

SUNBRICK® NATURAL CLAY THIN BRICK VENEER

Premium architectural veneer for interior & exterior applications



DESIGNED FOR MODERN ARCHITECTURE

SUNBRICK® Natural Clay Thin Brick Veneer combines the authentic beauty of traditional masonry with the installation efficiency of a lightweight architectural veneer system. Manufactured from stabilized natural clay using a low-carbon, non-fired process, SUNBRICK offers durability, dimensional consistency and timeless aesthetics for interior and exterior applications.

WHY ARCHITECTS CHOOSE SUNBRICK®

- Natural clay - authentic texture and timeless appearance.
- Low-carbon manufacturing - manufactured without kiln firing.
- Freeze-thaw resistant - suitable for demanding climates.
- Interior and exterior applications.
- ASTM-tested performance.
- Lightweight veneer system.

RECOMMENDED APPLICATIONS

- Residential
- Commercial
- Hospitality
- Retail
- Feature walls
- Fireplaces
- Exterior facades

PRODUCT DESCRIPTION

Sunbrick is a highly pressed brick veneer manufactured from stabilized clay, sand and cement. The product is made without kiln firing, resulting in significantly lower CO₂ emissions compared to traditional fired bricks. Each box contains 30 pieces, covering 6.13 ft².

PERFORMANCE CHARACTERISTICS

Size	9.8 × 3 × 0.63 in
Tolerances on Dimensions	TBX specification - ASTM C1088
Box Coverage	> 6.13 ft ² (30 pieces)
Compressive Strength	> 26 MPa; specification 13-17 MPa (ASTM C55, C90, C67)
Absorption	< 9%; specification 14-22% (ASTM C55, C90, C67)
Flexural Strength	Under evaluation - ASTM C67 Method
Freezing and Thawing	Complies with ASTM C67
Efflorescence	Complies with ASTM C67
Weight per Box	~53 lb
Available Colors	Wide range of natural colors

INSTALLATION RECOMMENDATIONS

1. SUBSTRATE

- The substrate shall be structurally sound, clean, dry and free of dust, paint, oils, curing compounds or any materials that may impair bond performance.
- Surface variation shall not exceed 1/4 in. in 10 ft. (6 mm in 3.05 m).
- For wood or steel stud framing systems, the maximum allowable deflection shall be L/360.

2. WATER-RESISTIVE BARRIER (WRB)

- For exterior applications over wood or steel stud framing, install two layers of a Water-Resistive Barrier (WRB), or one layer of WRB combined with a drainage mat.

3. FLASHING AND DRAINAGE

- Install corrosion-resistant flashing at wall bases, window and door openings, utility penetrations, transitions between substrates, copings and wall terminations.
- A corrosion-resistant weep screed or equivalent drainage system shall be installed at the base of the adhered veneer to provide proper moisture drainage.

4. SUNBRICK® THIN BRICK VENEER

- Use only Sunbrick® units that meet the dimensional and aesthetic requirements of the project.
- Where required, thin brick units shall comply with ASTM C1088.

5. MORTARS AND ADHESIVES

- Use ASTM C270 Type S mortar, polymer-modified mortar, ANSI A118.4 modified thin-set mortar or masonry adhesive approved by the manufacturer.
- The minimum required bond shear strength between the thin brick and the substrate shall be 50 psi (345 kPa).

6. MOVEMENT JOINTS

- Extend through the full thickness of the veneer system.
- Align with movement joints in the substrate.
- Be spaced no more than 18 ft. (5.5 m) apart in either direction.
- Enclose a maximum panel area of 144 ft² (13.4 m²).
- Maintain a maximum length-to-height ratio of 2.5:1.

7. INSTALLATION METHODS

- Thick-set method: install galvanized reinforcing lath where required; apply a mortar scratch coat with a nominal thickness of 1/2-3/4 in. (12-19 mm); score the scratch coat to provide a suitable bonding surface.
- Thin-set method: for exterior applications over cement backer board, apply a polymer-modified thin-set mortar approximately 1/8 in. (3 mm) thick. A non-sag adhesive may also be used when approved by the manufacturer.
- Modular panel systems shall be installed in accordance with the panel manufacturer's installation instructions.

