals.

CONTINUED ON PAGE 5
In 1971, a trust fund was established to promote the use of masonry materials. Through this trust fund, the Masonry Institute of St. Louis was created to serve as the promotional and technical arm in the Missouri counties of the Greater St. Louis area masonry industry.

MISSION STATEMENT
The purpose of the Masonry Institute of St. Louis is to promote the use of quality masonry materials and union masonry construction by serving as an educational and promotional resource for the use of brick, stone, glass and concrete masonry products in the commercial and residential markets.

Masonry Institute of St. Louis seminars are profession-specific. However, everyone is welcome to attend all programs.

2015 MASONRY INDUSTRY CONTRIBUTORS

PLATINUM LEVEL
Irwin Products, Inc. • Midwest Block & Brick
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REGISTERED PROVIDER
The Masonry Institute of St. Louis is a Registered Provider with the AIA Continuing Education System. Participants in all workshops presented by MISL earn Continuing Education Credits. A certificate showing credit earned is mailed annually in December. Most seminars earn AIA HSW credits and satisfy state professional development hours (PDH) requirements for Architectural and Engineering licensure.

REGISTER FOR SEMINARS AT (314) 645-5888 OR masonrystl.org
TORNADO & HIGH WIND SHELTERING WITH MASONRY
Wednesday, September 23, 2015
Speaker: Diane Throop, International Masonry Institute
When the 2015 International Building Code (IBC) is adopted in the greater St. Louis area, it will require new schools and emergency facilities to have a storm shelter meeting the requirements of the ICC 500, Standard for the Design and Construction of Storm Shelters. Join Diane Throop for an overview of these new requirements and how masonry can be used to provide safe, affordable storm shelters. Diane will also discuss new tornado missile testing that is opening doors for additional masonry options.
Sponsor: Midwest Block & Brick
www.midwestblock.com

ADVANCING CONSTRUCTION THROUGH MASONRY PREFABRICATION
Wednesday, October 28, 2015
Speaker: David T. Biggs, Biggs Consulting Engineering
Prefabrication, aided by tools such as Building Information Modeling (BIM), is gaining in popularity throughout the construction industry, including masonry. This presentation highlights the prefabrication of various masonry components and full buildings. Examples will be shown from actual projects where masonry prefabrication was implemented fully, or in combination with site-built methods. Key architectural and engineering aspects of masonry prefabrication will also be discussed.
Sponsor: John J. Smith Masonry Co.
www.smithmasonry.com

2015 I-CODES UPDATE: MASONRY DESIGN AND CONSTRUCTION REQUIREMENTS
Wednesday, November 18, 2015
Speaker: Jason Thompson
National Concrete Masonry Association
The International Code Council (ICC) published the 2015 “I-Codes” in 2014. A number of updates and revisions to these Codes will affect the design and construction of masonry. Join Jason Thompson for a review of key I-Code changes that will effect referenced masonry standards such as: TMS 402/602-13, Building Code Requirements and Specification for Masonry Structures; ACI 216.1/TMS 216-14, Standard Method for Determining Fire Resistance of Concrete and Masonry; TMS 302-12, Standard Method for Determining the Sound Transmission Class Rating for Masonry Walls; TMS 403-13 Direct Design Handbook for Masonry Structures.
Sponsor: Irwin Products Inc.
www.irwinproducts.com

ENERGY EFFICIENT SINGLE WYTHE DESIGN
Wednesday, January 27, 2016
Speaker: W. Mark McGinley, University of Louisville
Codes and standards continue to increase minimum energy efficiency provisions. Often this requires continuous insulation on the surface of single wythe masonry walls. This can adversely impact the cost and durability advantages of single wythe, especially for supermarkets and low rise box retail buildings.

