



# Building Stone

MAGAZINE

A Publication of Building Stone Institute | Winter 2008 Volume 31, Number 4

## THE ART OF STONE

**PLUS:**

**Why Architects and  
Contractors Choose  
Thin Stone**



# Flagstone from New Mexico



5 unique colors. Take your pick.

[www.nmtravertine.com](http://www.nmtravertine.com)

Phone: 505-864-6300

Toll free 800-9Marble (800-962-7253)

## BYBEE STONE CO., INC.



Whitman College, Princeton University

**BYBEE STONE TOOLS**  
6525 W. Maple Grove Road  
Ellettsville, IN 47439  
Tel.: (812) 876-3085  
Fax: (812) 935-6180



6293 N. Matthews Drive  
Ellettsville, IN 47429  
P.O. Box 968  
Bloomington, IN 47402  
Tel.: (812) 876-2215  
Fax: (812) 876-6329

Toll Free: (800) 475-4530 • [www.bybeestone.com](http://www.bybeestone.com)

# DELTA STONE

PRODUCTS INC.



SUPPLYING NATURAL STONE PRODUCTS,  
SPECIALIZING IN ARCHITECTURAL CUT LIMESTONE,  
SANDSTONE AND NATURAL STONE THIN VENEER  
FOR COMMERCIAL AND RESIDENTIAL PROJECTS.

FOR MORE INFORMATION, VISIT  
[WWW.DELTASTONEPRODUCTS.COM](http://WWW.DELTASTONEPRODUCTS.COM)  
435.654.3336



2276 SOUTH DANIELS ROAD • HEBER CITY, UT 84032  
435.654.0120 • 800.654.0094

[UTAHSTONE.COM](http://UTAHSTONE.COM)

BEAUTIFUL QUARRIED SANDSTONE  
WITH COLORS VARYING  
FROM GOLDS TO TANS TO RUSTS.

# *Stone* HAS EVOLVED. WELCOME TO THE EVOLUTION.

— Authentic —

***ThinStone***<sup>™</sup>

— Build Smart ■ Build Simple —

ThinStone<sup>™</sup> is a creative solution to many challenges facing today's builders, designers and architects. It is a green product designed to conserve natural resources by using approximately 80% less material per project and reducing energy costs for shipping. So now you can use 100% natural stone in areas where light-weight and thin-cut stone are required while feeling good that your purchase is making a difference. All of these benefits in one product that can be used indoors and out at an affordable price makes ThinStone<sup>™</sup> your natural stone solution for any project.

Thinner | Lighter | Smarter | Natural Stone



138 Woodmont Road Milford, CT 06460 TEL (203)876-7625 | FAX (203)882-0998 [www.ConnecticutStone.com](http://www.ConnecticutStone.com)

© 2004 Connecticut Stone Supply Inc. All Rights Reserved.



# BuildingStone

MAGAZINE

A Publication of Building Stone Institute

Volume 31 • Number 4

Winter 2008



Photo courtesy of Tim Hursley



## On the Cover:

Hand carved from a solid block of white limestone, this tub from Advent Design International is more than a bathroom necessity, it's a natural stone sculpture.

Photo courtesy of  
Advent Design International

## Features

- 6 Art of Natural Stone**
- 6 The Story Behind the Sculpture**  
A synthesis of nature and building, Nasher Sculpture Center uses natural stone in noteworthy ways.
- 10 Celebrate Stone**  
Participants at StoneFest and Stone Symposium deepen their connections with natural stone, bridging new and ancient perspectives.
- 16 Soak in a Masterpiece**  
More than tubs made from natural stone, these works of art are the culmination of a lifetime quest for the finest stone and artisans in the world.
- Case Study**
- 20 Understanding Stone's Green Properties**  
With the growth of the green building movement, consider how stone's "green" properties can contribute to sustainable design projects and green building certifications.
- 26 Thin Stone: A Natural and Simple Choice**  
Today, thin stone veneer is recognized in its own right and is the stone of choice for many residential, commercial and institutional projects.
- 30 Stone Through the Ages**  
Discover Kenneth Castellucci & Associates' mission to promote natural stone to architects around the country.

## Departments

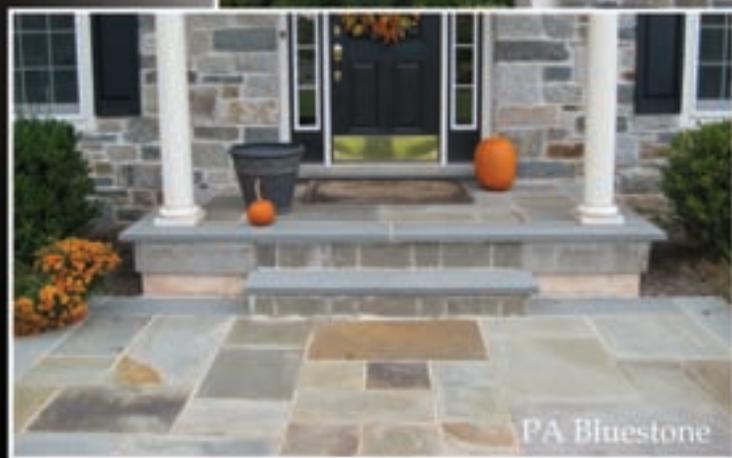
- 6 President's Message**  
Designer Profile
- 36 Davis Architects**  
Historical Feature
- 40 Natural Stone Leaves Legacy**  
Thanks to the endurance and beauty of natural stone, the Thomas Jefferson Memorial is an iconic American landmark.
- 44 Industry News**
- 48 Advertising Index**

Delaware Quarries, Inc.

[www.delawarequarries.com](http://www.delawarequarries.com)



*Tru-Stone® Thin Veneer*



Tru-Stone®  
Genuine Stone Thin Veneer.

800-448-STONE



## Appreciating the Art of Natural Stone

**U**NIQUE CHARACTER. VARIETY. SIMPLE ELEGANCE. These are terms that come to mind for me when describing the wonder and beauty of natural stone. In this issue, we share with you stone as art in many forms.

Two articles were of particular interest to me. During BSI's 2008 Tucker Design Awards event, I had the opportunity to visit the stunning Nasher Sculpture Center in Dallas, Texas. This structure and its gardens is a work of art we hope you'll enjoy learning more about in this issue.

This issue's historical feature on the Thomas Jefferson Memorial in Washington, D.C., also has significance for me. During BSI's fall study tour in Richmond, Va., I traveled to Charlottesville for the sole purpose of visiting Mr. Jefferson's home at Monticello. His innovation and creativity have always inspired me, and both of these venues pay tribute to those qualities. The use of natural stone in the memorial reflects Jefferson's own interest in designing for beauty as well as functionality. I am most proud of the use of Tennessee pink marble – a product of my home state – for the interior floor.

With the articles included here, we hope to spark your imagination and transfer to you some of the passion we feel about natural stone. If you are interested in learning more about the benefits of utilizing natural stone, we invite you to visit our Web site to learn more about our support of our members' efforts to continually increase the quality of service, quality of products and demand for natural stone. And, as always, should you have questions about our programs, products and services or need technical expertise regarding any aspect of composition, application or installation of natural stone please feel free to contact our office at 866-STONE13 (847-695-0170) and we will do our best to address your issues.

In closing, I wanted to express my appreciation to the Board of Directors and the members of the BSI. It has been my pleasure to serve as your president this year, and I wish the organization continued success in 2009 – BSI's 90th anniversary of service to the natural stone industry. ♦



**Bob Barden**  
2008 President, Building Stone Institute  
Barden Stone Inc.  
Memphis, Tenn.

### CORRECTION

In the 2009 Buyer's Guide, we inadvertently published an incorrect fax number for Ranier Devido Stone Co. The correct fax number is 724-658-0999.

### BUILDING STONE INSTITUTE

Margie Lechowicz, **Executive Vice President**  
551 TOLLGATE ROAD, SUITE C  
ELGIN, IL 60123

**Tel:** 847.695.0170

**Fax:** 847.695.0174

**Web:** [www.buildingstoneinstitute.org](http://www.buildingstoneinstitute.org)

**E-mail:** [margie@buildingstoneinstitute.org](mailto:margie@buildingstoneinstitute.org)

### BUILDING STONE INSTITUTE 2008 OFFICERS

**2008 President** Robert Barden  
**Vice President** Doug Bachli  
**Immediate Past President** Scott Buechel  
**Treasurer** Robert Hicken  
**Secretary** Thomas Schlough

### BOARD OF DIRECTORS

John E. Arnold Robert Barnes Jr.  
Bernard Buster George Bybee  
Glen Chesshir Mary Dillon  
Duffe Elkins John Grubb  
Sharad Muralidhar Rob Teel

### PROFESSIONAL BOARD MEMBERS

Robert H. Mortensen, FASLA Barry Starke, FASLA, AICP



THE UNITED VOICE OF THE  
NATURAL STONE INDUSTRY

BSI is a proud Member of the Natural Stone Council

GENUINE STONE 

Genuine Stone™ logo is a registered trademark of the NSC



BSI is an AIA Registered  
Provider



BSI is a proud Member of  
the U.S. Green Building  
Council

# BuildingStone

MAGAZINE

## PUBLISHER

Margie Lechowicz

## PUBLICATION MANAGEMENT

### LIONHEART PUBLISHING, INC.

506 ROSWELL STREET, SUITE 220  
MARIETTA, GA 30060

**Tel:** 770.431.0867

**Toll Free:** 888.303.5639

**Fax:** 770.432.6969

**Web:** [www.lionhrtpub.com](http://www.lionhrtpub.com)

**President** John Llewellyn  
E-mail: [llewellyn@lionhrtpub.com](mailto:llewellyn@lionhrtpub.com)

**Editor** Brooke Schmidt  
E-mail: [brooke@lionhrtpub.com](mailto:brooke@lionhrtpub.com)

**Feature Writers** Martha Barksdale  
Lorayne Bryan  
Stephanie Aurora Lewis  
K. K. Snyder

**Art Director** Alan Brubaker  
E-mail: [albrubaker@lionhrtpub.com](mailto:albrubaker@lionhrtpub.com)

**Online Projects Manager** Patton McGinley  
E-mail: [patton@lionhrtpub.com](mailto:patton@lionhrtpub.com)

**Advertising Sales** Art Shaeffer  
E-mail: [art@lionhrtpub.com](mailto:art@lionhrtpub.com)

**Advertising Sales** Aileen Kronke  
E-mail: [aileen@lionhrtpub.com](mailto:aileen@lionhrtpub.com)

**Advertising Sales** Marvin Diamond  
E-mail: [marvin@lionhrtpub.com](mailto:marvin@lionhrtpub.com)

**International Media Sales** Anthony Fitzgerald  
Tel: +44.1488.680623  
Fax: +44.870.199.2491  
E-mail: [mail@afitzgerald.co.uk](mailto:mail@afitzgerald.co.uk)

**Reprints** Kelly Millwood  
E-mail: [kelly@lionhrtpub.com](mailto:kelly@lionhrtpub.com)

**Subscriptions** Joni Tate  
E-mail: [jtate@lionhrtpub.com](mailto:jtate@lionhrtpub.com)

## ANNUAL SUBSCRIPTIONS

United States: \$34 • Canada & Mexico: \$58 • All Other Countries: \$69

*Building Stone Magazine* is published quarterly for the Building Stone Institute, the American stone industry's international trade association founded in 1919.

**COPYRIGHT © 2008** by the Building Stone Institute. All rights reserved.

Printed in U.S.A.

# 2010 TUCKER DESIGN AWARDS.

Sponsored by BSI, the Tucker Design Awards Program is the stone industry's most prestigious award program. Respected by the architecture and design community, the Tucker Design Awards honor those projects that demonstrate design excellence in the use of natural stone.

## Who May Enter

Architects, Landscape Architects, Interior Designers, and others whose work has achieved design excellence in the use of natural stone are encouraged to enter the 2010 Tucker Design Awards.

Firms honored have included Bohlin Cwynyński Jackson, Michael Van Valkenburgh and Associates, The Office of Lawrence Halprin, Malcolm Holzman, and Antoine Predock.

## Eligibility

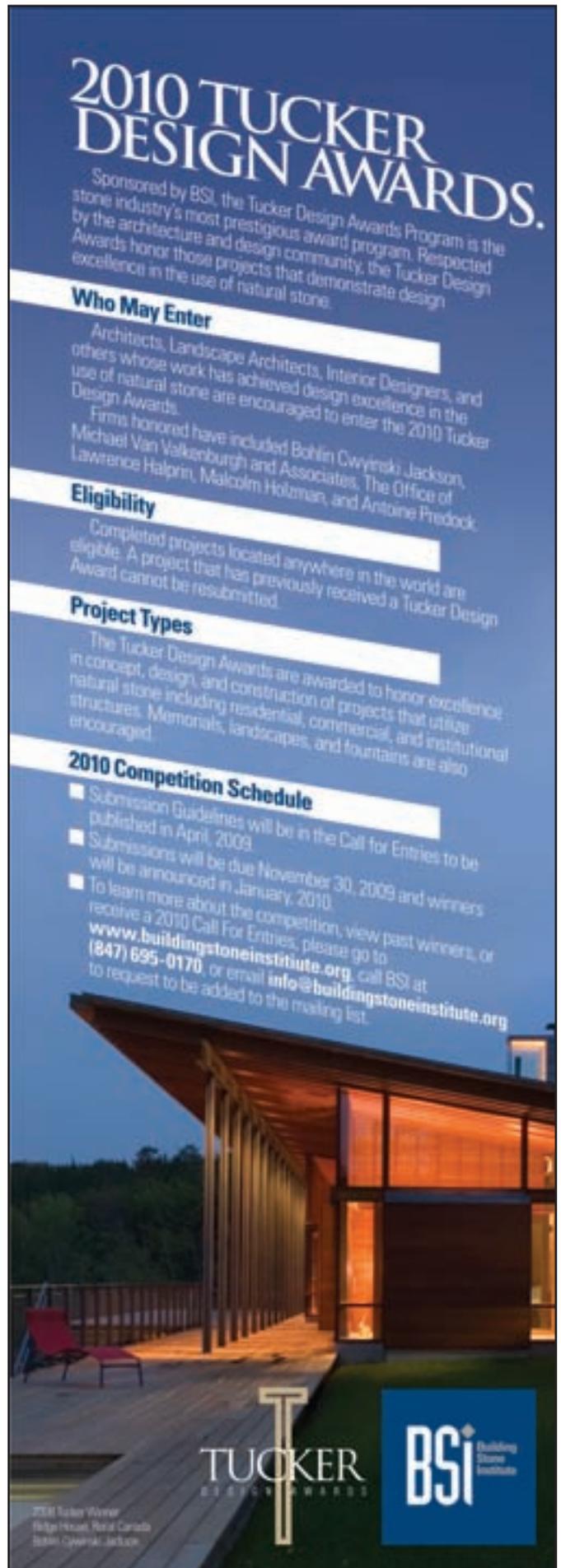
Completed projects located anywhere in the world are eligible. A project that has previously received a Tucker Design Award cannot be resubmitted.

## Project Types

The Tucker Design Awards are awarded to honor excellence in concept, design, and construction of projects that utilize natural stone including residential, commercial, and institutional structures. Memorials, landscapes, and fountains are also encouraged.

## 2010 Competition Schedule

- Submission Guidelines will be in the Call for Entries to be published in April, 2009.
- Submissions will be due November 30, 2009 and winners will be announced in January, 2010.
- To learn more about the competition, view past winners, or receive a 2010 Call For Entries, please go to [www.buildingstoneinstitute.org](http://www.buildingstoneinstitute.org), call BSI at (847) 695-0170, or email [info@buildingstoneinstitute.org](mailto:info@buildingstoneinstitute.org) to request to be added to the mailing list.





*Photo courtesy of Tim Hursley*

ART OF NATURAL STONE

# The Story Behind Nasher Sculpture Center

By Lorayne Bryan

**W**HEN TEXAS philanthropist and entrepreneur Raymond Nasher began to plan the Dallas museum that would house his family's extensive sculpture collection, he envisioned a light-filled, roofless space that would integrate the outdoors with the interior and serve as a peaceful retreat for reflection on art and nature. He hired world-renowned architect and recipient of the 2008 AIA Gold Medal and the prestigious 1998 Pritzker Prize, Renzo Piano, Hon. FAIA, to execute his vision.

