

# ALLEANZA® QUARTZ



Fabricator Technical Specifications (SOP)

## **INTRODUCTION**

- Alleanza Quartz is manufactured with high quality natural quartz stone, high performance polymer resin binders, and proprietary coloring agents that are homogeneous, with uniform color throughout their thickness.
- Alleanza Quartz Surfaces are designed for interior use only, ideal for residential and commercial applications.
   Alleanza Quartz is a solid, non-porous, highly durable surface and resistant to scratching, staining, and water absorption and is virtually maintenance free.
- Safety is a critical concern for any shop and key to a successful business. The following safety rules should be incorporated into your safety program to help prevent an accident. Safety training, knowledge, product use and environment are the responsibility of the facility owner and the shop employees.
- Alleanza Quartz is not responsible for any errors, damages, or failure to comply with the information contained
  in this manual. Under no circumstance should the author be liable for any damage or loss of revenue caused or
  allegedly caused because of any persons following the recommendations of this manual.
- All work followed through by any user of this manual on any Alleanza Quartz slab must be completed while
  under regulations of the law relating to the use of the slab, including but not limited to, occupational health,
  safety laws, and laws relating to the protection of the environment.

### **FACT SHEET**

- Common uses for Alleanza Quartz slabs are counter-tops, bar-tops, vanities, interior cladding, and furniture pieces. Alleanza Quartz is available in sizes suitable for kitchen counters or vanities.
- Slab sizes vary in each of our collections, please contact your sales representative for more information.
- Normal thickness options of 3/4" (2cm +/- 1.5mm) or 1 1/4" (3cm +/- 1.5mm). Some slabs are available in 1/2" (1.3cm) thickness. Not all colors are available in all thicknesses.
- In order to use the gray area of the slab you must inspect to ensure there is no damage due to transportation or other visible defects.



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

## HANDLING AND STORAGE OF ALLEANZA QUARTZ SLABS

- It is best to unload the shipment of slabs from a container with a forklift or other lifting device capable of withstanding at least 2,000 lbs (900kg)
- At most, slabs should be handled in multiples of two while using the clamp or sling back and should be lifted with the slabs face to face. For better grip, clasp the grip while face to face on the backside.
- Warning: keep a safe distance when handling/lifting the slabs.
- To prevent warping, slabs must be stored in a certain manner. Use at least two support beams at a 15 degree angle from the vertical, measuring a height of 50" (1,300mm), and at distance of 70" (1,800mm) apart.
- Slabs should be perfectly stored to minimize warping. There must be care when storing Alleanza Quartz slabs so it allows for identification of color and batch numbers.
- Temperatures of storage space should not exceed 129 degrees Fahrenheit.





#### CRYSTALLINE SILICA HEALTH HAZARDS AND PROTECTION GUIDE

- As finished and polished products, our slabs do not pose any hazard or health risk when being transported or
  used by a customer as a finished product. The fabrication process does however, present a hazard called
  crystalline silicosis. There is approximately 90% silica in Alleanza Quartz slabs (there is silica present in all quartz
  and granite slabs) which requires the fabrication process to be done a certain way with precautions to ensure
  safety.
- The safety recommendations in this guide are intended for employers and employees who fabricate Alleanza Quartz slabs to help control the amount of silicosis they get exposed to.
- During the fabrication process, when there is cutting, sawing, grinding, braking, crushing, drilling, sanding, and sculpting, there is a high risk of being exposed to the silica dust produced off the quartz slab which is the cause of crystalline silicosis.
- The lungs take in air which extract oxygen and release carbon dioxide, anything that interrupts this process can
  be life- threatening. Silica dust particles can damage the lung tissue and to protect from the particles the body's
  defenses isolate them into the scar tissue. When this happens, the lungs can build up too much excess scar
  tissue which will decrease lung capacity and makes breathing difficult. As the buildup of scar tissue continues,
  the lungs can no longer function properly.
- Unprotected and uncontrolled exposure to crystalline silicosis dust particles is dangerous to health and may
  cause silicosis. Silicosis is an incurable disease which can be fatal. Silicosis can lead to other health issues such as,
  lung cancer, tuberculosis, and autoimmune disease. Having some present health issues may speed the adverse
  effects of silica dust.
- Silicosis is a disease that effects people who work in the stone industry if they fabricate marble, granite, quartz, and other natural stones without following safety procedures. This disease affects the fabricator and anyone present for the fabrication process, not the customer who has a polished and finished slab installed in their home.
- PROPOSITION 65 WARNING: Quartz surfaces, including Alleanza Quartz, contain crystalline silica, a material known to the State of California to cause cancer.
- Silicosis and other diseases associated with quartz slabs can be reduced and controlled by following the recommended and required safety precautions. Some measures include working with wet tools, engineering controls, ventilation and filter systems, respiratory protective equipment, and training programs.
- We recommend that a silica control program be implemented in the workplace to reduce and control disease
  associated with silica dust and to be in accordance with all applicable laws, regulations, orders, and directives.
  This program should be reviewed frequently to remain up to date with all regulations.
- The fabrication work place should be restricted to employees only. The employer is responsible for providing the
  education and safety measures for protecting against exposure to silica dust. The employees are responsible for
  following and understanding the steps needed to be safe. A work place can be a healthy environment if
  everyone follows the safety local and state guidelines.
- The best protection is to avoid exposure to silica dust so using wet fabrication techniques will reduce the dust produced.
- Clean and maintain drainage systems.

