

The Ideal Balance of
Beauty, Performance & Value



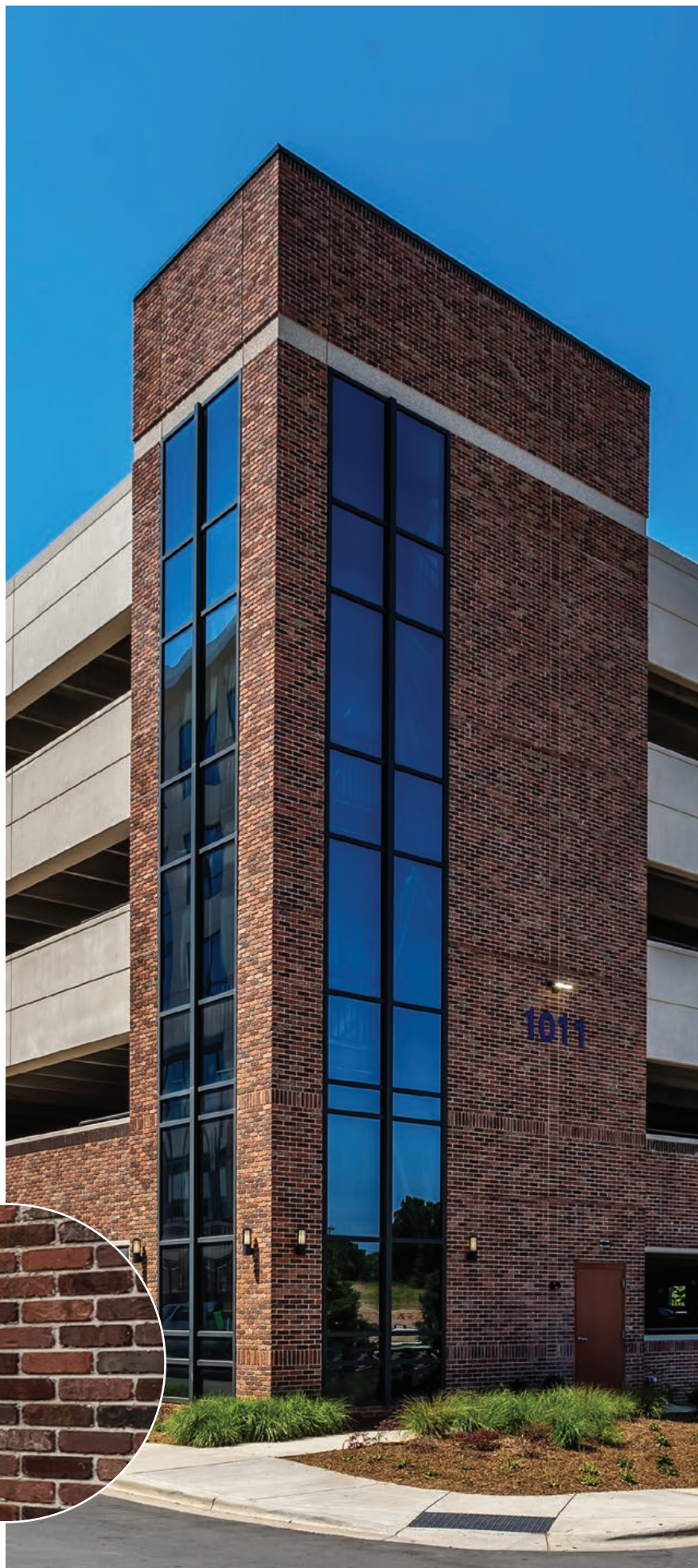
Real Clay Thin Brick
for Precast and Tilt-up Panels

Precast and Tilt-up embedded clay thin brick dramatically transform a building's exterior.

For precast and tilt-up concrete panels, genuine clay thin brick is rapidly becoming an aesthetically desirable and popular finish. Owners, builders, and architects appreciate the appearance and value clay thin brick provides vs. traditional acid etched, sand blasted, or exposed aggregate finishes. No other precast or tilt-up option dramatically transforms a building's exterior into such a classic and time-honored look.

General Shale produces one of the broadest lines of clay thin bricks for precast and tilt-up construction at our centrally located Denver, CO manufacturing plant.

Architects increasingly value the rustic and weathered appearance that our tumbled clay thin bricks provide. The realistic, hand laid look of our precast brick panels allows for the incorporation of additional architectural design elements due to their unique character.



