



Quartz Tile Installation Guide

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As changes occur in our installation systems, we will publish a new edition.

For the most up-to-date information, go to:

www.rikett.net

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1. **BEFORE STARTING THE JOB - PLANNING**

Please review these installation guidelines before starting your installation. Understanding the recommended procedures in this document will help you produce a successful installation for your customer and provide them with the most complete warranty protection. Please be sure you follow the recommendations for moisture testing, floor preparation and adhesives. If you have any questions about these guidelines, our materials or the suitability of the flooring material for an application, please call Rikett Technical Service at 1-855-RIKETT-7, (1-855-745-3887), or email us at service@rikett.net.

Inspect all flooring materials, adhesives and supplies to be sure they are the correct products for your installation. Inspect carton labels to be sure you have the correct style, pattern and color. Be sure to note the batch numbers on the carton labels so you can plan your installation layout for the optimal allocation of sequential batches for each color. Batch information is available on all carton labels. It is also available on Rikett's order acknowledgments, shipping papers and invoices.

Inspect all materials for any damage or defects before you install them. If you find any damage, defects or other issues with materials before installation, contact Rikett Technical Services immediately and we will work with you to solve those issues. Do not install any visibly damaged or defective material.

2. MATERIAL HANDLING AND STORAGE – RQTs is composed of more than 70% natural quartz. It is extremely tough, durable and easy to maintain. The high quartz content provides exceptional durability and superior wear resistance. To achieve the best results, RQT must be handled and stored according to Rikett's recommendations:

- Store all cartons of tile flat and squarely on top of one another. Do not lie on edge.
- Store all flooring products, adhesives, and maintenance products in a dry, temperature-controlled interior area at a steady temperature between **65 – 80°F**. Avoid temperature extremes.
- Store all flooring products protected from weather, direct sunlight and exposure to any petroleum-based exhaust emissions.
- Acclimate all materials to job site conditions. Deliver the material to the job site **at least 48 hours** prior to installation. The job site temperature must be close to its normal ongoing operating temperature for acclimation to work.
- You should always visibly inspect the materials before delivery to, and upon receipt at, the job site.

3. **JOB SITE CONDITIONS**

- Visit the jobsite to confirm site conditions & floor measurements.
- The jobsite must be well-lighted with its permanent occupancy lighting system on so the installers can properly see and prepare the substrate and install the floor.
- Allow other finishing trades, especially the overhead trades, to complete their work before beginning the flooring installation. During spackling and painting, cover the substrate to prevent contamination or staining. Such stains can cause adhesion failures and product discoloration.
- Close working spaces to traffic for 12 hours before installation and at least 12 hours after installation. This will minimize the chance of damaging the new floor.
- The building's heating and air conditioning system needs to be in full operation for at least one week prior to moisture testing and floor installation.
- The building must be well ventilated in the work area to avoid airborne contaminants, odors or dust accumulating in the workspace or affecting other parts of the building.
- Portable heaters are not acceptable.
- You should not use Kerosene heaters where floor covering products will be installed. They heat the

air, not the substrate. They also leave a petroleum-based residue on the substrate which might impede flooring adhesives.

- **Ambient Jobsite Conditions** - For 48 hours before installation, during the installation, and for 48 hours after installation, keep the temperature of the flooring material, the adhesive, the space to receive flooring, and the subfloor between **65°-80°F or the conditions expected during normal occupancy**. Thereafter, the minimum temperature for ongoing occupancy needs to be a minimum of **55°F**. Be sure the adhesive and the flooring acclimate to the job site conditions by delivering all materials to the job at least two days, (48 hours), prior to installation.

4. ***SUBSTRATE PREPARATION***

RQT can be installed on wood substrates and concrete substrates that are

- On grade
- Above grade
- Below grade

Wood substrates: Use **APA approved** underlayment type plywood such as APA™ Underlayment EXT or an Equivalent Agency Certified Plywood rated as suitable underlayment for resilient floor covering.

Wood subfloors should be:

- Double layer construction. Sanded finish. Free of old adhesives.
- Designed for resilient flooring.
- Minimum one-inch total thickness. Structurally sound.
- Minimum 18 inches of well-ventilated air space beneath the wood substrate.
- Free of any substances that may stain vinyl.
- All crawl spaces must be insulated with a vapor retarder.
- The top layer of the wood substrate must be clean, smooth, and completely free of knots or other voids in its surface.
- Installed according with the manufacturer's recommendations.
- **Caution** - Do not install over 'sleeper' floors or plywood floors that have been installed directly over a concrete slab.

Unacceptable wood surfaces include, but are not limited to, Luan, plywood with knots, underlayments made of pine or other soft woods, particle board, chipboard, flake board, oriented strand board (OSB), Masonite or other hardboard underlayments, hardwood flooring, textured or cushioned flooring, or other uneven or unstable substrates.

Cover unacceptable wood surfaces using a 1/4-inch or thicker wood panel underlayment system such as TECPLY® (www.tecply.com), or equal. Follow the panel underlayment manufacturer's written instructions for spacing, nailing, screwing and seam treatment for underlayment panels.

Remove all paint, varnish, oil, and wax from all wood subfloors. Note, state and federal regulations govern activities that disturb lead-based painted surfaces and may also require notice to building occupants. Do not remove or sand lead-based paint without consulting a qualified lead professional for guidance on lead-based paint testing and safety precautions.

Rikett does not recommend the use of solvents to remove paint, varnish, oil, wax, or old adhesive residues because the solvents can remain in the subfloor and negatively affect the new installation. Whenever sanding, be certain the work site is well ventilated and avoid breathing dust. If high dust levels are expected, use a proper National Institute for Occupational Safety and Health (NIOSH) designated dust respirator. All power sanding tools must be equipped with dust collectors. Follow current O.S.H.A guidelines for safety and air quality management while sanding and grinding. Avoid contact with skin or eyes. Wear gloves, eye protection and

long-sleeve, loose fitting clothes.