JOIN MARK McGINLEY FOR AN INVESTIGATION OF SINGLE WYTHE MASONRY WALLS THAT DO NOT RELY ON PRESCRIPTIVE CODE REQUIREMENTS, BUT RATHER ACT HOLISTICALLY TO PRODUCE COST EFFECTIVE, ENERGY EFFICIENT BUILDINGS.
Sponsor: Building Products Corporation
www.buildingproductscorp.com

18TH ANNUAL MISL NEW PRODUCTS SHOW
Wednesday, February 10, 2016
The MISL product show returns for the 18th season. Join us to discover what’s new, different, or even the same about great masonry products. This is a “not to miss” show for anyone in the building design and construction communities.
Time: 11:00 a.m. to 2:00 p.m.
Sponsors: MISL Supplier Contributors
RSVP not required.

BIM-M: PHASE III UPDATE
Wednesday, March 30, 2016
Speaker: Darrell McMillian, Masonry Institute of St. Louis
The Building Information Modeling for Masonry Initiative (BIM-M) is striving to increase wellbeing and safety by improving design and construction processes used for masonry structures. Join Darrell McMillian, BIM-M executive committee member, for an initiative update including developments from Phases I and II, Phase III progress, and outcomes expected during the final initiative phase, Phase IV.
Sponsor: Lemay Concrete Block Co.
www.lemayblock.com

EXPLORE THE TMS 602 / PROJECT MANUAL RELATIONSHIP
Wednesday, April 27, 2016
Speaker: Stephen Gantner, Jr., Cannon Design
TMS 602, Specification for Masonry Structures, is required to be specified for projects designed using TMS 402, Code Requirements for Masonry Structures. Join Stephen Gantner as he explores the proper relationship between TMS 602 and project manuals. Topics to include: TMS 402/602 overview, options for incorporating TMS 602 into project manuals, and the TMS 602 approach to field tolerances and special inspections.
Sponsor: Heitkamp Masonry
www.heitkampmasonry.com

THOMAS F. WALSH MEMORIAL LECTURE: “HISTORY OF BRICK MAKING – USA”
Wednesday, May 25, 2016
Speaker: J. Gregg Borchelt, Brick Industry Association (Ret.)
Now retired from the BIA, Gregg Borchelt returns as the 2016 Walsh Lecturer. For his “farewell” MISL presentation, Gregg will discuss the history of brick making in the United States. Join Gregg as he traces the methods of making brick including: the hand-molded brick, pressed brick, “Old World” influences, the industrial revolution, and Post-World War II advances leading to current and future brick making processes.
Sponsor: Spencer Brickwork Inc.
www.spencerbrickwork.com
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Sponsor: Midwest Block & Brick
www.midwestblock.com

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Sponsor: John J. Smith Masonry Co.
www.smithmasonry.com

2015 I-Codes Update: Masonry Design and Construction Requirements
Tuesday, November 17, 2015
Speaker: Jason Thompson, National Concrete Masonry Association
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Sponsor: Irwin Products Inc.
www.irwinproducts.com

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Sponsor: Irwin Products Inc.
www.irwinproducts.com

NEAR-SURFACE MOUNTED FRP RESEARCH
Wednesday, January 20, 2016
Speaker: John J. Myers, Missouri S&T
Ten reinforced masonry walls built at Missouri S&T were subsequently strengthened with carbon fiber-reinforced polymer (FRP) utilizing a near surface mounted technique (NSM). Out-of-plane cyclic load testing was performed to determine the effects of FRP type and amount, mortar and bond patterns, and FRP embedment material and depth. Join John Myers for a summary of test results including strength gain amounts and a discussion of ultimate failure modes.
Sponsor: JDS Masonry
www.jdsma sonsry.com

18TH ANNUAL MISL NEW PRODUCTS SHOW
Wednesday, February 10, 2016
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Time: 11:00 a.m. to 2:00 p.m.
Sponsors: MISL Supplier Contributors
RSVP not required

