# Repairing Etched or Stained Stone Floors

-Technical Bulletin —— September 2012

#### Introduction

Spills of acidic substances such as vinegar or pickle juice that are not cleaned up in a timely fashion can etch or stain floors that have been restored and protected with the 3M<sup>™</sup> Trizact<sup>™</sup> HX Disc and Scotchgard <sup>™</sup> Stone Floor Protector process.



This may leave an unsightly scar on a great-looking floor, as shown in Fig. 1.

Fortunately, floors that have been etched or stained following application of Scotchgard<sup>™</sup> Stone Floor Protector can be repaired. Etches and stains, although different, can be corrected with the same procedure. Etches result from a substance that causes a deterioration of the surface on which it comes into contact. This produces a hazy appearance and the surface may feel rough to the touch. A stain is caused when a colored liquid comes into contact and penetrates a surface. The liquid evaporates and leaves the coloring behind. This protocol outlines the steps required to restore the floor to its original beauty.

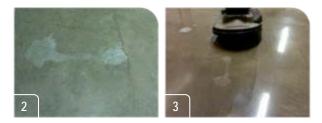
# **Recommended Tools and Equipment**

- = Mop and bucket
- Swing machine or hand tool
- High-speed burnisher (dust control recommended)
- Wetvac
- 3M<sup>T</sup> Trizact<sup>T</sup> Diamond HX Discs
- Scotch-Brite<sup>™</sup> Purple Diamond Floor Pad Plus

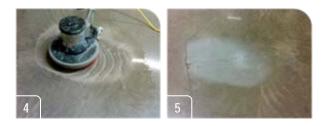
- 3M<sup>™</sup> Easy Shine Applicator System
- Scotchgard<sup>™</sup> Floor Protector Applicator Pad, Blue
- 3M<sup>T</sup> Easy Trap Duster
- Scotchgard<sup>™</sup> Stone Floor Protector
- Applicable Personal Protective Equipment (PPE)

## Procedure

 Scrub the area and assess the damage (Fig. 2). Determine whether the etch or stain is only in the Scotchgard<sup>™</sup> Stone Floor Protector layer or if it has gone through and affected the underlying floor material (concrete, marble, terrazzo, other). This can be done by hand scrubbing over some of the damaged area with a Scotch-Brite<sup>™</sup> Purple Diamond Floor Pad Plus center hole. If this removes the etch or stain, only the Scotchgard<sup>™</sup> Stone Floor Protector layer has been affected. Burnish the area with the Scotch-Brite<sup>™</sup> Purple Diamond Floor Pad Plus. This may be enough to remove the etch or stain if the damage is minor. If the etch or stain has not been removed as shown in Fig. 3, then move on to Step 2.

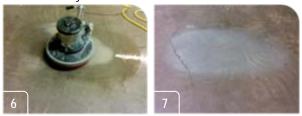


2. Wet floor in the area of the damage and scrub with 3M<sup>™</sup> Trizact<sup>™</sup> Diamond HX Gold Discs on a swing machine. For very small area repairs, a hand tool may be used instead of the swing machine. Execute six passes in a counter-clockwise direction, covering an area slightly larger than the damage area. A counter-clockwise direction will push the slurry to the middle and minimize the mess. Wet vac and mop to remove all slurry and dust. Examine the area after it has dried. If the area has a uniform look (Fig. 5), then move to the next step. If the etch or stain is still evident, repeat this step.

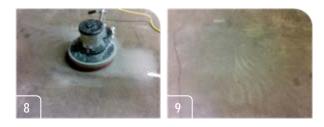




 Wet floor in the area of the damage and scrub with 3M<sup>™</sup> Trizact<sup>™</sup> Diamond HX Red Discs on a swing machine. Execute six passes in a counter-clockwise direction covering the area done previously, but also extending 3 to 4 inches farther out than the previous area. Wet vac and mop to remove all slurry and dust.



4. Wet floor in the area of the damage and scrub with 3M<sup>™</sup> Trizact<sup>™</sup> Diamond HX Blue Discs on a swing machine. Execute six passes in a counter-clockwise direction covering the area done in the previous step, but also extending 3 to 4 inches farther out than the previous area. Wet vac and mop to remove all slurry and dust. Allow the floor to dry.



- High-speed burnish the repair area of the floor with a Scotch-Brite<sup>™</sup> Purple Diamond Floor Pad Plus using a minimum of four passes. No water or moisture should be used during this process. Also burnish immediate undamaged Scotchgard<sup>™</sup> Stone Floor Protector area to ensure good blending. Dust with 3M<sup>™</sup> Easy Trap Duster to remove dust and pad debris.
- Apply a thin, even coat of Scotchgard<sup>™</sup> Stone Floor Protector to the repaired area of the floor, extending slightly beyond the repair. Allow the coating to dry to the touch. Wait a minimum of 15 minutes after floor is dry to the touch.

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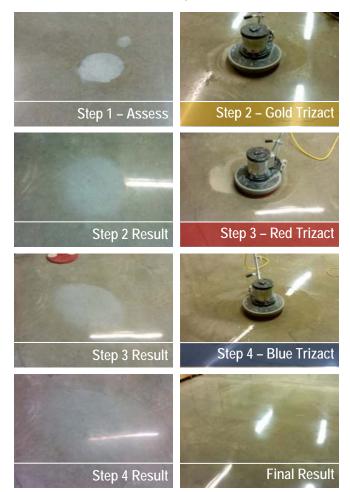


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- Burnish for a minimum of six passes using a Scotch-Brite<sup>™</sup> Purple Diamond Floor Pad Plus. Burnishing should be done at an approximate walking speed of 1 mph. Dust with 3M<sup>™</sup> Easy Trap Duster to remove dust and pad debris.
- 7. Apply a second coat of Scotchgard<sup>™</sup> Stone Floor Protector by repeating step 6 and 7.

### Additional Pictures of Repair Method



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