How to read this guide: Specifications marked Collection describe the current Duhon Imports sintered stone collection. Statements described as category characteristics or typical benchmarks explain how quality sintered stone generally performs. Any value represented as a tested specification of an individual Duhon item design will be confirmed from manufacturer or independent test documentation, which Duhon Imports provides on request as it becomes available.

# Duhon Imports & This Guide

A direct importer of premium surfaces, based in East Tennessee and focused on helping customers make informed choices.

Duhon Imports specializes in selected 12mm and 20mm sintered stone and makes them available to homeowners, fabricators, contractors, builders and designers across the region. By importing directly, we can offer large-format, design-forward surfaces with local availability, without requiring customers to commit to full-container quantities.

This guide is written for customers who want the look of premium natural stone with the consistency and low-maintenance characteristics of a modern mineral surface. It explains what sintered stone is, how it performs, how to plan a project around large-format slabs, how to care for the finished surface and what questions to ask before purchase.

- Direct import — Premium large-format slabs sourced directly, with inventory held locally in Johnson City, Tennessee.

- No container minimums — Buy a single slab, a matched set or a bundle — sized to your project.

- Trade-focused support — Fabricators, contractors, builders and designers receive quote, sample and documentation support.

- Honest specifications — We separate verified collection specifications from general category characteristics, so you know exactly what you are buying.

Who this guide is for: Homeowners comparing countertop materials · Kitchen & bath designers specifying finishes and patterns · Builders & contractors planning budgets and schedules · Fabricators evaluating handling and installation requirements.

# Sintered Stone 101

Never heard of sintered stone? Start with this page.

In one sentence: sintered stone is a slab made from natural minerals — the same families of minerals found in granite and fine porcelain — that are ground to a powder, pressed together under enormous pressure and fired at extreme heat until they fuse into one dense, hard, stone-like surface.

The simple way to picture it: in nature, stone forms when minerals are buried deep in the earth and squeezed and heated for thousands or millions of years. Sintered stone recreates that same idea in a factory in a matter of

hours. Leading producers describe pressing the mineral powder with tens of thousands of tons of force and firing it at roughly 1,200 °C (about 2,200 °F) — pressure often compared to "a mountain on top of the material."

What you get: a surface that looks like marble, natural stone or other natural stone, but behaves more like fine porcelain made in a much larger, tougher form — it shrugs off heat, resists stains and scratches, and does not need sealing.

## Sintered stone at a glance

- 100% mineral — Made from natural minerals with no polymer resin binder.

- Fired, not glued — Particles are fused by heat and pressure rather than held together by resin.

- Large format — About 63 × 126 in. per slab — enough for most islands in one piece.

- Thin & strong — Available in slim thicknesses such as 12 mm and 20 mm.

- Heat & UV resistant — No resin to scorch from hot pans or yellow in sunlight.

- Low maintenance — Very low porosity, so it generally never needs sealing.

- Designer looks — Marble, natural stone, concrete, solid colors and more.

- Versatile — Countertops, vanities, walls, showers, fireplaces and furniture.

The one thing to know before you buy: Sintered stone is very hard — which is why it resists scratches and heat so well — but, like porcelain or glass, very hard materials can chip if an exposed edge takes a sharp blow. Choosing an experienced fabricator and a sensible edge profile makes all the difference. You will find practical advice on this throughout the guide.

# What Is Sintered Stone?

Sintered stone is a dense, large-format mineral surface produced by compacting selected inorganic mineral materials under very high pressure and firing them at very high temperatures. The process fuses the particles into a hard, low-porosity surface intended for demanding architectural and interior applications.

The word sintering describes the process of bonding particles together with heat and pressure without fully melting them into a liquid. It is related to the way fine porcelain is made, but at a much larger scale and with far greater compaction. In the trade you may also hear the material described as large-format porcelain slab, ultra-compact surface or mineral surface. Brand names differ, but the underlying category is similar.

