



POLISHED LIMESTONE

MCI 111

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 polished limestone surfaces will involve 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. 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 an 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 limestone, grout or degrading any applied sealers.

Maintenance Cleaning

Both routine damp mopping and monthly scrub cleanings of polished limestone surfaces can be accomplished with STONETECH® Revitalizer® Cleaner and Protector. 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.

For routine cleaning of polished limestone with 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:

Use	STONETECH® Revitalizer® Cleaner & Protector (Concentrate)	Warm Water
Spray Refill	1 part	1 part
Light Duty	1 part	4 parts

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.

For routine cleaning of polished limestone installations 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:

Use	STONETECH Stone & Tile Cleaner (Concentrate)	Warm Water
Spray Refill	1 part	64 part
Light Duty	1 part	32 parts

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.

For a brilliant shine on countertops and vanities:

STONETECH Polish

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.

1. Spray a light coat of STONETECH Polish over the entire surface.
 2. Spread evenly with a clean cloth.
 3. Buff until there is no visible liquid and a high shine appears.
- Note:** STONETECH Polish is not intended for floors as it may create a slipping hazard. It is not a restorative process for worn or damaged marble surfaces.

Please refer to data sheet 216.5 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 limestones are 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 limestone 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 limestone that does darken with water a single application of sealer is generally sufficient as a pre-grouting treatment.

For a pre-grout sealer for polished limestone:

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 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 limestone, 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.



Polished Limestone – MCI 111 continued

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:

Use	STONETECH® KlenzAll™ Cleaner (Concentrate)	Warm Water	pH
Light Duty	1 part	8 parts	10.7
Medium Duty	1 part	4 parts	11

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 Heavy Duty 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 limestones. Surface refinishing may be required to remove mineral based deposits or stains from a polished limestone 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® Heavy Duty 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. Wear rubber gloves and eye protection during handling and application to prevent skin and eye contact.
3. Liberally apply an even coat of STONETECH Heavy Duty Coating Stripper over the required 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.
4. Application time will vary depending on type of coating being removed. Approximate application times are as follows:

Coating Type	Application Dwell Time
Sealer, wax or varnish	30 – 60 minutes
Polyurethane or acrylic	1 to 2 hours
Epoxy Grout Haze	1 to 2 hours

5. 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.
6. 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.

7. Wipe up residual STONETECH Heavy Duty Coating Stripper with clean, dry cloth or wet mop. A wet/dry vacuum can be used for larger area.
8. Rinse surface well with clean water.
9. More than one application may be required, repeat steps 3 through 8 when necessary.
10. Surface traffic may begin 2 hours after removal of coating.

Refer to data sheet DS235.0 for more information.

For spot or small area deep cleaning:

STONETECH® DeepKlenz™ Cleaner

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. Keep children and pets out of the area during application and drying.

1. Thoroughly wet surface by directly spraying onto soiled area.
2. Allow STONETECH DeepKlenz™ Cleaner to work on the surface for 5-10 minutes. Do NOT allow product to dry on the surface.
3. Lightly scrub with a stiff bristle brush to remove the surface contaminants.
4. Rinse and wipe surface with clean cloth and warm water. Repeat as needed for heavily soiled areas.
5. Reseal cleaned area with an appropriate STONETECH sealer (e.g. STONETECH Heavy Duty Sealer).

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 Stain 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 DS 214.0 for more information.

Mechanical Refinishing for Polished Limestone STONETECH Honing & Polishing Powders

This refinishing process is designed for scratch, etch and wear pattern removal and will restore the stone's surface to a uniform finish and shine. Depending on the severity of the wear or damage to the stone use, in succession, one or more of the grit levels (180/280/400/600/800) of the STONETECH Honing Powders bringing the stone up to an even, uniform 800 grit finish. After the honing steps, follow with the STONETECH Polishing Powder to create the final shine.

Refinishing requires using a hand-held low speed sander/polisher or an orbital sander for counters, walls or floor edges. For floors use a weighted 175 rpm floor machine (130 - 140 lb [59.1 – 63.6 kg]). Hand machines and floor machines need to be fitted with a natural hair pad or a white nylon polishing pad.

Read entire label before using. Use only as directed. Always test in a small inconspicuous area 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, dry and free of waxes and coatings.