8. THIN BRICK PLACEMENT

- Each Sunbrick® unit shall have full mortar coverage on the back of the unit.
- Press each unit firmly into the mortar or adhesive to ensure complete contact.
- Maintain uniform joint widths and proper coursing throughout the installation.
- When using adhesives, follow the adhesive manufacturer's installation instructions.

9. MORTAR JOINTS

- Mortar joints may be filled during brick installation or using a grout bag, mortar gun or other suitable placement equipment.
- When the mortar reaches thumbprint hardness, tool the joints to the specified finish: concave, V-joint, grapevine or flush joint.

GENERAL RECOMMENDATIONS

- Do not install over frozen or water-saturated substrates.
- Avoid installation during heavy rain or adverse weather conditions.
- Protect the veneer from weather exposure during the first 24-48 hours after installation.
- Provide movement joints as required by the project design.
- Remove excess mortar before it hardens.
- Do not use acidic cleaners until the mortar has fully cured.
- Apply a breathable penetrating sealer to the surface after the mortar has fully cured.

REFERENCE STANDARDS

- ASTM C1088 - Standard Specification for Thin Veneer Brick Units
- ASTM C270 - Standard Specification for Mortar for Unit Masonry
- ANSI A118.4 - Modified Dry-Set Cement Mortar
- TMS 402/602 - Building Code Requirements and Specification for Masonry Structures
- Brick Industry Association (BIA) Technical Notes

RECOMMENDED INSTALLATION METHODS

Substrate	Interior	Exterior	Recommended Installation Method
Concrete	✓	✓	Thick Set or Thin Set
Concrete Masonry Unit (CMU)	✓	✓	Thick Set or Thin Set
Clay Brick	✓	✓	Thin Set
Cement Backer Board	✓	✓	Thin Set
Cement Plaster (Stucco)	✓	✓	Thin Set
Cast-in-Place Concrete	✓	✓	Thick Set or Thin Set
Wood Stud Framing	—	✓	Thin Set over Cement Backer Board
Steel Stud Framing	—	✓	Thin Set over Cement Backer Board
Precast Concrete Panels	✓	✓	Prefabricated Panel System
Modular Panel System	✓	✓	Manufacturer's Instructions

NOTES

- Exterior installations over wood or steel studs shall include a Water-Resistive Barrier (WRB) and appropriate flashing.
- Cement backer board shall be installed in accordance with the manufacturer's recommendations.
- Expansion or movement joints shall be provided as specified in this document.

SYSTEM DETAILS

Typical assembly diagrams for common Sunbrick® thin brick veneer installations. Final installation design shall comply with project specifications, local code requirements and manufacturer-approved materials.

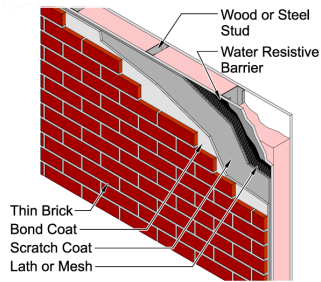


Figure 1
Thick Set Application on Studs

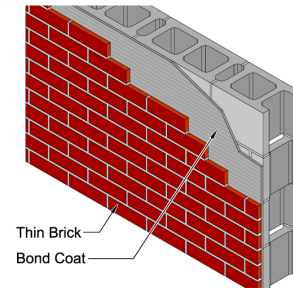


Figure 2
Thin Set Application on CMU

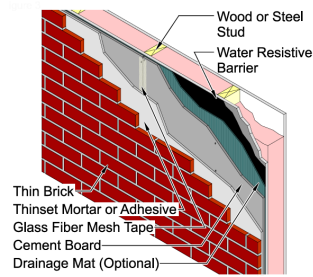


Figure 3
Exterior Thin Set Application on Studs
with Drainage Mat

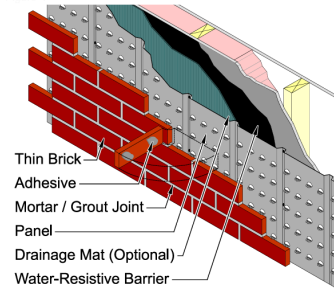


Figure 4
Modular Panel on Studs

Contact Information

Sunbrick America LLC | 3050 W Mustang Rd., Douglas, Arizona | info@sunbrickamerica.com | sunbrickamerica.com