

COLORQUARTZ<sup>®</sup>

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Fabrication & Health  
Protection Guide

## Introduction

Colorquartz is the world's leading producer of quartz surfaces designed for high-quality applications worldwide. Fabricators fabricate countertops and other products from slabs purchased from Colorquartz USA, Inc. or its distributors. Fabricators and installers sell and install countertops manufactured from slabs to end users. Colorquartz USA, Inc. gives a Limited Residential Lifetime Warranty and 10 Year Commercial Warranty to purchasers of countertops from certified fabricators with respect to the quality of the slab used by the fabricator to manufacture the countertop sold to the end user.

This manual is published by Colorquartz USA, Inc. to inform fabricators of the recommendations of Colorquartz USA, Inc. for fabricating countertops from slabs supplied by Colorquartz USA, Inc. or its distributors to fabricators. This manual does not replace normal industry standards for the fabrication and craftsmanship – a professional knowledge of stone/quartz fabrication is required.

Any failure by a fabricator to comply with the recommended methods of fabrication of countertops from slabs may result in claims by an end user against the fabricator and refusal of a claim made by an end user under the Residential Lifetime Warranty and given by Colorquartz USA, Inc. to the end user. Please direct any questions about the recommendations in this manual to your local Colorquartz representative's office. Colorquartz USA, Inc. gives a Limited Residential Lifetime Warranty and a 10 Year Commercial Warranty to the fabricator in respect to each slab sold by Colorquartz USA, Inc. or its distributors to the fabricator. The terms and conditions of the residential and commercial warranties to the fabricator and end user are set forth in this manual.

## Colorquartz® Fabrication & Health Protection Guide

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This manual supersedes all previous manuals. Content is subject to change at any time without notice. The use of the term “Distributor and “we” throughout this document refers to Colorquartz USA, Inc. Colorquartz® is a registered trademark of Colorquartz USA Inc.

## GENERAL INFORMATION

**Applications** Colorquartz is ideal for a wide range of interior commercial and residential applications, including those subjects to heavy use, such as kitchen countertops, bar tops, vanities, interior cladding, and furniture pieces.

Colorquartz is not suitable for exterior use, or any areas that are exposed to direct sunlight UV radiation or excessive heat over 300° F.

**Dimensions** Colorquartz is available in sizes that are ideal for kitchen counter and vanity tops.

The slab sizes are:

- 57" (1,450mm) × 120" (3,050mm) – Standard
- 62" (1,600mm) × 124" (3,200mm) – Jumbo

Nominal thickness options of  $\frac{3}{4}$ " (2cm +/-1.5mm) or  $1\frac{1}{4}$ " (3cm +/-1.5mm).

Note: Not all colors are available in all sizes and thicknesses.

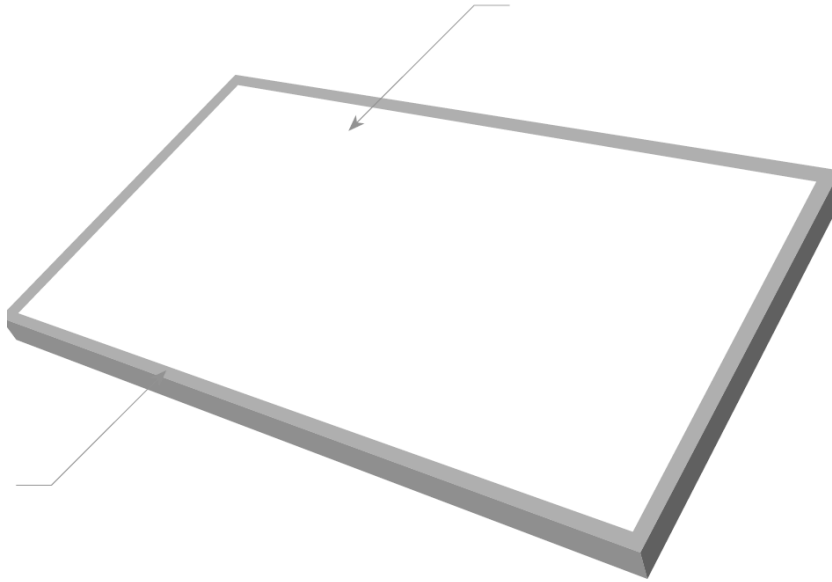
Slab dimensions are used as reference for storage and transportation. Actual usability varies with slab and should be inspected prior to cutting: maximum width and length usability is determined by the slab's perimeter according to colors, polish, transportation damage or any other defect that may be visible. If the slab proves to be unsuitable it should be exchanged for another prior to cutting.

**Safety Guidelines** Fabricators and installers are required to maintain a safe work environment.

- Read operating tool literature to be advised of hazards, applications and limitations.
- Keep guards in place and in working order.
- Ground all three-pronged tools. Never remove the third prong.
- Check for adjusting keys and wrenches before turning tools on.
- Prevent accidents by keeping work areas clean, dry, well-ventilated, well-lit and uncluttered.
- Employ Ground Fault Circuit Interrupters (GFCI) where there is water or moisture.
- Where masks and cut material with wet tools to reduce the number of airborne particles inhaled.
- Ensure that children and visitors are kept at a safe distance from the work area. Childproof workshop with padlocks, master switches or by removing starter keys.
- Use the right tools as designed. Wear proper apparel for work areas. Wear hair-protective covering to contain long hair. Wear ear/nose protectors and safety shoes.
- Wear approved protection eyewear. Use clamps or a vise to secure work when necessary, freeing both hands to safely operate tools.

- Don't overreach. always keep proper footing and balance.
- Maintain tools in top condition. Keep tools sharp and clean for best and safest performance.
- Follow instructions for lubricating and changing accessories

The white area represents the primary usable area of the slab.



Care should be taken if using the gray-shaded area. It should be thoroughly inspected prior to fabrication. This area will vary from slab to slab and side to side.

**Vehicle Loads** The Driver is responsible for ensuring that the load is within the legal carrying capacity of the vehicle. Colorquartz has no way of determining this at our premises. As a guide you must allow approximately 485 lbs. (220kg) per 2cm slab and 727.5 lbs. (330kg) per 3cm slab, plus the weight of any other items already loaded on the vehicle.

**Securing the Load** It is the responsibility of the Driver to ensure that the load is fully supported and safely secured to the vehicle prior to leaving premises. The Distributor will not secure the load to your vehicle.

**Handling** The slabs are best loaded/unloaded from a container or truck with a forklift or lifting device capable of handling at least 2,000 lbs. (900kg).  $\frac{3}{4}$ " (2cm) material weighs 485 lbs (220kg).  $1\frac{1}{4}$ " (3cm) weighs 727.5 lbs (330kg). Because of the

weight, proper safety shoes and gloves should be worn. Handle slabs either singularly or in multiples of two. Use clamps or sling straps and lift the slabs face- to-face. For better grip, take care to clasp the slabs from the back side (while face-to-face).

Warning: Keep a safe distance when handling/lifting the slabs.

**Visual Inspection** Performing a visual inspection for defects or color matching is essential when working with Colorquartz and should be a standard practice before cutting. Complete the following slab inspection steps as a guide to visual inspection for defects:

- Hairline cracks
- Slab-to-slab color match
- Color consistency within the sheet
- Quartz pattern irregularity
- Thickness tolerance 1.5mm
- Warpage: length  $\frac{1}{8}$ " (3mm), width  $\frac{1}{16}$ " (1.5mm)
- Irregular spots
- Inconsistent gloss levels
- Face side pits/voids/blemishes

Note: We will not accept any claims for any of the above if the slab is modified in any way. The Fabricator is responsible for determining if the slabs are fit for use. If they are not, they should be exchanged before the slabs are cut or modified in any way. Note: Length warp should be checked using a full-length straight-edge when the slab is placed horizontally.

**Storage** Store slabs in a way that prevents warping. Use at least two support beams to hold the slabs in place. Have the slabs placed vertically on an H frame. There should be no more than 20 slabs to each rack with the slabs face-to-face and back-to-back. Slabs must be bound with straps at all times, to minimize expansion and maintain flatness.

Slabs are fastened, on exiting production, with straps. Over time, the resin hardens and will maintain its shape and flatness. Thus, it is vital to keep it strapped in the initial phase as to keep it from warping later on. Please see picture.

Polished slabs should never be stored outdoors, as UV rays can permanently damage the internal structure of the slabs.

It is not necessary to store the slabs in a shaded area, but it is necessary to keep the last slabs in each rack facing out. Storage temperatures should not exceed 135°



# Respirable Crystalline Silica Health Hazards & Protection Guide

## Introduction to Guide

As the world's leading global quartz surface developer and manufacturer, we at Colorquartz view the existence of a safe working environment for all employees, free of hazards and in compliance with all local laws, as a foremost interest.

Colorquartz slabs and products, as finished products, do not present any type of health risk or hazard when transported, shipped or used by the end consumer. However, their fabrication and processing generate respirable crystalline silica dust. The approximately 90% silica present in Colorquartz products (and silica present in other quartz surfaces and granite) requires fabrication and processing to be performed under particularly diligent safety conditions.

**It is important to note that the guidelines provided in this Guide are not intended to replace your local laws and regulations, which should be complied with, as further detailed below.**

Colorquartz distributors are strongly encouraged to provide their customers with the relevant information related to workplace health and safety, particularly in areas with respirable crystalline silica dust. Furthermore, the instructions in this Guide are addressed to employers and employees who fabricate Colorquartz slabs and products to help them control their exposure to respirable crystalline silica dust.

**The objective of this Guide is, among other things, to:**

provide information about how the risks and health hazards caused by working in an environment with respirable crystalline silica dust are created; and provide certain information to assist in reducing workers' exposure to respirable crystalline silica dust, including guidance on the safe use of products containing crystalline silica in the workplace and protection that can be used.

## Hazards of Silica Dust

Colorquartz slabs and products are not hazardous when transported, shipped or used by the end consumer. However, Colorquartz slabs contain approximately 90% crystalline silica (quartz, silica sand and cristobalite), and like any natural stone product such as quartz, marble or granite, the fabrication and processing (i.e., cutting, sawing, grinding, breaking, crushing, drilling, sanding or sculpting) of Colorquartz slabs may produce dust containing fine particles of silica. This is known as respirable crystalline silica dust.

There are three dust fractions that are of main health concern: inhalable, thoracic and respirable dust. In the case of crystalline silica, it is the respirable fraction of the dust that is of concern for its health effects. The lungs take in air, extract oxygen, and release carbon dioxide. Anything that stops this process is potentially life-threatening. Silica particles may damage the lung tissue, and to protect against such particles, the body's defenses isolate them in scar tissue. Excess scar tissue, however, decreases lung capacity, which

makes breathing difficult. As the scar tissue builds up through continued exposure to dust, the lungs can no longer carry out their main function – the extraction of oxygen and release of carbon dioxide.

As a result, unprotected and uncontrolled occupational exposure and inhalation of respirable crystalline silica particles without the safety measures required by law is dangerous to health and may cause severe illnesses such as silicosis, which

is characterized by fibrosis of the lungs. Silicosis is a chronic and nonreversible disease, which may cause severe physical disabilities and may be fatal. The pathological process of silicosis may cause severe complications such as: lung cancer, tuberculosis and autoimmune diseases such as rheumatoid arthritis. Preexisting physical disorders may aggravate the adverse effects of exposure to silica dust.

Silicosis is an occupational disease that may affect workers in the stone fabrication industry if they process marble, granite, quartz surfaces and other natural stones without safety measures, which have been recognized for over a century. In the quartz surfaces industry, this disease can affect the production/fabrication workers themselves, and any other employee/worker who is present at the fabrication facilities (where there is silica dust) on a regular basis, for example managers and administrative staff.

