— FABRICATION & INSTALLATION MANUAL

For *fabricators,* *installers & trade.*

This manual outlines professional fabrication and installation guidelines for **Viana Quartz** and **Viana Sintered Stone** slabs. These guidelines apply to all qualified stone fabricators and installers. Adherence to these procedures is required to maintain the Viana product warranty and ensure long-term performance for the end customer.

Note: This document assumes familiarity with standard stone fabrication practices, safety protocols, and shop equipment. All work must comply with local codes and OSHA / HSE requirements. Always refer to the product-specific Safety Data Sheet for health and safety considerations, particularly regarding respirable crystalline silica exposure during fabrication.

— 01 · RECEIVING & STORAGE

On delivery.

Inspect each slab on delivery for transit damage — chips, cracks, or surface defects. Document any damage with photographs before signing the delivery receipt. Contact Viana within 48 hours for any damage claim.

Storage requirements:

— Store slabs vertically on A-frames or approved slab racks

— Maintain slab spacing of at least 2 inches between slabs using rubber or foam spacers

— Store indoors or under weatherproof cover — protect from prolonged direct UV and precipitation

— Keep storage area clean and free of dust, debris, and chemical contamination

— Never stack slabs horizontally — risk of cracking from weight load

— Temperature range: 50°F to 95°F (10°C to 35°C) for optimal handling

— 02 · HANDLING & LIFTING

Safe slab movement.

Viana slabs are heavy — a full 127 × 63 inch slab in 20mm weighs approximately 400–700 pounds depending on material. Proper lifting equipment is essential for safety and slab integrity.

Required handling equipment:

— Vacuum lifters rated for the specific slab weight and dimensions

— Forklift or crane for larger slabs with appropriate slab clamps

— Minimum 2 qualified personnel for any manual handling

— Steel-toed safety boots, cut-resistant gloves, safety glasses

— Hard hat when working under suspended loads

Transport slabs vertically, never flat. Flat transport greatly increases risk of cracking under dynamic loads.

— 03 · CUTTING & FABRICATION

Required tooling & technique.

All cutting, profiling, and drilling of Viana slabs must be performed using **diamond-edge wet tooling**. Dry cutting is strictly prohibited due to both material damage and respirable crystalline silica exposure.

Recommended tooling:

Straight cuts	Bridge saw with diamond blade rated for engineered stone / porcelain, wet cut only
Curved cuts & shapes	CNC router or waterjet with diamond tooling
Edge profiling	CNC router with profile-specific diamond bits
Sink & faucet holes	Diamond core bits, wet cut, pre-drill pilot hole
Mitered edges	CNC router with 45° profile, dry-fit before bonding
Surface polishing	Diamond polishing pads, grits progressing from 50 to 3000

Critical cutting guidelines:

— Always use a continuous water supply during cutting — prevents overheating and silica dust

— Reduce feed rate for hard materials (Viana Sintered Stone at Mohs 8 requires slower cuts than Viana Quartz)

— Support the slab fully during cutting — avoid stress fractures from unsupported ends

— Use a sacrificial backing material for intricate cuts to prevent chipping on the exit side

— Always pre-drill a pilot hole before any cutout — never start a cut with a diamond blade on an interior point

— For corner cutouts (e.g., sinks): use a minimum 10mm radius — sharp internal corners are stress risers and will crack

— 04 · EDGE PROFILES

Standard edges.

Viana supports a range of edge profiles. Selection depends on the design aesthetic and the thickness of the slab.

Eased edge	Clean 90° corner with slight radius — contemporary standard. Recommended for all thicknesses.
Straight edge	Full 90° corner. Used for minimal modern designs — typically 30mm slab.

Mitered edge	Two pieces joined at 45° to create built-up visual thickness. Popular for 3cm→6cm visual depth.
Bullnose / half-bullnose	Traditional rounded edge. More common with quartz than sintered stone.
Ogee	Decorative S-curve profile. Rare with modern designs; available on request.

— 05 · SEAMING

Joining slabs.

Seams are joined with **color-matched epoxy adhesive** formulated for engineered stone. Proper seaming is critical — poor seams are the most common installation failure.

