



550 E 56 HWY STE B • OLATHE, KS 66061 • PHONE: 913.254.9300 • FAX: 913.254.9301

The Canyon Stone Spec. Manual specifies manufactured stone veneer, manufactured brick veneer and manufactured stone trim. These products are manufactured by Canyon Stone Inc.. Revise Spec. Manual section numbers and title below to suit project requirements, specification practices and section content.

PART 1 GENERAL

1.01 SUMMARY

Specifier Note: Retain material(s) below to conform to project requirements.

- A. Section Includes: [Manufactured Stone veneer] [Manufactured brick veneer] [Manufactured stone trim].
- B. Related Section:
 - 1. Flashing: Division 07 flashing section
 - 2. Sealants: Division 07 sealant section

Specifier Note: Article below may be omitted when specifying manufacturer's proprietary products and recommended installation. Retain Reference Article when specifying products and installation by an industry reference standard. If retained, list standard(s) referenced in this section. Indicate issuing authority name, acronym, stand designation and title. Establish policy for indicating edition date of standard reference. Conditions of the Contract or Section 01 40 19 Reference Standards may establish the edition date of stands. This article does not require compliance with stand, but is merely a listing of references used. Article below should list only those industry standards referenced in this section.

1.02 REFERENCES

A. ASTM International (ASTM):

1. ASTM C39 Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.
2. ASTM C190 Standard Test Method for Tensile Strength.
3. ASTM C192 Standard Practice of Making and Curing Concrete Test Specimens in the laboratory.
4. ASTM C270 Standard Specification for Mortar for Unit Masonry.
5. ASTM C482 Standard Test Method for Bond Strength of Ceramic Tile to Portland cement.
6. ASTM C348 Standard Test Method for Flexural Strength.
7. ASTM AC51 Standard Test Method for Water Absorption.

B. US Green Building Council (USGBC)

1. LEED US_NC Version 2.2 Leadership in Energy and Environmental Design (LEED): Green Build Rating System Reference Package of New Construction and Major Renovations.

C. Underwriters Laboratories, Inc. (UL).

1. UL 723 Standards for Safety for Surface Burning Characteristics of Building Materials.

D. IAPMO-UES Evaluation Report

1. UES-337

1.03 SYSTEM DESCRIPTION

A. Performance requirements:

1. Comprehensive Strength: Not less than 1800 psi (12.4 MPa) average of 5 specimens and not less than 1500 psi (10.3 MPa) for individual specimen when testing in accordance with ASTM C39 and ASTM C192.
2. Bond Between Manufactured Masonry Unit, Mortar and Backing: Not

less than 50 psi (345 kPa when tested in accordance with ASTM C482 using type S mortar

3. Thermal Resistance: R-value of not less than 0.355 per inch (25.4 mm) of thickness when tested in accordance with ASTM C177.
4. Freeze/Thaw: No disintegration and less than 3% weight loss when tested in accordance with ASTM C67.
5. Unit Weight: Not more than 15 psf (73 kg/m²).
6. Surface Burning Characteristics: Not more than the following when tested in accordance with UL 723:
 - a. Flame spread 25.
 - b. Smoke Development 450.

Specifier Note: Articles below includes submittal of relevant data to be furnished by Contractor either before, or after construction coordinate this article with Architect's and Contractor's duties and responsibilities in Condition of the Contract and Section [01 033 00 – Submittals Procedures] (_____)

1.04 SUBMITALS

- A. General Submit listed submittals in accordance with Conditions of the Contract.
- B. Product Data Submit product data, including manufacturer's Spec sheet, for specified products.
- C. Shop Drawings: Indicated layout, show profile and product components, including anchorage, accessories, finish color, patterns and texture.

Specifier Note: Sustainability: LEED: Use the following paragraph when LEED Submittals are required.

- D. LEED Submittals: In accordance with (LEED US-NC) [And] (section 01 35 21 – LEED Requirements) [_____]
 1. Submit required letters, calculations, spreadsheets and templates prepared by [Engineers] (Consultants) {Architect} [_____] for submitting to USGBC for Credit Interpretation Requests.
 2. Submit Project Materials and Cost Data. Provide statement for total cost for building materials used for Project.

3. Provide LEED submittals indicating how following requirements will be met.

Specifier Note: Sustainability LEED: Paragraph below required Contractor to make early submittals indicating how certain LEED requirements will be met. Edit the follow paragraphs to suit project.

- a. Materials and Resources Credit: [MRc2.1 Construction Waste Management: Divert 50% From Landfill] [MRc2.2 Construction Waste Managements] Diverts 75% From landfill]: Submit Construction Waste plan in accordance with Section {01 74 21 – Construction/Demolition Waste Management and Disposal} [_____]

Specifier Note: Sustainability LEED: Delete paragraph below if recycled content of various materials is specified, rather than giving the Contractor the option to determine how recycled content requirement will be met.