# A Short History & What's in a Name

## An ancient idea, a modern material

Sintering — bonding powdered material with heat and pressure — is not new. It has long been used to make ceramics and porcelain and is used today across many industries, from metal parts to dental ceramics. What is new is the scale: in the early 2010s, ceramic and stone-surface manufacturers in Spain and Italy developed giant presses and kilns capable of producing countertop-sized slabs. Large-format sintered surfaces were introduced to the market from about 2010, and the category has grown quickly since, with manufacturing now established in Europe and Asia.

| Milestone | What happened |
|---|---|
| Traditional ceramics | Sintering is used for centuries to make porcelain and fired ceramics. |
| Around 2010–2012 | The first large-format sintered stone surfaces for countertops are launched in Spain and Italy. |
| 2017 | The U.S. tile industry publishes ANSI A137.3, a national standard for gauged porcelain tile panels and slabs; it has since been updated, most recently in 2025. |
| Europe | European technical bodies adopt a dedicated assessment document (EAD 090142-00-0404) that recognizes sintered stone as its own product category. |
| Today | Sintered stone is produced worldwide and is a fast-growing premium choice for kitchens, baths and architecture. |

## Many names, one family

You may hear this family of materials described in several ways. The terms overlap, and different manufacturers use different labels, but they all describe dense, fired, resin-free mineral surfaces:

| Term you may hear | What it usually means |
|---|---|
| Sintered stone | Large-format mineral surface fused by heat and pressure — the term used in this guide. |
| Ultra-compact surface | A marketing term for very dense sintered surfaces. |
| Porcelain slab / large-format porcelain | Porcelain produced in slab sizes; closely related in composition and manufacture. |
| Gauged porcelain tile panel (GPTP) | The U.S. standards term for thin porcelain panels and slabs. |

| Term you may hear | What it usually means |
|---|---|
| Mineral surface | A general description emphasizing the all-mineral composition. |

Is it different from porcelain? The two are closely related and the industry still debates where one ends and the other begins. European authorities now treat sintered stone as a distinct category. What matters most for you is the product's actual performance data, finish and construction — which is why this guide focuses on those.

# How Sintered Stone Is Made

Industry-standard production for the sintered-stone category, from raw minerals to finished slab.

- 1 · Mineral selection — Clays, feldspars, silica and other inorganic minerals are selected and proportioned for strength, color and body tone.

- 2 · Milling & blending — Raw materials are finely ground and blended into a uniform powder so the slab body is consistent throughout.

- 3 · Design application — Marble, stone or contemporary designs are applied using high-definition digital technology. Some products also distribute veining through the body.

- 4 · High-pressure compaction — Large-format presses compact the powder into a slab under extremely high pressure, removing air and creating density.

- 5 · Kiln firing — Slabs travel through long kilns at very high temperatures, where the minerals fuse into a hard, low-porosity material.

- 6 · Calibration & finishing — Slabs are calibrated for flatness and thickness, then given their polished, matte or silk surface finish.

- 7 · Quality inspection — Finished slabs are inspected for flatness, dimension, surface defects and color consistency before grading and packing.

- 8 · Packing & shipping — Slabs are packed vertically in reinforced wooden bundles or frames for ocean freight to Duhon Imports.

Why the process matters: Because sintered stone is fired rather than resin-bonded, there is no resin binder to soften with heat or discolor with sunlight. The trade-off is that the finished slab is very hard and comparatively thin, which is why experienced fabrication, proper support and careful handling are essential.

# Collection Specifications

Verified information for the current Duhon Imports sintered stone collection.

| Specification | 12mm selections | 20mm selections |
|---|---|---|
| Nominal slab size | 1600 × 3200 mm | 1840 × 3220 mm |
| U.S. equivalent | Approx. 63 × 126 in. | Approx. 72.4 × 126.8 in. |
| Area per full slab | Approx. 55.1 sq. ft. | Approx. 63.8 sq. ft. |
| Catalog | Full 12mm collection | Full 20mm collection |
| Selected inventory | Five designs · 0 slabs · Incoming | Five designs · 0 slabs · Incoming |
| Finish & body | Confirm by design at quote | Confirm by design at quote |
| Packing | Transport vertically with professional equipment | Transport vertically with professional equipment |

## Why the large format matters

A roughly 63 × 126 inch slab allows many islands, countertops, wall panels and shower applications to be fabricated with fewer seams, depending on the final layout and fabrication requirements. A single slab can often cover a standard island top, and full-height backsplashes or shower walls can be clad with very few joints — a dramatic, continuous look that is difficult to achieve with smaller formats.

| Typical piece | Approx. size | Fits on one slab? |
|---|---|---|
| Standard island top | Up to approx. 48 × 120 in. | Usually yes |
| Large island with waterfall ends | Top plus two 36 in. legs | Often 2 slabs; matched sets recommended |
| Vanity top (double) | Approx. 22 × 72 in. | Yes, with remnant for a second vanity or shelves |
| Full-height backsplash wall | Approx. 60 × 120 in. | Often a single piece, depending on outlets and windows |
| Shower wall panel | Approx. 60 × 96 in. | Usually yes |

Sizes are planning examples only; usable area depends on layout, vein direction, cutouts and fabrication allowances.

