NOTE: For all recommended products: read the entire product 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. Avoid skin and eye contact. Always wear appropriate safety equipment during product use.

REGULAR MAINTENANCE AND CARE

Routine, daily maintenance of Basalt tile surfaces will involve keeping dirt, dust and other soiling from building up. Exterior installations will 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 are advisable. For larger installations these processes remain the same; only the scale will change.

Highly alkaline, acidic, ammonia based, abrasive 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 Basalt, grout or degrading any applied sealers.

Maintenance Cleaning

Both routine damp mopping and monthly scrub cleanings of Basalt can be accomplished with STONETECH® Revitalizer® or STONETECH Stone & Tile Cleaner. These types of cleaning can be accomplished using a bucket and mop while 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. Both of these cleaners can be used as damp mop type no-rinse cleaners as well as more traditional scrub and rinse applications.

1. For routine cleaning of basalt using a cleaner and protector:

STONETECH® Revitalizer® Cleaner and Protector (Concentrate)

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 (Concentrate) 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>Spray Refill</td>
<td>1 part</td>
<td>1 part</td>
</tr>
<tr>
<td>Light Duty</td>
<td>1 part</td>
<td>4 parts</td>
</tr>
</tbody>
</table>

2. Apply diluted solution with a damp mop, towel, sponge or low pressure sprayer.
3. Rub surface 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.
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 DS212.0 for more information.

2. For routine cleaning of basalt and grout with 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 parts</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

Grouting cleanup is often easier when the stone is sealed prior to grouting. Light colored or porous polished basalt is susceptible to grout staining and may benefit from sealing prior to grouting.

A simple water test can be performed to identify if the tile is porous. If the basalt darkens after applying water to the stone surface and waiting for 5 minutes, the tile is absorbent and applying a sealer prior to grouting may aid in clean up after grouting. On a polished basalt tile that does darken with water a single application of sealer is generally sufficient as a pre-grouting treatment.
For a pre-grout sealer for Basalt:

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. 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 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.
7. Allow sealer to cure for 24 hours prior to grouting.
8. Clean tools used during application with water.

Refer to data sheet DS279.0 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 resealing or for specialized surface cleaning circumstances. These cleaning processes should not damage the surface of the polished, basalt-basalt, however, these types of heavy-duty cleaning may degrade or strip many sealers from the application.

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

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

STONETECH KlenzAll™ 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 resealing 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 KlenzAll™ Cleaner with warm water according to the following mixing chart:
<table>
<thead>
<tr>
<th>Use</th>
<th>STONETECH® KlenzAll™ Cleaner (Concentrate)</th>
<th>Warm Water</th>
<th>pH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Duty</td>
<td>1 part</td>
<td>8 parts</td>
<td>10.7</td>
</tr>
<tr>
<td>Medium Duty</td>
<td>1 part</td>
<td>4 parts</td>
<td>11</td>
</tr>
<tr>
<td>Heavy Duty</td>
<td>1 part</td>
<td>2 parts</td>
<td>11.3</td>
</tr>
</tbody>
</table>

2. Apply mixed solution with a mop, clean cloth or low-pressure sprayer. Avoid applying cleaner on unintended surfaces.
3. Lightly scrub with a scrub brush or floor machine as needed.
4. Remove STONETECH® KlenzAll™ Cleaner using a clean cloth, wet/dry vacuum or damp mop.
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. Reseal cleaned area with an appropriate STONETECH sealer (e.g. STONETECH BulletProof® Sealer). Refer to data sheet DS215.0 for more information.

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

This type of restorative surface cleaning process is typically performed with an acidic cleaning compound. The use of acidic cleaners will damage or affect the surface appearance of polished basalts. Surface refinishing may be required to remove mineral based deposits or stains from a polished basalt surface. Consulting a stone restoration professional is recommended.

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

**STONETECH® Epoxy Grout Haze & Coating Stripper**

Read entire label before using. Use only as directed. Test in a small inconspicuous area to determine ease of application and desired results. Be 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 until surface use resumes. Avoid contact with surfaces not intended to be treated. Avoid applying in direct sunlight. Should not be used in extreme temperatures. Recommended application temperature range is between 50°F - 90°F (10 °C - 32 °C).

1. **SHAKE WELL BEFORE USING.** Do not dilute before applying.
2. Liberally apply an even coat of STONETECH Epoxy Grout Haze & Coating Stripper over the area with a paint brush, mop or paint pad. DO NOT APPLY WITH A SPRAYER. Immediately remove STONETECH Heavy Duty Coating Stripper from unintended surfaces with a wet cloth to prevent potential damage to those surfaces.
3. Allow STONETECH Epoxy Grout Haze & Coating Stripper to swell as follows:

<table>
<thead>
<tr>
<th>Haze/Coating</th>
<th>Surface Type</th>
<th>Age of Haze / Coating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy Grout Haze</td>
<td>Tile</td>
<td>24 Hours</td>
</tr>
<tr>
<td>Epoxy Grout Haze</td>
<td>Stone or Masonry</td>
<td>1 – 3 minutes</td>
</tr>
<tr>
<td>Coatings*</td>
<td>Tile</td>
<td>1 – 5 minutes</td>
</tr>
<tr>
<td>Coatings*</td>
<td>Stone or Masonry</td>
<td>1 – 5 minutes</td>
</tr>
</tbody>
</table>

Application time may vary depending on the surface texture and age/thickness of grout haze.

