

MASONRY

THE TOWERS AND COLONNADE FEATURE OBTUSE ANGLES OF 122 DEGREES, A TOUCH OF CRAFTSMANSHIP THAT IS A HALLMARK OF SPENCER BRICKWORK. PHOTO BY JEFF DAY



Dreams Come True with Masonry

Spencer Brickwork builds a family's dream house one stone at a time

A new dream house constructed in Southern Illinois confirms the claim that masonry is outstanding in its field.

This 30,000 square foot masonry mansion is literally out standing in a 60-acre field formerly used to grow corn. This dream house was built to match the lifelong vision of its owner.

“The owner wanted a simple European Old World feel without a lot of ornate detail for the front of the house,” said architect **Jeff Day, Jeff Day and Associates**,

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ALL PHOTOS BY MICHAEL DeFILIPPO EXCEPT WHERE INDICATED

THE OWNER WANTED TO DISPLAY THE HOME'S KEY EXTERIOR FEATURES ON THE REAR OF THE HOUSE, AWAY FROM THE ROAD. THIS VIEW OF THE REAR OF THE HOUSE AND THE POOL HOUSE DURING CONSTRUCTION HINTS AT THE MASSIVE SCALE OF THE PROJECT. PHOTO BY JEFF DAY.

BELOW: THE FREESTANDING STRUCTURAL MASONRY ARCHES IN THE COLONNADE ARE MADE OF 18" AND 14" OF SOLID PIECES OF LIMESTONE. PHOTO BY JEFF DAY



At A Glance

Architect | Jeff Day & Associates, LLC

Builder | Minton Homes, LLC

Mason Contractor | Spencer Brickwork, Inc.

Structural Engineers | Huenke

Stone, Supplies | Earthworks, Inc.

Craft Workers |

- Bricklayers' Union Local #1 of Missouri

- Eastern Missouri Laborers' District Council



THE OWNER WANTED A SIMPLE EUROPEAN HOME WITHOUT OVERT ORNAMENTATION PRESENTED TO THE FRONT. PHOTO BY CREATIVE EDGE.

LLC. "However, the rear of the house contains the most interesting features."

The complex of buildings on this property used a staggering amount of tumbled dolomitic limestone from **Earthworks, Inc.** The house, carriage house, pool house and entrance gate required 480 tons of harvest mix limestone and a trailer and a half of specialty cut stones for caps, arches and trim.

"This was the largest home we have ever installed masonry on. We worked on this job in two phases, encompassing parts of two years," said **John Spencer**, President of **Spencer Brickwork, Inc.** "Earthworks, through **Rob Harrison**, provided many specialty stone caps and heads that were instrumental in bringing the Old World masonry look together."

The owner wanted a mix of stone to create a warm feel that would complement their selections in roofing material, window trim and soffit. They decided on a mix of three colored types of limestone from Earthworks after thoroughly researching their options. Viewing a test panel

was helpful, but the decision was made to construct one of the least visible walls in the complex first.

Spencer Brickwork, the mason contractor, started assembling the north wall of the 9,000 square foot carriage house first under the watchful eye of the owner. Before the wall was completed, the owner decided to warm the combination further by increasing the mix of chocolate colored stones from 5% to 10%. This wall became the template for the rest of the stone masonry on the property.

"This project was in design longer than many of our projects because the owners were very careful about making the right decision," said **Jim Minton**, President of **Minton Homes, LLC.** "As we value-engineered the project, we looked at the cost differential between arches and no arches. The owners believed the arches were an important component of the house."

A stone veneer was not only selected for this mansion because masonry projects a traditional image of success and elegance, but also because it ranks high as a low-maintenance building material.



THE STONE IN THE 9,000 SQUARE FOOT CARRIAGE HOUSE MIMICS THE ASHLAR PATTERN AND SMOOTH FACE LIMESTONE BANDING BETWEEN FLOORS ON THE MANSION. PHOTO BY CREATIVE EDGE.