# Surface Finishes

The same design can look and feel noticeably different depending on the finish you select.

| | Polished | Matte | Silk |
|---|---|---|---|
| Look | High-gloss, reflective sheen that deepens color and makes veining vivid | Low-reflection, natural honed appearance | Soft satin sheen between matte and polished |
| Feel | Smooth and glassy | Natural, stone-like touch | Smooth, velvety "skin-touch" feel |
| Best for | Statement kitchens, vanities, feature walls | Modern, organic and rustic interiors; high-light areas | Kitchens wanting low glare with a refined feel |
| Shows | Fine scratches and reflections more readily under direct light | Fingerprints and oily marks; possible metal marks from cookware | A balance of both; generally forgiving |
| Everyday care | Wipe dry to prevent water spots | Clean regularly with a neutral cleaner; remove metal marks with a mild cream cleanser | Neutral cleaner; wipe spills promptly |
| Floors | Not typically recommended for floors where slip resistance matters | Better suited where slip resistance matters | Confirm slip-resistance data before floor use |

Choosing a finish: View samples of the actual finish in your own lighting. A polished surface will show its full color depth and contrast; matte and silk finishes appear slightly lighter and softer. Because finishes change appearance, always approve the finish and design together before fabrication begins.

Finish availability varies by design. The current availability for each Duhon item design is listed in The Duhon Imports Collection section and is confirmed at the time of quote.

# Body Types & Vein Patterns

## Body construction

The body is the material beneath the decorative surface — what you see at a cut edge, a sink cutout or a chip. Three constructions are common across the sintered-stone category:

| Construction | What it means | Practical impact |
|---|---|---|
| Surface design (printed) | Design is on the face; the body is a solid color (confirm body color by design) | Edges show the body color. Mitered edges are recommended to continue the design around edges. |
| Through-body (full body) | Body color closely matches the surface ground color | Cut edges blend better with the surface; chips are less noticeable. |
| Vein-through | Veining continues partially or fully through the slab body | Edges and cutouts show continuing veins — the most natural-stone-like edge. |

Construction is being confirmed design-by-design as part of our documentation program (see Product Documentation & Responsible Claims).

## Vein patterns & matched sets

| Pattern | Description | Best use |
|---|---|---|
| Single face | Each slab is an individual, complete design | Countertops, vanities and projects needing one or several independent slabs |
| A-B sequence | Two slabs designed so veining continues side by side | Long runs and walls needing a two-slab continuous look |
| A-B-C sequence | Three consecutive slabs with continuous, flowing veins | Large walls, long islands, waterfall islands |
| Book match (A-B-A) | Mirrored slabs meeting in a symmetrical pattern | Feature walls, fireplaces, statement islands |
| 3-face random | Three face variations delivered at random | Larger projects wanting natural-looking variation |

Important — matched sets: Designs produced as book-match or A/B/C sequences are sold only as complete sets, not as individual slabs. This protects the continuous pattern. Plan seams and vein direction with your fabricator before cutting, because the sequence cannot be re-created once slabs are cut out of order.

# Performance Characteristics

Recognized characteristics of the sintered-stone category.

- Heat resistance — Quality sintered surfaces are known for strong resistance to heat because the material is produced through a high-temperature mineral process and contains no resin binder. Good practice is still to use trivets for extremely hot cookware and to avoid sudden, localized temperature shock.

- Stain & water resistance — Very low porosity helps resist absorption of common household spills such as coffee, wine, oil and juice. Unlike many natural stones, sintered surfaces generally do not require periodic penetrating sealer.

- Scratch & abrasion resistance — The hard mineral surface is designed to withstand everyday use. Scratch resistant does not mean scratch proof; cutting boards and reasonable care are still recommended. Ceramic knives and diamond-grit objects can mark any surface.

- Acid & chemical resistance — The category is highly resistant to common household acids such as lemon juice, vinegar and tomato, which etch marble. Avoid hydrofluoric acid and highly aggressive industrial chemicals.

- UV & outdoor potential — With no resin binder to yellow, the sintered category can offer strong UV color stability. Exterior use should be based on the specific product's UV/weathering and freeze-thaw documentation.

- Hygiene & cleaning — Low absorption makes routine cleaning straightforward and limits places for residue to collect. Warm water, a soft cloth or sponge and a mild cleaner are appropriate for normal care.

- Dimensional stability — Fired mineral slabs are dimensionally stable and resist warping from heat or humidity once properly installed and supported.