NOTE: For more information on the installation and preparation of wood and board-type underlayments, see the current edition of ASTM F1482, “Standard Practice for Installation and Preparation of Panel Type Underlayments to Receive Resilient Flooring.”

Concrete Substrates: Responsibility for the concrete and underlayment warranty - Regardless of the type of concrete or cement-like underlayment material used as a substrate, in the event of any concrete or cement-like underlayment failure, the responsibility for warranty guarantees rests with the concrete or cement-like underlayment manufacturer or supplier and not with Rikett. **Rikett recommends:** Secure a written guarantee and installation instructions from the supplier or manufacturer of any concrete or cement-like underlayment being used.

Concrete Slab Construction: New and existing concrete substrates must meet the requirements of the latest edition of **ASTM F710 *Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring***. **ASTM F710 and its appendix** contain guidelines regarding concrete slab construction, and specific information regarding concrete, lightweight concrete, water- cement ratio, curing procedures, alkalinity, moisture retarders, flatness and levelness, and additional reference documents. You may find the most current version of **F710 and its appendix** at <http://www.astm.org> or by calling ASTM at 1-610-832-9500.

Minimum Concrete Substrate Requirements: To ensure a successful RQT installation, concrete substrates must be structurally sound to receive resilient flooring material and must meet these minimum requirements:

- A minimum compressive strength of 3000 psi
- A concrete mix water/cement ratio of less than 0.45
- A minimum density of 115 lb./cubic foot
- Maximum slump of 4”.
- Follow recommendations of ACI Standard 302.1R for Class 2 or Class 4 floors
- Follow Portland Cement Association’s recommendations for slabs on ground.

Lightweight concrete (concrete with a density of less than 115 lbs./cubic foot) may not be a suitable substrate for RQT. Lightweight concrete suffers from fundamental problems that include, but are not limited to:

- Low compressive strength
- Surface porosity and breakdown
- High moisture content
- Excessively long drying times
- Surface indentation due to its low compressive strength

ASTM F 710 clearly states: *Lightweight concrete, less than 115 lb./cubic foot, may have such low strength that it is unsuitable for covering with resilient flooring...* In addition, *floors containing lightweight aggregate or excess water and those that can dry from only one side, such as concrete on metal deck construction, may need a much longer drying time.*¹

Contact Tech Support at **855-745-3887 XT 2** before installing RQT on lightweight concrete.

Flatness and Levelness – Concrete substrates need to be smooth to prevent irregularities and roughness from telegraphing through the new RQT. The surface of the concrete needs to be *flat within the equivalent of*

3/16 inch in 10 feet and within the equivalent of 1/32 inch in 12 inches. For more information on flatness and levelness, consult the most recent publication of **ASTM F710**.

Concrete Surface Preparation - ASTM F710 *Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring* states: *All substrates to receive resilient flooring shall be permanently dry, clean, smooth, and structurally sound. They shall be free of dust, solvent, paint, wax, oil, grease, residual adhesive, adhesive removers, curing, sealing, hardening, or parting compounds, alkaline salts, excessive carbonation or laitance, mold, mildew, and other foreign materials that might prevent adhesive bond.*¹

Concrete floors must be structurally sound and:

- Permanently dry, clean, and smooth.
- Free of dust, sealers, paint, wax, oil, grease, residual adhesives, adhesive removers, coatings, finishes, dirt, film-forming curing compounds, silicate penetrating curing compounds, sealing, hardening, or parting compounds and any other substances that will interfere with the adhesion of the new Quartz Flooring or with the rate of moisture dissipation through the top surface of the slab.
- Use only non-chemical methods, such as bead blasting or abrasive cleaning, to remove all bond breakers from the surface of the concrete. Removal procedures need to be completed at least 48 hours before any concrete testing is begun.
- Do a **bond test** on any floor where foreign substances have been removed. Install several tiles in random areas according to the installation instructions described in this guide. Allow the adhesive to set for 24 hours. If the tile and adhesive are easily removed from the substrate, the slab is still contaminated. Additional preparation will need to be done. A second bond test will be needed.

WARNING: *Exceptionally porous, soft, or dusty concrete surfaces may have such low strength that they are not suitable for installation of resilient floor coverings. It may be necessary to mechanically remove the top layer of concrete in such cases. Such surfaces may need to be primed and covered with a latex patching or underlayment compound. Consult with a manufacturer of patching or underlayment compounds or someone with expertise in concrete problems*².

Note: Rikett America does not recommend installation of its RQT over gypsum concrete.

Moisture Vapor Retarder – For all RQT installations on grade or below grade, there must be a permanent, effective moisture vapor retarder installed directly below the slab. The retarder must be at least 0.010 inches thick with a permeance of 0.1 y (perms). This retarder is typically incorrectly called a moisture vapor barrier. Provided it has not been ripped or torn, this vapor retarder will reduce the potential severity of water vapor penetration into the concrete slab from groundwater sources.

Alternate approved substrate – RQT can be successfully installed over well-bonded, clean resilient flooring including, Quartz Tile, VCT, VET and solid vinyl tile. To ensure a successful installation, the tile must be -

- A single layer of resilient flooring, quartz tile, VCT, VET or solid vinyl tile only
- Free of all waxes and floor finishes
- Fully dry and free of all dirt and debris
- Securely bonded to an approved subfloor, underlayment or substrate
- Flat with no raised areas

The performance of the new floor is directly dependent upon the condition and continued bond of the existing floor. Any irregularities in the existing flooring (such as textures, embossing, bumps, depressions, or tile joints) will telegraph through the new floor. If the existing resilient flooring's surface is not sufficiently smooth, it may be preferable to remove the existing floor before beginning the installation.

