

SECTION 04700

SIMULATED MASONRY

PART GENERAL

SECTION INCLUDES

Manufactured stone veneer.

Manufactured brick veneer.

Mortar.

Metal nails, staples, or screws for fastening lath and accessories.

Metal lath and accessories.

RELATED SECTIONS

Section 05400 - Cold-Formed Metal Framing: Frame supports for substrate.

Section 06100 - Rough Carpentry: Wall framing and sheathing.

Section 07900 - Joint Sealers: Perimeter sealing at openings.

Section 09200 - Plaster and Gypsum Board: Finish plaster.

Section 10300 - Fireplaces and Stoves.

Section _____ - _____.

REFERENCES

ASTM C 91 - Specification for Masonry Cement.

ASTM C 150 - Specification for Portland Cement.

ASTM C 177 - Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus.

ASTM C 207 - Specification for Hydrated Lime for Masonry Purposes.

ASTM C 270 - Specification for Mortar for Unit Masonry.

UL 273 - Test for Surface Burning Characteristics of Building Materials.

Uniform Building Code (UBC) Standard No. 14-1. Kraft Waterproof Building Paper.

Uniform Building Code (UBC) Standard No. 26-10 Parts I and IV: Test Method for Compressive Strength of Cylindrical Concrete Specimens.

SUBMITTALS

Submit under provisions of Section 01300.

Submit samples for selection under provisions of Section 01300.

Submit manufacturer's installation instructions under provisions of Section 01300.

QUALITY ASSURANCE

Applicator: Company experienced in installation of simulated masonry of the type specified.

Three years experience.

_____ years experience.

MOCK-UPS

Erect mock-up under provisions of Section 01400.

Erect 3-foot by 4-foot (0.914 by 1.219 m) sample panel at job site at location as directed.

Illustrate field pattern of simulated masonry, including color and tooling of joints. Show field cutting of units where required.

DELIVERY, STORAGE AND HANDLING

Deliver products to site, store, and protect under

provisions of Section 01600.

Store mortar and other moisture-sensitive materials in protected enclosures. Handle by methods which avoid exposure to moisture.

PROJECT CONDITIONS

Maintain materials and surrounding air temperature to minimum 40 degrees F (4 degrees C) prior to, during, and for 48 hours after completion of work.

Protect materials from rain, moisture, and freezing temperatures prior to, during, and for 48 hours after completion of work.

Allow no construction on opposite side of wall during installation and for 48 hours after completion of work.

WARRANTY

Provide manufacturer's warranty under provisions of Section 01700.

PART PRODUCTS

MANUFACTURERS

Acceptable Manufacturer: Stone Products Corporation,
P.O. Box 270, Napa, CA 94559-0270; ASD. Tel: (800) 255-1727 (US and Canada), (707) 255-1727 (outside USA), Fax: (707) 255-5572; email: cltrdstn@culturedstone.com; website: <http://www.culturedstone.com>

Requests for substitutions will be considered in accordance with provisions of Section 01600.

Substitutions: Not permitted.

Provide all simulated masonry from a single manufacturer.

MATERIALS

Cultured Stone(R), Texture:
Type: Carolina LedgeStone:
Color: Onyx Brown.
Color: Pewter Gray.

Color: Silver Sand.
Color: Vintage Sand.
Type: Castle Stone, Gray.
Type: Cobblefield(R):
Color: Austin.
Color: Bark.
Color: Brown.
Color: Desert Blend(R).
Color: Gray.
Color: Ohio.
Color: Texas Cream.
Type: Dressed Fieldstone.
Color: Aspen.
Color: Brandywine.
Color: Bucks County.
Color: Chardonnay.
Type: Driftstone:
Color: Blond.
Color: Glacier(R).
Color: Regular.
Type: Drystack LedgeStone:
Color: Caramel.
Color: Cedar.
Color: Chardonnay.
Color: Mist.
Color: Suede.
Type: European Castle Stone:
Color: Golden Blend.
Color: Granite.
Color: Gray.
Type: Fieldstone, Napa Valley.
Type: Limestone:
Color: Buckeye.
Color: Graphite.
Color: Lake Erie.
Color: White Vein.
Type: Pro-Fit LedgeStone(R):
Color: Autumn.
Color: Gray.
Color: Mojave.
Color: Platinum.
Color: Shale.
Color: Southwest Blend.
Type: River Rock:
Color: Earth Blend.
Color: Lakeshore Blend.
Color: Lake Tahoe.
Color: Michigan.

Color: Whitewater.
Type: Split Face:
Color: Granite.
Color: Great Lakes.
Color: Superior.
Color: Weber Canyon.
Type: Split Quarried:
Color: Apache.
Color: Flintstone.
Color: Palo Verde.
Type: Southern LedgeStone:
Color: Fawn.
Color: Fog.
Color: Walnut.
Color: White Oak.

Type: Stream Stone, 'Std' size or 'Std' size with a percentage of 'Skimmers':

Percentage of 'Skimmers': _____.
Color: Spring.
Color: Summer.
Color: Fall.
Color: Winter.

Type: Water Wash:
Color: Tehama.
Color: Yosemite.

Type: Weather Edge LedgeStone:
Color: Fox Valley.
Color: Mesa.
Color: Silverado.
Color: Wisconsin.

Type: Blending Textures:
Color: 80 percent Fog Southern LedgeStone with 20 percent Aspen Dressed Fieldstone.
Color: 80 percent Bucks County Southern LedgeStone with 20 percent Bucks County Dressed Fieldstone.
Color: 80 percent Rustic Southern LedgeStone with 20 percent Brandywine Dressed Fieldstone.
Color: 80 percent Chardonnay Southern LedgeStone with 20 percent Chardonnay Dressed Fieldstone.