* Coatings such as varnish, lacquer, sealer, wax, paint, polyurethane, acrylic, and stain.

4. Do not let STONETECH Epoxy Grout Haze & Coating Stripper dry on the surface. If STONETECH Epoxy Grout Haze & Coating Stripper starts to dry, add additional STONETECH Epoxy Grout Haze & Coating Stripper 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 epoxy grout haze or coating.
6. Wipe up residual STONETECH® Epoxy Grout Haze & Coating Stripper with clean, dry cloth or wet mop. A wet/dry vacuum can be used for larger area.
7. Rinse surface well with clean water.
8. More than one application may be required, repeat steps 1 through 7 as necessary.
9. Surface traffic may begin 2 hours after removal of coating or when surface is completely dry.

Refer to data sheet DS166.4 for more information.

**For spot or small area deep cleaning:**

**STONETECH® DeepKlenz™**

Read entire label before using. Use only as directed. Test in a small inconspicuous area to determine required 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. Recommended application temperature range is between 40°F and 100°F (5°C and 38°C).

1. Apply sufficient material to thoroughly wet the surface.
2. Allow STONETECH DeepKlenz™ to work on the surface for 5-10 minutes (do not allow product to dry on the surface)
3. Lightly scrub with stiff bristle brush to remove the surface contaminants.
4. Rinse and wipe surface with clean cloth and warm water.

*Heavily soiled areas may require a second application. Refer to data sheet DS111.2 for more information.

**For cleaning and removing soap scum:**

**STONETECH 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. Spray STONETECH Soap Scum Remover directly on soiled areas. Avoid applying onto unintended surfaces.
2. Wipe surface with clean, dry cloth or scrub with stiff nylon brush as needed.
3. Rinse area well with clean water.
4. Wipe area dry with clean cloth.
5. Repeat as needed for heavily soiled areas.

Refer to data sheet DS229.0 for more information.

**For cleaning and removing mold and mildew:**

**STONETECH Mold & Mildew Stain 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. Do not mix this product with other household cleaners or metals.

1. Spray STONETECH® Mold & Mildew Remover directly on soiled areas. Avoid applying onto unintended surfaces.
2. Clean surface with non-abrasive sponge or stiff nylon brush as needed.
3. Rinse area well with clean water.
4. Repeat as needed for heavily soiled areas.
Refer to data sheet DS 219.0 for more information.

For oil stain removal:

STONETECH® Oil Stain Remover

Read entire label before using. Use only as directed. Always test in a small inconspicuous area to determine that 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 clean and dry.

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 that 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 Heavy Duty Sealer).
Refer to data sheet DS214.0 for more information.

SEALING AND PROTECTING:

All Basalt is susceptible to staining from both oil and water-based materials and sealing will help protect the stone’s appearance. The cement grouts used with Basalt 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:

STONETECH® BulletProof® Sealer or any natural look STONETECH 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 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. 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. Should a sealer residue appear, rewet the impacted section of the surface with sealer. Agitate the surface with a white nylon scrubbing pad to loosen residue and wipe dry with a clean, absorbent towel.
7. A full cure is achieved in 24-72 hours. Use of the treated surface may resume in 6-8 hours. If use of the surface must resume sooner, cover the treated surface with red rosin paper to protect it until full cure has been achieved.

8. Clean tools used during application with water.

Refer to data sheet DS282.0 for more information.

* If another STONETECH® natural look sealer is used, please follow the instructions stated on the product data sheet or label.

For interior and exterior natural look protection for added water protection:

STONETECH® Heavy Exterior Duty Sealer

Surface Preparation 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 and 80°F (10°C and 26°C). When cocktailing with the STONETECH® BulletProof® Sealer allow sealer to cure for a minimum of 24 hours prior to sealing with the STONETECH Heavy Duty Exterior Sealer. Keep children and pets out of the area until surface care resumes. On some surfaces the STONETECH Heavy Duty Exterior Sealer can slightly enhance the color of the stone.

1. Mask off any surfaces not intended to be treated.
2. Allow STONETECH Heavy Duty Exterior Sealer to cure 24 hours and substrate to be dry and free of any moisture.
3. Liberally apply an even coat of STONETECH Heavy Duty Exterior Sealer with a paint pad, paintbrush, paint roller or solvent-resistant, low-pressure sprayer. Do not use power sprayer. Do not thin before using. See method of application.
4. Allow sealer to penetrate the surface for 5–15 minutes; denser material may require more time for sealer to penetrate. During this time, distribute excess sealer over entire area to insure even penetration. DO NOT ALLOW EXCESS SEALER TO DRY ON THE SURFACE.
5. Thoroughly wipe dry the entire surface with a clean dry cloth to completely remove all excess sealer from the surface.
6. 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.
7. If sealer was not completely wiped off and a residue appears, wipe entire surface with a towel dampened with sealer. Use a white nylon pad to loosen residue and follow with a clean, white absorbent towel to remove.
8. Full cure is achieved in 24–72 hours. Surface use may resume in 4-6 hours.
9. 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.

Cleaning 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.
METHOD OF APPLICATION: DO NOT USE A POWER SPRAYER. Power sprayers increase exposure hazard. Power sprayers also create a significant amount of overspray resulting in wasted product and the need for additional clean-up. A pump-up garden sprayer will reduce the potential for over-exposure to vapors and produce better results.

Refer to data sheet DS 212.5 for more information.