Existing resilient flooring must not be cushion backed, and it must have no evidence of moisture, alkalinity, hydrostatic pressure, or flooding. You must remove floor finishes or any applied sealers, polishes or protective coatings on the existing floor by stripping. Repair or replace any damaged areas of the existing floor before installing the new floor. Fill any open voids or holes in the existing floor with approved patching materials. You may need added adhesive open time and cure time when installing over an existing resilient floor. Installation over existing floors may change the performance specifications of the new floor.

Radiant Heated Floors – You may install RQT over a radiant heated floor if the slab temperature does not exceed 85°F under any condition of use.

Other Substrates – Cement terrazzo or metal may not be suitable for RQT. Check with your patching/leveling compound manufacturer for guidelines on preparing these substrates for resilient tile. For metal substrates, remove all dirt, rust, oil or other contaminants. Contact Rikett Technical Support at 855- Rikett 7, (855-745-3887) XT 2, before installing our Quartz Tile on metal.

Unacceptable Substrates - Epoxy terrazzo, rubber, cork, cushion backed flooring, VAT, asphalt tiles, floating floors and interlocking tiles and planks are not acceptable substrates on which to install RQT. To successfully install RQT where these floors exist, you must remove these floors using mechanical means and prepare the floor as recommended in these guidelines. You must remove VAT according to the most recent Federal and local regulations on asbestos abatement. See the Asbestos Warning below.

Patching or Underlayment Compounds - Use a **Portland-based** patching material or underlayment compound to fill all surface cracks, grooves, depressions, control joints or other non-moving joints, and other surface irregularities. Choose a product that is moisture, mildew, and alkali resistant with a minimum of 3,000 PSI compressive strength after 28 days. **Note:** Rikett does not recommend gypsum-based patching or underlayment products.

Expansion joints - Joints such as expansion joints, isolation joints, or other moving joints in concrete shall not be filled with patching compound or covered with resilient flooring. Use an expansion joint covering system.

Removal of Existing Resilient Floor Coverings - If you decide to remove an existing floor please be aware that existing floors and adhesives may contain asbestos fibers that cannot be easily identified except by laboratory testing. Improper removal of asbestos containing materials (including, but not limited to, vinyl asbestos tile, asphalt tile, felt backed sheet goods, asphalt 'cutback' adhesives and other flooring materials) can create asbestos dust, a known health hazard.

ASBESTOS WARNING! *Do not sand, dry sweep, dry scrape, drill, saw, bead blast, or mechanically chip or pulverize existing resilient flooring, backing, lining felt, asphaltic 'cutback' adhesive, or another adhesive. These products may contain asbestos fibers and/or crystalline silica. Avoid creating dust. Inhalation of such dust is a cancer and respiratory tract hazard. Smoking by individuals exposed to asbestos fibers greatly increases the risk of serious bodily harm. Unless positively certain that the product is a non-asbestos-containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content². A pamphlet from the **Resilient Floor Covering Institute** entitled **Recommended Work Practices for Removal of Resilient Floor Coverings** outlines a defined set of instructions for removing all resilient floor-covering structures.*

NOTICE: Various federal, state and local government agencies have regulations governing the removal of in-place asbestos-containing material. If you contemplate the removal of a resilient floor covering structure that contains, or is presumed to contain asbestos, you must review and comply with all applicable regulations. Regulations may require that the existing floor material be tested to determine asbestos content. It is the obligation of the flooring installer to ensure the practices used are safe, without risk to health, and meet all legal requirements.

NOTE: RQT AND ITS RECOMMENDED ADHESIVES CONTAIN NO ASBESTOS!

Installing on Substrates with Adhesive Residue:

Asphaltic Adhesive Residue - Do not install RQT directly over adhesive residue or paint. Do not skim coat over old adhesive using patching compound. Where existing asphaltic (black) adhesive is present, remove all adhesive residues off the subfloor. No adhesive residue or adhesive trowel ridges should remain. REFER TO THE ASBESTOS WARNING ABOVE.

Water-based Adhesive Residue - This adhesive residue must be thoroughly removed prior to applying a patching or underlayment compound. This includes old carpet and VCT adhesive. Do not skim coat over water based adhesive residue using patching compound.

Chemical or Citrus-Based Adhesive Removers – Rikett does not recommend the use of chemical or citrus-based adhesive removers. There are chemical adhesive removal products effective in removing cutback or emulsion adhesives that comply with OSHA requirements. However, these products leave a residue within the subfloor that interferes with the bonding of the new floor's adhesive. Concrete subfloors contaminated by chemical or citrus based adhesive removal products will require mechanical abrasion to remove 100% of the residues. Rikett will not recognize claims or complaints for flooring or adhesive failure due to residues of chemical or citrus based adhesive removers.

5. CONCRETE MOISTURE TESTING AND PH TESTING

Before beginning the installation: Test all concrete slabs for moisture and alkali regardless of the slab's age or grade level. New concrete slabs must be properly cured and dried before installation of our RQT. *Drying time before slabs are ready for moisture testing will vary depending on atmospheric conditions and mix design.*

Conduct all concrete moisture tests following procedures outlined in **ASTM F 2170-18** (Relative Humidity *in situ* Probe Test Method) and **ASTM F1869-16a**. For additional information about these procedures, contact the American Society of Testing and Materials (ASTM) at (610) 832-9585 or www.astm.org.

Please refer to the adhesive manufacturer's published RH limits for the specific adhesive used by the installer to install the flooring. Rikett America requires the concrete substrate must test within the adhesive manufacturer's published RH limits on the internal Relative Humidity Test allowing for their suggested margin of error, before a successful installation should proceed and can be correctly accomplished.

