REGULAR MAINTENANCE AND CARE
Routine, daily maintenance of sandstone or flagstone surfaces will involve keeping dirt, dust and other soiling from building up. External installations often require more intensive maintenance and care processes. Spills, food and other potential staining materials need to be cleaned up in a reasonable period of time. Regular sweeping and light damp mopping is advisable. For larger installations these processes remain the same; only the scale will change. Highly alkaline, acid, ammonia based, abrasives cleaners, or bleach may damage some stone, tile and/or grout surfaces and may also degrade any applied sealer, adversely affecting stain repellency. The use of a gentle cleaner specifically formulated for stone, tile and grout maintenance is the best assurance of not harming the sandstone or flagstone, grout or degrading or any applied sealers.

Maintenance Cleaning
Both routine dump mopping and monthly scrub cleanings of sandstone or flagstone surfaces can be accomplished using sponges and brushes, spray mops, and traditional mop and bucket. A wet/dry vacuum is helpful for cleaning big floors. For commercial applications a swing machine fitted with a brush or pad or an auto-scrubber will help maintain larger installations. LATICRETE has two maintenance cleaners suitable for sandstone or flagstone surfaces.

For routine cleaning of sandstone and flagstone using a cleaner and protector:

STONETECH® Revitalizer® Cleaner and Protector

Read entire label before using. Use only as directed. Be sure all surfaces to be cleaned are swept or vacuumed to remove loose debris. Keep children and pets out of the area during application and drying.

1. Dilute STONETECH® Revitalizer® Cleaner and Protector with warm water according to the following mixing chart:

<table>
<thead>
<tr>
<th>Use</th>
<th>STONETECH® Revitalizer® Cleaner &amp; Protector (Concentrate)</th>
<th>Warm Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Duty</td>
<td>1 part</td>
<td>4 parts</td>
</tr>
<tr>
<td>Heavy Duty</td>
<td>1 part</td>
<td>32 parts</td>
</tr>
</tbody>
</table>

2. Apply diluted solution with a damp mop, scrub, sponge or low-pressure sprayer.

3. Rub surfaces lightly and remove any excess cleaner. No need to rinse.

4. Repeat if necessary for heavily soiled areas.

5. Let area dry completely before using.

6. STONETECH Revitalizer Cleaner and Protector (Ready-To-Use)

Read entire label before using. Use only as directed. Be sure all surfaces to be cleaned are swept or vacuumed to remove loose debris. Keep children and pets out of the area during application and drying.

1. To refill 24 oz. (709 ml) spray bottle, use a funnel.

2. Spray or pour directly onto soiled area.

3. Wipe clean with a dry towel, lint-free cloth or sponge. No need to rinse.

4. Repeat for heavily soiled areas using a non-abrasive scrubbing pad.

5. Wipe clean with a dry towel.

Refer to data sheet DS211.0 for more information.

For routine cleaning of sandstone, flagstone and grout using a cleaner:

STONETECH Stone & Tile Cleaner (Concentrate)

Read entire label before using. Use only as directed. Be sure surfaces to be cleaned are swept or vacuumed to remove loose debris. Avoid skin and eye contact with product. Wear protective eyewear and gloves when handling concentrate. Keep children and pets out of the area during application and drying.

1. Dilute STONETECH® Stone & Tile Cleaner (Concentrate) with warm water according to the following mixing chart:

<table>
<thead>
<tr>
<th>Use</th>
<th>STONETECH Stone &amp; Tile Cleaner (Concentrate)</th>
<th>Warm Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Duty</td>
<td>1 part</td>
<td>64 part</td>
</tr>
<tr>
<td>Heavy Duty</td>
<td>1 part</td>
<td>32 parts</td>
</tr>
</tbody>
</table>

2. Apply mixed solution with a damp mop, sponge or appropriate professional cleaning equipment.

3. Clean entire area with mop, changing cleaning solution often to ensure that soil is not redeposited. Wipe or rinse cleaned area.

4. Let area dry completely before using.

STONETECH Stone & Tile Cleaner (Ready-To-Use)

Read entire label before using. Use only as directed. Be sure surfaces to be cleaned are swept or vacuumed to remove loose debris. Avoid skin and eye contact with product. Wear protective eyewear and gloves when handling concentrate. Keep children and pets out of the area during application and drying.

1. Spray or pour directly onto soiled area.

2. Wipe clean with a dry towel, lint-free cloth or sponge. No need to rinse.

3. Repeat for heavily soiled areas using a non-abrasive scrubbing pad.

4. Wipe clean with a dry towel.

Refer to data sheet DS211.0 for more information.

