



Cleaning brick masonry after installation is a routine practice. Selecting the proper cleaner and cleaning methods for your project is critical to avoid issues which can result from improper cleaning. The Brick Industry Association has issued [Technical Note 20](#) which offers detailed guidelines for cleaning brickwork. Please refer to the [Technical Note 20](#) for additional instructions and references.

Meridian Brick offers the following guidelines when cleaning new masonry. Due to the diverse nature of cleaning solutions, procedures and problems, Meridian Brick cannot accept responsibility for the final success or effectiveness of these procedures.

Brick Type	Cleaning Method	Recommended Cleaners
Red Body or Red Flashed	<ul style="list-style-type: none"> • Bucket and Brush • Pressurized water (100-400 psi, 25-60 degree fan nozzle at > 2 FT) • Chemical Cleanes 	Proprietary masonry cleaners: <ul style="list-style-type: none"> • PROSOCO SureKlean 600 • PROSOCO SureKlean Vana Trol • EaCo Chem NMD 80 * Never use unbuffered muriatic acid solutions
White, Tan, Buff, Gray, Pink, Brown, Iron Spot	<ul style="list-style-type: none"> • Bucket and Brush • Pressurized water (100-400 psi, 25-60 degree fan nozzle at > 2 feet) • Chemical Cleaners 	Sensitive Brick Cleaners <i>Only</i> : <ul style="list-style-type: none"> • PROSOCO SureKlean Vana Trol • EaCo Chem NMD 80 * Never use unbuffered muriatic acid solutions
Sand and Slurry Surface Coatings, Cut and Roll-back texture (gentlest cleaning method)	<ul style="list-style-type: none"> • Bucket and Brush • Chemical Cleaners • DO NOT use pressurized water 	See above approved cleaners based on brick color. <ul style="list-style-type: none"> • Use sensitive brick cleaners for bricks with heavy white, black, or gray coatings regardless of body color.
Colored Mortars	<ul style="list-style-type: none"> • Method is generally controlled by brick category 	Many manufacturers of colored mortars do not recommend chemical cleaning solutions. Unbuffered acids and some proprietary cleaners tend to bleach colored mortars. Mild detergent solutions are recommended.

General Cleaning Tips

- Reduce the need for cleaning:
 - Before installation, brick cubes should be stored under a cover and off the ground to protect the product from mud and weather
 - Protect bricks and walls from mud and mortar splatter during installation. For installed brick, mud splatter can be reduced by placing pine straw at the base of the wall prior to landscaping
 - Cover walls which are under construction to prevent mortar wash-out during rain
 - Remove mortar at the end of each day by brushing walls with a non-metallic medium-soft bristle brush
- Select the gentlest cleaning method which will effectively clean the brickwork beginning with the bucket and brush method
- Test any cleaning method on a small area before cleaning the entire surface

Cleaning with Chemicals

- Saturate walls with water before applying cleaning agent. This reduces the amount of cleaner absorbed by the wall and prevents acid from penetrating deep into the bricks
- Apply an approved masonry cleaner (referencing above table):
 - o Always wear the prescribed PPE when handling chemical cleaners
 - o Follow the cleaner manufacturer's recommendations for application and dwell time
 - o Do not allow the cleaner to dry in the wall
 - o Applying cleaners with high pressure can drive the chemicals deeper into the bricks and mortar. DO NOT use "high pressure" spray to apply cleaning solution or rinsing down the walls
 - o Use a medium-soft non-metallic brush to scrub areas with excess mortar build-up rather than applying more cleaner
- Rinse the wall thoroughly from top to bottom with large amounts of low-pressure clean water. It is important to be sure all the cleaner is flushed from the wall to prevent acid burn, manganese bleed and vanadium stains
- If staining or efflorescence develops after cleaning, DO NOT reclean the masonry with the same cleaning agent until consulting with your Meridian Brick representative. When recleaning is commenced, work on a sample wall area only in order to verify new cleaning procedure.