*PROPOSITION 65 WARNING: Quartz surfaces, including Colorquartz, contain crystalline silica, a material known to the State of California to cause cancer*

## General Prevention Principles

Silicosis and other diseases associated with silica dust as stated above can be reduced and controlled by following the required safety precautions, including those described below. Such measures include improved work practices (such as working with wet tools), engineering controls, ventilation and filter systems, respiratory protective equipment and training programmes, as further detailed below and in your local laws and regulations regarding working in environments containing harmful dust. Please note that the recommendations with respect to the work area relate mainly to the production/fabrication facilities, but also to the adjacent offices.

In order to control and reduce/eliminate the health risks associated with crystalline silica, we recommend that a Silica Control Programme be implemented in the workplace in accordance with all the applicable laws, regulations, orders and directives. This programme should be reviewed on a regular basis.

Furthermore, permissible exposure limits to respirable crystalline silica dust should be met. Exposure limits for quartz, silica sand and cristobalite (free silica – the respirable dust fraction) differ in each country, and we recommend that you consult with a local expert regarding the mandatory and recommended limits in your country.

It is important to note that the exposure and personal protection precautions are only necessary for the fabrication of Colorquartz products (cutting, sawing, polishing etc.), due to the dust that may be generated in the process, and not from the Colorquartz slab as a product.

The employer is responsible for providing his workers with all the information, tools and safety measures required in order to protect them from the dangers of exposure to silica dust. The workers are responsible for fully implementing the safety instructions. Access to the work area should be restricted to authorized employees only. By a joint effort of the employer and workers, the workplace can become a healthy environment for everyone.

### Wet Tools

The best protection is to avoid exposure to dry silica. Therefore, where possible, implement fabrication techniques in which all cutting, grinding and shaping is performed wet.

- Operate wet tools and cutting machines as they help to prevent the release of silica dust. This applies to both manual and automated tools.
- Work with electrical systems designed by professionals to ensure safety when working with wet tools.
- Control and maintain all water systems in perfect working order according to supplier instructions.
- Take precautions to handle freezing in unusually cold weather.
- Clean and maintain all drainage systems when using water sprays and hoses.
- Wet hosing rather than compressed air should be used for cleanup and in no circumstances should dust be swept up with a broom





## Filter (Exhaust) Systems

Although the best solution is to prevent exposure to dust by using wet fabrication techniques, a second type of engineering control is to use ventilation and filtration systems specifically designed to collect respirable particles in the dust, as detailed below:

Implement filter systems that include the following elements:

- Professional extraction hoods
- Enclosure for collecting and containing pollutants
- Ducts for pollutants removal
- Filters positioned between the hood and the fan
- Fans for moving air flow and releasing clean air outside the workplace



## Ventilation

Recommendations regarding proper ventilation include the following:

- Ensure that the workplace (including the fabrication facilities, as well as the adjacent offices) have complete and effective ventilation.
- For local exhaust ventilation, dust extraction and pollution control equipment, work only with professional ventilation suppliers who employ qualified engineers for project execution.
- Position the work area as far away as possible from doors, windows and passages in order to stop wind and draft from spreading the dust and hindering local exhaust ventilation.
- Operate local exhaust ventilation at the dust source in order to capture the dust.
- Connect local exhaust ventilation to a dust extraction unit such as a bag filter/cyclone.
- Maintain local exhaust ventilation in good working order as per the supplier's instructions.
- Keep the dust source as tightly closed as possible to prevent dust dispersal.
- Ensure a constant supply of fresh air into the work area to replace extracted air.
- Release extracted air to a safe place away from doors and windows.
- Replace filters or other parts according to supplier's instructions.
- Keep air ducts as short as possible.

- Prevent employees from being exposed to local exhaust ventilation.
- Pay attention to unusual noises from fans that may indicate a malfunction.

*We advise that you consult with a ventilation expert or engineer in implementing certain of the foregoing recommendations, such as work area positioning and air ducts length.*



## **Dust Monitoring and Supervision**

Dust monitoring and supervision include the following:

- Consult your local regulations and laws as to the Permissible Exposure Limit (PEL) and/or Threshold Limit Value (TLV) limits for the legal permitted level of exposure to the different types of respirable silica dust.
- Execute risk assessment to determine whether existing dust controls are sufficient.
- Work with designated experts to create appropriate dust monitoring systems and consult with industrial hygiene professionals regarding dust sampling strategy.
- Ensure that all dust extraction emissions comply with local environmental rules.
- Keep complete records of dust monitoring campaigns and implement a quality system accordingly.
- Perform regular checks to ensure that the dust intake, filtration and expulsion systems are functioning correctly.
- Ensure that settled dust and polluted air cannot be dispersed or spread to clean areas or outside the work area.
- Select wall tiles and flooring surfaces that are hermetically sealed and easy to clean.
- Display a “Hazardous Dust” sign in all areas with hazardous dust.
- Create and enforce rules for all employees to wear protective respiratory equipment in areas with hazardous dust (as further detailed below).
- Convey to employees in charge of dust supervision the importance of setting a good example on the floor.

*We advise that you consult with industrial hygiene professionals or other appropriate experts in implementing certain of the foregoing recommendations, such as creating dust monitoring systems, dust extraction and selection of wall tiles and flooring.*



## Personal Protective Equipment

If dust production is not prevented by using water based machinery, workers must wear protective gear, such as P3 masks, which should be used and replaced in accordance with the manufacturer's instructions. In cases where exposure is particularly heavy, industrial respirators should be used and comprehensive training provided.

- Personal Protective Equipment (PPE) is mandatory in workplaces where risks exist. This should be clearly marked with appropriate signage.
- PPE should comply with your local legal requirements; be designed and manufactured according to safety and health standards; and be used and replaced in accordance with the manufacturer's instructions.
- Respiratory protection against silica dust should be P3 classification.
- As facial hair can lessen the effectiveness of a dust mask, operators with facial hair should work with air respirators or other suitable alternatives.
- Employees should receive training on the use and maintenance of the PPE and should check efficacy of all respiratory protection equipment before use.
- Ensure that all employees wear appropriate PPE.
- Keep records of all PPE in use pursuant to applicable law.
- Provide employees who work with silica dust with overalls that prevent dust absorption.



## Hygiene

Personnel hygiene is another important factor in health protection, and includes the following:

- Provide bathroom facilities in the plant with toilets, showers, wash basins and individual lockers for storing changes of clothing. Make two checkrooms available to all plant employees: one in which they change from home clothes into clean work clothes and store their home clothes during working hours; and another in which they change out of work clothes at the end of a working day before showering and changing back into home clothes.
- Employees should wear only designated work apparel at the worksite, including footwear and socks. Employees should leave their work clothes and shoes in the workplace and never remove them from the plant.
- Launder all employees working clothes and provide them with clean clothes each day.
- Provide explanations on the importance of separating work clothes from clean clothes.
- Employees should wash their hands and faces and change clothes before eating.

- Permit eating, drinking and smoking only in designated areas that are not exposed to hazardous dust.



## **Cleaning**

- Clean the workplace, floors and all exposed surfaces on a daily basis.
- Check that the work area is clean at the end of each shift.
- Create a regular, recurring schedule for cleaning all equipment and systems.
- Employ both wet and vacuum cleaning methods.
- Provide ample vacuum connection points for a central vacuum cleaning system.
- Provide ample water connection points for wet cleaning techniques.
- Use vacuum cleaning systems for dry spillage only
- Use only dry cleaning with brushes when wet cleaning or vacuum cleaning is not possible.
- Clean wet or dry spillage immediately; never wait for the end of day cleanup.
- Do not allow dust and debris to dry out before cleaning.
- Do not sweep with a dry broom, brush or compressed air.
- Do not clean work clothes, machines or floors with compressed air.



## **Administration, Regulation and Maintenance**

- Maintain all equipment in good working order.
- Do not make changes to any working systems without supplier approval.
- Keep instructions and diagram of installed systems in a safe place for reference.
- Ensure that regular checks are performed on inlet airflows, duct air speed and filter pressure index on ventilation systems.
- Check all systems at least once a week or according to supplier instructions.
- Keep inspection reports for a period of time that complies with local laws.

## Installing Colorquartz Quartz Surfaces

- In order to protect installers from working in an unprotected environment, all surfaces should be fabricated in the plant and not at the end user's location.
- If the surface needs any grinding or other dust-producing modifications at the installation site, use a wet method in an outdoors area such as a terrace or balcony. This should be performed with the appropriate P3 respiratory protection against silica dust (as detailed above), along with eye and ear protection.
- If an outdoors area is not available, dust produced during modifications should be collected with a manual vacuum with a HEPA filter and the heating/air-conditioning system should be sealed off.
- After completing an installation, thoroughly clean the work surface and remove all dust. Carry out a final check by using a dry-cleaning method and clean any remaining dust and debris with a portable vacuum cleaner.
- It is important to clarify that grinding, cutting or polishing surfaces in the end user's home during installation or repair do not put the end user at any risk of disease. Silicosis and other lung diseases caused by respirable crystalline silica dust develop only because of long-term, regular exposure.



## Training Employees on Safety and Hygiene Issues

One of the keys to creating a safe work environment is providing ongoing training to employees at all levels on safety issues that are specific to their workplace. Employees who are involved in and committed to the safety programme are most likely to comply with them.

- Employee training may include the following:
- Create and implement clear guidelines for safe working procedures and good practices in your workplace.
- Provide health safety and hygiene training for all new employees.
- Continue delivering mandatory training sessions to existing employees on an ongoing basis in order to update and review their knowledge of your health and safety procedures.
- Regularly review your safety and hygiene procedures. Safety issues can differ over time, and it is important to ensure that your safety program evolves as needs change.
- Inform your employees as to how your plant deals with harmful substances such as respirable crystalline silica.
- Provide clear data about the risks associated with Colorquartz fabrication tasks.
- Provide employees with current data on health effects associated with respirable crystalline silica dust.
- Provide training for the use of respiratory protective equipment or other Personal Protective Equipment.
- Keep comprehensive records of all training provided to employees.

- Record employees' attendance at training sessions.
- Encourage employee feedback to improve future training sessions.
- Assess employees' knowledge after each training session to verify that they understand your plant's safety procedures.



## Health Surveillance

Health surveillance should be implemented based on your local rules and regulations, which may include the following:

- Implement a health surveillance program for employees who are exposed to respirable crystalline silica, including medical testing and other tests as required by local regulations.
- Keep records following the termination of each employee's employment for the amount of time required by local regulations.
- If an employee is overexposed to respirable crystalline silica, he should be provided with details of his monitoring result.
- Persons under the age of 18 should not be employed in any role in which they are exposed to silica dust.
- Keep records of the protocol of all tasks that expose workers to respirable crystalline silica.

## Other Information and Disclaimers

The information contained in this Guide is, according to the best of our knowledge, current and accurate. However, it is only a summary; it is not possible in this short document to comprehensively cover all the topics mentioned, nor is it possible to cover in detail all areas of concern regarding crystalline silica dust in the workplace.

Furthermore, any recommendations or suggestions made here are general and do not consider the specific conditions that exist at each fabrication site. In addition, none of the content in this Guide may be construed as a recommendation for using any product or tool in violation of any laws, safety practices or other applicable terms.

We recommend that you also consult with occupational health professionals and other experts concerning all matters regarding control of respirable crystalline silica in each specific workplace.

We also note that the laws and regulations regarding silica dust differ from country to country, and we recommend that you check and observe your local regulations and legislation regarding working in environments containing harmful dust.

