



# Re-Grouting Swimming Pools, Fountains and Water Features

## TDS 186

### GENERAL CONDITIONS

Degradation or deterioration of grout in submerged installations is not uncommon, and can occur due to several factors due to the environment in which the grout exists. This is especially true of cement based grouts. Degradation or deterioration of portland cement based grouts is a more common occurrence in submerged installations than a high quality epoxy based grout.

The performance of cement grouts can be affected by the following factors which can cause it to lose strength and fail;

1. Improper pool water chemistry maintenance
2. Filling the pool too soon
3. No allowance for movement
4. Use of improper grout
5. Poor surface preparation prior to grouting
6. Improper grout and/or tile installation

Typically, epoxy based grout (e.g. SPECTRALOCK<sup>®</sup> PRO Premium Grout\*) are better suited for the conditions found in pools and water features. For more information on pool water chemistry, and other factors which can minimize the life of a cement based grout, please refer to the LATICRETE Tiled Swimming Pools, Fountains and Spas Technical Design Manual available at [http://www.laticrete.com/architects/technical\\_design\\_manuals.aspx](http://www.laticrete.com/architects/technical_design_manuals.aspx).

It is necessary to visually inspect all of the tiled surfaces to determine if the installation is performing as expected on a regular and frequent schedule. It may also be necessary to drain the pool or water feature on a regular basis for routine maintenance of both the water and the pool structure and any necessary repairs can be conducted during this time. Inspection of the tiled surface may show signs of grout degradation, based on any or multiple items listed above, which will require repair. Prior to making any repairs it may be wise to try to determine the reason that repairs are required and make any necessary corrections, thus minimizing future repairs. To properly repair or replace the grout please follow these steps;

### TOOLS REQUIRED

Medium or high-pressure power washer  
Dustless circular saw or right angle grinder  
Epoxy grout float or grout float (for cement based grout)  
Margin trowels  
Wet vacuum  
White nylon scrub pads  
Grout sponges  
Gloves  
Duct tape  
Plastic sheeting or other protection material

## **REPAIRING LOOSE OR CRACKED TILE**

Carefully cut out cracked or loose tiles by cutting around the tiles with an angle grinder or circular saw with a dustless attachment to replace tiles as required.

The pool shell should be clean (free of dirt, dust, curing compounds, sealers, residues, or any other material that can act as a bond breaker), and have no standing water. The concrete can be ground down with an angle grinder to remove existing thin set mortar down to the top of the concrete surface. Care must be taken if a waterproofing membrane is installed under the tile so damage to the membrane is avoided. If a waterproofing membrane is present and is damaged during the repair process, please contact LATICRETE Technical Services at 1.800.243.4788 x235.

Once the surface is prepared, use 254 Platinum ([DS 677.0](#)), Glass Tile Adhesive ([DS 252.0](#)), or 211 Powder ([DS 239.0](#)) gauged with 4237 Latex Additive ([DS 230.1](#)) to install the tiles.

## **REMOVAL OF EXISTING GROUT**

### **Option 1. Using a medium to high pressure water system**

Use a medium (1,000 – 2,000 psi/6.9 – 13.8 MPa) to high pressure (>2,000 psi/>13.8 MPa) power washer system to carefully remove the grout from between the tile. Care must be taken to make sure that the pressurized water does not dwell on a particular area and that damage is not done to the tile installation.

NOTE: This option should only be used if the use of abundant water will not damage surrounding areas, equipment or other building elements. This option generally works well in swimming pools, large fountains and water features.

- a. Direct the pressurized water at all the joints, moving continuously, to remove the existing grout. The existing grout should be removed to at least ½ the depth of the grout joint down to stable and sound existing grout or bedding mortar.
- b. Remove any excess water and loose material with a wet vacuum.
- c. Rinse the tiles areas with clean water to remove any loose material remaining in the joints and to clean the area. Use a wet vacuum to remove any remaining residue and water.
- d. Allow the joints to completely dry prior to re-grouting.

Before proceeding with the re-grout, ensure that joints are clean, free of loose grout material, construction debris or other contaminants. Make sure the grout joints are fully dry before installing SPECTRALOCK® PRO Premium Grout\* or PERMACOLOR® Select^ or PERMACOLOR Grout. Use a wet vacuum to remove all standing water. The grout joints can be damp when the re-grouting takes place.

### **Option 2. Saw-cut existing joint with diamond blades**

- a. Using extreme care, use hand-held electric circular saw or right angle grinder (e.g. Makita – [www.makita.com](http://www.makita.com)) with diamond saw blades and dustless attachments to remove the grout. The existing grout should be removed to at least ½ the depth of the grout joint down to stable and sound existing grout or bedding mortar. Be sure to scrape out all soft and loose grout and leave joints clean.
- b. Remove any excess water and loose material with a wet vacuum.

- c. Rinse the tiled areas with clean water to remove any loose material remaining in the joints and to clean the area. Use a wet vacuum to remove any remaining residue and water.
- d. Allow the joints to completely dry prior to re-grouting.
- e. Before proceeding with the re-grout, ensure that joints are clean, free of loose grout material, construction debris or other contaminants. Make sure the grout joints are fully dry before installing SPECTRALOCK® PRO Premium Grout, PERMACOLOR® Select^ or PERMACOLOR Grout. Use a wet vacuum to remove all standing water. The grout joints can be damp when the re-grouting takes place.

Install the new grout by following [DS 681.5](#) for SPECTRALOCK PRO Premium Grout, [DS 281.0](#) for PERMACOLOR Select or [DS 250.0](#) for PERMACOLOR Grout available at [www.laticrete.com](http://www.laticrete.com). Use LATASIL™ to repair any movement joints which may have been damaged or are in need of replacement in the project. Allow SPECTRALOCK PRO Premium Grout to cure for 10 days at 70°F (21°C) or for 14 days when using PERMACOLOR Select or PERMACOLOR Grout at 70°F (21°C).

See LATICRETE Technical Data Sheet [400](#) “Grout Guide” for more information on LATICRETE Grouts.

Please refer to LATICRETE Technical Data Sheets [179](#) “Pool Maintenance Guide”, [180](#) “Pool Maintenance Checklist” and [192](#) “Installation of Ceramic Tile in Swimming Pools” for more information on pool water maintenance / chemistry and general information on tiled swimming pools.

\* United States Patent No.: 6,881,768 (and other Patents)

^ United States Patent No.: 6,784,229 (and other Patents)

Technical Data Sheets are subject to change without notice. For latest revision, check our website at [www.laticrete.com](http://www.laticrete.com)  
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