

LONSAR™ QUARTZ

FABRICATION, INSTALLATION & SAFETY MANUAL

Version 1.0

Prepared for Authorized Lonsar™ Fabricators, Installers, and Distributors

IMPORTANT SAFETY NOTICE

WARNING

Lonsar™ Quartz contains crystalline silica.

Fabrication activities including cutting, grinding, polishing, routing, drilling, shaping, sanding, and finishing may generate respirable crystalline silica dust.

Respirable crystalline silica exposure can cause serious injury, permanent disability, or death.

Potential health effects include:

- Silicosis
- Lung Cancer
- Chronic Obstructive Pulmonary Disease (COPD)
- Kidney Disease
- Other irreversible respiratory illnesses

Fabricators and installers are responsible for complying with all applicable OSHA regulations and local workplace safety requirements.

Failure to follow proper safety procedures may result in serious injury, death, product failure, warranty exclusion, and legal liability.

TABLE OF CONTENTS

1. Product Information

2. Health & Safety Requirements
 3. Personal Protective Equipment
 4. Material Handling & Transportation
 5. Storage Requirements
 6. Slab Inspection
 7. Fabrication Guidelines
 8. Installation Guidelines
 9. Care & Maintenance
 10. Warranty Limitations
 11. Fabricator Acknowledgment
-

1. PRODUCT INFORMATION

Lonsar™ Quartz is an engineered stone surface manufactured primarily from natural quartz aggregates, polymer resins, pigments, and performance-enhancing materials.

Lonsar™ Quartz is designed exclusively for interior applications including:

- Kitchen countertops
- Bathroom vanities
- Commercial work surfaces
- Wall cladding
- Backsplashes
- Interior decorative applications

Lonsar™ Quartz is non-porous, stain-resistant, durable, and requires minimal maintenance.

Natural Characteristics

Lonsar™ Quartz is manufactured using natural quartz materials. Variations in:

- Color
- Veining

- Shade
- Aggregate distribution
- Pattern movement
- Surface appearance

are natural characteristics and are not considered manufacturing defects.

Product samples are intended only as general representations and may not exactly match the final slab supplied.

2. HEALTH & SAFETY REQUIREMENTS

Crystalline Silica Hazard

Lonsar™ Quartz contains crystalline silica.

Activities that may generate respirable crystalline silica include:

- Cutting
- Grinding
- Sanding
- Drilling
- Polishing
- Routing
- Breaking
- Edge profiling

Exposure to respirable crystalline silica can result in:

- Silicosis
- Lung cancer
- Respiratory disease
- Kidney disease
- Permanent disability
- Death

Required Engineering Controls

The following controls shall be used whenever fabricating Lonsar™ Quartz:

- ✓ Wet cutting
- ✓ Wet grinding
- ✓ Wet polishing
- ✓ Water-fed tooling
- ✓ Local exhaust ventilation
- ✓ Dust collection systems
- ✓ OSHA-compliant silica control measures

Dry fabrication methods are strongly discouraged and may void warranty coverage.

3. PERSONAL PROTECTIVE EQUIPMENT (PPE)

The following PPE shall be worn during fabrication:

Respiratory Protection

NIOSH-approved respirators suitable for silica exposure.

Eye Protection

ANSI-approved safety glasses with side shields or face shields.

Hearing Protection

Appropriate hearing protection when operating fabrication equipment.

Hand Protection

Cut-resistant gloves.

Foot Protection

Steel-toe or safety-toe footwear.

Clothing

Appropriate work clothing without loose sleeves, jewelry, or accessories.

4. MATERIAL HANDLING & TRANSPORTATION

Lonsar™ Quartz slabs are heavy and must be handled carefully.

General Handling

- Use trained personnel only.
- Use proper lifting equipment.
- Use slab clamps, straps, and lifting devices rated for the load.
- Keep hands clear of pinch points.
- Never stand beneath suspended slabs.
- Maintain a clear work area.

Transportation

- Transport slabs vertically.
- Never transport slabs horizontally.
- Secure slabs using approved A-frames.
- Use protective padding to prevent edge damage.
- Secure all slabs before moving.
- Inspect transport equipment before each use.

5. STORAGE REQUIREMENTS

A-Frame Storage

Slabs shall be stored vertically on properly designed A-frames.