In any case where these guidelines contradict your local regulations, your local regulations shall take precedence.

None of the information contained in this Guide creates a contractual relationship between Colorquartz and any fabricator.

Information on occupational safety and health administration appears, among other sources, at [www.osha.gov](http://www.osha.gov); the International Labor Organization at [www.ilo.org/safework/info/lang--en/WCMS\\_108566/index.h](http://www.ilo.org/safework/info/lang--en/WCMS_108566/index.h); the European Network for Silica at [www.nepsi.eu/good-practice-guide.aspx](http://www.nepsi.eu/good-practice-guide.aspx); [www.nepsi.eu](http://www.nepsi.eu); the “Good Practice Guide on Workers Health Protection through the Good Handling and Use of Crystalline Silica and Products Containing It,” issued by NEPSI; and [www.cdc.gov/NIOSH](http://www.cdc.gov/NIOSH).

## Questions and Answers

### 1. What is silica and quartz?

Silica is one of the most common compounds on earth. Silica is composed of two elements: silicon and oxygen (silicon dioxide, SiO<sub>2</sub>).

Silica is found in nature in various forms, mainly as sand, and also as rocks and stones such as marble, granite, quartz and cristobalite. Silica is a component of many manufactured products in daily use, such as glass, pottery and quartz surfaces. Silica is very commonly used in construction and at various concentrations in bricks, blocks, tiles, slabs, cement and concrete. All human beings are extensively exposed to silica in their daily lives.

### 2. What are Colorquartz quartz surfaces?

Colorquartz quartz surfaces are an advanced solution for kitchen countertops, bathroom vanities flooring, wall cladding and other internal applications. They are manufactured from approximately 90% quartz and high-quality polymer resins and pigments.

### 3. What is silicosis?

Silicosis is an occupational lung disease that may affect workers in the stone fabrication industry if they process marble, granite, quartz surfaces and other natural stones without safety measures. This disease has been recognized for more than a century.

Processing and polishing quartz and other substances containing silica (including other types of work such as cleaning by sandblasting) produce dust containing fine particles of silica. This is known as respirable crystalline silica. Inhalation of respirable crystalline silica over an extended period by workers in stone fabrication plants, without the safety measures required by law, may cause occupational lung disease, including silicosis, which is characterized by fibrosis of the lungs. Silicosis is a chronic and non-reversible disease, which may cause severe physical disabilities and may be fatal. The pathological process of silicosis may cause severe complications such as: lung cancer, tuberculosis and autoimmune diseases such as rheumatoid arthritis.

In the quartz surfaces industry, production workers are at risk of developing these diseases, as well as any other employee/worker who is present at the fabrication facilities (where there is silica dust that can originate from quartz or cristobalite, for example) on a regular basis, such as managers and administration staff.

### 4. Can silica dust hazards be prevented?

Yes. Exposure to silica dust and the diseases that may result from such exposure (including silicosis) can be reduced and controlled if the proper safety measures are implemented. These measures include working with water-injected tools, using dust masks or respirators and installing ventilation and filter systems in the workplace to reduce or eliminate the



concentration of silica dust in the air.

*For further information, see the Colorquartz Respirable Crystalline Silica – Health Hazards & Protection Guide and information on occupational safety and health administration, among other sources, at [www.osha.gov](http://www.osha.gov); the International Labor Organization at [www.ilo.org/safework/info/lang-en/WCMS\\_108566/index.h](http://www.ilo.org/safework/info/lang-en/WCMS_108566/index.h); the European Network for Silica at [www.nepsi.eu/good-practice-guide.aspx](http://www.nepsi.eu/good-practice-guide.aspx); [www.nepsi.eu](http://www.nepsi.eu); in the “Good Practice Guide on Workers Health Protection through the Good Handling and Use of Crystalline Silica and Products Containing It,” issued by NEPSI; and [www.cdc.gov/NIOSH](http://www.cdc.gov/NIOSH). Always apply your local laws and regulations regarding working in environments containing harmful dust. Who is responsible for ensuring the health and safety of stone fabrication workers?*

*The owners of stone fabrication plants and the employers are responsible for their own health and the health of their workers, in all matters related to work in these plants. Stone fabrication plants that operate according to the legally required safety regulations for working with harmful dust ensure the health and safety of their workers.*

*The employer is responsible for providing his workers with all the information, tools and safety measures required in order to protect them from the dangers of exposure to silica dust and for enforcing their implementation. The workers are responsible for fully implementing the safety instructions. By a joint effort of the employer and his workers, the workplace can become a healthy environment for everyone.*

## **5. Can Colorquartz surfaces installed in the home be harmful to the consumer?**

Absolutely not. Silica is non-toxic and Colorquartz quartz surfaces are completely safe for domestic use.

The health risk lies in the processing procedure, if performed not in accordance with legal requirements, and not in the surfaces themselves.

A small amount of silica dust is sometimes produced during installation or repair of Colorquartz quartz surfaces in the end user’s home. This poses no health threat whatsoever to the end user as silicosis and other diseases caused by silica dust develop only because of ongoing occupational exposure to silica dust. Silicosis is purely an occupational disease.

## **6. Does Colorquartz meet industry standards for health and environment?**

Colorquartz quartz surfaces maintain the most stringent industry standards for health and environment, as listed below, and presented on the Colorquartz website.

- Colorquartz products are compliant with the National Sanitation Foundation International standard, ensuring that our working surfaces are safe for use in all food environments.
- Colorquartz surfaces comply with the American GEI (GREENGUARD Environmental Institute) certification, which primarily verifies that Colorquartz’s products meet the most stringent air emission standards.
- Colorquartz’s recycled range of quartz slabs incorporate 15-40% first quality reclaimed quartz from the fabrication process (postproduction recycled) and post-consumer recycled glass and mirrors.
- Colorquartz surfaces are kosher due to their low porosity.

# Fabrication Instructions

## Tools and Safety Equipment

It is critically important that all fabricators wishing to fabricate Colorquartz have the proper tools and safety equipment to produce a quality finished product safely and efficiently. Below is a list of tools and safety equipment that are either essential or recommended to meet this objective.

### Basic Tools

- Bridge saw
- Electric/pneumatic polisher (variable speed preferred)
- Diamond grinding wheel
- Diamond polishing pad
- Grinding stone
- Core bits
- Diamond contour blade
- Wet profiling machine (edge router)
- Stone carts/dollies
- Frame/storage racks
- Fabrication stands
- Air compressor
- Pneumatic seam setters with leveling points
- Water source

### Advanced Tools

- Water jet
- CNC
- Automated profiler
- Diamond jig saw

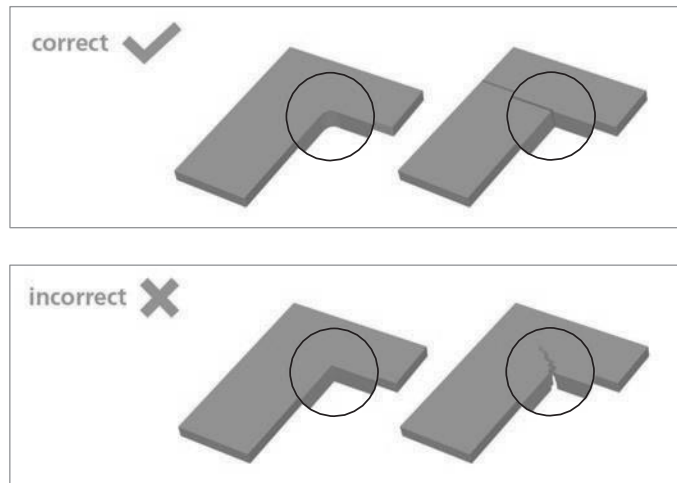
### Basic Safety Equipment

- First-Aid kit
- Safety glasses
- Dust masks
- Safety gloves
- Steel-capped safety shoes
- Aprons
- Ear plugs

## Basic Fabrication Guidelines

The following guidelines should be followed to ensure a high-quality product:

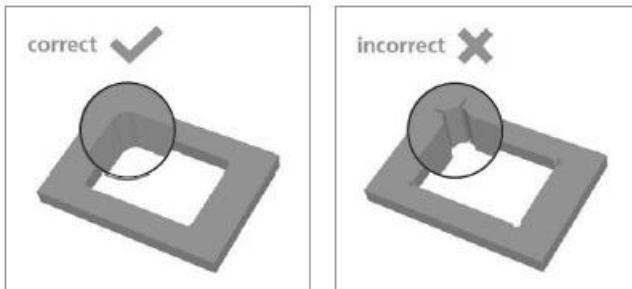
- Do not change the original surface finish of the slabs by re-polishing, honing, sealing, or otherwise altering the factory finish.
- To avoid overheating the slab, only water-cooled tools should be used for cutting, drilling, and polishing Colorquartz®.
- Do not cut square corners (cross cut) as this will create stress points in the slab and may result in cracking.
- When cutting an inside corner, always use a core bit to avoid damaging the corner area with the cutting disc. Damage to the radius area will create a stress point.
- Any internal angled corner must be radiused. Cut with the saw up to the joint of the drilled hole, leaving the drilled hole intact. Avoid dry grinding/polishing of the corner since overheating the area may result in a crack



**Inside Corners** In the case of an angular shaped kitchen (L- or U-shaped), the surfaces of the countertop should be fabricated from a single slab. Inside corners must have a minimum  $\frac{3}{8}$ " radius; the larger the radius the stronger the corner.

## Cutouts

- If the distance between the cutout and a joint is less than 6", the area needs to be supported. This can be achieved by ensuring that all joints are placed at the junction of the base cabinets or a solid slat be fitted under the joint.
- Cross cutting should be avoided. When preparing a cutout always use a core bit. Avoid damaging the drill area with a cutting disk.
- Damage to the drilled area can result in stress points that may lead to hairline cracks. All cuts should be done using only wet diamond cutting tools to avoid generating excessive heat, which could also result in hairline cracks.
- Always allow an extra 1/8" between the appliance and the edge of the cutout for expansion.

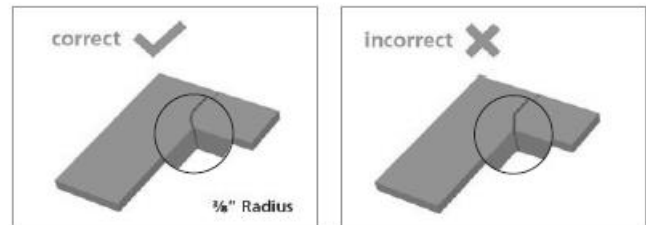


NOTE: Chiseled or hammered edges are not approved edge details.

\*Do not use square edges.

## Seams

- Straight seams are always recommended.
- All seams should be made level by adjusting the material before adhesive sets.
- Do not surface polish seams to make them even/level.
- Use pneumatic seam setters with leveling points to make seams as narrow and inconspicuous as possible. Seams should not be more than 1/16" wide.



## Edge Detail

- All exposed edges must be fabricated to the same finish as the surface.
- All edges must have a minimum edge profile of 3-4 mm (1/8").
- The top and bottom of edges must be rounded or beveled.
- Our preferred edge detail is a Pencil Round edge.
- The larger the surface area of the edge, the more resistant it is to chipping.
- For high use areas, such as sinks or commercial applications, Colorquartz recommends that the edge details have a minimum of 6 mm (1/4") radius on both top and bottom, and a minimum of 6 mm (1/4") on outside corners.

**Polishing Edge Profiles** Polishing any Colorquartz edge profile should be done in a progressive manner using only granite or marble diamond polishing pads. Colorquartz recommends the use of premium quality pads and use of plenty of water for best polishing results. The quality of the pads being used will affect the time required to complete polishing and the quality of the finish. Polishing Colorquartz should be done by starting with a surface that is smooth, clean, and free from any residual adhesive.

