

# Brick—the Smart, Natural Choice

Add BEAUTY and VALUE TO YOUR HOME with BRICK FROM GENERAL SHALE





# III Inspirate BRIGE NAME: Providence



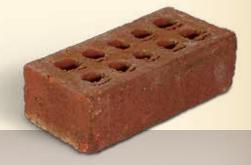
# Timeless Brick

A brick home or building is more than just a statement of style; it's a sound investment in a structure's future. When constructed properly, a brick exterior can be expected to last around 100 years.

As one of the oldest building materials still in use today, brick is the embodiment of natural and sustainable building practices. Brick is highly energy efficient, as it retains heat and coolness better than most other natural construction materials or techniques. These energy-efficient characteristics mean not only a smaller utility bill for the homeowner but also a smaller impact on our environment.

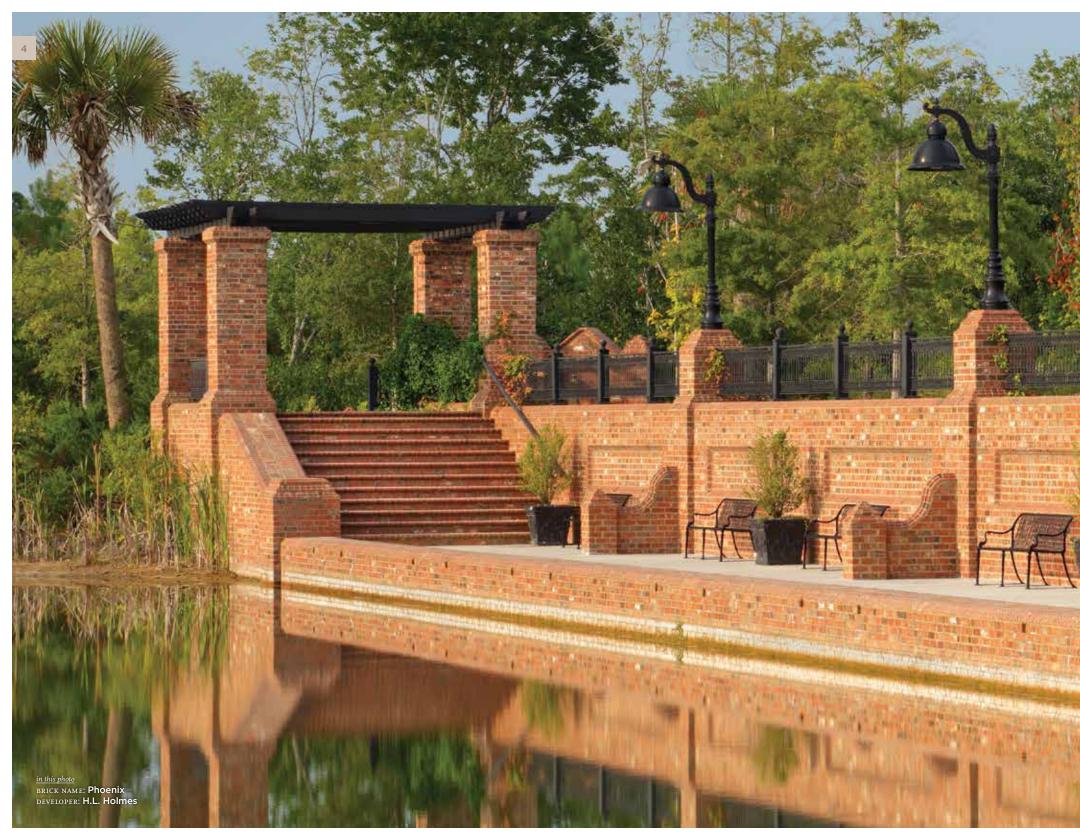
General Shale brings the power of choice right to the consumer with a multitude of color and size variations to choose from. The timeless art of masonry offers an endless array of stylistic options for today's homeowner. From flemish and herringbone patterns to pinwheel or traditional layouts, a skilled mason can bring the perfect artful touch to your home or business.

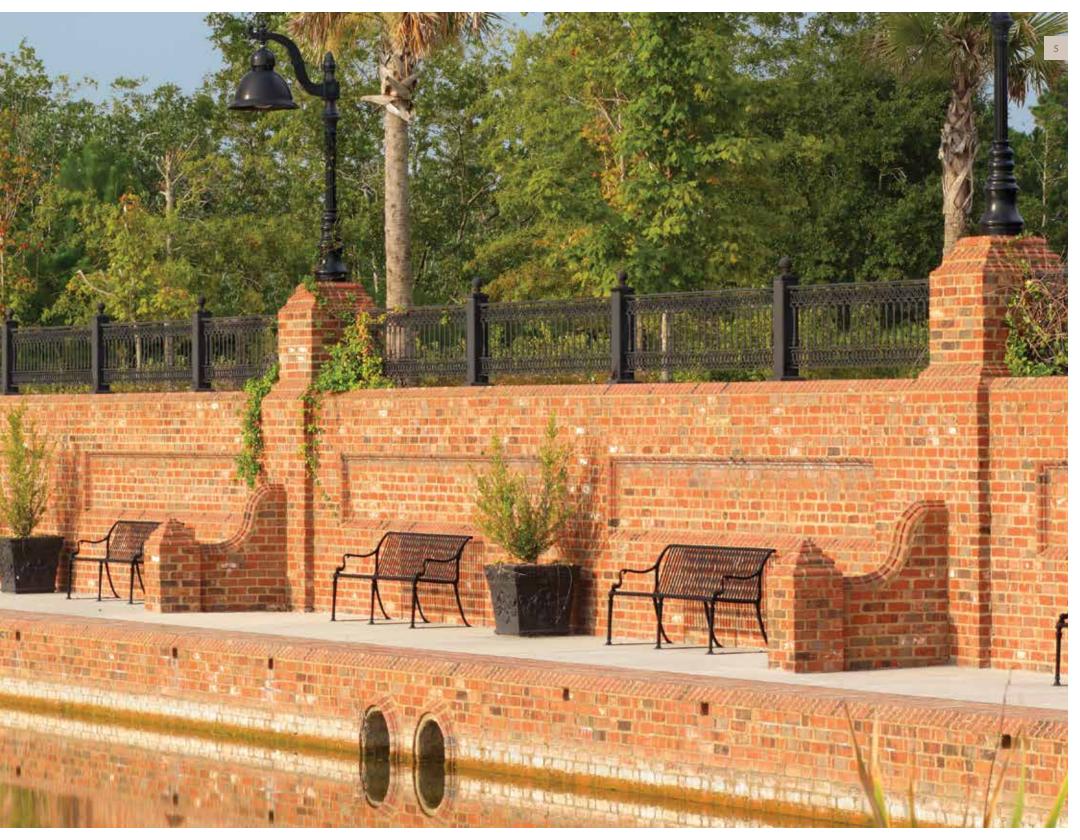
So make the smart choice. Choose brick and enjoy the years of natural aesthetics, energy efficiency and unmatched style that only brick can bring.