NOTE: It is the floor covering installer's responsibility to ensure that these moisture tests have been conducted properly and that the test results are acceptable, within limits, and documented before starting the installation.

ASTM F 2170 RELATIVE HUMIDITY CONCRETE MOISTURE TESTING USING *IN SITU* PROBES

- Perform the required concrete moisture testing only after the building is fully-enclosed and the HVAC system is fully-operational for at least one week.
- Perform three (3) RH tests for the first 1,000 feet and at least one (1) added RH test for each additional 1,000 square feet.
- Select your test probe locations to provide optimal information about moisture in areas of potential high moisture. For slabs on-grade and below-grade, include a test location within 3 feet of each exterior wall.
- Follow the procedures as described in the most recent ASTM publication of Test Method F 2170. Failure to follow the detailed procedures in F2170 can lead to a moisture-related installation failure.
- Field testing has found that the **Wagner Rapid RH® 4.0EX or 5.0 Systems** provide consistent RH results. For more information, visit the Wagner website at www.rapidrh.com.

pH Testing – You must test concrete floors for alkalinity prior to the installation of RQT. To test for pH at the surface of a concrete slab, use wide range pH paper, its associated pH chart, and distilled or de-ionized water. Place several drops of water on a clean concrete surface, forming a puddle 1 inch in diameter. Allow the puddle to set for 1 minute, and then dip the pH paper in the water. Remove at once and compare to the chart to determine the pH reading¹. Readings more than 10.0 pH can cause adhesive bond failure. Always refer to the adhesive manufacturer’s recommendations for pH limits.

Standard Concrete Moisture & pH Requirements*

<u>Type of Test</u>	<u>Maximum Result (3% MOE)</u>
F 2170 Relative Humidity <i>in situ</i> Probe Test	RH must not exceed 85%*
pH readings	Must not exceed 10*
ASTM F1869-16a Calcium Chloride Test	up to 8 lbs. MVER*



Wagner Rapid RH® 4.0EX Test Kit

Wagner Rapid RH® 5.0 Test Kit

Photo courtesy of Wagner



pH Testing Kit

Photo courtesy of Vaprecision

*These results are the minimum published limits for standard troweled acrylic adhesives recommended by Rikett. Please see each recommended adhesive manufacturer’s technical data sheet, which may publish higher limits for their adhesives.

Document All Test Results – Moisture and pH test results need to be documented by the person conducting the testing and submitted to the general contractor/architect/building owner at the time of testing. This is

important, as moisture and/or excess pH conditions that occur after the floor covering installation is completed are not the responsibility of the installer or Rikett

The design of the subfloor must also meet both the static and dynamic load requirements for the intended use of the space.

6. ADHESIVES

Rikett has invested much time and research in testing the best adhesives for use with RQT. We recommend the following adhesives to install RQT on concrete and wood substrates. Click on the embedded links to go to each manufacturer's web site and download their technical data sheets:

- 1) Mapei
 - [Ultrabond ECO® 360](#) Hard Setting Adhesive.
 - [Ultrabond ECO® 373](#) – Universal, Pressure-Sensitive Multi-Flooring Adhesive.
- 2) Roberts/QEP
 - [2350](#). Hard Set Resilient Flooring Adhesive.
 - [7350](#). Universal Flooring Adhesive.
 - 7399. Universal Flooring Adhesive for higher moisture applications.
- 3) Ardex Henry (TBA).
- 4) Spray-Lock®
 - [6500 and 650 Platinum](#) as an alternate to trowel adhesives.
 - [9500 and 9500 Platinum](#) high moisture spray adhesive.
- 5) Aquaflex Water-Proof Adhesive System
 - [Series 100](#).

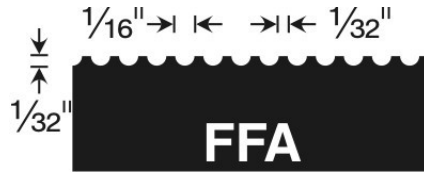
Check the amount of working time and open time for each adhesive. Open time is the amount of time recommended for the adhesive to set before it is covered with the flooring. Working time for tile is the amount of time from when the adhesive is set until the tile will no longer bond. Post-installation rolling is required. You must complete rolling according to these guidelines within the working time of the adhesive. Both open time and working time are affected by temperature, humidity, and porosity of the subfloor.

Use of Alternate Adhesives - Should RQT be installed with adhesives other than the ones listed above all adhesive related performance problems are the responsibility of the manufacturer of the alternate adhesive used and the installer who used it. Potential problems include, but are not limited to *indentation, shrinkage, shifting, bubbling, edge swelling, adhesive oozing, moisture related failures, etc.*

IMPORTANT: It is the responsibility of the installer to use the recommended adhesive. If you have any questions or concerns about which is the right adhesive, please do not install the floor. Contact Rikett Technical Service at 855-Rikett-7 or visit www.rikett.net to download current installation instructions.

The Gundlach FFA Trowel

Spreading adhesive with the wrong trowel is the cause of many installation failures! If you do not have the FFA Trowel, don't start the installation!



The Gundlach FFA Trowel is the correct trowel for applying Rikett’s recommended troweled acrylic adhesives. When installing RQT, the trowel acts as a measuring device. The FFA Blade is a professional trowel with a fine notch sized 1/16" x 1/32" x 1/32". It is available either with a wooden handle or as part of the Versablade System. To avoid installation problems, Rikett recommends:

- Periodically check your trowel for wear.
- Do not re-notch the Gundlach trowel blade by hand.
- Replace the trowel every 1,000-2,000 s/f.
- Clean old adhesive from your tools using warm water and detergent or mineral spirits.

Rikett America currently does not market nor is it an authorized reseller of any adhesive system, or installation tools. Rikett America does not supply the warranty coverage for adhesive systems or tools. Support for product performance claims and warranty coverage for all approved adhesive systems and tools is supplied solely by the adhesive manufacturers.