NEW INSTALLATION PRE-GROUT TREATMENT

Graffiti cleaning is often easier when the stone is sealed prior to grouting. Sandstone or flagstone can be porous and are susceptible to grout staining and may gain from sealing prior to grouting.

A simple water test can be performed to identify if the stone is porous. If the sandstone or flagstone-darkens after applying water to the stone surface and waiting for 5 minutes, the stone is absorbent and applying a sealer prior to grouting may aid in clean up after grouting. For most stones that darken when wet a single application of sealer is generally sufficient as a pre-grouting treatment.

For a pre-grout sealer for sandstone or flagstone:

STONETECH Heavy Duty Sealer

Pre-Grout Sealer Application

Read entire label before using. Use only as directed. Always test in a small inconspicuous area with a 24-hour cure time to determine ease of application and desired results. Make sure surface is clean and free of waxes and coatings. STONETECH Heavy Duty Sealer may be applied to damp surfaces one hour after standing water has been removed. Surface temperature should be between 50°F - 80°F (10°C - 26°C). Ensure that the area is well-ventilated during application and until the surface is dry. Keep children and pets out of the area until treated surface is dry.

1. Ensure cap is closed and sealed, and shake well before use.

2. Mask off surfaces not intended to be treated.

3. Liberally apply an even coat of STONETECH Heavy Duty Sealer using a paint pad, roller, brush or low pressure sprayer.

4. Allow the sealer to penetrate the surface for 10-15 minutes. During this time, keep the surface wet with sealer, adding more sealer as needed. DO NOT ALLOW SEALER TO COMpletely DRY ON THE SURFACE.

5. Thoroughly wipe dry the entire surface with clean absorbent towels.

6. A second coat may be necessary for porous, absorbent surfaces. If a second coat is required, it should be applied within 30-40 minutes from the initial application as directed in steps 3-5.

7. Allow sealer to cure for 24 hours prior to grouting.

8. Clean tools used during application with water.

Refer to data sheet DS211.0 for more information.

RESTORATIVE DEEP CLEANING

Stone, tile and grout installations can become heavily soiled over time. Restorative cleaning processes will help return these surfaces to a more acceptable appearance.

The following restorative surface cleaning processes are done in preparation for rescaling or for specialized surface cleaning circumstances. These cleaning processes should not damage the surface of the sandstone and flagstone, however, these types of heavy duty cleaning may degrade or strip any protective sealers from the application.

Depending on the type of scaling or staining, select one of the following options:

For cleaning grease, oil, dirt, dry soil, or to prepare for rescaling:

STONETECH KleenzAll™ Cleaner (Concentrate)

Read entire label before using. Use only as directed. Always test in a small inconspicuous area to determine ease of use and desired results. Be sure all surfaces to be cleaned are swept or vacuumed to remove loose debris. Avoid skin and eye contact with product. Wear protective eyewear, gloves, long sleeves, and long pants while handling concentrate. Ensure work area is well-ventilated during application and until surface is dry. Keep children and pets out of the area during application and drying.

The following is a restorative surface cleaning process which is done in preparation for rescaling or for specialized surface cleaning circumstances. This process should not damage the stone surface, however, this type of heavy duty cleaning will degrade or strip many sealers from the application.

1. Dilute concentrated STONETECH KleenzAll™ Cleaner with warm water according to the following mixing chart:

<table>
<thead>
<tr>
<th>Use</th>
<th>STONETECH KleenzAll™ Cleaner (Concentrate)</th>
<th>Warm Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Duty</td>
<td>1 part</td>
<td>8 parts</td>
</tr>
<tr>
<td>Medium Duty</td>
<td>1 part</td>
<td>4 parts</td>
</tr>
<tr>
<td>Heavy Duty</td>
<td>1 part</td>
<td>2 parts</td>
</tr>
</tbody>
</table>

2. Apply mixed solution with a mop, clean cloth or low-pressure sprayer. Avoid applying cleaner on untreated surfaces.

3. Lightly scrub with a scrub brush or floor machine as needed.

4. Remove STONETECH® KleenzAll™ Cleaner using a clean cloth, wet/dry vacuum or damp mop.

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DS-211 4-1016
5. Rinse area well with clean water. Allow area to dry completely.
6. Some surfaces may require additional cleaning. If so, repeat steps 2 – 5 above.
7. Re-Coat cleaned area with an appropriate STONETECH sealer (e.g. STONETECH BulletProof® Sealer).

Refer to data sheet DS 215.0 for more information.