Pressurized Water

Cleaning with pressurized water can damage bricks with surface coatings and new mortar joints. Bricks without surface coatings can be cleaned with pressurized water once mortar has hardened for 7 days - following these guidelines.

- Pressurized water should be regulated to 100-400 psi when cleaning new brickwork
- Use a 25-60 degree fan tip nozzle at a distance of no closer than 2 feet
- Test the cleaning method on a small area before cleaning the entire wall

Common Problems Caused by Improper Cleaning

Preventing Vanadium Staining

Many white or buff clays contain traces of a metal called vanadium which become free from the clay crystals as the bricks are fired in kilns. The vanadium takes the form of a metallic salt which can be dissolved by acidic solutions and can migrate to the surface of the bricks as a stain. Similar to other types of efflorescence, vanadium stains occur when the soluble materials are deposited on the surface of the bricks as they dry.

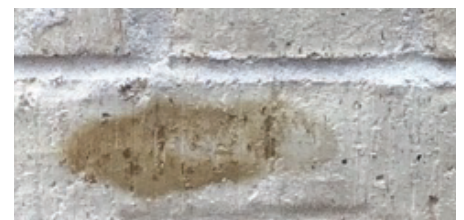


Vanadium stains are typically known for their green appearance, but can also be yellow, brown, or even purple in color. These stains can be difficult to remove so taking steps to prevent staining can save time and money. The most common cause of vanadium staining is improper cleaning chemicals or methods.

New masonry cleaners use acid to dissolve mortar smears and splashes left behind during installation. In light bodied bricks, many acidic cleaners will dissolve vanadium salts in the bricks and deposit them on the surface as they dry. Luckily, there are masonry cleaners designed for sensitive bricks which reduce the likelihood of vanadium staining. Meridian Brick is not responsible for bricks damaged due to improper cleaning and only recommends **PROSOCO SureKlean Vana Trol** or **EaCo Chem NMD 80** when cleaning bricks containing white or buff clays. These products have proven to be safe for the product and effective when used per the manufacturers' instructions. If you have questions regarding whether a specific cleaner is safe to use on your product, please contact your Meridian Brick Representative for assistance.

Preventing Manganese Bleed

Manganese is a natural pigment which is added to many bricks to darken the body. Improper cleaning can draw this pigment out of the bricks and onto the surface or into the mortar. This problem is often caused by using strong acidic cleaning solutions or the failure to pre-wet the bricks before applying cleaners. Meridian Brick recommends a sensitive masonry cleaner such as **PROSOCO SureKlean Vana Trol** and **EaCo Chem NMD 80** when cleaning brown, tan, or gray bricks which contain manganese to help avoid manganese bleed.



Preventing Acid Burn

Acid burn occurs when strong cleaners such as unbuffered muriatic acid solutions are used to clean masonry. Acid burn is also seen when bricks are not soaked before cleaning or when cleaning solutions are not thoroughly rinsed from the wall. Acid burn can leave a hazy, discolored stain on bricks and often causes discoloration in the mortar. Using approved cleaners and following the manufacturer's instructions will prevent this problem.



Aggressive Cleaning

Cleaning bricks with sand or slurry surface coatings requires care to protect the coatings from damage. The use of high-pressure water is not recommended for bricks with surface coatings as it can damage the appearance of the bricks. Select the gentlest method (reference table above) which effectively cleans the bricks and test the method on a small area before cleaning the entire wall.



Conclusion

Cleaning bricks restores their beauty and lets their true character shine. Using the proper cleaning method is key to avoiding common issues and maintaining the beauty of your home or building. The selection of effective cleaning solutions, coupled with the use of consistent and appropriate cleaning procedures throughout the job, is essential to successful cleaning and cannot be overemphasized. Improper cleaning practices can lead to a host of problems which in severe cases cannot be repaired. These guidelines do not address specific safety issues related to various methods of cleaning brick masonry. Beware cleaning agents and processes may be hazardous and may cause injury if used carelessly or inappropriately. Cleaning operations should be performed only by personnel trained to handle the safety risks associated with the work and following the label instructions.