INTERNATIONAL EXISTING BUILDING CODE (IEBC) – PART III
Wednesday, March 23, 2016
Speaker: Phillip Shinn, Jacobs
Our IEBC “trilogy” concludes with Phillip Shinn returning to present an example building utilizing the masonry related chapters of Appendix A, which were discussed last season. Topics to include: brief summary of material presented during Parts I and II, example building overview, and the applicable 2015 IEBC provisions. Since Parts I and II were based on the 2012 IEBC, Phillip will also address key 2015 IEBC changes related to masonry structures.
Sponsor: Grant Contracting
www.grantcontracting.com

NEW! STRENGTH DESIGN MOMENT MAGNIFIER
Wednesday, April 20, 2016
Speaker: Richard Bennett, University of Tennessee
TMS 402-13 contains a “moment magnifier” option for the strength design of masonry slender walls. Join Dick Bennett, current TMS 402/602 Committee chair, for an overview of the new provisions. Discussion to include: moment magnifier development, comparison of moment magnifier and existing P-delta provisions, and practical wall examples highlighting differences in resulting design moments and deflections.
Sponsor: Trends In Masonry
www.trendsinmasonry.com

STRUCTURAL MASONRY DESIGN SOFTWARE VERSION 7.0
Wednesday, May 18, 2016
Speaker: Darrell McMillian, Masonry Institute of St. Louis
Version 7.0 of this handy design tool, originally developed by the National Concrete Masonry Association, is now available. The latest version updates the software to the 2015 IBC and 2013 TMS 402/602. Join Darrell McMillian for an overview of the software update exploring its capabilities and uses for safe and efficient masonry design.
Sponsor: Midwest Block & Brick
www.midwestblock.com

REGISTER FOR SEMINARS AT (314) 645-5888 OR masonrystl.org
**BASIC MASONRY 101**

**Wednesday, October 14, 2015**

**Speaker:** Darrell McMillian, Masonry Institute of St. Louis

This session provides an overview of current materials and processes for constructing new masonry exterior wall envelopes. Topics to include: codes and standards, masonry units, mortars and grouts, flashing and weeps, anchors and ties, hot and cold weather precautions, field tolerances, and masonry cleaning. Current on-line masonry informational sources will also be discussed.

**Sponsor:** Earthworks  
www.ewgroupinc.com

**MASONRY FLASHING UPDATE**

**Wednesday, December 16, 2015**

**Speaker:** Darrell McMillian, Masonry Institute of St. Louis

Join Darrell McMillian for an update session highlighting current masonry flashing types and installations. Topics to include: masonry flashing history and code requirements, sheet metal flashing, flexible flashing, flashing accessories, typical flashing locations and common installation issues.

**Sponsor:** Heitkamp Masonry  
www.heitkampmasonry.com

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**Time:** 11:00 a.m. to 2:00 p.m.

**Sponsors:** MISL Supplier Contributors  
RSVP not required

**MASONRY SEISMIC DESIGN FOR CODE OFFICIALS**

**Wednesday, April 13, 2016**

**Speaker:** Darrell McMillian, Masonry Institute of St. Louis

International Building Code references TMS 402, Building Code Requirements for Masonry Structures, for the seismic detailing of masonry buildings. This presentation is an overview of the related masonry seismic code provisions including: general seismic analysis requirements, masonry shear wall classifications, minimum seismic reinforcement, and seismic detailing related to the project Seismic Design Category.

**Sponsor:** Spec Mix  
www.specmix.com

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**REGISTER FOR SEMINARS AT (314) 645-5888 OR masonrystl.org**
A fractal pattern carved into the limestone reinforces the connection between curriculum and construction.

The new building has no formal name. It houses two halls — Brauer and McDonnell — in a sprawling multi-story brick incubator for thought, expression and growth. Brauer Hall houses offices, conference rooms and common areas — including an 800 seat amphitheater. This circular space establishes a curvilinear design pattern that is repeated on walls, walkways and common areas in combinations of brick and stone.

