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U.S. General Services Administration

Removing Soluble Salts From Limestone

Procedure code:

446004S

Source:

Hsr - Federal Bldg/P.O., Wash, Dc - Bldg Conservation Tech

Division:

Masonry

Section:

Limestone

Last Modified:

07/28/2017

PART 1---GENERAL

1.01 SUMMARY

- A. This procedure includes guidance on removing soluble salts from limestone.
- B. See 01100-07-S for general project guidelines to be reviewed along with this procedure. These guidelines cover the following sections:
 - 1. Safety Precautions
 - 2. Historic Structures Precautions
 - 3. Submittals
 - 4. Quality Assurance
 - 5. Delivery, Storage and Handling
 - 6. Project/Site Conditions
 - 7. Sequencing and Scheduling
 - 8. General Protection (Surface and Surrounding)

These guidelines should be reviewed prior to performing this procedure and should be followed, when applicable, along with recommendations from the Regional Historic Preservation Officer (RHPO).

- C. For general information on the characteristics, uses and problems associated with limestone, see 04460-01-S.

PART 2---PRODUCTS

2.01 MATERIALS

- A. Distilled water
- B. Paper pulp made by boiling good quality blotting paper with distilled water and beating it until completely disintegrated

and cellulose fibers mat together to form a pulp

2.02 EQUIPMENT

- A. Stiff bristle brushes (non-metallic)
- B. Vacuum

PART 3---EXECUTION

3.01 ERECTION, INSTALLATION, APPLICATION

- A. Clean stone of all debris, dust, oil, salt crystals, etc. by brushing with a stiff fiber bristle brush or by vacuuming.
- B. Thoroughly wet stone with clean, clear water just prior to applying poultice.
- C. Apply wet paper pulp (soaked in distilled water) to the stone completely covering and concealing all voids and surfaces.
- D. Keep pulp in position for three weeks or until completely dried and removed easily.
- E. After carefully removing the dried pulp, brush or vacuum to remove all salt crystals formed on stone surfaces.
- F. Apply fresh pulp as described in Section B through D above.
- G. Brush or vacuum to remove all salt crystals formed on stone surfaces.
- H. If high concentrations of soluble salts remain in the stone, repeat applications of poultice.

Last Reviewed: 2018-10-25