



LATICRETE Grout Guide

SPECTRALOCK[®] PRO Premium

TDS 400

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LATICRETE® Grout Guide

Introduction

Grout, when properly installed, will enhance the final appearance and performance of any tile, paver, stone, or brick installation. The LATICRETE International Technical Service Dept. offers this LATICRETE Grout Selection and Maintenance Guide to insure that the project specifier is given enough information to make the best possible decision about the selection, installation and maintenance of grout.

Please refer to this guide prior to beginning any tile installation - ideally while you are in the project design phase. This guide offers general information to facilitate the many steps or decisions that must be made regarding grout type, installation and long-term maintenance.

Section 1:

The LATICRETE® System offers readily available, factory prepared grout in a wide range of colors.

LATICRETE Grouts can also be custom color matched to many colors not available in the LATICRETE Grout color spectrum. Custom color matching involves an approximate minimum of 2,000 lb (907 kg) order for SPECTRALOCK® Part C powder. There is a color matching fee which is non-refundable if product is not ordered. A credit will be applied to the order when placed.

This array of colored grouts offers unlimited design freedom. Room function, exposure to chemicals, soiling, or moisture must be taken into account when selecting grout colors. Please note the following points about colored grout:

1. Printed samples of grout colors are made as accurate as possible. Mixing with other additives will cause slight variation. The LATICRETE Grout Color Card depicts colors representative of PERMACOLOR® Grout mixed with water; or, 1500 Sanded Grout & 1600 Unsanded Grout that are mixed with 1776 Grout Enhancer; SPECTRALOCK PRO Grout; SPECTRALOCK PRO Premium Grout; LATAPOXY® SP-100; and SPECTRALOCK 2000 IG. **IMPORTANT NOTE:** Color samples are printed reproductions, and should only be used as approximate guides to appearance. Actual shade and texture will depend on jobsite conditions, installation technique, tile characteristics, lighting, and other factors beyond grout/sealant manufacturer's control. Verify appearance with a test area before main installation commences. See Grout Color Chart (DS 254.3) for color applicable to each type of grout.
2. White or lightly colored grout joints show soil readily. For example, commercial kitchen joints that are wide and white will appear to be dirty in a shorter period of time than a narrow or darker joint would.
3. Neutral gray, dark gray or medium colored grouts are less likely to show soil than will a light colored grout.
4. Dark joints in a shower or exterior may show water deposits and/or the natural occurrence of efflorescence more readily than a lighter colored joint.
5. For maximum color consistency always use grout with the same control/lot number. Grout colors may vary due to jobsite conditions (e.g. temperature, cure rate, moisture content, etc...). Dry mix grout powder if different control numbers will be used.
6. Some grout pigment can stain the surface of certain types of tile, etc. A grout release, tile sealer or paraffin wax applied to the top of these types of tiles prior to grout installation, may reduce staining problems. Verify compatibility with a test area.

Section 2:

LATICRETE Grout Coverage:

1. Coverage of LATICRETE grout products is available by referencing Data Sheet 254.3, the LATICRETE Grout packaging coverage chart, or the LATICRETE Grout Coverage Calculator located at www.laticrete.com/coverage.
2. Coverage may vary considerably when grout joint width varies or when cushion-edge or wave-edge tile are specified. When several tiles are used to create an overall pattern, grout width will be predetermined by any mounted tile.
3. It is customary to provide extra grout (typically 10% extra) to allow for jobsite waste. Additional grout should be provided to the building owner for future use.
4. LATICRETE Grout Coverage Calculator is a user-friendly Microsoft Office Excel spreadsheet which provides automated calculation of grout coverage in both the English and Metric Systems.

Section 3:

Criteria for Finished Grout Appearance:

The following criteria should be used to judge the final grout installation. Finished joints must be:

1. Uniform in color, no “show through” of setting/fixing materials
2. Compacted and cured to maximum hardness (not powdery)
3. Smooth and evenly filled
4. Free of voids or pinholes
5. Grout can be finished to near level of tile surfaces (except with the installation of cushioned edge tile where requirement is to the depth of the cushion, and epoxy grouts, where slight depression is accepted by the industry)
6. Grout should not be higher than the tile surface
7. No grout or grout haze should remain on surface of tile, etc...
8. Contact and adhesion by the grout to each tile is crucial for both long-term performance and maintenance

Section 4: Part A

SPECTRALOCK® PRO Premium Grout – Installation Procedures

Storage:

1. Store materials at room temperature 70°F (21°C). To facilitate installation, mix and apply material at room temperature 70°F (21°C).
2. Cold floor temperatures or cold liquids will impair workability. If liquids are cold, separated, or crystallized, immerse the sealed containers in hot tap water until they become clear of any crystals and do not separate after shaking.
Do not install SPECTRALOCK PRO Premium Grout when surface temperatures are above 95°F (35°C) or below 40°F (5°C)

Section 4: Part B

SPECTRALOCK PRO Premium Grout – Installation Procedures

Prior To Grouting:

1. **Read ALL instructions BEFORE proceeding. Follow directions as written.**
2. Use plenty of thin-set and beat tile/stone in properly; leave no ridges or voids beneath tile/stone for grout to flow into. Allow tile installation to set hard before grouting.
3. Before starting to grout, remove debris in grout joints and lightly sponge the tile surface to remove dust and dirt. Do not use acid. Do not leave standing water in joints.
4. Follow temperature guidelines as stated in Section 5, Part A.
5. Check to insure that multiple cartons / bags of SPECTRALOCK® Part C Powder are all the same batch number. Minor shade variations may occur from batch to batch. Manufacturer is not responsible for different batches being used on same job.

PROPER TOOLS REQUIRED

1. Clean bucket (provided with each full unit) and a clean margin trowel for mixing.
2. Hard rubber epoxy float (e.g. Walton GK1) is a must for quarry tile. Standard grout floats may be used for glazed tile (particularly cushion-edge tile).
3. Grout sponges.
4. White scrub pad for secondary cleaning of SPECTRALOCK PRO Premium Grout.

Section 4: Part C

SPECTRALOCK PRO Premium Grout – Installation Procedures

Mixing of SPECTRALOCK PRO Premium Grout:

1. Thoroughly stir contents of “A” hardener and “B” resin liquid bags.
2. Blend entire contents of “A” and “B” liquids thoroughly with clean mixing stick or margin trowel in the clean bucket provided, for one minute.
- 3 Mix in all SPECTRALOCK® Part C powder provided. For easier workability or narrow joints, use 10-less powder (using less SPECTRALOCK Part C powder will affect coverage).
4. Mix by hand with margin trowel or use a slow speed (<300 RPM) electric drill mixer until uniform.
5. Bubbling in the mix indicates an excessively loose mix and more filler powder should be added to reduce bubbling.

Do Not Over mix. Over mixing Can Cause Air Bubbles In Grout Joints.

See Data Sheet 681.5 for complete installation instructions for SPECTRALOCK PRO Premium Grout

Section 4: Part D

SPECTRALOCK PRO Premium Grout – Installation Procedures

Grouting Floors With SPECTRALOCK PRO Premium Grout:

1. Use standard grouting techniques to work SPECTRALOCK PRO Premium Grout into grout joints.
2. BE SURE ALL JOINTS ARE FULLY PACKED!
3. To ease cleanup, use rubber float at 90° angle to remove as much excess material as soon as possible before initial cleaning with sponge. Wait 20-30 minutes after grouting to allow grout to settle and firm slightly.

Do Not Leave Excess Grout On The Face Of Tiles

Grouting Walls With SPECTRALOCK PRO Premium Grout:

1. Use standard grouting techniques to work SPECTRALOCK PRO Premium Grout into grout joints.
2. If grout sags out of joints during installation, stop immediately and wait an additional 15 minutes for grout to firm up in bucket. You may also add more Part C filler powder if any was held back.
3. BE SURE ALL JOINTS ARE FULLY PACKED!
4. To ease cleanup, use an epoxy grout float or a standard rubber grout float at a 90° angle to remove as much excess material as possible before initial cleaning with sponge. Wait 20 – 30 minutes after grouting to allow grout to settle and firm slightly.

Section 4: Part E

SPECTRALOCK PRO Premium Grout – Installation Procedures

Installation Clean-Up of SPECTRALOCK PRO Premium Grout:

1. Begin cutting excess grout off tiles, cleaning grout haze 20 – 30 minutes after grouting an area. Use clean water and a damp sponge. Wipe the tile surface in a light circular motion to loosen grout residue and to smooth out the joints.
HINT: Using 1 packet of Cleaning Additive 377 mixed with two gallons clean water will help reduce grout haze residue and prevent sponge from becoming gummed up. Certain tiles clean up more easily than others, so be sure to rinse sponge frequently, checking your work as you progress. Change water and cleaning solution after cleaning every 50 ft² (4.6 m²) of tile when using multiple units.
2. For vertical joints, if grout sags or runs out of joints during cleanup it may be advisable to use a well wrung folded, white terry cloth towel to remove excess grout while smoothing the joints. Make sure that light pressure is used. Rinse towel frequently and change water and cleaning additive every 50 ft² (4.6 m²).
3. Begin final cleaning of all areas grouted approximately one hour after initial wash to ensure no grout haze or contaminants (ex. footprints) exist on the tile surface. A solution of 2 gallons of clean water and a packet of LATICRETE Cleaning Additive is recommended to completely remove any residual grout film/haze. Using a well wrung, clean white scrub pad, clean entire tile surface with a light circular motion. Rinse scrub pad frequently. Change water and cleaning solution every 50 ft² (4.6 m²).
4. Next, using a new sponge and clean water, pull across tile to pick up any remaining residue. Rinse the sponge after every pass; USE EACH SIDE ONLY ONCE. Allow installation to dry and inspect for any areas where residual haze remains. If haze is present, repeat step 2 immediately. SPECTRALOCK PRO Premium Grout haze which is allowed to

cure on the tile surface may be difficult to remove. Make certain to check the tile surface with adequate lighting after the surface has dried.

Maximum stain resistance is achieved after 7 days @ 70°F (21°C).

Section 4: Part F

LATICRETE® SPECTRALOCK® PRO Premium Grout – Installation Procedures

Removal of SPECTRALOCK PRO Premium Grout haze:

- For grout haze that is less than 48 hours old use straight white vinegar and a white terry cloth towel. Apply white vinegar to terry cloth towel, apply to affected areas and allow to dwell for 5 – 10 minutes. Scrub areas with towel and rinse with clean water and sponge. Repeat as needed for areas with heavy haze.

Note: Do a test area in an inconspicuous area to confirm results before proceeding. Be careful when using vinegar in conjunction with polished marble or similar stone. Do a test area to confirm results.

- For SPECTRALOCK PRO Premium Grout haze that is older than 48 hours try either of the following procedures;
 1. Use 1/4 cup (0.06 Liters) electric dishwasher detergent (e.g. Cascade, Electrosol, etc...). per 3.5 gallons (13.2 Liters) pail of water. Liberally apply the dishwasher detergent / water solution to the surface with a mop. Then broadcast silica sand or SPECTRALOCK Part C powder over the floor. Use a buffing machine with a white scrub pad and make several passes over the floor. Next, vacuum up the solution and sand with a wet vac. Rinse well with clean water. Repeat process as required. Do a test area to confirm results.

2. Contact any of the following manufacturer's for their product recommendation for removing epoxy grout haze;

- The Miracle Company - 1-800-350-1901
- StoneTech Professionals– 1-888-786-6343
- Walter Legge Company – 1-800-345-3443

Mask off the work area to protect adjacent finished surfaces.

Section 4: Part G

SPECTRALOCK PRO Premium Grout – Installation Procedures

Removal Of SPECTRALOCK PRO Premium Grout from grout joint:

For all removal methods, always:

1. Protect/mask off carpeting, woodwork and other finishes near the work area;
2. Verify results first with a small test area in an inconspicuous area;
3. Remove at least ½ the depth of the existing grout joint prior to re-grouting;
4. Provide effective ventilation

Mechanical Removal

This method is fast; but great care must be taken to avoid damage to tile surface and edges. Use small circular or right angle saws with diamond cutting blades equipped with dustless vacuum systems. The vacuum system will minimize the amount of airborne dust. This system can be used in occupied structures. Proper re-grouting depth is approximately ½ the depth of the existing joints.

Chemical Removal

1. Apply nonflammable, water cleanable, gel type Paint and Epoxy remover directly to grout joints. Be absolutely certain to follow manufacturer's safety precautions & warning instructions on the label. **ROOM MUST BE WELL VENTILATED!** Do a small test area to confirm results prior to doing the entire installation.
2. Allow remover to remain on the grout joints as long as necessary to remove epoxy (usually 30 minutes to 2 hours).
3. Using a narrow brass or wire brush (NOTE: wire brush may scratch some types of tile, test before using), rake out joints (minimum ½ depth of the grout joint).
4. Wash with a solution of Spic & Span, tri-sodium phosphate (TSP) or machine dishwasher detergent (1/2 cup detergent in 2 qt. of warm water) to completely neutralize the paint remover.

Warning: Detergent solutions require eye protection and gloves.

5. Remove any and all loose or free epoxy from the grout joints. A wet/dry vacuum works best for this procedure. Rinse with clean water. Remove all excess water from joints with wet/dry vacuum, sponge or dry cloth and allow joints to dry completely.