Piano's conception of the museum building was a parallel series of archeological walls directing sight and movement through the lightly glazed building from Flora Street, the central spine of Dallas' art district, out to the garden. The garden's stone walls extend this concept and are opened up by a series of transparent gates and windows allowing glimpses of the garden and the collection from Olive and Harwood streets. Piano worked with landscape architect Peter Walker and Partners and associate architect and contractor Beck Group of Dallas to make this concept a reality.

The resulting creation, the Nasher Sculpture Center, opened to acclaim in 2003. A synthesis of nature and building, the Center encompasses a 55,000-square-foot indoor museum and 1.5-acre outdoor sculpture center, which is often referred to as an oasis amid the downtown mirrored skyscrapers. The roofless effect was achieved in the museum by engineering an aluminum mesh of oblique holes to let in only indirect sunlight. The sides of each individual hole are cut out by a computer to let as much light as possible through, while protecting from direct sun, taking into

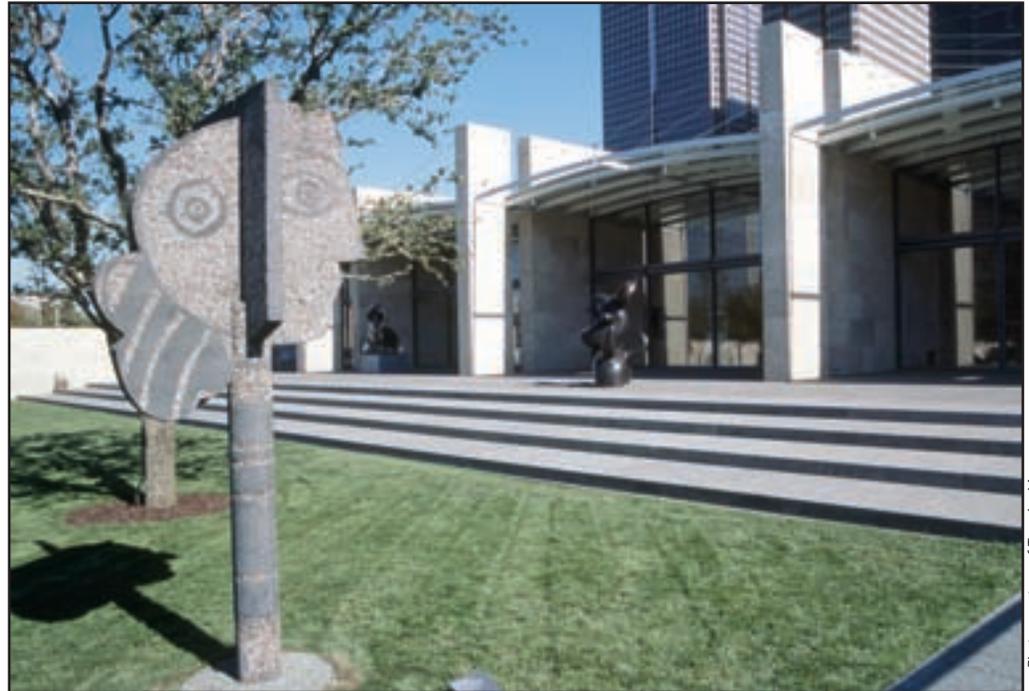


Photo courtesy of Tom Jenkins



Photo courtesy of Tim Hursley

account the position of each hole in the roof relative to the sun.

The understated gallery building features long walls that define five equal-sized parallel pavilions. The walls are faced in two-inch wide, 190-pound slabs of creamy, honed Italian travertine (Navona light), creating a quiet classic backdrop for the sculpture.

The glazed walls at one end invite visitors in from the street, with the sculpture fully visible; those at the other end transition guests into the garden where more sculpture awaits.

The garden planting designed by Walker also forms a series of continuous linear spaces with live oak trees, a growth of cedar elms, hedges and the stone plinths

OPPOSITE LEFT: Recipient of the 2008 AIA Gold Medal and the prestigious 1998 Pritzker Prize, Renzo Piano, Hon. FAIA, is behind the conception of Dallas' Nasher Sculpture Center.

ABOVE TOP: A broad stone terrace and steps connect the indoor space of the museum with the garden in a continuous flowing movement.

ABOVE: A synthesis of nature and building, the Center encompasses a 1.5-acre outdoor sculpture center.



Photo courtesy of Tim Hursley

ABOVE: The Nasher's gallery walls are faced in 190-pound slabs of creamy, honed Italian travertine (Navona light), creating a quiet classic backdrop for the sculpture.

composed along the axis of the garden. A broad stone terrace and steps connect the space of the museum with the garden in a continuous flowing movement. Walker's work on the project is chronicled with sketches, text and photos in the book, "Peter Walker and Partners: Nasher Sculpture Center: Source Books in Landscape Architecture."

A seamless flow of space between the galleries and sculpture garden and the prominent use of natural stone inside and out provide visual continuity throughout the site.

"The stone we used for the entry, the terrace and throughout the garden was Verde Fontaine – a dark, lustrous, green [granite] that contrasted with the golden buff of the building walls. The in-filled travertine of the walls has a deep, soft, warm appearance, while the pavements appear hard and are flame finished," Walker explains. The building's exterior is clad in 2,522 2' x 4' pieces of Etruscan

travertine, which is rough and pitted with a water-jet finish. This stone is also featured prominently on the garden walls (2,999 pieces).

According to Rick del Monte, the associate architect on the project, a story or idea exists behind all of Piano's buildings. "In the Nasher Sculpture Center he saw the building as an archeological dig where six ancient stone walls were found, and then he built a lightweight glass structure between the walls to create the museum," del Monte says. "It was important for him that these walls look ancient. He chose Coliseum Travertine, from the same quarry that produced the stone for the Roman Coliseum. All of the exterior stone was water blasted to give the appearance that it had eroded over time. On the interior Renzo used a slightly different travertine whose voids have been filed to give it a more consistent appearance; this appearance was designed to allow art to be gracefully displayed on the walls. Renzo

felt that this building and the stone that it is made of should last for one thousand years, and he always told us that Beck should provide the owner with a one-thousand-year warranty."

Rob Barnes, president and COO of Dee Brown, was in charge of the stone installation on the job.

"The Nasher Sculpture Center was a great job, and it was exciting to work with Piano and his team. It was certainly one where you know at the end of the day that this project is going to get international acclaim." Barnes says that it wasn't a huge job for his company, but it was one that was very detailed and required the best of the best stone setters.

"Renzo Piano is the son of a builder, and he has a great respect for the people who build his buildings and the quality of the final product," del Monte adds.

"It was a great collaboration," assesses Walker. ♦

# YOUR VALUE EQUATION

QUALITY + VALUE + SERVICE

*When You're Building Your Best...  
Always Build with the Best!*

ARCHITECTURAL DETAILS • COLUMNS  
SLABS • CUSTOM CUT STONE  
COPING AND PAVERS  
ACCENT TRIMS

*Quality is more than just a word to us.  
It's our passion, it's our promise,  
it's your lifestyle!*

Authentic  
**Durango  
Stone**  
*There's only one!*

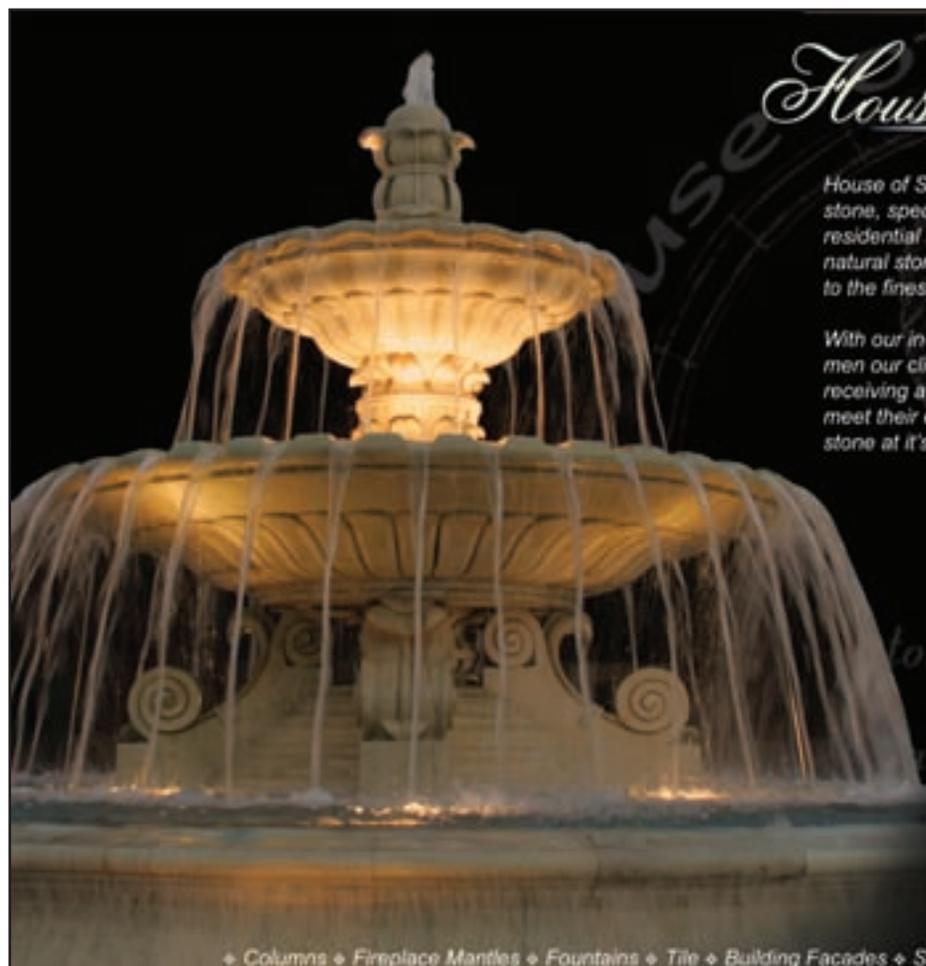
*Available Only through Official "Authorized Distributors" of World Wide Stone Corporation*

15275 N. 83rd Place • Scottsdale, AZ. 85260  
602.438.1001 • [www.durangostone.com](http://www.durangostone.com)



*Call today for our incomparable  
monthly value specials!*

*Quality... Value... Service...  
with American Ingenuity  
you can have it all!*



## House of Stone, Inc.

House of Stone is a provider of high quality carved stone, specializing in all aspects of commercial and residential stone work. We have over 40 varieties of natural stone ranging from limestone and sandstone to the finest premium travertine and marble.

With our in-house design services and skilled craftsmen our clients can be confident that they are receiving a top quality product custom made to meet their exact specifications. Truly, custom carved stone at it's finest.

Toll Free: (800) 304-6135  
Fax: (661) 326-0182

3528 Fruitvale Ave.  
Bakersfield, Ca.  
93308

Visit us online at  
[www.houseofstoneinc.us](http://www.houseofstoneinc.us)

Custom Carved Stone  
at its Finest.

◆ Columns ◆ Fireplace Mantles ◆ Fountains ◆ Tile ◆ Building Facades ◆ Sculpture ◆ And more ◆

Photo courtesy of Kentaro Kojima



Photo courtesy of Kathryn Hackney



Photo courtesy of A. Morasco



CLOCKWISE FROM TOP LEFT:  
Photo 1: Drystone bridge in progress.

Photo 2: Carving by John Fisher.

Photo 3: John Fisher carves a sculpture.

Photo 4: StoneFest participants work on drystone wall.

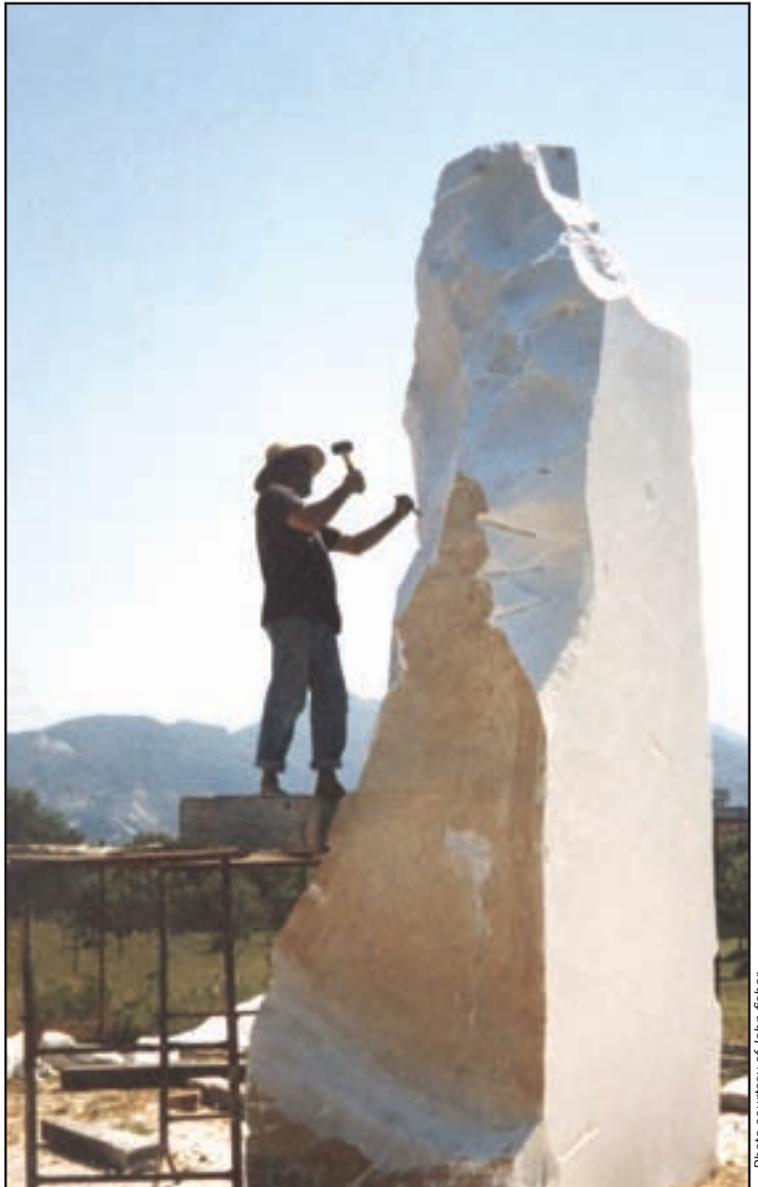


Photo courtesy of John Fisher

## ART OF NATURAL STONE

# Celebrate Stone

## STONEFEST ATTRACTS INTERNATIONAL ENTHUSIASTS

By Lorayne Bryan



TOP LEFT: At Washington's annual StoneFest, professionals share their expertise through hands-on projects.

BOTTOM LEFT: StoneFest attendees have opportunities to further their connections with natural stone.



Photo courtesy of A. Morosco

Photo courtesy of Kathryn Hackney

**A** DYNAMIC COMMUNITY WITHIN the world of stone gathers annually at Marenakos Rock Center near Seattle, Wash., for StoneFest, an educational and inspirational event created for people who love stone. An international cast of distinguished professionals share their expertise through hands-on projects, lectures, demonstrations and audio/visual presentations, offering a unique learning and networking experience for masons, carvers, architects, quarriers and landscape designers. Participants can further their connection with stone while working alongside some of the most extraordinary stewards of stone alive today, bridging the trades with both new and ancient perspectives.

At the 2008 four-day event in September, participants had the opportunity to work side by side with guest instructors Patrick McAfee (Dublin, Ireland) and

Scotsman Bobby Watt (Ottawa, Canada) building with natural stone, using both mortar and dry stack methods. Stone carvers had the opportunity to witness monumental works being created by two guest sculpture instructors, John Fisher (Pietrasanta, Italy/California) and Sabah Al-Dhaher (Iraq/now resides in Seattle). Acclaimed monument and memorial carvers Karin Sprague (Rhode Island) and Peter Atilla Andrusko (Portland, Ore.) shared words carved in stone and traditional techniques of this extraordinary niche within the stone trade.