Seaming procedure:

— Dry-fit both slab edges to ensure they meet cleanly with no gap

— Clean both edges with isopropyl alcohol to remove dust, oils, and residue

— Apply color-matched epoxy to both edges evenly

— Bring slabs together under consistent pressure using seam pullers or clamps

— Maintain pressure until epoxy fully cures (typically 20–40 minutes; check manufacturer)

— Remove excess epoxy with a razor scraper while still soft — never grind after full cure

— Polish the seam lightly to match the surrounding surface finish

Seam placement guidelines:

— Place seams away from heat sources (cooktops, ovens) when possible

— For bookmatched slabs, align veining carefully — test the match before bonding

— Avoid seams directly adjacent to cutouts (minimum 6 inches from sink, cooktop, or other penetrations)

— Target seam width: less than 1/16 inch (1.5mm) for a professional-quality join

— 06 · INSTALLATION ON CABINETS

Support & leveling.

Before installation, confirm:

— Cabinets are level across the entire run (tolerance: 1/8 inch over 10 feet)

— Cabinet boxes are structurally sound and plumbed properly

— Any shimming required is completed before slab placement

— Electrical, plumbing, and gas rough-in is complete and verified

— Subfloor and cabinet installation is documented by the general contractor

Overhang support requirements:

20mm (¾") — Quartz / Sintered	Unsupported overhang: up to 10" (254mm)
30mm (1¼") — Quartz / Sintered	Unsupported overhang: up to 14" (356mm)
Beyond 14 inches	Requires steel brackets, corbels, or knee-wall support — engineered per load

Waterfall edges	Bond with epoxy at miter; support vertical panel along full cabinet edge

Adhering slabs to cabinets:

— Use 100% silicone adhesive — continuous beads on cabinet tops along all edges

— Never use construction adhesive (PL400, Liquid Nails) — can discolor or damage the slab

— Place the slab, check level in both directions, adjust before silicone cures

— Do not over-fasten — silicone allows minor thermal expansion/contraction

— 07 · FINAL INSPECTION & HANDOFF

Before client walkthrough.

Complete pre-handoff inspection:

— Verify all seams are tight, polished, and color-matched

— Check all edges for chips, cracks, or tool marks — touch up as needed

— Confirm faucet, sink, and cooktop openings are clean with smooth edges

— Seal perimeter gaps with color-matched silicone (between backsplash and countertop, countertop and walls)

— Clean the entire surface with soap and water — remove all installation residue

— Apply first-use protective wax or polish only if specifically requested by customer (generally not recommended)

Customer handoff:

— Provide the customer with the Viana Care & Maintenance Guide

— Demonstrate basic cleaning (soap and water only)

— Review what NOT to use (abrasives, strong chemicals, sealers)

— Confirm warranty activation — provide warranty documentation

— Record final installation photos for your records and for Viana warranty validation

— 08 · SAFETY REQUIREMENTS

Shop & job-site protocols.

Respirable crystalline silica (RCS) is generated during any dry cutting, grinding, or polishing of engineered stone. RCS exposure is a serious occupational health hazard. Compliance with OSHA Standard 29 CFR 1926.1153 (construction) or 29 CFR 1910.1053 (general industry) is mandatory.

Required controls:

— **Always wet-cut** — dry cutting is prohibited in most jurisdictions and voids the Viana warranty

— Continuous water suppression during all cutting and grinding operations

— Local exhaust ventilation (LEV) at all fabrication stations

— NIOSH-approved respirators (minimum N95, often P100) as required by exposure assessment

— Written exposure control plan on file, reviewed annually

— Medical surveillance and respiratory fit testing for all affected workers

— Shop cleaning protocols that prevent dry accumulation of silica dust

Refer to the product-specific Safety Data Sheet for complete hazard information.

— 09 · WARRANTY & SUPPORT

Viana's 15-year comprehensive warranty is conditional on installation by a qualified fabricator following the procedures in this manual. Improper fabrication, improper handling, or non-approved adhesives void the warranty. For technical questions, fabricator certification, or project support, contact Viana Surfaces directly at **vianasurfaces.com**.