AvidXChange Corporate Headquarters
Charlotte, NC
Brick Style: Old Brick Originals™
& Architectural Classics
Color: Englishpub & Coffeebean



LPL Financial Eastern Headquarters | Fort Mill, SC | Architectural Classics | Old Monobuck (tumbled)



NY Mets Citi Field Stadium | Flushing, NY | Designer Classics | Danbury

Exceptional Efficiency and Durability

Precast and tilt-up concrete embedded clay thin brick panels provide an ideal balance between desired performance, environmental awareness, and aesthetic objectives. For certain large scale projects, thin brick precast panels may also positively affect a building's initial as well as life cycle cost.



EFFICIENCY

No lintels, ledges, weep cavities, waterproofing, or flashing needed. Brick is an integral part of the concrete panel.

Embedded thin brick panels minimize materials and clean-up at the job site. This is critical where construction space is at a premium.

More useable square footage per floor due to thinner wall thickness results in additional rental income.



SCHEDULING

Precast and tilt-up thin brick can be used for many types of projects, including parking structures, office buildings, medical centers, schools, government facilities and more.

Precast thin brick walls are usually installed at a job site on average three to four weeks faster than comparable field laid walls.

No weather delays since casting is done offsite.



DURABILITY

No moisture penetration or joint cracks. Freeze thaw and efflorescence do not affect the brick wall.

No long-term maintenance needed for tuck-pointing or other mortar joint repair, as concrete replaces the less durable mortar.

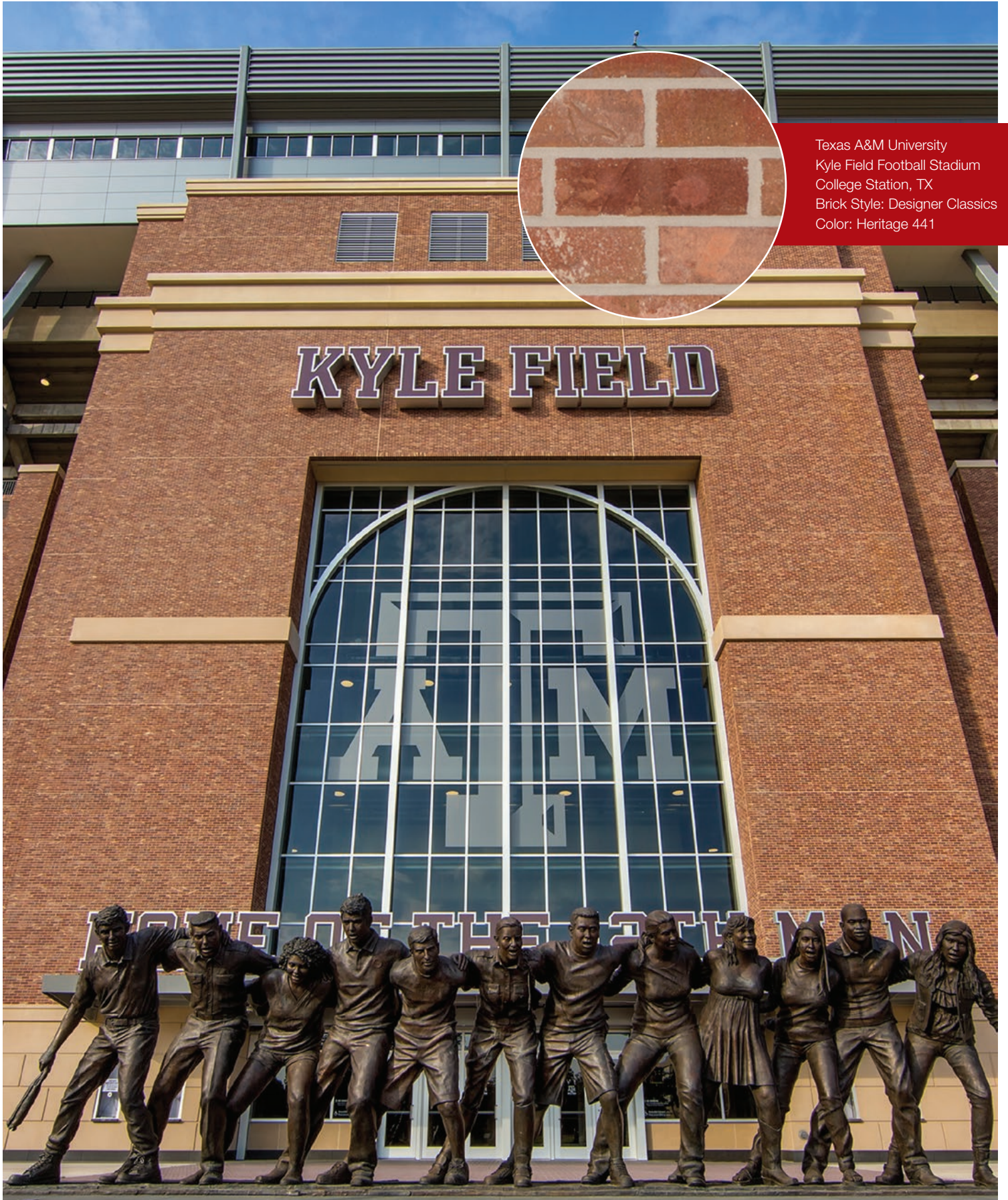
Stronger walls result in greatly increased fire, seismic, tornado, and blast resistance.



