



GFO STONE

FABRICATION & INSTALLATION GUIDE

Quartz & Engineered Stone Surfaces

FOR PROFESSIONAL FABRICATORS, CONTRACTORS & STONE PROFESSIONALS

General guidance for the inspection, handling, fabrication, transportation, and installation of GFO Stone, quartz, and engineered stone surfaces.

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1. Purpose and Scope

GFO Stone supplies natural and engineered stone slabs for professional fabrication and installation. This guide is intended to help qualified fabricators and installers plan, process, transport, and install quartz and engineered stone surfaces while reducing avoidable cracking, chipping, stress, and installation-related damage.

- This guide is general and does not replace product-specific technical instructions.
- Product-specific requirements, current technical bulletins, applicable codes and tool/adhesive manufacturer instructions take precedence.
- The fabricator and installer must verify the suitability of the selected material for the intended application.

2. Important Responsibilities

Successful results depend on proper inspection, fabrication, support and installation. GFO Stone is a supplier and distributor; it does not fabricate, cut or install countertops.

- Inspect slabs before fabrication for color, pattern, finish, thickness and visible condition.
- Verify dimensions, cabinet conditions, cutout locations, seam locations and edge details.
- Use trained personnel and properly maintained equipment.
- Use fabrication methods, abrasives, adhesives and tooling suitable for the material.
- Provide appropriate reinforcement and structural support.
- Protect finished pieces during transportation and installation.

3. Slab Inspection & Project Planning

Do not begin cutting until the slab and project layout have been reviewed and accepted.

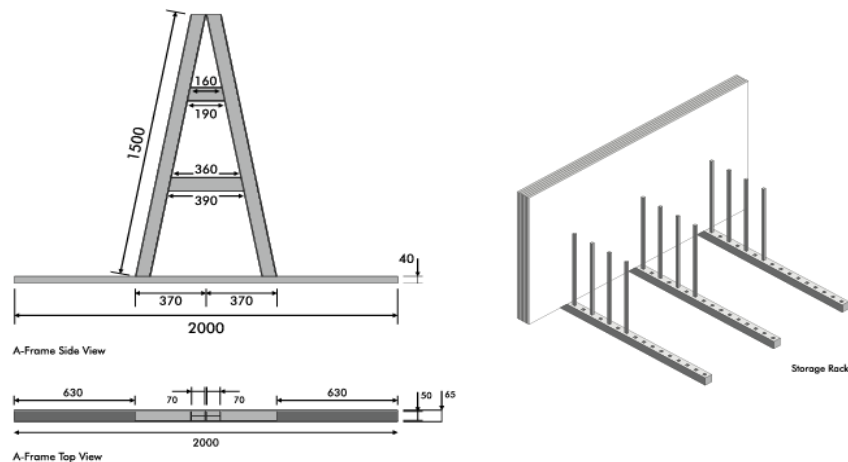
- Inspect slabs under adequate lighting and from multiple viewing angles.
- Verify product identification, thickness, finish, and batch/lot information where available.
- Compare multiple slabs for shade and pattern consistency.
- Plan directional veining, pattern flow, and visual focal areas before cutting.
- Check for warpage and ensure the slab can be properly supported on the cutting table.
- Confirm final dimensions, seams, sink/cooktop positions, edge profiles, and backsplash requirements.
- Do not fabricate material that has not been inspected and approved.



4. Handling, Storage & Transportation

Large slabs and finished pieces are heavy and can be fragile. Use equipment rated for the load and trained personnel for movement.

- Use suitable forklifts, cranes, clamps, vacuum equipment, or other rated lifting systems as appropriate.
- Keep slabs secured during movement and stay clear of potential fall zones.
- Store slabs on a properly engineered A-frame or slab rack designed for the load.
- Support slabs adequately to minimize bending and movement.
- Secure slabs against sliding or tipping.
- Transport finished pieces vertically on a properly secured A-frame whenever practical.
- Use padded protection between finished surfaces and supports.
- Secure tie-downs without applying excessive pressure to fragile sections and cutouts.



All dimensions are in millimeters (mm)

5. Health & Safety

Stone fabrication can generate respirable dust. Follow applicable OSHA requirements, workplace exposure assessments, current SDS information, and local regulations.