ABOVE: SMOOTH FACED AUXVASSE LIMESTONE CAPS ARE PART OF THE EXTERIOR STAIRWELL WALLS AND PROVIDE A SOLID BASE FOR HANDRAILS. PHOTO BY CREATIVE EDGE.

RIGHT: THE TRADITIONAL LOOK ESTABLISHED BY A THIN STONE VENEER ON ALL FOUR SIDES OF THE FIREPLACE JUXTAPOSES NICELY WITH THE LATEST IN VIDEO VIEWING ON MULTIPLE SCREENS. THE STONE MANTLE HAD CUTS MADE TO PROVIDE ELECTRICAL ACCESS. PHOTO BY CREATIVE EDGE.

“All the selections on the exterior of the home were driven by a key fundamental – the owner wanted a home as maintenance free as possible,” said the homebuilder. “Stone is about as maintenance free as you are ever going to get. Spencer was a great fit for the project. They do great work with stone.”

Spencer Brickwork displayed their usual flair for craftsmanship on this forty-room home. This once-in-a-lifetime experience was the last project supervised by foreman **Larry Murphy** before his retirement after over 35 years at Spencer Brickwork. To say the home is three stories tall is an understatement, because each story is fourteen feet tall.



Twelve archways across the rear of the house support a second story veranda that presented its own challenges to the erection of scaffolding for the home’s upper levels. “The masons did a great job of keeping their courses straight as they worked some forty feet high on the upper levels,” said architect Jeff Day.

Although not everyone dreams of building a home to this scale, many of the masonry features highlighted on this masterpiece can be scaled to fit anyone’s dream home.

Spring into Action

Saint Louis University chooses masonry to meet a residential hall construction deadline



THE BRICK CLOCK TOWER IN THE REAR OF THIS PHOTOGRAPH SERVES AS A TOUCHSTONE FOR MANY NEW BUILDING DESIGNS ON THE SAINT LOUIS UNIVERSITY CAMPUS.

SPRING HALL IS AN EIGHT-STORY BUILDING CONSTRUCTED WITH TWO DISTINCTIVE TOWERS ABOVE THE EIGHTH STORY MAKING IT APPEAR MUCH TALLER.

When Saint Louis University faced a fast track residential building project, they turned to masonry as a trusted solution to their tasks of completing a residence hall in time for student arrivals at the beginning of the academic year's fall semester.

Bricks, in the right hands, provide an unbeatable combination of speed and flexibility that wins the race against tough construction deadlines.

"Initially, we considered using precast construction for **Spring Hall**, but based on time constraints we went with brick construction. The selection of masonry allowed us to work under a quicker time schedule than with pre-cast construction," said **Loraine Logan**, Director of Construction Administration, **Hastings + Chivetta Architects**.

Not only did brick outperform precast construction with regards to schedule, it also allowed an additional degree of flexibility on a job-site with extremely tight working conditions.

"Masonry allows for flexibility in the system. Even though this is a new structure, there will always be nuances, especially when working eight stories up" said **Ryan Moss**, Project Manager for **McCarthy Building Companies, Inc.**

Grant Masonry Contracting performed their work primarily through the winter months of 2015-2016. Handling 300,000