*NOTE: Care must be taken not to overpolish edges in excess of the factory surface polish.*

The type of tools, diamond pads, and fabrication techniques will affect actual polishing results. When polishing the edge profile, use water-cooled tools. Dry-polishing the edge profile or cutting/polishing too quickly, even with water, may cause burning of the resin, leaving the edge prone to chipping. Excessive heat undermines the physical structure of the slab, and although not visible to the naked eye, micro-fissures are formed, leading to chipping upon impact, discoloration and an uneven polish.

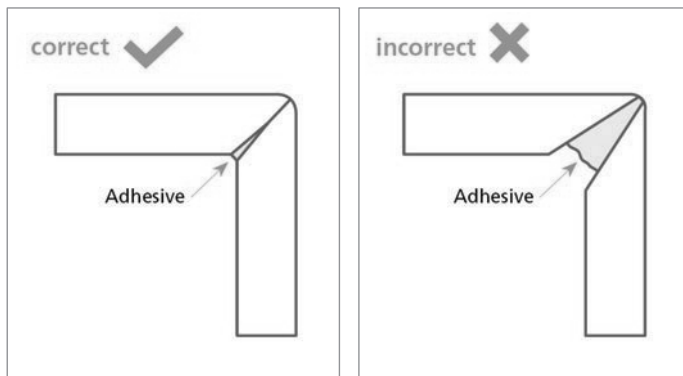
Use lower RPM on polishers, typically half the speed used on natural stone.

Do not use stone “buff” pads on Colorquartz.

Do not overpolish edge details in excess of the factory surface polish.

## Mitered Edges

- Mitered edges should be done at a 45° angle to ensure maximum strength. The joint should be clean, flush, and parallel.
- Mitered edges have the greatest area of weakness and are most prone to chipping. Our preferred minimum edge profile is a 1/8” (3–4mm) radius edge.)
- Chipping is most prevalent where the application of the adhesive is not evenly distributed throughout the joint.



•Do not cut edges at less than 45° as this makes the edge prone to physical damage such as chipping.

•Incorrect angles restrict the type of edge that can be produced, since the larger the edge profile, the larger the joint that is visible.

*NOTE: Internally score the material at the joint location and ensure that the adhesive is thoroughly distributed throughout the joint for maximum strength.*

## Polishing Texture Finish Edges

The natural, unique look of texture finish combines a low level of gloss, making it beautiful to both see and touch. Due to the innovative technology used to create lightly textured surfaces, we recommend the following guidelines below to ensure the highest quality workmanship and an optimal result when polishing texture finish edges.

We are recommending that a mitered edge be used for this material, as it will achieve the best textured appearance. However, if any other edge is demanded, special fabrication and brushes will be required for the edge detail.

1. Complete cutting the surface into the required pieces/sections, before proceeding with polishing.
2. Using clamps, attach all pieces required for the final design to a suitable work surface.
3. In cases where the texture finish edge will require gluing, it is recommended to do so prior to polishing.
4. Cut or shape the required edge profile.
5. Smooth and polish the edge shape, following standard polishing procedures and according to regular levels – up to a maximum of 100–120 grain.
6. Polishing of texture finish surfaces must be executed while wet, using a generous amount of water.
7. Polishing a texture finish edge will require approximately the same amount of time as polishing a regular edge.
8. Use a suitable manual, electric or pneumatic angle grinder – with a low RPM of 600–1200; connect it to a source of water and attach a 60grain special texture brush.
9. Begin polishing the texture finish using movements similar to those used when polishing a regular edge.
10. Continue until the edge attains a homogeneous, textured finish.
11. Change the brush to a 120 grain and polish until there are no visible signs remaining of the 60grain brush.
12. Repeat the above with 400, 800 and 1600 grain brushes or until the edge is consistent with surface texture.

## iTouch Finishes

**Cleaning** Please understand that iTouch finishes will require more daily cleaning than our polished finishes. Since there is more exposed surface area with these finishes, metal marks, fingerprints and other signs of daily living will show on these materials. Most of these marks can be removed with a little effort and cleaning products such as Soft Scrub® Liquid Gel with Bleach or Barkeeper's Friend. Rinse thoroughly with water.

iTouch materials may receive slight surface markings during transportation, fabrication, or installation. These marks can usually be removed using the cleaning methods mentioned above.

*NOTE: Under no circumstances should any type of stone-impregnating sealers be applied to any Colorquartz surface.*

When fabricating any Colorquartz material with a honed/concrete finish, take care not to overpolish any edge details beyond the finish on the slab face surface.

All Colorquartz fabrication requires fabricators to avoid modifying the factory polish on the face of the slabs.

*NOTE: A Special Care Considerations Form should be signed by the homeowner prior to purchase, accepting the additional cleaning needs.*

**Adhesives** It is important that a flexible adhesive be used, such as 100% clear silicone adhesive be used to secure the countertops to the cabinets, substrate, or to secure Colorquartz backsplashes to the wall. This will allow for limited thermal expansion.

The use of non-flexible adhesives, such as epoxies, liquid nails, or construction adhesive, is not recommended. Colorquartz will not warrant any claims for cracks that are the result of tops being bonded to the base cabinets with non-flexible adhesives.

Follow stone adhesive manufacturer's instructions. Observe good stone working and safety practices at all times and comply with applicable building codes and regulations.

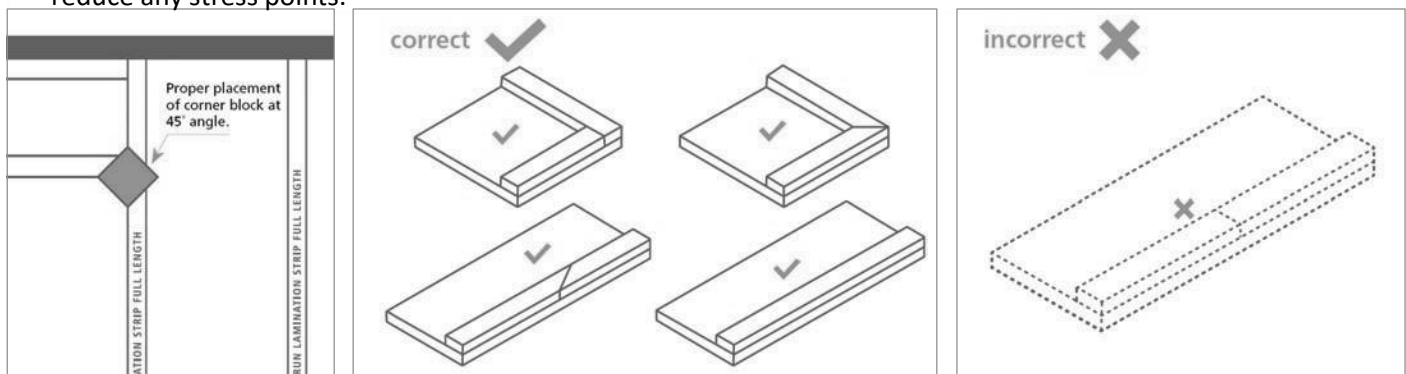
**Seaming & Laminations** Colorquartz requires that all fabricators follow the individual manufacturer's instructions for the use of their seaming adhesives, including but not limited to the minimum working temperatures for their product. Failure to follow the prescribed instructions will void the Colorquartz warranty.

**Joint Adhesives** In order to achieve a minimally visible seam, the adhesive used must be pigmented to a color similar to that of the material being installed. This can be done using color paste pigments hand-mixed with the adhesive to achieve a color match. Colorquartz recommends the use of a polyester resin knife grade adhesive for all seaming and laminations.

**Laminations/Double Edges** When laminating, it is important to make sure that the lamination piece is the full length of the top piece and cut at 45o on the corners. If this cannot be done and a joining of the lamination pieces is unavoidable, the joint must be cut at 45o. The use of a mitered end cut reduces stress on the material that may cause stress fractures.

The lamination strip should be cut from the same slab as the counter top surface material to ensure a color match. It's recommended when cutting the piece to be laminated, to add the lamination piece size to your cutting measurements, ensuring that you will have the same length and same color piece for your lamination.

- A 45° corner joint is recommended to minimize the stress on corners.
- Use full-length lamination pieces.
- For very long countertops where a joint is required, ensure that the joint in the lamination piece is at 45° to reduce any stress points.





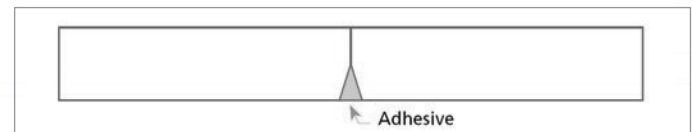
## Seaming

- Use a pneumatic seam setter with leveling pins to make seams as narrow and inconspicuous as possible. Note Picture A. Seams should not be more than  $\frac{1}{16}$ " wide. Support must be provided under all countertop seams.
- All seam surfaces should be smooth, clean and free of debris.
- Colorquartz requires the use of colored glue for all seams. This can be accomplished by using one of the premixed Integra colors available or by manually tinting the glue of your choice.
- Grooves should be created in surfaces to be joined to allow space for glue. Extra glue should be placed at all corners and around joints. Note in Picture C1 and C2.
- Seam locations should be carefully planned to minimize visibility.
- Colorquartz prohibits the surface polishing of seams.



Picture A

This is an example of a pneumatic seam setter available at Braxton Bragg.



## Joint Positions

- A seam over a dishwasher or any appliance is not permitted.
- On seams, miters, and lamination areas, it is necessary to grind notches or grooves on the surfaces to be bonded together.



Picture C1



Picture C2

## Transportation

### Packing for Transport

- Countertop sections are normally heavy and fragile. Consideration must be given to portability and site access when planning and packing for transport.
- Brace all cutouts to avoid flexing of the seams and corners.
- Transport Colorquartz with sections touching face-to-face or back-to-back. A protective barrier, such as corrugated plastic sheets, should be placed between the pieces to avoid surface abrasion on the product. Do not allow any parts to slide around during transportation. Make sure the face is always protected and not touching metal, the back of another slab, etc.

### Racking for Transport

- Time and skill has been spent in the factory manufacturing a first-class product. Good racking is essential for getting the product to the site in good condition.
- Many rack designs have been made for stone slab transportation devices. Some prefer to have a removable “A” frame that they can hoist off the delivery vehicle.
- The slabs should be securely fastened to the rack by straps. Care should be taken to protect the straps from being damaged or cut by the edge of the slabs.
- At least two people should be taken on the delivery vehicle to get the product onto the site.
- All racking should have a protective layer between the rack and Colorquartz material. This will help to prevent scratching or other surface damage during storage or transit.



# Installation Instructions

**Preparing Base Units/Cabinets** Ensure that cabinets are complete and satisfactorily installed. Verify that all cabinets are level. The tops of the cabinets must be flat and true within 1/16" (1.5mm) over 18" (457mm). The cabinets should be affixed to each other and then secured to the back wall. In the case of a dishwasher, make sure that the surrounds of the opening of the counter will have sufficient support. The front edge of any countertop over a dishwasher should always be supported with material matching the installed cabinets to better match the kitchen.

*NOTE: If cabinets do not meet the minimum standards, the installer must notify the homeowner or project manager present at the jobsite prior to installation of tops.*

**Support** Below are some guidelines on installation, material, and type of supports:

- Colorquartz must be supported on a strong perimeter frame.
- Front-to-back support within the cabinet should be provided every 24". Plan for front-to-back support strips 2.5"-wide (40mm–100mm) to coincide with cutouts and periodic support. Support must be provided under all countertop seams.