Cultured Brick(R), Texture:

Type: Used:
Color: Antique Red.
Color: California Drift(R).
Color: Chicago Used.
Color: Old Used.
Color: White Speckle.

Color: Vintage Used.
Type: Clinker, Antique Red.

Trim Products: Cultured Stone(R):

Quoins:

Champagne.
Gray.
Buckskin.
Taupe.

Capstones:

Champagne.
Gray.
Buckskin.
Taupe.

Water Table/Sill:

Champagne.
Gray.
Buckskin.
Taupe.

Keystones:

Champagne.
Gray.
Buckskin.
Taupe.

Chateau Window and Door Trim:

Champagne.
Gray.
Buckskin.
Taupe.

Trim Stones:

Champagne.
Gray.
Buckskin.
Taupe.

Hearthstones:

19 inches by 20 inches (483 x 508 mm):

Color: Blond.
Color: Cream.
Color: Drift.
Color: Gray.
Color: Great Lakes.
Color: Marsh.
Color: Napa.
Color: Silver Sand.
Color: Whitewater.

Mortar:

Cement: Portland Cement, ASTM C 150, Type I, or
Masonry Cement, ASTM C 91, Type N.
Masonry Sand.
Lime: ASTM C 207.
Iron Oxide Pigments.

Masonry Sealer: Breather type (non-film forming) sealer.

Weather-Resistant Barrier: Kraft waterproof building
paper, UBC Standard No. 14-1.

Metal Lath:

18 gauge galvanized woven wire mesh.
Galvanized 2.5 lb. flat diamond mesh.
Galvanized 3.4 lb. flat rib.

MANUFACTURED UNITS - SIMULATED MASONRY

Shipping Weight: 8 to 12 pounds per sq. ft. (3.9 to 5.9
g/sq. cm).

Compressive Strength: Tested in accordance with UBC
Standard No. 26-10, Parts I and IV.

Shear (Adhesion) Strength: Tested in accordance with
ASTM C 482 using a unit thickness approximately the same
as the stone unit.

Thermal Resistance: K factor of 2.82 in accordance with
ASTM C 177; R factor of 0.355 per 1 inch of thickness.

Fire Hazard Test on 1-7/8 Inch Thick Sample: Flame
Spread 0, smoke development 0, per UL 723.

PART EXECUTION

PREPARATION

Open Stud:

Install paperbacked metal lath to studs using
galvanized nails or staples which penetrate a minimum
of 1 inch (25 mm) and 4 inches (100 mm) on center.
Apply 1/2 to 3/4 inch (12 to 19 mm) scratch coat and
allow to dry 48 hours.

Wrap weather-resistant barrier and metal lath a
minimum of 16 inches (400 mm) around all outside and
inside corners.

Sheathed Surfaces:

Install one layer of weather-resistant barrier with lap joints 4 inches (100 mm) shingle fashion. Apply code-approved metal lath; attach with galvanized nails or staples which penetrate a minimum of 1 inch (25 mm). Apply 6 inches (150 mm) on center vertically, 16 inches (400 mm) on center horizontally. Wrap weather-resistant barrier and metal lath a minimum of 16 inches (400 mm) around all outside and inside corners.

Concrete and Masonry Surfaces (New, Clean, and Untreated):

Examine finished surface of newly placed concrete to ensure that no releasing agents (form oils) are present. Etch surfaces containing form oil using muriatic acid; rinse thoroughly and/or score with a wire brush or use high pressure water or sandblasting to remove.

Existing Concrete and Masonry Surfaces:

Etch surfaces containing paint, coatings, sealers, or dirt using muriatic acid; rinse thoroughly and/or score with a wire brush or use high pressure water or sandblasting to remove.

Existing Concrete and Masonry Surfaces:

Apply metal lath to surfaces, attached with galvanized concrete nails penetrating 1 inch (25 mm) minimum. Apply 6 inches (150 mm) apart, 16 inches (400 mm) on center.

MORTAR MIXING

Thoroughly mix mortar ingredients in quantities needed for immediate use in accordance with ASTM C 270, Type N.

Do not use anti-freeze compounds to lower the freezing point of mortar.

APPLICATION

Apply in accordance with manufacturer's installation instructions.

Apply 1/2 to 3/4 inch (12 to 19 mm) of mortar to lath or

dampened masonry, stucco, or concrete surfaces, covering a maximum of 10 square feet (0.929 square m) at one time.

Press units firmly into position in soft mortar bed; wiggle and apply slight pressure to unit to ensure firm bonding, causing mortar to extrude slightly around edges of units.

Install hearth pieces in a full 1/2 to 3/4 inch (12 to 19 mm) deep mortar setting bed.

Place units with uniform mortar joints.

Joint Width: 1/2 inch (12 mm).

Joint Width: 3/4 inch (19 mm).

When installing 'pre-fitted' stone textures, fit units tight against each other with no allowance for mortar joints.

Maintain uniform 3/8 inch (9.5 mm) wide brick joints, horizontal joints level.

Head Joints: Evenly spaced and centered above units below.

Head Joints: _____.

Outside Corner Return Units: Short and long lengths alternated.

Plan work to minimize job site cutting. Perform necessary cutting with proper tools to provide uniform edges; take care to prevent breaking unit corners or edges.

Remove excess mortar; do not allow mortar to set up on face of units.

Point, rake, and tool joints before mortar has set.

Clean and finish joints in accordance with manufacturer's instructions.

END OF SECTION