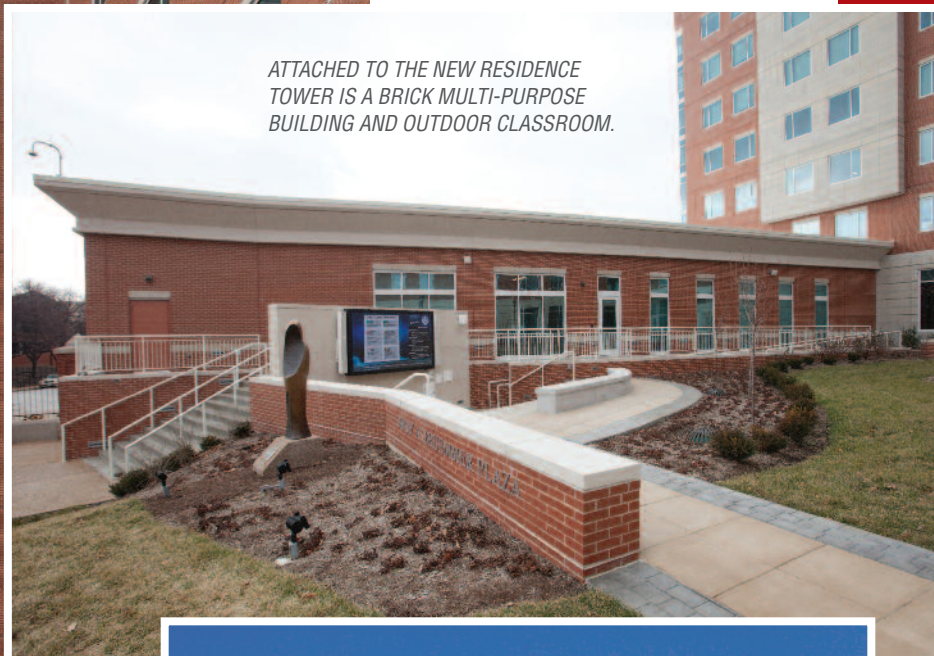
CAST STONE TRIM ABOVE THE MAIN ENTRANCE TO SPRING HALL AND A PATH OF STONE PAVERS CREATE A WARM AND WELCOMING PORTAL TO THIS NEW RESIDENCE HALL.

brick units and 30,000 square feet of cast stone in less than ideal conditions was just another day in the field for the craft workers.

“We had to get creative setting up in certain areas because of the tight site,” said Moss. “That is where Grant Masonry Contracting brought their expertise to the project, allowing us to enhance the schedule, and they handled the masonry with finesse.”

The masons worked hand-in-hand with the drywall contractor and the window installer in a tightly choreographed dance that expedited the sealing of the building so interior finish work could begin.

The Saint Louis University campus contains a variety of masonry buildings. Recent campus additions have followed the color scheme and style of the brick clock tower with a pyramidal cap



ATTACHED TO THE NEW RESIDENCE TOWER IS A BRICK MULTI-PURPOSE BUILDING AND OUTDOOR CLASSROOM.



VERTICAL AND HORIZONTAL BANDS OF CAST STONE EFFECTIVELY HELP REDUCE THE MASS OF THE EIGHT STORY BRICK BUILDING.

At A Glance

Client | Saint Louis University
Architect | Hastings + Chivetta
General Contractor | McCarthy Building Companies, Inc.
Mason Contractor | Grant Masonry Contracting
Structural Engineer | Alper Audi, Inc.
Civil Engineer | Stock & Associates
Craft Workers |
 - Bricklayers' Union Local #1 of Missouri
 - Eastern Missouri Laborers' District Council
Brick | Richards Brick
Cast Stone | Caliber Cast Stone
Accessories | Irwin Products, Inc.
Mortar | Raineri Building Materials

THE SELECTION OF MASONRY FOR THE NEWEST RESIDENCE HALL ON THE SLU CAMPUS WAS MADE FOR BOTH AESTHETIC REASONS AND DEADLINE PRESSURES. THE RESULT WAS A BEAUTIFUL NEW BUILDING COMPLETED IN TIME FOR THE ARRIVAL OF STUDENTS FOR THE NEW ACADEMIC YEAR.



ABOVE: THE BRICK WALLS OF THE ADA COMPLIANT RAMP ARE CAPPED WITH THE PRECAST STONE.

LEFT: WORKING ON A TIGHT SITE ON THE SAINT LOUIS UNIVERSITY CAMPUS PROVED A CHALLENGE WORTHY FOR THE EXPERIENCED CRAFTWORKERS.

that serves as a campus landmark. Spring Hall is the most recent building to reinforce that brand in its design.

“We were working higher than eight stories up because the masonry on the towers extends above the roof line. Each building wing features a tower topped with the distinctive blue standing seam pyramid seen capping other campus buildings,” said **Brian Grant**, Project Manager for Grant Masonry Contracting.

