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.

SURFACE PROTECTION, MAINTENANCE AND CARE
Proper surface care is the key to maintaining the appearance of the crackled glass tile. A regular, consistent cleaning regimen will help contribute to keeping the crackled glass tile looking its very best as well as minimizing potential surface issues. A well-structured and properly executed cleaning program considers daily maintenance as well as monthly and semi-annual tile surface inspection and services.

NEW INSTALLATION PRE-GROUT TREATMENT
To facilitate the cleaning of crackled glass tile, it would be beneficial to seal the surface to help prevent the grout from bonding within the “crackle”. STONETECH® Impregnator Pro® Sealer is the preferred product to be used as a pre-grout sealer. The crackled glass tile must be clean and free of any previous sealers, waxes, oils, coatings, or other potential bond breakers.

STONETECH® Impregnator Pro® 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 applying sealer. Make sure surface is clean, dry and free of waxes and coatings. Surface temperature should be between 50°F and 80°F (10°C and 27°C). Keep children and pets out of the area until surface use resumes or treated surface is dry.

1. Ensure area is well-ventilated during application and until the surface is dry. Use a respirator if unsure that area is well-ventilated. A NIOSH-approved respirator with a combination HEPA/organic vapor cartridge is recommended. Follow respirator manufacturer’s instructions for use. 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 Impregnator Pro Sealer using a paint pad, roller, brush or pump-up garden sprayer. DO NOT USE A POWER SPRAYER. See method of application for more information. Do not thin before using.
4. Allow sealer to penetrate surface for 5-7 minutes; denser stone 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 SURFACE.
5. Thoroughly wipe dry the entire surface with clean absorbent towels.
6. A second coat may be needed for more porous surfaces and should be applied one hour after initial application, as directed in steps 3 through 5.
7. If excess 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 loosen residue and follow with white absorbent towel to remove.
8. Full cure is achieved after 24–72 hours. Surface use may begin 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 is achieved.
9. Rags and equipment that are wet with product may be combustible. Clean up promptly after job is complete. Clean equipment with mineral spirits and allow to dry in a well-ventilated area. Allow rags to
dry in a well-ventilated area out of the reach of children and pets. When dry, dispose of in accordance with local waste disposal regulations.

**REGULAR MAINTENANCE AND CARE**

Routine, daily maintenance of crackled 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 is 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 crackled tile, grout or degrading any applied sealers.

**Maintenance Cleaning**

Routine maintenance cleaning involves keeping dirt, dust and other soiling from building up. Spills, food and other potential staining materials need to be cleaned up in a reasonable period of time to help prevent staining.

Highly alkaline, acidic, ammoniated, abrasive cleaners are not necessary for Daily Maintenance and may also degrade the STONETECH® Impregnator Pro® Sealer, adversely affecting stain resistance. The use of a pH neutral cleaner specifically formulated for stone & tile is the best assurance for an effective cleaning which will not degrade STONETECH Impregnator Pro Sealer performance.

For routine cleaning of the crackled glass tiles, STONETECH Stone & Tile Cleaner is the preferred cleaner. Prepare a solution of STONETECH Stone & Tile Cleaner concentrate mixed with water based on these ratios:

**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.

**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 crackled tile 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 Impregnator Pro® Sealer).

Refer to data sheet DS215.0 for more information.

**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>24 Hours</th>
<th>1 Day to 7 Days</th>
<th>&gt;7 Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy Grout Haze</td>
<td>Tile</td>
<td>1 – 3 minutes</td>
<td>3- 5 minutes</td>
<td>10 minutes</td>
</tr>
<tr>
<td>Epoxy Grout Haze</td>
<td>Stone or Masonry</td>
<td>1 – 3 minutes</td>
<td>5 - 10 minutes</td>
<td>10 minutes</td>
</tr>
<tr>
<td>Coatings*</td>
<td>Tile</td>
<td>1 – 5 minutes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coatings*</td>
<td>Stone or Masonry</td>
<td>1 – 5 minutes</td>
<td></td>
<td>10 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 DS235.0 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 Impregnator Pro® Sealer).

Refer to data sheet DS 279.0 for more information.

SEALING AND PROTECTING:
All crackled tile 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 crackled 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® Impregnator Pro® 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 applying sealer. Make sure surface is clean, dry and free of waxes and coatings. Surface temperature should be between 50°F and 80°F (10°C and 27°C). Keep children and pets out of the area until surface use resumes or treated surface is dry.

1. Ensure area is well-ventilated during application and until the surface is dry. Use a respirator if unsure that area is well-ventilated. A NIOSH-approved respirator with a combination HEPA/organic vapor cartridge is recommended. Follow respirator manufacturer’s instructions for use. 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® Impregnator Pro® Sealer using a paint pad, roller, brush or pump-up garden sprayer. DO NOT USE A POWER SPRAYER. See method of application for more information. Do not thin before using.
4. Allow sealer to penetrate surface for 5-7 minutes; denser stone 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 SURFACE.
5. Thoroughly wipe dry the entire surface with clean absorbent towels.
6. A second coat may be needed for more porous surfaces and should be applied one hour after initial application, as directed in steps 3 through 5.
7. If excess 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 loosen residue and follow with white absorbent towel to remove.
8. Full cure is achieved after 24–72 hours. Surface use may begin 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 is achieved.
9. Rags and equipment that are wet with product may be combustible. Clean up promptly after job is complete. Clean equipment with mineral spirits and allow to dry in a well-ventilated area. Allow rags to dry in a well-ventilated area out of the reach of children and pets. When dry, dispose of in accordance with local waste disposal regulations. Refer to data sheet DS238-0120 for more information.

**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.