HELPFUL HINT

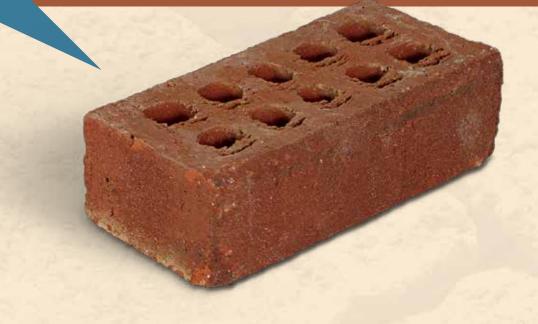
When deciding on a brick mason, ask your builder or contractor to provide examples of their work and find out if they have ever completed any projects similar to yours.







Natural Clay
Wide Color Selection
Energy Efficiency
Higher Resell Value
Zero Maintenance
Lower Insurance Costs
Sustainable Process
Lasts a Lifetime



\$5.35 / Sq. ft.
TYPICAL INSTALLED PRICING
FOR MODULAR SIZE\*

\*Pricing differs per region
Listed prices are for product and
typical installation and can increase
when additional resources are included.

# The Showdown of Exterior CLADDINGS

Cost of each per sq. ft. installed – Brick Industry Association, Southeast Region 2013



#### VINYL SIDING \$2.55 / sq. ft.

Benefits: Low cost, easy installation

Disadvantages: Poor aesthetics; poor resistance to fire, poor energy and sound insulation value; dents/dings/misalignment/warping; moisture damage over time



#### SYNTHETIC STONE \$9.95 / sq. ft.

Benefits: Natural material appearance; high resell value; zero maintenance; resistance to moisture and wind; sustainability

Disadvantages: Requires precision construction practices; possible moisture damage; color could change over time



#### FIBER SIDING \$4.15 / sq. ft.

Benefits: Better aesthetics than vinyl; no special foundation support needed

Disadvantages: Seams can be visible; contains wood pulp — susceptible to wind, fire, moisture, chips/dents; may show waves when attached to imperfect subframe



#### THIN BRICK \$9.85 / sq. ft.

Benefits: Natural materials; aesthetics; less weight and wall loading; design flexibility (exterior and interior walls); good energy efficiency; moisture resistance

Disadvantages: Provides less structural strength than brick or real stone



#### SYNTHETIC STUCCO \$6.45 / sq. ft.

Benefits: Various colors, better energy efficiency and sound insulation.

Disadvantages: Susceptible to dents, tears, holes (repatching can be problematic); poor moisture resistance; poor fire resistance; insect infestation; cracks easily; may require higher insurance premiums



#### REAL STONE \$16.00 / sq. ft.

Benefits: Natural materials; super aesthetics, various types/colors; high energy efficiency and sound insulation; superior home resell value; sustainability; zero maintenance

Disadvantages: Requires special trade skills to install

# Our Environmental Commitment

As one of America's largest brick manufacturers, a major concrete block manufacturer and a supplier of a variety of masonry materials for the construction industry, we are proud of our products and their role in our environmental accomplishments.

General Shale has a long history of responsible stewardship of the environment. We lead our industry with innovative processes while providing the world's best building materials for customers across the country and around the world. On these pages, you will find a few facts that chronicle the story of the environmental benefits of brick in different applications.

#### LONGEVITY

Clay bricks have been used for hundreds of years because they last for generations and require almost no maintenance. Buildings made of brick stand the test of time due to the inherent strength, durability, and weather-resistant and fire-resistant qualities of brick products.

#### **EFFICIENCY**

Brick's high thermal mass allows it to better regulate indoor temperature. Brick retains heat from the sun

during winter days and then releases it back into the building at night. In the summer, brick absorbs heat slowly, keeping living and working conditions much more stable compared to other building materials.

Over a 50-year period, as much as 89% of a building's cost lies in the regulating of indoor temperature, so brick is the best choice for an energy-efficient construction material.

#### **RECYCLABILITY**

Brick buildings can be renovated for new use long after original construction. Brick can also be salvaged for use in new construction for an authentic, broken-in look and feel. It can even be crushed for use in landscaping or concrete or as a base for pavement.

#### **ENVIRONMENTAL FOOTPRINT**

Because brick can be recycled, is energy efficient and lasts for such a long period of time, its cumulative environmental footprint is far smaller than materials that are considered disposable after 10 to 15 years.

#### HEALTH AND SOCIAL BENEFITS

Brick interior walls contribute to better air quality by eliminating the need for interior paint, which can contain harmful VOCs. Brick also fosters a positive emotional environment, as the warmth of natural materials has been shown to improve overall outlook in people who occupy those environments on a regular basis.