Other invited guests included British letter cutter Nathen Blackwell, who has been cutting stone for more than 60 years, and at age 87, is still going strong—he just completed the hand-cut lettering in the Ronald Reagan Library in California. A primary sponsor and supporter of StoneFest, Trow and Holden Company was represented by Randy Potter who covered the

finer points of use, application and maintenance of their hand-crafted, stone-carving and masonry tools. Richard Rhodes of Rhodes Architectural Stone (Seattle) presented three AIA Accredited Lectures on Stone Specification, The Sacred Rules of Freemasonry, and The Grain of Stone: Implications for Design and Fabrication.

“At StoneFest, we set out to educate, support and share knowledge of the ancient and venerable crafts within the stone trade, allowing for the application of this knowledge to both traditional and more contemporary techniques of building today,” explains StoneFest Director Alexandra Morosco. “The lion’s share of the StoneFest group focuses their time learning correct methods of true masonry. In the



Photo courtesy of Kentaro Kojima

ABOVE: Most attendees to StoneFest focus their time on learning correct methods of true masonry.

# CELEBRATE STONE

## The Stone Symposium Rocks the Granite Festival

By Lorayne Bryan

Part educational seminar and part revival meeting, Stonework Symposium 2008, the annual gathering of the Stone Foundation, was hosted by Vermont’s Barre Granite Museum in conjunction with Barre’s annual Granite Festival.

“It’s part art school, part demonstrations, part trade show and part festival,” says Tomas Lipps, founder of the Stone Founda-



tion, a community of stonemasons and others involved with stone, stonework and stone art. “The presentations and demonstrations that constitute the Symposium program promote an appreciation of the art and the craft of stonework as well as impart knowledge. The Symposiums give stonemasons a rare opportunity to connect with their fellow artisans and share experiences. Young stonemasons get to associate with their elders, and believe me, this is one of the most important and positive aspects of the Symposiums—it reinforces the lineage of the craft.”

The Symposium consisted of three days in early September of presentations featuring different aspects of stonework and stone art as varied as: the geology and morphology of building stones; stone in trail work; large-scale stone installations, both structural and sculptural; stone water features; stonework around the world and through history; stonework and stone art in Japan; stone bridges in Norway and in Vermont; and the construction of a modern-day stone castle.

In the week preceding the Symposium, the Stone Foundation offered workshops in Dry Stone Walling, Granite Letter Carving and Traditional Lime Mortar.

On the day of the Barre Granite Festival, Saturday, Sept. 13, the educational workshops took a back seat and good fun was the order of the day. “We put on the first-ever Lithic Olympics,” says Tomas Lipps, himself a stonemason. “Participants competed in events such as Dry Stone Walling, Stone Bowling, Stone Balancing and a Wheel Barrow Steeplechase. At a Dry Stone Walling Workshop just prior to the Symposium we made a Bocce Ball course of stone for the town of Barre. So bocce ball, played with stone balls, was also part of the Lithic Olympics. All of this took place on the grounds of the Barre Granite Museum and the participants as well as spectators, more than a thousand of them, had a great time. Everyone comes away energized and inspired, eager to continue their work with stone, whether that is building with it, carving it or selling it.”

The first Stonework Symposium took place in Santa Fe, N.M., in 2000. Since then the event has moved around the country: Virginia, back to Santa Fe, South Carolina, Ohio and Oregon. Last year the Symposium was held on the island of Mallorca, in Spain, and last September, in Barre, Vt.

Many Building Stone Institute members also belong to the Stone Foundation, an organization of more than 800 members that is dedicated to the traditions, the craft and the art of stonework. Its administrators are principally stonemasons. Its Web site, [www.stonefoundation.org](http://www.stonefoundation.org), functions as a clearinghouse for information, with announcements of stone-related events and links to other relevant Web sites. But of most interest to the tens of thousands of visitors to the site are the pages containing material from the highly regarded in-house publication, *STONEXUS Magazine*. The magazine features articles and photographs that explore diverse aspects of the world of stone, stonework and stone art.

“Reinforcing the lineage of the craft is really the central mission of the Stone Foundation. The Symposiums and Workshops, *STONEXUS Magazine*, the newsletter and the Web site are the ways we do that,” Lipps affirms.

IS YOUR BUSINESS POSITIONED TO SURVIVE?



No matter the size of your business, by investing in the Natural Stone Council, you unify and strengthen our industry by bolstering preference for Genuine Stone® over synthetic materials. To learn more about how you can do your part, visit [naturalstonecouncil.org](http://naturalstonecouncil.org).

Photo courtesy of Kentaro Kojima



Photo courtesy of Kentaro Kojima

CLOCKWISE FROM TOP LEFT:  
Photos 1 and 2: Participants at StoneFest  
work on a walling tract.

Photo 3: An architectural carving by  
Keith Phillips.



Photo courtesy of Kentaro Kojima

**ADIRONDACK NATURAL STONE**  
 Quarriers of Natural Building & Landscaping Stone  
 Whitehall, NY  
 (518) 499-0602 P/f • adirnat@aol.com  
 www.adirondacknaturalstone.com

**Featuring:**  
 Adirondack, Blue Mountain, Dolph Pond,  
 Hawthorne and Heritage Granite

**Available in:**  
 Thin Veneer, Mosaic Veneer, Roughly Squared &  
 Rectangular, Ashlar, Flagging, Uniwall,  
 and Wall Stone

United States today, where are young masons learning how to build? Few masons today have proper role models or mentors and most have no applied apprenticeship. After a few years of sticking 'lick and stick' on CMU block they call themselves 'master masons.' The skill-level and craftsmanship bar falls every year with the development of production machinery, modern building practices and the onslaught of temporary faux. We want to change this."

What's next? McAfee and Morosco are already sharing correspondence about what may be included for future events.

McAfee is proposing a workshop on building traditional castle walls, windows and portals. "This style of workshop takes a practical look at building such structures and will be of interest to experienced stonemasons who want to further their knowledge," Morosco says. "But it will also appeal to anyone who simply has a love of such things and wants to have a greater understanding of how the ancient structures were built and survived the tests of time." ♦

**For more information,** visit [www.StoneFest.org](http://www.StoneFest.org), or e-mail Director Alexandra Morosco at [info@stonefest.org](mailto:info@stonefest.org).



ROCKFORD™  
ESTATE BLEND



THE LOOK OF  
SUCCESS COMES  
NATURALLY.

■ To achieve the unmistakable look of success for today's commercial and residential buildings, choose the color, durability, and endurance of natural Indiana Limestone. Presenting Rockford Estate Blend™—a richly textured, lightly tumbled, natural full-color range building veneer from Indiana Limestone Company. ■ For permanence and value, specify the timeless beauty of natural Indiana Limestone.

Learn more about the design possibilities of Indiana Limestone Classics™ Building Veneers. Call (800) 457-4026 or visit [IndianaLimestoneCompany.com](http://IndianaLimestoneCompany.com) and request your copy of our new Indiana Limestone Product Guide.

INNOVATIONS IN STONE



INDIANA LIMESTONE  
COMPANY

# ART OF NATURAL STONE

# Soak in a Masterpiece

By Lorayne Bryan  
Photos courtesy of Advent Design International

**A** **STONE BATHTUB** from Advent Designs isn't just a tub made from marble, travertine or basalt. It is the culmination of owner David Luster's lifetime quest for the finest stone and artisans in the world and of a stone-sculpting expertise handed down through generations. For a quarter of a century, Luster has explored the Earth's

continents to commission the finest artisans and to uncover exquisite blocks of stone. It is this critical attention to detail which he says sets his collection of artistic stone baths apart.

"Along the way," he says, "I realized the need for pieces that were outside the ordinary and began a search for exquisite stone and the artisans who could carve it into magnificent pieces

of functional art." The search took him from the interior of Brazil to the Peruvian Andes, the Italian Alps to Turkey and India, and throughout the Far East.

The laborious process of custom carving a stone bath requires first mining the stone from a quarry, with a typical boulder weighing 16 to 18 tons. The preliminary work continues as this boulder is cut into a rectangular or square block that weighs 5 to 6 tons. The carved and sculpted finished pieces require 350 to 400 man hours to create. "I frequently work with a family on the Mediterranean coast in Italy. We begin with an idea and collectively develop the idea into a final design which they execute," Luster explains. "Each piece is a unique work of art created with specific intent."

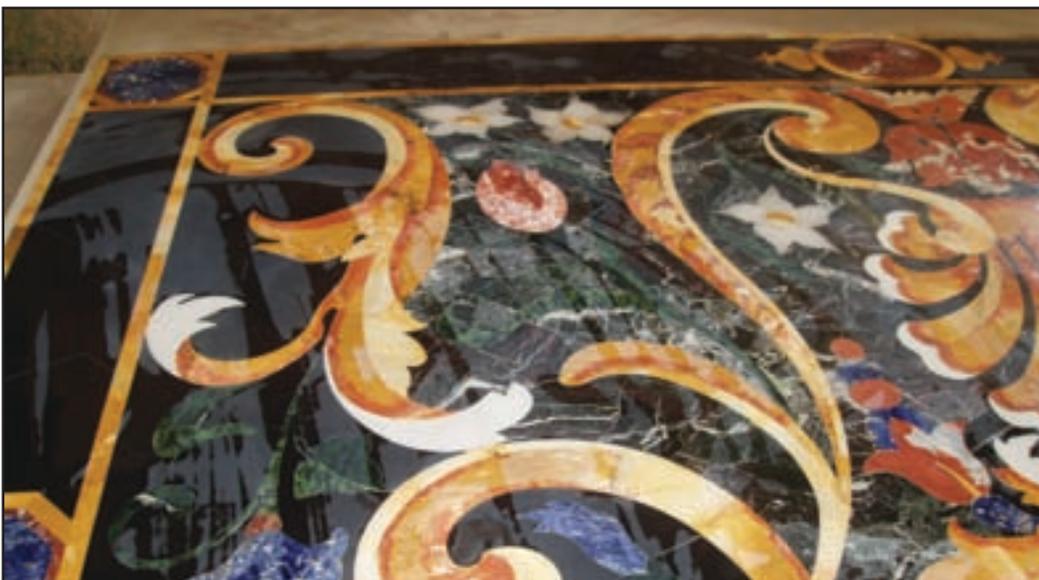
The company does not work with distributors and therefore has no showrooms, but instead prefers to sell on a direct basis to the high-end professional community and the consumer. At any given time, there are a number of hand-crafted solid stone soak-

BELOW: This bathtub was hand carved from a single block of yellow travertine.





ABOVE: Hand carved from a solid block of white limestone, this tub makes a bold and modern addition to any bathroom.



LEFT: Designed, cut and fit together by Italian stone artisans, this floor from Advent Design International is approximately 4 feet by 7 feet and includes more than 2,000 individual pieces of marble.



ABOVE: In keeping with the owner's goal of tubs that are "outside the ordinary," this Advent Design tub was hand carved from a solid block of beige travertine.

## RESOURCES

Advent Design International  
201-444-0426  
www.adventstone.com

**TROW & HOLDEN CARBIDE HAND TOOLS**

**Featuring our new Chisel Whizard!**  
Available to fit 1/2" through 1-1/8" shank sizes.  
Manufactured exclusively by Trow and Holden.

- The most rugged, versatile and cost effective tools of the trade
- The widest variety of styles and sizes, made from the finest materials
- Tools that last and last, even when used on the hardest stone

**MADE TO LAST SINCE 1890 IN BARRE, VERMONT USA**

**TROW & HOLDEN COMPANY**  
FINE STONEMWORKING TOOLS

45 South Main Street • Barre Vermont 05641  
Toll-Free 1-800-451-4349 • 802-476-7221  
www.trowandholden.com

*Please write or call for a free catalog.*

ing baths and basins, made to measure, in Advent's warehouse waiting to be shipped to clients. Luster welcomes visits from the world at large to view his magnificent pieces in person.

Advent's creations are not limited to bathtubs and basins. "We recently created an exquisite inlaid stone floor. This particular work was approximately 4-by-7 foot and was composed of over 2,000 individual pieces of marble in varying shades. It was designed, cut and fit together by our stone artisans in Italy who flew over to assemble it here."

Luster's penchant for detail likewise extends to the impeccable service he and Advent provide,

which is vital to ensure flawless delivery and installation. He observes, "The customers—be it the builder, architect, interior designer or the homeowner—genuinely appreciate all that we do," and, he adds, "in the end, that's what makes my work so gratifying."

Advent Design is a member of SBIC, the Sustainable Buildings Industry Council, in an effort to encourage "green construction" where materials used in the design and construction of residences and buildings of all types utilize natural materials that are sustainable and environmentally sound. Advent's solid stone soaking baths are priced from \$22,500. ♦

## CASE STUDY

# Green Building and Natural Stone

University of Tennessee, Center for Clean Products

**N**ATURAL STONE HAS MANY innate attributes that make it a green building product: it is natural, low-maintenance and exceptionally durable. However, with the growth of the green building movement, it is worth considering how these and other properties of stone can contribute to sustainable design projects and green building certifications.

### LEED

The U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) rating system has helped to shape the green building movement in North America. LEED addresses all building types, including new construction, existing buildings, commercial interiors, core and shell, operations and maintenance, homes, neighborhoods and specific applications such as retail, multiple buildings/campuses, schools, healthcare laboratories and lodging.<sup>1</sup> Through mid-2008, more than 1,540 construction projects have been LEED-certified.<sup>2</sup>

### LEED-NC

LEED-NC, for New Construction projects, is the most widely used green building rating system in the United States.<sup>3</sup> LEED-NC emphasizes six categories for environmental improvement:

1. Sustainable Sites (SS)
2. Water Efficiency (WE)
3. Energy and Atmosphere (EA)
4. Materials and Resources (MR)
5. Indoor Environmental Quality (IEQ)
6. Innovation and Design. (ID)

Natural stone products, such as those made from granite, marble and limestone, among others, can contribute to points in several of these categories.

**SS Credit 7.1:** Heat Island Effect, Non-Roof: Using light-colored natural stone with a solar-reflective index of 29 or greater can reduce heat-island effects. For instance, the use of light colored stone as caps on such features as landscaping walls, stair treads and pavement may generate a credit.<sup>4</sup>

**EA Credit 1:** Optimize Energy Performance: Natural stone has good thermal mass (the ability of a material to store heat and slowly release it), which positively impacts indoor ambient air temperature, and thus, energy efficiency. The number of points in this credit category (1-10) is dependent on the thermal mass of the specific type of stone used.<sup>5</sup>

**MR:** Due to the durability of stone, there are several credits in the MR category that can potentially be garnered.

- MR Credits 1.1 & 1.2 Building Reuse, Maintain 75-95% of Existing Walls, Floors and Roof: These credits apply if the life-cycle of existing building stock can be maintained in a project.
- MR Credits 2.1 & 2.2 Construction Waste Management, Divert 50-75% from Disposal: These credits apply if "waste" stone used in construction is diverted to a beneficial use



Photo courtesy of Photography by Kessler

rather than being disposed.

- MR Credits 3.1 & 3.2 Materials Reuse, 5-10%: These credits apply if salvaged stone products can be reused for another purpose in a building design.
- MR Credits 5.1 & 5.2 Regional Materials, 10-20% Extracted, Processed and Manufactured: These credits apply if the project uses natural stone that has been extracted, harvested or recovered, as well as manufactured, within

500 miles of the project site for a minimum of 10% (based on cost) of the total materials value (if only a fraction of a product or material is extracted/harvested/recovered and manufactured locally, then only that percentage, by weight, contributes to the regional value.).

**ID Credit 1:** Use of natural stone may contribute to exceptional performance in areas such as life-cycle cost and durability, mold resistance and improved air quality.<sup>6</sup>

## LEED 2009

In anticipation of the development and release of LEED 2009, a revised point system based on the application of life-cycle assessment to support LEED credits, the Natural Stone Council (NSC) has just completed an extensive benchmarking exercise of its member operations. The resulting life-cycle inventory data sets have been made publicly available on the NSC Web site to make transparent the extent and affect of their operations and to support an informed decision regarding stone products. The datasets can be accessed at [http://www.genuinestone.com/env\\_researchandresults](http://www.genuinestone.com/env_researchandresults).