7. PRODUCT PACKAGING INFORMATION

Standard Tile Size:

- 24 inch x 24 inch (609.6 mm x 609.6 mm) x 2 .0 mm, (0.080 in) thickness
- 60.0 ft.² per carton (15 tiles per carton) 51.00 lbs. per carton.
- 2,760 ft.² per pallet (46 cartons and 690 tiles per pallet) 2,386 lbs. per pallet.

Special Order Tile Sizes:

- 12 inch x 12 inch (304.8 mm x 304.8 mm) x 2 .0 mm (0.080 in) thickness
- 40.0 ft.² per carton (40 tiles per carton) 32.03 lbs. per carton.
- 2,880 ft.² per pallet (72 cartons and 2,880 tiles per pallet) 2,356 lbs. per pallet

RQT Carton Label: All carton labels show the following information:

- A color number and color name. Color numbers and names identify the style and color. Example: RQT **8802** (color number), **Alto** (color name).
- A batch code. Batch codes are a numeric date followed by an alpha code - #####A. Batch codes show sequences of manufacturing. Example: 202007**18A** and 202007**18B** are sequential batches made on July 18, 2020. The codes are set up like this: year/month/day/sequence), 2020...07...18...A. The letter “A” shows the first batch made that day. The letter “B” shows the second batch made that day. The next batch would have the letter C showing the third batch of that day, etc. Material manufactured the next day, July 19th, would be labeled Batch 202007**19A**. This batch number begins the next set of sequential batch numbers with the alpha code A.

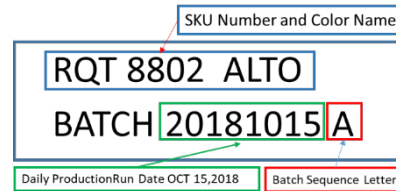
You should always install RQT according to batch sequence using batch codes as your guide. This will help minimize any potential shade variations which can occur if you install non-sequential batches next to each other.

If using material from non-sequential batches is necessary, then the installer must plan the installation layout to minimize non-sequential batch materials from being installed next to each other in the same room, corridor or open area.

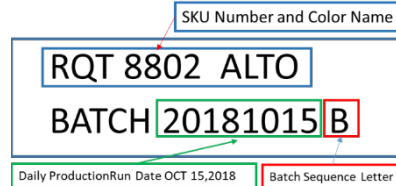
Carton Label Explanation:

Diagram 1:

1. RQT Label for a Batch run on
10/15/2018 **Batch A**



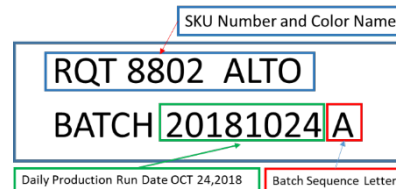
2. RQT Label for a Batch run on the same day
10/15/2018 **Batch B**



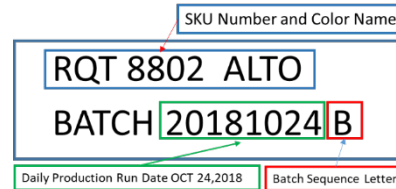
An example of a separate daily production run and batch numbers is shown in Diagram 2:

Diagram 2:

- RQT Label for a production run on
10/24/2018 **Batch A**



- RQT Label for a production run on
10/24/2018 **Batch B**



If you have any questions about batch sequencing or find issues with labels or materials before installation, contact Rikett Technical Service at once and we will work with you to solve any issues. Do not install any material you have a question about.

8. INSTALLATION RECOMMENDATIONS

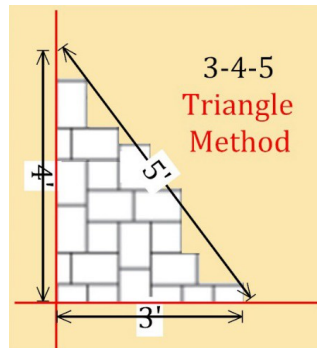
Follow Rikett's recommendations.

1. Sweep and/or vacuum the substrate before spreading adhesive.
2. Use one wall as a guide. Place the tiles with the lines on the tile back running parallel to the wall.
3. Drop two chalk lines to square the room. Use the 3-4-5 squaring method to determine the starting point. Do not mix tiles from different batches, boxes or pallets. Install tiles from the last produced tiles sequentially to the first produced tiles, using batch codes on the carton labels as a guide, to insure proper shade distribution. Start by laying all tiles from one carton. Then start a new carton from the same batch. Follow the batch sequence throughout the installation.
4. **3-4-5 squaring rule** - At the intersection of the two chalk lines, measure along one line and place a mark at 3 feet. On the opposite side of the intersection, measure and place a mark at 4 feet.

Measure the distance from the two marks. If the intersection is square, the distance will be 5 feet. Adjust the chalk lines as needed so that the border tiles are the same size on each side of the area and fill pieces along walls will be uniform. Be sure to also consider the tiles laid into the doorways or additional design criteria when adjusting the lines. Dry lay several tiles to determine the best layout.

3-4-5 right angle

Diagram courtesy of diamondpavers.com



5. Follow manufacturer's recommendations for spreading adhesive. Spread the adhesive in one quadrant at a time to control runoff. Allow proper open time.
6. Once the adhesive is ready, lay tiles following the standard point-to-point installation method. Use a pyramid layout beginning at the intersection of the two chalk lines.
7. You can use recommended Tungsten carbide-tipped scribing knives for scoring and snapping straight cuts. You may also use a 24 inch tile cutter. Replace worn blades as needed.
8. Allow 3/16-inch expansion space at the perimeter and around all stationary objects.
9. Terminate flooring at centerline under doors or where it meets an adjacent floor finish.
10. Install reducer strips at unprotected or exposed edges where flooring stops.
11. Scribe flooring to walls, columns, cabinets, floor outlets and other stationary objects to produce tight joints. You can apply light heat to tiles to make them easier to cut around door jambs and tight spaces.
12. Install flooring under movable partitions and under open cabinets without interrupting tile pattern.
13. Roll and cross roll flooring with a 100 lb. floor roller within one hour after installing the tiles, while adhesive is still in "working time". Failure to do so may result in trowel ridge telegraphing and poor adhesive bond.