In addition to the residence hall, the university also constructed an adjoining two story multi-purpose building with a chapel, music rehearsal rooms, and classrooms. The **Mary A. Bruenner Plaza** features an outdoor classroom defined by the

brick walls of an ADA compliant ramp and a brick wing wall. All the walls are capped with the precast stone.

New academic residence halls typically have unforgiving deadlines especially when there are over 400 students arriving for the start of a new semester. The skill and hard work of all parties involved ensured that students had a smooth transition to the start of the 2016-2017 academic years.

“The masons did a very good job of sequencing the work. I was impressed by how efficient they were in working through the winter months,” said Logan. “They had a well thought-out plan, did a good job and tackled all the tasks.”

MASONRY STANDS TALL

Toenjes Brick Contracting, Inc. Adds Value to Park Street Plaza



THIS BUILDING FEATURES 118,000 BRICKS WITH LIMESTONE ACCENT PANELS, LIMESTONE SILLS AND LIMESTONE HEADS. THE LIGHTER RECESSED BRICK PANELS UNDER THE TOP FLOOR WINDOWS ALLOW THE VERTICAL PIERS TO REMAIN THE DOMINANT ARCHITECTURAL ELEMENT WHILE ADDING RELIEF IN THE AMOUNT OF GLAZING ON THE BUILDING.

< PARK STREET PLAZA USES BRICK AND LIMESTONE TRIM IN AN INTERPLAY OF COLORS AND PATTERNS TO INTEGRATE TO ITS NEIGHBORHOOD.

Park Street Plaza is the newest landmark in Edwardsville, IL.

The designer for this five-story, mixed-use office and retail tower chose masonry to help integrate an oversized, transitional style building into the fabric of a town aware of its architectural heritage.

From the beautiful stone of the downtown Madison County Courthouse, to the Brick Street Landmark District, Edwardsville has a long and proud relationship with masonry. The developers of Park Street Plaza were also aware also of the town's traditions. Standing more than twice the height of many of its neighboring structures, Park Street Plaza uses multiple colors of bricks, detailed brick piers and limestone trim to carry the city's traditions into the twenty-first century.

"We always strive to integrate with the existing architecture", said **Rachelle Lengermann**, Project Manager, **Plocher Construction**. "The City was concerned about having a five story building in this location."

According to the designer and project architect, achieving a "main street" character was a high priority when considering building materials. "Brick and stone masonry seemed to be the right material choice to evoke that feeling, given the context in which the building was to be built," said **Gregg Sutherland**, Vice President, **Hurford Architects**.

Selecting different colors and textures of materials allowed the designers to scale down very large elements to create visually interesting parts of the entire façade.

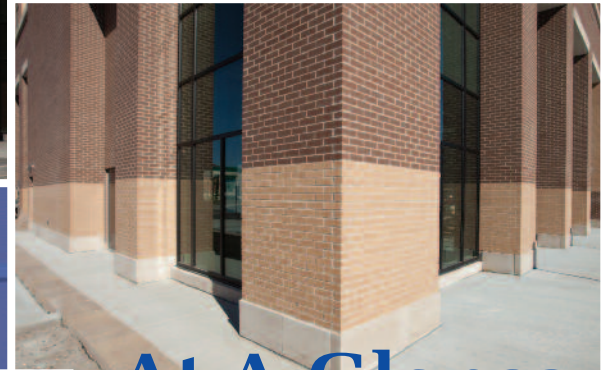
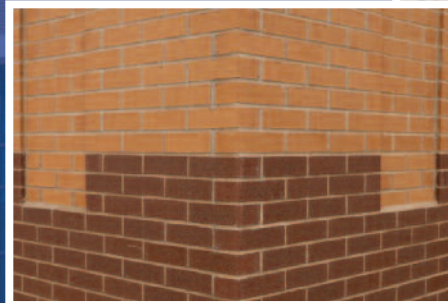
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LIGHTER BRICK IN THE FAÇADE ADDS TREMENDOUS DETAIL. ACCENTS AND PROVIDES FOR EASILY RECOGNIZABLE ENTRY POINTS TO THE BUILDING WITHOUT HAVING TO UTILIZE A LOT OF SIGNAGE.

