

WALL WASHING
MARBLE AND TILE

1. GENERAL

- 1.01 This section covers the washing of interior marble and tile walls, wainscoting and trim. It is also applicable to asbestos-cement wall boards and tiles having smooth, baked enamel finishes.
- 1.02 It is reissued to reduce to about one half the quantities of pyrophosphate cleaner recommended in Issue 2 as the new granular form of this material is approximately twice as effective as the crystalline form initially furnished.
- 1.03 The pyrophosphate solution is most effective when it is permitted to remain in contact with the surface being cleaned for a few minutes before rubbing to remove the dirt. Such procedure, in addition to producing better results also substantially reduces the physical effort required to do the job.
- 1.04 Most people can use the cleaning materials recommended herein without adverse effect on the hands but those whose hands may be affected should wear suitable rubber gloves.
- 1.05 There are three classifications of wall cleaning covered by this section.
- (a) Spot washing - cleaning of specific soiled areas such as finger marks about doors, columns, lighting switches, elevator signal buttons, etc.
- (b) Over-all cleaning - removal of general dirt accumulations to restore a clean appearance. This may be done by the hand method using sponges or cloths, or by the cellulose sponge tool method.
- The tool method is most advantageous where there are large unobstructed wall areas and for stairwell walls. Most room walls can be washed from the floor and by means of an extension handle stairwell walls can usually be washed without need for scaffolding.
- (c) Stain removal - application of a poultice made of scouring powder to specific or general areas as needed.
- 1.06 Natural stones such as marble, travertine, etc., especially those of lighter color tend to become stained if not kept clean and on aging require somewhat costly restoration measures such as poulticing or resurfacing. To minimize staining, such walls should be washed whenever dirt can be removed by a sweeping motion with the finger tips or a fog or film becomes visible when the wall is viewed at an angle toward strong light.

- 1.07 It is important that precautions be taken to fully protect dial and other telephone equipment during the cleaning activities. The nature and extent of the safeguards are arranged with the cooperation of the wire chief.

2. EQUIPMENT AND MATERIALS

- 2.01 For spot cleaning
- 1 pail
 - 1 cellulose sponge
 - dust or wiping cloths
 - Soap - white floating or toilet
- 2.02 For over-all jobs - hand method
- Drop cloths or newspapers, if needed
 - Stepladders or scaffolding
 - 2 pails
 - 2 sponges
 - Pyrophosphate cleaner
- 2.03 For over-all jobs - sponge tool method
- Drop cloths or newspapers, if needed
 - Stepladders or scaffolding, if needed for supplementary hand work
 - 2 sponge tools
 - 2 square pails with wringers
 - 1 hand size cellulose sponge
 - Pyrophosphate cleaner
- 2.04 For poulticing
- 2 pails
 - 1 trowel
 - 1 cellulose sponge
 - Scouring powder
 - Chlorinated lime

3. PROCEDURE - SPOT WASHING

- 3.01 Spot washing is done as required, which is indicated by evidence of finger marks, smudges, pencil marks and other defacements on walls, columns, partitions, etc.
- 3.02 In the case of natural stones and stone compositions the area to be cleaned is first wet with clean water in order to prevent the soap and loosened dirt from penetrating into the pores of the material. Preliminary wetting of the surface is not required for glazed tiles, baked enamel finishes and other non-porous surfaces.
- 3.03 The cake of soap is rubbed against one side of the moistened sponge to produce a lather, which in turn is rubbed against the dirty areas until the dirt is removed. The

SECTION H51.118

area is immediately rinsed with the clean portion of the sponge or with a separate clean sponge and wiped with clean dry pieces of dust or wiping cloths.

3.04 Where washing does not remove dirt such as sub-surface penetrations from natural stones about elevator signal buttons, door jambs, etc., spot poulticing as described in Section 6 may be employed.

4. PROCEDURE - OVER-ALL WASHING - HAND METHOD

4.01 Any ladders and scaffolding shall be in good condition and shall be carefully placed to insure safety. Stepladders should be fully opened and the braces engaged. Scaffold planking should extend at least one foot beyond the supporting point and in stairwells it should be lashed.

4.02 Where needed, drop cloths or newspapers shall be used to protect equipment, furniture and floors. Washing about telephone or electrical equipment should be done only with the cooperation of the person in charge of the equipment.

4.03 Move furniture away from the wall where the work is to be performed. This is done as the work progresses and is replaced as soon as the area is finished.

4.04 A solution of one to two tablespoonfuls of pyrophosphate cleaner to a pail (10 qts.) of water, preferably warm, is used. The concentration is dependent upon the character and the degree of dirt, the nature of the wall surface and in some localities upon the hardness of the water. Lesser concentrations usually suffice for glazed tiles and other smooth non-porous materials.

4.05 When washing the natural stones such as marble and travertine it is important that they first be wet with clean water immediately before the cleaning solution is applied.