- Impact & edges — Like porcelain and glass, the material is very hard but can chip if exposed edges or corners are struck by heavy objects. Eased or slightly rounded edges improve chip resistance.

Hardness vs. toughness: Hardness (resistance to scratching) and toughness (resistance to chipping from impact) are different properties. Sintered stone is very hard, which is why it resists scratches so well — but hard materials can be more prone to edge chipping from sharp impacts. Thoughtful edge selection and normal care deliver the best long-term result.

# Technical Benchmarks & Test Standards

How performance is measured, and typical values for quality products in the category.

The table below lists the internationally recognized test methods used for sintered and porcelain slab products, together with typical benchmark values for quality products in the category. These are category benchmarks — not tested values for a specific Duhon item design. SKU-specific test reports will be provided as documentation is verified.

| Property | Common test method | Typical category benchmark | What it tells you |
|---|---|---|---|
| Water absorption | ISO 10545-3 / ASTM C373 | ≤ 0.5% (porcelain classification); quality slabs often ≤ 0.1% | Lower = less porous, more stain resistant |

| Property | Common test method | Typical category benchmark | What it tells you |
|---|---|---|---|
| Breaking strength / modulus of rupture | ISO 10545-4 / ASTM C648 | Typically ≥ 35 MPa modulus of rupture | Resistance to bending and breakage |
| Surface hardness | Mohs scale (EN 15771) | Typically 6–7 on the Mohs scale | Resistance to scratching |
| Abrasion resistance | ISO 10545-6 / -7 | Low volume loss; high wear class | Resistance to wear from traffic and use |
| Thermal shock resistance | ISO 10545-9 | No visible damage after cycling | Tolerance of rapid temperature change |
| Thermal expansion | ISO 10545-8 | Low linear expansion | Dimensional stability with temperature |
| Frost resistance | ISO 10545-12 | No damage after freeze-thaw cycles | Suitability for exterior climates |
| Chemical resistance | ISO 10545-13 | High resistance class | Tolerance of household chemicals and acids |
| Stain resistance | ISO 10545-14 | Highest cleanability classes | How easily stains are removed |
| Slip resistance (floors) | ANSI A326.3 (DCOF) | Varies by finish | Suitability for floor applications |
| Fire behavior | EN 13501-1 | Non-combustible class (typical for fired ceramics) | Behavior in fire; useful near fireplaces |

Why we publish category benchmarks separately: Manufacturers test different products to different standards, and values can vary by design, finish and thickness. Duhon Imports will only represent a value as a tested specification of an individual Duhon item design once the supporting report has been reviewed. Ask us for the current documentation status of any design you are considering.

# 12mm vs 20mm

Duhon Imports carries sintered stone in two thicknesses, as two separate catalogs.

- 12mm — Lighter, with more slabs per container. Ideal for countertops with mitered edges, vanities, walls and furniture.

- 20mm — A thicker, sturdier slab for countertops and islands without needing a built-up edge.

- Two slab formats — 12mm is 1600 × 3200 mm; 20mm is 1840 × 3220 mm.

# Understanding 12 mm & 20 mm

Sintered stone is produced in slimmer thicknesses than most traditional countertops. The two most popular countertop thicknesses are 12 mm (just under 1/2 in.) and 20 mm (about 3/4 in. — the same as a "2 cm" granite countertop). Both are recognized countertop thicknesses for sintered stone; the right choice depends on the look you want, your layout and your budget.

| | 12 mm sintered | 20 mm sintered |
|---|---|---|
| Thickness | Approx. 0.47 in. | Approx. 0.79 in. |
| Slab format | 1600 × 3200 mm | 1840 × 3220 mm |
| Area | Approx. 55.1 sq. ft. | Approx. 63.8 sq. ft. |
| Profile | Slim | Thicker countertop proportion |
| Support | Follow your fabricator's instructions | Follow your fabricator's instructions |

## When 12 mm makes sense

- You love a slim, modern profile, or want to build up a thick-looking mitered edge.

- Wall cladding, backsplashes, shower walls and furniture, where lighter weight is an advantage.

- Projects where reducing weight or material cost matters.

## When 20 mm makes sense

- You want the familiar proportion of a standard 2 cm countertop without building up the edge.

- Busy kitchens and islands where extra thickness adds stiffness and edge robustness.

- Seating overhangs and longer spans (always following fabricator guidance).

- Selected exterior applications where the product documentation supports it.

## Making either thickness work beautifully

- Substrate & support: cabinets must be level and structurally sound. Many fabricators add a support layer under 12 mm slabs.