THE CITY PARK'S USE OF BRICK AND TRIM IN A VETERAN'S MEMORIAL IS ECHOED IN MASONRY OF PARK STREET PLAZA.



BUFF AND CHOCOLATE COLORED BRICK COMPLEMENT EACH OTHER IN THE BUILDING'S EXTERIOR VENEER.



At A Glance

Client | Park Street Plaza LLC
Architect | Hurford Architects, Inc.
General Contractor | Plocher Construction
Mason Contractor | Toenjes Brick Contracting, Inc.
Structural Engineer | AEdifica | Case
Craft Workers |
 - Bricklayers' Union Local #1 and #8
 - Eastern Missouri Laborers' District Council
Brick | Richards Brick
Mortar | Spec Mix
Accessories | Irwin Products, Inc.

COLUMNS OF THE SOUTH ENTRANCE INCORPORATE LIMESTONE TRIM TO ACCENT THE MULTIPLE COLORS OF BRICK.

"The lighter recessed brick panels under the top floor windows allow the vertical piers to remain the dominant architectural element while adding relief in the amount of glazing on the building," said Sutterfield.

The contrasting brick colors in the façade also adds tremendous detail accents and provides for easily recognizable entry points to the building without having to utilize signage.

The building's prominent position on a busy corner abutting a public park provided some design considerations that masonry solved. While the west face is technically the rear wall of the building, this side offers a very public view. Brick was used to wrap around the back-up generator and transformer on the utility side of the building, providing an appealing presentation.

"The choice of masonry for this enclosure was as much for aesthetics as it was for general durability," said Sutterfield. "We wanted an enclosure to complement the balance of the architecture."

Toenjes Brick Contracting, Inc., faced a tight job site flanked by existing structures, a historic park and a busy street. The craft workers, under the direction of onsite superintendent **Harry Heitland**, skillfully completed the project on schedule. Production assistance came from the company's use of a Hydro Mobile hoist and scaffolding system to overcome the logistical issues of handling 118,000 bricks and numerous pieces of limestone on a busy and tight jobsite.

"Toenjes did a great job," said Lengermann. "We have used them on many projects. We are happy with their performance."

Shelter from the Storm

Foeste Masonry builds a "learning shelter" in Farmington, MO



THE NEW ADDITION TO TRUMAN LEARNING CENTER FEATURES TWO SEEMINGLY IDENTICAL WINGS OF CLASSROOMS. INSIDE THE LOADBEARING WALLS OF THE EAST WING ARE THE ELEMENTS THAT CLASSIFY IT AS A FEMA RATED TORNADO SHELTER.

Recognized for its ability to weather the march of time, masonry construction also withstands times of bad weather.

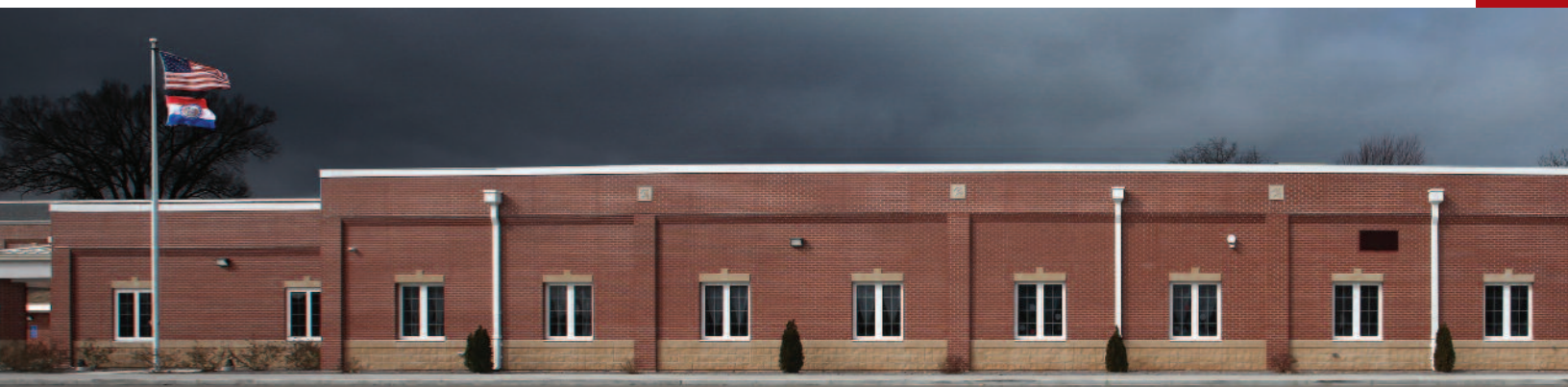
The **Truman Learning Center** in Farmington, MO, could change its name to "Truman Learning Shelter" based on the dual purpose designed into the early childhood development center's new wing addition.