4.06 Two pails and two sponges are used; one for the cleaning solution and washing sponge and the other for the clean water and rinse sponge. The cleaning solutions should be changed often enough to maintain full cleaning effectiveness and to avoid resmearing the accumulated dirt over the surfaces being cleaned. The rinse water also should be changed frequently as it has an important bearing on the freedom from streaks and brightness of the finished results.

4.07 The solution is applied with the sponge wrung sufficiently to avoid dripping or running. It is applied over an area of about ten or twelve square feet, simply wetting the surface without rubbing to remove the dirt. After the section has been covered, repeat the operation, rubbing if necessary to remove the dirt.

4.08 Immediately following the washing operation and before the wall has become dry, rinse the section washed with a clean sponge squeezed as dry as possible.

5. PROCEDURE - OVER-ALL WASHING - TOOL METHOD

5.01 With the tool method the work is done from the floor, or from stairs or landings in the case of stairwell washing. Stepladders or scaffolding are used only when there is need for supplemental hand washing that cannot be reached from the floor.

5.02 A solution of one to two tablespoonfuls of pyrophosphate cleaner to ten quarts of water, preferably warm, is used. The concentration is dependent upon the character and degree of dirt, the nature of the wall surface and in some localities upon the hardness of the water. Lesser concentrations usually suffice for glazed tiles and other smooth non-porous materials.

5.03 When washing the natural stones such as marble and travertine it is important that they first be wet with clean water, immediately before the cleaning solution is applied.

5.04 Two buckets are used, i.e., one for the cleaning solution and the other for clean water for the rinsing operation. A cellulose sponge tool is assigned to each bucket. One hand size cellulose sponge is also provided for the occasional areas that are hard to get at with the special tool.

5.05 For space above shoulder level, the sponge head is held above the handle and stroked upwards. For space lower than shoulder level, the sponge head is held below the handle and the strokes are made downward toward the baseboard. The areas (considered vertically) are therefore done in two sections.

5.06 The wall washing tool is immersed in the cleaning solution and placed under the wringer and given a partial squeeze, i.e., sufficient solution is removed so that it does not drip when the tool is applied to the wall. It is then applied to the wall using, where possible, straight upward and downward strokes of some four to six feet in length to cover an area of about twenty to thirty square feet. This is done to wet the wall with the cleaning solution thereby enabling it to loosen the dirt.

5.07 After the area has been wet down the tool is rinsed in the solution bucket and the area again gone over with the tool, with sufficient pressure applied to remove the dirt. The sponge face is intended to be in flat contact with the wall but where there are dirty spots that are especially tenacious the corner of the sponge can be used.

5.08 The washed areas should be rinsed before they have had opportunity to dry, i.e., within a few minutes, using the sponge tool which has been immersed in the clean water and given a full squeeze.

5.09 In larger areas, best results are obtained with two operators, one washing and one rinsing.

5.10 Where washing does not remove dirt such as sub-surface stains from natural stones, poulticing as described in Section 6 or in severe cases refinishing of the surfaces may be required to restore a satisfactory appearance.

6. PROCEDURE - POULTICING

6.01 The poultice treatment is helpful in the removal of stains and discolorations which are so imbedded in hard walls as to resist removal by the customary washing processes. It should be employed as a special rather than a routine treatment. Poulticing is not always fully successful in single applications and further improvement in some cases may be obtained by a second application. However, poulticing is not effective if the stain is coming from the back of the slab. Preliminary trial on a few inches of obscure surface is desirable to establish that it is not in any manner harmful. Roughing or dulling of the surface or bleaching of the color of the stone are evidences of damage.

6.02 The poultice is made in the proportion of one pound of chlorinated lime well mixed with ten pounds of scouring powder; sufficient warm water is added to produce a paste capable of adhering to a vertical wall surface.

It is desirable to make it as wet as possible rather than dry; four to six pints of water is usually sufficient for ten pounds of the powder, and it should be freshly prepared when required for use and only in sufficient quantity for the immediate job as it does not keep. One pound of the powder mixed as above covers approximately two square feet.

6.03 The poultice is applied to the wall by means of a trowel in a layer approximately $1/8$ to $1/4$ inch thick. It is, however, essential that the thickness decided upon shall be maintained consistently to obtain uniform results. It is permitted to remain from 12 to 48 hours after which it is carefully scraped off with a thin piece of wood. The area is then copiously rinsed with warm water and dried with sponges or cloths. After drying, if the surface does not have its normal sheen, buffing with dry dust or wiping cloths will be helpful. The poulticing operation may be repeated if the first treatment is not fully satisfactory and it is known that the discoloration does not come from the back of the slabs.

7. CARE OF TOOLS

7.01 All tools and equipment are cleaned, after use, in the building service quarters.

7.02 Clean all buckets, sponges and tools and restore them to their proper places.

7.03 Brush all superficial dust from drop cloths with a counter dust brush, fold carefully and store them in their proper places.

7.04 Damp wipe all ladders and scaffolding and store them in their proper places.