



EaCo Chem

# HARDSCAPE CLEANING

HARDSCAPE MASONRY CLEANING

## THE PROFESSIONAL'S GUIDE

Using the right equipment and chemicals for safe, cost effective and excellent cleaning results.

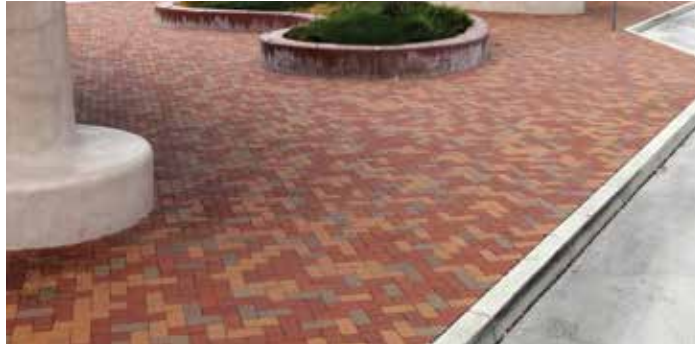
THE WAVE OF THE FUTURE

**ONE CHOICE...BECAUSE IT WORKS!**

## **THE BEST INFORMED CHOOSE**



EaCo Chem has been producing exceptional cleaning chemicals for decades with nothing but the best results. Our chemistry has been approved worldwide on many projects. Professional cleaners that choose to stay ahead of their competition have one thing in common - the desire to be the best. That includes using the best chemicals.



Vacaville Transportation Center CA

### **INDUSTRIES WE SERVE:**

- NEW CONSTRUCTION
- RESTORATION
- HOUSE & DECK
- FLEET WASHING
- HARDSCAPE
- PAINT STRIPPING
- WINDOW RESTORATION

### **WHY CLEAN AFTER INSTALLATION?**

Hardscape masonry units have been used for years to enhance outdoor spaces, parks, campuses, country clubs and many other places. While they can create a very inviting environment, they can also have unsightly appearances.

These masonry units can inherently have a little dust or film on them from the manufacturing and storage process. Cleaning these units properly after installation, whether vertical or horizontal, will typically remove any dust or film and leave the units clean and crisp!

Regardless of whether they are clay or concrete pavers, natural or synthetic paving stones or concrete retaining wall blocks, it is very important to clean after installation to:

- Enhance the overall color
- Remove job site dirt and debris left behind by the installers
- Remove any imperfections caused by the manufacturing or storage process
- Allow the unit to properly breathe to help prevent future water derived staining
- Prepare the surface for sealing if desired

These masonry units can also have other issues on them before installation, such as:

- Efflorescence
- Scuff Marks
- Secondary Hydration or "Halos"
- Hard Water Stains

Proper cleaning with the appropriate chemicals and equipment can almost ensure that your customer will be completely satisfied with your service when you leave the job site.

### **THE APPROPRIATE CHEMICALS**



**EF-FORTLESS**

**WHITE SCUM  
PRESOAK**

**PROFESSIONAL SOLUTIONS FOR NEW CONSTRUCTION CLEANING**

THE WAVE OF THE FUTURE

## THE APPROPRIATE CHEMICALS (cont.)



**NMD 80™** is a powerful detergent-based solution designed for safe and effective removal of mortar smears from masonry surfaces and surrounding materials. It can be used on all masonry substrates including brick, stone, synthetic stone, precast, architectural, and colored block.

This product is capable of extremely effective cleaning without brushing or scrubbing and will leave the cream on the mortar joints. Using the **EaCo Chem** process is essential to experience great reductions in chemical costs and cleaning time. Combine these cost reductions with heightened safety and excellent final appearance, and you have tomorrow's chemistry today.