The Farmington, MO, school district selected load bearing masonry construction with a brick veneer for the addition of two new wings to the school. One of these wings bears the distinction of functioning as a **Federal Emergency Management Agency (FEMA)** rated emergency shelter, as well as a developmental learning center.

"We never want to use the center as a FEMA structure. However, if we do have winds up to 250 mph, this is where I would want to be," said **Kim Johnson**, Principal, Truman Learning Center. "One of the most important factors when we were making plans for the new building was to be able to tie in to our existing structure."



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FOESTE MASONRY HAS DEVELOPED A REPUTATION IN MISSOURI AND SURROUNDING STATES FOR THE EXPERT WORK IN CONSTRUCTING MUNICIPAL BUILDINGS THAT ALSO SERVE AS FEMA RATED STORM SHELTERS.



THE NEW WING TIES INTO THE EXISTING STRUCTURE IN THE CENTER OF THE PHOTO. BRICK COLOR SELECTION WAS CRITICAL TO THE SUCCESS OF THIS PROJECT.

THE REINFORCED CMU IN THE WALLS AND HEADERS NOT ONLY PROVIDES A BRIGHT AND DURABLE LEARNING ENVIRONMENT BUT ALSO CAN WITHSTAND WINDS UP TO 250 MPH.



The original buildings that now comprise part of the Truman Learning Center were built in the 1930's as the Farmington High School auditorium. The original brick set the tone for the new full masonry construction addition, while at the same time nodding to contemporary options and styles.

“Working in a traditional or classical masonry style, we borrowed the keystone elements above the windows and the corbelling of brick from the original building in our new construction,” said **Wade Welch**, Project Architect, **Hoener Associates Architects**. “Matching the brick color to the original was our primary interest.”

In addition to providing early childhood education for 400 youngsters, the Truman Learning Center expansion was also designed to function as an emergency shelter during severe weather and intense wind. A load bearing masonry structure provides the level of safety necessary to meet FEMA's

standards for a storm shelter, while daily creating a warm, nurturing environment for children.

Twelve inch wide concrete masonry units (CMU), fully grouted and reinforced with two #6 rebar per cell, provide a structural support rated to withstand winds up to 250 mph and the impact of an eight foot 2x4 shot at 100 mph. Welch notes that construction projects of this nature often favor masonry for both structural and aesthetic solutions.

“It seems the cost of precast construction rises when you get further away from larger municipalities,” said Welch. “Contractors in these areas are more familiar with masonry construction, which gives more flexibility in design than precast concrete.”