#### **OUR ENVIRONMENTAL FUTURE**

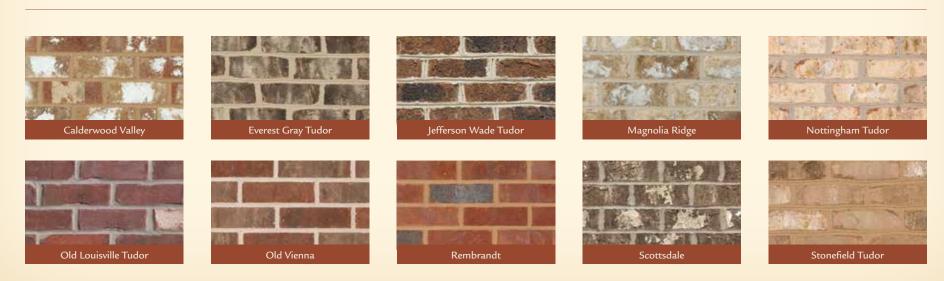
As General Shale brings ancient building materials into our modern times, we will continue to strive for better use of our natural resources and more efficient methods of production and distribution. Our continual goal is to achieve a level of environmental stewardship worthy of our planet and of the natural materials that lie at the heart of our business.

Whether we are fortunate enough to have a relationship with you as a mason, a general contractor, a homeowner or a weekend warrior, we want you to rest assured that our products are created with the utmost care and respect for our planet.

### Top 10 Colors from Cleveland County, North Carolina



# Top 10 Colors from Spring City, Tennessee



# Top 10 Colors from Denver, Colorado













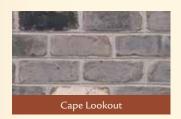




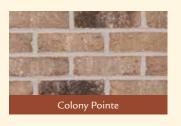




# Top 10 Colors from Moncure, North Carolina







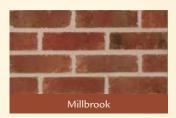














# Top 10 Colors from Roanoke, Virginia







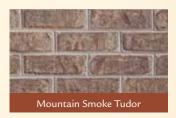






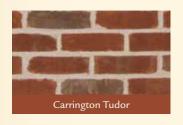








# Top 10 Colors from Marion, Virginia

















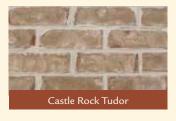




# Top 10 Colors from Rome, Georgia



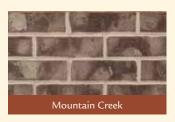


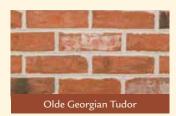












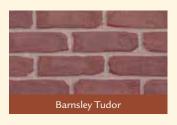




# Top 10 Colors from Mooresville, Indiana





















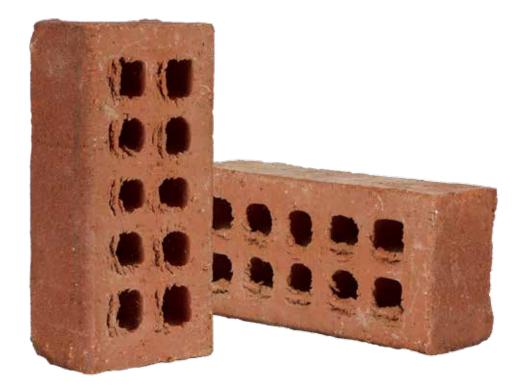
# Bricks by Size

General Shale offers hundreds of colors, styles, textures and sizes of brick.

You can choose from traditional reds to pastels, earth tones, misty grays, browns and deep burgundies. Our surface textures run the gamut from smooth for a sleek, modern feel to heavily textured units that create an Early American handmade look. Build beauty, value, strength and distinctive appeal into your next project with our brick.

Looking for cost savings? Energy efficiency? Long-term beauty? No matter what your needs, General Shale has the type of brick for the job. From a variety of colors and textures to different sizes for different projects — General Shale is your one-stop source.

Whether you are a homeowner, contractor, architect or designer, the General Shale promise is to help you build the most enduring project possible with the brick and other materials we offer.



#### LIGHTWEIGHT MODULAR

3-1/2" bed, 2-1/4" face, 7-5/8" length

Modular size is the most common in the industry. When laid with 3/8" mortar joints, it forms an 8" modular dimension. With a slightly larger void area (30% versus 24%), C652 units allow for a greater fire resistance rating.



#### ENDURANCE RS4

5-5/8" bed, 2-3/4" face, 11-5/8" length

The Endurance unit is a load-bearing structural brick that can be reinforced with steel to provide very strong walls capable of handling high loads.



#### UTILITY

3-5/8" bed, 3-5/8" face, 11-5/8" length

Utility-sized bricks bring labor costs down compared with standard or modular-sized bricks. Its larger length dimension, 11-5/8" wide, makes it well suited for a wide range of commercial and institutional applications.



#### ELITE

3-1/8" bed, 3-1/2" face, 10-1/8" length

The Elite brick is an ASTM C216 unit that is commonly used in Canada. This brick is referred to as a solid unit because the void area is less than or equal to 25%. Face shell is 3/4" or greater.



# LIGHTWEIGHT KING SIZE

2-3/4" bed, 2-3/4" face, 9-5/8" length

The King Size unit provides a very low installed wall cost because fewer bricks are required per square foot. The 2-3/4" width complies with model building codes in the U.S. (Minimum 3" bed depth is required in Canada.)



# QUEEN SIZE

2-3/4" bed, 2-3/4" face, 7-5/8" length

The Queen Size provides the same face size as Engineered Modular with a cost-effective reduced bed depth of 3".



# ENGINEERED MODULAR

3-1/2" bed, 2-3/4" face, 7-5/8" length

Engineered Modular has the same bed size as Modular, with an increased face height. This size is often referred to as an "oversized" brick.

# New Products — New Brick Colors

Three new brick colors have been added to our vast selection — "Mallory Creek," "Mountain Creek" and "Stone Canyon Tudor."

Mallory Creek features elegant, earth-toned colors unlike anything the competition offers. Sizes available for Mallory Creek are Lightweight Queen, Lightweight Engineered Modular and Lightweight Modular.