9. **INSTALLATION RECOMMENDATIONS – TILE ALIGNMENT**

RQT features a unique visual shading effect created by its manufacturing process. So, *RQT must be installed with the directional markings on the tile back aligned as required in the following instructions.*

Quartz is a naturally occurring mineral and it can be challenging, at times, to achieve consistent color matching during the manufacturing of quartz floor tiles, especially in lighter color tiles. Therefore, Rikett recommends installing Rikett Quartz Tile, (RQT), using a specific tile pattern layout in areas where color shade consistency is a concern.

When installing Rikett Quartz Tile, (RQT), in a monolithic layout please be sure to follow the most recent version of the ***Rikett Quartz Tile Installation Recommendations***. Special attention should be paid to Rikett's recommended tile layouts. Using the directional lines found on the back of the tiles, layout the lines in either:

- a Traditional tile layout for tiles made before January 1, 2018, as seen in Diagram 1.
- a “Face-to-Face” fashion for tiles made between January 1, 2018 and March 31, 2019 as seen in diagram 2.
- a “light line to HEAVY LINE” Face-to-Face fashion for tiles made after April 1, 2019, with the directional lines laid in an alternating sequence from tile to tile, as seen in diagram 3.

Diagram 1 – for batches manufactured before January 2018, (batches before 20180101A)

“Traditional” Alignment.

Install tiles using lines on back of tiles as a directional guide. Align lines as shown in Diagram 1. Directional Lines are all the same thickness.

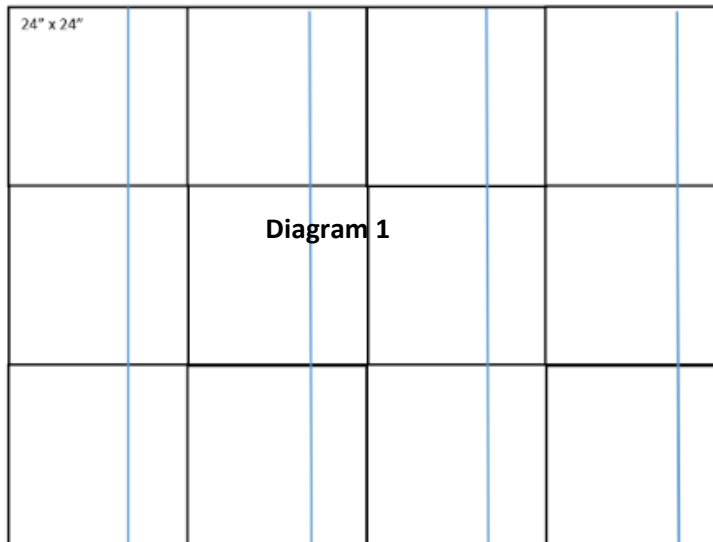


Diagram 2 – for batches manufactured January 2018 thru March 2019, (batches 20180101A to 20180331A).

“Face to Face” alignment

Install tiles using lines on back of tiles as a directional guide. Align lines “**line-to-line**”. Directional Lines are all the same thickness.

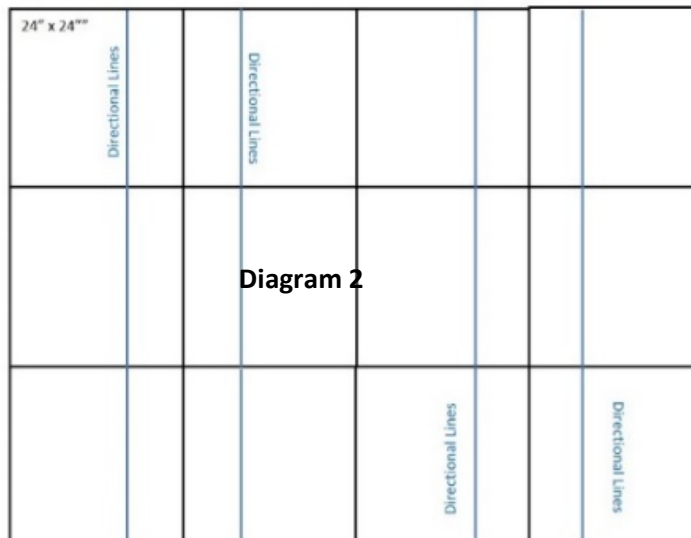


Diagram 3. Cartons of quartz tile, manufactured from December 18, 2019 to March 31, 2020, will contain a sheet with tile layout diagrams and written instructions in both English and Spanish. The tile layout, called **Heavy/Light Layout** applies to quartz tile manufactured December 18, 2019 thru March 31, 2020. It is the **Face-to-Face** layout seen in Diagram 2, except with different weight lines.

