

**SECTION 04 01 00
MAINTENANCE OF MASONRY**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Water cleaning of masonry and stucco soffits surfaces.
- B. Repointing mortar joints.
- C. Repair of damaged masonry and stucco soffits.

1.02 RELATED REQUIREMENTS

- A. Section 02 41 00 - Demolition.
- B. Section 04 20 00 - Unit Masonry: Mortar and grout.
- C. Section 09 24 00 - Cement Plastering.

1.03 PRICE AND PAYMENT PROCEDURES

- A. See Section 01 22 00 - Unit Prices, for additional unit price requirements.
- B. Repointing: By the linear foot. Base bid includes [] lf.
- C. Patching Stucco Soffit: By the square foot. Includes [] sf.

1.04 REFERENCE STANDARDS

- A. TMS 402/602 - Building Code Requirements and Specification for Masonry Structures 2016.

1.05 ADMINISTRATIVE REQUIREMENTS

- A. Pre-cleaning Meeting: Convene two weeks prior to commencing work of this section.
 - 1. Require attendance of parties directly affecting work of this section.
 - 2. Review conditions of installation, procedures, and coordination with related work.
- B. Scheduling:
 - 1. Perform cleaning and washing of masonry between the hours of 7 am to 11 pm only.

1.06 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data on cleaning compounds.
- C. Manufacturer's Instructions: For cleaning materials, indicate special procedures, conditions requiring special attention, and protection of adjacent materials.

1.07 QUALITY ASSURANCE

- A. Comply with provisions of TMS 402/602, except where exceeded by requirements of Contract Documents.
- B. Restorer: Company specializing in masonry restoration with minimum ten years of documented experience. Provide a list of ten similar project within the last five years.
- C. Restorers:
 - 1. Winco of South Texas: www.wincotx.com.
 - 2. []
 - 3. []

1.08 MOCK-UP

- A. Restore and repoint an existing masonry wall area sized 6 feet long by 4 feet high; include in mock-up area instances of mortar, accessories, wall openings, and flashings.
- B. Clean a 10 ft by 10 ft panel of wall determine extent of cleaning.
- C. Clean a 6 ft by 4 ft panel of stucco soffit to determine extent of cleaning.
- D. Locate where directed.

- E. Acceptable panel and procedures employed will become the standard for work of this section.
- F. Mock-up may remain as part of the Work.

1.09 DELIVERY, STORAGE, AND HANDLING

- A. Store restoration cleaner materials in manufacturer's packaging.

1.10 FIELD CONDITIONS

- A. Maintain materials and surrounding air temperature to minimum 40 degrees F prior to, during, and 48 hours after completion of masonry work.
- B. Maintain materials and surrounding air temperature to maximum 90 degrees F prior to, during, and 48 hours after completion of masonry work.
- C. Do not clean or use process creating dust, dirt, cleaning solution mist, when wind is over 10 mph.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Restoration and Cleaning Chemicals:
 - 1. PROSOCO: www.prosoco.com/#sle.
 - 2. [].
 - 3. Substitutions: See Section 01 60 00 - Product Requirements.

2.02 CLEANING MATERIALS

- A. Cleaning Agent: Detergent type.
- B. Acid Solution: Hydrochloric (muriatic) acid is not allowed.
- C. Blasting Medium is not allowed.

2.03 MORTAR MATERIALS

- A. Comply with requirements of Section 04 20 00.

2.04 STUCCO MATERIALS

- A. Comply with requirements of Sections 09 21 16, 09 22 36, and 09 24 00.
- B. Replace stucco soffits including support framing and lath in locations indicated in drawings.

PART 3 EXECUTION

3.01 PRE-TESTING

- A. A requirement of the bid process is for the restoration contractor(s) to survey and pre-test masonry and stucco soffit for required treatments to address existing conditions. At the General Contractor's option a report maybe developed by a single cleaning specialist and shared with sub-contractors.
 - 1. Pre-test report to include areas, linear feet of repointing if not matching below and list of treatments required to meet specific stains (organic and inorganic), soot, dirt and other observed issues.

3.02 EXAMINATION

- A. Verify that surfaces to be cleaned are ready for work of this section. All masonry and stucco soffits are to be cleaned. For bidding purposes estimate a total of [] linear feet of repointing and replacement of [] square foot of stucco soffit.
- B. Corrdinate locations requiring repointing or special treatment with General Contractor, Architect and Owner's Representative.

3.03 PREPARATION

- A. Protect surrounding elements from damage due to restoration procedures. All precautions and all manufactures' specifications to be followed to insure wall, stucco and surfaces are not damaged.

- B. Carefully remove and store removable items located in areas to be restored, including fixtures, fittings, finish hardware, and accessories; reinstall upon completion.
- C. Separate areas to be protected from restoration areas using means adequate to prevent damage.
- D. Cover existing landscaping and adjacent vehicles with tarpaulins or similar covers.
- E. Mask immediately adjacent surfaces with material that will withstand cleaning and restoration procedures.
- F. Close off adjacent occupied areas with dust proof and weatherproof partitions.
- G. Protect roof membrane and flashings from damage with 1/2 inch plywood laid on roof surfaces over full extent of work area and traffic route.
- H. When using cleaning methods that involve water or other liquids, install drainage devices to prevent runoff over adjacent surfaces unless those surfaces are impervious to damage from runoff.
- I. Do not allow cleaning runoff to drain into sanitary or storm sewers.

3.04 REPOINTING

- A. Perform repointing prior to cleaning masonry surfaces.
- B. Cut out loose or disintegrated mortar in joints to minimum 1/2 inch depth or until sound mortar is reached.
- C. Use power tools only after test cuts determine no damage to masonry units will result.
- D. Do not damage masonry units.
- E. When cutting is complete, remove dust and loose material by brushing.
- F. Premoisten joint and apply mortar. Pack tightly in maximum 1/4 inch layers. Form a smooth, compact concave joint to match existing.
- G. Moist cure for 72 hours.

3.05 CLEANING EXISTING MASONRY AND STUCCO SOFFITS

- A. Low Pressure Water Cleaning: Apply 60 psi maximum pressure to masonry surfaces at indicated locations, maintaining uniform depth and surface texture throughout.
- B. Cleaning Detergent: Brush clean masonry surfaces at indicated locations with cleaning agent applicable for stain and wall conditions in accordance with the manufacturer's instructions. Saturate masonry and stucco with clean water and flush loose mortar and dirt.

3.06 CLEANING

- A. Immediately remove stains, efflorescence, or other excess resulting from the work of this section.
- B. Remove excess mortar, smears, and droppings as work proceeds and upon completion.
- C. Clean surrounding surfaces.

END OF SECTION

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