Mountain Creek is produced on a "Millstone" brick with added textures reminiscent of a rock face. It is currently available in Lightweight King, Lightweight Queen and Lightweight Modular sizes.

Stone Canyon Tudor brick features through-the-body coloring, allowing the brick to remain true to its original color in the strongest of outdoor elements. Sizes in which Stone Canyon Tudor is available are Lightweight Queen, Lightweight Engineered Modular and Lightweight Modular.



Searching for the perfect brick for new construction or a renovation? Don't focus on color alone. Brick can have a variety of textures and sizes that can make a big difference in the overall look of your project.





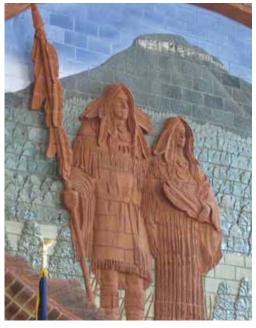


# Brick as Art

The use of brick as sculptured art is a centuries-old tradition. Brick structures in the Middle East include elements of sculpture that have endured for 2,000 years or more. Today, architects and designers can add dimension and style to new construction or remodeling projects by incorporating a brick sculpture. The possibilities are virtually unlimited. General Shale's Masonart® brick sculpting capabilities include a line of standard painted and unpainted murals as well as custom design services to provide ideas and support. Our award-winning on-staff sculptor, Johnny Hagerman, can create one-of-a-kind, three-dimensional brick sculptures from original drawings.

Hagerman, one of the country's foremost brick sculptors, has been perfecting the art of brick sculpting since the mid-1980s. Since then, he has created masterpieces for a multitude of large companies nationwide, including the Opryland Hotel in Nashville, Tennessee.

At General Shale, we know that our customers want to enhance the beauty of their homes and businesses with the long-lasting durability of brick, and our Masonart offers even more versatility for a look that will stand the test of time.











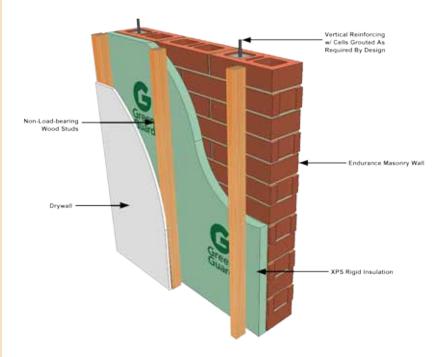
# Endurance RS4™ Structural Brick

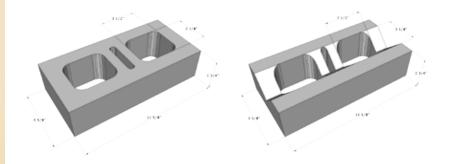
The RS4 stands for "Real Strong, Real Safe, Real Sustainable, Real Smart"—the 4 Rs. Endurance RS4 Brick is safer, stronger, more energy efficient and sustainable and is designed for structural longevity. This product eliminates the need for load-bearing wood or steel framing and has excellent thermal mass properties. In addition, the product is suitable for any type of foundation, withstands higher loads and meets seismic requirements. It is the perfect solution for homes, especially in areas prone to high winds, tornadoes and earthquakes. It is also recommended for important commercial or government buildings, such as hospitals, schools, courthouses and police stations.

#### One-Wall Advantage

The featured diagram demonstrates an interior wall treatment using Endurance Structural Brick combined with continuous insulation. This combination dramatically increases the structure's energy efficiency while decreasing the overall cost of construction by building one exterior wall rather than two.







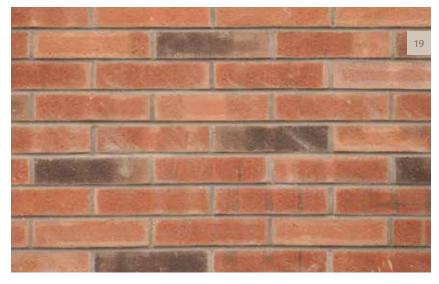
# Perfect for Energy-Efficient Construction

Brick homes are more energy efficient than many people realize.

Due to its high thermal mass, brick responds more slowly than other exterior cladding materials to changes in temperature. This phenomenon is called "thermal lag." Thermal lag keeps the inside temperature of a home at a more moderate level when outside temperatures change, thereby reducing peak heating and cooling loads on a home's HVAC system.

#### Thermal Mass Properties

Endurance wall systems can be used in conjunction with any type of interior wall construction (e.g., furring strips, non-load-bearing metal studs, hat channel) and insulation systems. One of the most efficient methods, both in terms of cost and energy savings, is one using continuous rigid insulation, reducing thermal bridging, making Endurance Structural Brick one of the most energy-efficient building materials in the industry.





# Ashlar Park Series — Dimensional Brick

Build with Unmatched Depth and Quality

Ashlar Park brick adds an extra dimension to General Shale's well-known textured brick products. The most compelling characteristic is the unique look created by the bundling of three individual sizes within each product: full single units  $(2-1/4" \times 7-5/8")$ , double units  $(4-7/8" \times 7-5/8")$  and triple units  $(7-5/8" \times 7-5/8")$ .

#### **Application Methods**

Ashlar Park brick provides two methods of application in both residential and commercial structure exterior applications. They employ a standard flush application for a traditional look and feel as well as an element that extends beyond the face of the wall for a unique look with added depth and texture.

#### Packaging

Ashlar Park bricks are packaged to cover 50 square feet of wall area. Each package contains 252 single, 28 double and 14 triple units.

#### Installation

Ashlar Park brick installs like brick veneer units using standard masonry mortar. While installing facing brick in a random pattern results in a design that is more visually appealing, the pattern shown (recommended design template available) should be followed to maximize usage of all units.