ABOVE: ImaginOn, a children's library and theater, is the first USGBC LEED-certified public building in Charlotte, achieving a silver rating.



ABOVE: Architects for ImaginOn placed significant emphasis on the use of natural, local and regionally produced materials used in conjunction with recycled-content materials.

### Beyond LEED

The green building movement has inspired numerous other green building certifications and programs in the United States and abroad. Some of these programs, such as The Living Building Challenge, seek to inspire builders, owners, architects, engineers and design professionals to build environmentally sound and self-sus-



## CHESSHIR

Stone & Rock Supply, Inc.



Providing a large selection of all natural stone, gravel, and soils for your building and landscape needs.

2818 Lombardy Lane  
Dallas, TX 75220  
Phone: 214.350.6781  
Fax: 214.350.6818



[www.chesshirstone.com](http://www.chesshirstone.com)

## STONE INDUSTRY WORKS TO PROMOTE TRUTH ABOUT GRANITE SAFETY

Based on years of experience and a number of studies confirming a lack of evidence that granite countertops in a typical setting could cause a human health concern relative to radon exposure, the natural stone industry and others have largely assumed that granite countertops were safe. Over the past year or so, claims have been made by some suggesting that conclusive scientific data to the contrary exists. The media in some markets has picked up on this “story.” News items have been circulated that generate negative attention about our industry despite the fact that evidence and support from the Environmental Protection Agency (EPA) suggests that granite countertops are not a significant health issue.

As a result of negative media coverage and in an effort to spread our message of truth about natural stone, the natural stone industry is developing more sophisticated independent test protocols to measure radon and radiation emissions from granite. Our objective is twofold: (1) testing and/or re-testing stone types used in the U.S. countertop market today in order to reassure the public and the media that concerns about radon emissions from granite countertops do not constitute a significant human health risk; (2) developing standards that ensure all testing is conducted appropriately and consistently, which will eliminate the questionable science and results that many media articles have reported as fact.

This work will take some time, but significant progress is being made.

Granite testing is still underway, but scientific analysis completed to date has yet to identify a single stone that poses any health risk. That means none of the third-party testing completed to date has found a granite sample that would contribute to typical household radon levels beyond EPA recommended levels. To read more about the largest study so far to find no granite that poses a health threat, see page 44 in our Industry News section.

*John Mattke is co-chair of the Natural Stone Council and president of Cold Spring Granite Company.*

taining buildings—buildings that actually “give back” to the ecosystem in which they are built. Developed in 2005 by the Cascadia Region Green Building Council, the Living Building Challenge promotes “no credits, only prerequisites”; buildings must meet requirements such as generating all of its own energy with renewable resources, capturing and

treating all of its water on site, and using resources efficiently and for maximum beauty.<sup>7</sup> The program is comprised of six performance areas, or “petals,” including Site, Energy, Water, Materials, Indoor Quality, and Beauty and Inspiration. Each petal includes prerequisites that must be met in order to achieve that specific performance area designation.



Another program, directly based on LEED 2.0, is the Sustainable Project Rating Tool, or SPiRiT, developed by the U.S. Army Corps of Engineers. SPiRiT is tailored to Army-specific needs and includes checklists, strategies and scoring mechanisms to allow Army installations to rate themselves in creating and maintaining sustainable facilities, as well as to improve the process of planning, programming, designing, building and maintaining those facilities.<sup>8</sup> SPiRiT incorporates all of the LEED 2.0 categories for environmental improvement except the Innovation and Design category. However, it includes three additional categories: Facility Delivery Process, Current Mission and Future Missions.<sup>9</sup>

The Living Building Challenge and SPiRiT are just two of many examples of green building standards and programs that have taken off since the success of the USGBC's LEED program. Their existence demonstrates the continued growth in the green building movement and the ways in which such tools can be used to develop and inspire eco-efficient, healthier buildings.

**Examples:**

**ImaginOn, The Joe and Joan Martin Center**

Charlotte, N.C.  
 Silver LEED Certification  
 Designed by Holzman Moss Architecture  
 Completion Date: 2005

ImaginOn is the new facility of the Public Library of Charlotte-Mecklenburg County and the Children's Theatre of Charlotte. This first-of-its-kind facility "serves as a catalyst for all ImaginOn's visitors to experience the written, spoken and electronic word in an integrated environment."<sup>10</sup>

ImaginOn is also the first USGBC LEED-certified public building in Charlotte, achieving a silver rating. The architects selected materials to challenge, inspire and excite young minds, with significant emphasis placed on the use of natural, local and regionally produced materials used in con-

junction with recycled-content materials. Whimsical design features of the building, such as representations of a parallelogram, a helix and a cube also provide unique vehicles to highlight environmentally sensitive materials. Stone cladding is featured in the helix, representing the architect's

The advertisement for Stone Products, Inc. is a collage of images and text. At the top left, the word "IMAGINON" is written vertically in large, bold, red letters. To its right, the company logo features the tagline "Since 1958... the stone people" above "STONE PRODUCTS, INC." and "Stone Solutions" in a script font. The central image is a large photograph of the ImaginOn building, a multi-story structure with a prominent stone facade and tall, narrow windows. Below this, on the left, are two smaller photographs: one of a large, multi-story stone house and another of a stone building with a tower, identified as the "Butler Cultural & Loyola Stakefield". To the right of these images is the text "Nearly 50 Years of Service Excellence." and "Cutstone Dri Stack" written vertically. At the bottom left, there is a small disclaimer: "View Stone Products, Inc. Does not guarantee results from the use of our products that is varying methods, techniques, and/or skills of the installers. As all natural products, colors and characteristics may vary and/or become enhanced, and/or altered by the environment. Colors represented in this advertisement may vary from that of the actual stone." At the bottom right, there is a small photograph of a stone-clad building.

www.stoneproducts.com

798 Marriottsville Road  
 Marriottsville, MD 21104  
 P: 410.442.4000  
 F: 410.442.4001

15927 Falls Road  
 Butler, MD 21023  
 P: 410.771.4200  
 F: 410.771.4201

Charlotte, NC - ImaginOn Public Library

Butler Cultural & Loyola Stakefield

Charlotte, NC - Public Library



Photo courtesy of Photography by Kessler

ABOVE: ImaginOn's cladding is a split-face Ashlar from the Dakota Granite Company.

innovative use of a remnant material. The cladding, a split-face Ashlar from the Dakota Granite Company, is a reused by-product of monument slabs when the polished slabs are cut to size; this innovative use of stone contributed to a LEED MR credit.<sup>11</sup>

The creative use of materials and sustainable design of ImaginOn are further used as teaching tools. The ImaginOn Web site offers the opportunity to "Go on a Green Hunt" to identify green building materials used in the building, including compressed wheat fiberboard, wool and stone.<sup>12</sup>

### Jefferson Hall Library and Learning Center

United State Military Academy  
at West Point  
West Point, N.Y.  
SPiRiT Bronze Rating  
Designed by Holzman Moss  
Architecture  
Completion Date: 2008

The Jefferson Hall-USMA Library and Learning Center opened in September 2008, making it the first new academic building on the historic West Point campus in more than 35 years. The facility, designed by STV and Holzman Moss Architects, "cele-

brates the charge to provide a building of quality and character that will be perceived as a progression of past success that also leads to future opportunities."<sup>13</sup>

This vision required careful consideration of the West Point National Historic Landmark District in the design and materials decisions. The facility sits on the edge of West Point's 70-acre parade ground known as the "Plain." Building on the Plain required careful consultation with the New York State Historical Preservation Office, requiring a "statement of adverse effect."

According to Malcolm Holzman, FAIA, of Holzman Moss Architecture, "Designing a facility that reflects the spirit and values of the 21st century Army and still honors the academy's architectural values was imperative."<sup>14</sup>

Natural stone is a key aspect of the design. East and West granite-clad towers provide harmonization with adjoining Gothic style structures, using regional stone and contributing points to the bronze SPiRiT certification. In order to match the stone used in the adjoining Eisenhower Barracks, a section of the Fletcher Granite Quarry was reopened, contributing more than 130 tons of hand-tooled stone blocks. ♦

## REFERENCES

- 1 U.S. Green Building Council. 5 September 2007. <<http://www.usgbc.org/>>.
- 2 Ibid, 30 July 2008.
- 3 Subasic, C.A. "Sustainable Design and Natural Stone," *Masonry Construction Magazine*, January 1, 2008.
- 4 Ibid.
- 5 "Thin Brick and Thin-Cut Stone Take on Full Dimension Masonry Products," *Architectural Record*, December 2007.
- 6 Ibid.
- 7 Cascadia Region Green Building Council Living Building Challenge, 26 August 2008. <<http://www.cascadia gbc.org/lbc>>
- 8 U.S. Army Corps of Engineers Engineer Research and Development Center. *Sustainable Project Rating Tool (SPiRiT)*, January 2008.
- 9 U.S. Army Corps of Engineers U.S. Army Assistant Chief of Staff for Installation Management. *Sustainable Project Rating Tool (SPiRiT)*, Version 1.4, April 2001.
- 10 Holzman Moss Architecture. *Case Study: ImaginOn: The Joe and Joan Martin Center*.
- 11 Holzman Moss Architecture. *Architectural Fact Form: ImaginOn: The Joe and Joan Martin Center*.
- 12 [http://www.imaginon.org/Just\\_For\\_Fun/greenhunt.asp](http://www.imaginon.org/Just_For_Fun/greenhunt.asp)
- 13 Holzman Moss Architecture. *Case Study: Jefferson Hall-USMA Library and Learning Center*.
- 14 "West Point Builds a Commanding New Library and Learning Center for the Information Age," press release, June 2008.

## ACKNOWLEDGEMENTS

The authors wish to express thanks to the staff of Holzman Moss Architecture for their kind assistance and provision of materials on both the ImaginOn and Jefferson Hall projects.



The Home of Dimensional Stone™



nc  
granite  
corporation

Granite + Marble + Limestone + Sandstone

Complete natural stone quarrying & fabrication

Crafted in the USA using earth-friendly techniques

Perfect for LEED-Certification!

THE NORTH CAROLINA GRANITE CORPORATION ☎ +1.800.227.6242 ☎ +1.336.786.5141 🌐 [www.ncgranite.com](http://www.ncgranite.com)



*Exquisite!*

This warm and inviting space was designed around a Wausau Red bartop. The uniqueness of this stone, its superb consistency – in grain and in color – is ideal for countertops, back-splashes, island tops and furniture, such as dining tables, consoles and sideboards.

The results speak for themselves.

Now, you can buy finished Wausau Wisconsin Red granite slabs, direct from the quarry, in quantities as few as one slab. Prices are competitive, and availability is guaranteed.

Let Anderson Bros. & Johnson be your North American source for the very best red granite. Call us today for more information or samples: 1-800-826-1581 or visit our web site at [www.abjgranite.com](http://www.abjgranite.com).

**ANDERSON BROS. & JOHNSON**

A DIVISION OF MICHELS CORPORATION

Brownsville, Wisconsin

[www.abjgranite.com](http://www.abjgranite.com)

THIN STONE

# The Natural and Simple Choice for Many Architects



Photo courtesy of Jon Curry

By Martha W. Barksdale

**W**HEN IT COMES to adding warmth and beauty to architecture, nothing beats the look of natural stone. That added attractiveness can come with a hefty price tag, both in terms of money and labor. The additional weight of stone can also prohibit the use of full dimensional stone in some applications, but thin veneers, unlike conventional full veneer stone products, do not require ledgers, footings or ties. For those reasons and more, architects and builders from coast to coast originally fell in love with thin stone veneer. Today, thin stone veneer is recognized in its own right and is the stone of choice for many residential, commercial and institutional projects.

### A Guesthouse in Wine Country

Giving a new structure a vintage look – as if it had been standing for many years – was Jon Curry's vision when he began designing his guesthouse in the wine country of northern California. Already on the property was Curry's home, a circa-1910 reconstructed barn converted into a house. Curry, of Landers Curry Inc., says his goal was for the 650-square-foot guesthouse to look like an outbuilding that might have existed before the barn was constructed.

Curry turned to his friend and world-class mason Pascal Faivre, owner of A L'Ancienne Imports of Sonoma, giving him free rein to create the look. "When we met to talk about the direction of the guesthouse," Curry says, "he asked me what I would like and I said 'surprise me.'" Faivre, using his innovative techniques, created a weathered appearance using stone from Natural Stone Veneers International Inc. of Fond du Lac,

Wisconsin. Shamrock Materials Inc. of San Rafael, Calif., was the stone distributor. Blonde-colored Monterrey thin veneer was applied to the flat surfaces, says Shamrock's Carol Green, who served as the liaison between the supplier and the architect. A mix of Monterrey and buff-color Sydney was used to create the corners.

"If you go to the Burgundy region of France, where Pascal is from, and take a look at some of the old buildings that were constructed as full masonry circa 1600-1700, then stuccoed over to repair and modernize, with degradations over time due to weather and age, you would see many similarities between them and Jon Curry's guesthouse," said Dmitra Smith, marketing director for A L'Ancienne Imports Inc. "The quality of the aggregate stucco, the color, even the stones could be neighbors with the old buildings."

Curry agrees, saying the guesthouse looks as though it were built in stone, stuccoed over some 40 years ago with the stucco now

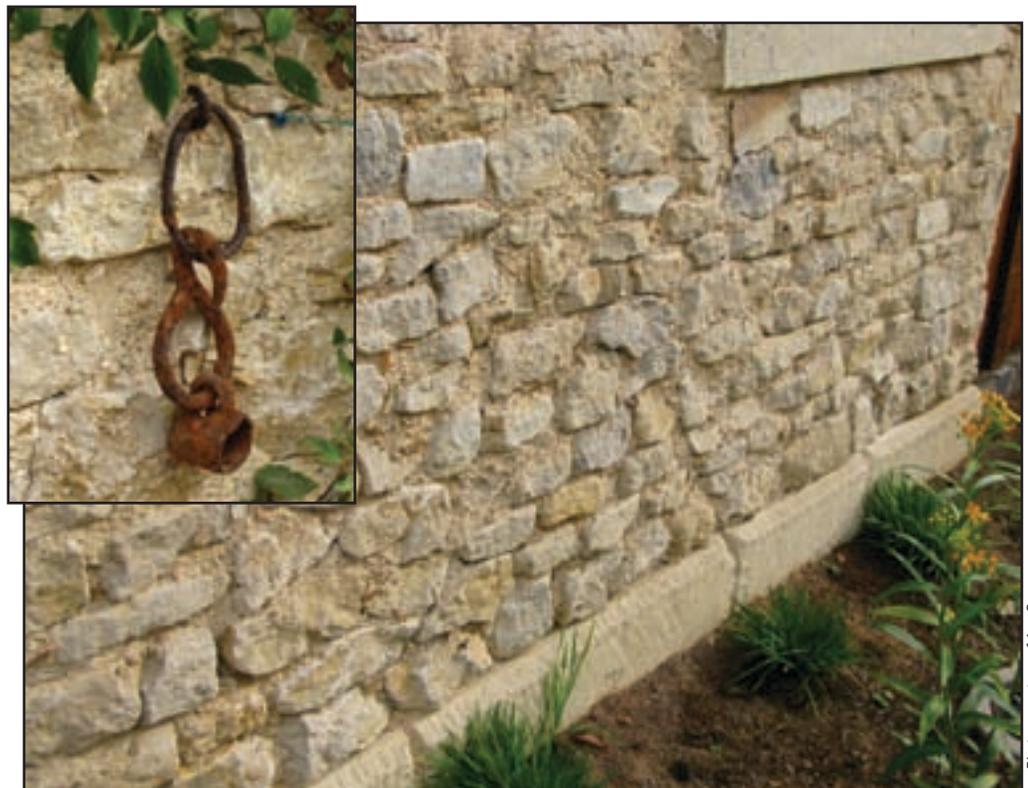
crumbling away. "During the construction process," he says, "both subs and clients thought this was an existing building."