- Use wet cutting, grinding, and polishing methods where appropriate.
- Use effective local exhaust ventilation and other engineering controls where required.
- Do not dry cut, dry grind or dry polish where hazardous airborne dust may be generated.
- Wear suitable eye protection, hearing protection, gloves, protective clothing and safety footwear.
- Use respiratory protection when required by the applicable respiratory protection program.
- Keep work areas clean using methods that do not re-aerosolize settled dust.
- Follow all safety instructions for tools, abrasives, adhesives and chemicals.
- For more information, please visit: www.gfostone.com/safety



6. General Fabrication Principles

Proper support, cooling, tooling and stress control are essential to reliable fabrication.

- Use a flat, stable cutting table that supports the slab throughout processing.
- Use tooling designed or recommended for engineered stone and keep it in good condition.
- Use continuous water flow during wet cutting, drilling, grinding, and polishing as appropriate.
- Avoid excessive heat buildup during processing.
- Use rounded internal corners rather than sharp stress-concentrating corners.
- Keep bonding surfaces clean and free from dust and debris.
- Use flexible bonding materials where required by the application.
- Do not unnecessarily alter the factory finish.

7. Cutting & Machining

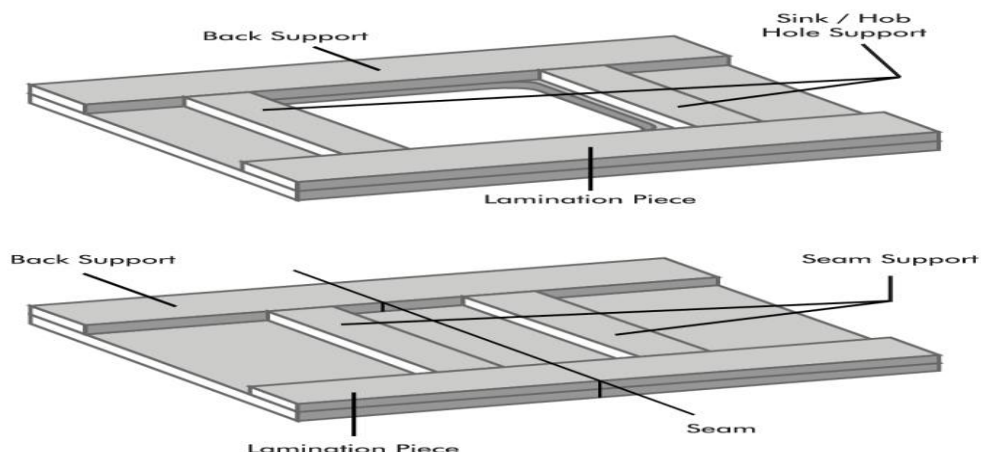
Controlled cutting practices reduce chipping, overheating and stress.

- Use a controlled feed rate appropriate for the blade, equipment and material.
- Do not force the blade or use worn, damaged or improperly maintained tooling.
- Provide adequate cooling and water flow for wet cutting.
- Support the slab on all areas affected by cutting.
- Inspect cuts for chips, cracks and other damage before continuing.
- Where practical, fabricate L-shaped countertop assemblies as separate pieces joined with a properly supported seam.

8. Sink, Cooktop & Appliance Cutouts

Cutouts are stress-sensitive areas and require careful planning and support.

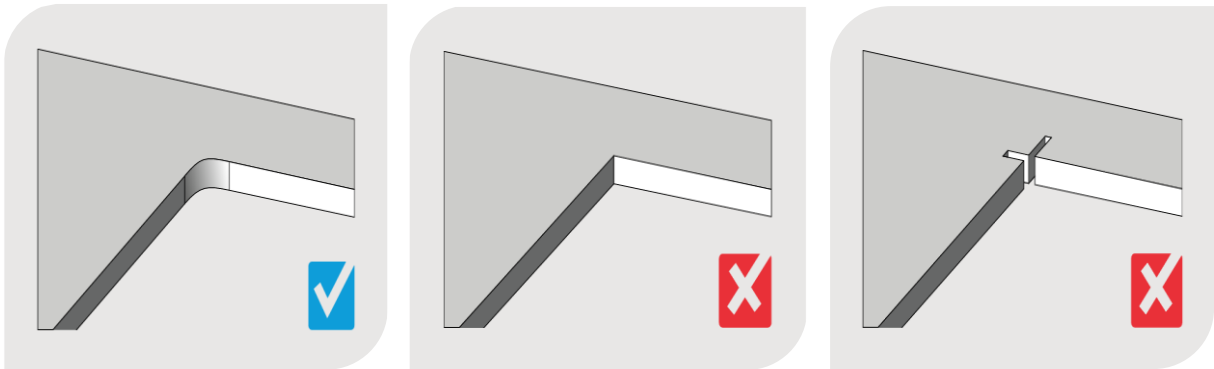
- Verify exact dimensions from the appliance or sink manufacturer's current template.
- Drill corner radii before connecting the cuts.
- Do not overcut beyond the drilled corner.
- Provide full support around cutouts and reinforcement where required.
- Maintain adequate material between cutouts and between a cutout and slab edge.
- Avoid locating seams immediately adjacent to cutouts whenever practical.
- Provide appliance clearances and heat protection required by the appliance manufacturer.



