

Description

The 3M™ Stone Floor Protection System is a complete floor care process that restores the natural beauty of porous stone and produces an exceptional aesthetic appearance. The system includes three steps:

- Restore
- Protect
- Maintain

This document describes three 3M™ Stone Floor Protection System options (A,B,and C) to address a variety of maintenance and aesthetic requirements, summarized in the Table below.

Application

The 3M™ Stone Floor Protection System may be used on concrete, marble, granite, terrazzo, and other porous stone surfaces.

Scotchgard™ Stone Floor Protector Plus should **NOT** be used on the following types of flooring, environments or situations:

- Floors with extremely uneven tiles
- Ceramic (including porcelain, glazed, and polished)
- Installation environments where air temperature is below 50 degrees Fahrenheit
- Product that has been frozen or suspected of being frozen should not be used

Caution should be used when using 3M™ Trizact™ Diamond TZ Abrasive Pads and Scotchgard™ Stone Floor Protector Plus on flooring that is:

- Granite (3M™ Trizact™ Diamond Abrasive TZ Pads should not be used on granite that is already highly polished)
- Textured stone (such as flamed granite or slate - Do not use 3M™ Trizact™ Diamond Abrasive TZ Pads)
- Stained concrete (3M™ Trizact™ Diamond Abrasive TZ Pads can leave non-uniform color due to removal of top layer of surface)
- Travertine (increased dry time)
- Crystallized marble (must remove crystallized layer using 3M™ Trizact™ Diamond Abrasive TZ Pads first)
- Grout lines greater than 1/4 inch (often sanded grout)

3M™ Trizact™ Diamond TZ Abrasive Pads and 3M™ Stone Floor Protection System are **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.)

Table 1. Summary of 3M™ Stone Floor Protection System Options

		Configuration Results						System Solutions			
		Appearance*		Initial Cost	Ongoing Cost	Stain Resistance	High Traction Rating	Restore	Protect	Maintain	
System Options	A	Gloss	DOI	\$\$\$	\$	✓					
		50-60	80-90								
	B	40-50	40-50	\$	\$	✓					
C	30-40	70-80	\$\$	\$\$							

*Typical values produced on concrete flooring. A variety of factors will impact the actual results.

3M™ Stone Floor Protection System: Installation and Maintenance Protocol

Option A: Full System

Restore:

1. Strip all old finish from floor (follow finish manufacturer's recommended procedure).
2. If the floor is uncoated, clean thoroughly and rinse floor with water.
3. Allow floor to dry.
4. If flooring is rough to the touch or has pronounced scratching, wet floor and scrub with 3M™ Trizact™ Diamond Abrasive TZ Gold Pad, coarse grade, and complete a minimum of 6 passes (All Trizact™ Abrasive Pads should be used in conjunction with a 3M™ Red Buffer Pad 5100 per 3M™ Trizact™ Abrasive Pad use instructions). 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, uniform appearance, complete another six passes.
5. Always wet vacuum and dust mop before moving to the next series of 3M™ Trizact™ Diamond Abrasive Pads. 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 products used in the following steps.
6. Wet floor and scrub with 3M™ Trizact™ Diamond Abrasive TZ Red Pad, medium grade, and complete a minimum of 6 passes. After completing 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 vacuum and dust mop before moving to the next series of 3M™ Trizact™ Diamond Abrasive Pads. 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 products used in the following steps.
8. Wet floor and scrub with 3M™ Trizact™ Diamond Abrasive TZ Blue Pad, 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:** Properly diluted 3M™ Neutral Cleaner Concentrate may be used instead of water to reduce friction if needed.
9. Wet vacuum and dust mop to remove all slurry and dust.
10. If flooring is natural stone, or if using an oscillatory/rectangular scrubber for 3M™ Trizact™ Diamond Abrasive Pad steps, or a burnisher is not available, wet floor and scrub with Scotch-Brite™ Purple Diamond Floor Pad Plus using a minimum of six passes. If floor is not natural stone, or not using an oscillatory/rectangular scrubber for 3M™ Trizact™ Diamond Abrasive Pad steps, or a burnisher is available, proceed to step 12.

11. Wet vacuum and dust mop to remove all slurry and dust. Proceed to step 1 of Protect section.
12. Burnish the floor with a Scotch-Brite™ Purple Diamond Floor Pad Plus using a minimum of four passes. No water should be used during this process.
13. Clean expansion joints (terrazzo) using properly diluted 3M™ Neutral Cleaner Concentrate and 3M™ Red Buffer Pad 5100 with swing machine to eliminate metal dust.