*NOTE: Support is required across the top of a dishwasher space and over any other appliance.*

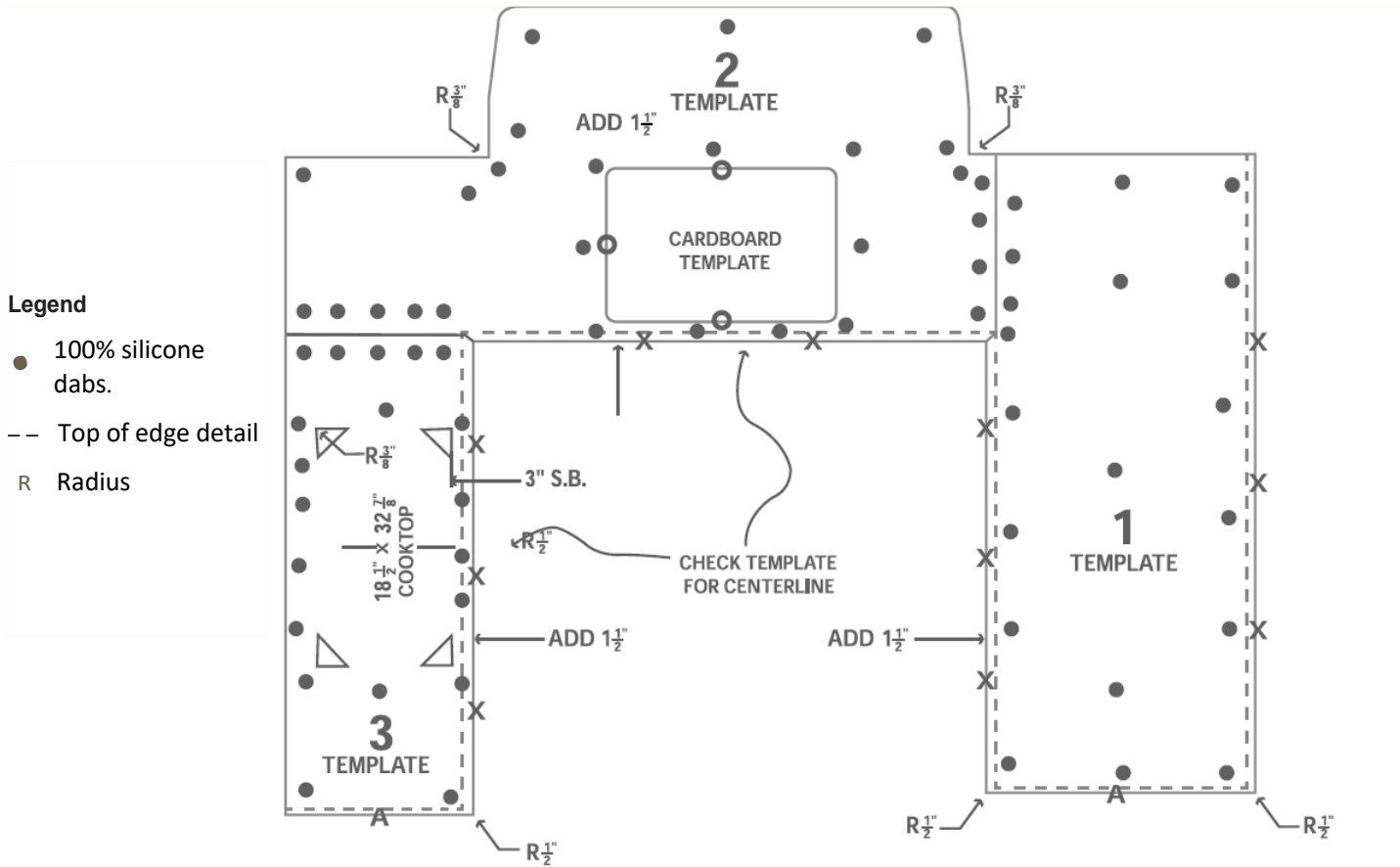
**Overhang** As a general guideline, support is required for overhangs of Colorquartz. The following guidelines are for standard cabinets 24" in depth but in no case may the overhang be more than 1/3 of the width of the countertop. Cantilevered countertops exceeding these dimensions will require corbelled supports beneath the stone.

2CM (3/4")	2CM (3/4") with 5/8" substrate	3CM (1.18")	MATERIAL SUPPORT REQUIRED
Less than 8" (200mm)	Less than 12" (300mm)	Less than 16" (400mm)	No additional support required.
8–16" (200–400mm)	12–20" (300–500mm)	16–24" (400–600mm)	Brackets required at 24" (600mm) intervals.
Over 16" (400mm)	Over 20" (500mm)	Over 24" (600mm)	Legs, Columns or Panels required at 24" (600mm) intervals.

## Fitting

- Space should always be allowed as Colorquartz needs room to expand. Each countertop requires at least 1/8" at each wall for expansion and contraction.
- When affixing the Colorquartz surface to the supports, use only dabs of flexible silicone 8–12" apart. Extra adhesive must be placed along all joints and cutouts.
- Mechanical fasteners (screws, nails, etc.) must never be affixed directly onto Colorquartz. Through bolting is permitted as long as the hole is larger than 3/4" and allows for 1/8" expansion room around the bolt.

**Countertop Installation** We only recommend the use of 100% silicone adhesive for affixing Colorquartz® surfaces



**Legend**

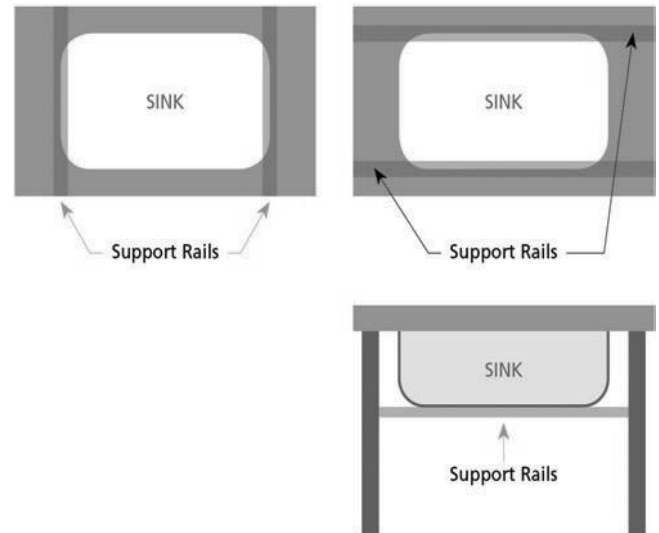
- 100% silicone dabs.
- Top of edge detail
- R Radius

**Securing of Countertops**

- Fix top using dabs of silicone 8–12" apart.
- Use extra silicone on all corners, joints and around all cutouts
- Support is required on overhangs over 8" (200mm) for 3/4" (2cm) thick slabs and 16" (400mm) on 1.18" (3cm) slabs.
- Radius all inside corners on all cutouts "to a minimum of 3/8".
- Use color matched adhesives to join the seams.
- Do not undercut corners.
- Allow 1/8" clearance room for expansion between tops and walls.
- All cabinets must be leveled and supported prior to the installation of the tops.
- If the cabinets are on adjustable legs, please ensure that all legs are evenly tensioned to prevent any movement.

### Sinks and Basins

- Regarding cutouts, follow the recommendations on Page 19 of this manual. For under-mount installations, we recommend the use of a 1/4" radius on the edge detail to reduce the risk of chipping.
- Twin basin installations (Top- or Under-mount), where the tap hole is in the countertop, require extra care to ensure that there is sufficient material left for strength. Extra support is required to ensure that no cracking occurs.
- All sink cutouts must be made using drilled radius corners (minimum 3/8") to prevent stress points in the top.
- We recommend that all sink installations be fully supported independent of the Colorquartz top. Please be sure to use a professional sink-setter or support rail system. Plan for front- to-back support strips 2.5"-wide (40mm–100mm) to coincide with cutouts and periodic support. Support must be provided under all countertop seams.



*NOTE: Under no conditions can mechanical fasteners (screws, nails, etc.) be affixed directly to Colorquartz.*

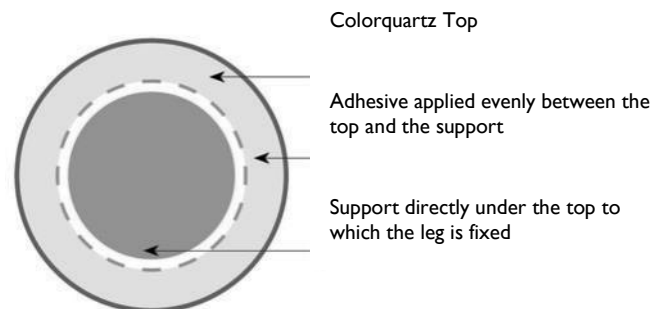
### Under-mount sink installations

- All under-mount sink cutouts must have the inside edges polished to match the surface.
- All under-mount sinks should be sealed to the countertop using 100% silicone.

**Table Tops** If you are using Colorquartz as a freestanding tabletop,

care needs to be taken with the method by which the top is secured to the base. This is of the most importance when the table has only one central leg as support. A silicone adhesive may be too flexible to adequately secure the Colorquartz top to the base.

In this situation we would recommend a stronger, more rigid adhesive be used (such as a construction adhesive like polyurethane [Sikaflex®-11 FC] which is strong yet still flexible) to ensure that the top is properly secured to the base.



**Wall Applications** Structural requirements for Colorquartz require that wall surfaces to be covered be sound, secure, rigid and conform to all applicable laws and engineering practices. Maximum allowable deflection is L/360 and should be uniform over the length of the span. All surfaces must be true and level within 1/8" over ten feet.

Colorquartz recommends only the use of latex thin-set mortar adhesive or epoxy adhesive and grout for all wall applications.

All bedding and grouting mortars should be weather, frost, shock, and chemical-resistant, and meet the following physical requirements:

Compressive Strength:	Thick-bed mortar	3000 PSI Minimum
Compressive Strength:	Thin-bed, bonding, grouting mortars	500 PSI Minimum
Tensile Strength:	Thin-bed, bonding, grouting mortars	500 PSI Minimum
Water Absorption		4%
Ozone Resistance:	200 hrs @ 200ppm	No loss of strength
Smoke Contribution Factor		0
Flame Contribution Factor		0

- The finished mortar and grout should be resistant to urine, diluted acid, diluted alkali, sugar, brine and food waste products.
- Colorquartz can be applied over concrete, block and masonry-type surfaces, gypsum wallboard, plasters, cement backer board, plywood, asphalt, and steel with proper preparation and the use of appropriate adhesives and grout.
- Colorquartz and its setting and grouting mortars do not constitute a waterproof barrier and should not be considered a replacement for a waterproof membrane. For information on thin, load-bearing waterproof membranes, consult your preferred supplier.
- Colorquartz surfaces to be bonded must be free of dust, oil, grease, paint, tar, wax, curing agents, primers, sealers, form release agents, or any other deleterious substances which may act as bond barriers.
- The installer is responsible for ensuring the removal of any such contaminant prior to the commencement of Colorquartz installation.
- All mortar additives, epoxy adhesives, and grouts should be from one manufacturer to ensure compatibility.
- All Colorquartz should be handled in a manner to avoid chipping, breakage or the intrusion of foreign matter.
- Handle, store, mix and apply all setting and grouting materials in strict compliance with the manufacturers directions.
- Observe good stone working and safety practices at all times and comply with applicable building codes and regulations.

**Finishing Touches** If further construction work is to be performed at the job site after the installation of the surface is complete, ensure that the Colorquartz surface is properly protected by covering the entire top with corrugated plastic sheeting or another protective material.