One challenge posed by the use of thin stone veneer was to make sure the veneer made contact with the ground, so the guesthouse didn't look like "a floating stone building," Curry says. Contractors protected and preserved the drip screed by leaving small voids in the grout so the stucco scratch coat and brown coat drain at the screed.

Faivre has no problem adapting his family's ancient craft to new materials. "A L'Ancienne used to use strictly 300-year-old bulk limestone reclaimed from old barns and farms combined with the Faivre family old grout recipe for our masonry projects," Smith says. "However, over the past several years we have been working with new stone and have found that we are able to achieve this look with almost any stone" if it is of good quality and properly cut, she says.

OPPOSITE LEFT: Mason Pascal Faivre helped create the vintage look of this natural stone guest cottage in California.

BELOW: This weathered thin stone veneer was supplied by Natural Stone Veneers International in Wisconsin.



Photos courtesy of Jon Curry



Photo courtesy of Connecticut Stone Supplies

ABOVE: Natural thin stone blue-grey sandstone supplied by Connecticut Stone Supplies boldly sets off the exterior of this farmhouse.

Curry says working with Faivre taught him that simple is usually better. "Pascal reminds me to keep the building scale and form truthful."

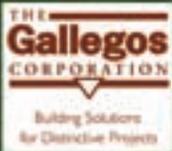
#### Traditional Look Without the Weight

When looking for a means to set off the exterior of a New

Canaan, Conn., farmhouse they were building, the late New York City architect Jeffrey Bacon and a homeowner chose ThinStone™, the natural thin stone manufactured by Connecticut Stone Supplies of Milford, Conn. They selected Colonial Thin Strip, a sandstone in a blue-grey color resembling bluestone, says Tyra

Dellacroce, the marketing director for Connecticut Stone Supplies. The thin strip stone ranges from 1/2 inch to 2 inches in length, with a depth of 4 to 14 inches. Strip cut corners are notched to wrap around and give the appearance of traditional 4-inch facing. This particular home used 60 tons of ThinStone, Dellacroce reports.

The front porch area was clad floor to ceiling with the ThinStone, while the front and side walls had ThinStone up to 4 feet from the roofline with a bluestone cap, says Lou DiMaio of Onsite Construction of Shelton, Conn., the builder of the 6,800-square-foot house. DiMaio says this was the first time he had worked on a project utilizing stone veneer. DiMaio likes the jointless look of the natural stone, but masonry for the product was more time con-



When it has to be perfect....

Stone . Masonry . Plaster . Stucco . Marble . Granite . Concrete . Art Rock . Stone Sales

800-Gallegos  
www.GallegosCorp.com

## RESOURCES

### SONOMA GUESTHOUSE

#### Contractor/Designer

Jon Curry, Landers Curry Inc.  
Sonoma, Calif.  
707-815-2785

#### Distributor

Shamrock Materials Inc.  
San Rafael, Calif.  
415-455-1575  
www.shamrockmat.com

#### Supplier

Natural Stone Veneers  
International Inc.  
Fond du Lac, Wisc.  
877-923-2800  
www.nsvi.com

#### Installer

A L'Ancienne Imports  
Sonoma, Calif.  
707-996-2550  
www.alaimports.com

### CONNECTICUT HOME

#### Supplier

Connecticut Stone Supplies  
Milford, Conn.  
203-882-1000  
www.connecticutstone.com

#### Mason/Contractor

Holmes Construction  
Woodbury, Conn.  
203-278-0453

#### Builder

Onsite Construction  
Shelton, Conn.  
203-943-0054

Photo courtesy of Connecticut Stone Supplies



suming than typical construction processes.

Mason Dave Holmes of Holmes Construction in Woodbury begs to differ. He knows how labor-intensive full veneer masonry is and appreciates the flexibility of thin stone veneer. "The biggest advantage [of this stone] is the lighter weight," he says. "There are no loadbearing issues to consider." Holmes also appreciates that the decision to use thin stone veneer can be made after construction is underway. "You can adhere it right to the wall," he says.

"The time factor is also a plus," Holmes continues. "It is

applied more like a tile. You can get more applied in a day than you would with full veneer. You don't have to wait for mortar to dry."

The fact that no ledgers or footings are required also means that height is not an issue. "With full veneer you can only go up vertically so far. With ThinStone, you can go 100 feet high," Holmes says. ♦

*Martha Barksdale has written articles for numerous publications. She is a graduate of the University of Georgia and lives in the Atlanta area.*

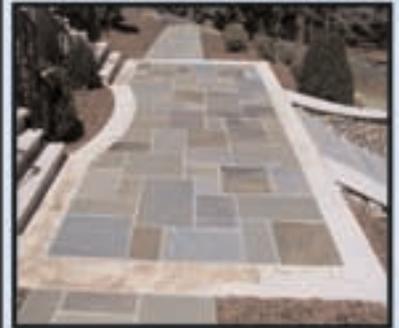
ABOVE: Its light weight and ease of installation make natural thin stone veneer a popular choice for architects, builders and contractors.

## Meshoppen Stone Inc.

P.O. Box 127  
Meshoppen, PA 18630  
800-836-1269  
or 570-833-2767

www.meshoppenstone.com  
mstone@epix.net

**Natural Stone Dealer**



Pennsylvania Bluestone  
Flagstone (Square Cut and  
Irregular), Fieldstone, Treads,  
Tumblestone, Various types of  
Landscape Stone  
Thin Veneer

**Custom Cut Orders**  
Countertops, Sinks  
Stone Railings



**Weathered Edge Thin Veneer**  
(Natural Stone)

Meshoppen Stone Inc. has been distributing various types of Pennsylvania Flagstone and Stacked Stone for over 50 years. Our high quality natural stone products are quarried in Northeastern Pennsylvania. This beautiful natural stone is marketed for use in many applications around your home and business.

**Call today for our color brochure and price list!**  
Delivery Available!



Photo courtesy of Ken Lopardo Photography



Photo courtesy of Kenneth Castellucci & Associates

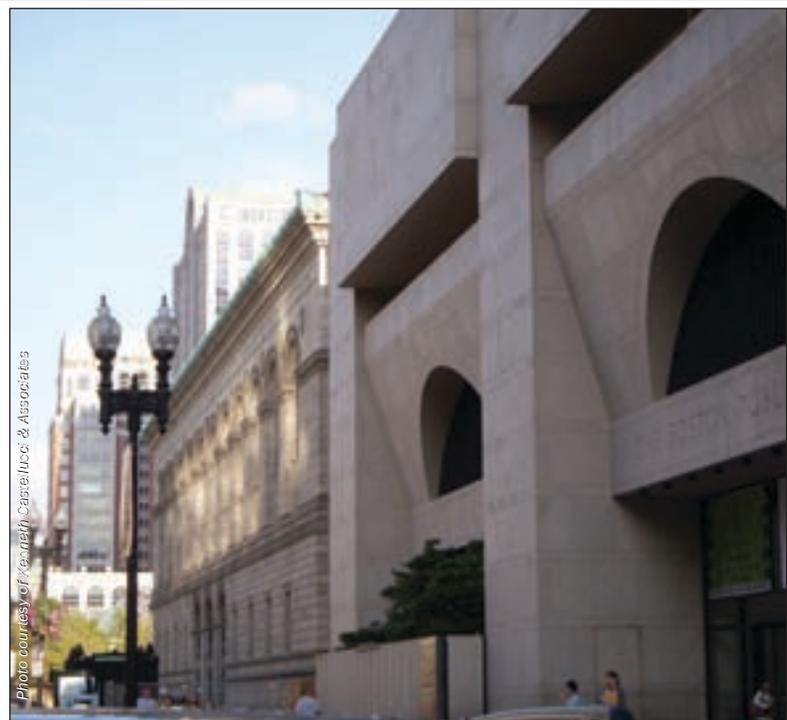


Photo courtesy of Kenneth Castellucci & Associates

## STONE THROUGH THE AGES

# Kenneth Castellucci & Associates

By Stephanie Aurora Lewis, RA, LEED

“DON’T TELL ME what the weather was last week; I am going forward.” That’s a philosophy that Kenneth Castellucci lives and works by. Owner of Kenneth Castellucci & Associates, natural stone fabricators and installers, Castellucci and his crew of employees are working full steam ahead as the sixth generation of Italian stone fabricators and installers for large, commercial building projects. The company’s foundation is based on Italian stone-working tools and techniques, more than a century of family apprenticeship training, and a successful business strategy aimed at the promotion of natural stone through relationships with architects.

The Castellucci family entered the stone-working trade in 1828 from the Abruzzo region of Italy and is still in business after a remarkable 128 consecutive years. Castellucci’s grandfather was the first generation of the family to work in America. Kenneth was born in Stonington, Maine, and was thrust into the business at the age of 18. Though the quarries at Stonington are still used by the Castellucci family, they moved to Rhode Island early on in order

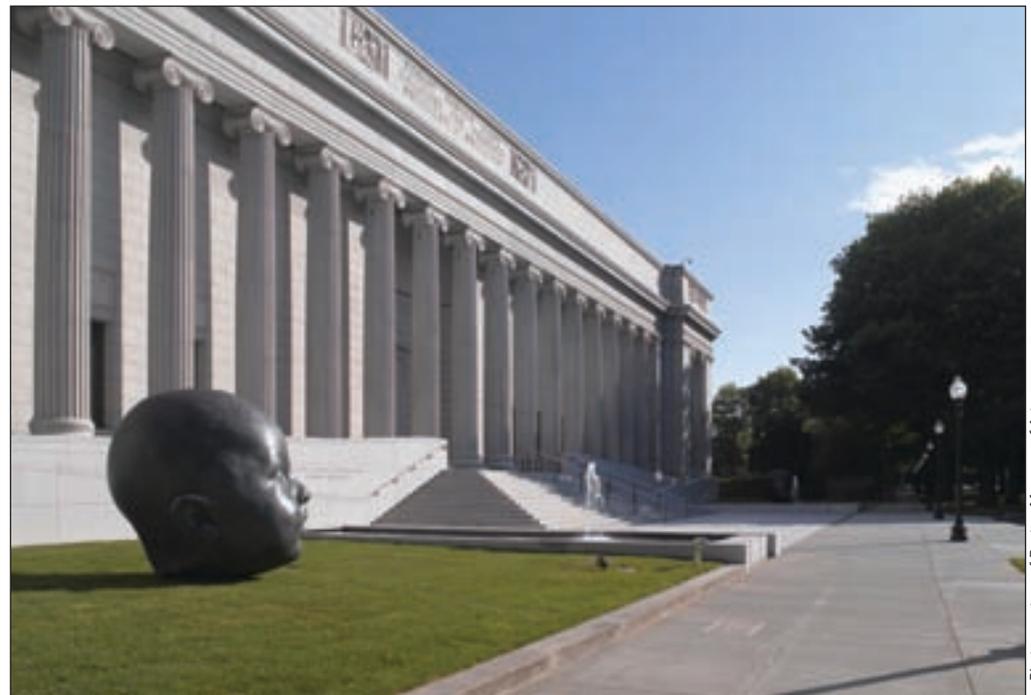


Photo courtesy of Boston Museum of Art

to capture important projects in the Washington, New York and Boston metropolitan areas.

Castellucci credits his family’s successful heritage primarily to Italian stone-working roots. “Italy is the stone capital of the universe. Without Carrara, Italy, there would be no natural stone today,” he says.

Modern stone-working techniques and tools are a direct result of the ingenuity and inventiveness of the Italian people. Castellucci explains that it was the excellent Italian stone working techniques of his

OPPOSITE CLOCKWISE FROM TOP: Photo 1: The GTECH World Headquarters in Rhode Island features Kershaw granite. The stone work on the background buildings (Westin Hotel & Residences, Marriott Hotel Residences and Providence Place Mall) was also done by Kenneth Castellucci & Associates.

Photo 2: Kenneth Castellucci’s work on the addition to the Boston Public Library utilized Milford Pink granite from Milford, Mass.

Photo 3: Rhode Island’s Providence Public Safety Complex features Gray Indiana limestone and Chelmsford Gray granite.

ABOVE: While Kenneth Castellucci & Associates are busy fabricating and installing stone for some of the Northeast’s most notable metropolitan architecture (such as the Boston Museum of Art seen here), they also recognize the importance of educating area architects about the benefits of natural stone.



Photo courtesy of Boston Museum of Art

ABOVE: More than 100,000 cubic feet of Deer Isle granite is used at the Boston Museum of Art, one of Castellucci & Associate's highest profile projects.

grandfather and father that saved the Castellucci family business when natural stone was a declining U.S. industry after World War II. "The Jumbo Gang Saw from Italy saved and revolutionized the industry," he says. "It is an Italian machine that cuts marble and granite into slabs.

This Italian invented and fabricated machine is used throughout the world today."

### Spreading the Word

After a lifetime in the business, now, at the age of 66, Castellucci realizes a new frontier of architects exists who

need stone experts to build relationships with them that will benefit the industry as a whole.

"The key to the stone fabrication and installation industry is to educate architects on the use of natural stone," Castellucci says. One challenge facing the industry is that stereotomy, the science of stone detailing, is no longer taught in universities, specifically in the land grant colleges of New England. So, the responsibility of education falls to stone fabricators and installers.

"[Education] is not just taking samples to show architects. It is, rather, going into an architecture firm to talk to them about the use of natural stone, then to talk to them about how to install it on their buildings," Castellucci

## VOGELMAN

*West*

STONE • MASONRY

Nation-wide stone supplier  
and full service masonry  
contractor serving the  
Western United States

---

*A tradition  
in stone since 1981*

vogelmanwest.com

970-949-4138  
800-449-4138

PO Box 921  
Avon, CO 81620



## The Best Coverage for the Thin Veneer Market.

Our extensive experience in many different types of stonework around the world, combined with our strong local commitment to service and support, has given us a unique knowledge. It is this knowledge that enables us to develop tools and support for maximum efficiency and reliability.

Stone thin veneer creates warmth and character without the cost and hassle of natural stone veneer. Diamant Boart has been, and continues to be, invested extensively in research and development of new technology for the thin veneer market. Our continued collaboration with thin veneer manufacturers has enabled us to provide the best blade on the market for specific machines and materials. All of our thin veneer blades are closely monitored during production at our Columbia, SC location ensuring you receive the highest quality blade.

Diamant Boart service centers are conveniently located throughout the United States to better support your needs. A variety of blades to cut granite, limestone, sandstone and marble are available in 4 in - 13 ft diameters at our service centers and most come in standard core, silent core or laser cut. We also carry chop saw blades and block saw blades.

### HUSQVARNA CONSTRUCTION PRODUCTS

17400 West 119th Street • Olathe, Kansas 66061 • T 800-845-1805 • F 800-872-1125  
2077 Bond Street • North Bay, Ontario P1B 8G5 • T 800-461-9589 • F 800-728-1907  
[www.dbstone.com](http://www.dbstone.com)



Photo courtesy of Ken Lopardo Photography

ABOVE: For his work on the Johnson & Wales University Quadrangle and Library (foreground), Kenneth Castellucci used Canadian Black granite from the Alma Provence of Quebec. Castellucci also completed the stone work on the buildings pictured in the background: 100 Westminster Street, One Financial Center and The Textron Building.

explains. “Don’t just be bidders; go out and be promoters.”

### Promoting Natural Stone

“When I visit an architect,” Castellucci says, “it is most often about a specific project.

The first rule that I use is never walk into their office with a particular natural stone sample. The initial visit is to learn about the particular project by either reviewing the preliminary drawings and/or seeing a rendering of the pro-

posed building. I then ask the architect what materials they envision using on the interior and exterior. Based upon their budget, I can get a feel for whether they can afford stone and what type. I try to refrain from quoting ‘off the wall’ prices until I can study the job. At a second meeting, I present a budget price that includes both the fabrication and the installation of a particular stone.