Protect:

1. Dust floor with 3M™ Easy Trap™ Sweep and Dust Sheets to ensure all dust, hair, grit, and debris has been removed.
2. Apply a pool of Scotchgard™ Stone Floor Protector Plus to the floor and saturate 3M™ Easy Shine 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.
3. 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. Coating method tip: Treat the application like you are applying product and then trying to wipe it off.
4. When coating is complete allow time to fully dry. A more porous floor will result in longer time for the coating to fully dry. It must be dry to the touch before it is walked on or further processed. Wait a minimum of 15 minutes after floor is dry to the touch before moving to next step.
5. Apply another (second) thin even coating of product to floor following the same process used in steps 3-4.
6. Allow coating to dry. Wait a minimum of 30 minutes after floor is dry to the touch and burnish using a 3M™ Tan Burnish Pad 3400. If using a propane or battery, burnishing with a maximum of 2 passes should be completed. Use of a corded electric burnisher may require up to 6 passes for optimal appearance. **Note:** Burnishing is not required to cure the product, but will enhance the appearance. If a burnisher is not available, this step may be omitted.
7. Dust with 3M™ Easy Trap™ Sweep and Dust Sheets to remove dust and pad debris.

Maintain:

1. Dust mop with 3M™ Doodleduster™ Cloth or 3M™ Easy Trap™ Sweep and Dust Sheets
2. Damp mop using properly diluted 3M™ Neutral Cleaner Concentrate and a flat mop or string mop or auto scrub as necessary using properly diluted 3M™ Neutral Cleaner Concentrate and 3M™ Red Buffer Pad 5100 on an auto scrubbing machine. For heavy soiling or scratch removal a Scotch-Brite™ Purple Diamond Floor Pad Plus may be used occasionally for cleaning.

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3. Periodically burnish the floor using a 3M™ Tan Burnish Pad 3400 to maintain gloss. A suggested burnishing schedule 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
4. If fine scratch removal is required, burnish using a Scotch-Brite™ Purple Diamond Floor Pad Plus followed by a 3M™ Tan Burnish Pad 3400.
5. When traffic lanes are no longer returned to gloss by burnishing, an additional application of Scotchgard™ Stone Floor Protector Plus should be applied (see the "Recoat" section for instructions). A typical recoating schedule is:
 - d. High traffic areas once every 3-4 months
 - e. Medium traffic areas should once every 6 months
 - f. Light traffic areas once every 12 months

Tips for cleaning:

- To ensure proper slip resistance, flooring should be cleaned regularly to keep dust, sand, oils, and other contaminants off the surface.
- **Do NOT** use acidic cleaners, cleaners that contain citrus (d-limonene), 2-butoxyethanol (butyl cellulolve), amine based cleaners, bleach, isopropyl alcohol, solvent based cleaners, degreasers, or non-neutral cleaners.
- **Do NOT** use spray buff products or chemical dust mop treatments.
- For concrete floors coated with Scotchgard™ Stone Floor Protector Plus, a Scotch-Brite™ Clean & Shine Pad may be used for daily cleaning to enhance appearance and reduce need for periodic burnishing.

Recoat:

1. Scrub using Scotch-Brite™ Purple Diamond Floor Pad Plus and a minimum of 2 passes to ensure floor is clean and mark free. Use additional passes to remove marks if required.
2. Dust mop floor with 3M™ Easy Trap™ Sweep and Dust Sheets to ensure all dust, hair, grit, and debris has been removed.
3. Apply a thin even coating of Scotchgard™ Stone Floor Protector Plus 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. Coating method tip: Treat the application like you are applying product and then trying to wipe it off.
4. Allow coating to dry. Wait a minimum of 30 minutes after floor is dry to the touch and burnish using a 3M™ Tan Burnish Pad 3400. If using a propane or battery, burnishing with a maximum of 2 passes should be completed. Use of a corded electric burnisher may require up to 6 passes for optimal appearance. **Note:** Burnishing is not required to cure the product, but will enhance the appearance. If a burnisher is not available, this step may be omitted.

Option B: No Polishing with 3M™ Trizact™ Abrasive TZ Diamond Pads

Restore:

1. Strip all old finish from floor (follow finish manufacturer's recommended procedure).
2. If the floor is uncoated, clean thoroughly using a 3M™ Blue Cleaner Pad 5300 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.