For refinishing to a polished finish:

1. If surface is heavily soiled, pre-clean with STONETECH KlenzAll Cleaner if needed.
2. Mask off and protect any baseboards or adjacent areas to avoid splashing and overspray onto surfaces not intended to be treated.
3. If you are using a variety of abrasive grits, ensure that the surface is well rinsed and a new pad is used for each changeover.
4. Apply approximately 1/2 cup (118 mL) STONETECH Honing Powder plus 1 cup (237 mL) clean water directly onto the stone surface.
5. Refinish using a hand orbital sander or weighted floor machine at 130-140 lbs. (59-64 kg). 175 rpm, fitted with a natural hair pad.
6. Keep compound wet while refinishing with plenty of water. Add STONETECH Honing Powder as needed.
7. Use successively higher numbered grits of STONETECH Honing Powder to close the face of the stone and follow with STONETECH Polishing Powder applied as in steps 5-10 above. Repeat as needed to achieve the desired level of shine.
8. Rinse well and use a wet vacuum or hot water extraction unit to remove all remaining compound.
9. Clean equipment with water.
10. Reseal polished area with an appropriate STONETECH sealer (e.g. STONETECH Heavy Duty Sealer).

Refer to data sheet DS 225.5 and DS224.5 for more information.

SEALING AND PROTECTING:

Polished limestone 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 limestone tile installations will also be more stain resistant with the application of a penetrating sealer.

For natural looking protection for polished limestone and grout installations:

STONETECH® Heavy Duty 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, 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 lowpressure 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. 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.
8. 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 is achieved.
9. Clean tools used during application with water.

Refer to data sheet DS279.0 for more information.

MARBLE
GRANITE
LIMESTONE
TRAVERTINE
SLATE
SANDSTONE AND FLAGSTONE
TERRA COTTA AND CLAY PRODUCTS
CONCRETE AND MASONRY
PORCELAIN, CERAMIC AND QUARRY TILE
OTHER



UNPOLISHED, HONED AND TEXTURED LIMESTONE

MCI 112

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 limestone 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 limestone, grout or degrading any applied sealers.

Maintenance Cleaning

Both routine damp mopping and monthly scrub cleanings of limestone 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. STONETECH® has two maintenance cleaners suitable for unpolished, honed or textured limestone surfaces.

For routine cleaning of unpolished, honed or textured limestone 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 (Concentrate) with warm water according to the following mixing chart:

Use	STONETECH® Revitalizer® Cleaner & Protector (Concentrate)	Warm Water
Spray Refill	1 part	1 part
Light Duty	1 part	4 parts

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.

For routine cleaning of unpolished, honed, textured limestone 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:

Use	STONETECH Stone & Tile Cleaner (Concentrate)	Warm Water
Spray Refill	1 part	64 part
Light Duty	1 part	32 parts

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.

For a brilliant shine on countertops and vanities:

STONETECH Polish

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.

1. Spray a light coat of STONETECH Polish over the entire surface.
2. Spread evenly with a clean cloth.
3. Buff until there is no visible liquid and a high shine appears.

Note: STONETECH Polish is not intended for floors as it may create a slipping hazard. It is not a restorative process for worn or damaged marble surfaces.

Please refer to data sheet DS216.5 for more information.

NEW INSTALLATION PRE-GROUT TREATMENT

Grouting cleanup is often easier when the stone is sealed prior to grouting. Unpolished, honed or textured limestones can be porous and are susceptible to grout staining and may benefit from sealing prior to grouting.

A simple water test can be performed to identify if the stone is porous. If the limestone 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 unpolished, honed or textured limestone:

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 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 unpolished limestone, 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.

Unpolished, Honed and Textured Limestone – MCI 112 continued

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:

Use	STONETECH® KlenzAll™ Cleaner (Concentrate)	Warm Water	pH
Light Duty	1 part	8 parts	10.7
Medium Duty	1 part	4 parts	11
Heavy Duty	1 part	2 parts	11.3

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 many limestone finishes. Surface refinishing may be required to remove mineral based deposits or stains from a limestone 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® Heavy Duty 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. Wear rubber gloves and eye protection during handling and application to prevent skin and eye contact.
3. Liberally apply an even coat of STONETECH Heavy Duty Coating Stripper over the required 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.
4. Application time will vary depending on type of coating being removed. Approximate application times are as follows:

Coating Type	Application Dwell Time
Sealer, wax or varnish	30 – 60 minutes
Polyurethane or acrylic	1 to 2 hours
Epoxy Grout Haze	1 to 2 hours

5. 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.