# Ashlar Park Series — Clay Pavers

Pave the Way Like Never Before

Ashlar Park pavers offer multiple-size pavers in a clay package, something for which concrete pavers have been known for years. While the heavily textured appearance is a defining characteristic, they too, like their brick counterparts, are created using three individual sizes: half units (4" x 4"), single units (4" x 8") and double units (8"x 8").

#### Packaging

Ashlar Park pavers are packaged to cover 60 square feet of ground area. Each package contains 90 half units, 135 single units and 45 double units.

#### Installation

Ashlar Park pavers install like typical clay pavers in a flush surface pattern, although a flexible base is recommended. The pattern shown (recommended design template available) should be followed to maximize usage of all units based upon Ashlar Park paver packaging; however, the pavers can be installed in several patterns.





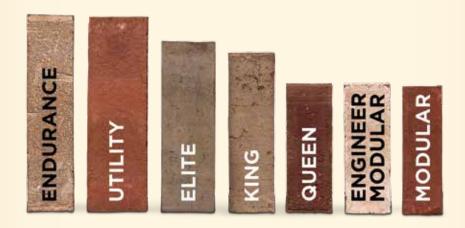




# Dreams Built with General Shale

When building or renovating your ideal home, consider the dream team of General Shale brick and a skilled mason. Discuss with your builder the type of brick exterior you envision, and research existing homes, old and new, to get ideas.

You may also be inspired by the photos in the next several pages. These featured homes utilize brick from General Shale in a variety of ways. Whether interior or exterior, General Shale has the perfect brick style to complement your home's design.





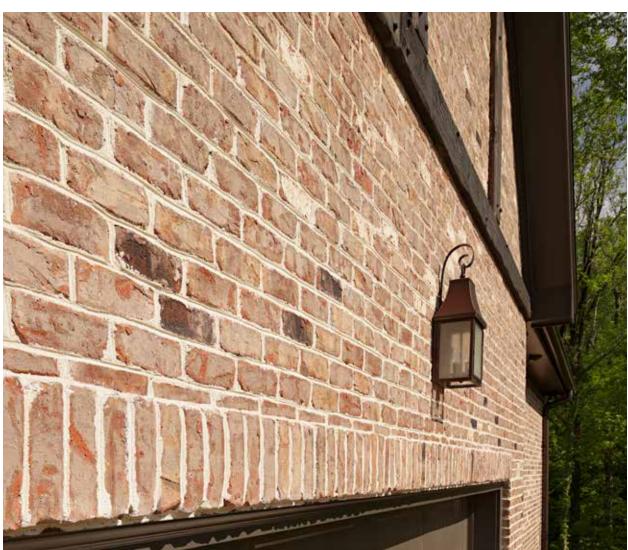
General Shale's residential brick is made to meet ASTM C652, which uses less material and lowers energy costs throughout the manufacturing process and finished product delivery.



















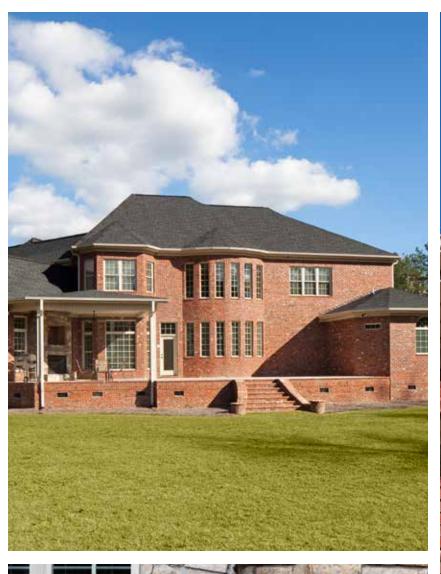












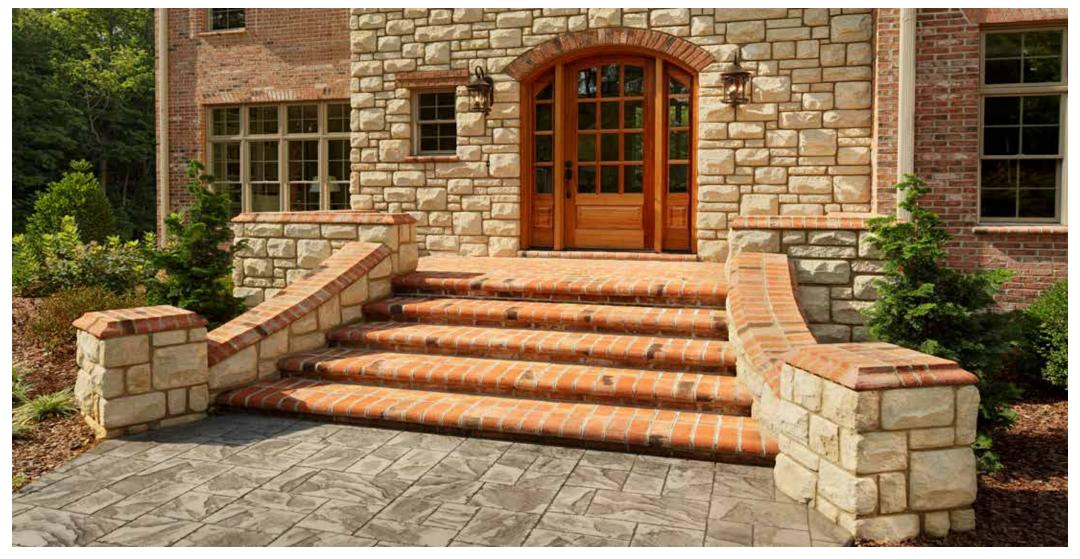












# Multi-Living with General Shale

Just as in other residential and commercial projects, brick is the ideal construction material for large, multi-living structures.

The use of brick allows designers to introduce richness to the building façade in terms of color, texture and shadow that are unattainable with other materials. The beauty and versatility of brick also mean that building professionals can make new construction or renovation projects fit seamlessly into existing neighborhoods.

Brick provides a natural and durable exterior that requires little maintenance. The appearance of a brick exterior appeals to a wide range of potential buyers. The use of brick as a building material gives an added sense of durability and stability to multiliving buildings.