Protect:

1. Dust floor with 3M™ Easy Trap™ Sweep and Dust Sheets to ensure all dust, hair, grit, and debris has been removed.
2. Apply a pool of Scotchgard™ Stone Floor Protector Plus to the floor and saturate 3M™ Easy Shine 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.
3. 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. Coating method tip: Treat the application like you are applying product and then trying to wipe it off.
4. When coating is complete allow time to fully dry. A more porous floor will result in longer time for the coating to fully dry. It must be dry to the touch before it is walked on or further processed. Wait a minimum of 15 minutes after floor is dry to the touch before moving to next step.
5. Apply another (second) thin even coating of product to floor following the same process used in steps 3-4.
6. Allow coating to dry. Wait a minimum of 30 minutes after floor is dry to the touch and burnish using a 3M™ Tan Burnish Pad 3400. If using a propane or battery, burnishing with a maximum of 2 passes should be completed. Use of a corded electric burnisher may require up to 6 passes for optimal appearance. **Note:** Burnishing is not required to cure the product, but will enhance the appearance. If a burnisher is not available, this step may be omitted.
7. Dust with 3M™ Easy Trap™ Sweep and Dust Sheets to remove dust and pad debris.

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Maintain:

1. Dust mop with 3M™ Doodleduster™ Cloth or 3M™ Easy Trap™ Sweep and Dust Sheets.
2. Damp mop using properly diluted 3M™ Neutral Cleaner Concentrate and a flat mop or string mop or auto scrub as necessary using properly diluted 3M™ Neutral Cleaner Concentrate and 3M™ Red Buffer Pad 5100 on an auto scrubbing machine. For heavy soiling or scratch removal a Scotch-Brite™ Purple Diamond Floor Pad Plus may be used occasionally for cleaning.
3. Periodically burnish the floor using a 3M™ Tan Burnish Pad 3400 to maintain gloss. A suggested burnishing schedule 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
4. If fine scratch removal is required, burnish using a Scotch-Brite™ Purple Diamond Floor Pad Plus followed by a 3M™ Tan Burnish Pad 3400.
5. When traffic lanes are no longer returned to gloss by burnishing, an additional application of Scotchgard™ Stone Floor Protector Plus should be applied (see the "Recoat" section for instructions). A typical recoating schedule is:
 - a. High traffic areas once every 3-4 months
 - b. Medium traffic areas should once every 6 months
 - c. Light traffic areas once every 12 months

Tips for cleaning:

- To ensure proper slip resistance, flooring should be cleaned regularly to keep dust, sand, oils, and other contaminants off the surface.
- **Do NOT** use acidic cleaners, cleaners that contain citrus (d-limonene), 2-butoxyethanol (butyl cellusolve), amine based cleaners, bleach, isopropyl alcohol, solvent based cleaners, degreasers, or non-neutral cleaners.
- **Do NOT** use spray buff products or chemical dust mop treatments.
- For concrete floors coated with Scotchgard™ Stone Floor Protector Plus, a Scotch-Brite™ Clean & Shine Pad may be used for daily cleaning to enhance appearance and reduce need for periodic burnishing.

Recoat:

1. Scrub using Scotch-Brite™ Purple Diamond Floor Pad Plus and a minimum of 2 passes to ensure floor is clean and mark free. Use additional passes to remove marks if required.
2. Dust mop floor with 3M™ Easy Trap™ Sweep and Dust Sheets to ensure all dust, hair, grit, and debris has been removed.
3. Apply a thin even coating of Scotchgard™ Stone Floor Protector Plus 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. Coating method tip: Treat the application like you are applying product and then trying to wipe it off.

4. Allow coating to dry. Wait a minimum of 30 minutes after floor is dry to the touch and burnish using a 3M™ Tan Burnish Pad 3400. If using a propane or battery, burnish a maximum of 2 passes should be completed. Use of a corded electric burnisher may require up to 6 passes for optimal appearance. **Note:** Burnishing is not required to cure the product, but will enhance the appearance. If a burnisher is not available, this step may be omitted.

