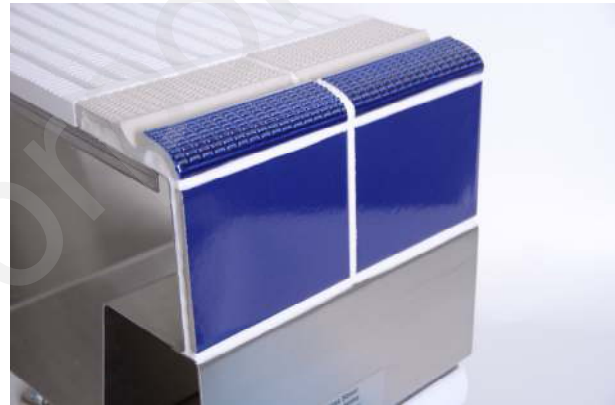
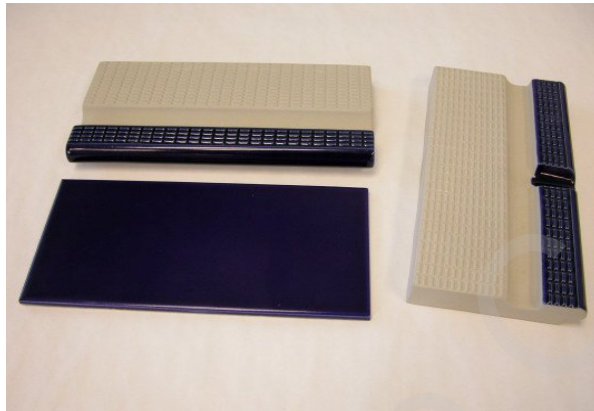


Tile Installation for Natare Pools or Pool Systems

Any portion of a stainless steel Natare Pool, spa or pool perimeter system may be provided with a porcelain ceramic tile finish, including the entire pool interior and is often used in conjunction with a deck level perimeter overflow gutter system.. Ceramic tile may also be combined with Natare's NataClad PVC laminated stainless steel wall systems to provide ceramic tile interior, a ceramic tile pool surround or a complete ceramic pool interior.

Natare often provides high quality porcelain ceramic tile for the pool edge in a profile known internationally as the Finnish Style, which offers an excellent slip-resistant surface and an integral handhold at the water line that complies with typical health and safety codes and requirements. Natare porcelain tile is also available in a matching vertical pool wall tile for use with or without the deck edge tile.



Porcelain is much more heavy-duty, chip resistant, and less prone to cracking than typical ceramic tile, which is ceramic-fired at a lower temperature and is effectively clay with paint on top. Porcelain-fired tile is fired at a very high temperature and often incorporates the same color throughout much like a toilet or white bathroom sink. Ceramic is easily affected by thermal change and its thermal expansion coefficient is higher.

Porcelain ceramic tile is more resistant to acids and alkalis than ceramic tiles and has very low porosity. It is hygienic and sanitary as it does not collect microorganisms, dirt or stains like regular ceramic tile. The glazed surface is highly resistant to staining and the water absorption rate of the Porcelain is under 0.01% as a result of the high temperature firing. Porcelain tiles are made of more dense raw materials than ceramic. Porcelain has more durability than ceramic and more resistance to scratching, chipping and shocks. Porcelain even defies frost

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and can be used for indoor or outdoor use, even in freezing climates. It is not affected by thermal change and resists temperature extremes to -40 °C. Thermal expansion coefficient is between 5 to 7% at temperature ranges between 20° C and 100° C.

Typical porcelain ceramic tile installed on the perimeter of a Natare Pool requires 1.25 tiles per linear foot or 4.08 tiles per linear meter of pool perimeter, plus additional allowance for overage, installation fitting, breakage during installation and other unforeseen needs. Tile application and quantities required for other tile profiles and pool areas will require different amounts of tile. Typically, an additional quantity of 10-15% is necessary to ensure that adequate tile is on hand to complete the installation.

To be suitable for the installation of tile, stainless steel surfaces on Natare Pools or pool systems where tile installation is anticipated will have a minimum deflection no greater than L/360 for ceramic tile and L/480 or greater for large tile modules or stone. This deflection must be verified with the tile manufacturer’s deflection requirements. Expansion allowance must be incorporated into the tile installation design, and the Tile Council of America guidelines outlined on Detail EJI 71- for construct, design and placement of expansion joints must be followed.

Installation of porcelain ceramic tile in a Natare stainless steel pool or PVC laminated pool is accomplished using a proprietary cleaning and passivation system (for bare stainless), and a two-step installation process (setting & grouting separately) an epoxy adhesive for setting the tile and a sanded epoxy grout. Stainless steel must be clean and free of all contamination and is prepared using a special etching and passivation process. Final cleaning of any dust, grease, or atmospheric pollution prior to tile installation is a must.

Once the tile is installed, a minimum cure time for traffic of 24-hours is required, and tile system must be allowed to cure for a minimum period of 10 days at 70 degrees F (21 degrees C) following the final grouting period before filling with water. Generally, a water fill (or drain) rate of 1" (25mm) per hour is recommended. Also,

Technical Values – Typical Stock Porcelain Tile

Sizes:

Pool edge (handhold) tiles	4.72-in wide x 9.57-in long x 1-in thick (120 mm x 243 mm x 25 mm)
Vertical tiles	4.72-in wide x 9.57-in long x .25-in thick (120 mm x 243 mm x 6.35 mm)

Weight:

Pool edge (handhold) tiles	2.75 lb/1.247 kg
Vertical tiles	1.12 lb/.508 kg

Colors

All tiles	Available in dark blue and light blue with custom colors available
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***Due to the nature of tile, all colors, sizes and weights are approximate and may vary slightly from piece to piece**