

STONEYARD®, Inc.
2 Spectacle Pond Road
Littleton, Massachusetts 01460
Telephone: 978-742-9800
www.stoneyard.com

SECTION 04 42 00

ADHERED THIN STONE VENEER

Specifier Note: *This guide specification has been prepared by Stoneyard®, Inc. for use by qualified design professionals. Edit to suit project requirements. Verify section number and title per office MasterFormat standard. Some offices may file this section under 04 42 43 or other subsection. Delete all specifier notes and convert to hidden text or remove entirely before issuing for construction.*

PART 1 — GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Adhered natural thin stone veneer units.
 - 2. Factory-cut stone corner units.
 - 3. Setting mortar, pointing mortar, accessories, and installation materials required for a complete adhered stone veneer system.
- B. Related Sections:
 - 1. Section 06 16 00 — Sheathing.
 - 2. Section 07 25 00 — Weather-Resistive Barriers.
 - 3. Section 07 62 00 — Sheet Metal Flashing and Trim.
 - 4. Section 07 90 00 — Joint Sealants.

Specifier Note: *Edit Related Sections to coordinate with project-specific section numbering and scope. Consider adding Section 04 05 00 — Common Work Results for Masonry if used in the project manual.*

1.2 REFERENCES

- A. ASTM International:
 - 1. ASTM C144 — Standard Specification for Aggregate for Masonry Mortar.
 - 2. ASTM C150 — Standard Specification for Portland Cement.
 - 3. ASTM C270 — Standard Specification for Mortar for Unit Masonry.
 - 4. ASTM C482 — Standard Test Method for Bond Strength of Ceramic Tile to Portland Cement Paste.
 - 5. ASTM C847 — Standard Specification for Metal Lath.
 - 6. ASTM C979 — Standard Specification for Pigments for Integrally Colored Concrete.
 - 7. ASTM C1063 — Standard Specification for Installation of Lathing and Furring to Receive Interior and Exterior Portland Cement-Based Plaster.
- B. ANSI:
 - 1. ANSI A118.4 — Modified Dry-Set Cement Mortar.
 - 2. ANSI A118.9 — Specifications for Cementitious Backer Units.
 - 3. ANSI A118.10 — Load-Bearing, Bonded, Waterproof Membranes for Thin-Set Ceramic Tile and Dimension Stone Installation.

Specifier Note: Verify standard editions are current at time of issue. Delete standards not referenced in the project specification.

Specifier Note: Add applicable building code edition (IBC or local equivalent) and TMS 402/602 edition adopted by the Authority Having Jurisdiction. The adhered veneer provisions of TMS 402/602 apply to this work.

1.3 SUBMITTALS

- A. Product Data: Submit manufacturer's current technical data sheets for the following:
 - 1. Stone veneer units, including physical properties and available sizes.
 - 2. Setting mortar.
 - 3. Pointing mortar.
 - 4. Air and water barrier membrane.
 - 5. Cementitious backer board, where applicable.
- B. Samples:
 - 1. Stone veneer samples: Minimum two samples of each selected color showing the full range of color variation. Minimum 1 square foot each.
 - 2. Mortar color samples: Minimum two samples of each selected mortar color.
- C. Installation Instructions: Submit manufacturer's current written installation instructions.
- D. Mock-Up:
 - 1. Construct a mock-up panel, minimum 4 feet by 4 feet, when directed by Architect.
 - 2. Mock-up shall include selected stone color(s), shape(s), mortar color, and corner units.
 - 3. Approved mock-up establishes the standard for quality and appearance.

Specifier Note: Delete Mock-Up requirements if not required for the project.
- E. Maintenance Data: Submit manufacturer's recommendations for cleaning and maintenance of installed stone veneer.

1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Firm with minimum five years of documented experience producing natural stone veneer products.
 - B. Installer Qualifications: Firm with documented experience installing adhered stone veneer systems of similar scope and complexity.
- Specifier Note:** Adjust qualification requirements to suit project scope. Consider requiring installer references for larger projects.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver stone veneer units on pallets or in crates, with product identification labels intact.
- B. Store materials off the ground on level surfaces, protected from moisture, staining, and physical damage.
- C. Protect mortar and cementitious materials from moisture. Store in dry, enclosed spaces.
- D. Handle stone carefully to prevent chipping and breakage.