### EF-FORTLESS

**EF-Fortless** is a soap solution that melts powdery efflorescence and haze from cleanup efflorescence, and helps to control its return. This product is mildly acidic and great for use on color sensitive surfaces since it will not discolor brick, block or mortar. It can be used on slurry-dyed block and similar substrates. Simply apply **EF-Fortless** straight and wait for foam to collapse. Reapply as needed. No rinsing required. The amount of coverage will vary with the thickness of the efflorescence; with the most common powder type getting approximately 75 square feet per gallon. This product offers long-term protection. Surface can be sealed after one week.

### WHITE SCUM PRESOAK

**White Scum Presoak** is designed as a presoak to facilitate quick removal of white scum on block, brick, or concrete. **White Scum Presoak** is used in conjunction with **NMD 80™** to ensure complete removal of white scum. **White Scum Presoak** provides powerful penetration and softening action of white scum. First apply **White Scum Presoak** straight and allow a dwell time of 5-10 minutes. Then apply **NMD 80™** cut 4:1 wet on wet without rinsing in between. Allow dwell time 5-10 minutes. Then rinse to get complete satisfaction.

## THE RIGHT EQUIPMENT

The proper equipment will always make the cleaning project go much more smoothly. You would never try to hammer a screw in, so why use the wrong equipment to clean hardscape?

Before you get started, make sure you have the following items with you:

### Pressure Washer



A 3 to 5 G.P.M. unit is recommended with 2,000 P.S.I. for optimum efficiency. Unit should not exceed 2,000 P.S.I.

### Polyethylene Mortar Pan



To help prevent any spills or drips on the paver surface. Should be wide enough and deep enough to capture any liquid if the bucket spills.

### EC Jet for Pavers



Quick couples to the tip of pressure washer wand. It comes with 30' of hose to allow cleaning of 1,800 square feet of surface. To rinse, simply shut off the chemical intake valve.

### Tips needed on pressure washer to work with EC Jet for Pavers:



MEG nozzle - quick connect nozzle necessary for use of EC Jet for Pavers.



NPT nozzle - screwed into pressure washer wand. This type of system will not work with the EC Jet for pavers unless it is connected with an adapter.



MEG adapter for NPT nozzle.

[www.eacochem.com](http://www.eacochem.com)



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**ONE CHOICE...BECAUSE IT WORKS!**

**INNOVATIVE CLEANING PROCESS THAT WORKS!**

Using NMD 80™ with EaCo Chem's innovative EC Jet pressure washer wand, will reduce cleaning time 90% versus traditional bucket and brush cleaning.

**NMD 80™**  
**NEW MASONRY DETERGENT**

**EC Jet**  
**FOR PAVERS**



- BRINGS BACK THE TRUE COLORS
- REMOVES POLYMERIC SAND HAZE
- REMOVES INSTALLATION MARKS
- NO BRUSHING
- NO ETCH



### WATER IS NOT YOUR FRIEND

Most of the problems associated with staining or deposits on or in masonry/concrete walls are due to excess water migration. Our top down process requires a thorough rinse. Thorough is not soaking or drenching a wall, it is methodical and consistent (refer to videos). All parts of the wall should be rinsed once. Absorptive brick or cast stone cause worry among many contractors, don't worry. Our process works with these substrates.

Additional issues are discussed in our "Complete Cure" brochure. Our "Vanadium and Manganese Issue Statement" should also be reviewed.



Biodegrades readily. Generally NMD 80 runoff should be neutral within an hour in exterior cleaning where runoff is not collected.



Uses 80% less water than other cleaning processes.

**RESULTS THAT SELL**

THE WAVE OF THE FUTURE

## THE CLEANING PROCESS

Testing is always recommended prior to any cleaning project. Although this process has been tested and proven effective, every situation is different and can present different challenges. Allow the test area to dry thoroughly before evaluating the final results.