Removal of efflorescence, mineral deposits, and calcium based staining:

STONE TECH® Restore™ Acidic Cleaner
Read entire label before using. Use only as directed. Always test in a small inconspicuous area to determine required dilution and results. Be sure all surfaces to be cleaned are swept or vacuumed to remove loose debris. Heavy duty dilution may darken some surfaces. This acid-based cleaner will etch or damage most marble, limestones and travertine surfaces. Will etch or corrode most metal surfaces. Avoid skin and eye contact. Wear protective eyewear, gloves, long sleeves, and long pants while handling product. Ensure work area is well ventilated during application and until surface is dry. Keep children and pets out of the area during application and drying.

1. Dilute concentrated STONETECH Restore™ Acidic Cleaner with warm water according to the following mixing chart:

<table>
<thead>
<tr>
<th>Use</th>
<th>STONETECH® Restore™ Acidic Cleaner (Concentrate)</th>
<th>Warm Water</th>
<th>pH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Duty</td>
<td>1 part</td>
<td>16 parts</td>
<td>1.4</td>
</tr>
<tr>
<td>Hard Duty</td>
<td>1 part</td>
<td>4 parts</td>
<td>1.2</td>
</tr>
<tr>
<td>Heavy Duty</td>
<td>1 part</td>
<td>1 part</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>

2. Mask off and protect any metals or other surfaces not intended to be treated. Apply mixed solution with a clean mop, or towel.
3. Apply 3 coats with a scrub brush or floor machine as needed.
4. Remove STONETECH Restore™ Acidic Cleaner using a clean cloth, wet/dry vacuum or damp mop.
5. Rinse area well with clean water and wipe dry.
6. Thoroughly rinse all metal surfaces with clean water. Clean and rinse equipment with water.
7. Re-Coat cleaned area with an appropriate STONETECH sealer (e.g. STONETECH BulletProof® Sealer).

Refer to data sheet DS 214.0 for more information.

Removal of epoxy or single component great hazes, stripping topical coatings, acrylic finishes or heavy waxes:

STONE TECH® Heavy Duty Coating Stripper
Read entire label before using. Use only as directed. Always test in a small inconspicuous area to determine ease of use and desired results. Make sure all surfaces to be cleaned are swept or vacuumed to remove loose debris. Ensure work area is well-ventilated during application and until surface is dry. Keep children and pets out of the area during application and drying. Avoid contact with other household cleaners or metals.

1. Spray STONETECH Heavy Duty Coating Stripper directly on the surface. If STONETECH Heavy Duty Coating Stripper starts to dry, add additional product to keep surface wet.
2. Apply a ¼" (6 mm) thick layer of paste to the stain. Ensure that the paste extends at least 1" - 2" (25 – 50mm) beyond the edge of the stain.
3. Allow STONETECH Heavy Duty Coating Stripper to work on the surface for 5-10 minutes. Do NOT allow product to dry on the surface.
4. Lightly scrub with a stiff brush to remove the surface contaminants.
5. Rinse and wipe surface with clean cloth and warm water. Repeat as needed for heavy soiled areas.
6. Reseal cleaned area with an appropriate STONETECH sealer (e.g. STONETECH BulletProof® Sealer).

Refer to data sheet DS111.2 for more information.

For cleaning and removing soap scum:

STONE TECH® Soap Scum Remover
Read entire label before using. Use only as directed. Always test in a small inconspicuous area to determine ease of use and desired results. Be sure surfaces to be cleaned are swept or vacuumed to remove loose debris. Avoid skin and eye contact. Wear protective eyewear and gloves. Keep children and pets out of the area during application and drying.

1. Using a plastic or wood spatula, stir thoroughly to mix the paste.
2. Thoroughly wet surface by directly spraying onto soiled area.
3. Allow STONETECH Soap Scum Remover to work on the surface for 30-40 minutes from the initial application time will vary depending on type of coating being removed. Approximate application times are as follows:

<table>
<thead>
<tr>
<th>Coating Type</th>
<th>Application Dwell Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sealer, wax or varnish</td>
<td>30 – 60 minutes</td>
</tr>
<tr>
<td>Polyurethane or acrylic</td>
<td>1 to 2 hours</td>
</tr>
<tr>
<td>Epoxy/Grout Haze</td>
<td>1 to 2 hours</td>
</tr>
</tbody>
</table>

4. Do not let STONETECH Heavy Duty Coating Stripper dry on the surface. If STONETECH Heavy Duty Coating Stripper starts to dry, add additional product to keep surface wet.
5. Agitate surface with a nylon scrub brush or pad after testing a small area first to make sure that brush or pad will not scratch the surface. Surface can be wet with water to enable easier removal of coating.
6. Wipe up residual STONETECH Heavy Duty Coating Stripper with clean, dry cloth or wet mop. A wet/dry vacuum can be used for larger areas.
7. Rinse surface well with clean water.
8. Allow area to dry completely. Avoid applying on untreated surfaces.