Please make your customer aware that any successive trades must not use the new countertop as a workbench, a stepping or a standing platform, and that any trades using solvents or adhesives should take due care to avoid and/or remove any spills created by their solvents or adhesives.

We strongly recommend that your customer confirm, in writing, their satisfaction with the material and workmanship at the end of the job to cover you against damages caused by others.

**Returning Slabs** Any slab that is not suitable should be returned for credit or exchange. This can only be done providing the slab has not been altered in any way. If exchanged within seven days, no restocking fee is applied. After seven days a restocking fee may apply. After 30 days, no return is accepted.

**Batch Tracking** Although we do our best to record all batches that are sold, it is your responsibility to maintain a record of the batch number as listed on the back of the slab. We cannot guarantee that we will always be able to supply you this information on invoices in the future.

**OSHA** The Distributor has an OSHA Policy in place to ensure the safety of all persons on our premises. All visitors must observe any direction given by our staff and follow any warning signs that are posted throughout the warehouse.

## Driver Requirements

- Drivers should stay with their vehicles and ensure the slabs being loaded are suitable.
- Drivers are not to wander through the warehouse unless accompanied by an authorized person.
- Contract Drivers should be made aware of which orders are to be collected. This is especially important when there are several orders pending pickup or delivery. The Distributor will not be responsible for extra charges for goods missed on the initial delivery.

## Countertop Care

**Regular Cleaning** Due to Colorquartz's high density and non-porous qualities, normal cleaning with a damp cloth and mild detergent is all you need to keep your Colorquartz surface looking great. Thoroughly rinse off the soap/mild detergent with hot water after use and dry with soft cloth or paper towel. To avoid dulling the surface shine, make sure to use a non-abrasive cleaner, and thoroughly rinse off with water after use. Those wishing to use environmentally safe cleaners may also use a combination of 50/50 vinegar & water, rinsing afterwards.

**Stubborn Food Stains** If needed, apply a generous amount of a non-abrasive gel, such as Soft Scrub Liquid Gel with Bleach, to a damp soft cloth or paper towel (not directly on to the countertop). Wipe the area using a circular motion, rinsing thoroughly with water and dry with soft cloth or paper towel. We recommend a thorough cleaning of your Colorquartz surface on a regular basis (because of the patina that will develop on the surface from day-to day use) to keep the surface as beautiful as the day it was installed.

**Metal Marks/Rust Special Use for spot cleaning ONLY** – Because of the abrasive nature of this cleaner, use Liquid Barkeeper's Friend only as follows: Place small amount on damp cloth. Using very light pressure, wipe the area where the marks are in a circular motion, rinsing thoroughly with warm water and dry with soft cloth or paper towel.

**Dried Spills** To remove adhered material such as food, gum or nail polish, first carefully scrape away the excess material with a plastic putty knife and then clean the surface with a damp cloth to remove any marks left behind and any residual dirt. Also, do not use any abrasive pads to clean tougher dirt as abrasives can damage the finish/sheen of your countertops.

**Are there any chemicals or cleaners to avoid using?** Prolonged exposure to cleaning solutions may cause permanent damage/ discoloration to the countertop surface. Avoid exposing Colorquartz to chemicals, such as oven grill cleaners, floor strippers, paint removers/strippers, toilet bowl cleaners, oil soaps, tarnish removers, furniture cleaners, drain products, battery acid, dishwasher detergent, etc. Should your surface accidentally be exposed to any potentially damaging products, rinse immediately with water to neutralize the effect.

**How does Colorquartz withstand heat?** Colorquartz is structurally more heat resistant in comparison to other stones, including granite. However, any stone material can potentially be damaged by sudden and rapid temperature changes, especially near the edges. Therefore, using inexpensive and readily available trivets is always recommended, especially when using cooking units such as electric frying pans, crock pots, or toaster ovens. Do not put hot cookware directly on the Colorquartz surface.

**How durable is Colorquartz?** Tough, yes – Indestructible, No Colorquartz is resistant to cracks, scratches and stains. However, like most materials, excessive force and/or pressure from objects can damage the surface. As with any surface, Colorquartz can be permanently damaged by exposure to strong chemicals and solvents. Use of a minimum 1/8" pencil round radius on an edge detail profile can reduce the susceptibility for chipping on the edge. A greater radius is recommended for high traffic areas.

Colorquartz surfaces are scratch resistant; however, avoid using sharp objects such as sharp knives or screwdrivers directly on the surface. The use of a cutting board is always recommended.



# Special Care Considerations Form

## Special Care Considerations for iTouch Finishes



Colorquartz is proud to offer select colors in a iTouch finish.

Please note that iTouch finishes will require more daily maintenance than our polished finishes. Since there is more exposed surface area with these finishes, metal marks, finger prints, and other signs of daily living will be more apparent, especially on darker colors. However, superficial marks like these can be removed with a little effort by using non-abrasive cleaning products such as Soft Scrub® Gel with Bleach Cleanser. Rinse thoroughly with water and dry after using cleaner.

By signing this document, you agree that the properties of these unique finishes have been fully explained to you, and that you understand that more frequent cleaning may be required to keep the product looking new and free of marks. You also understand that while Colorquartz has a Residential Lifetime\* Warranty, this warranty covers failures caused by product defects when the material is installed by a Colorquartz Certified Fabricator. Temporary marks that are common on these finishes are not covered by our Colorquartz warranty.

For additional warranty information, please refer to the Residential Lifetime\* Warranty and Care and Maintenance

NAME OF PURCHASER

NAME OF DEALER/FABRICATOR

SIGNATURE OF PURCHASER

DATE

SIGNATURE OF SALESPERSON

DATE

## LIFETIME RESIDENTIAL WARRANTY

If properly cared for, there should never be a problem with your Colorquartz Surface. Quartz is an extremely hard material and will offer you one of the best solutions for your residential countertop. Please carefully read the terms and conditions of the Colorquartz Residential Warranty.

### Terms and Conditions:

- This warranty program applies to the Original Purchaser of Colorquartz Surfaces. For a single-family home, the original purchaser refers to the Original Owner who has Colorquartz Surfaces permanently installed in his/her residence. If the product was purchased through a builder (for a newly constructed home), the warranty applies to the First Owner of the property who purchased and installed Colorquartz Surfaces in his/her residence. This warranty does not cover any residence where the First Owner is not the occupant.
- This warranty expires upon transfer of ownership of the property to subsequent parties. This warranty is not transferable and does not cover claims made by subsequent owners of your home.
- This warranty applies only to Colorquartz Surfaces which have been permanently installed in an interior application and has not been removed from the original installation area(s).
- This warranty applies only to surfaces which have been maintained according to the Colorquartz Surface Care & Maintenance Guide. This warranty does not cover damage caused by product mishandling, improper care and maintenance, impact damage, heat damage, physical and chemical abuse, and damage resulting from exposing the product to extreme weather conditions. Colorquartz Surface Care & Maintenance Guide is available at [Colorquartz.com](http://Colorquartz.com).
- This warranty covers Colorquartz Surfaces that have been installed by Colorquartz's network of Certified Fabricators and Installers who follow the guidelines and processes set forth in the Colorquartz Fabrication and Installation Manual. It is the sole responsibility of the owner(s) of the residence(s) to ensure that Certified Fabricators and Installers are used for their projects. This warranty does not cover any improper/defective workmanship performed by any fabricator, whether certified or not, who does not follow the requirements set forth in the Colorquartz Fabrication and Installation Manual. Please contact your area distributor(s) to inquire more about Colorquartz's network of Certified Fabricators and Installers.
- Visual inspection of the slabs prior to fabrication is very important. Fabricators are required to perform detailed inspection of the slabs at the time of the purchase and prior to fabrication. This warranty does not cover any product defects that were visible at the time of purchase and/or prior to fabrication.
- This warranty does not cover chips, scratches, color variances, thermal shock, misuse or improper/defective fabrication. Make sure to check your Colorquartz countertops thoroughly at the time of installation. Colorquartz Surfaces are highly resistant to scratches, but they are not scratch proof. No cutting shall be done directly on the surface and a cutting board shall always be used. Proper care and maintenance shall be followed at all times – refer to the Colorquartz Surface Care & Maintenance Guide.

- This warranty does not cover additional modifications or supplemental repairs such as structural changes, plumbing, electrical, cabinets, tiles, etc. that may be necessary to complete the repair or replacement of Colorquartz countertops covered under this warranty. These material and labor costs shall be the responsibility of the customer.
- This warranty only applies to polished finishes. It does not apply to surfaces with honed and textured finishes.
- This warranty does not cover finishes that have been altered from their original Colorquartz factory-applied finish. Any issues arising from the practice of “additional and/or in shop honing” are the sole responsibility of the fabricator who performed the process and/or the owner who purchased the original Colorquartz Surfaces.
- This warranty does not cover any creative adjustment made to the material including bending, curving, thickness reduction, or any other alteration to the original Colorquartz factory material.
- This warranty does not cover any failures due to inadequate support for the installation. This includes overhangs in excess of recommended support guidelines or an unsupported base.
- As Colorquartz slabs contain natural quartz, this warranty does not cover natural variations in the color, size, and pattern movement of the slabs. These characteristics are inherent in the quartz stone. The customer is responsible to perform a visual inspection of the slabs during purchasing to ensure the selected slabs meet his/her specifications. If after or during installation, the customer decides to change colors, edging profiles or finishes, this decision is not covered under this warranty.
- Color samples provided to customers, fabricators, and installers may not match to the actual stone. Colorquartz is made of natural quartz. Variation in color, shade, pattern, and grain size is expected of this natural product. Samples are small pieces cut from a slab; they do not display all the characteristics of the actual slab. Purchases should never be made based on samples alone. We recommend the customer to inspect and approve the actual slabs to ensure the right color is purchased.
- There may be spots and small blemishes in the stone. These are inherent in the manufacturing process and do not affect the structural integrity of the material. This warranty does not cover spots and/or blemishes smaller than 18 mm (0.705 inches) in diameter. The customer, fabricator, and installer should perform a thorough inspection of the slabs during purchasing. This warranty does not cover spots and blemishes smaller than 18 mm (0.705 inches) in diameter discovered later in the finished countertops.
- This warranty does not cover Colorquartz products exposed to outdoor weather and climate conditions, abnormal use or conditions, or abuse in any way. Abnormal use or conditions include, but is not limited to, damage from mishandling or misuse, damage from excessive heat or exposure to weather conditions, exposure to ultraviolet light, physical or chemical abuse, and damage from improper care and maintenance. Do not use products like SOS, oven cleaners, bleach, silver cleaners, tarnish removers, or any other similar products. Do not attempt to seal the product or use any abrasive or harsh scrubbing pads. Never use paint removers, strong alkaline, acid or oxidizing substances and products with pumice.
- This warranty does not cover flooring applications.