A curved limestone wall on the second story terrace of the teacher’s lounge is the Brauer Hall’s hidden gem, as it is not a public space available to the entire campus like so much of the building.

McDonnell Hall houses the STEM Center. Circularity asserts itself in the curved Indiana Limestone wall of the building’s greenhouse section.

“This building is very unique, as it has a lot of curves and oval shapes,” said Mark Wellen of BSI. “It is a lot easier to build a box. Everything is more difficult with curves. The masons met this challenge with incredible professionalism.”

The freestanding curved brick colonnade in the courtyard formed by the new building is a point of pride for all involved in this project.

“Building this was very intense — coordinating the stone heights, the corners, the arches,” said Jeff Schmidt, President of JDS Masonry. “It was the coolest part of the project. The colonnade extends for a straight course, and then it curves. The precision of the work by our bricklayers and masons is very impressive. They did a great job.”

Serpentine stonewalls repeat the circular pattern established by the garden wall in a courtyard made of Earthworks Gold Limestone capped with Indiana Limestone.
Earthworks Gold Stone — which is quarried and fabricated right here in Missouri — was used for the exterior. It helped differentiate between the more refined limestone that was used for window sills and lintels and the rougher limestone used on the exterior spaces.

Chief Financial Officer Becky Young served as the school’s liaison with the contractors. “This project included several complicated architectural details and the masonry contractor successfully implemented the architect’s design intent. The contributions and efforts of all the design and construction team members, including the masonry contractor, resulted in a beautiful well-designed, well-built facility that provides remarkable spaces for teaching and learning and building community,” said Young.

Buying supplies and material locally was a smart move for the design team, as it helped the project achieve LEED Platinum certification. “By sourcing the materials within a 500 mile radius of the job, we could apply for the higher LEED certification. All the local masonry suppliers were of great assistance in that part of the process,” said Mark Wellen of BSI.
The City of O’Fallon, Illinois needed a new headquarters and garage for their Parks and Recreation maintenance division. Architect Jeff Williams, of Archimages selected the one-step product for the utility building.

This system provides very impressive “R”-values and utilizes the thermal mass which is inbound of the insulation and has a built in air/weep cavity for moisture resistance through the building envelope. The inside face of the block and the outside face are connected with plastic — creating no direct thermal path.

The parks building was designed and built at the same time as its neighbor — the new firehouse and headquarters. Because this product is available in multiple colors in assorted masonry faces, the architect was able to match the color of the brick firehouse and remain in budget and on time. This extremely strong wall system provides a 4-hour fire rating. The parks building needed to economize in its construction, but at the same time provide a visual complement for the new brick firehouse.

The new building features multiple bays for the parks department’s maintenance vehicles as well as new office space. Prior to this construction the parks department had its equipment scattered around town in several smaller garages and sheds. Consolidating the gear under one roof allows them greater efficiency in operation and equipment maintenance.

“This building is built to last. We are glad to have a good, strong, durable building for our headquarters,” said Jamie Frank, Parks and Grounds Superintendent, City of O’Fallon.
John Smith Jr., President of John J. Smith Masonry Co., is the recipient of this year’s C. DeWitt Brown Leadman Award presented by the Mason Contractors Association of America (MCAA).

Smith is no stranger to achievement, having experienced success as an athlete in high school and college and as a Boy Scout, where he entered the prestigious Order of the Arrow in the Eagle Scouts. This award coincides with Smith’s fortieth year in the masonry industry. Following in the footsteps of his father, first as a bricklayer, then as the head of a successful mason contracting company, Smith has been a tireless advocate for the industry. He has held a wide range of leadership positions in both the Mason Contractors Association of St. Louis and the MCAA, and is also a former Chairman of the Masonry Institute of St. Louis.

MCAA Chairman Mark Kemp remarked “We in the industry are all indebted to John Smith Jr. for his innumerable efforts in the advancement of masonry over his accomplished career. We all continue to benefit from his legacy of leadership and innovation.”