1.6 PROJECT CONDITIONS

- A. Do not install stone veneer when ambient or substrate temperature is below 40 degrees Fahrenheit or above 90 degrees Fahrenheit, unless provisions for temperature protection are approved by the manufacturer.
- B. Protect installed work from freezing for a minimum of 24 hours after installation.
- C. Do not install stone veneer on frozen substrates or in the presence of precipitation without approved weather protection.

PART 2 — PRODUCTS

2.1 MANUFACTURER

- A. Acceptable Manufacturer:
STONEYARD®, Inc.
2 Spectacle Pond Road
Littleton, Massachusetts 01460
Telephone: 978-742-9800
Website: www.stoneyard.com

- B. Substitutions: Not permitted.

Specifier Note: *If substitutions are allowed, replace “Not permitted” with the office-standard substitution clause referencing Division 01.*

2.2 NATURAL STONE VENEER — GENERAL REQUIREMENTS

- A. Material: Natural quarried and gathered New England stone, including granite, quartzite, and fieldstone, supplied as adhered thin veneer units.
- B. Finish: Natural weathered and split stone faces.
- C. Variations: Color, texture, and veining variations inherent to natural stone are expected and acceptable.

2.3 PHYSICAL REQUIREMENTS

- A. Nominal Thickness: 1.0 inch. Range: 0.75 to 1.25 inches.
- B. Weight: Less than 14 pounds per square foot.
- C. Density: 153 pounds per cubic foot.
- D. Climate Suitability: Suitable for interior and exterior applications in all climate zones, including freeze-thaw exposure and coastal environments, when installed in accordance with manufacturer’s instructions and applicable building codes.
- E. Bond Strength: Adhered veneer-to-substrate bond shall achieve a minimum shear bond strength of 50 pounds per square inch when tested in accordance with ASTM C482 using the specified setting mortar.
- F. Applications:
1. Interior wall veneer.
 2. Exterior wall veneer.
 3. Fireplaces and chimneys.
 4. Architectural accent features.

Specifier Note: *[VERIFY: Compressive strength and water absorption rate per manufacturer’s current test data. Add values here if available.]*

2.4 AVAILABLE STONE COLORS

Specifier Note: *Delete colors not required for the project. Verify color names and descriptions against manufacturer’s current catalog and physical samples.*

- A. Boston Blend: Gathered New England fieldstone consisting of granite, quartzite, and other indigenous stone. Features gray, tan, beige, white, and charcoal tones with natural weathered and split faces.
- B. Greenwich Gray: Granite. Dominant gray hues with variations of silver, charcoal, and occasional warm undertones.
- C. Colonial Tan: Quartzite. Tans, buffs, light browns, and soft gray accents.
- D. Vineyard Granite: Granite. Pronounced grain featuring grays, blacks, whites, and crystals of peach and pink.

- E. Newport Mist: Quartzite. Soft grays, pale tans, and off-whites with a naturally weathered appearance.
- F. Oyster Bay: Granite. Deep grays, blue, black, and white tones with subtle hints of beige. Contains mica with natural mineral sparkle.
- G. Mystic Harbor: Granite. Blends of dark gray, light gray, white, beige, and blue.

2.5 AVAILABLE STONE SHAPES

Specifier Note: Delete shapes not required for the project. Not all shapes are available in all colors. Verify availability with manufacturer before specifying. See availability table below.

- A. Round.
- B. Roughly Square and Rectangular.
- C. Mosaic.
- D. Ledge stone.
- E. Ashlar.

Stone Color	Round	Sq. & Rect.	Mosaic	Ledge stone	Ashlar
Boston Blend	X	X	X	X	X
Greenwich Gray	—	X	X	X	X
Colonial Tan	—	X	X	X	X
Vineyard Granite	—	X	X	X	X
Newport Mist	—	X	X	X	X
Oyster Bay	—	X	X	X	X
Mystic Harbor	—	X	X	X	X

Specifier Note: Round shape is available only in Boston Blend. Verify shape availability by color with manufacturer before specifying.