- This warranty does not cover seam appearance and seam performance. Seam performance can fail with shifting or movement of the substrate, foundation and cabinets, or from thermal shock. Thermal shock can happen with roasting ovens, heat lamps, crock pots, griddles, electric frying pans, or any source that can create excessive heat.
- Colorquartz is not liable for any loss of direct or indirect, consequential, incidental, punitive, or any other similar damages arising out of the use or inability to use the product in residential applications covered by this warranty. This includes but is not limited to, loss of use, loss of profits, business interruption, and/or any other losses.
- Colorquartz is not responsible for damages or injury caused by acts of God, job site conditions, architectural and engineering changes, structural movement, acts of vandalism, and accidents that occurred at job sites that may cause damage to the material.
- This warranty only applies to products that have been paid for in full.
- In the event of a defect in the product, Colorquartz USA, Inc. has the option to repair or replace the countertops. Upon the completion of inspection, Colorquartz USA, Inc. will decide to either repair or replace the installed surface. If replacement is required, exact color matching cannot be guaranteed. If the color is discontinued at the time of repair/replacement, the customer needs to select an alternative color. This option to repair/replacement does not apply to Final Sales.
- To obtain service under this Residential Warranty, you must contact the entity who sold you Colorquartz slabs within thirty (30) days of the failure of the product. The warranty claim must be filed within thirty (30) days.
- To claim this Residential Warranty, you must provide proof of purchase in the form of a copy of your original invoice or receipt showing the name of the owner who purchased and installed Colorquartz products in his/her residence (First Owner). Without proof of purchase, this warranty is void.
- This Residential Warranty does not cover commercial applications for any use. Commercial use includes, but is not limited to: apartments, rental properties, hotels, offices, or any other place of business. For commercial projects, please refer to the Colorquartz Commercial Warranty.

*All decisions regarding this warranty are to be made by Colorquartz USA, Inc. No distributor, fabricator, installer, or any person is authorized to make any warranty statements and promises regarding Colorquartz surfacing materials. Colorquartz USA, Inc. makes no other warranty, representation or guarantee, express or implied, with respect to its products, except as expressly stated herein.*

## 10-YEAR LIMITED COMMERCIAL WARRANTY

This 10-year warranty applies to Colorquartz Surfaces that have been installed in an interior, commercial use application. Colorquartz USA, Inc. warrants for a period of 10 years that Colorquartz Surfaces will be free from manufacturing defects from the date of the completion of the installation of Colorquartz. This is a product warranty only. Colorquartz USA, Inc.'s obligation under the 10-year warranty covers only the replacement of the failed Colorquartz product in slab form. It does not cover labor to remove, fabricate and/or re-install Colorquartz products, or any other tasks necessary to complete the replacement or removal of the defective material. Commercial property is defined as any location open to the general public for business use, properties for rental or lease, or properties designated as hotels, motels, or other temporary residence applications.

### TERMS AND CONDITIONS

- This warranty is issued to the Original Owner of the commercial property who purchased and installed Colorquartz Surfaces. This warranty expires upon transfer of ownership of the property to subsequent parties. This warranty is not transferable and does not cover claims made by subsequent owners of the commercial properties.
- This warranty applies only to Colorquartz Surfaces which have been permanently installed in an interior, commercial application and has not been removed from the original installation area(s).
- This warranty covers Colorquartz Surfaces that have been installed by Colorquartz's network of Certified Fabricators and Installers. This warranty does not cover any improper and/or defective workmanship performed by fabricators and installers outside of Colorquartz's network. Please contact your area distributor(s) to inquiry more about Colorquartz's network of Certified Fabricators and Installers.
- This warranty applies to surfaces which have been maintained according to the Colorquartz Surface Care & Maintenance Guide. This warranty does not cover damage caused by product mishandling, improper care and maintenance, impact damage, heat damage, physical and chemical abuse, and damage resulting from exposing the product to extreme weather conditions. Colorquartz Surface Care & Maintenance Guide is available at [colorquartz.com](http://colorquartz.com).
- This warranty does not cover chips, scratches, color variances, thermal shock, misuse or improper/defective fabrication. Colorquartz Surfaces are highly resistant to scratches, but they are not scratch proof. No cutting shall be done directly on the surface and a cutting board shall always be used. Proper care and maintenance shall be followed at all times – refer to the Colorquartz Surface Care & Maintenance Guide.
- This warranty does not cover additional modifications or supplemental repairs such as structural changes, plumbing, electrical, cabinets, tiles, etc. that may be necessary to complete the repair or replacement of Colorquartz products covered under this warranty. These materials and labour costs shall be the responsibility of the owner of the commercial property.
- This warranty only applies to polished finishes. It does not apply to surfaces with honed and textured finishes.
- This warranty does not cover finishes that have been altered from their original Colorquartz factory-applied finish. Any issues arising from the practice of "additional and/or in shop honing" are the sole responsibility of the fabricator

who performed the process and/or the owner who purchased the original Colorquartz Surfaces.

- This warranty does not cover any creative adjustment made to the material including bending, curving, thickness reduction, or any other alteration to the original Colorquartz factory material.
- This warranty does not cover any failures due to inadequate support for the installation. This includes overhangs in excess of recommended support guidelines or an unsupported base. As Colorquartz slabs contain natural quartz, this warranty does not cover natural variations in the color, size, and pattern movement of the slabs. These characteristics are inherent in the quartz stone.
- Color samples provided to owner customers, fabricators, and installers may not match to the actual stone. Colorquartz is made of natural quartz. Variation in color, shade, pattern, and grain size is expected of this natural product. Samples are small pieces cut from a slab; they do not display all the characteristics of the actual slab.
- This warranty does not cover Colorquartz products exposed to outdoor weather and climate conditions, abnormal use or conditions, or abuse in any way. Abnormal use or conditions include, but is not limited to, damage from mishandling or misuse, damage from excessive heat or exposure to weather conditions, exposure to ultraviolet light, physical or chemical abuse, and damage from improper care and maintenance. Do not use products like SOS, oven cleaners, bleach, silver cleaners, tarnish removers, or any other similar products. Do not attempt to seal the product or use any abrasive or harsh scrubbing pads. Never use paint removers, strong alkaline, acid or oxidizing substances and products with pumice.
- This warranty does not cover flooring applications.
- This warranty does not cover seam appearance and seam performance. Seam performance can fail with shifting or movement of the substrate, foundation and cabinets, or from thermal shock. Thermal shock can happen with roasting ovens, heat lamps, crock pots, griddles, electric frying pans, or any source that can create excessive heat.
- Colorquartz USA, Inc. sole responsibility and liability under this warranty shall be to replace the failed Colorquartz product in slab form. Colorquartz is not liable for any loss of direct or indirect, consequential, incidental, punitive, or any other similar damages arising out of the use or inability to use the product in commercial applications covered by this warranty. This includes but is not limited to, loss of use, loss of profits, business interruption, and/or any other losses.
- Colorquartz is not responsible for damages or injury caused by acts of God, job site conditions, architectural and engineering changes, structural movement, acts of vandalism, and accidents that occurred at job sites that may cause damage to the material.
- This warranty only applies to products that have been paid for in full.
- In case of product manufacturing defects, exact color matching cannot be guaranteed. If the color is discontinued, the owner customer needs to select an alternative color.
- In order to obtain service under this Commercial Warranty, the owner customer must provide proof of purchase in the form of project contract showing the name of the owner of the commercial property. This warranty is not applicable without proof of original contract.

# Performance: Colorquartz Quartz Surfaces Technical Data

TEST PERFORMED	TEST STANDARD	RESULTS	REMARKS	SGS TEST REPORT
<b>PHYSICAL PROPERTIES</b>				
Moisture absorption	ASTM C97	0.06%	Low absorption means Colorquartz's nonporous finish resists stain and provides endurance power against bacteria development.	No. 654:033873-1
Density	ASTM C97	151.95 lb/ft3 (2.435 g/cm3)	Tested with 3/4" (2cm) thickness. 3/4" Colorquartz = 151.95 lb/ft3.	No. 654:033873-1
<b>DURABILITY</b>				
Mohs Hardness Scale	DIN EN 101	Quartz = 7 Diamond = 10 (highest)	Gemstones and other minerals are ranked according to their Mohs hardness. Mohs hardness refers to a material's ability to resist abrasion or scratch.  Quartz is harder and endures scratch better than any other natural stone.	No. 654:033873-2
Impact Resistance	NEMA LD3 Section 3.8	No fracture	This is a fracture resistance test. A half pound (224g) steel ball dropped from varying heights onto the surface. Developed concentric indentation at 84" drop but no surface fracture.	No. 654:033873-4
High Temperature Resistance	NEMA LD3 Section 3.6	No effect	No change in color or surface finish - no blistering, crazing, whitening, cracking, and delamination when tested at 365 degree Fahrenheit. (180 degree Celsius).	No. 654:033873-4
Cigarette Test	ANSI Z124.6 Section 5.4	Pass	No ignition or glow. Colorquartz resists ignition by cigarettes.	No. 654:033873-10
<b>STRENGTH</b>				
Flexural Strength	ASTM C880	4,382 psi (308.1 kg/cm)	Tested with 3/4" (2cm) thickness. This is a bending strength test. Colorquartz is stronger and withstands bending better than natural stone.	No. 654:033873-3
Compressive Strength	ASTM C170-09	30,400 psi (2,137.8 kg/cm)	This is a compression stress test. High psi indicates Colorquartz's capacity to tolerate heavy load on surface.	No. 2146086-1

**STAIN RESISTANCE**

Stain Resistance	ANSI Z124.6 Section 5.2	No effect	No stain after 16-hour exposure to crayon, shoe polish, ink, gentian violet solution, beet juice, grape juice, lipstick, hair dye, iodine, and wet tea bag.	No. 654:033873-8
Wear and Cleanability	ANSI Z124.6 Section 5.3	Pass	Wear: passed 10,000 scrub cycles. Cleanability: lost 1.1% of light reflectance after 25 cycles.	No. 2146086-2
Resistance to Fungi and Bacteria	ASTM G21	No traces of growth	Colorquartz is inherently resistant to fungi and mold due to its low moisture absorption and nonporous properties.	No. 654:033873-5

**CHEMICAL RESISTANCE**

Resistance to Household Chemical	ANSI Z124.6 Section 5.5	Pass	No visual damage after 16-hour exposure to naptha, ethyl alcohol, ammonia, citric acid, lye (drano), acetone, vinegar, pine oil, phenol (Lysol).	No. 654:033873-11
Resistance to Chemical Substances	ASTM C650	Not affected	This test measures resistance to acid, alkali, and chemical agents. Colorquartz is not affected by majority of acids and hydroxide.	No. 654:033873-6

**SAFETY AND HEALTH**

Surface Burning	ASTM E84	Class A rated	Colorquartz is rated Class A building material by National Fire Protection Association  - Life Safety Code (NFPA) and International Building Code (IBC) Chapter 8 Interior Finishes.	No. 2111997
Volatile Organic Compounds (VOCs)	EPA 5021 method	7.01 mg/kg	VOCs are a large group of carbon-based chemicals, which evaporate at room temperature. Colorquartz test results are within the safe level in VOCs content.	No. CY/2010/A2149
Benzene Toluene Ethylbenzene Xylene(BTEX)	EPA 5021 method	Benzene and Xylene= Not detected  Toluene = 5.45 mg/kg Ethylbenzene = 1.20 mg/kg	Colorquartz is tested to contain none or very low level of BTEX.	No. CY/2010/A2150
Styrene	EPA 5021 method	Not detected	Colorquartz product is safe from Styrene.	No. CY/2010/A2151



# Colorquartz MSDS

Product Name: Colorquartz®

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Colorquartz®

Product Use: Colorquartz® Quartz Surfacing

Company: Colorquartz USA Inc.

Phone Number: 1.929.279.0088

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Material	CAS Number	%
Crystalline Silica and other natural stone	14808-60-7	>85
Cristobalite	14464-46-1	<50
Polymeric resin		7-15
Additives		0-8

## 3. HAZARDS IDENTIFICATION

### Emergency Overview

Information Pertaining to Particular Dangers for Man and Environment: Classification: This preparation is not classified as hazardous according to the latest adaptation of European Union Directives 67/548/EEC and 1995/45/EC.

