



→ SURE KLEAN →

# Guide

to Common Brick Staining  
in New Construction



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**PROSOCO**  
SINCE 1939

*improving the appearance and performance of buildings*

# Which stains invited themselves to your projects?

Here's a rogues gallery of masonry construction's toughest, most troublesome stains. Recognize any of the characters on this "Most Unwanted" list? When these fugitives from cleanliness show up, they blight even the best designed and built structures. Stain, scum or efflorescence – they all spell trouble for masonry construction professionals. Until now.

## White Efflorescence

**Description:** Loose, powdery surface deposit that disappears when wet and may reappear as drying continues. Seasonal.

**Cause:** Water-soluble salts dissolved in rainwater, construction water or groundwater. As water evaporates from wet bricks, it leaves the crystallized salts on the surface.

**Removal:** Let bricks dry thoroughly. Use the appropriate Sure Klean® new brick cleaner at the highest possible recommended dilution with water. Follow product label instructions.

**Prevention:** Protect wall cavities and brick cubes from rain during construction. Let masonry dry before cleaning. Protect the cleaned bricks with Weather Seal Siloxane PD or Siloxane WB Concentrate.



After  
Removal



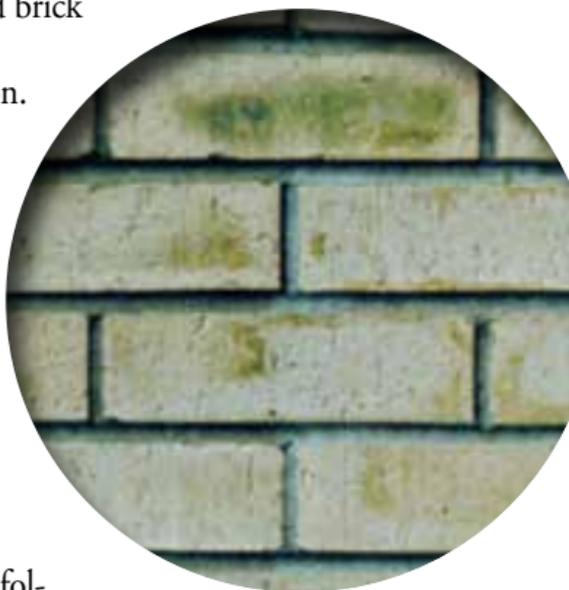
## Green Vanadium

**Description:** Yellow, green or green/brown stains in the heart of light-colored brick units common in new or water-saturated construction.

**Cause:** Water-soluble vanadium salts dissolve in rainwater, construction water or muriatic acid. As water evaporates, salts form on masonry surface to create unsightly stains.

**Removal:** Let masonry dry thoroughly. Apply Sure Klean® 800 Stain Remover following label instructions.

**Prevention:** Protect wall cavities and brick cubes from rain during construction. Let masonry dry thoroughly before cleaning with Sure Klean® Vana Trol® masonry cleaner. Protect the cleaned bricks with Weather Seal Siloxane PD or Siloxane WB Concentrate.



## Brown Manganese

**Description:** Tan, brown or gray staining concentrated along mortar joints of brown, gray or other manganese-colored brick.

**Cause:** Manganese dioxide dissolved in rainwater, construction water or muriatic acid. As water evaporates, manganese reacts with the alkaline mortar joint to create an insoluble brown stain.