For all stain removal:

STONE TECH® Oil Stain Remover
Read entire label before using. Use only as directed. Always test in a small inconspicuous area to determine the desired results will be achieved. Make sure surface is clean, dry, and free of waxes and coatings. Ensure that area is well-ventilated and keep children and pets away from the area during application and until surface is dry and clean.

1. Using a plastic or wood spatula, stir thoroughly to mix the paste.
2. Apply a ¼" (6 mm) thick layer of paste to the stain. Ensure the paste extends at least 1" - 2" (25 – 50mm) beyond the edge of the stain.
3. Do not cover.
4. Allow 48 – 72 hours for STONETECH Oil Stain Remover to dry.
5. Using a plastic spatula, remove the dried STONETECH Oil Stain Remover and discard.
6. Allow solvent to completely dry from the stone.
7. If stain is not completely gone after drying, repeat process.
8. Clean up residue and tools with mineral spirits.
9. Once the surface is dry, reseal the cleaned area with an appropriate STONETECH sealer (e.g. STONETECH BulletProof® Sealer).

Refer to data sheet DS 214.0 for more information.

SEALING AND PROTECTING:

All sandstone or flagstone is susceptible to staining from both oil and water-based materials and sealing will help protect the stone's appearance. The cement grouts used in sandstones or flagstone tile installations will also be more stain-resistant with the application of a penetrating sealer.

For interior and exterior natural look protection from water- and oil-based staining:

STONE TECH® BulletProof® Sealer
Read entire label before using. Use only as directed. Always test in a small inconspicuous area with a 24 hour cure time to determine areas of application and desired results. Allow new grout installations to cure for a minimum of 72 hours prior to application. Make sure surface is clean and free of waxes and coatings. Sealer may be applied to damp surfaces one hour after standing water has been removed. Surface temperature should be between 50°F - 80°F (10°C - 26°C). Ensure that the area is well-ventilated during application and until the surface is dry. Keep children and pets out of the area until treated surface is dry.

1. Ensure cap is closed and sealed, and shake well before use.
2. Mask off surfaces not intended to be treated.
3. Liberally apply an even coat of STONETECH BulletProof® Sealer using a paint pad, roller, brush or low-pressure sprayer.
4. Allow sealer to penetrate the surface for 10-15 minutes. During this time, keep the surface wet with sealer, adding more sealer as needed. DO NOT ALLOW SEALER TO COMPLETELY DRY ON THE SURFACE.
5. Thoroughly wipe dry the entire surface with clean absorbent towels.
6. A second coat may be needed for porous, absorbent surfaces. If a second coat is required, it should be applied within 30-40 minutes from the initial application as directed in steps 3-5.
For a natural look water repellent on exterior surfaces:

**STONETECH® Heavy Duty Exterior Sealer**

Read entire label before using. Use only as directed. Always test in a small inconspicuous area with a 24-hour cure time to determine ease of application and desired results. Allow new grout installations to cure for a minimum of 72 hours prior to application. Make sure surface is clean, thoroughly dry and free of waxes and coatings. Surface temperature should be between 50°F to 80°F (10°C - 26°C). Keep children and pets out of the area until surface cure is achieved.

1. Mask off any surfaces not intended to be treated.
2. Liberally apply an even coat of STONETECH® Heavy Duty Exterior Sealer with a paint pad, paintbrush, paint roller or solvent-resistant, low-pressure spray gun. Do not use a power sprayer. Do not thin this sealer before using. See method of application.
3. Allow sealer to penetrate the surface for 5 to 15 minutes; dense material may require more time for sealer to penetrate. During this time, distribute excess sealer over entire area to ensure even penetration. DO NOT ALLOW EXCESS SEALER TO DRY ON THE SURFACE.
4. Thoroughly wipe dry the entire surface with a clean dry cloth to completely remove all excess sealer from the surface.
5. A second coat may be needed for porous, absorbent surfaces and should be applied one hour after initial application as directed in steps 2-4.
6. If sealer was not completely wiped off and a residue appears, wipe entire surface with a towel dampened with sealer. Use a white nylon scrubbing pad to remove excess sealer from the surface and follow with a clean, white absorbent towel to remove any sealer residue.
7. Full cure is achieved in 24-72 hours. Surface use may resume in 4-6 hours.
8. Clean up promptly after job is complete, since rags and equipment that are wet with product may be combustible. Clean equipment with mineral spirits and allow equipment and rags to dry in a well-ventilated area out of reach of children and pets. After rags are dry, dispose of in accordance with local waste disposal regulations.