SUSTAINABILITY

Thin brick uses 80% less materials and energy to process, manufacture, and transport the finished product. They are eligible for LEED™ points for regional and innovative materials and innovation in design.

The ability to add continuous insulation within concrete panels to achieve the specified R value, and reduce thermal bridging as required by the IECC and ASHRAE Energy Codes.



Texas A&M University
Kyle Field Football Stadium
College Station, TX
Brick Style: Designer Classics
Color: Heritage 441

Styles

Limitless Design Potential

General Shale manufactures a wide selection of solid, multi-color, and textured clay thin bricks, all available with tumbled or straight edges. Unlike many thin brick companies, since our precast/tilt-up bricks are cut from full size bricks, our full bed bricks are identical in appearance to their thin version – an important advantage where both full size and thin bricks are specified on the same project.

Advantages of our tumbled Old Brick Originals™ range from creating a timeless appearance, harmonizing with surrounding historic or industrial buildings, to adding a surprising design impact to the exteriors of modern buildings.



AvidXchange Building | Charlotte, NC
Old Brick Originals™ | Englishpub | Architectural Classics | Coffeebean



Old Brick Originals™

Old Brick Originals™ Thin Brick

Old Brick Originals™ feature a tumbled edge and antique weathered look, in contrast to the straight edge, solid color thin bricks often used on precast and tilt-up projects. The unique visual appeal of General Shale genuine clay thin brick within precast or tilt-up panels imparts an authentic sense of timeless beauty and sophisticated expression.



Carriagehouse



Cigarfactory



Cityhall



Englishpub



Frenchquarter



Ironworks



Peppermill



Schoolhouse



Smokestack



Towerbridge



Townsquare



Trainstation



Ascension St. Clare's Hospital | Weston, WI | Designer Classics | Danbury

Architectural Classics

Architectural Classics

Our Architectural Classics line provides aesthetic excellence and accurate, repeatable colors to ensure maximum usage. The broad palette includes traditional red and earth tones, deep striking colors, and pastel pinks and whites.