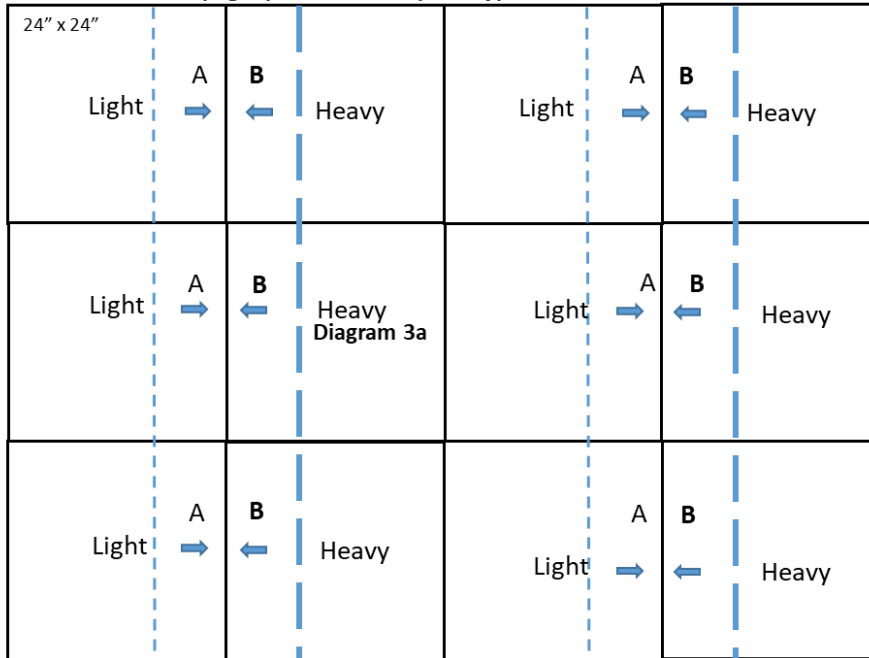
Heavy Line/Light Line layout – Diagram 3a is the preferred layout choice. Use this layout first.

A= Light Line B = HEAVY LINE.

Diagram 3a – Required for batches after April 1, 2019 (batch 20190401A +)

When tile lines are mixed, (light and heavy), align the lines in a sequence of “A - light line to B - HEAVY line”, repeating the sequence as shown in **Diagram 3a**.

Mixed A & B - A (Light) lines and B (Heavy) lines



Alternate Layouts - Diagram 3b & 3c – required for batches after April 1, 2019, (batch 20190401 +)

Diagram 3b – All Light Lines - for batches after June 1, 2019 (20190601A +)

When tile lines are the same, (all Light), align lines in a repeating sequence as shown in Diagram 3b. Keep this layout separate from other layout combinations for best color consistency.

All A - Light lines

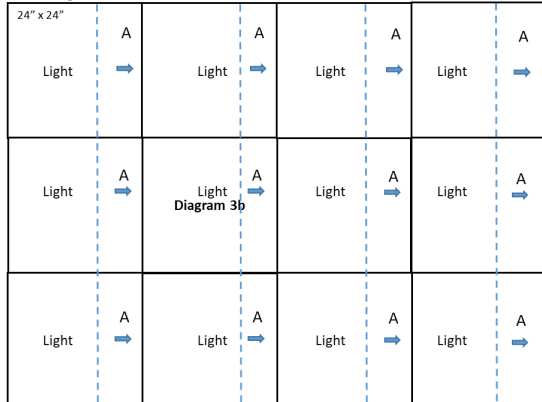


Diagram 3c – All heavy Lines - for batches after June 1, 2019 (20190601A +)

When tile lines are the same, (all thick), align lines in a repeating sequence as shown in Diagram 3c. Keep this layout separate from other layout combinations for best color consistency.

All B - HEAVY lines

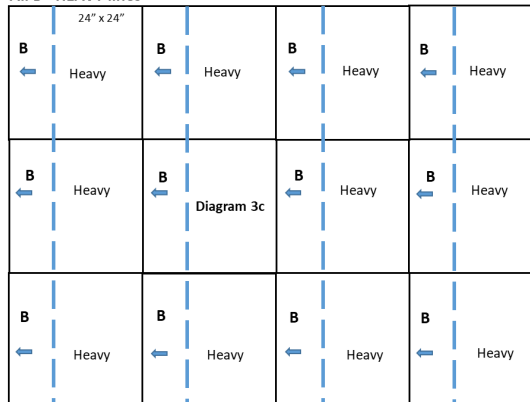


Diagram 4. Every new carton of quartz tile manufactured after April 1, 2020 will have a sheet with new tile layout diagrams and written instructions in both English and Spanish. This new tile layout, called the **Arrows Layout**, applies to quartz tile **manufactured after April 1, 2020**. Starting with batch number **20200401A**. The Arrows Layout is the same **Face-to-Face** layout as in Diagrams 2 and 3, except it uses arrows instead of lines.

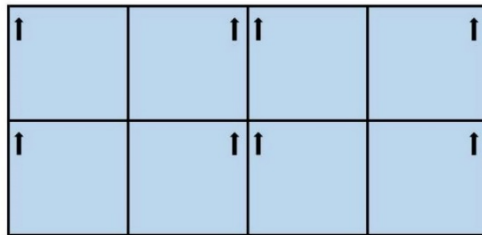
“ARROWS” Layout:

Quartz Tile - Installation Layout and Batch Codes

For all tiles made after 4/1/2020

installation direction
dirección de instalación

Arrows Layout - Face to Face



please install as shown
por favor instale como se muestra

Reading SKU Numbers and Batch Codes
Lectura de números de SKU y códigos de lote

<p>Sequence #1</p> <p>Número de SKU y nombre de color SKU Number and Color Name</p> <p>SKU 8802</p> <p>BATCH 20200615 A</p> <p>Daily Production Run Date JUNE 15, 2020 Producción diaria Ejecutar JUNIO 15, 2020</p> <p>Batch Sequence Letter Carta de secuencia de lote</p>	<p>Sequence #3</p> <p>Número de SKU y nombre de color SKU Number and Color Name</p> <p>SKU 8802</p> <p>BATCH 20201024 A</p> <p>Daily Production Run #1 Date OCT 24, 2020 Producción diaria Ejecutar OCTUBRE 24, 2018</p> <p>Batch Sequence Letter Carta de secuencia de lote</p>
<p>Sequence #2</p> <p>Número de SKU y nombre de color SKU Number and Color Name</p> <p>SKU 8802</p> <p>BATCH 20200615 B</p> <p>Daily Production Run #2 Date JUNE 15, 2020 Producción diaria Ejecutar JUNIO 15, 2020</p> <p>Batch Sequence Letter Carta de secuencia de lote</p>	<p>Sequence #4</p> <p>Número de SKU y nombre de color SKU Number and Color Name</p> <p>SKU 8802</p> <p>BATCH 20201024 B</p> <p>Daily Production Run #2 Date OCT 24, 2018 Producción diaria Ejecutar OCTUBRE 24, 2018</p> <p>Batch Sequence Letter Carta de secuencia de lote</p>