Refer to data sheet DS282.0 for more information.

For a color enhancing impregnating sealer for interior surfaces:

**STONETECH® Enhancer Pro™ Sealer (Water-based)**

Read entire label before using. Use only as directed. Test in a small inconspicuous area with a 24-hour cure time to determine ease of application and desired results. Allow new grout installations to cure for a minimum of 72 hours prior to application. Be sure surface is clean, thoroughly dry and free of sealers, waxes and coatings. Not recommended for exterior surfaces. Surface temperature should be between 50°F to 80°F (10°C - 26°C). Avoid skin contact and eye contact. Wear protective eyewear and gloves. Ensure work area is well-ventilated during application and until surface is dry. Keep children and pets out of the area during application and drying.

1. Shake well before using.
2. Apply STONETECH Enhancer Sealer evenly and liberally using a paint pad, low-pressure chemical-resistant sprayer, roller or brush. Avoid applying sealer on unattended surfaces.
3. Allow sealer to penetrate the surface for 15-30 minutes; dense material may require maximum time to penetrate surface. Spread excess sealer over entire area for even penetration.
4. Following penetration time, completely wipe surface dry with a clean dry towel. DO NOT ALLOW EXCESS SEALER TO DRY COMPLETELY ON SURFACE.
5. A second coat may be needed for porous, absorbent surfaces or if a darker appearance is required. Apply second coat 1 hour after start of initial application following directions in steps 1-4.
6. A full cure is achieved after 24-72 hours. Surface traffic may begin in 6-8 hours. If needed sooner, cover the floor with red rosin paper to protect it until the recommended time period has passed.
7. Clean tools used during application with water.

Refer to data sheet DS217.5 for more information.

For a color enhancing protective sealer for exterior surfaces:

**STONETECH High Gloss Finishing Sealer**

Road entire label before using. Use only as directed. Always test in a small inconspicuous area to determine appropriate application method, achievement of desired results, and to ensure good adhesion. Surface must be thoroughly clean, dry, and free of any sealers or coatings before application. Application to a dirty or dusty surface will affect adhesion and appearance. Avoid applying in direct sunlight; surface temperature should be 50°F - 80°F (10°C - 26°C). STONETECH High Gloss Finishing Sealer should not be applied to a wet or moist surface. Avoid applying onto surfaces not intended for treatment. For new installations with grout, sealer can be applied as soon as 72 hours after grouting. For concrete slabs require a minimum of 28 days to dry before applying the sealer. Keep children and pets out of the area until treated surface is dry.

1. SHAME WELL BEFORE USING. Do not dilute before applying.
2. Liberally apply 1 to 3 even coats of STONETECH High Gloss Finishing Sealer with a natural bristle paint brush, paint roller, low pressure sprayer, or pumpgang sprayer. Avoid puddling of product during application.
3. Allow 30-45 minutes between coats or until the surface is dry.
4. Surface traffic may begin 12 hours after final application; keep installation dry for a minimum of 12 hours; full cure is achieved in 24-48 hours.
5. Keep surfaces clean and dry as finished surfaces may become slippery when wet.
6. Clean tools used during application immediately with water.

Refer to data sheet DS219.5 for more information.

**STONETECH Semi Gloss Finishing Sealer**

Road entire label before using. Use only as directed. Always test in a small inconspicuous area with a 24-hour cure time to determine ease of application and desired results. Allow new grout installations to cure for a minimum of 72 hours prior to application. Make sure surface is clean, free of waxes, coatings, and previous sealers, and is dry for 48-72 hours. Surface temperature should be between 50°F to 80°F (10°C - 26°C). Ensure that the area is well-ventilated during application and until treated surface is dry. Keep children and pets out of the area until treated surface is dry.

1. Mask off any surfaces not intended to be treated.
2. Liberally apply an even coat of STONETECH Semi Gloss Finishing Sealer with a paint pad, roller, brush, or pumpgang sprayer. Do not use a power sprayer, towel, or sponge for application. Do not thin before using.
3. Allow sealer to penetrate the surface for 15-20 minutes. Dense material may require more time to penetrate. DO NOT ALLOW EXCESS SEALER TO DRY ON THE SURFACE. Failure to remove excess sealer from surface may result in residue that may need to be mechanically removed.
4. Thoroughly wipe surface with multiple dry cloths to remove all excess sealer.
5. A second coat may be needed for more absorbent surfaces or if darker appearance is required. Sealer should be applied one hour after start of initial application, as directed in steps 2-4.