- Overhangs: keep unsupported overhangs modest and use brackets or corbels as your fabricator recommends — especially with 12 mm.

- Built-up edges: both thicknesses can be mitered to look 1 in., 1.5 in., 2 in. or thicker while keeping the lighter slab.

- Cutouts: sink and cooktop cutouts need radiused inside corners and adequate material around them.

- Waterfall ends: mitered waterfall legs show continuous veining and add visual mass in either thickness.

# Edge Profiles

Your edge choice affects appearance, chip resistance and how the white body is seen.

| Edge profile | Appearance | Notes |
|---|---|---|
| Eased / pencil edge | Slim, clean, very slightly rounded | Most popular for 12 mm; small radius improves chip resistance |
| Small bevel (chamfer) | Crisp angled edge | Contemporary look; softens the corner |
| Square (arris) | Sharp, minimal line | Sharpest look; most prone to edge chipping — choose with care |
| Mitered edge — 24 to 50+ mm | Appears as a thick solid slab with continuous veining | Recommended to continue the design around the edge and conceal the body |
| Mitered waterfall | Countertop design flows down the side of the island | Best with matched or book-matched slabs |
| Full bullnose / ogee | Traditional decorative profiles | Generally not suited to thin surface-design slabs; ask your fabricator |

Edge tip: Because confirm body color by design, a mitered edge is the best way to keep a marble-look design continuous around exposed edges. Simple eased edges are clean and practical, especially on white and light designs where the white body blends naturally.

# How It Compares

## Choosing the right surface

### For a customer who loves marble

A Calacatta-style sintered surface can provide the visual character of white marble without marble's well-known sensitivity to acidic foods such as lemon juice and vinegar. It is a particularly attractive option for busy kitchens where the owner wants a marble-inspired appearance with easier everyday care.

### For a customer considering granite

Granite offers genuine natural geological variation — no two slabs are exactly alike. Sintered stone instead offers greater design consistency, low maintenance and repeatability. The best choice depends on whether the buyer prioritizes natural uniqueness or controlled appearance and maintenance.

### For a customer considering porcelain tile

Large-format sintered slabs share porcelain's mineral, fired character but at a far larger size, allowing countertop fabrication and walls with very few grout lines or seams.

## Honest Pros & Cons

Every surface has trade-offs. Here are sintered stone's, plainly stated.

ADVANTAGES

- Heat resistant — no resin to scorch or discolor.

- Stain resistant — very low porosity; wine, coffee and oil wipe away.

- No sealing — no periodic sealer, unlike many natural stones.

- Scratch resistant — very hard mineral surface.

- Acid resistant — lemon and vinegar do not etch it as they do marble.

- UV stable — will not yellow in sunlight.

- Huge slabs — fewer seams on islands, walls and showers.

- Lighter — thinner and lighter than traditional stone.

- Consistent — what you see in the sample is what you get.

- Resin-free — 100% mineral composition.

THINGS TO PLAN FOR

- Edge chipping — hard edges can chip from sharp impacts; choose eased or mitered edges.

- Repairs — chips can be filled, but invisible repair is harder than on granite or especially on designed surfaces.

- Specialist fabrication — needs proper blades, handling and experience; not every shop works with it.

- Edges show the body — on surface-designed slabs the cut edge shows the body color unless mitered.

- Thin profile — 12 mm needs good support; overhangs need planning.

- Cost — installed cost can be higher than some alternatives because fabrication is specialized.

- Manufactured look — beautiful and consistent, but not a one-of-a-kind natural slab.

Is sintered stone right for you?: Great fit if you want a marble or designer look with very low maintenance, cook a lot, want heat and stain resistance, love large seamless surfaces or want a surface for a sunny room. Think carefully if you want a one-of-a-kind natural slab, want the thickest possible traditional edge without mitering, or have a very rough-use area where heavy items are frequently dropped against exposed edges.

# Cost & Value

What shapes a sintered stone project? The slab itself is only one part. Fabrication, edges, cutouts and installation make up a large share of the installed cost — and sintered stone's specialized fabrication is a key factor.

| Cost factor | Why it matters |
|---|---|
| Design & finish | Premium designs, matched sets and statement veining cost more than simple patterns. |
| Number of slabs | Layout, seams and vein matching determine how many slabs are needed. |
| Thickness | 20 mm slabs use more material and weigh more than 12 mm slabs. |
| Edge profile | Mitered and waterfall edges take more labor than eased edges. |
| Cutouts | Sinks, cooktops, faucets and outlets each add fabrication time. |
| Fabricator experience | Experienced sintered-stone fabricators may charge more but reduce risk. |
| Site conditions | Stairs, access, distance and removal of old countertops affect installation. |

Request a quote: Every project is different. Contact Duhon Imports at 865-362-0014 or levi@duhonimports.com for a project-specific quote.