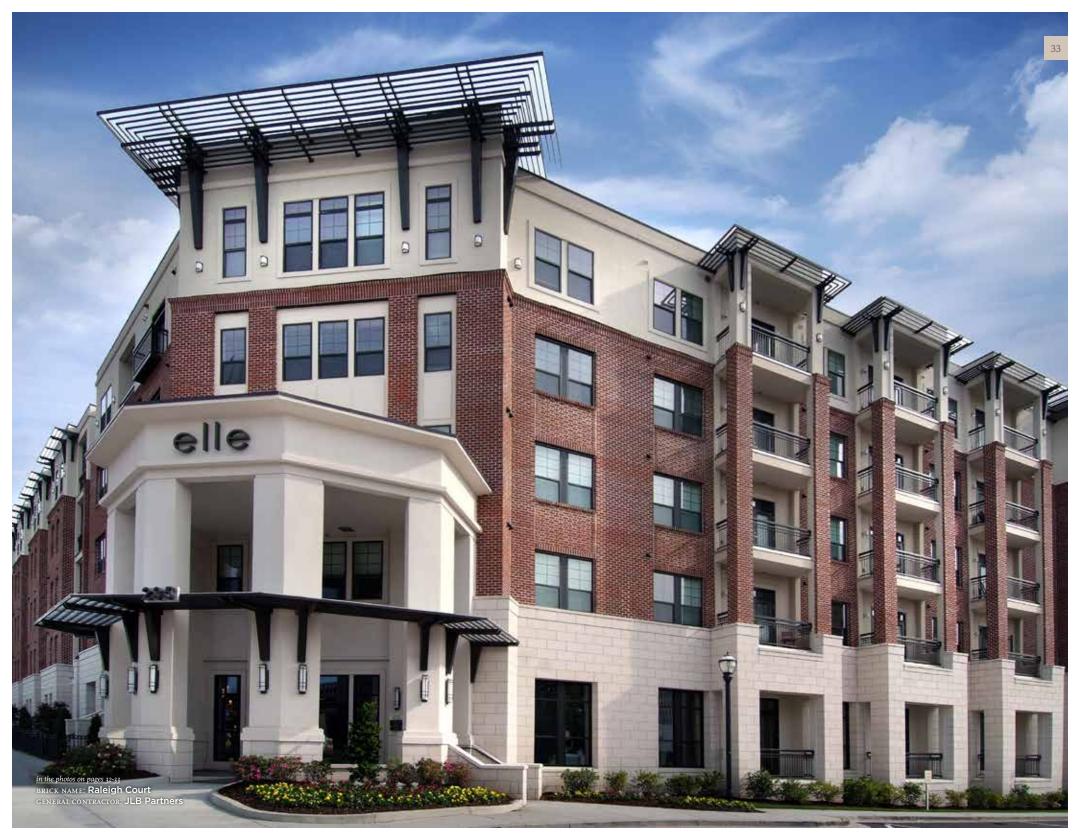
Its low maintenance and traditional, high-quality aesthetic just make good business sense when building multi-living structures with a timelessness that can't be beat.

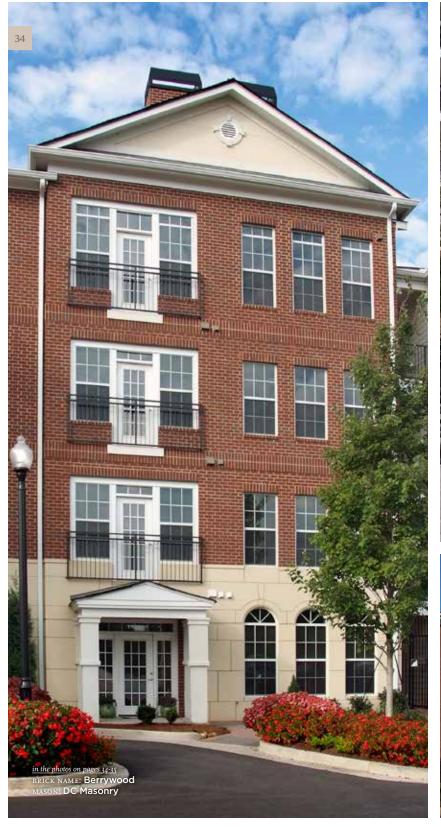






Check out our "Showdown of Exterior Claddings" on pages 6-7 to see how brick stacks up against other exterior types to be the best choice for multiliving structures.