- Work with electrical systems designed by professionals.
- Control and maintain all water systems in perfect working order.
- Wet hosing rather than compressed air should be used for cleanup and in no circumstances, should dust be swept with a broom.

#### RECOMMENDATIONS ON PROPER VENTILATION

- Ensure that the workplace (including the fabrication facilities, as well as the offices within the same building) have complete and effective ventilation.
- For local exhaust ventilation, dust extraction, and pollution control equipment, work only with proper ventilation suppliers who employ qualified engineers for project execution.
- Operate local exhaust ventilation at the dust source to capture the dust.
- Connect local exhaust ventilation to a dust extraction unit such as a bag filter/cyclone.
- 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 malfunction.
- Maintain local exhaust ventilation in good working order as per the supplier's instruction.
- Position the work area as far away as possible from doors, windows, and passages to stop wind and draft from spreading the dust and hindering local exhaust ventilation.
- 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 per supplier's suggestions.
- Consult your local law for the regulations and laws in your area about the Permissible Exposure Limit (PEL) and/or Threshold Limit Value (TLV) limits for exposure level respirable silica dust.
- Regularly check to ensure dust intake, filtration, and expulsion systems are always functioning properly. Make sure that polluted air and settled dust cannot disperse while cleaning areas.
- In areas with silica dust, display a "hazardous dust sign."
- Execute risk assessments to determine if dust controls are efficient.
- Work with experts to create dust monitoring systems and consult with hygiene professionals regarding dust sampling.
- Ensure that all dust extraction emissions comply with environmental laws.

- Keep complete records of all dust monitoring and implementing a quality system accordingly.
- Strongly enforce rules that all employees must wear protective respiratory equipment when in areas of exposure. Convey to employees the importance of setting a good example of practicing safety in the work place.
- Alleanza Quartz suggests you consult with industrial hygienist and other important experts in proving the
  recommendations of this manual, such as creating dust monitoring systems, dust extraction, and selection of
  wall tiles and flooring.
- Personal Protective Equipment (PPE) is required in workplaces that are at risk of crystalline silicosis. This should be marked with proper signage.
- PPE should comply with your local requirements; Should be manufactured per health and safety standards as well as used and replaced per the manufacturer's instructions.
- Respirator protection against silica dust should be P3 classification.
- Operators with facial hair should work with air respirators or other suitable alternatives since facial hair can lessen the effectiveness of a dust mask.

## PRE INSPECTION OF ALLEANZA QUARTZ SLABS

- Once slabs are received and prior to cutting, the protective plastic has to be removed to properly and fully
  inspect each slab. If the plastic has not been removed prior to cutting this will void the warranty.
- The backside of the slab needs to be looked at as well to check for any issues. If any issues are found while pre inspecting, please take a photo and forward to your sales representative before cutting.
- Quartz slabs are factory made with natural material and therefore may contain variation accordingly. Each quartz slab has unique elements and characteristics and therefore should be inspected fully prior to cutting. For multiple slab requirements please inspect each slab for proper layout, shading, and seaming prior to cutting.
- When laying out slabs with veining, multiple seams, etc, take into consideration that these will not be book
  matched perfectly and it is up to the certified fabricator to make sure everything flows within the layout. If
  proper layout cannot be achieved, please contact your sales representative.
- Foreign material, surface voids, color blotches, and other material concerns need to be reported to your sales
  representative prior to cutting. Alleanza Quartz will only receive slabs back that have not been cut or altered
  from their original state.
- We recognize that it is difficult to reproduce high quality "shop" lighting while on location at a homeowners
  residence or commercial site. Therefore, pre- inspection of Alleanza Quartz slab prior to installation is
  paramount.
- If there are issues or concerns with your slab, please reach out to your sales representative with the following: purchase order, design and photos showing the exact concern(s) with a size reference marked next to it (i.e. pen tip, penny, tape measure). This will help ensure a quick response and the appropriate resolution from our team to help our certified fabricators.
- Alleanza Quartz slabs should always be stored inside, and prior to cutting, acclimated to room temperature. If
  Alleanza Quartz slabs are stored outside, they will need to be completely covered with a tarp as to not be
  damaged by direct UV light.
- Claims for Alleanza Quartz warranty inspection must be submitted with the following information: invoice
  containing batch #, slab number(s), product design, fabricator, installation date, homeowner information,
  photos showing the areas of concern. Fabricator must be on site with an Alleanza Quartz representative to
  resolve the claim.
- We highly recommend to our fabricators that they provide homeowners the opportunity to view and approve slab(s) and layouts. We require when fabricating our textured finish designs that homeowners are shown and the expectations are set that these design characteristics will vary in texture and tonality where the seams meet.