9. Corners, Openings & Radii

Rounded internal corners distribute stress more effectively than sharp 90-degree intersections.

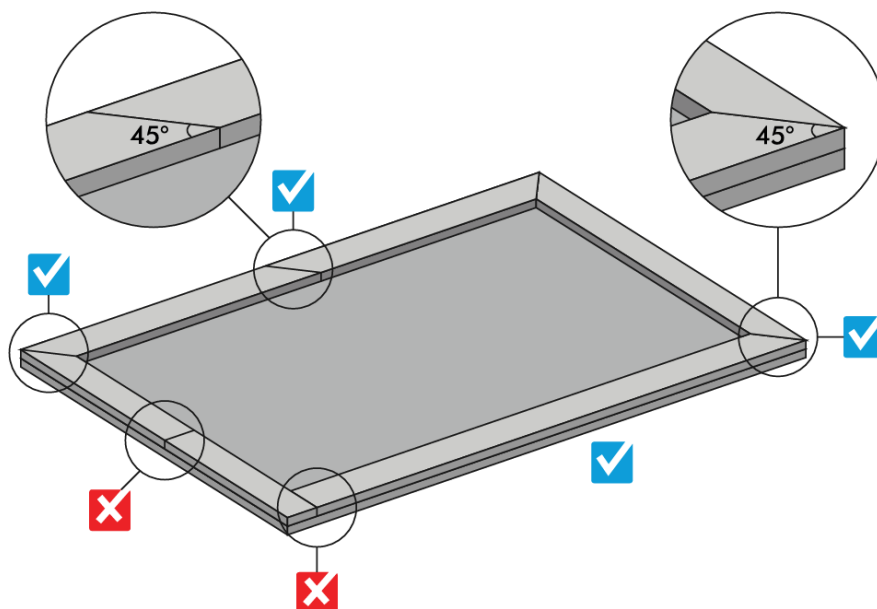
- Drill the required corner radius before connecting cuts.
- Connect drilled corners using controlled cuts.
- Do not create sharp internal corners where a radius can be used.
- Inspect the finished radius and surrounding material before polishing and installation.
- The exact minimum radius must be confirmed against the current requirements for the specific GFO Stone product and thickness.



10. Laminated / Built-Up Edges

Built-up edges may be used to create a thicker visual profile.

- When practical, use lamination strips from the same slab as the countertop for appearance consistency.
- Prepare bonding surfaces according to the adhesive manufacturer's instructions.
- Use a compatible adhesive intended for the material and application.
- Clamp or fixture pieces securely during cure.
- Avoid placing lamination seams at high-stress locations.



11. Mitered Edges

Mitered edges can create a refined built-up profile and allow pattern movement from the horizontal surface into the edge.

- Use accurately cut and properly matched pieces where appearance requires pattern continuity.
- Ensure mating surfaces are clean, flat, and properly aligned.
- Avoid excessively thin or fragile miter tips.
- Provide adequate support beneath the edge assembly.
- Use a compatible adhesive system and follow its curing requirements.



12. Edge Polishing

Edge polishing should be controlled and performed with tooling appropriate for the material.

- Remove dust and debris before polishing.
- Use quality diamond tooling intended for engineered stone.
- Maintain adequate water flow during wet polishing.
- Use a controlled progression of grits appropriate to the desired finish and tooling system.
- Inspect the finished edge for uniform sheen, flatness, chips, and transition marks.
- Do not attempt to recreate or alter a factory finish unless the product-specific instructions permit it.

13. Seams

Seam placement affects appearance and structural performance.