6. Sweep joints again with stiff dry brush to remove all residue.

Heat Gun Removal

This method is well suited for “spot” (singular) tile repairs. Use a high power Industrial heat gun (1200 Watt, 500°F). These devices will soften the cured grout and enable it to be scraped out. **DO NOT USE TORCHES.** Do a test patch to verify results. The heat gun method requires patience. Finished surfaces need to be protected from the heat. Also, the heat gun may damage some soft glazed tiles. This method may produce some odor so adequate ventilation is required.

Section 4: Part H

SPECTRALOCK® PRO Premium Grout Maintenance Guide:

NOTE: LATICRETE Grouts require routine cleaning with a neutral pH soap and water. Contact the manufacturer if another cleaner type will be used to ensure compatibility with the grout.

1. ADVANTAGES OF: SPECTRALOCK PRO Premium Grout.

- Stain and soil resistant
- Stays uniformly colorfast over time
- Never needs to be sealed and resealed
- Resists exposure to most acids, alkalis and many chemicals
- Will not peel, crack or pulverize
- High strength

SPECTRALOCK PRO Premium Grout is extremely low in absorption. Liquids will not penetrate the surface of these grouts due to the low absorption rate. Dirty grout can always be cleaned down to the original color - not so with portland cement based grouts, latex modified portland cement grouts or modified epoxy grouts. Stains become part of portland cement-based grouts.

Protect grouted areas from traffic and other trades for at least 24 hours after installation or until the grout is hard and no longer tacky. For areas that must have traffic during curing time, cover installation with plastic sheeting and plywood or other temporary load bearing course. Protect grout from dirt and dust for 72 hours at 70°F (21°C). Please note that temperatures lower than 70°F (21°C) will require protection from traffic for a longer period of time. SPECTRALOCK PRO Premium Grout reaches maximum hardness in 14 days and maximum stain resistance in 7 days @ 70°F (21°C).

At 70°F (21°C) full chemical resistance with SPECTRALOCK PRO Premium Grout is not achieved until 7 days after installation. Prior to this, and following the 24 hour "Time to Heavy Traffic" period, the grout **MAY BE** cleaned with neutral pH soap and water. Any exposure to chemicals, food or other staining agents must be cleaned up promptly.

2. ROUTINE MAINTENANCE OF LATICRETE GROUTS: SPECTRALOCK PRO Premium Grout is stain resistant when properly installed and allowed to cure properly. They are, unfortunately, not self-cleaning. Routine maintenance can be done with detergents and a sponge or mop. For tough or difficult to remove soil, a bleaching cleaner (e.g. Soft Scrub, Comet, Ajax, etc. or electric dishwashing detergent) on a nylon scrubbing pad or a long handled stiff bristle brush can be used. Please note: Prior to using any cleaning material on a tile, etc. installation, test a discrete area or scrap piece of tile to insure desired results.

3. COMMERCIAL KITCHENS

SPECTRALOCK 2000 IG is recommended for high abuse areas such as commercial kitchens.

Section 4: Part I

SPECTRALOCK PRO Premium Grout - INSTALLATION PROCEDURES

SPECTRALOCK® PRO Premium Grout Time To Service @ 70°F (21°C)

Working Time: 80 Minutes

Tack Free: 4 Hours

Ready for Light Foot Traffic: 12 hours

Ready for Heavy Foot Traffic: 24 hours

Stain Resistance, Food Spills, and Household Cleaners: 7 days

Full Cure: 14 days

Notes:

- The temperature of the surface determines the working and cure time of all grouts.
- Concrete floors on grade may be substantially cooler than room temperature.
- For temperatures below 60°F (10°C), or for faster cure above 60°F (10°C), use SPECTRALOCK 2000 IG.

Certified Service Ratings*:

1. Residential - Kitchens, bathrooms and foyers
2. Light Traffic - Normal residential foot traffic
3. Moderate Traffic - commercial and light institutional use in public space of restaurants and hospitals
4. Heavy Traffic - Shopping malls, stores, work areas, laboratories, auto showrooms and service areas, shipping/receiving, and exterior decks
5. Extra Heavy - Heavy and high impact use in food plants, dairies, breweries, and commercial kitchens. Requires quarry tile, packing house tile, or tile designated by tile manufacturer

* See ASTM Standard C627 - Standard Test Method for Evaluating Ceramic Floor Tile Installation Systems Using the Robinson-Type Floor Tester

^ United States Patent No.: 6881768 (and other patents)

Technical Data Sheets are subject to change without notice. For latest revision, check our website at www.laticrete.com

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