## Value over time

Sintered stone's value is in what you do _not_ have to do: no sealing, minimal special cleaners, strong resistance to heat damage, staining, etching and sun fading. For many households, that low lifetime maintenance offsets a higher upfront fabrication cost.

# Sustainability & Healthy Homes

- All-mineral composition — Made from natural minerals with no petroleum-based resin binder.

- No sealers or harsh treatments — Because it does not require periodic sealing, there are fewer chemical treatments over its life.

- Long service life — Resistance to heat, stains, scratches and UV supports a long-lasting installation.

- Lighter per square foot — Thin, large-format slabs weigh less than traditional thick stone, reducing structural load.

- Easy hygiene — A low-porosity surface is simple to keep clean with mild products.

- Fired material — As a fired mineral product, it contains no resin to off-gas.

Environmental claims such as recycled content, recyclability and low-emission certification vary by manufacturer and product. Duhon Imports will only represent these for a specific design once documentation has been verified (see Product Documentation).

# Where It Can Be Used

| Application | Suitability | Notes |
|---|---|---|
| Kitchen countertops & islands | Excellent | Heat, stain and scratch resistance suit daily cooking |
| Waterfall islands | Excellent | Mitered legs; matched sets recommended |
| Bathroom vanities | Excellent | Low absorption; integrated or undermount sinks |
| Backsplashes (incl. full-height) | Excellent | Large format means few or no seams |
| Shower & tub surrounds | Excellent | Large panels reduce grout lines; use proper wet-area substrate |
| Interior wall cladding & feature walls | Excellent | Book-matched sets create dramatic features |

| Application | Suitability | Notes |
|---|---|---|
| Fireplace surrounds | Very good | Mineral, fired material; follow clearance codes for the appliance |
| Furniture & tabletops | Very good | Dining tables, consoles, desks; edge protection recommended |
| Commercial interiors | Very good | Reception desks, bars, hospitality and retail surfaces |
| Flooring | Conditional | Confirm slip resistance (DCOF) for the specific finish and use |
| Exterior / outdoor kitchens | Conditional | Only after reviewing UV, weathering and freeze-thaw documentation for the exact product |

Exterior applications should only be represented as approved after reviewing the specific product's UV, weathering and freeze-thaw documentation.

# Planning Your Project

A simple path from inspiration to installation.

- 1 · Choose a design & finish — Review the collection, request samples and view them in your own lighting alongside cabinet, floor and paint selections.

- 2 · Select a fabricator — Work with a fabricator experienced in thin, large-format sintered slabs. Duhon Imports can help connect you with trade partners.

- 3 · Measure & estimate slabs — Share a sketch or plan. Your fabricator will estimate the number of slabs based on layout, seams and vein direction.

- 4 · Plan seams & vein flow — Decide where seams fall and how veining should flow across islands, corners and waterfall ends. Matched sets need extra planning.

- 5 · Confirm sinks & appliances — Have sink, faucet and cooktop specifications on site before templating so cutouts are exact.

- 6 · Template — After cabinets are installed and level, the fabricator creates a precise template of the space.

- 7 · Slab layout approval — Review how pieces will be cut from the slabs — especially for statement veining — before cutting begins.

- 8 · Fabrication & installation — Pieces are cut, edged, finished and installed. Seams are bonded and color-matched.

## Estimating slab quantity

| Project type | Typical slab count |
|---|---|
| Single vanity or small bar top | 1 slab (often with usable remnant) |
| Standard island only | 1 slab |
| Small kitchen — perimeter only | 1–2 slabs |
| Average kitchen — perimeter + island | 2–3 slabs |
| Large kitchen with full-height backsplash or waterfall island | 3–5 slabs |
| Shower surround (three walls) | 2–3 slabs |

Planning estimates only, based on approx. 55.1 sq. ft. per slab. Final counts depend on layout, seams, vein matching, cutouts and fabrication allowances, and should be confirmed by your fabricator.

# Questions to Ask Your Fabricator

A great result depends as much on the fabricator as on the slab. These questions help you choose with confidence:

- How many sintered stone or large-format porcelain projects have you completed? Can I see photos or references?

- What blades, saws or waterjet equipment do you use for sintered material?

- How do you handle, transport and support large thin slabs in your shop and on site?

- Which edge profile do you recommend for my design and household, and why?