- Plan seams over adequately supported areas.
- Avoid seams over unsupported openings or appliance voids.
- Avoid seams immediately adjacent to sink and cooktop cutouts whenever practical.
- Keep seam surfaces clean, smooth, and free of dust.
- Use a professional seam-setting system to align pieces.
- Allow adhesive to cure fully before stressing or transporting the assembly.

14. Installation

The substrate must be ready before the countertop is permanently installed.

- Cabinets must be securely fastened to one another and to the supporting wall or structure.
- Support surfaces should be level, plumb and sufficiently flat to prevent point loading.
- Remove dust, grease and construction contaminants from bonding surfaces.
- Provide flexible perimeter clearance where required by the product and installation conditions.
- Use flexible attachment methods appropriate for the substrate and application.
- Do not rigidly bond the slab in a manner that prevents normal movement.
- Do not mechanically fasten through the slab unless a specifically approved system is being used.
- Install sinks, cooktops and appliances according to their manufacturers' instructions.

15. Supports, Overhangs & Substrate

Countertops must be adequately supported. Support requirements depend on product, thickness, geometry, application and loading.

- Support countertop sections continuously over cabinet frames and structural support points.
- Provide additional support under seams, narrow sections, cutouts and other stress-sensitive areas.
- Use properly sized support strips, panels, brackets, legs, posts or other structural supports where needed.
- Do not rely on the countertop alone to bridge large unsupported spans.
- Verify overhang limits using the current GFO Stone requirements for the specific product and thickness.

16. Backsplashes

Backsplash fabrication requires the same attention to support, openings and stress control as countertop fabrication.

- Verify walls are flat, plumb, clean and suitable for installation.
- Plan outlets, switches, faucets and other penetrations before cutting.
- Use radiused internal corners around openings.
- Maintain adequate material around openings.
- Use flexible adhesive or silicone suitable for the application.
- Follow appliance clearances and heat-protection requirements.

17. Cleaning & Final Inspection

Protect the finished surface throughout the project and inspect before turnover.

- Remove adhesive residue using methods permitted by the adhesive manufacturer.
- Use non-abrasive cleaning materials appropriate for the surface.
- Do not use aggressive chemicals or abrasive pads that may damage the factory finish.
- Check seams for alignment, cleanliness and uniformity.
- Check edges for chips, polishing defects and damage.
- Confirm cutouts have adequate support and required clearances.
- Confirm the countertop is stable and properly supported.
- Clean the completed surface according to the applicable care instructions.

18. Fabrication & Installation Checklist

Stage	Verification
Before Cutting	☐ Slab inspected and accepted
Before Cutting	☐ Product, thickness and finish verified
Before Cutting	☐ Layout and pattern direction confirmed
Before Cutting	☐ Cutouts and appliance templates verified
Fabrication	☐ Cutting table is flat and fully supportive
Fabrication	☐ Dust controls and wet-processing methods are in place
Fabrication	☐ Internal corners are radiused
Fabrication	☐ Cutouts have adequate support
Fabrication	☐ Seam locations are properly supported
Fabrication	☐ Edges and seams inspected before transport
Installation	☐ Cabinets/substrate are secure and level
Installation	☐ Required wall/movement clearances provided
Installation	☐ Flexible attachment method used
Installation	☐ Sink/cooktop installed to appliance instructions
Final	☐ Surface and edges inspected
Final	☐ Installation cleaned and protected

19. Limitations & Technical Notice

This guide is a general reference for professional fabricators and installers. It is not a substitute for project-specific engineering, applicable building codes, workplace safety requirements, appliance instructions, adhesive/tooling instructions, current product specifications, or an SDS.

GFO Stone may update product specifications and technical recommendations as products and manufacturing processes change. The fabricator and installer are responsible for confirming current requirements before fabrication and installation.

Material must be inspected and approved before fabrication. Natural and engineered stones may vary in color, pattern, veining, texture, thickness, and other characteristics. Fabrication and installation decisions remain the responsibility of the qualified professional performing the work.

DANGER: SILICA DUST IS HARMFUL IF INHALED

For silica-related hazards, consult the applicable GFO Stone Safety Data Sheet, current OSHA requirements, and the workplace exposure-control program. Never use this guide as a substitute for a current SDS or site-specific safety program.

GFO STONE INTERNATIONAL, LLC

Natural & Engineered Stone

Garfield, NJ • Bristol, PA

www.gfostone.com

