

MODIFYING THE COLOR OF BRICKWORK WITH BRICK STAIN

In cases where there is a need or desire to modify the color of brickwork, many people are not aware of staining as an option. Even though many designers and owners are not familiar with this option, staining brickwork is a widely accepted practice within the brick industry that has been employed since at least 1960. It is a viable, time-tested, practical solution that has been used successfully to change the color of brick or brick-and-mortar surfaces where maintaining the appearance of natural or unaltered brickwork is desired.

Applications. Staining has been used to change the color of brickwork in a variety of circumstances, including but not limited to the following:

- Correcting brickwork in which multiple brick colors may not have been properly blended, resulting in a patchwork appearance.
- Matching brickwork constructed of brick from different production runs.
- Matching brickwork installed in a building addition. Not only can the new brickwork be matched to the existing brickwork, but the existing brickwork can be matched to the new brickwork.
- Covering surface imperfections of brick due to the presence of chips, lime pops or pyrite pops.
- Repairing brickwork that was damaged due to improper cleaning.
- Updating existing brickwork to change aesthetics yet maintain natural brick appearance.
- Providing an exact color for the desired brickwork when a custom color or color match cannot be achieved through the manufacturing process.
- Modifying both the brick units and mortar joints to achieve a consistent color throughout the facade, to resemble painted brickwork.
- Modifying only the mortar joints to match the color of surrounding mortar joints.

Photos 1 through 14 depict the various applications in which brick staining can change the finished appearance of brick masonry.



Photos 1 and 2: Before staining (top), lighter-color brick stands out. After staining (bottom), they blend with the surrounding brick.



Photos 3 and 4: The color of mortar joints can impact the overall look of the brickwork. Before staining (left), the color of the joints was inconsistent, tricking the eye to think the brick were also mismatched. Staining only the joints created a consistent mortar color in the wall (right).

Benefits. Brick staining invariably avoids many of the physically and economically impractical situations that arise from removing and replacing existing or new brick, especially if the brickwork was well-constructed and is acceptable in all other aspects except color. Such situations include the scheduling, time, expense and cleaning associated with demolition and reconstruction. The staining of individual brick allows the existing mortar to remain in place and avoids the possibility of mismatching the color of fresh mortar with the existing mortar color. For portions of brickwork with different joint colors due to mortar mix selection and workmanship issues, a brick stain can be applied to the mortar alone to correct this condition.

Materials and Methods. The process of brick staining involves the application of certain ceramic stains and pigments specifically formulated for brick and mortar. Trained, experienced professionals under the employ of reputable, responsible brick



Photos 5 and 6: Before staining (top), brick from different production runs were installed, causing inconsistent color. After staining (bottom), the facade had a well-balanced blend of varying brick colors.



Photos 9 and 10: Lime pop exposes underlying red brick body (top). After staining, the lime pop is concealed (bottom).



Photos 7 and 8: Before brick staining (top), it was easy to identify the new additions of a building. After staining (bottom), even the brickwork in the newest addition matches.

manufacturers or specialized brick staining contractors apply the staining materials to the exposed surface of the brickwork in accordance with the recommendations of the staining material manufacturer. The stain then permeates the porous surface of the brickwork, resulting in a colorfast, durable finish that can perform in the climate conditions present in North America, ranging from hot, humid and high precipitation to freezing weather. Properly applied brick stains do not require additional maintenance and do not affect the structural integrity of the brick units or the mortar joints.

Historically, there have been no formal technical resources or



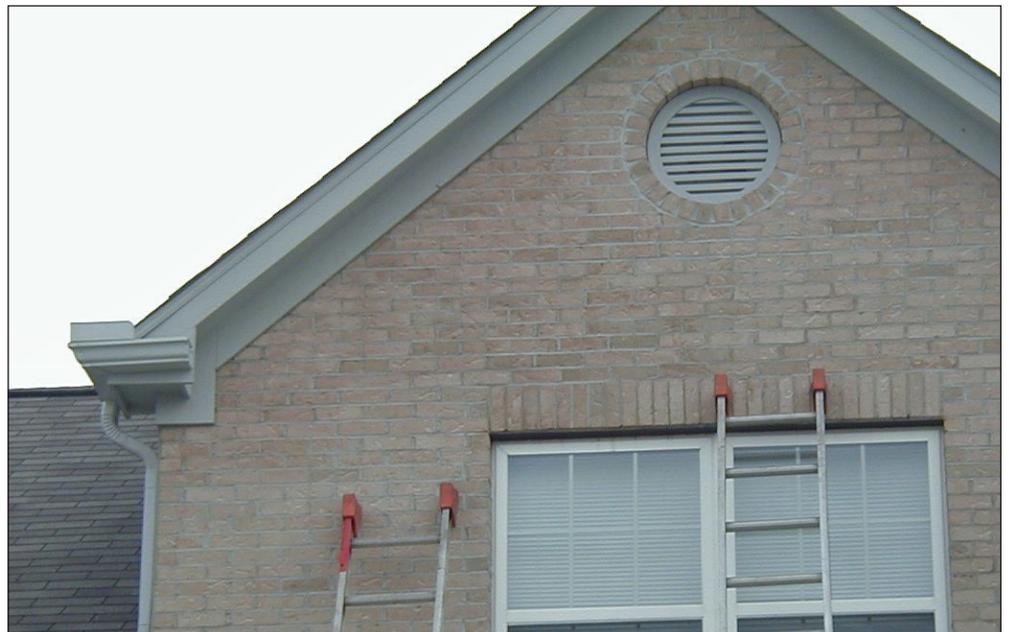
Photos 11 and 12: Before staining (left), all the brick units were the same color. Brick staining was applied to certain individual brick units to create a variegated appearance (right).

ASTM Standards related to stain materials or their application. The process of formulating and applying masonry stains is proprietary and differs among practitioners. It is critical to ensure that the methods and materials used are appropriate and durable for the climate in which the project is located. As such, it is recommended that the brick staining contractor validate their experience by submitting references of several successful brick stain projects. At a minimum, the references should include photos and addresses of the projects. Most stain manufacturers provide a warranty for their product.



Whether used to achieve an aesthetic change or to correct color differences, brick staining is a solution that has been successfully used for many decades. Brick staining should be given serious consideration, as it results in a durable, colorfast finish that preserves the minimal maintenance associated with traditional brickwork.

Brick Briefs are short discussions of a particular topic. The information contained herein must be used with good technical judgment. Final decisions on the use of this information must rest with the project designer and owner. © 2021 Brick Industry Association.



Photos 13 and 14: Before staining (top), brick finish removed by improper cleaning. After staining (bottom), the brick finish matches the surrounding brickwork.