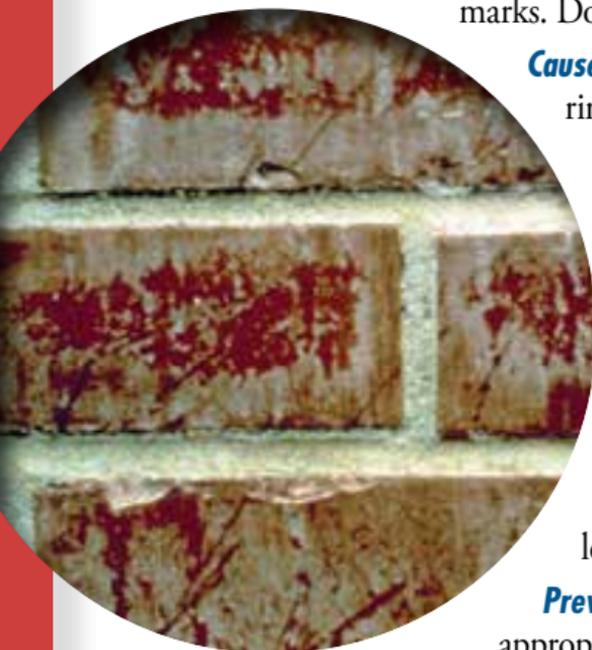
**Removal:** Let masonry dry thoroughly. Apply Sure Klean® 800 Stain Remover following label instructions.

**Prevention:** Protect wall cavities and brick cubes from rain during construction. Let masonry dry thoroughly before cleaning with Sure Klean® 800 Stain Remover® masonry cleaner. Protect the cleaned bricks with Weather Seal Siloxane PD or Siloxane WB Concentrate.



## White Scum

**Description:** Uneven white or gray stain on brick face or mortar joints. Often appears as vertical run marks. Does not disappear when wet.



**Cause:** Inadequate prewetting or rinsing when cleaning with muriatic acid or other acidic solutions. Mortar dissolved by the acid is absorbed by the dry wall surface to produce insoluble silicate salts commonly referred to as “scumming.”

**Removal:** Use Sure Klean® White Scum Remover following label instructions.

**Prevention:** Clean with the appropriate Sure Klean® new brick cleaner.

## Acid Burn

**Description:** Uneven yellow or gold stain on brick face and in mortar joints. Stained areas may also exhibit severe etching or mortar discoloration.



**Cause:** Cleaning with muriatic acid. Acid and impurities in the acid are rapidly absorbed by porous masonry and cannot be thoroughly water-rinsed. As the acid attacks the bricks and mortar, soluble and insoluble salts are mobilized to create unsightly stains.

**Removal:** Use Sure Klean® 800 Stain Remover following label instructions.

**Prevention:** Clean with the appropriate Sure Klean® new brick cleaner.

## Lime Run (Carbonate Staining)

**Description:** Hard white or gray surface crust concentrated along a mortar joint or running down from a hole or fine separation crack between brick and mortar joints. Does not disappear when wet.

**Cause:** Water deposited or collected in the wall during construction or as a result of inadequate waterproofing dissolves water-soluble calcium compounds. Over a prolonged period of time, the water migrates through openings in the wall surface. As the water evaporates, the dissolved calcium reacts with the atmosphere and crystallizes to produce a hard calcium carbonate crust on the masonry surface.

**Removal:** Use Sure Klean® Custom Masonry Cleaner or Heavy Duty Concrete Cleaner following label instructions. Repeated controlled applications and agitation may be required.

**Prevention:** Protect wall cavities from rainwater during construction. Clean with the appropriate Sure Klean® new brick cleaner. Protect the cleaned bricks with Weather Seal Siloxane PD or Siloxane WB Concentrate.



# Product recommendations for the removal of common brick stains

**600** is an effective general-purpose cleaner formulated specifically to scour excess mortar, grout and job dirt from new masonry, tile and concrete.

**Vana Trol®** is specifically formulated for final cleandown of new masonry surfaces that are subject to vanadium, manganese and other metallic stains common to white and most light-colored brick.

**101 Lime Solvent** is formulated to remove excess mortar, job dirt and normal job stains from red and dark-colored brick, concrete block and other masonry not subject to metallic stains.

**Custom Masonry Cleaner** removes concrete splashes, excess mortar, mud, retarders, heavy efflorescence, embedded stains and surface soiling from textured masonry surfaces.