- Where will the seams be, and how will you match the veining across seams and waterfall ends?

- Will you show me the slab layout before cutting?

- How will you support overhangs and seating areas?

- How do you make sink and cooktop cutouts (corner radius, reinforcement)?

- What adhesives and color-matching do you use for seams and mitres?

- How do you protect your workers from silica dust (wet cutting, ventilation, respiratory protection)?

- What warranty do you provide on fabrication and installation, and what does it exclude?

- How are chips or damage handled if they occur during installation?

# Care & Maintenance

One of sintered stone's greatest advantages is how little it asks of you.

- Daily care — Wipe with warm water and a soft cloth or sponge. Use a mild or neutral household cleaner as needed. Remove spills promptly and rinse away cleaner residue. Dry polished surfaces to prevent water spots.

- Deeper cleaning — For a periodic deep clean, use a non-abrasive cream cleanser or a cleaner made for porcelain and ceramic surfaces, then rinse thoroughly and dry.

- No routine sealing — One of the major attractions of sintered surfaces is that they generally do not require the periodic sealing associated with many natural stones.

- Seams & caulk — Seam adhesive and silicone joints are the softest part of any installation. Clean gently and ask your fabricator about re-caulking around sinks over time.

## Good habits

- Use a cutting board rather than intentionally cutting directly on the surface.

- Use trivets for extremely hot cookware, and avoid sudden localized heat such as hot pans placed on a cold surface for long periods.

- Avoid striking exposed edges and corners with heavy pots, cast iron or appliances.

- Do not stand or sit on unsupported overhangs; follow the fabricator's instructions around seams, sinks and overhangs.

- Lift, rather than slide, rough-bottomed ceramic or cast-iron items, especially on matte finishes.

## Products to avoid

- Hydrofluoric acid (found in some rust removers and glass etchers) — it can damage ceramic and mineral surfaces.

- Highly aggressive industrial chemicals, paint strippers and oven cleaners left in prolonged contact.

- Coarse abrasive pads, steel wool and scouring powders on polished finishes.

- Wax- or oil-based "polishes" and sealers — they are unnecessary and can leave a film.

# Stain & Mark Removal Guide

Most marks lift with simple products. Always test in an inconspicuous area first.

| Mark | Recommended approach |
|---|---|
| Coffee, tea, wine, juice | Warm water and a neutral detergent; for dried residue, a non-abrasive cream cleanser. |
| Grease, oil, food residue | Degreasing dish detergent or an alkaline kitchen degreaser; rinse and dry. |
| Hard-water spots & soap scum | Diluted white vinegar or a descaling bathroom cleaner; rinse thoroughly. |
| Metal marks (gray lines from pots or utensils) | Most common on matte finishes; remove with a mild cream cleanser and a soft sponge. |
| Ink, marker, crayon | Isopropyl alcohol or acetone on a soft cloth; rinse afterward. |
| Paint | Remove fresh paint with water or a suitable solvent; scrape cured paint gently with a plastic scraper. |
| Rust marks | A rust remover that does not contain hydrofluoric acid; rinse well. |
| Silicone, adhesive or grout haze | Plastic razor or scraper, then an appropriate solvent or grout-haze remover; rinse. |
| Candle wax, gum | Let harden, lift with a plastic scraper, then clean residue with a neutral cleaner. |

Rule of thumb: Start with the gentlest method — warm water and a neutral cleaner — and only move to stronger products if needed. Always rinse cleaner residue completely, because leftover film can attract dirt and dull the appearance.

# Fabrication & Installation

Large-format sintered stone rewards fabricators who respect its hardness and format.

Large-format sintered stone should be handled and fabricated by professionals experienced with thin, high-density slabs. Proper equipment, support, cutout radii, transport, seam planning and installation technique are important to achieving the intended finished performance.

- Handling & transport — Store and move slabs vertically on A-frames or bundles. Never carry or lift a large slab flat without full support. Use rigid frames or vacuum lifters and adequate crew — a full slab weighs approx. 330 lb.

- Inspection before cutting — Inspect slabs for transit damage, flatness and design/finish before cutting. Confirm the design, finish and sequence letter of matched sets.

- Cutting — Use equipment and continuous-rim diamond blades suitable for porcelain/sintered materials, with steady water cooling. Many shops make relief cuts to release tension before final cuts.

- Cutouts — Use radiused inside corners, never square-cut corners. Keep adequate material between cutouts and slab edges, and support the piece fully while cutting.

- Edges & mitres — Mitered edges and waterfall joints require precise angles and appropriate adhesives; ease exposed arrises to improve chip resistance.

