

Scotchgard™ Stone Floor Protector

Technical Data

July 2012

Description:

Scotchgard™ Stone Floor Protector is a high performance floor surface hardener and protective clear coat for concrete, marble, terrazzo, and other porous stone surfaces. It produces a glossy, hard, dust repellent and watertight surface.

Special Features:

- **Certified by National Floor Safety Institute (NFSI) as “High Traction” under ANSI B101.1 wet test.**
- Glossy, hard, watertight coating that reduces dust formation.
- Hardens and seals concrete, marble, terrazzo, and other porous stone surfaces.
- Easy to repair or recoat
- Surface scratches can be burnished away with Scotch-Brite™ Purple Diamond Floor Pad Plus

Applications:

Scotchgard™ Stone Floor Protector may be used on concrete, marble, terrazzo, and other porous stone surfaces.

Scotchgard™ Stone Floor Protector should **NOT** be used on the following types of flooring:

- Floors with extreme lippage (uneven tiles)
- Installations where the account does not own a burnisher or is unwilling to burnish
- Granite
- Black marble
- Ceramic (including porcelain, quarry, Mexican tile, etc.)
- Textured stone (such as slate)
- Installs where air temperature is below 50 degrees Fahrenheit

The 3M™ Trizact™ Diamond HX Disc and Scotchgard™ Stone Floor Protector System is **NOT RECOMMENDED** for use in the following areas:

- Where flooring is often exposed to water (outdoor sidewalks, swimming pool areas, and carwashes, etc).
- Where flooring is often dusty or dirty, (wood shops, manufacturing sites, playgrounds, etc).
- Where cleaning and dust mopping are not performed regularly (garages, dock areas, etc.)
- Where solvent degreasers are commonly used (kitchens, meat processing plants, maintenance bays, etc.)

Caution should be used when using Scotchgard™ Stone Floor Protector on flooring that is:

1. Stained concrete (see stained concrete floor preparation section)
2. Travertine (increased dry time)
3. Crystallized marble (must remove crystallized layer using 3M™ Trizact™ Diamond HX Disc first)
4. Grout lines greater than 1/4 inch (often sanded grout)

Packaging:

3.785 Liter Bag
2 per case

General Use Directions:

Recommended Tools/Equipment:

1. Mop and bucket
2. Swing machine or autoscrubber
3. High speed burnisher (dust control recommended)
4. Wet vac

5. 3M™ Trizact™ Diamond HX Disc
6. Scotch-Brite™ Sienna Diamond Floor Pad Plus
7. Scotch-Brite™ Purple Diamond Floor Pad Plus
8. 3M™ White Super Polish Pad 4100
9. 3M™ Easy Shine Applicator System
10. Scotchgard™ Floor Protector Applicator Pad, Blue
11. 3M™ Easy Trap Duster
12. Scotchgard™ Stone Floor Protector
13. Applicable Personal Protective Equipment (PPE)

Marble, Terrazzo, and Un-dyed Concrete Floor Preparation:

1. Strip all old finish from floor using a 3M™ Floor Stripping Chemical and 3M™ Stripping Pad.
2. If the floor is uncoated, clean thoroughly using a blue scrubbing pad and thoroughly rinse floor with water.
3. Allow floor to dry thoroughly.
4. If flooring is rough to the touch or has pronounced scratching, wet floor and scrub with 3M™ Trizact™ Diamond HX Gold Disc, Coarse Grade, and complete a minimum of 6 passes. After six passes use the floor squeegee to move away the slurry and ensure that the floor has a consistent appearance (scratches and pitting have been removed). If floor does not have a consistent appearance, complete another six passes.
5. Wet vac and mop to remove all slurry and dust.



6. Wet floor and scrub with 3M™ Trizact™ Diamond HX Red Disc, Medium Grade, and complete a minimum of 6 passes. Note: If 3M™ Trizact™ Diamond HX Gold Discs, Gold have been used, only 4 passes with the Red discs are required at this point. After the required number of passes, use the floor squeegee to move away the slurry and ensure that the floor has a consistent appearance (scratches and pitting have been removed). If floor does not have a consistent appearance, complete another six passes.
7. Always wet vac and mop before moving to the next series of 3M™ Trizact™ Diamond HX Disc. This is to ensure that any abrasive that may have come loose during the previous step is removed from the floor and does not remain to cause scratching during the next step. Note: Failure to remove slurry between steps can also cause excessive wear of discs used in the following steps.
8. Wet floor and scrub with 3M™ Trizact™ Diamond HX Blue Disc, Fine Grade, and complete a minimum of 6 passes. After six passes use the floor squeegee to move away the slurry and ensure that the floor has a consistent appearance (scratches and pitting have been removed). If floor does not have a consistent appearance, complete another six passes. NOTE: Neutral cleaner may be used mixed with the water to reduce friction if needed.
9. Wet vac and mop to remove all slurry and dust. **NOTE: Any dust not removed at this time will be spread into the air during burnishing and could set off fire alarms or result in further need for dusting of surrounding areas.**
10. High speed burnish the floor with a Scotch-Brite™ Purple Diamond Floor Pad Plus

using a minimum of four passes. No moisture should be used during this process.