“I do not push a particular granite, marble or other types of stones for two reasons,” Castellucci continues. “There is such a wide variety [of stone] available and because present day architects are looking for something new. It is up to the natural stone people to keep abreast of all these new stones and finishes. As

## Carderock® Stone...a natural choice



*Consider the possibilities...*

Tri-State Stone® & Building Supply, Inc.  
8200 Seven Locks Road, Bethesda, Maryland 20817 U.S.A.  
301-365-2100  
[www.carderock.com](http://www.carderock.com)

# FAMILY LEAVES LEGACY AT BOSTON MUSEUM OF ART

Photos courtesy of Kenneth Castellucci & Associates



Photo courtesy of Boston Museum of Art



Currently under construction, The Boston Museum of Art is perhaps the highest profile project for Kenneth Castellucci & Associates today. The project is also the largest natural stone job in the works in the United States, using more than 100,000 cubic feet of Deer Isle granite quarried from Stonington, Maine.

The original art museum was built of Deer Isle granite by Castellucci's grandfather in 1923. Since then, Castellucci's father completed the 1952 East Wing addition, and Kenneth Castellucci himself did the 1973 West Wing addition. The \$600 million new Gund Wing, designed by Sir Norman Foster, will house *Art of the Americas*.

"All the Deer Isle granite throughout the entire museum comes from the quarry that my grandfather first used. Only one family has been involved with the natural stone on that building: the Castellucci family," Castellucci says proudly.

one gets familiar with each architectural office, they will learn their preferences regarding color and finishes. Therefore, it is the continuous contact with the architect that usually results in them calling you when they think of stone."

After overcoming business challenges in the past, Castellucci maintains his calm, forward-looking philosophy for the future. "As everyone knows,

what is happening today with the economy is unprecedented and quite unsettling," he says. While conceding that there has been a lull in the use of natural stone for building interiors and facades, he says, "As long as people are building, they will continue to use natural stone." ♦

*Based in Ohio, Stephanie Aurora Lewis is a registered architect who has published more than 70 articles.*

WHEN *Durability*  
AND  
*Stunning Beauty*  
ARE A REQUIREMENT



**ROCKY RIDGE**  
STONE COMPANY

Crab Orchard Flagstone • TN Fieldstone  
Natural & Sawed Flooring • Squares  
Broken Ends • Rubble • Coping  
Capstone • Natural & Sawed Mantels  
Steppers • Tumbled Material

Crossville, Tennessee

931-484-7158

[www.rockyridgestoneco.com](http://www.rockyridgestoneco.com)

# Stone Helps Birmingham Firm Keep It Natural

By K.K. Snyder  
Photos courtesy of Davis Architects



## DAVIS ARCHITECTS at a Glance

Specializing in designs and master plans for schools, colleges and universities, libraries, churches and performance venues, Davis Architects is Birmingham's oldest architecture firm.

In June, Davis Architects received an Honor Award at the 2008 Design Awards Gala from The American Institute of Architects (AIA) - Birmingham for its 4-H education center project. The Honor Award is the highest level of recognition bestowed by AIA Birmingham for projects displaying exemplary design exceeding the criteria set forth by the jury.

At press time, the 4-H Environmental Education Center was still in the process of receiving LEED Gold Certification.

**W**ITH THE ENVIABLE GOAL of LEED Gold Certification in mind, Davis Architects of Birmingham, Ala., set out to design a sustainable environmental education facility and conference facility on a wooded hillside at Lay Lake near Columbiana, Ala.

Led by Neil Davis, firm president and chief designer on the project, the center was built at the request of Alabama 4-H, an organization aimed at developing character and knowledge for young people. The building was to replace the group's existing training and conference facility on Lay Lake.

OPPOSITE PAGE: Paying close attention to the natural environment, Davis Architects' 4-H Environmental Education Center uses native Alabama sandstone.

RIGHT: The firm hopes that sandstone, harvested north of Birmingham, will help the 4-H center achieve LEED Gold Certification.

The firm's design for the education center mirrored the client's environmental philosophies, from green roof construction to recycled products to state-of-the-art building systems designed for higher efficiency and lower energy consumption. The 4-H Environmental Education Center project by design, construction and operation was to have a minimal draw on non-renewable resources while giving high priority to preserving the surrounding natural environment.

To that end, the facility was designed using mainly natural materials, says Davis architect Don Cosper. These materials included a native Alabama sandstone quarried and installed by Lamb Stone, a four-generation family-owned business located in Oneonta.

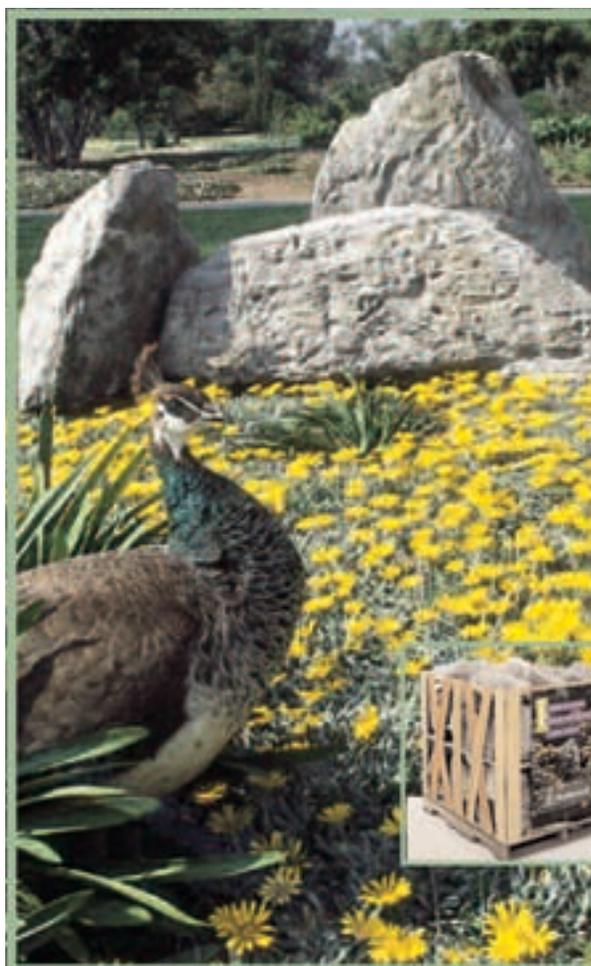
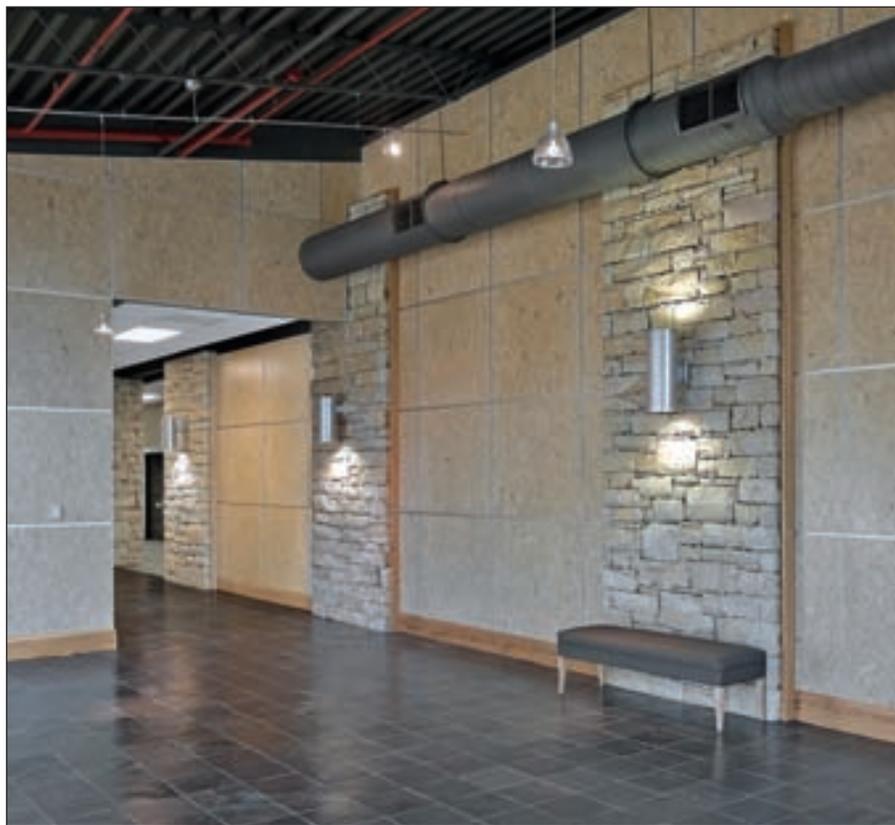
"In this area, using the indigenous sandstone is very popular," Cosper says. The sandstone is harvested north of Birmingham. "It's a very pretty stone," he continues, "and the proximity is important with LEED projects."

The entire design of the \$5.2 million environmental center hinged on the use natural materials, Cosper says. "[The center] is nestled in the woods, and we wanted to make it look like it belongs there. Stone is a natural looking material, so the sandstone was perfect."

On the exterior of the 17,480-square-foot building, randomly sized pieces of sandstone were stacked using concealed mortar joints. Two-story structural columns and partial sandstone walls were accented with other materials, including concrete, glass and wood – all topped off with a metal roof.

Impressive raised wooden walkways lead to the tucked-away building. These natural walkways offer one of the best views of the facility, which is nearly all glass across the woods-facing backside.

The local sandstone was also used on the interior as a decorative element, including in the main lobby, and through the corridors upstairs and down. The upper lobby, which also features Oneonta sandstone as a decorative accent, serves as a pre-function space for the conference facility, while the lower lobby,



 **featherock**  
Treasure from the High Sierra

Natural landscaping calls for natural Featherock boulders. Enduring and beautiful, they come in harmonizing colors of silver gray and light charcoal. So light you don't need heavy rigs to lift, haul and place. Available in many sizes nationwide.

Ask about our display ready palletized boulders

**Featherock, Inc.**  
20219 Bahama Street  
Chatsworth, CA 91311  
(800) 423-3037  
fax (818) 882-9643  
[www.featherock.com](http://www.featherock.com)

# Designer Profile



LEFT: Architect Don Cosper explains that natural stone is the strongest design element of the 4-H center, wrapping the building on all sides and adding warmth.

with sandstone accents, has a display area and accommodates busloads of visitors. Cosper says, "Sections of stone with sections of panelized wood in between give a rhythm and pattern of stone and wood."

Tim Lamb, owner of Lamb Stone where his family has quarried Oneonta sandstone for four generations, explains that the stone comes out of the ground in layered sheets of thicknesses ranging from 1/2 inch to 24 inches. Once out of the ground, the sandstone is transported to Lamb Stone's processing plant where a splitter or breaker is used to "break it into pattern."

Lamb says the quartz sandstone product used on the 4-H center consisted of wall-type slabs ranging from 3 to 8 inches in thickness. The architects chose the Oneonta sandstone in the brown tones, though Lamb also quarries a blue-gray variety.

"It has pretty veins running through it, too," he says. "The stone is a range of tones of buff colors and the blue-gray. The Tennessee area produces the same basic colors, but it's not as hard as quartz; ours is a harder base material."

Lamb says for the 4-H project his company used a random ashlar split face pattern on a thick wall veneer. "It's a two-to-one ratio so, you'd have one 8-inch piece with two 4-inch pieces," he explains, noting that Lamb Stone now offers a thin wall veneer of 4 to 5 inches.

"The stone, certainly from a visual point of view, is the strongest design element. It pretty much wraps the building on all sides," Cosper says. "We wanted to bring in the warmth of the stone."

This extensive stone project wasn't Davis Architects' first use of natural stone. In fact, the firm has been using stone in its designs for decades, including a number of projects on the campus of Birmingham's Samford University, one of the firm's oldest clients, going back some 50 plus years.

"The entire campus is Georgian Colonial, so brick is their choice for exterior finish, but the buildings are all trimmed in limestone," Cosper says. "We use classical detailing in limestone on eaves, cornices,

## DIAZ STONE & PALLET

RR 2, Box 205 Kingsley, PA 18826  
Ph - 570-289-8760 Fax - 570-289-9958  
For more information please call or visit our website at  
[www.diazstoneandpallet.com](http://www.diazstoneandpallet.com)



Tumbled Pavers  
Irregular  
Fieldstone  
Radius Cuts



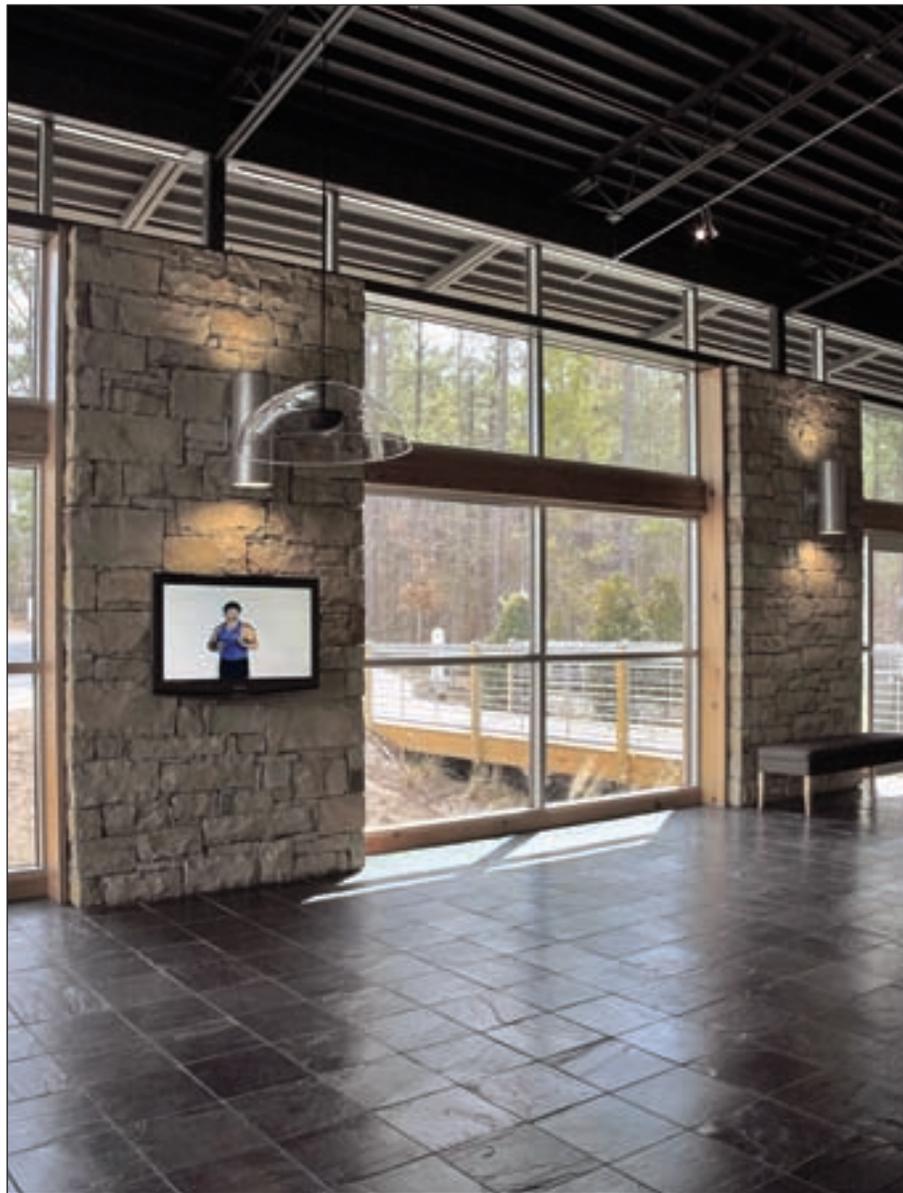
Various Thin Veneers  
Garden Path Steppers  
Colonial  
Pool Coping  
Custom Cut Orders & Finishes



Bluestone Treads  
Flagstone  
Gauged Natural Cleft  
Delivery Available

Diaz Stone & Pallet, Inc. has been a distributor and professional supplier of all types of stone products native to NE Pennsylvania for the past 10 years. We are an independently owned company that seeks to provide high quality personalized service and materials to each of our customers.