6. 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.
 7. Wipe up residual STONETECH Heavy Duty Coating Stripper with clean, dry cloth or wet mop. A wet/dry vacuum can be used for larger area.
 8. Rinse surface well with clean water.
 9. More than one application may be required, repeat steps 3 through 8 when necessary.
 10. Surface traffic may begin 2 hours after removal of coating.
- Refer to data sheet DS235.0 for more information.

For spot or small area deep cleaning:

STONETECH DEEPKLENZ™ Cleaner

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. Keep children and pets out of the area during application and drying.

1. Thoroughly wet surface by directly spraying onto soiled area.
2. Allow STONETECH DeepKlenz™ Cleaner to work on the surface for 5-10 minutes. Do NOT allow product to dry on the surface.
3. Lightly scrub with a stiff bristle brush to remove the surface contaminants.
4. Rinse and wipe surface with clean cloth and warm water. Repeat as needed for heavily soiled areas.
5. 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:

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 Stain 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 BulletProof Sealer).

Refer to data sheet DS 214.0 for more information.

Mechanical Refinishing for Unpolished, Honed, or Textured Limestone:

STONETECH Honing Powders

This refinishing process is designed for scratch, etch and wear pattern removal and will restore the stone's surface to a uniform matte finish. Depending on the severity of the damage to the stone and/or the desired surface appearance, use one or more of the grit levels (180/280/400/600/800) of the STONETECH Honing Powders. Refinishing requires using a hand-held low speed sander/polisher or an orbital sander for counters, walls or floor edges. For floors use a weighted 175 rpm floor machine (130 lbs.-140 lbs.). Hand machines and floor machines need to be fitted with a natural hair pad or a white nylon polishing pad. A Tampico brush can be used on machines for textured stone floors & walls.

For refinishing to a honed finish:

Read entire label before using. Use only as directed. Always test in a small inconspicuous area to determine ease of application and desired results. Allow new grit installations to cure for a minimum of 72 hours prior to application. Make sure surface is clean, dry and free of waxes and coatings.

1. If surface is heavily soiled, pre-clean with STONETECH KlenzAll Cleaner if needed.
2. Mask off and protect any baseboards or adjacent areas to avoid splashing and overspray onto surfaces not intended to be treated.
3. If you are using a variety of abrasive grits, ensure that the surface is well rinsed and a new pad is used for each changeover.
4. Apply approximately 1/2 cup (118 mL) STONETECH Honing Powder plus 1 cup (237 mL) clean water directly onto the stone surface.
5. Refinish using a hand orbital sander or 175 rpm, weighted floor machine at 130 to 140 lbs. (59.1 to 63.6 kg) fitted with a natural hair pad.
6. Keep compound wet while refinishing with plenty of water. Add STONETECH Honing Powder as needed.
7. Refinish area until the desired level of hone has been achieved[^].
8. Rinse well and use a wet vacuum or hot water extraction unit to remove all remaining compound.
9. Clean equipment with water.
10. Reseal polished area with an appropriate STONETECH sealer (e.g. STONETECH BulletProof Sealer).

Refer to data sheet DS225.5 for more information.

[^] Use successively higher grits of STONETECH® Honing Powder (up to the 800 grit) repeating steps 5 through 10 if a finer honed finish is desired.

MARBLE
GRANITE
LIMESTONE
TRAVERTINE
SLATE
SANDSTONE AND FLAOSTONE
TERRA COTTA AND CLAY PRODUCTS
CONCRETE AND MASONRY
PORCELAIN, CERAMIC AND QUARRY TILE
OTHER

SEALING AND PROTECTING:

All limestone 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 limestone 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, 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 point 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. 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.
8. 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.

9. Clean tools used during application with water.
- Refer to data sheet DS282.0 for more information.

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 - 80°F (10°C - 26°C). Keep children and pets out of the area until surface use resumes.

1. Mask off any surfaces not intended to be treated.
2. Liberally apply an even coat of STONETECH Heavy Duty Exterior Sealer with a point pad, paintbrush, point roller or solvent-resistant, low-pressure sprayer. Do not use power sprayer. Do not thin before using. See method of application.
3. 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 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 pad to loosen residue and follow with a clean, white absorbent towel to remove.
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 DS212.5 for more information.