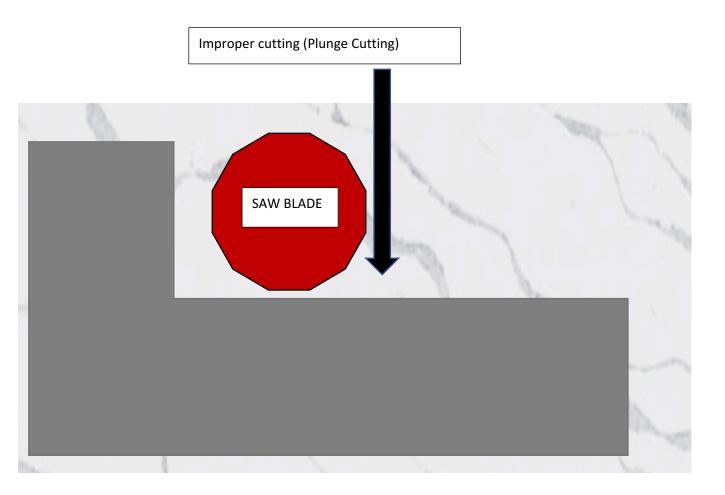
## **FABRICATION TIPS**

- We recommend the following cutting procedures to reduce the potential for slab cracking when cutting with a bridge saw, combo bridge saw/water jet, or water jet.
- All Equipment manufacturers should be contacted for proper operating specifications.
- PLUNGE CUTTING (dropping the blade directly down and into the slab) is not a proper cutting practice and needs to be avoided as it places large amounts of stress on the slab and can contribute to a slab cracking during cutting. Plunge cutting as a first cut is not allowed, and this will void the warranty.
- Relief cuts have to be made before cutting the perimeter. Minimum relief cuts of 1 per quadrant are necessary based on countertop/slab layout. Additional relief cuts are needed as the layout allows. Relief cuts should be 12"- 20" in length.
- Always cut with the saw blade/water jet off of the slab, working from the outside perimeter of the slab to the
  inside. Saw blades must be sharpened, in good condition, and be operated at the proper manufacturers setting
  for rpm's, feed rates, etc.
- Straight line cutting clear across the slab without a connecting relief cut (12"-20") is not recommended and can contribute to the slab cracking. If this is done, it will void the warranty.
- Cutting bed/ table must support the material during the cutting process.
- The slab has to be supported and on the same plane during cutting.
- Slabs must be fully acclimated to room temperature before cutting to reduce the risk of thermal shock.
- Cutting blade must be lowered at least 1/16" below bottom of slab before performing cuts (off of the slab).



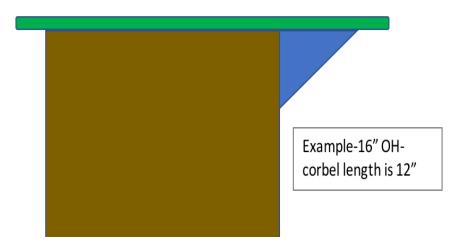
Common straight line cutting procedure CUT 2 CUT 1 12"-20" Preliminary relief cuts (1 per quadrant)

- All sink cut outs, cooktops, etc being cut on a bridge saw, bridge saw/water jet combo or water jet need to be cut after all individual pieces have been cut.
- We require that there is at least a 1/4" radius on all sink cut outs, cooktop cutouts, and inside corners. Please note this when using a water jet when finishing the inside geometry of cutouts on the cutting bed.
- Cutting smaller pieces first allows for less movement of the larger pieces and decreases the internal stress of the slab and reduces slab cracking.
- A constant flow of water with the nozzles pointing directly at the blade must always be maintained for proper cutting procedures.