Addison



Autumn Leaf Grain



Autumn Leaf Satin



Ballpark



Basilica



Coffeebean



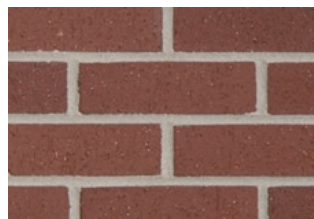
Coliseum



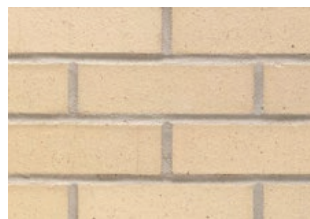
Colonial Grain



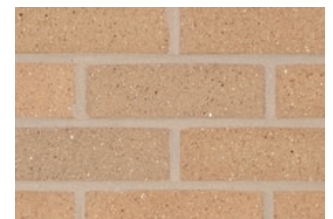
Colonial Satin



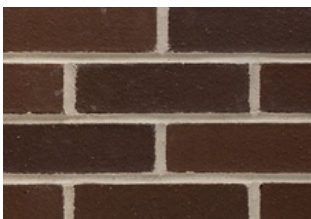
Cooperstown



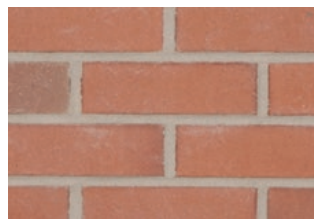
Honeycomb



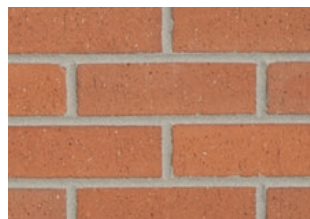
Imperial 41 Grain



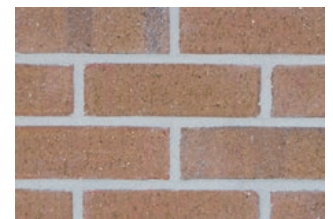
Java



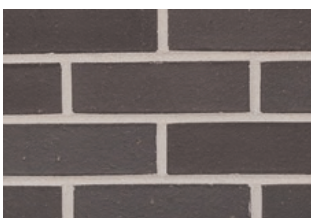
Larimer



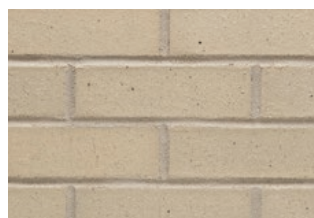
Mandarin



Manitou



Mistyhollow



Parchment



Shadowcanyon



Wheatfield

Designer Classics

Designer Classics

Clean, crisp edges combined with traditional tones and patterns offer a sophisticated look with a hint of charm from our Designer Classics line. Choose from a wide array of color options to highlight any precast or tilt-up project.



Barnwood



Brimstone



Carbondale



Charleston



Chestnut



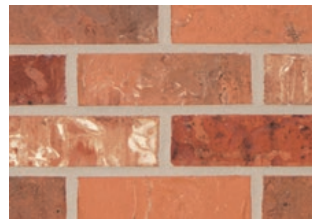
Chicago common



Danbury



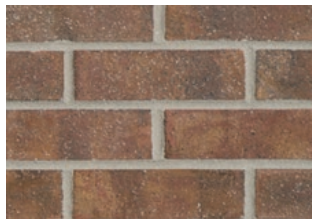
Dover Grey



Georgetown



Heritage 441



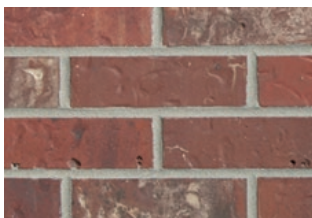
Old Chicago



Stoneybrook



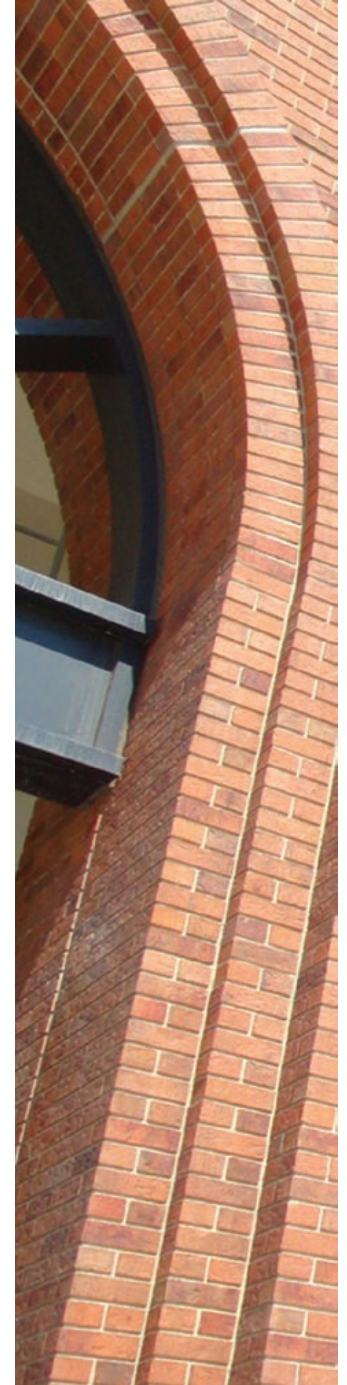
Thundercloud



Universityhill



Waterlodge

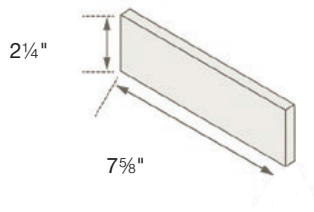


NY Mets Citi Field Stadium
Flushing, NY
Designer Classics | Danbury

Sizes & Process

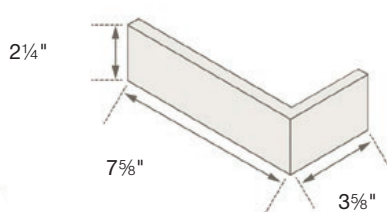
General Shale precast and tilt-up thin bricks are available in standard modular size. Other sizes are available as a special order production.