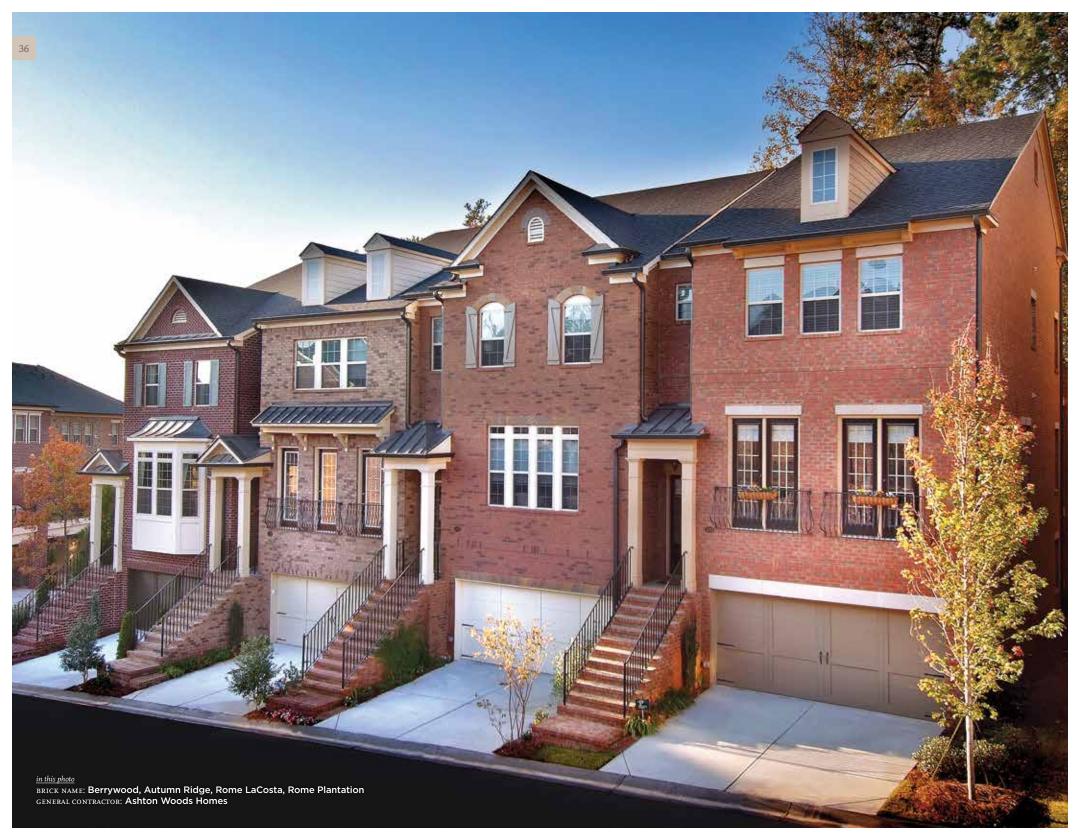










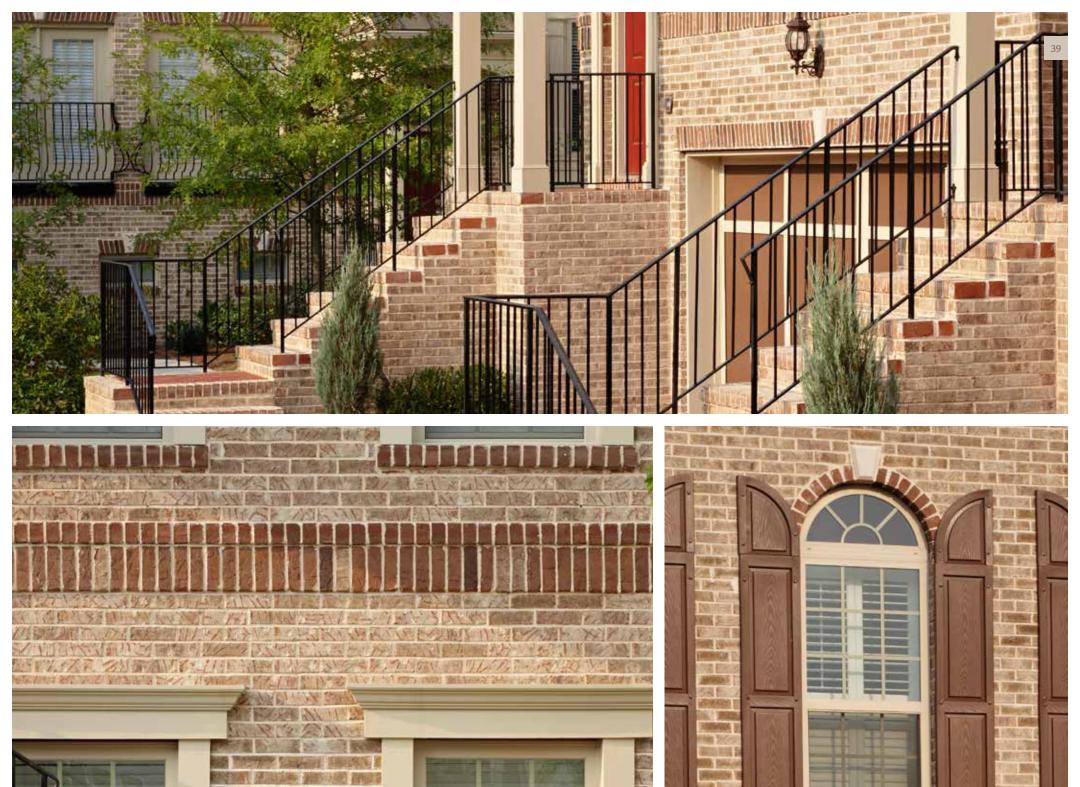












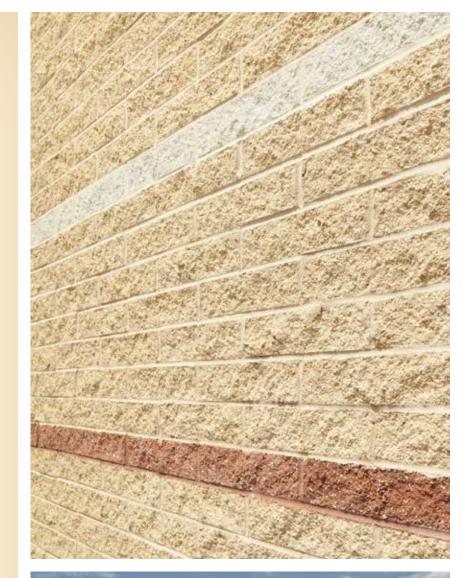
# Commercial Applications

General Shale has been a staple for architects and builders since 1928. Our manufacturing facilities are strategically located across the Southeast and Midwest. With 300 quality distributors from coast to coast, our products are within easy access of any building project in North America.

We take pride in the relationships we have built with our customers. We are proud to be your brick supplier, and we see ourselves as your partner, working with you as you approach each new structure.

From clay and concrete pavers to match practically any environment to thin veneers that add warmth and texture without the need for additional structural support,

General Shale has everything you need for your project. We even offer retaining wall options, concrete masonry units and outdoor living products.







