



## Technical Data Sheet

### Product Description

StarQuartz, QuartzLock<sup>2</sup> Grout is a PRE-MIXED, READY-TO-USE URETHANE and colored quartz-based grout for ceramic, porcelain, glass and natural stone tiles on floors and walls. QuartzLock<sup>2</sup> Grout requires no sealing and is resistant to typical food stains and most household chemical products.

### Features and Benefits

- Pre-mixed, ready to use
- Excellent chemical, stain and mildew resistance
- Semi-flexible, low shrinkage and high crack resistance
- No color fading, streaking or shading - Even when wet!
- Fast and easy clean-up when compared to epoxy and cement grouts
- Excess product can be saved and used later
- UV stable colors (non-yellowing)
- Self-sealing - no sealing required
- Non-sag formula great for vertical surfaces
- Free of BPA (bisphenol-A) found in epoxy grouts
- Dust-free mixing
- Fast, easy installation - installs up to 50% faster than other grouts
- Superior to cement grout
- Contributes to USGBC LEED Credits: MR 4.1 & 4.2 (Recycled Content), MR 5.1 & 5.2 (Regional Materials), and EQ, 4.1 (Low-Emitting Materials).

### Product Uses

QuartzLock<sup>2</sup> Grout can be used in grout joint widths from 1/16" to 1/2" on vertical or horizontal surfaces in both interior and exterior installations of ceramic, porcelain, glass and natural stone tiles.

### Installation

Read and understand Technical Data Sheet and Material Safety Data Sheet completely before beginning installation. Follow applicable ANSI, TCNA and NTCA installation standards. Always do a test area to ensure product satisfaction, including adhesion to substrate, and/or to become familiar with proper application techniques prior to use.

QuartzLock<sup>2</sup> Grout is a READY-TO-USE Urethane Grout and different installation techniques are required for successful product use. Please read the following instructions carefully.

### Preparation for Grouting:

- DO NOT add any water, liquid, or other material to QuartzLock<sup>2</sup> Grout! This will cause grout failure and void all warranties.
- A milky, white liquid may be present on the surface of the grout when opened. This is from normal settling during shipment. The use of a margin trowel is recommended to bring grout into suspension. If a drill mixer is used, mix at low speed for no more than 30 seconds. Over-mixing with a drill mixer may introduce excessive air into the product and cause grout sagging on vertical applications and/or other performance issues. Continue to mix with a margin trowel throughout the grouting process. DO NOT use



vinegar solutions for clean up!

- Ensure tile is firmly set and mortar is completely dry (always follow manufacturer's instructions) before grouting. Remove all spacers, water, debris and adhesive from tile joints.
- For best results, surface of tile should be at room temperature (70°F to 75°F). Urethane materials are affected by temperature and humidity variations. Cool temperatures and/or high humidity will slow cure time.
- To facilitate cleaning, pre-seal all porous tile and natural stone before grouting.
- For glass tile, polished marble, stone and other soft surfaces, test grout on a small area to ensure compatibility.
- Make sure grout joints are clean, dry, and free from solvents and residue before grouting.

## Application

- Spread grout using a green, sharp-edged, firm rubber grout float. Work the grout diagonally across the joints, packing them full.
- Remove excess grout from the tile surface, pulling the edge of the float diagonally across the joint to prevent grout removal.

## Grout Cleaning

For best results, remove grout haze AS YOU WORK, particularly in warm or dry climates. If working alone, only grout as far as you can reach (10-12 square foot area) before initial cleaning. If working as a team, one person should grout, with the other(s) cleaning immediately behind the first person.

