



ASIAQUARTZ

# Slab Inspection & Quality Standards

Every Slab Passes Strict Quality Inspection Before Dispatch

EN 15285 · EN 15286 · ASTM C97 · ISO 13006

Visual · Dimensional · Performance · SGS Verified

Grade A / B / C Classification · Batch Traceability

# 01 Inspection Standards

| Standard      | Scope                                | Key Tests                                                         |
|---------------|--------------------------------------|-------------------------------------------------------------------|
| EN 15285:2008 | Aggregated stone — flooring & stairs | Density, flexural strength, abrasion, impact, chemical resistance |
| EN 15286:2013 | Aggregated stone — wall panels       | Water absorption, flexural strength, frost resistance             |
| ASTM C97      | Standard test methods for absorption | Bulk density, absorption, specific gravity                        |
| ISO 13006     | Ceramic tiles — classification       | Physical & chemical properties classification                     |

## 02 Visual Inspection

### Appearance & Surface QC

| Inspection Item     | Acceptance Criteria                                                                   |
|---------------------|---------------------------------------------------------------------------------------|
| Surface Quality     | No cracks, chips, pits or scratches. Color & pattern consistent with approved sample. |
| Edge Quality        | Edges straight, no delamination or voids. Suitable for CNC cutting.                   |
| Pattern Continuity  | Continuous pattern across slab surface. No banding or mis-registration.               |
| Color Uniformity    | Color within approved shade range. No patches or discoloration.                       |
| Thickness Tolerance | ±0.5mm for 12/15/18mm; ±1.0mm for 20/30mm slabs.                                      |



Countertop Stacking in QC Area



Countertop Inspection with Label



## 03 Performance Specifications

### Physical Properties

| Test Item            | Standard    | Result                                 | Grade                      |
|----------------------|-------------|----------------------------------------|----------------------------|
| Water Absorption     | EN 14617-1  | 0.03%                                  | W4 ( $\leq 0.05\%$ )       |
| Flexural Strength    | EN 14617-2  | 74.4 MPa                               | F4 ( $\geq 40\text{MPa}$ ) |
| Abrasion Resistance  | EN 14617-4  | 26.5 mm                                | A4 ( $\leq 29\text{mm}$ )  |
| Impact Resistance    | EN 14617-9  | 11.84 J                                | —                          |
| Chemical Resistance  | EN 14617-10 | HCl&NaOH; $\geq 98\%$                  | C4                         |
| Thermal Expansion    | EN 14617-11 | $27.2 \times 10^{-6} / ^\circ\text{C}$ | —                          |
| Anti-slip (Dry)      | EN 14231    | SRV 46                                 | —                          |
| Anti-slip (Wet)      | EN 14231    | SRV 10                                 | —                          |
| Thermal Conductivity | EN 12664    | 0.508 W/(m·K)                          | —                          |
| Mohs Hardness        | EN 15771    | 6                                      | —                          |

Source: SGS Test Report XMIN2201000323CM · January 13, 2022 · Fujian Nanan City Lifeng Stone Co., Ltd. · Sample: Artificial Quartz Stone



Polishing & Buffing



Manual Material Feeding

# 04 Zero-Silica Compliance

## XRD-Confirmed Silica-Free

Our zero-silica series uses a special glass-based formula (90% glass + 10% UP resin) instead of natural quartz sand. XRD analysis by SGS confirms 0% crystalline silica — significantly reducing silicosis risk for fabricators, and meeting the latest EU / UK / Australia occupational silica regulations.

| Aspect             | Standard Quartz               | Zero-Silica Quartz                    |
|--------------------|-------------------------------|---------------------------------------|
| Crystalline Silica | Contains natural quartz       | 0% (XRD confirmed)                    |
| SVHC               | Not Detected ( $\leq 0.1\%$ ) | Not Detected ( $\leq 0.1\%$ )         |
| Formula            | Quartz sand + resin           | 90% glass + 10% UP resin              |
| Recommended For    | All standard applications     | EU workshop, US countertop, Australia |
| Worker Safety      | Requires dust extraction      | Significantly reduced risk            |

# 05 Raw Material & Preparation QC

## Input Quality Control

Every production batch starts with raw material verification: quartz sand grading, resin batch testing, and pigment colour matching against the approved master sample. Only materials passing incoming inspection enter the production line.



Quartz Sand Raw Material Yard



Material Preparation

## 06 Production & Demolding QC

### In-Process Inspection

Slabs are inspected at every production stage — from vacuum pressing and curing through to polishing. Key checks include: surface integrity after demolding, texture consistency, dimensional accuracy, and polish quality. Defective slabs are rejected and recycled at the source.



Slab Demolding



Worker Surface Inspection



## 07 Cutting & Processing QC

### CNC & Bridge Saw Precision

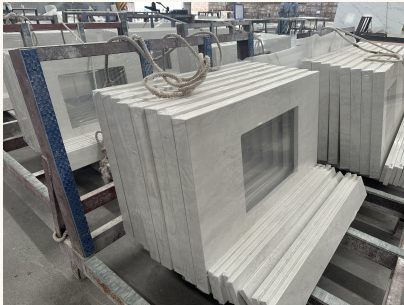
Cut-to-size orders are processed on CNC bridge saws with precision cutting to  $\pm 1\text{mm}$  tolerance. Each cut piece is inspected for edge quality, dimensional accuracy and surface finish before packaging.



Slab Cutting — Bridge Saw



Cutting — Close-Up



## 08 Warehouse & Storage

### Finished Goods Management

Finished slabs are stored upright in racking with clear aisle marking and forklift lanes. Batch codes and quality grades are marked on every slab for full traceability from production to dispatch.



White Slab Parallel Display



Warehouse Passage



## 09 Pre-Packing QC Flow

### 6-Step Quality Gate

| Stage  | Quality Control Item    | Description                                                           |
|--------|-------------------------|-----------------------------------------------------------------------|
| Step 1 | Raw Material Check      | Quartz sand, resin & pigment batch tested before production.          |
| Step 2 | In-Process Inspection   | Slab checked at pressing, curing & polishing stages.                  |
| Step 3 | Visual Sorting          | All slabs sorted by trained QC staff. Grade A / B / C classification. |
| Step 4 | Dimensional Measurement | Length, width, thickness & diagonal measured with digital calipers.   |
| Step 5 | Edge Inspection         | Edges checked for chippage, delamination and straightness.            |
| Step 6 | Final Quality Sign-Off  | QA manager signs off each dispatch batch before crating.              |

## 10 Dispatch Protection

### Packing & Marking

Before crating, every slab is re-checked for surface damage. Slabs are then protected with EPE foam, kraft paper and corner guards, placed in ISPM 15 heat-treated wooden crates, strapped with steel bands, and marked with batch code, crate ID and destination port.



Dispatch Protection



Multi-Slab Wooden Crate



# Factory Quality Assurance

AsiaQuartz operates a complete in-house quality assurance system covering raw material, production, cutting, warehousing and packaging. Every dispatch is batch-traceable and backed by SGS test reports. We welcome third-party inspection (SGS / BV / TÜV) at our factory before loading.



Factory Panorama



Exterior View