From architects and designers to builders and contractors, the "Professionals" section of our website, www.GeneralShale.com, is the perfect resource center. There you can download our Wall Cost Calculator, view installation videos and much more!













































# BUILDING the AMERICAN DREAM for MORE THAN 80 YEARS

In 1928, General Shale began as a local brick manufacturer in East Tennessee. Over the years, we have grown to be one of America's leading masonry suppliers, with manufacturing and sales sites across the U.S. and Canada. Strategic acquisitions and plant expansions have broadened our product offering to include Arriscraft™ Stone Products, a well-known brand among commercial and residential builders, and a complete line of outdoor living products in the form of do-it-yourself kits. In 1999, General Shale joined forces with the world's largest producer of bricks, Wienerberger of Vienna, Austria, further establishing our commitment to the brick industry.

General Shale has been a driving force in building the American dream for over 80 years. From professional-grade products for some of America's greatest landmarks to high-quality goods for home renovations and backyard projects, our entire portfolio of products stands for quality, service and lasting beauty. Regardless of the size — a small patio renovation or large new home, multi-family housing or multi-story commercial buildings — General Shale is the right solution for your project. Stop by one of our General Shale locations or visit us at www.GeneralShale.com to see our entire selection of products such as:

Brick
Brick Murals
Concrete
Grills

Heaters House Wrap Landscape Lighting Mortar Natural Stone
Outdoor Living Kits
Pavers
Real Brick Siding

Thin Brick
Thin Rock

# RETAIL LOCATIONS

#### **ALABAMA**

7029 Highway 72 West Huntsville, AL 35806 (256) 837-8685

#### **COLORADO**

3255 Drennan Road Colorado Springs, CO 80910 (719) 390-5477

1845 West Dartmouth Avenue Denver, CO 80110 (303) 783-3000

2415 East Mulberry Street Unit #9 Ft. Collins, CO 80524 (970) 484-1292

2122 Highway 6 & 50 Grand Junction, CO 81501 (970) 248-9723

#### **GEORGIA**

121 Turner Bend Road SW Rome, GA 30165 (877) 556-0009

# **ILLINOIS**

Chicago (West) 1975 Aucutt Road Montgomery, IL 60538 (630) 897-7922

Chicago (South) 16109 108th Avenue Orland Park, IL 60467 (708) 460-4581

# **INDIANA**

105 Carmel Drive West Carmel, IN 46032 (317) 846-2566

3401 Mt. Vernon Avenue Evansville, IN 47712 (812) 425-3381

148 Sycamore Lane Mooresville, IN 46158 (317) 831-4614

#### **KENTUCKY**

307 Peterson Drive Elizabethtown, KY 42701 (270) 765-2116

211 N. English Station Road Louisville, KY 40216 (502) 448-1780

# **MARYLAND**

34 Thomas Avenue Baltimore, MD 21225 (410) 789-2708

#### **MICHIGAN**

42374 Mound Road Sterling Heights, MI 48314 (586) 726-0400

6556 Whitmore Lake Road Whitmore Lake, MI 48189 (734) 665-8800

# MISSISSIPPI

2027 McCullough Boulevard Tupelo, MS 38801 (662) 840-8221

#### **MONTANA**

531 Sugar Avenue Billings, MT 59101 (406) 259-9222

#### **NORTH CAROLINA**

10800 Reames Road Charlotte, NC 28269 (704) 599-2877

1622 Long Branch Road Grover, NC 28073 (704) 937-7431

1060-A Highway 66 South Kernersville, NC 27284 (336) 993-0882

245 Brick Plant Road Moncure, NC 27559 (919) 777-6899

8820 Westgate Park Drive Raleigh, NC 27617 (919) 828-0541

2507 Jefferson Davis Highway Sanford, NC 27332 (919) 775-2121

3750 Highway 421 North Wilmington, NC 28401 (910) 452-3498

# **SOUTH CAROLINA**

425 Oak Road Piedmont, SC 29763 (864) 801-1775

#### **TENNESSEE**

7833 Lee Highway Chattanooga, TN 37421 (423) 485-1260

400 Wittichen Lane Humboldt, TN 38343 731-824-5272

3015 Bristol Highway Johnson City, TN 37601 (423) 282-4661

925 East Stone Drive Kingsport, TN 37660 (423) 245-6131

9714 Parkside Drive Knoxville, TN 37922 (865) 531-6203

605 Morrison Street McMinnville, TN 37110 (931) 473-2139

2076 Whitten Road Memphis, TN 38133 (901) 363-1887

1838 West Morris Boulevard Morristown, TN 37813 (423) 586-9666

909 Mountain View Drive Piney Flats, TN 37686 (423) 538-3332

241 Hoyal Lane Spring City, TN 37381 (423) 365-2444

# VIRGINIA

7164 Lee Highway Atkins, VA 24311 (276) 783-3156

16019 Lee Highway Bristol, VA 24202 (276) 591-5400

7500 Mason King Court Manassas, VA 20109 (703) 368-9991

2353 Webster Road Roanoke, VA 24012 (540) 977-5505

# **WYOMING**

1615 East Yellowstone Highway Casper, WY 82601 (307) 234-4831

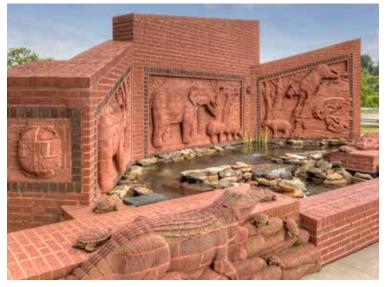
601 East Lincolnway Cheyenne, WY 82001 (307) 634-4474



P.O. Box 3547 3015 Bristol Highway Johnson City, TN 37602 (800) 414-4661 · www.GeneralShale.com













General Shale masonry products are an integral part of a systems solution for sustainable construction. From highly efficient and environmentally friendly production to extremely long product life cycles, General Shale products can benefit both the environment and the building's occupants.

Our company has a long history of responsible stewardship of the environment and has received numerous awards for our conservationist accomplishments. We are proud of leading the masonry products industry with innovative processes while providing the world's best building materials for customers across North America.