2.6 CORNER UNITS

- A. Provide factory-cut 90-degree corner units matching selected stone color and shape.
- B. Corner units shall provide the appearance of full-depth stone returns.
- C. For angles other than 90 degrees, field-cut mitered flat pieces or alternating flat weave pattern as approved by Architect.

2.7 INSTALLATION MATERIALS

- A. Air and Water Barrier: Liquid-applied membrane complying with ANSI A118.10.
- B. Cementitious Backer Board: Exterior-rated cement board complying with ANSI A118.9, where indicated on Drawings.
- C. Setting Mortar: Polymer-modified latex-Portland cement mortar complying with ANSI A118.4.
- D. Pointing Mortar: Polymer-modified pointing mortar compatible with stone veneer and setting mortar.
- E. Metal Lath: Self-furring, galvanized expanded metal lath, where indicated on Drawings.

Specifier Note: Edit Installation Materials to match the assembly shown on Drawings. Include only materials applicable to the project substrate conditions.

PART 3 — EXECUTION

3.1 EXAMINATION

- A. Verify that substrates are plumb, true, clean, dry, and free of contaminants that would impair bond.
- B. Verify that weather-resistive barriers, flashing, and drainage components are installed and properly lapped per the Contract Documents.
- C. Verify that framing and sheathing are structurally adequate to support the weight of the stone veneer assembly.
- D. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Prepare substrates in accordance with manufacturer's current written instructions.
- B. Install air and water barrier and flashing prior to stone veneer installation.

Specifier Note: For framed wall assemblies with lath and scratch coat, verify the number of weather-resistive barrier layers required by the wall assembly design. Two layers is typical practice, with the outer layer acting as a sacrificial bond break. Coordinate with Section 07 25 00 and the Drawings. Where drainage space or drainage mat is required by code or owner standards, specify the minimum drainage gap and drainage efficiency requirements here.

- C. Install metal lath and scratch coat where required by the substrate condition and manufacturer's instructions. Metal lath shall comply with ASTM C847 and be installed in accordance with ASTM C1063.

Specifier Note: Scratch coat thickness over lath is typically a nominal 1/2 inch, fully engulfing the lath, and scarified horizontally to provide mechanical key for setting mortar. Adjust to suit manufacturer's recommendations and project conditions.

- D. Dampen concrete masonry and concrete substrates prior to application of setting mortar, as recommended by mortar manufacturer.

3.3 INSTALLATION

- A. Install stone veneer in accordance with manufacturer's current written instructions and applicable ANSI standards.
- B. Lay out stone to distribute color, size, and texture variations evenly across the installation area. Blend units from multiple pallets to ensure consistent appearance.
- C. Install corner units before flat units.
- D. Apply setting mortar to achieve full coverage on the back of each stone unit per manufacturer's instructions.
- E. Work installation from the bottom up, unless otherwise recommended by the manufacturer.
- F. Maintain uniform joint widths as established by the approved mock-up or as indicated in the Contract Documents.
- G. Tool mortar joints to a uniform profile and depth as established by the approved mock-up.

Specifier Note: If a specific joint width or mortar joint profile is required, add that requirement here.

3.4 JOINTS

- A. Provide control joints and expansion joints as indicated in the Contract Documents.
- B. Coordinate joint locations with structural movement joints, penetrations, and transitions to adjacent construction.
- C. Seal joints with sealant as specified in Section 07 90 00.

3.5 CLEANING

- A. Clean stone veneer surfaces after mortar has cured sufficiently to prevent displacement.
- B. Clean with clean water and stiff natural-fiber or nylon brushes only.
- C. Do not use muriatic acid, acidic cleaners, harsh chemicals, or power washing on natural stone veneer.

- D. Remove mortar smears and residue from stone faces promptly during installation.

3.6 PROTECTION

- A. Protect installed stone veneer from damage, staining, and moisture exposure until Substantial Completion.
- B. Cover installed work as necessary to prevent staining from adjacent construction activities.
- C. Maintain ambient temperature above 40 degrees Fahrenheit for a minimum of 24 hours after installation.
- D. Protect installed stone veneer from heavy rain, saturation, and water runoff during the mortar curing period. Allow a minimum of 24 hours curing at 70 degrees Fahrenheit before exposure to moisture, or as recommended by the mortar manufacturer.

END OF SECTION