After Pavers have been installed and before landscaping has begun, follow the procedures below to remove efflorescence, job site debris, and dirt:

1. Lightly pre-wet (do not soak) the paver surface.
2. Apply **NMD 80™** through an **EC Jet for Pavers** using overlapping strokes to achieve even coverage.
3. Allow the product to dwell for 5-7 minutes. Do not allow the product to dry on the surface.
4. Re-apply **NMD 80™** through an **EC Jet for Pavers** to melt away the remaining efflorescence, job site debris, and dirt. \*With **NMD 80™**, the longer it stays on the paver surface, the cleaner the end results. It has been noted that longer dwell times produce a decrease in the water rinse.
5. Begin rinsing from the highest elevation to the lowest. Use long, even strokes that overlap each other. Low pressure rinse is recommended through the **EC Jet** (turn off the soap valve and rinse). If a pressure washer is unavailable, a garden hose may be used.



\*When using a pressure washer, a wide tip nozzle is suggested. Care should be taken near the joints not to “blow” the sand out.

## SCUFF MARKS



The cleaning process after installation will always begin the same, pre-wet (do not saturate) the surface. The main differences will be in the dwell time of **NMD 80™** or adding a secondary product, such as **White Scum Presoak**. Since every paver is manufactured under various circumstances, the process can also vary! Much like the normal cleaning process, testing is necessary to determine which protocol is appropriate.

*Scuff Marks* will generally occur when the pavers have peaks and valleys. This is caused by the layer above rubbing the peaks. Cleaning after installation will even out the appearance of the peaks and valleys.



The cleaning process is the same general cleaning after installation, however the dwell time for **NMD 80™** needs to be extended to remove the scuff marks.

Allow the product to dwell for 7 to 10 minutes. Do not allow the product to dry on the surface. Re-apply as necessary to keep the product wet.

- The key to removing the scuff marks is to allow extended dwell times.



# ONE CHOICE...BECAUSE IT WORKS!

## SECONDARY HYDRATION OR "HALOS"

Secondary Hydration or "Halos (shown below) can be present before pavers are installed. Cleaning after installation can remove these unsightly stains and restore the pavers to their natural color!

1. Lightly pre-wet (do not soak) the paver surface.
2. Apply **NMD 80™** through an **EC Jet for Pavers** (or pump sprayer diluted 4:1) using overlapping strokes to achieve even coverage. Allow the product to dwell for 5 to 7 minutes. Do not allow the product to dry on the surface.
3. While the **NMD 80™** is dwelling, apply **White Scum Presoak** through a pump sprayer using a cone shaped nozzle only to the areas where secondary hydration or halos are present.
4. Multiple applications of **White Scum Presoak** may be required to completely remove stains.
  - Do not rinse between applications.
5. Re-apply **NMD 80™** through an **EC Jet for Pavers** (or a pump sprayer diluted 4:1) to restore the appropriate color (presoaks can whiten the color).
6. With **NMD 80™**, the longer it stays on the paver surface without drying, the cleaner the end results.
  - It has been noted that longer dwell times produce a decrease in the water rinse.
7. Begin rinsing from the highest elevation to the lowest. Use long even strokes that overlap each other. Low pressure rinse is recommended through the **EC Jet for Pavers** (turn off the soap valve and rinse). If a pressure washer is unavailable, a garden hose may be used.
  - When using a pressure washer, a wide tip nozzle is suggested.
  - Care should be taken near the joints not to "blow" the sand out.
8. If there are still spots with secondary hydration present after rinsing, repeat steps 3 and 4 just to the areas where they are still visible. Thoroughly rinse again to remove remaining stains and chemical.



## SEALER REMOVERS

Rated from 0-5, 0 being the Least Effective while 5 being the Most Effective.

	Stripsol LO	Graf-Ex	AcrylicStrip
(A) Acrylic Semi Gloss	5	4	5
(B) Solvent Based Silicone	4	5	5
(C) Solvent Based Acrylic	3	4	5

## WATER STAINS

Hard Water Stains can occur on concrete tiles due to the shrink wrapping process that can trap moisture in it. When this happens, streaks appear on the surface, typically running down. Proper cleaning after installation will remove these streaks.



The process to remove hard water stains (streaks) from concrete tiles is exactly the same as cleaning pavers after installation. Additional applications may be required, depending on the severity of the streaks.