Option C: No Protection with Scotchgard™ Stone Floor Protector Plus

Restore:

1. Strip all old finish from floor (follow finish manufacturer's recommended procedure).
2. If the floor is uncoated, clean thoroughly and 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 Abrasive TZ Gold Pad, coarse grade, and complete a minimum of 6 passes (All Trizact™ Abrasive Pads should be used in conjunction with a 3M™ Red Buffer Pad 5100 per 3M™ Trizact™ Abrasive Pads use instructions). 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, uniform appearance, complete another six passes.
5. Always wet vacuum and dust mop before moving to the next series of 3M™ Trizact™ Diamond Abrasive Pads. 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 products used in the following steps.
6. Wet floor and scrub with 3M™ Trizact™ Diamond Abrasive TZ Red Pad, medium grade, and complete a minimum of 6 passes. After completing 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 vacuum and dust mop before moving to the next series of 3M™ Trizact™ Diamond Abrasive Pads. 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 products used in the following steps.
8. Wet floor and scrub with 3M™ Trizact™ Diamond Abrasive TZ Blue Pads, 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.

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Note: Properly diluted 3M™ Neutral Cleaner Concentrate may be used instead of water to reduce friction if needed.

9. Wet vacuum and dust mop to remove all slurry and dust.
10. If flooring is natural stone, or if using an oscillatory/rectangular scrubber for 3M™ Trizact™ Diamond Abrasive Pad steps, or no burnisher is available, wet floor and scrub with Scotch-Brite™ Purple Diamond Floor Pad Plus using a minimum of six passes. If floor is not natural stone, or not using an oscillatory/rectangular scrubber for 3M™ Trizact™ Diamond Abrasive Pad steps, or a burnisher is available, proceed to step 12.
11. Wet vacuum and mop to remove all slurry and dust.
12. Burnish the floor with a Scotch-Brite™ Purple Diamond Floor Pad Plus using a minimum of four passes. No water should be used during this process.
13. Clean expansion joints (terrazzo) using properly diluted 3M™ Neutral Cleaner Concentrate and 3M™ Red Buffer Pad 5100 with swing machine to eliminate metal dust.

Maintain:

1. Dust mop with 3M™ Doodleduster™ Cloth or 3M™ Easy Trap™ Sweep and Dust Sheets.
2. Damp mop using properly diluted 3M™ Neutral Cleaner Concentrate and a flat mop or string mop or auto scrub as necessary using properly diluted 3M™ Neutral Cleaner Concentrate and Scotch-Brite™ Clean & Shine Pad. Maximum gloss will appear after approximately 10 autoscrubbing passes.
3. Periodically burnish the floor using a Scotch-Brite™ Purple Diamond Floor Pad Plus to maintain gloss. A suggested burnishing schedule 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

When traffic lanes are no longer returned to gloss by burnishing, restore by:

1. Wet floor and scrub with 3M™ Trizact™ Diamond Abrasive TZ Blue Pad, fine grade, and complete a minimum of 1-3 passes. After 3 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 3 passes.
Note: Properly diluted 3M™ Neutral Cleaner may be used instead of water to reduce friction if needed.
2. Wet vacuum and dust mop to remove all slurry and dust.
3. 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.

Tips for cleaning:

- To ensure proper slip resistance, flooring should be cleaned regularly to keep dust, sand, oils, and other contaminants off the surface.
- **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.
- **Do NOT** use spray buff products or chemical dust mop treatments.

Health and Safety

When handling any chemical products, read the manufacturers' container labels and the Safety Data Sheets (SDS) for important health, safety and environmental information. To obtain SDS sheets for 3M products go to 3M.com/SDS, or by mail or in case of an emergency, call 1-888-364-3577 or 1-651-737-6501. When using any equipment, always follow the manufacturers' instructions for safe operation.

Technical Information

Technical information and data, recommendations, and other statements provided by 3M are based on information, tests, or experience which 3M believes to be reliable, but the accuracy or completeness of such information is not guaranteed. Such technical information and data are intended for persons with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. The typical values shown should not be used for the purpose of specification limits. If you have questions about this Product, contact the **Customer Service Department at 1-800-852-9722**.

Product Use

Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

3M™ Stone Floor Protection System: Installation and Maintenance Protocol Options

Warranty

3M warrants that each 3M product will be free from defects in material and manufacture for 90 days from the date of purchase from 3M's authorized distributor. 3M MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Limited Remedy

If a 3M product does not conform to this warranty, the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

No Extension of Warranty

In the case of an approved warranty claim, the replacement Product will carry only the remaining term of the original warranty period.

Limitation of Liability

Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted.

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