- Rinse sponge in water and wring out completely. Since urethane grout requires very little water during cleanup, make sure that the sponge is wrung nearly dry. Wipe lightly, leaving sponge flat on the tile surface to prevent grout removal from joints. Excessive water during cleanup can dilute the urethane binder and cause curing issues that may lead to grout failure.
- Wipe up spilled water immediately. Do not allow water to sit on grout surface or in ungrouted joints.
- Change water mixture after each 100 square feet, for each new bucket of grout, or when dirty.
- Check work as you clean. Repair any low spots with additional grout. Unlike other grouts, DO NOT over wash.
- Allow cleaned areas to dry, and then inspect tile / stone surface. If a second cleaning is necessary, wait 24 hours and spray a film remover (Aqua Mix® Heavy-Duty Tile and Grout Cleaner, Miracle Tile & Stone Cleaner, or DuPontT StoneTech® Professional KlenzAllT Cleaner) on a white scrubby DoodlebugT cleaning pad, rubbing the tile lightly to remove any remaining urethane haze, then using a damp sponge and clean water, wipe the surface to remove the film remover (do not flood surface with cleaner). Finish by drying the tile surface with a clean towel or cloth. Contact StarQuartz if persistent haze exists.

## Installation Requirements

- For use in joints 1/16" or greater. Ensure that joints are well packed. Smaller joints may require extra effort.
- To speed up installation, or for quarry and other porous tile and/or outdoor applications, pre-wet tile surface using clean water with a damp sponge prior to spreading grout, being careful not to leave standing water in the grout joints.
- Maintain temperature above 40°F (5°C) during installation and curing.

## Curing

- Protect finished surface from light traffic for at least 24 hours at 70°F (21°C). Heavy foot traffic requires 72 hours at 70°F and 50% relative humidity. See Limitations/Cautions below for further curing requirements.
- If needed, cover ONLY with kraft or breathable paper after initial 24-hour curing period.
- Full cure depends on grout depth. Normal cure of a ¼" grout joint with a 3/8" thick tile is 28 days.

## Showers/Steam Showers/Wet Applications

- Use an approved waterproof sealer for mud bed applications and follow manufacturer's recommendations for sealer installation. For liquid-applied waterproofing materials, apply to within 1" of any drains to prevent weep hole blockage. The use of pre-sloped, waterproof trays (instead of mud beds) is highly recommended.
- Shower, steam shower, pool, fountain and wet area installations must be protected from moisture and allowed to cure for 7 days before use.

## Limitations/Cautions

- Do not apply or clean up this product like traditional cement-based or epoxy grouts; QuartzLock<sup>2</sup> Grout is a new technology that requires a simpler and easier application and clean-up process.
- Follow all manufacturers' instructions for all other setting materials, waterproofing, anti-fracture membranes, etc. to be used on the job.
- Minimum recommended grout joint width is 1/16".
- Maximum recommended grout joint width is 1/2".
- Ensure that grout joints are fully packed, especially in tight and irregular joints. Take special care in all wet and outdoor applications.
- Do not use as a setting mortar.
- Not for use in heavy industrial applications (i.e. chemical plants), in areas subjected to harsh or persistent chemicals, or areas exposed to very aggressive cleaning routines such as steam or pressure washing.
- QuartzLock<sup>2</sup> Grout is not a replacement for a waterproofing membrane. When a waterproofing system solution is required, please contact StarQuartz Technical Service.
- Protect grout from staining agents and chemicals during the cure process.
- Grouting when tile surface is above 90°F (32°C) is not recommended. Cool tile surface with damp sponge if tile surface is above 90°F (32°C). Be careful not to add excessive water during the tile cooling process.
- Do not use vinegar or acid solutions for clean-up; this could damage uncured grout.
- Always use protective clothing (gloves and eye protection) when working with grout.
- Prior to regrouting applications, remove 1/8" of old grout and any surface contaminants. Be sure to rinse any residual solvent/cleaner off grout joints, then allow joints to completely dry before re-grouting.
- Do not use for commercial or wet environment re-grouting installations, including showers, steam showers, and outdoor applications.
- Seal porous tile surfaces with a water-based sealer, including the sides of the stone, prior to grouting with QuartzLock<sup>2</sup> Grout.
- Outdoor installations must be protected from moisture (rain) for 7 days. If rain is forecast within 7 days, protect by tenting the grouted area (at least 1 foot above surface).
- Not for use in hot tubs.
- Wait 7 days before rigorously cleaning tile and grout surface.
- Wait 7 days prior to exposing grout to full submersion.
- Use care on soft, highly polished surfaces to avoid scratching. Test a small area. Use of a sealer is always recommended on polished marble, stone, slate and other natural, porous tiles.
- Use of enzymatic floor cleaners will void all warranties.
- Do not ingest. Keep out of the reach of children.
- **Do not use StarCure® Urethane Grout Cure Accelerator.**
- Do not use solvent-based adhesives or sealers with QuartzLock<sup>2</sup> Grout.
- Protect grout from freezing. Do not grout outdoors or in unheated areas when temperatures are expected to be below 40°F (5°C) within 3 days. If product freezes, return to room temperature and use as directed.
- For Chemical Emergency, call CHEMTREC 24 hours, (800) 424-9300 in North America, (703) 527-3887 International (collect).
- For more information, consult the MSDS for this product.