Give us a call today for our color brochure and current price list.



window and door trim, columns, entrances, etc. We chose limestone because it has the best choice for authentic, traditional detailing. Cornices with dentils and mutiles are executed beautifully in limestone.”

Many interiors of buildings on Samford’s campus feature other types of stone, such as granite and travertine.

“The granite, especially dark granite, is both striking and durable on stairs in an entrance lobby. Travertine, such as the two color combination in the Sciencenter lobby, is very rich and elegant in appearance. It seems a building dedicated to science should use some natural materials when possible,” he says. ♦

*K.K. Snyder is a freelance writer based in Albany, Ga. She can be reached at [kkondeadline@hotmail.com](mailto:kkondeadline@hotmail.com).*

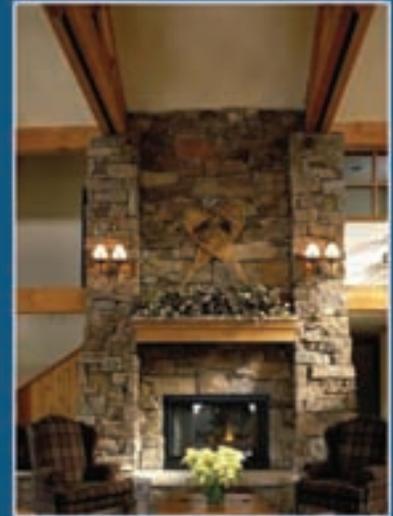
ABOVE: Davis Architects has used natural stone in projects throughout the Birmingham area. At the 4-H Environmental Education Center project, the design, construction and operation was to have a minimal draw on non-renewable resources while giving high priority to preserving the surrounding natural environment.

## RESOURCES

Davis Architects  
Birmingham, Ala.  
205-322-7482  
[www.dadot.com](http://www.dadot.com)

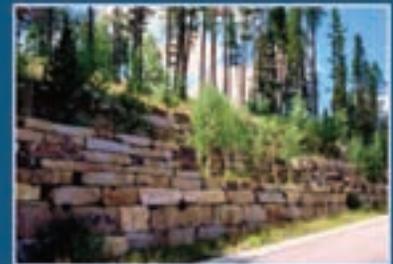
Lamb Stone  
Oneonta, Ala.  
205-274-9800  
[www.lambstone.com](http://www.lambstone.com)

## SILDOAM STONE, INC.



### Natural Sandstone

- Permanent
- Beautiful
- Elegant
- Dramatic



- Water Features
- Retaining Walls
- Stairways
- Walkways
- Entryways
- Veneer
- Rip-Rap
- Signs
- Bridges
- Patios



Phone: 719.275.4275

[www.silloomstone.com](http://www.silloomstone.com)

E-mail: [info@silloomstone.com](mailto:info@silloomstone.com)

NATURAL STONE LEAVES LEGACY

# The Jefferson Memorial Endures

By K.K. Snyder

Photos courtesy of Terry J. Adams, National Park Service

**W**HEN IT COMES TO DEMONSTRATING the splendor and endurance of natural stone, the Thomas Jefferson Memorial in Washington, D.C., is an outstanding example – having stood the test of time since the completion of its three-year construction in 1942.

Built from various types of marble in dedication to one of America's founding fathers and the third president of the United States, the memorial was designed by famed architect John Russell Pope and constructed by Philadelphia contractor John McShain.

The neoclassical Jefferson Memorial is located on 18 acres in East Potomac Park

BELOW: Various types of marble were used to create the infamous Jefferson Memorial in Washington, D.C.



RIGHT: The interior wall panels of the Jefferson Memorial, which houses this 19-foot bronze statue, are made from Georgia white marble.

on the Tidal Basin. The structure is open to the elements and features a shallow dome, a circular colonnade of 26 Ionic order columns, a portico and circular marble steps. The memorial houses a 19-foot bronze statue of Jefferson, completed by sculptor Rudolph Evans.

Construction of the memorial began in 1938 amidst conflict; the final design had not been approved, according to the Commission of Fine Arts. The project moved forward but was slightly impeded following Pope's death less than one year later. His partners, Daniel Higgins and Otto Eggers, stepped in to complete the task in Pope's absence.

The exterior walls and columns of the memorial are constructed with Danby Imperial



marble from Vermont – the most significant stone used in the structure. Danby marble is well known for its clean, white coloration with light veining. Specifically, Danby Imperial is recognizable by its golden veins in distinct, naturally occurring patterns. Danby

marble has been used in the construction of a number of Washington, D.C., landmarks.

In addition to Danby Imperial, the Jefferson Memorial includes Tennessee pink marble for the interior floor, Georgia white marble for the interior wall panels and Mis-



Discover one of Colorado's iconic natural stones; elegant and enduring quartzitic Lyons Sandstone.

[www.lyonssandstone.com](http://www.lyonssandstone.com)

303.823.5659



**LYONS SANDSTONE**

*"consider the possibilities"...*



# Historical Feature



BELOW: The Jefferson Memorial is a two-time recipient of the BSI Tucker Design Award based on its extraordinary use of natural stone.

souri gray marble for the pedestal. Indiana limestone was used in construction of the ceiling.

The Jefferson Memorial was dedicated on April 13, 1943, on the 200th anniversary of the late president's birthday. This national memorial was listed on the National Register of Historic Places in 1966.

The Thomas Jefferson Memorial is a two-time recipient of the BSI Tucker Design Award, having received the honor in 1985 in the category of a building 25 years or older and still in use, and another in 1996 for a structure built at least 40 years ago and still in use. The latter award was the result of a nomination by Leslie N. Boney Jr., FAIA, who passed away in 2003.

Charles Boney Jr., an architect in the Wilmington, N.C., firm his uncle worked for, says his uncle's interest in the Jefferson Memorial parallels the interest the elder Boney had in Henry Bacon, an architect with ties to Wilmington and designer of the Lincoln Memorial.

"The use of stone in these [Washington, D.C.] buildings reflects the permanence of government and leaving a lasting legacy," Boney says. He adds that for his uncle, the appreciation for the use of stone in such buildings goes back to the late Boney's father, also an architect.

"Both were trained as classicists, so the use of stone appealed to them," he says. "Stone is obviously an enduring material for memorials and has stood the test of time. The Pantheon in Rome is made of stone, brick and poured-in-place concrete that has stood for over 2,000 years. It just made great sense for John Russell Pope to use that material."

Today, the Memorial is one of the main anchor points near the National Mall in Washington, D.C., and is managed by the National Park Service. Last year, it was ranked fourth on the List of America's Favorite Architecture by the American Institute of Architects. ♦

*K.K. Snyder is a freelance writer based in Albany, Ga. She can be reached at [kkondeadline@hotmail.com](mailto:kkondeadline@hotmail.com).*



## M S International, Inc.

*Premium Natural Landscaping Stones*

**The One-Stop Shop for all of your landscaping stone needs.**



30 million Sq. Ft. of stone in stock

- ▣ Pavers ▣ Caps ▣
- ▣ Flagstone ▣ Ledger Stones ▣
- ▣ Walling Stones ▣ Pool Copings ▣
- ▣ Cobbles & Pebbles ▣ Natures Bricks™ ▣
- ▣ Garden Stone Accessories ▣

[www.msistone.com](http://www.msistone.com)



Sandstone · Slate · Quartzite · Travertine · Granite · Marble · Limestone · Onyx · Mosaics

**Orange, CA**  
Ph: 714 685 7500  
(Corporate Office)

**Chicago, IL**  
Ph: 847 758 0556

**Braintree, MA**  
Ph: 781 794 0100

**Atlanta, GA**  
Ph: 404 505 9101

**Phoenix, AZ**  
Ph: 602 393 6330

**Farmers Branch, TX**  
Ph: 469 522 0300

**Edison, NJ**  
Ph: 732 650 1815

**“Quality  
is Etched in  
Our Stone”**

# *Cumberland Mountain Stone*

a Division of Turner Brothers Stone

- **Quarrying and fabricators of Tennessee Quartzite stone for over 6 decades.**
- **With over 900 acres of quarry land and state-of-the-art stone cutting and fabricating equipment.**
- **We take pride in efficiently serving customers.**
- **We consider our customers and our reputation to be our most valuable assets.**



## **SOME COMPLETED PROJECTS:**

Ronald Reagan International Trade Center  
Washington, DC  
Architect: Pei Cobb Freed & Partners  
with Ellerbe Becket

Randolph County House  
West Virginia  
Architect: Train & Spencer

McGhee Tyson Airport,  
Knoxville, Tennessee  
Architect: HNTB Corporation with McCarty,  
Holsaple, McCarty, Inc.

Rockefeller Plaza  
New York, New York  
Architect: Beyer Blinder Belle

**Cumberland Mountain Stone Co. • 389 Flagstone Lane • Crossville, Tennessee 38557  
Phone: (800) 334-7719 • Telefax: (931) 484-6329**

## Largest Study of Granite Countertops Finds No Stones that Pose Health Threat

The most comprehensive scientific study of health threats from granite countertops did not find a single stone slab that poses a health risk. Quantities of radon and radiation emitted by stones included in the analysis all fell well below average background levels commonly found in the United States.

The scientists conducted more than 400 tests of 115 different varieties of granite countertops, including stones cited in media reports as being potentially problematic. The stones tested include types of granite that comprise approximately 80 percent of the annual U.S. market share for granite countertops, based on the most recent market data available. The study specifically included types of granite most commonly used in countertops in the United States and more exotic stones that represent a tiny share of the market. The study found:

- Not one stone slab contributed to radon levels that even reached the average U.S. outdoor radon concentration of 0.4 picocuries per liter – one-tenth the U.S. Environmental Protection Agency level for remedial action within a home. The stone slabs found to emit at higher levels – though still well below average outdoor background levels – represent a tiny share of the U.S. market for granite countertops, less than 1 percent of sales.
- Not a single stone emitted radiation levels that even approached a radiation dose of 0.3 milliSievert per year (mSv/year), the level determined by the European Commission to be negligible for human health risk; the U.S. has no such standard. However, this European standard is just 30 percent of the 1 milliSievert per year annual dose limit recommended for the general public by the National Council for Radiation Protection & Measurements.

Unlike some media reports of questionable scientific accuracy, this study evaluated a large variety of stones and used a number of complementary, well established scientific techniques to assess the exposures that people could have to radon and radiation in real-world environments and to determine whether the presence of these specific stones could compromise consumer health.

“The study showed that you are more likely to have a fatal fall from bed than to develop a health problem related to the most common granite countertops,” said Dr. John F. McCarthy, president of Environmental Health & Engineering (EH&E), the independent environmental testing firm that conducted the study. “Stones were selected for the study based on their prevalence of use as countertops and media reports suggesting specific types of granite pose health risk.

“Our research program was designed to assess exposure and risk to individuals in real-world conditions. The scenarios that we evaluated were selected to ensure that they represent what people will really encounter in U.S. homes,” McCarthy said. “Our research shows that some of the reports published by the media significantly exaggerate risk because they report raw data without considering real-world conditions as commonly defined by the scientific community. It is very important to put the results of these product evaluations into a context that is meaningful for the consumer.”

Study findings are consistent with an earlier review of the scientific literature, which assessed results from every identified study of radon emissions from granite published in the scientific literature to evaluate potential exposures in homes.

“Our study included detailed mapping of radiation emitted from various stones that had areas that we identified as being elevated above levels for typical granite countertop material. We found that it’s easy to get what appear to be high readings of radon or radiation from a small fraction of granite countertops, but those readings do not reflect the actual risk to consumers because they do not assess the real exposure, only isolat-

ed, extreme measurements,” McCarthy said. “As with any other type of environmental measurement, assessing the real risk to consumers must take into account more than isolated readings from small spots on a countertop. It must reflect real-world exposure scenarios and be interpreted using well established principles of environmental health.”

The study also concluded:

- Radon levels associated with emissions from granite countertops in homes are low in comparison to typical background levels of radon exposure. In other words, natural stone is a minor contributor to concentrations of radon gas within homes. These findings are consistent with an earlier review of the scientific literature that EH&E performed.
- Absorbed dose associated with radiation emissions for all of the slabs tested are well below health-protective guidelines, including the exemption limit of 0.3 mSv per year recommended by the European Commission. The United States has yet to establish an exemption level for building products based on radioactivity to our knowledge.
- A portion of stones used as countertops may contain limited areas that are enriched in radioactive materials relative to the remainder of the slab. The areas of enrichment in the stones evaluated for this study make up a small proportion of the stone, on the order of less than 10 percent of the surface area. Detailed measurements of these enriched areas showed that they make a negligible contribution to potential doses of ionizing radiation.
- Assessing exposure to radon and radiation requires accounting for duration and frequency of exposure, not just absolute magnitude. Additionally, careful consideration of several key parameters is warranted. For

radon, measurements of radon flux from a countertop must account for variability across the countertop surface, the effect of any backing material on the stone and diffusion through the slab. It is critical that ventilation is accounted for when estimating radon concentrations in indoor air from measurements of radon emissions from stones. For radiation, distance and geometry must be incorporated into dose assessments.

- While significant variability was observed across stone types, the stones at the lower end of radon emissions were found to account for the vast majority of sales and also exhibited little variability among slabs. The varieties of granite that exhibited the greatest variability of radon flux among slabs represent a small fraction of the U.S. market.

“You can never rule out anything, but [the likelihood of a granite countertop posing any health risk] is as close to zero as you could hope to get about a risk in your life based on what I know,” said David Ropeik, risk consultant and author of the book “Risk.” “Cumulatively, we have a huge body of evidence that suggests that this particular risk from granite is negligible.”

Marble Institute of America (MIA) President Guido Gliori said, “This study once again proves that granite countertops do not pose the risk that some exaggerated media reports would suggest. While some organizations that benefit financially from consumer concerns about granite attempt to spread panic, this study was designed to withstand the closest scientific scrutiny and should reassure the public about granite countertops.”

In the absence of comprehensive, independent scientific analysis of granite countertops, the Marble Institute financed the study as part of its continuing effort to define a standard test protocol to assess radiation and radon emissions from different stones. The goal is to develop protocols for

testing granite in the home, in showrooms or fabrication shops and at the quarry. The fact that no single protocol exists has allowed individuals to make claims about granite countertops based on inconsistent and often incorrect tests, methodologies or analyses.

The MIA is working with the scientific community to develop a single, accept-

able standard for the proper testing of granite countertops and other granite building material. Work on the standard will involve scientists and several independent and governmental agencies.

A copy of the study’s executive summary can be downloaded from the Marble Institute’s Web site, [www.marbleinstitute.com](http://www.marbleinstitute.com).

Choose the peak of quality at a fair price.

Choose from over 25 natural stone selections.

Choose thin natural stone veneer from Pinnacle Stone Products.

*Natural Stone Veneer*

Timeless beauty, strength and durability

610 / 593-ROCK (7625)

**PINNACLE**  
Stone Products, LLC

Owners & operators of over 35 stone quarries

[info@PinnacleStoneProducts.com](mailto:info@PinnacleStoneProducts.com)

## U.S. Consumers Prefer Granite over Any Other Countertop Surface

A new Harris Interactive survey finds that by overwhelming majorities, U.S. consumers prefer granite countertops to any other countertop surface and believe that granite countertops increase the resale value of a home.

Conducted in October, the survey of 2,021 American consumers asked respondents which countertop surface they would most want in their dream kitchen. At 55 percent, "granite countertops" was by far the most popular response, followed distantly by synthetic stone at 12 percent.

When asked how much they agree with the statement "granite countertops increase the resale value of a home," 90 percent of the surveyed consumers either strongly or somewhat agreed.

"The survey reaffirms what we have known all along: across America, granite is the most desired countertop surface on the market today," said Jim Hogan, president of the Marble Institute of America. "After months of inaccurate reporting and questionable research aimed at raising doubts about granite, it is tremendously gratifying to know that consumers continue to feel that granite countertops are as safe as they are beautiful, practical and durable."

In fact, 84 percent of survey respondents either strongly or somewhat agreed with the statement, "Granite countertops are among the most safe, beautiful and durable kitchen counter surfaces on the market today."