## **INSTALLATION REQUIREMENTS**

- We recommend the use of 2cm and 3cm Alleanza Quartz for counter top surfaces.
- A minimum of ¼" radius is required on all cutouts and inside corners. Square corners add stress and contribute to cracks.
- Cabinets can not be out of level more than 1/8" for every 8 feet.
- Particle board is never to be used as a substrate.
- Expansion gaps between installed Alleanza Quartz slab and walls must be a minimum of 1/16" and no greater than 1/8" to allow for expansion.
- Vertical Support of load bearing structure must be a minimum of 3" to the left and right of cutouts (cooktops, etc) in order to support the material.
- Alleanza Quartz material must be supported vertically (load bearing structure) every 36" left to right, and every 24" front to back. Alleanza Quartz material must make direct contact with the vertical gables (load bearing structure). if it does not, once installed, place shims underneath to shore up any support issue and gaps to maintain the above mentioned requirements. Never shim in free space, only shim on a load bearing structure (vertical gables, structural steel).
- Lazy Susan cabinets are typically not supported well and proper support has to be maintained for a successful installation. We require prior to installation the 36" and 24" support guidelines are adhered to. Any measurements not supporting the Alleanza Quartz material fully will void the warranty.
- For overhang installations, we require Alleanza Quartz material be supported fully by a 4 sided cabinet structure. With this, 2/3 of the material has to be supported fully while 1/3 of the product can overhang. We require any overhang in excess of 12" (3cm) and 10" (2cm) be supported with the use of corbels or steel brackets. The corbels or steel brackets must be mounted to a load bearing structure. The length of the support structure( corbel or bracket) must extend ¼ the length of the overhang (ex. 16" OH, corbels or bracket must extend 12"). The corbels or brackets must be placed at a minimum of 36" to provide proper vertical support.



- Secure the countertop to cabinet or support structure with a perimeter bead of 100% silicone only. Never use a non-flexible adhesive when securing top.
- Materials that are acceptable substrates: wood, plywood, structural steel, MDF board.
- Seams should be dry fit in the fabrication shop to ensure proper fit, thickness, flow of design elements, and vein match. Seam width is to be no greater than 1/16". Seam height is to be no greater than 1/16". Vertical support at seams or directly adjacent to them is highly recommended. Seams are not recommended over a dishwasher and should be placed a minimum of 2" to the immediate left or right of them (vibration and constant heat can cause seam failure). The use of seam setters is highly recommended for tight and level seams. Seams should be scored prior to applying adhesive. This is done to create a stronger bond, and to reduce seam failure in the future.
- Take care when scraping and cleaning up seams as working in an area for a prolonged amount of time on any product can cause damage. Seam failure and seam adhesive color match are not a product related issue, and we expect certified fabricators to install Alleanza Quartz properly. When cleaning up seams we highly recommended the use of denatured alcohol over acetone, as acetone can potentially damage the product. Seams need to be dry, unpolished, cleaned and level before applying adhesive. Seams should not be placed on an overhang on an island or peninsula.
- Wet polishing, wet grinding, and wet cutting has to be maintained at all times. All OSHA guidelines must be followed when fabricating Alleanza Quartz material.

#### **CLEANING AND MAINTENANCE**

- Acetone is not a recommended cleaner and can halo or damage the AQ material. We recommend denatured
  alcohol for use in a fabrication environment. The use of harsh and abrasive chemicals such as oven cleaners,
  bleach, and the like can damage the AQ surface.
- Alleanza Quartz material is stain resistant and requires routine cleaning.
- Alleanza Quartz material is only to be installed indoors. Outdoor kitchens will void the warranty.
- Alleanza Quartz requires no surface polishing or sealing. Topical treatments, such as sealers or penetrants, can damage the surface and void the warranty. This includes honing or changing the surface of Alleanza Quartz slab.
- For everyday cleaning of your countertop, warm water and Dawn dishwashing liquid is recommended. Apply with a microfiber cloth and then rinse clean with warm water.
- For stubborn stains we recommend Simple Green concentrate at a dilution rate of 50% (water). Allow the mixture to sit on the surface for 5 minutes, wipe up with a paper towel and then flush with water to remove any residue.
- For any residue buildup on countertop, we recommend using a plastic scraper to gently remove the build-up.
   Dawn dishwashing liquid with warm water and a microfiber cloth should be used to clean the area after removal.
- For Alleanza Quartz textured finishes (i.e.Tuscan and Citta), we recommend warm water with Dawn dishwashing liquid and a microfiber cloth. Rinse with water to clean. For more stubborn stains (i.e. finger prints, oils), we recommend using denatured alcohol applied directly on a paper towel to wipe the area clean.
- A 50% mix of distilled white vinegar and water can be used to treat hard water buildup around faucet/sinks. This mixture will also help with stubborn stains on the Alleanza Quartz textured surfaces.
- Wiping up spills as quickly as possible will help mitigate most issues.
- When cutting on your Alleanza Quartz countertop be sure to use a cutting board to avoid possible damage.
- Alleanza Quartz can be damaged by excessive heat. Slow cookers, griddles, and the like have to be used with a trivet or closed weaved hot pad underneath to reduce the risk of thermal shock.



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