## Availability and Cost

QuartzLock<sup>2</sup> Grout is available at better distributors throughout the U.S. and Canada. Contact your local distributor or StarQuartz Industries, Inc. at (866) 220-4500 or [info@StarQuartz.com](mailto:info@StarQuartz.com).

## Maintenance

QuartzLock<sup>2</sup> Grout requires occasional cleaning with water and common grout cleaners. For best stain resistance, always clean up spills immediately.

## Packaging

Available in 9 lb. and 18 lb. units

## Warranty

Click here to see our complete **warranty**.

## Applicable Standard

QuartzLock<sup>2</sup> Grout is a revolutionary new technology which employs state-of-the-art urethane chemistry. As yet, there is no current ANSI or ASTM standard for this technology (ANSI 118.3 pertains only to epoxy grout products); however, for comparative purposes, physical and chemical properties are listed in the table below. Epoxy grouts are hard, brittle and lack flexibility. QuartzLock<sup>2</sup> Grout is designed to have the perfect balance of physical properties in order to provide flexibility, strength and adhesion to a variety of materials, making it the best choice for a wide variety of applications. Specifications are subject to change without notice.

## Typical Properties

Description	Typical Results*
Water Cleanability	Pass
Initial Set	>2 hrs
Service Strength	Pass
Vertical Joint Sag	Pass
ASTM C267 Chemical	Pass
Compressive Strength	>3,500 psi
Linear Shrinkage	.06%
Water Absorption	<1%
Open Time	180 minutes
Color	40 available

\*Results shown are typical and reflect test procedures used by the Tile Council of North America (TCNA) for ANSI 118.3 and 118.3 modified. Actual field performance will depend on installation methods, site conditions and other environmental factors.

## Working Properties

Description	Time Required*
Working Time	3 hours
Tack-Free Time	8 hours
Ready for Light Foot Traffic	24 hours
Ready for Heavy Foot Traffic	72 hours
Stain Resistant (food, cleaners, etc.)	3 days
Showers, Outdoors, Pools, Fountains and Wet Area Installations	7 days

\*Results are typical, but reflect testing procedures employed. Actual results may vary due to particular environmental conditions and other factors (e.g. type of setting material used).

## Coverage (18 lb. Unit)

Tile Size	Joint Width					
(inches)	1/16"	1/8"	3/16"	1/4"	3/8"	1/2"