Recommendations:

- Keep slabs securely strapped.
- Maintain balanced loads on both sides of A-frames.
- Protect slabs from impacts.

- Avoid uneven support conditions.
- Protect edges from damage.

Environmental Conditions

Store indoors whenever possible.

Avoid:

- Extreme temperature changes
 - Prolonged UV exposure
 - Standing water
 - Impact hazards
-

6. SLAB INSPECTION

All slabs must be inspected prior to fabrication.

Fabricators shall verify:

- ✓ Correct color
- ✓ Correct finish
- ✓ Correct thickness
- ✓ Pattern suitability
- ✓ Transportation damage
- ✓ Chips
- ✓ Cracks
- ✓ Surface imperfections
- ✓ Edge damage
- ✓ Manufacturing anomalies

If any concern exists, fabrication must stop and the distributor must be notified immediately.

Once fabrication begins, the slab is considered accepted.

No claims will be accepted for visual defects discovered after fabrication has commenced.

7. FABRICATION GUIDELINES

Approved Tools

Recommended tools include:

- Diamond bridge saws
- CNC routers
- Diamond polishing systems
- Water-fed hand tools
- Wet core drills
- Wet edge profiling equipment

General Fabrication Practices

- Maintain continuous water flow.
- Avoid overheating the material.
- Support slabs properly at all times.
- Use smooth cutting techniques.
- Avoid excessive vibration.

Internal Corners

All internal corners shall be radiused.

Sharp internal corners increase the risk of cracking and are not recommended.

Cutouts

Sink, cooktop, and appliance openings must be properly supported.

Stress concentration areas shall be minimized.

Edge Profiles

Edges shall be fabricated using approved diamond tooling and polished using water-fed systems.

8. INSTALLATION GUIDELINES

Cabinet Support

Cabinetry must be:

- Level
- Secure
- Structurally sound
- Properly anchored

Unsupported spans may result in cracking.

Seams

Seams shall:

- Be properly aligned
- Be adequately supported
- Utilize approved color-matched adhesives
- Be minimized whenever possible

Adhesives

Only high-quality stone adhesives and silicone products designed for engineered stone applications should be used.

Overhangs

Overhangs exceeding industry-standard limits shall be supported using brackets, corbels, or steel reinforcement.

9. CARE & MAINTENANCE

Daily Cleaning

Use:

- Mild soap
- Warm water

- Soft cloths
- Non-abrasive cleaners

Avoid

- Abrasive pads
- Strong alkaline cleaners
- Paint removers
- Oven cleaners
- Bleach-based cleaners
- Solvent-based chemicals

Heat Protection

Always use:

- Trivets
- Hot pads
- Heat-resistant barriers

Do not place hot cookware directly on the surface.

Cutting

Do not cut directly on the countertop surface.

Always use a cutting board.

10. WARRANTY LIMITATIONS

The Lonsar™ Limited Warranty does not cover:

- Improper fabrication
- Improper installation
- Fabricator workmanship
- Chips
- Cracks

- Impact damage
- Dry cutting damage
- Dry polishing damage
- Seam failure caused by substrate conditions
- Excessive heat exposure
- Outdoor installations
- Product misuse
- Natural color variation
- Natural pattern variation
- Chemical damage
- Scratches caused by misuse
- Damage resulting from failure to follow this manual

Lonsar™ reserves the right to inspect any warranty claim before determining eligibility.

11. FABRICATOR ACKNOWLEDGMENT

LONSAR™ QUARTZ FABRICATOR ACKNOWLEDGMENT

Company Name: _____

Authorized Representative: _____

Title: _____

Date: _____

By signing below, the undersigned acknowledges and agrees that:

1. The company has received and reviewed the Lonsar™ Fabrication, Installation & Safety Manual.
2. The company understands that fabrication of quartz products may generate respirable crystalline silica.
3. The company is responsible for complying with OSHA regulations and all applicable workplace safety requirements.

4. The company will implement appropriate engineering controls, wet fabrication methods, ventilation systems, and respiratory protection.
5. The company is responsible for training its employees, subcontractors, and representatives regarding silica hazards.
6. The company accepts responsibility for fabrication and installation practices performed by its employees and subcontractors.
7. Failure to follow the requirements of this manual may void applicable warranty coverage.

Authorized Signature: _____

Printed Name: _____

Date: _____

© Lonsar™ Quartz All Rights Reserved.