MODULAR



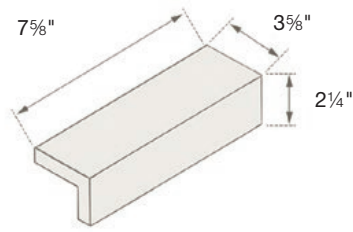
6.849 pcs. / sq. ft.

MODULAR CORNER



4.57 pcs. / linear ft.

MODULAR EDGE CAP



1.5 pcs. / linear ft.

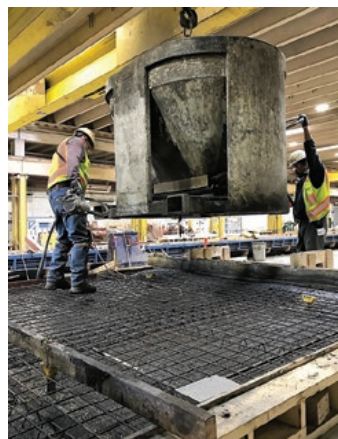
Style Availability
Old Brick Originals™
Architectural Classics
Designer Classics

- Standard thin brick thickness is $\frac{3}{4}$ ". Thicker units of 1" or more available as special order.
- Waxing and custom shapes available.
- Thin or full bed bricks are available with tumbled or straight edges.
- Custom blends and back surface textured units available as special order.
- Our extensive stocking inventory provides for the best lead times in the industry.

Precast Process



Thin brick installed in form liner



Concrete poured over thin brick



Concrete being vibrated in place



Thin brick panels ready for delivery to job site

Almost any bond pattern, arch, or other brick design can be produced in thin brick panels.

Testing & Specifications

As a Precast/Prestressed Concrete Institute member, General Shale products exceed or perform well with all standard PCI thin brick specifications. We work closely with precasters and the major form liner manufacturers to ensure our products fit correctly and securely for optimum results. Typical PCI standard test results for various Denver plant product body types are summarized below. Testing data for specific units is available.

Requirement	Test	Results
Freeze-Thaw	ASTM C666	Tested: No Deterioration, Spalling, Cracking or Breaking – 300 Cycles (Meets PCI Standard)
Pull-out Strength Pre Freeze-Thaw	ASTM E488	Tested: Avg. Strength = 210 – 274 psi (Meets PCI Standard > 150 psi)
Pull-out Strength Post Freeze-Thaw	ASTM E488	Tested: Avg. Strength = 169 – 193 psi (Meets PCI Standard > 150 psi)
Chemical Resistance	ASTM C650	Tested: Rated “Not Affected” (Meets PCI Standard)
Breaking Strength Modulus of Rupture (MOR)	ASTM C67	Tested: Average MOR = 1,316 psi (Meets PCI Standard > 250 psi)
Efflorescence	ASTM C67	Tested: Rated “Not Effloresced” (Meets PCI Standard)
Dimensional Tolerances	ASTM C67	1) Tested: Exceed ASTM C1088 TBX 2) Performs well using most formliners w/o grinding (both tumbled & straight edge thin brick)
Cold Water Absorption (CWA)	ASTM C67	PCI Requirement = 6% or less (List of Denver Products at 6% or less available)



About General Shale

For over 85 years, General Shale has been one of North America's largest brick, stone and concrete block manufacturers, supplying a wide variety of masonry materials for residential, commercial and specialty architectural projects. These materials include brick, thin veneers, stone, outdoor living kits, concrete block and various building materials. The company offers an endless array of sizes, colors and textures to complete any building project. With a life cycle of more than 100 years, the sustainability of brick is the company's commitment to responsible stewardship.

For more information visit our website at www.generalshale.com/precastthinbrickpanels.

Denver Thin Brick Production Plant

**1845 West Dartmouth Avenue
Denver, CO 80110**

800-477-9002

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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.



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