

Cement grout Troubleshooting guide

Situation	Probable Causes	Prevention	Solution
EFFLORESCENCE White powdery residue on the surface of the cured grout joint.	Portland cement naturally creates soluble salts when curing. These soluble salts are carried to the surface of the grout while the grout is wet and appear after the moisture has evaporated.	Use the required amount of water when mixing and cleaning. Follow manufacturer's instructions explicitly. When using cold water or in humid conditions, allow longer cure time before cleaning. The grout should have the consistency of mashed potatoes.	Use an acid based cleaner (9006) to remove efflorescence. Verify with grout manufacturer that the chosen cleaner is appropriate for their grout.
DISCOLORED GROUT Washed out colour.	Grout is mixed too wet. An excessive cleaning might also be the cause. The coloring agent (pigments) is diluted.	Avoid washing your floor within the first 72 hours.	Some tropical or penetrating sealers will enhance colour and give the grout a wet look. Try an inconspicuous area before sealing the entire application. Grout colorants are also available to change the grout colour.
SPOTTED GROUT Color is streaky uneven or shadowy. Grout color is spotty, too dark in places, does not match.	Grout washed too quickly before the Portland cement has locked in the colour. Uneven grout joint depths will also cause inconsistent color.	Be sure the grout is firm and solid in the joint before cleaning. A 10 minute delay is required before cleaning your tile after your installation. Use a new high density sponge to clean grout.	A penetrating grout colorant (PX-90) may be used. Some tropical or penetrating sealers will enhance colour and give the grout a wet look. Try an inconspicuous area before sealing the entire application. Using an acid based cleaner (9006) could also help.
CRACKED GROUT JOINTS Thin cracks along the edge of the tile or directly in the middle of the joint.	Shrinkage cracks are due to the grout being mixed with too much water or when it cured too fast (i.e. in an excessively hot). A faulty underlayment may also be the cause.	Follow mix ratios and underlayment requirements as indicated by the manufacturer.	Re-grouting over cracked joints with unsanded grout of the same color may hide the crack.
DIRTY GROUT Grout appears full of dust or dirt particles.	Airborne dirt or tracked in dirt imbedded into the joint before the grout has cured. Joints have not been sealed.	Cover your floor after grouting for 3-4 days. Do not use polyethylene cover, plywood is a better option. Use a grout sealer.	An acid clean up (9006) usually removes this dirt.
POWDERY OR SOFT GROUT Grout is soft or powdery and can be easily raked out of the joint.	Grout is mixed too wet. Rapid drying of the grout (hot temperatures or excessively absorbent tile biscuit).	The grout should have the consistency of mashed potatoes. Moist absorbent tiles before tiling.	In some cases, moistening the grout and covering it will improve the cement hydration and harden the grout. If this does not improve the hardness of the joint, remove loose grout and grout again.
PINHOLES IN THE GROUT Tiny holes on the surface of the grout.	Usually caused by a grout mixed too quickly (air entrapment) or by improper grout application.	Always grout from filled areas to open areas. Mix grout by hand or with a low-speed mixer (less than 150 RPM)	In some cases, re-grouting lightly over existing joints with unsanded grout of the same colour will hide the pinhole.