11. Clean expansion joints (terrazzo) using neutral cleaner and red pad with swing machine to eliminate metal dust prior to applying Scotchgard™ Stone Floor Protector.

Dyed Concrete Floor

Preparation:

1. Strip all old finish from floor using a 3M™ Floor Stripping Chemical and 3M™ Stripping Pad.
2. If the floor is uncoated, clean thoroughly using a blue scrubbing pad and thoroughly rinse floor with water.
3. Allow floor to dry thoroughly.
4. Burnish the bare floor using a Scotch-Brite™ Sienna Diamond Floor Pad Plus.
5. Burnish the bare floor with the Scotch-Brite™ Purple Diamond Floor Pad Plus.

Application Procedure

1. Burnish entire flooring area using a 3M™ White Super Polish Pad 4100 using two passes. **NOTE: If a 3M™ White Super Polish Pad 4100 is not available, a 3M™ Tan Burnish Pad 3400 or 3M™ Eraser™ Burnish Pad 3600 may be used.**
2. Dust floor with 3M™ Easy Trap Duster to ensure all dust, hair, grit, and debris has been removed.
3. Apply a pool of Scotchgard™ Stone Floor Protector to the floor and saturate applicator head. When applicator has been saturated, wipe area clear of product and note the color of the flooring where the pool was laid. The darkness of this area is the same darkness the rest of the floor should turn during application of the first coat.
4. Apply a thin even coating of product to floor. Make sure that all drips or heavy areas are addressed while applying. **Proper coating thickness should NOT**

have any milky

appearance to it. Treat the application almost like you are applying product and then trying to wipe it off.

5. When coating is complete allow time to fully dry. The more porous the flooring the longer it will take for product soaked into the floor to fully dry. It will be dry to walk on before it is ready to burnish. Wait a minimum of 15 minutes after floor is dry to the touch to move on to next step.
6. Burnish for a minimum of 6 passes using a Scotch-Brite™ Purple Diamond Floor Pad Plus. **NOTE: A pass is once over a tile, so down and back on the same line would be twice over a tile and count as two passes.** Burnishing should be performed at a forward speed of 1ft/sec.
7. Burnish for a minimum of 6 passes using a 3M™ White Super Polish Pad 4100.
8. Dust with 3M™ Easy Trap Duster to remove dust and pad debris.
9. Apply second thin even coat of Scotchgard™ Stone Floor Protector.
10. Allow coating to dry and burnish for a minimum of 6 passes using a Scotch-Brite™ Purple Diamond Floor Pad Plus.
11. Burnish for a minimum of 6 passes using a 3M™ White Super Polish Pad 4100. **NOTE: If a 3M™ White Super Polish Pad 4100 is not available a 3M™ Tan Burnish Pad 3400 or 3M™ Eraser™ Burnish Pad 3600 may be used.**
12. Dust with 3M™ Easy Trap Duster to remove dust and pad debris.

Note:

- **If labor time is limited, steps 1 and 7 may be eliminated. Elimination of these steps will result in a lower gloss (about 5-10 points on a gloss meter) than the full recommended process.**

- **Avoid standing water on the finished floor for 36 hours after application.**
- **Coverage is typically 2500-3000 sq. ft./gallon.**
- **Always test in an inconspicuous area to verify appropriate application.**
- **3M™ Trizact™ Diamond HX Discs should be applied to a red, natural blend, or white pad only. Some red pads made by companies other than 3M have been known to bleed color. This can turn light colored grout lines pink. If the origin of the pad is unknown, consider using a white or natural blend pad to minimize the risk of color bleeding.**
- **Fresh or newly poured concrete should be allowed to cure for 30 days prior to use of Scotchgard™ Stone Floor Protector.**

Cleaning:

1. Dust mop with 3M™ Doodleduster™ Cloth or 3M™ Easy Trap Duster.
2. Damp mop using 3M™ Neutral Cleaner and a flat mop or string mop.
3. Auto scrub as necessary using a 3M™ Neutral Cleaner and 3M™ Red Buffer Pad 5100 on the auto scrubber. For more aggressive cleaning, use 3M™ TopLine Autoscrubber Pad 5000.
4. For cleaning combined with light polishing the Scotch-Brite™ Purple Diamond Pad Plus may be used on an autoscrubber.
5. **To ensure proper slip resistance, flooring should be cleaned regularly to keep dust, sand, oils, and other contaminants off the surface.**
6. Do NOT use acidic cleaners, cleaners that contain citrus (d-limonene), 2-butoxyethanol (butyl cellusolve), amine based cleaners, isopropyl alcohol,

solvent based cleaners, degreasers, or non-neutral cleaners.

7. Do NOT use spray buff products or chemical dust mop treatments.

Burnishing:

1. Flooring should be periodically burnished using a Scotch-Brite™ Purple Diamond Floor Pad Plus to maintain gloss. A suggested burnishing schedules is:
 - a. High traffic areas: 1 to 2 times per week
 - b. Medium traffic areas : 3 to 4 times per month
 - c. Low traffic areas: 1 to 2 times per month.
2. When traffic lanes are no longer returned to gloss by burnishing, an additional application of Scotchgard™ Stone Floor Protector should be applied.

Black Mark Removal:

Listed in order of increasing aggressiveness. Try least aggressive first.

1. Burnish with 3M™ Eraser™ Burnish Pad 3600.
2. Auto scrub with Scotch-Brite™ Purple Diamond Floor Pad Plus and water or neutral cleaner.
3. Auto scrub with Scotch-Brite™ Purple Diamond Floor Pad Plus and 3M™ 3-in-1 Floor Cleaner.
4. Pre-treat difficult marks using spray bottle of 3M™ 3-in-1 Floor Cleaner then auto scrub with Scotch-Brite™ Purple Diamond Floor Pad Plus and water or 3M™ 3-in-1 Floor Cleaner.
5. Always burnish the affected area with Scotch-Brite™ Purple Diamond Floor Pad Plus to restore gloss.

Recoating:

Scotchgard™ Stone Floor Protector will wear down over time due to floor traffic. High traffic areas should be recoated at least once every

6 months. Light to moderate traffic areas should be recoated at least once per year.

1. Scrub traffic areas or the entire floor as required using 3M™ Neutral Cleaner and non-abrasive floor pad followed by a clear water rinse.
2. Burnish the floor with the Scotch-Brite™ Purple Diamond Floor Pad Plus using 2-3 passes
3. Dust floor with 3M™ Doodleduster™ Cloth or 3M™ Easy Trap Duster.
4. Recoat the scrubbed area with 1 coat of Scotchgard™ Stone Floor Protector.
5. Burnish the floor with the Scotch-Brite™ Purple Diamond Floor Pad Plus using 6 passes.

Removal of Scotchgard™ Stone Floor Protector:

1. Scotchgard™ Stone Floor Protector may be removed using a 3M™ Floor Stripping Chemical and a 3M™ Stripping Pad.

Product Specifications:

(Typical Values)

1. pH: 11 - 12
2. Flashpoint: >200°F
3. Solubility in water: Complete
4. Slip Resistance: Meets or exceeds ASTM-D-2047-4 coefficient of friction of 0.5 on James Static Friction tester
5. Certified by National Floor Safety Institute (NFSI) as "High Traction" under ANSI B101.1 wet test
6. Viscosity: <8 centipoise
7. Fragrance: Acrylic odor
8. Appearance: Milky-white liquid
9. Specific gravity: 1.09
10. Percent solids: 13%

Note:

Refer to product Material Safety Data Sheet (MSDS: 28-4142-7) for specific health hazard, first aid and precautionary information



Because the user knows and controls factors affecting the performance and safe use of a 3M™ Floor Pad and 3M™ Trizact™ Diamond HX Disc, user is ultimately responsible for determining these products are suitable for user's flooring and application. Some floors may release material such as dust that may cause lung damage and other injury to user or bystanders. Eye, skin and/or respiratory personal protection equipment may be appropriate to reduce the risks associated with exposure to such airborne material.

Depending on local regulations, concrete and stone slurries generated from polishing operations may be considered regulated waste. Improper disposal may cause damage to the environment. There are concrete washout products and services for slurry disposal from job sites that may be available in your area. Regardless of the waste disposal method you choose, please follow federal, state and local regulations

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DMR#587885