For a salt water resistant protector:

STONETECH Salt Water Resistant Sealer

Not intended for use on surfaces that have been previously exposed to salt water or deicing salts. 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, dry and free of waxes and coatings. Surface temperature should be between 35°F - 90°F (2°C - 32°C). Keep children and pets out of the area until surface use resumes.

1. Mask off any surfaces not intended to be treated.
2. Liberally apply an even coat of STONETECH Salt Water Resistant Sealer with a bristle point brush or point roller.
3. Allow sealer to penetrate the surface for 15-20 minutes. During this time, distribute excess sealer over entire area to ensure even penetration. Do not allow sealer to pool on the surface. DO NOT ALLOW EXCESS SEALER TO DRY ON THE SURFACE.
4. Thoroughly wipe the entire surface with a clean dry cloth to completely remove all excess sealer from the surface.
5. For protection against de-icing salts, a second coat is recommended and should be applied 15-20 minutes after the initial application as directed in steps 2-4.
6. The sealer should be fully cured prior to water contacting the surface. Full cure is achieved in 72 hours. If there is a possibility of rain within the 72 hour cure time, cover surface so it remains dry.
7. Clean tools used during application with water.
8. If resistance to oily stains is also desired, apply STONETECH BulletProof Sealer after STONETECH Salt Water Resistant Sealer has fully cured.

Refer to data sheet DS288.0 for more information.

For a color enhancing impregnating sealer for interior surfaces:

STONETECH Enhancer 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 at least 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 - 80°F (10°C - 26°C). Avoid skin 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 point pad, low-pressure chemical-resistant sprayer, roller or brush. Avoid applying sealer on unintended surfaces.
3. Allow sealer to penetrate surface for 15-30 minutes; denser 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 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 periods have passed.
7. Clean tools used during application with water.

Refer to data sheet DS217.5 for more information.

For a color enhancing impregnating sealer for interior and exterior surfaces:

STONETECH Enhancer Pro™ Sealer (Solvent-based)

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, free of waxes, coatings, and previous sealers, and is dry for 24-72 hours. Surface temperature should be between 50°F - 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 Enhancer Pro™ Sealer using a point pad, roller, brush, or pump-up garden sprayer. Do not use a power sprayer, towel, or sponge for application. Do not thin before using.
3. Allow Sealer to penetrate surface for 15-20 minutes. Denser material may require more time to penetrate. DO NOT ALLOW EXCESS SEALER TO DRY ON 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.
6. Full cure is achieved after 24-72 hours. Avoid surface traffic for 6-8 hours after application. If surface traffic must resume sooner, cover the floor with red rosin paper to protect it until full cure has been achieved. Red rosin paper is not needed to apply second coat.
7. Clean up promptly after job is complete. Rags and equipment that are wet with product may be flammable. 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 reach of children and pets. When dry, dispose of in accordance with local waste disposal regulations.

Refer to data sheet DS218.5 for more information.

For a color enhancing topical protector:

STONETECH High Gloss Finishing Sealer

Read 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. Fresh concrete slabs require a minimum of 28 days to cure before applying the sealer. Keep children and pets out of the area until treated surface is dry.

1. SHAKE WELL BEFORE USING. Do not dilute before applying.
2. Liberally apply 1-3 even coats of STONETECH High Gloss Finishing Sealer with a natural bristle point brush, point roller, low pressure sprayer, or pump-up garden 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.

Unpolished, Honed and Textured Limestone – MCI 112 *continued*

STONETECH® Semi Gloss Finishing Sealer

Read 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® Semi 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. Fresh concrete slabs require a minimum of 28 days to cure before applying the sealer. Keep children and pets out of the area until treated surface is dry.

1. SHAKE WELL BEFORE USING. Do not dilute before applying.
2. Liberally apply 1-3 even coats of STONETECH® Semi Gloss Finishing Sealer with a natural bristle paint brush, paint roller, or paint pad. Do not apply product with a 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 DS220.5 for more information.

MARBLE

GRANITE

LIMESTONE

TRAVERTINE

SLATE

SANDSTONE AND
FLAOSTONE

TERRA COTTA
AND CLAY
PRODUCTS

CONCRETE AND
MASONRY

PORCELAIN,
CERAMIC AND
QUARRY TILE

OTHER