- b. Material and Resources Credit: [MRc4.1 – Recycled Content: 7.5% (Post consumer + ½ Post-Industrial) {MRc4.2 – Recycled Content: 15% (Post consumer + ½ Post-Industrial) Submit product data, list {And certification letter(s)}
 - 1) Showing their cost and percentages by weight of post-customer and pre-customer recycled content.
- c. Materials and Resources: [Credit MRc5.1 Regional Materials: 10% Extracted and Manufactured Regionally] {MRc5.2 Regional Materials: 20% Extracted and Manufactured Regionally}: Submit {Product data and} list of proposed Regionally manufactured materials (And regionally extracted, Harvested and recovered materials). [_____]
 - 1) [Minimum of 10% of building materials or products for which at least 80% if the mass is extracted, processed and manufactured within 497 miles (800 km) of Project Site].
 - 2) [Minimum of 20% of building materials or products for which at least 80% of the mass is extracted, processed and manufactured within 1491 miles (2400 km) of Project site, and shipped by road or water].
- d. Materials and Resources: {Credit MRc6 Rapidly Renewable Materials}: Submit product data for rapidly renewable materials.

1. Include statement indicating costs for each rapidly renewable materials.

- e. Indoor Environmental Quality Credit: {EQc401 Low-Emitting Materials: Adhesives and Sealants}: Submit product data ensuring that VOC content in g/L for adhesives and sealants used is calculated in accordance with SCAQMD Rule 1168.

E. Samples: Submit 8 1/2 inch by 11 inch (216 by 279 mm) inch or larger samples of specified manufactured masonry showing color, pattern and texture.

F. Quality Control Submittals:

1. Test Reports: Certified test reports showing compliance with specified performance requirements and physical properties.
2. Manufacture's Instructions: Manufacture's installation instructions.

G. Operational Maintenance Data: Manufacture's maintenance and cleaning instruction

Specifier Note: Article below should include prerequisites, standards, limitations and criteria that establish an overall level of quality for products and workmanship for this section. Coordinate article below with Division 1 Quality Assurance Section.

1.05 QUALITY ASSURANCE

Specifier Note: Paragraph below should list obligations for compliance with specific code requirements particular to this section. General statements to comply with a particular code are typically addressed in Condition of the Contract and Section 01 42 00 Regulatory Requirements. Repetitive statements should be avoided.

A. Regulatory Requirements: In accordance with Section [01 41 00 Regulatory] [_____].

B. Mock-up

Specifier Note: If mock-up configuration is not indicated on the drawings, insert a description below.

1. Provide a mock-up panel for each type of manufactured masonry specified and indicated on the drawings.
2. Located mock-up(s) as directed by the Architect. Do not move,

Alter or destroy mock-up(s) until directed to do so by the Architect.

3. For each mock-up, provide manufactured masonry of color, finish and cut that represents the manufactured masonry to be used in the work.
4. Do not begin installation of manufactured masonry work until the Architect accepts the mock-up(s). Build as many mock-ups as required to obtain Architect's acceptance. Remove unacceptable mock-up from the site.

1.06 DELIVERY, STORAGE AND HANDLING

- a. General: Comply with Section {00 61 00 Common Product Requirements}[_____].
 - B. Delivery: Deliver materials in manufacture's original, unopened. Undamaged, containers with identification labels intact.
- b. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacture.

Specifier Note: Coordinate article below with Conditions of the Contract and with Section 01 78 36 Warranties.

PART 2 PRODUCTS

2.01 SUSTAINABILITY REQUIREMENTS

Specifier Note: SUSTAINABILITY: LEED: Edit the following paragraph to include sustainable requirements to the construction and verifiable of the project for attaining environmental performance goals. Choose products and materials with recycled content or resource efficient characteristics whenever possible. Use least toxic and low VOC content sealants, adhesives, sealers and finishes.

- A. Do materials and products in accordance with Section {01 47 15 Sustainable Requirements: Constructions} [_____].
- B. Do verification requirements in accordance with Sections {01 47 17 Sustainable Requirements: Contractor's Verification}[_____].

Specifier Note: Retain article below for proprietary method specification. Add product attributes, performance characteristics, material standards and description as applicable. Use of such phrases as “or equal” or “or approved equal” or similar phrases may cause ambiguity in specifications. Such phrases require verification (procedural, legal and regulatory) and assignment of responsibility for determining “or equal” products.

2.02 MANUFACTURED MASONRY

Specifier Note: Paragraph below is an additional to CSI Section Format and supplement to Canyon Stone Spec. Manual. Retain or delete paragraphs below per projects and specifier’s practice.

A. Manufacturer: Canyon Stone Inc.

B. Canyon Stone

1. Contact: 550 E. 56 Highway Suite B, Olathe, Kansas 66061:
Telephone (913)254-9300 Fax (913)254-9301: Website: www.canyon-stone.com

Specifier Note: Insert either single or blended texture selections below. Refer to manufacturer’s product data for range of textures available. In both are retained, create designators and coordinate with the drawings.

