

Recommended Cleaning Procedures and Solutions

Glen-Gery - Coal City Black / Marseilles Plant

Recommended Cleaning Procedures:

These recommendations are for use in exterior applications with the Glen-Gery brick listed on the price sheet pages. Contact your Glen-Gery sales representative for information about any brick not listed. While Diedrich Technologies Inc. products have been listed as acceptable cleaning solutions, other cleaning solutions may be used at your own risk. **Do not use muriatic acid to clean brickwork.** Wait seven (7) days before cleaning the masonry. Except as noted, follow the mixing and application recommendations of the cleaning solution manufacturer.

Except as noted, limit cleaning procedures to the bucket and brush method described in *Glen-Gery Technical Profile*, *Cleaning New Brickwork*, and as summarized on the following page. If a pressure washer is used during the rinsing phase of cleaning, observe the pressure limits noted.

Procedure:

Bucket and brush method with the recommended cleaning solution. Maximum water pressure 400 psi.

Recommended Cleaning Solution:

Diedrich 202V Vana-Stop

Diedrich 202V Vana-Stop is recommended for cleaning this brick because cleaning this brick with Diedrich 202 New Masonry Detergent may discolor or otherwise damage the brick.

Note: <u>Inadequate wetting prior to cleaning solution application has been proven to cause efflorescence. Proper pre-wetting is particularly important prior to application of 202V Vana-Stop, which has been proven to cause efflorescence when absorbed into the brickwork.</u>

Note: Unless thorough testing reveals that 202 New Masonry Detergent does not bleach or otherwise damage a specific colored mortar, use only 202V Vana-Stop to clean colored mortars, including Glen-Gery Color Mortar Blend.

Test Panel

A test application should be performed on an inconspicuous wall area prior to cleaning the masonry. Test each type of surface to be cleaned to ensure proper dilution rate, procedure and desired results. Adjust dilution rate to the lowest concentration of cleaning solution that effectively cleans the masonry surface. After cleaning, the test area should be allowed to dry for 7 to 14 days before final inspection. The brick as well as the mortar should be inspected for possible undesirable effects. Do not proceed if discoloration or efflorescence appears. Contact your brick supplier or Glen-Gery to

request additional assistance. Approval of owner or owner's representative should be obtained before proceeding with full scale cleaning.

Bucket and Brush Method

- 1. Adjacent materials and plant life should be protected from exposure to the cleaning solution. Appropriate personal protective equipment must be worn.
- 2. Remove all large mortar particles with wooden paddles. The cleaning solution alone will not remove all mortar.
- 3. Dilute the cleaning solution with water as recommended by the solution manufacturer. Based on test panel results, use the lowest effective concentration of solution. Always pour the acid into the water.
- 4. Thoroughly pre-wet the area to be cleaned. Pre-wet any masonry below. Do not allow the masonry to dry before applying the diluted cleaning solution. <u>Inadequate pre-wetting of material has been proven to cause efflorescence</u>.
- 5. Apply the diluted cleaning solution freely in a gentle-scrubbing manner with a stiff bristle brush or with a low-pressure sprayer. Start cleaning at the top of the wall. Keep the wall surfaces wet below the areas being cleaned. Rinse regularly to keep these areas free of cleaning solution residue. Scrub bricks, not mortar. Do not use metal tools.
- 6. Allow the diluted cleaning solution to remain on the surface of the masonry in accordance with manufacturer's recommendations. Do not allow the diluted cleaning solution to dry on the wall.
- 7. Reapply the diluted cleaning solution as required.
- 8. Rinse thoroughly with fresh water. Cleaning solutions must be completely rinsed from the masonry to prevent discoloration.
- 9. Repeat as required, following steps 4-8 above. Multiple applications may alter the color of the mortar.

Pressure Washing

Pressures should be limited according to the procedure indicated on the reverse side. If allowed, a pressure washer may be used in steps 4 and 8. Be sure to limit water pressure to that listed for the specific brick noted on the reverse side. Do not use pressure washing equipment to apply the cleaning solution.

Proper pressure washing involves the correct pressure, proper volume of water, and proper nozzle (spray tip). A minimum flow of 3 gallons of water per minute should be maintained, although 4 to 6 gallons per minute is more desirable. A fan type stainless steel spray tip is the most efficient and least likely to cause damage to the surface of the masonry. The spray tip should disperse a 30 deg.-50 deg. fan spray. Do not hold the spray tip closer than 12" to the face of the wall.

Additional Information

Glen-Gery Technical Profile, Cleaning New Brickwork is available for additional general information about cleaning brick masonry.

To achieve satisfactory results, cleanliness during construction is important:

- 1. Care should be taken to keep mortar from dropping on the exposed masonry.
- 2. At the end of the workday, excess mortar remaining on the brick should be brushed off with a stiff bristle brush.
- 3. At day's end, cover the tops of unfinished walls to prevent moisture penetration, and turn scaffold planks on edge.
- 4. Protect the bases of walls from dirt and mud.

Note: Because of the extensive variety of applications, job conditions, and cleaning methods available for use with clay masonry, these recommendations do not eliminate the need to test chemicals and procedures for every project. Other cleaning solutions are available for remedial cleaning. Contact your local Glen-Gery representative prior to exposing brick to such cleaning solutions. Reactions of solutions with materials other than the listed brick are not the responsibility of Glen-Gery.