

Porcelain is a clay like substance, which when kiln fired at very high temperatures and fused to cast iron or a steel mold, creates a very hard and vitreous surface that is impervious to most chemicals and abrasions. After years of constant use and abuse, such as a bathtub in a rental unit, the outer surface erodes and exposes a porous interior layer. This porous under-layer traps particulate and begins to appear dark, dirty, worn out, and generally unsanitary. The options for keeping the bathtub looking good at this point are: replacement of the bathtub, covering the tub with bathtub liner or refinishing the bathtub.

Refinishing is sometimes referred to as re-porcelainizing, reglazing or resurfacing. There is in fact no way to 're-porcelainize' a bathtub, as the original process required kiln firing, and this is not possible once a tub has been installed in an occupied building. Refinishing is a process where a new coating is applied over the existing porcelain. As with any coating process, preparation is the key to a successful application.

The most widely accepted refinishing procedure is as follows:

- 1) Thoroughly clean the surface of the bathtub.
- 2) Etch the surface with an acid solution.
- 3) Neutralize the acid and sand the surface with an abrasive.
- 4) Mask and protect all adjacent surfaces not to receive the coating.
- 5) Spray the new surface coating with an HVLP spray gun (High Volume Low Pressure).

There are a wide variety of coatings that can be successful on the surface of a bathtub, however the best coating system is an epoxy primer followed by an acrylic urethane top-coat. The epoxy primer has the greatest adhesion characteristics and the acrylic urethane has the greatest resistance to abrasion, chemicals, and the additional benefit that urethanes tend not to yellow over time. These products are high performance paints and the applicator needs to be trained to handle them safely and to wear the proper personal protective equipment. One should be aware that certain coatings like oil-based enamel may be cost effective initially, but they will not stand up very long and can yield disappointing results. And again, proper preparation is the key to the refinishing process being successful.

The entire refinishing process should take a skilled technician three to four hours from start to finish per bathtub. The new surface should appear glossy and smooth much like the original porcelain did. There will be a required cure time of 24 to 48 hours, during which time the bathtub should not be used. Most building managers familiar with this process prefer to refinish bathtubs when units are vacant to ensure proper cure time and minimize tenant disruption. One can expect to pay between \$300 and \$500 for a typical tub refinish, and most bathtubs can be refinished again and again.

The refinishing industry is a rapidly growing business, especially here in the Northeast where there are plenty of older bathtubs in need of attention. There is a constant flow of new and improved refinishing products on the market and one can expect refinished surfaces to last longer and longer as these improvements evolve. The

Porcelain Patch & Glaze Corp.

"The Reliable Way To Refinish."

refinishing process is not limited to bathtubs, as many building managers use our services for porcelain wall tile as well.

140 Watertown Street
Watertown, Massachusetts 02472

Phone (617) 924-9100 Fax (617) 924-9101

www.porcelainpatch.com

Good luck with your refinishing projects!