"The results of the survey, which has a margin of error of 1 percent, show that consumers' preferences for granite countertops are virtually the same across all regions, genders and age groups," Hogan said.

The survey found remarkable consistency across the United States, with minimal variance in responses from different regions of the country. It also showed the appeal of granite was consistent among both age and socio-economic groups.

## Natural Stone Council Issues First Sustainability Best Practices Document

The Natural Stone Council (NSC), a collaborative organization representing business and trade associations that promote stone under the Genuine Stone™ brand, recently announced the publication of the organization's first best practices document based on the results of a benchmark data collection effort of the natural stone industry. The best practices outlined in this initial document offer effective strategies in which a quarry or stone processing facility can minimize its overall daily water demand.

Due to the significance of water in the quarrying and manufacturing process, the NSC selected it as the topic of the inaugural best practices document following their sustainability research. Because of global water

shortages and fluctuating policies around water usage, responsible water management is key to achieving sustainable practices in any industry.

Highlights of the water consumption best practices document include:

- A description of water use in quarrying and processing operations
- Strategies for conservation within processes of extraction, cutting and finishing
- Site changes that can reduce the need for water, mitigate dust and begin initial steps towards quarry remediation
- A discussion of facility and equipment upgrades that result in increased water use efficiency
- Overall benefits to implementing a water management plan

"The NSC's goal is to provide our industry with assistance in implementing socially responsible and environmentally-preferable operations," said John Mattke, NSC sustainability committee chairman. "Implementation of even a few of these best practices regarding water consumption, treatment and re-use can potentially result in a cost savings in addition to an improved environmental profile."

The NSC believes that it is important to establish best practice guidelines in order to reduce the life cycle impact of stone products. In partnership with The University of Tennessee (UT) Center for Clean Products, the NSC will produce a series of best practice documents, case studies, materials fact sheets and a life cycle assessment.

More information on the NSC's research and results, including a link to this first best practice document and all other publications, may be found at [http://www.genuinestone.com/env\\_researchandresults.php](http://www.genuinestone.com/env_researchandresults.php).

## Sicily's Stone Project Visits Chicago

In an effort aimed at finding new ways of presenting the Sicilian economic-productive industry into international mar-

News continued on page 48



**MUSTANG STONE QUARRIES, LLC,**  
a growing quarry, seeks exceptional  
Quarry Master candidates for dimensional  
limestone quarry in southern Oklahoma.

Duties will include quarry planning,  
employee training & supervision, main-  
tenance oversight, regulatory compliance,  
and reporting.

We offer competitive compensation,  
relocation reimbursement, and benefits.

Please fax cover letter and resume  
to: 240.255.8641

# BUILDING A STRONG NATURAL STONE INDUSTRY

## STARTS WITH YOU.

Since 1919, BSI has worked on behalf of our membership providing education for members and the design community. We promote the use of natural stone to increase consumer demand while connecting our members to people and resources. BSI is also an industry advocate for legislative issues. Joining BSI benefits you today and as we build a strong industry for tomorrow.



**BUILDING  
A STRONG  
INDUSTRY  
TOGETHER.**

Become a BSI member today.  
Call 866-786-6313 or visit  
[www.buildingstoneinstitute.org](http://www.buildingstoneinstitute.org)

## Click on *Who's Who* and find the Stone Products and Services you're looking for...

**by Type:**



**by Region:**



**by Company:**



Visit [www.buildingstoneinstitute.org](http://www.buildingstoneinstitute.org) and click on *Who's Who* to quickly find contacts for Stone Products and Services. It's the industry's most comprehensive Web site for natural stone uses, suppliers, educational programs, and events that benefit architects, designers, builders, and specifiers.

[www.buildingstoneinstitute.org](http://www.buildingstoneinstitute.org)



News continued from page 46

kets, The Region of Sicily's Stone Project has been conducting trade missions in Chicago. The first took place in July 2008 and the second in October 2008. The Sicilian delegates met with local institutions, managers and owners of private companies, as well as architects and interior designers who had expressed an interest in the project.

The goal of the "Country Partnership Project" is to focus the promotional programs of the Region of Sicily on the regional economic sectors and geo-economic areas that are strategic for the regional administration.

In Sicily, the stone industry, along with agricultural food products, are the sectors most extensively exported. The stone industry is at the top of the major cut stone exporting regions, especially with regard to the Middle East markets.

The marble industry encompasses a vast range of production types, from very rough cut pieces to the most prestigious finished marble for decoration and restoration.

Various industry products are on the market: rough material (marble and granite), processed material - cut stone (tiles, mosaics, cubes), simple processed pieces (small blocks, paving stones, kerbstones), and slate.

The following 20 companies from Sicily participated:

Consorzio Perlato Sicilia, Iovino Marmi, Santoro marmi, Consorzio Ceramiche Desuir, Calandra marmi Sas, Nuovo art spa, CIMA srl, Pellegrino Francesco and group Pellegrino IMPORT-EXPORT srl, Alfa Graniti, Italia Lithos srl, Gieffevi, TREEMME dei Flli Micelli, SICILIANA INDUSTRIA LAVORAZIONI MARMI, lavorazione Industriale Marmi e Affini-LIMA, SANTANGELO MARMI, Settapani, AVOLA LUCIANO di AVOLA GIUSEPPE, Oddo marmi Srl and ORO marmi.

The companies' part of the consortium is the extraction, working and the commercialization of the marble. These companies vary in their types of produced marble and their uses, such as tiles, furniture, slabs, blocks and bathroom fittings. These companies export their products worldwide. ♦

- |   |  |  |
|---|--|--|
| <p><b>14 Adirondack Natural Stone, LLC</b><br/>P.O. Box 225,<br/>Whitehall, NY 12887<br/>Phone: 518-499-0602<br/>Fax: 518-499-0602<br/>www.adirondacknaturalstone.com</p> <p><b>25 Anderson Brothers &amp; Johnson</b><br/>2128 Main Drive<br/>P.O. Box 26<br/>Wausau, WI 54402<br/>Phone: 800.826.1581<br/>FAX: 715.539.3803</p> <p><b>5, 47 Building Stone Institute</b><br/>551 Tollgate Road, Suite C<br/>Elgin, IL 60123<br/>Phone: 866.786.6313<br/>Fax: 847.695.0174<br/>www.buildingstoneinstitute.org</p> <p><b>19 Bybee Stone Co., Inc.</b><br/>P.O. Box 968<br/>Bloomington, IN 47402<br/>Phone: 812.876.2215<br/>Fax: 812.876.6329<br/>www.bybeestone.com</p> <p><b>22 Cheshir Stone</b><br/>2820 Lombardy Lane<br/>Dallas, TX 75220<br/>Phone: 214.350.6781<br/>Fax: 214.350.6818<br/>www.cheshirstone.com</p> <p><b>1 Connecticut Stone Supplies, Inc.</b><br/>138 Woodmont Road<br/>Milford, CT 06460<br/>Phone: 203.882.1000<br/>Fax: 203.882.1991<br/>www.ConnecticutStone.com</p> <p><b>43 Cumberland Mountain Stone, Co.</b><br/>389 Flagstone Lane<br/>P.O. Box 297<br/>Crossville, TN 38557<br/>Phone: 800.334.7719<br/>Fax: 931.484.6329</p> <p><b>3 Delaware Quarries</b><br/>6603 Route 202<br/>P.O. Box 778<br/>New Hope, PA 18938<br/>Phone: 800.533.4954<br/>Fax: 215.862.1680<br/>www.delawarequarries.com</p> <p><b>IFC Delta Stone</b><br/>2276 South Daniels Road<br/>Heber City, UT 84032<br/>Phone: 435.654.3336<br/>Fax: 435.654.3337<br/>www.deltastoneproducts.com</p> <p><b>38 Diaz Stone and Pallet, Inc.</b><br/>RR2 Box 205<br/>Kingsley, PA 18826<br/>Phone: 570.289.8760<br/>Fax: 570.289.9958<br/>www.diazstoneandpallet.com</p> <p><b>37 Featherrock, Inc.</b><br/>20219 Bahama Street<br/>Chatsworth, CA 91311<br/>Phone: 800.423.3037<br/>Fax: 818.882.9643<br/>www.featherrock.com</p> <p><b>28 Gallegos Corp.</b><br/>P.O. Box 821<br/>Vail, CO 81658<br/>Phone: 970.926.3737<br/>Fax: 970.926.3727<br/>www.GallegosCorp.com</p> <p><b>9 House of Stone, Inc.</b><br/>3528 Fruitvale Ave<br/>Bakersfield, CA 93308<br/>Phone: 800.304.6135<br/>Fax: 661.326.1082<br/>www.houseofstoneinc.us</p> | <p><b>33 Husqvarna Construction Products</b><br/>17400 West 119th Street<br/>Olathe, Kansas 66061<br/>Phone: 800.845.1805<br/>Fax: 800.872.1125<br/>www.dbstone.com</p> <p><b>15 Indiana Limestone</b><br/>301 Main Street<br/>Oolitic, IN 47451<br/>Phone: 812.275.3341<br/>Fax: 812.275.3344<br/>www.ilco.com</p> <p><b>41 Lyons Sandstone</b><br/>2439 CR 37 E<br/>Lyons, Colorado 80510<br/>Phone: 303.823.5659<br/>Fax: 303.823.0173<br/>info@lyonssandstone.com<br/>www.lyonssandstone.com</p> <p><b>42 MS International, Inc.</b><br/>2095 N. Batavia<br/>Orange, CA 92865<br/>Phone: 714.685.7564<br/>Fax: 714.685.7569<br/>www.msistone.com</p> <p><b>29 Meshoppen Stone, Inc.</b><br/>P.O. Box 127<br/>Meshoppen, PA 18630<br/>Phone: 570.833.2767<br/>Fax: 570.833.2180<br/>www.meshoppenstone.com</p> <p><b>46 Mustang Stone Quarries</b><br/>523 South Cascade Ave, Suite E<br/>Colorado Springs, CO 80903<br/>Phone: 240.255.8641<br/>www.mustangstone.com</p> <p><b>13 Natural Stone Council</b><br/>P.O. Box 539<br/>11 Crestwood Dr.<br/>Hollis, NH 03049<br/>Phone: 800.210.3916<br/>Fax: 603.465.2616<br/>www.genuinestone.com</p> <p><b>19 New Mexico Travertine, Inc</b><br/>3700 Camino Del Llano<br/>Belen, NM 87002<br/>Phone: 505.864.6300<br/>Fax: 505.864.6390<br/>www.nmtravertine.com</p> <p><b>25 North Carolina Granite Corporation</b><br/>151 Granite Quarry Trail<br/>Mount Airy, NC 27030<br/>Phone: 336.786.5141<br/>Fax: 336.786.6984<br/>www.ncgranite.com</p> <p><b>45 Pinnacle Stone Products, LLC</b><br/>3001 Lower Valley Rd<br/>Parkesburg, PA 19365<br/>Phone: 610.593.7626<br/>Fax: 610.593.7903<br/>www.pinnaclestoneproducts.com</p> <p><b>35 Rocky Ridge Stone Company</b><br/>29 Pugh Cemetery Road<br/>Crossville, TN 38571<br/>Phone: 931.484.7158<br/>Fax: 931.484.7161<br/>www.rockyridgestoneco.com</p> <p><b>39 Siloam Stone, Inc.</b><br/>315 N. 7th Street<br/>Canon City, CO 81212<br/>Phone: 719.275.4275<br/>Fax: 719.275.9050<br/>siloam@ris.net<br/>www.siloamstone.com</p> | <p><b>IBC TexaStone Quarries</b><br/>P.O. Box 38<br/>Garden City, TX 79739-0038<br/>Phone: 432.354.2569<br/>Fax: 432.354.2669<br/>www.texastone.com</p> <p><b>34 Tri State Stone &amp; Building Supply, Inc.</b><br/>8200 Seven Locks Road<br/>P.O. Box 34300<br/>Bethesda, MD 20827<br/>Phone: 301.365.2100<br/>Fax: 301.365.5524<br/>www.carderock.com</p> <p><b>18 Trow &amp; Holden</b><br/>45 South Main Street<br/>P.O. Box 475<br/>Barre, VT 05641<br/>Phone: 800.451.4349<br/>Fax: 802.476.7025<br/>www.trowandholden.com</p> <p><b>23 Vinci Stone Products</b><br/>798 Marriottsville Road<br/>Marriottsville, MD 21104<br/>Phone: 410.442.4000<br/>Fax: 410.442.4001<br/>www.vincistone.com</p> <p><b>32 Vogelman West Associates</b><br/>P.O. Box 921<br/>Avon, CO 81620<br/>Phone: 970.949.4138<br/>Fax: 970.845.7605<br/>www.vogelmanwest.com</p> <p><b>OBC W.F. Meyers</b><br/>1017-14th Street<br/>P.O. Box 426<br/>Bedford, IN 47421<br/>Phone: 812.275.4485<br/>Fax: 812.275.4488<br/>www.wfmeiers.com</p> <p><b>9 World Wide Stone Corp.</b><br/>15275 N 83<sup>rd</sup> Place<br/>Scottsdale, AZ 85260<br/>Phone: 480.734.2303<br/>Fax: 602.438.6888<br/>www.durangestone.com</p> |
|---|--|--|

# TEXASTONE QUARRIES

## Specializing In:

- Balusters
- Cladding
- Cobblestones
- Columns
- Dimensional  
Cut Blocks

HADRIAN

TEXASTONE PINK

TEXAS PEARL

- Panels
- Quarry Blocks
- Slabs
- Split-Face
- Table Tops
- Tile

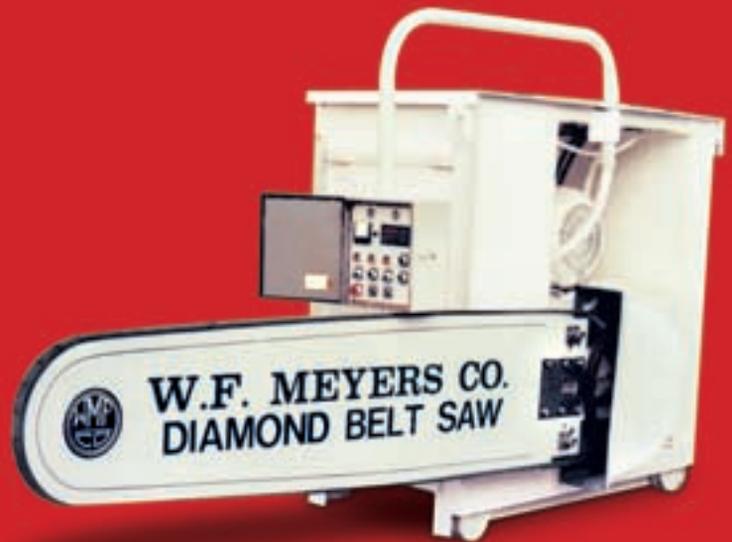
CEDAR HILL CREAM

DESERT SUNSET

PERMIAN SEA CORAL

PO Box 38  
Garden City, TX 79739  
O:432-354-2569 F:432-354-2669  
Toll Free:1-866-896-7613  
[www.TexaStone.com](http://www.TexaStone.com)  
[TexaStone@aol.com](mailto:TexaStone@aol.com)

\*NOTE: These samples show the general appearance of the stone. Color, texture, dimension, and other physical properties will vary in all natural stone. Stone is a product of nature; testing to determine specific physical qualities should be performed for its suitability for each project. Each piece is unique and can never be duplicated.



## Still the one that cuts it.

Designed and built like no other.  
The original W.F. Meyers Diamond Belt.  
Anything else is a compromise.



The world's finest stone craftsmen choose quiet,  
true-cutting W.F. Meyers diamond blades.

**WF MEYERS**  
**COMPANY, INC.**

The Right Tool for Every Job.™

1-800-457-4055 | [www.wfmeyers.com](http://www.wfmeyers.com)  
1017 14th Street P.O. Box 426 | Bedford, Indiana 47421-0426

*\*W.F. Meyers Diamond Belt Saws purchased prior to 2002 can be retrofitted with Auto Saw technology. Call for details.*