1. Single Texture:[_____]
 - a. color [_____]
2. Blend Texture:
 - a. [_____] percent [_____]
 - b. [_____] percent [_____]
 - c. color [_____]

Specifier Note: Insert brick color below. Refer to manufacturer’s product data for range of colors available. If more than one is selected create designator and coordinate with the drawing.

C. Canyon Stone Brick: [_____]

Specifier Note: Retain trim pieces below to the project requirements.

c. Architectural Trim:

1. Pier Cap Stones.

- a. Texture: {Smooth} {Rough}
- b. Color: [_____]
- c. Size: i.e. {24 x 24 inches} (609.60 by X 609.60 mm [As indicated in the drawings])
- d. Various sizes available.

2. Wall Cap Stones:

- a. Texture: [_____] Rough or Smooth
- b. Color: [_____] {as indicated on the drawing}
- c. Size: {12 inches by 20 inches} or {13 inches by 20 inches} [304.80 by 508.00 mm] or [330.20 by 508.00 mm] [As indicated on the drawings]

3. Hearth Stones:

- a. Color: [_____] {As indicated on the drawing}
- b. Size: [19 inches by 19 inches] [482.60 by 508.00mm]

4. Trim Stones

- a. Color: [_____] {As indicated on the drawing}
- b. Size: {6 inches by 8 inches by 1 ½ inches} or {4 inches by 5.5 inches} {[152.40 by 203.20 by 38.10] or [101.60 by 139.70 by 38.10]}

5. Keystone

- a. Color: [_____] {As indicated on the drawing}
- b. Size: {8 inches by 10 inches by 1 ½} [203.20 by 254.00 by 38.10 mm]

6. Quions – Stone Texture

- a. Color: [_____] {As indicated on the drawing}

b. Size: {12 inches by 12 inches by 8 inches} [204.80 by 204.80 by 203.20 mm]

7. Lintels

a. Color: [_____] {As indicated on the drawing}

b. Size: {40 inches by 6 inches by 2 5/8 inches} [1,016.00 by 152.40 by 66.68 mm]

8. Watertable/Sills- Stone textured

a. Color: [_____] {As indicated on the drawing}

b. Size: {2 inches front x 2 ½ inches back x 3 inch x 18 inches} [50.80 by 63.80 by 457.20 mm]

9. Light Fixture Round Outlet Stone [Smooth]

a. Color: [_____] {As indicated on the drawing}

b. Size: {8 inches by 12 inches by 1 ½ inches} [203.20 by 304.80 by 38.10 mm]

10. Square Outlet Stone [Smooth]

a. Color: [_____] {As indicated on the drawing}

c. Size: {4.5 inches by 5 inches by 1 ½ inches} [114.30 by 127.00 by 38.10 mm]

2.03 ACCESSORIES

Specifier Note: Retain accessories below to conform to project requirements.

A. Fasteners:

1. Into Wood Studs: Minimum 0.120 inch (3.05 mm) shank diameter galvanized nails or staples of sufficient length to penetrate 1 3/8 inch (35 mm) minimum into the stud.
2. Into Metal Studs: Minimum 7/16 inch (11.1 mm) head corrosion resistant, self-drilling, pancake head screws of sufficient length to penetrate 3/8 inch (9.5 mm) minimum into

the stud.

B. Mortar: Premixed Type N or mortar mix using components and proportions in accordance with manufacture's masonry manufacturer's installation instruction.

1. Mortar Color: Iron Oxide pigments. Color [_____]

C. Sealants: Type [_____], in accordance with Section (07 92 00 Sealants) [_____]

Specifier Note: SUSTAINABILITY: LEED: Use the following subparagraph if low-emitting material are required for LLED credit EQc4.1 where VOC content of sealants must be less than VOC content limits of SCAQMD Rule 1168.

1. Sealants: Maximum VOC limit [250] g/L [to SCAQMD Rule 1168].

2.04 MIXES

A. Proportions: ASTM C270, Type N.

B. Procedure: In accordance with manufactured masonry manufacturer's installation instructions.

2.05 PRODUCT SUBSTITUTIONS

A. Substitutions in accordance with Section [01 2513 – Product Substitution Procedure] {No substitutions permitted} [_____].

PART 3 EXECUTION

Specifier Note: Paragraph below is an addition to CSI Section Format and a supplement to Canyon Stone Spec. Manual. Retain or delete paragraph below per project requirements and specifier's practice.

3.01 MANUFACTURER'S INSTRUCTIONS

A. Comply with manufacturer's product data, including product technical

bulletins, product catalog installation instructions and product carton instruction for installation.

3.02 EXAMINATION

- A. Site Verification of condition: Verify that substrate conditions, which has been previously installed under other sections, are acceptable for product installation in accordance with manufacture's instructions.

3.03 PREPARATION

- A. Prepare surface using methods recommended by the manufacturer for achieving the best result for the substrate under the project condition.

3.04 CLEANING

- A. Upon completion, clean manufactured masonry in accordance with Section 01 74 00 Cleaning and Waste Management.

3.05 PROTECTION

- A. Protect finished work from rain during and for 48 hours following installation.
- B. Protect finished work from damage until the date of Substantial Completion.