Rikett recommends Installers to dry-lay tiles and inspect them for color consistency before gluing them to the floor. After laying out the tiles, if the tile-to-tile color match is not as expected, please stop installing and contact Rikett immediately by calling **855-745-3887 ext. 1**. Rikett will assist you with an available solution.

Rikett includes layout diagrams with all order acknowledgements and invoices. You will also find layout diagrams with instructions in English and Spanish packaged in the cartons delivered to the job sites. It is the responsibility of the flooring installer to install the product according to Rikett's most current written installation recommendations, including recommended batch sequencing and right tile layouts. You can download the most current recommendations from www.rikett.net/tech-data/

Failure to follow these layout diagrams and batch sequencing instructions can result in shade variation or the appearance of different gloss levels. This out of shade condition will in fact not affect the tiles wear performance, however, it may be a visual complaint which Rikett cannot take responsibility.

After you lay the tiles, roll the tiles into the adhesive bed within 1 hour, before the adhesive working time expires. Roll in both directions using a 3-section, 100 lb. roller, overlapping each pass by ½ of the width of the roller. Roll a second time in a direction at 90 degrees from the direction of the first roll.

10. AFTER INSTALLATION

- The flooring installer should protect the finished floor from abuse by other trades and traffic by covering it completely with heavy commercial grade Kraft paper.
- Light foot traffic can be allowed 12 hours after installation.
- Keep all heavy traffic, equipment and rolling loads off the floor for 48 hours.
- At all times, you should use lauan boards, plywood or equivalent, as required, to protect the new floor from all heavy traffic, equipment and rolling loads.
- Inspect the floor for any damaged or misaligned tiles and replace them.
- Do not slide or drag pallets or heavy equipment across the new floor.
- While the adhesive is still wet: Clean all tools and adhesive spills with a white cloth dampened with water and mild detergent.
- When the adhesive is set: Clean all tools and adhesive spills with a white cloth dampened with mineral spirits. Follow with a water rinse.

Initial Maintenance

- Set up "wet floor" signage and take safety precautions to restrict foot traffic on wet floors.
- Sweep the floor with a soft bristle broom or vacuumed and lightly damp mopped.
- RQT does not require a polish or floor finish. Scrubbing with a neutral cleaner will clean the floor.
- **Do not heavy wet wash for 72 hours.**
- Follow the current RQT maintenance recommendations at <https://rikett.net/tech-data/>

Recommended Best Practices for the Optimal Performance of Rikett Quartz Tile:

- Sweeping with a soft bristled broom, vacuuming, (with no metal beater bar), and dust mopping – This measure alone will add years to a floor's life. Once a system is in place that effectively removes dirt and debris, it is easy to develop an ongoing routine. Frequency will depend on a building's location, amount of foot traffic and equipment. Clean dust mop heads after each use. Replace vacuum bags as needed. Replace worn or broken parts or tools.

- Primary/Secondary matting should be exterior and just inside the entrance. Mats are ideal for heavy soil, water removal and provide slip resistance. Walked in dirt and moisture can be kept out while reducing maintenance. Vacuum often. Exterior mats may be power washed periodically to remove heavy saturation of soil, dirt and debris.
- Anti-microbial safety mats absorb spills in wet areas such as restrooms, water fountains and locker rooms reducing slip and fall incidents and, in some cases, improving hygiene. For indoor use only, anti-microbial Safety mats are often inexpensive and disposable.
- Use Floor Protectors on Furniture and Equipment – Furniture and equipment glides, wheels and casters specifically designed for use on resilient flooring are required. Those designed for carpet should not be used. Exposed metal glides, metal wheels or casters or broken legs or damaged glides may scratch and cause damage to a resilient floor surface. These items should be repaired or replaced with those specifically designed for hard surface flooring. Rikett’s product warranty does not cover scratching or damage caused by furniture or equipment using the wrong, broken or unprotected glides, casters, feet/bases.
- Soft, self-adhering felt protectors applied to furniture or equipment glides, feet or legs on a hard surface floor prevent scratches, gouges and cuts caused by furniture, chair and table movement. Protectors applied to the feet/base of furniture and equipment is an inexpensive way to extend a floor’s life. Routinely clean felt pads with a stiff brush or vacuum attachment. Replace every 3-6 months.
- Slip On/Slip Over floor protectors are also recommended for use on furniture and equipment feet/bases, glides.
- Furniture moving aids provide protection to flooring surfaces against heavy items that would otherwise drag on the floor and against heavy carts with hard casters during moves. Most solutions are inexpensive, long lasting, reusable and reduce human strain.

Referenced Documents

This publication includes direct copyrighted quotes from accepted industry practices as follows:

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Complete copies of these standards may be purchased from ASTM, phone (610) 832- 9585, fax: 610-832-9555, e-mail service@astm.org, website www.astm.org, by the Resilient Floor Covering Institute (RFCI) 401 East Jefferson Street, Suite 102, Rockville, MD 20850. phone: (301) 340-8580

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