## OIL STAINS

Oil stains, such as the one pictured to the right can be very difficult to remove. There are methods to absorb the physical oil, however the trouble comes with removing the stain left behind!

1. Pre-wet (not soak) the area with water before applying the product.
2. Dilution will vary depending on the severity of the stain from undiluted to 10:1
3. Allow **Hot Stain Remover** to dwell 15 minutes to an hour. **Hot Stain Remover** should have an extended dwell time as it contains special additives that cause the stain to rise to the surface.
4. Thoroughly rinse.



# RETAINING WALL CLEANING PROCESS

There are two ways to install retaining wall blocks, mortared or dry stack. The cleaning process after installation is exactly the same, with one exception. Mortared retaining walls will need to be scraped between applications to remove the chunks (the mortar will also need time to set prior to beginning the cleaning process).

Testing is still always recommended prior to any cleaning project. Although this process has been tested and proven effective, every situation is different and can present different challenges. Allow the test area to dry thoroughly before evaluation the final results.

After retaining wall has been installed and before landscaping has begun, follow the below procedures to remove excess mortar, jobsite debris and dirt.

1. Lightly pre-wet (do not soak) the retaining wall surface.
  - If landscaping is already in place, thoroughly soak the roots and foliage and/or cover with plastic. Be sure to keep landscaping wet to prevent chemical from drying on the surface.
2. Apply **NMD 80™** through and **EC Jet** (or a pump sprayer diluted 4:1) starting from top and working down the wall using overlapping strokes to achieve even coverage.
3. Allow the product to dwell for 5 to 7 minutes. Do not allow the product to dry on the surface.
4. Scrape any large chunks of mortar off with an appropriate scrapper (if mortar is present).
5. Re-apply **NMD 80™** through an **EC Jet** (or pump prayer diluted 4:1) to melt away remaining mortar smears, jobsite debris and dirt.
  - With **NMD 80™**, the longer it stays on the surface, the cleaner the end results. It has been noted that longer dwell times produce a decrease in the water rinse.
6. Begin rinsing from the top of the retaining wall and work down. Use long even strokes that overlap each other. A thorough rinse is necessary to avoid leaving any cleaning material on the surface or in the retaining wall block.
  - Rinse pressure is determined by the masonry manufacturer's requirements. Color sensitive surfaces should always be rinsed with low pressure.



## RUST



1. You can use **OneRestore®** for rust removal.
2. Single to double application may be necessary.
3. Pressure wash rinse using appropriate pressure.

## EFFLORESCENCE

Efflorescence can appear as a white powdery substance on the surface of pavers or retaining walls. It is also one of the most common and easiest things to remove. There are two simple remedies to this problem, **NMD 80™** or **EF-Fortless**.

Applying **NMD 80™** through an **EC Jet for Pavers** (or a pump sprayer diluted 4:1) to a prewet surface, just as installation cleaning, will remove efflorescence on a larger scale. Multiple applications may be necessary based on severity of staining. Once there is no more efflorescence detected, a thorough rinse is required.

Applying **EF-Fortless** through a pump sprayer undiluted will also remove efflorescence on a larger or smaller scale. Rinsing is still required.

## WHITE SCUM

White scum has a very similar appearance to efflorescence, however it is slightly more difficult to remove. The process is the same as removing secondary hydration or "halos".

As you can see by the example to the right, the entire surface can be affected by white scum, therefore you will not "spot treat" certain areas. You will apply **NMD 80™** through an **EC Jet for Pavers** (or a pump sprayer diluted 4:1); then without rinsing, apply **White Scum Presoak** undiluted to the affected area, followed by another application of **NMD 80™**. Multiple applications of **White Scum Presoak** may be necessary, so testing first is extremely important to determine the correct number of applications needed. Once the white scum has been lifted, rinse thoroughly.





**HIGHEST**  
**LEVEL**  
**CLEAN**

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