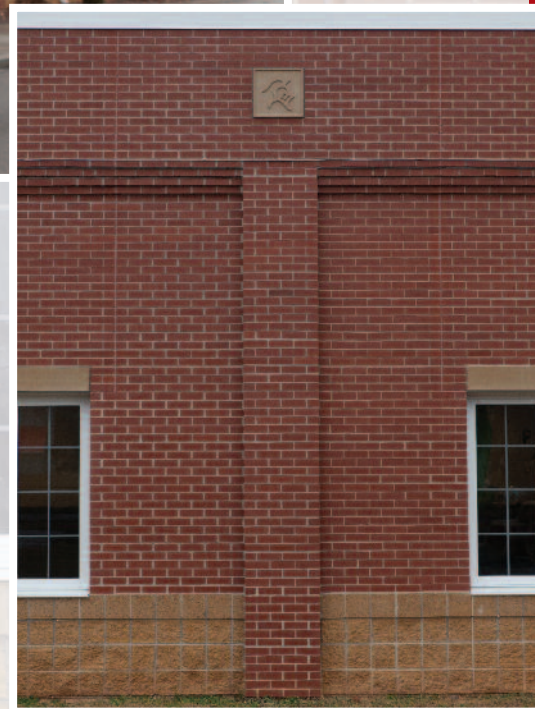
The architect sought to break up the visual mass created by 74,000 bricks plus in the veneer and add character and warmth to the structure by using split-face CMU treatments at the base



CORBELLING OF THE BRICK ON THE EXTERIOR EVOKES DESIGN ELEMENTS OF THE EXISTING STRUCTURE.



THE MAIN OFFICE ENTRANCE IS FLANKED BY A SET OF BRICK PIERS.



SMALLER CAST STONE KNIGHT LOGOS ADORN THE TOP OF EACH PIER ON THE WALLS OF THE TWO WINGS.

of the walls and piers. Cast stone lintels with keystones, corbelled brick and piers define every classroom window.

Cast stone accent panels bearing the school's logo - a knight - are strategically placed on the walls in high traffic areas, such as the main entrance and playground.

"We wanted to include a punch in certain locations to accent the design," said Welch.

The majority of the school's eye pleasing interior was accomplished by utilizing durable painted CMU. The exterior red brick transitions into the building's main entrance vestibule and lobby, setting the tone for a welcome visit. Meanwhile, brick piers help define the main office area.

Foeste Masonry, Inc., rose to satisfy all the project's needs from building a solid, reliable, and durable structure that will shelter a community from a storm to creating a pleasant and

At A Glance

- Client** | Farmington, MO, School District
- Architect** | Hoener Associates
- General Contractor** | Brockmiller Construction
- Mason Contractor** | Foeste Masonry, Inc.
- Civil & Structural Engineers** | Toth & Associates, Inc., Springfield, MO
- Craft Workers** |
 - Bricklayers' Union Local #1 and #23
 - Eastern Missouri Laborers' District Council
- Brick** | Midwest Block and Brick
- Accessories** | Irwin Products, Inc.
- Mortar** | Spec Mix



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SHELTER FROM THE STORM CONTINUED FROM PAGE 11

welcoming space where children will learn and grow. Foeste Masonry has built a number of FEMA shelters.

Ken and Judy Foeste have a unique business relationship that spans almost as long as their fifty-five years of marriage. Ken, the company President, is a master mason who struck out on his own in the 1970's. Judy attended school to learn estimating and joined Ken in business in 1980. She serves as the company's Vice President and Senior Estimator. Their combined experience and knowledge are the twin piers on which the company rests.

"It was the first time I worked with Foeste Masonry, Inc., on one of our projects," said Welch. "I was impressed with their attention to detail on both reinforcing the FEMA portion, as well as the veneer portion when we were doing such a critical tie-in to the 1930's era building."

M

Congratulations Rick Frisch

In recognition and appreciation of 7 years of dedicated service on the Masonry Institute of St. Louis Board of Trustees, **Richard F. Frisch, Jr., Frisch Masonry, Inc.**, is awarded a plaque by **Darrell McMillian**, Technical Director of the **Masonry Institute of St. Louis**.



Grant Contracting Receives MCAA Safety Advantage Award

The Mason Contractors Association of America awarded the **2016 Safety Advantage Award** to **Grant Masonry Contracting Co.**, of St. Louis. Grant was one of only six companies to receive the award, which is based on a company's incident rate. Grant has been providing quality masonry craftsmanship in a safe and timely manner for seventy years.

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