(cm)	.16	.32	.48	.63	.95	1.27
<b>1" x 1" x 1/4"</b> 2.54 x 2.54 x .63	<b>63</b> 5.9	<b>32</b> 2.9	<b>NR</b> NR	<b>NR</b> NR	<b>NR</b> NR	<b>NR</b> NR
<b>2" x 2" x 1/4"</b> 5.08 x 5.08 x .63	<b>126</b> 11.7	<b>63</b> 5.9	<b>NR</b> NR	<b>NR</b> NR	<b>NR</b> NR	<b>NR</b> NR
<b>4 1/4" x 4 1/4" x 5/16"</b> 10.79 x 10.79 x .79	<b>214</b> 19.9	<b>107</b> 10.0	<b>71</b> 6.6	<b>54</b> 5.0	<b>36</b> 3.3	<b>27</b> 2.5
<b>4" x 8" x 1/2"</b> 10.15 x 20.30 x 1.27	<b>168</b> 15.6	<b>84</b> 7.8	<b>56</b> 5.2	<b>42</b> 3.9	<b>28</b> 2.6	<b>21</b> 2.0
<b>6" x 6" x 1/2"</b> 15.23 x 15.23 x 1.27	<b>189</b> 17.6	<b>95</b> 8.8	<b>63</b> 5.9	<b>47</b> 4.4	<b>32</b> 2.9	<b>24</b> 2.2
<b>8" x 8" x 3/8"</b> 20.30 x 20.30 x .95	<b>337</b> 31.3	<b>168</b> 15.6	<b>112</b> 10.4	<b>84</b> 7.8	<b>56</b> 5.2	<b>42</b> 3.9
<b>12" x 12" x 3/8"</b> 30.45 x 30.45 x .95	<b>505</b> 46.9	<b>253</b> 23.5	<b>168</b> 15.6	<b>126</b> 11.7	<b>84</b> 7.8	<b>63</b> 5.9
<b>13" x 13" x 3/8"</b> 32.99 x 32.99 x .95	<b>547</b> 50.9	<b>274</b> 25.4	<b>182</b> 17.0	<b>137</b> 12.7	<b>91</b> 8.5	<b>68</b> 6.4
<b>16" x 16" x 3/8"</b> 40.61 x 40.61 x .95	<b>673</b> 62.6	<b>337</b> 31.3	<b>224</b> 20.9	<b>168</b> 15.6	<b>112</b> 10.4	<b>84</b> 7.8
<b>18" x 18" x 3/8"</b> 45.69 x 45.69 x .95	<b>758</b> 70.4	<b>379</b> 35.2	<b>253</b> 23.5	<b>189</b> 17.6	<b>126</b> 11.7	<b>95</b> 8.8
<b>24" x 24" x 3/8"</b> 60.96 x 60.96 x .95	<b>1010</b> 93.9	<b>505</b> 46.9	<b>337</b> 31.3	<b>253</b> 23.5	<b>168</b> 15.6	<b>126</b> 11.7

Approximate coverage in square feet per Full Unit (18 lbs) or in square meters per Full Unit (8.16 kg)

## Coverage (9 lb. Unit)

Tile Size	Joint Width					
	1/16"	1/8"	3/16"	1/4"	3/8"	1/2"
(inches) (cm)	.16	.32	.48	.63	.95	1.27
<b>1" x 1" x 1/4"</b> 2.54 x 2.54 x .63	<b>32</b> 2.9	<b>16</b>	<b>NR</b> NR	<b>NR</b> NR	<b>NR</b> NR	<b>NR</b> NR
<b>2" x 2" x 1/4"</b> 5.08 x 5.08 x .63	<b>63</b> 5.9	<b>32</b> 2.9	<b>NR</b> NR	<b>NR</b> NR	<b>NR</b> NR	<b>NR</b> NR
<b>4 1/4" x 4 1/4" x 5/16"</b> 10.79 x 10.79 x .79	<b>107</b> 10.0	<b>54</b> 5.0	<b>36</b> 3.3	<b>27</b> 2.5	<b>18</b>	<b>13</b>
<b>4" x 8" x 1/2"</b> 10.15 x 20.30 x 1.27	<b>84</b> 7.8	<b>42</b> 3.9	<b>28</b> 2.6	<b>21</b> 2.0	<b>14</b>	<b>11</b>
<b>6" x 6" x 1/2"</b> 15.23 x 15.23 x 1.27	<b>95</b> 8.8	<b>47</b> 4.4	<b>32</b> 2.9	<b>24</b> 2.2	<b>16</b>	<b>12</b>
<b>8" x 8" x 3/8"</b> 20.30 x 20.30 x .95	<b>168</b> 15.6	<b>84</b> 7.8	<b>56</b> 5.2	<b>42</b> 3.9	<b>28</b> 2.6	<b>21</b>
<b>12" x 12" x 3/8"</b> 30.45 x 30.45 x .95	<b>253</b> 23.5	<b>126</b> 11.7	<b>84</b> 7.8	<b>63</b> 5.9	<b>42</b> 3.9	<b>32</b>
<b>13" x 13" x 3/8"</b> 32.99 x 32.99 x .95	<b>274</b> 25.4	<b>137</b> 12.7	<b>91</b> 8.5	<b>68</b> 6.4	<b>46</b>	<b>34</b>
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Approximate coverage in square feet per Full Unit (9 lbs) or in square meters per Full Unit.