### Potential Health Effects

Quartz surfaces products are not hazardous as shipped. However, operations such as sawing, grinding, routing, drilling and sanding can generate dust. Inhalation of such dusts, smoke and vapors may cause upper respiratory tract irritation. Symptoms may include burning sensation, coughing, sneezing, and sore throat. Skin contact with dust may produce transitory mechanical irritation. Symptoms may include redness and itching. High concentrations of dusts may cause irritation to the eyes causing burning, redness, and tearing. This product is not expected to be toxic if ingested.

Overexposure to airborne crystalline silica can cause silicosis, a chronic and progressively debilitating disease, characterized by the formation of silica-containing scar tissue in the lungs. Symptoms of silicosis include coughing,

difficulty breathing, wheezing and progressive impairment of lung function. In addition to silicosis, epidemiology studies show limited evidence of an excess of lung cancer in occupations involving exposures to crystalline silica, such as stone cutters and granite industry workers.

Individuals with chronic respiratory disorders may be adversely affected by any fume or airborne particulate matter exposure. Persons with preexisting skin disorders may be more susceptible to the effects of this material.

### Carcinogenicity Information

The following components are listed by IARC, NTP, OSHA or ACGIH as carcinogens.

Material	IARC	NTP	OSHA	ACGIH
Silica, Crystalline (quartz and cristobalite)	I	x	yes	A2

## 4. FIRST AID MEASURES

**Eye Contact:** Flush immediately with copious amounts of water for a minimum of 15 minutes. Seek immediate medical attention.

**Skin Contact:** Wash affected area with soap and plenty of water. Seek medical attention if adverse effect occurs.

**Inhalation:** Remove person to fresh air. If breathing is difficult, or has stopped, administer artificial respiration (mouth-to-mouth) or oxygen as indicated. Call a physician.

**Ingestion:** Product in its marketed form is inert. If large amounts are swallowed, seek medical attention or advice.

## 5. FIRE FIGHTING MEASURES

**Auto Ignition:** Quartz surfaces products can be combusted only with difficulty.

**Fire Spreading Rating:** 5

**Smoke Developed Rating:** 25

**Flash Point:** 490oC

**Flammable Limits in Air (% by Volume):** NA

**Extinguishing Media:** Water, Dry Chemical, CO2 and Foam.

**Special Fire Fighting Procedures:** Keep personnel away and upwind of fire. Use self-contained breathing apparatus with full face mask.

**Unusual Fire and Explosion Hazards:** Decomposition products resulting from the polymer and pigments degrading at elevated temperatures include various hydrocarbons, carbon dioxide, carbon monoxide and water. Fumes of metal oxides and mica particles could also be released.

## 6. ACCIDENTAL RELEASE MEASURES

Cleanup and Disposal of Spill: Solid slabs can simply be gathered and disposed of as necessary. If large amounts of dust or wastes are created by cutting process, vacuum or sweep up material avoiding dust generation or dampen spilled material with water to avoid airborne dust. Wear suitable respiratory protection and protective clothing where necessary. If large quantities of this material enter the waterways contact the Environmental Protection Authority, or local Waste Management Authority. Dispose of waste in accordance with local, state and federal regulations.

## 7. HANDLING AND STORAGE

Handling/Storage: Avoid breathing dust. Wash hands before eating, drinking, smoking, or using toilet facilities. Wash thoroughly after work using soap and water. Good industrial hygiene practices should be followed when handling this material. Product is heavy and breakable; handle with care to avoid injury and prevent damage.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION Exposure Guidelines:

Reference	Substance	Guideline or limit (mg/m <sup>3</sup> )
OSHA (29 CFR 1910.1000- Table Z-3) OSHA Vacated PELs	Respirable crystalline silica: quartz, cristobalite, and tritymite	Total dust, (30 mg/m <sup>3</sup> / % SiO <sub>2</sub> + 2); Respirable dust, (10 mg/m <sup>3</sup> / % SiO <sub>2</sub> + 2) as 8hr TWAs 0.1 mg/m <sup>3</sup> TWA (respirable dust)
ACGIH (2010)	Respirable crystalline silica: quartz, cristobalite, and tritymite	0.025 mg/m <sup>3</sup> (8hr TWA)
NIOSH	Respirable crystalline silica: quartz, cristobalite, and tritymite	0.05 mg/m <sup>3</sup> (8hr TWA)

### Abbreviations:

TWA = time-weighted average, ACGIH = American Conference of Governmental Industrial Hygienists, Inc. OSHA = Occupational Safety and Health Administration, NIOSH = National Institute of Occupational Safety and Health.

**Engineered Controls:** Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the MSDS. General room ventilation is satisfactory under anticipated use conditions. Generally, machinery and tools involving the use of water are required.

### PERSONAL PROTECTIVE EQUIPMENT

**Eye/Face Protection:** If eye contact while using this product may be anticipated, wear appropriate safety glasses with side shields or chemical goggles as described by OSHA's eye and face protection regulations in 29CFR 1910.133 or European Standard EN166.

**Respiratory Protection:** Respiratory equipment approved by NIOSH/MSHA for protection against organic vapors and dusts is necessary to avoid inhalation of excessive air contaminants. The appropriate respirator selection depends on the type and magnitude of exposure (refer to 29 CFR 1910.134 for appropriate NIOSH approved respirators and to the NIOSH Pocket Guide to Chemical Hazards, DHHS (NIOSH) Publication NO. 2001-145 for equipment selection). Use a positive pressure air supplied respirator if there is a potential for an uncontrolled release, exposure levels are not known or under any other circumstances where air purifying respirators may not provide adequate protection.

Skin Protection: During cutting, grinding or sanding operations use body protection appropriate for task including work gloves if handling sharp or rough edges and steel-toed shoes if lifting product.

## PREVENTION

- P260 Do not breathe dust generated in the cutting, grinding and polishing processes.
- P264 Wash face and hands thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P284 Wear respiratory protection for particles (P3).

## FIRST AID MEASURES

- P314 Get medical advice/attention if you feel unwell.
- P501 Dispose of remains in accordance with local regulation.
- R20 Harmful by inhalation.
- R48 Danger of serious damage to health by prolonged exposure.

## HYGIENE

- S22 Do not breathe the dust.
- S38 Use personal protective equipment P3.

*Classification according to directive 1999/45/EC*

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Appearance: Multi-colored engineered stone

Odor: Odorless

pH: NA

Specific Gravity: 2.4

Water Solubility: Insoluble

Flash Point: 490°C

## 10. STABILITY AND REACTIVITY

Chemical Stability: Stable at normal temperatures and storage conditions.

Incompatibility with Other Materials: This product is incompatible with hydrofluoric acid.

Hazardous Decomposition Products: Thermal decomposition can release various hydrocarbons, carbon dioxide, carbon

monoxide

and water. Fumes of metal oxides and mica particles could also be released.

Hazardous Polymerization: Will not occur

## 11. TOXICOLOGICAL INFORMATION

### Acute Effects

Crystalline Silica

Inhalation (human) LCLo: 0.3 mg/m<sub>3</sub>/10Y

Inhalation (human) TCLo: 16 mppcf/8H/17,9Y

Intermittent; focal fibrosis, (pneumoconiosis), cough, dyspnea.

### Chronic Effects

Crystalline Silica

**Silicosis:** caused by the inhalation and retention of respirable crystalline silica dust.

**Carcinogenicity:** The International Agency for Research on Cancer (IARC) concluded that “crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1).” The National Toxicology Program (NTP), in its Ninth Annual Report on Carcinogens, concluded that silica, crystalline (respirable) is “known to be a carcinogen, based on sufficient evidence in experimental animals and in humans.” The U.S. Occupational Safety and Health Administration (OSHA) does regulate crystalline silica (quartz) as a carcinogen. The American Conference of Governmental Industrial Hygienist (ACGIH), noted in the “TLV & BEIs” book, version of 2011, that silica, crystalline (respirable) and cristobalite is A2 (Suspected Human Carcinogen - human data are accepted as adequate in quality but are conflicting or insufficient to classify the agent as a confirmed human carcinogen).

The American Thoracic Society position on the issue of silica carcinogenicity was published in Adverse Effects of Crystalline Silica Exposure, American Journal of Respiratory and Critical Care Medicine, Vol. 155, pp. 761-765 (1997). The official statement concluded that “The available data support the conclusion that silicosis produces increased risk for bronchogenic carcinoma. The cancer risk may also be increased by smoking and other carcinogens in the workplace.”

**Aggravation of Pre-existing Conditions:** Inhalation may increase the progression of tuberculosis; susceptibility is apparently not increased. Persons with impaired respiratory function may be more susceptible to the effects of this substance. Smoking can increase the risk of lung injury.

**Mutagenicity:** No Data

**Reproductive Effects:** No Data

**Developmental Effects:** No Data

## 12. ECOLOGICAL INFORMATION

Toxicity is expected to be low based on insolubility in water.

**Environmental Fate:** ND

**Environmental Toxicity:** ND

**GREENGUARD Certification:** Colorquartz is compliant with GREENGUARD standard.

Quartz (14808-60-7)

**Environmental Fate:** No information found

**Environmental Toxicity:** No information found

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Preferred options for disposal are (1) recycling, (2) incineration with energy recovery, and (3) landfill. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of in accordance with federal, state and local requirements.

## 14. TRANSPORTATION INFORMATION

ADR/RID/IMO/ICAO/US DOT	Proper Shipping Name	Not Regulated
	Hazard Class	Not Regulated
	ID Number	Not Regulated
	Packaging Group	Not Regulated

## 15. REGULATORY INFORMATION

*U.S. Federal Regulations: SARA Title III Hazard Classes: Fire Hazard: No*

*Reactive Hazard: No*

*Release of Pressure: No Acute Health Hazard: No Chronic Health Hazard: Yes*

**TSCA:** *All components of this product are on the TSCA inventory or are exempt from TSCA Inventory requirements*

**U.S. State Regulations:** *California Prop 65 List: Crystalline silica is classified as a substance known to the state of California to be a carcinogen.*

## 16. OTHER INFORMATION

### National Fire Protection Association NFPA(R) and Hazardous Materials Identification

#### System (HMIS) Hazard Ratings:

*Health Hazard: 1*

*Flammability: 0*

*Reactivity: 0*

#### Key Legend Information:

*NA – Not Applicable*

*ACGIH – American Conference of Governmental Industrial Hygienists*

*IARC – International Agency for Research on Cancer*

*PEL – Permissible Exposure Limit*

*STEL – Short Term Exposure Limit*

*TLV – Threshold Limit Value*

*ND – Not Determined*

*OSHA – Occupational Safety and Health Administration*

*IDLH – Immediately Dangerous to Life and Health*

*TWA – Time Weighted Average*

*NTP – National Toxicology Program*

The information contained herein is based on the data available to us and is believed to be correct. However, Colorquartz makes no warranties, expressed or implied, regarding the accuracy of these data or the results to be obtained from the use thereof. Check with Colorquartz before using or supplying this product for other applications, different to those previously stated. In addition, the contents of this Safety Data Sheet must not be interpreted as a recommendation to use any product in violation of the laws, safety practices or patents in force on any material or its use. It is the responsibility of the recipient of our product to check the corresponding rules and regulations. Under no circumstances does the data contained in this Safety Data Sheet constitute a guarantee of specific properties or create any contractual relationship. This Safety Data Sheet (MSDS) is according to the CLP Regulation, (EC) No 1272/2008. For further information follow the instructions in the *Respirable Crystalline Silica – Health Hazards & Protection Guide* published by the manufacturer. Further information is available at [www.nepsi.eu](http://www.nepsi.eu) and in the *Guide to Good Practice for the Agreement on Workers' Health Protection Through the Good Handling and Use of Crystalline Silica and Products Containing It*.