**Concrete Brick Cleaner** won't etch concrete brick – WILL take mortar smears, rust, mud, atmospheric dirt and more cleanly off, while clarifying joints and bringing out the true color of the brick.

**Manufactured Stone Cleaner** dissolves excess mortar and other common construction stains and soiling to reveal the true intended beauty of the stone, without altering surface texture of these sometimes sensitive substrates.

**Safety Klean** cleans new brick construction effectively without using hydrochloric or other traditional inorganic acids. That makes it safe for use around metal.

**White Scum Remover** quickly and easily removes tough, insoluble salt scums (carbonates and sulfates) from brick and tile surfaces. It corrects surface conditions that commonly result from improper cleaning procedures during final cleandown of new brick surfaces.

**800 Stain Remover** effectively removes green vanadium stains most commonly found in buff/white brick. It also removes acid burn, "straw stain" and other metallic stains.

**Ferrous Stain Remover** removes metallic oxidation stains such as rust, manganese and other metallic discolorations from brick, stone and concrete surfaces.

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## Brick Stain Removal

<b>Stain</b>	<b>Product</b>
Acid Burn	<i>800 Stain Remover</i>
Algae, lichen	<i>BioKlean™ BioWash®</i>
Asphalt, tar, oil	<i>Degreaser Asphalt &amp; Tar Remover</i>
Copper Stain	<i>800 Stain Remover Limestone Restorer</i>
Efflorescence	<i>600 Safety Klean Light Duty Concrete Cleaner</i>
Job dirt/dust	<i>Vana Trol® 600 2010 All Surface Cleaner Safety Klean</i>
Graffiti - Protected Surface	<i>Graffiti Wipe</i>
Graffiti - Unprotected Surface	<i>Fast Acting Stripper Safstrip 8</i>
Lime run	<i>Custom Masonry Cleaner Heavy Duty Concrete Cleaner</i>
Manganese	<i>800 Stain Remover Ferrous Stain Remover</i>
Mud	<i>Restoration Cleaner Custom Masonry Cleaner Light Duty Restoration Cleaner 2010 All Surface Cleaner</i>
Oil & Grease Stain	<i>Asphalt &amp; Tar Remover Degreaser</i>
Paint	<i>Fast Acting Stripper Heavy Duty Paint Stripper Safety Peel 1 Safstrip Safstrip 8</i>
Rust Stains	<i>Ferrous Stain Remover Light Duty Restoration Cleaner 800 Stain Remover</i>
Silicone Sealants	<i>Dicone NC9 Dicone NC15 Gel</i>
Vanadium Stains	<i>800 Stain Remover</i>
White Scum	<i>White Scum Remover</i>

Always test to ensure desired results and proper dilution where appropriate.

# Protect newly cleaned brick construction...

with “Laboratory-tested, field proven” Sure Klean® Weather Seal water repellents from PROSOCO.

## **Weather Seal Siloxane PD (Predilute)**

penetrates your masonry, locking out water and the destructive salts and dirt water carries. Treated surfaces resist cracking, spalling, staining, and other damage related to water intrusion. There’s no surface film, so masonry “breathes.”

## **Weather Seal Siloxane WB Concentrate**

Dilute this economical concentrate up to 1:14 with water. One gallon provides up to 3,500 square feet of water-repellency. It’s water-based, low-odor and has no flammable solvents. It won’t darken your masonry or create a surface film.

## **Weather Seal Blok-Guard® & Graffiti Control II**

Protect brick, concrete block and other porous masonry from water AND graffiti penetration with this “breathable” protective treatment. Graffiti can’t get a grip, so it cleans off fast and easy with DeFacer Erasers Graffiti wipes. Water beads up, runs off and takes away a host of potential water-related problems, like efflorescence and mildew.

*For VOC information on PROSOCO’s protective treatments, see the applicable current product data sheet.*

The first name and the last word in cleaning, protecting & maintaining your masonry investment.

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