- Support & installation — Install on level, rigid cabinets or a continuous substrate. Support overhangs with brackets as required, and leave expansion allowance where the slab meets walls.

- Seams — Bond seams with an adhesive suited to sintered/porcelain surfaces and color-matched to the design; plan seam location with the customer.

- Wall & shower cladding — Use an appropriate large-format porcelain installation system and substrate, and follow wet-area waterproofing practices.

Silica safety: Fabrication involves silica-containing mineral material. Cutting, grinding and polishing can create respirable crystalline silica dust. Professional shops should use wet-processing methods, engineering controls such as local exhaust ventilation, appropriate respiratory protection and exposure monitoring, and follow the OSHA respirable crystalline silica standards (29 CFR 1910.1053 for general industry and 29 CFR 1926.1153 for construction). A finished, installed countertop does not release silica dust during normal use.

# Silica, Health & Sintered Stone

You may have seen news about silica and countertops. Here is what customers should know.

Crystalline silica is a natural mineral found in sand, granite, concrete and many building materials. It is harmless in a finished countertop, but when silica-containing materials are cut, ground or polished, they can release fine respirable crystalline silica dust. Breathing high levels of this dust over time can cause serious lung disease, which is why the stone fabrication industry is required to control it.

| Material | Typical crystalline silica content |
|---|---|
| Granite | Approx. 10–45% |
| Marble | Generally less than 5% |
| Sintered stone / porcelain | Varies by product and manufacturer; confirm with the product SDS |

General figures widely cited by U.S. occupational-health sources; individual products vary.

- For homeowners — An installed, finished sintered stone countertop does not release silica dust in normal use. The concern is for workers during cutting and grinding.

- For fabricators — Use wet cutting, local exhaust ventilation, respiratory protection and exposure monitoring, and comply with OSHA 29 CFR 1910.1053 and 1926.1153.

- Ask for the SDS — The safety data sheet lists crystalline silica content. Duhon Imports is obtaining SDS documentation for each design.

- Choose responsible shops — Ask your fabricator how they protect their workers — responsible shops will be glad to explain.

# The Duhon Imports Collection

Curated around designs that translate beautifully to current U.S. residential interiors.

Our complete 12mm and 20mm catalogs are available under the corresponding navigation tabs. Available inventory contains the ten selections below: five 12mm designs and five 20mm designs, each with zero slabs and Incoming status. Only imagery from our current catalogs is represented. Confirm quantity, finish, pattern and availability when requesting a quote.

| Code | Design | Thickness |
|---|---|---|
| DI-12-001 | Pure White | 12mm |
| DI-12-002 | Royal Fish Belly White | 12mm |
| DI-12-003 | White Snow Princess | 12mm |
| DI-12-004 | Calacatta Gold Look | 12mm |
| DI-12-005 | Black Marble Glossy | 12mm |
| DI-20-001 | Silver River | 20mm |
| DI-20-002 | Premium Calacatta Gold | 20mm |
| DI-20-003 | Fine Calacatta White | 20mm |
| DI-20-004 | Taj Mahal | 20mm |
| DI-20-005 | Black & White Marble | 20mm |

# Ordering, Samples & Delivery

- Request a quote — Reference the Duhon item code, finish and quantity of each design. Quotes are provided for single slabs, matched sets and bundles.

- Samples — Sample pieces are available for most designs so you can confirm color, finish and veining in your own space.

- View slabs in person — Trade customers can schedule a time to view available inventory at our Johnson City, Tennessee location.

- Trade accounts — Fabricators, contractors, builders and designers can open a trade account for quotes and documentation support.

- Pickup & delivery — Slabs can be picked up by your fabricator or delivered on request. Slabs must be transported vertically on A-frames.

- Receiving inspection — Inspect slabs at pickup or delivery and before cutting. Report any concern before fabrication begins.

Before you buy — checklist: Confirm design, Duhon item code and finish · Confirm whether the design is single face or a matched set · Approve a sample · Confirm slab count with your fabricator · Ask for current documentation and warranty terms · Plan seams and vein direction.

# Frequently Asked Questions

### Does it need to be sealed?

Sintered surfaces generally do not require periodic sealing.

### Can it stain?

Its low porosity provides strong stain resistance, but spills should still be cleaned normally.

### Can I put a hot pan on it?

The category has excellent heat resistance, but trivets remain sensible everyday care.

### Can it scratch?

It is highly scratch resistant, not indestructible. Use a cutting board and avoid abusive contact.

### Can it chip?

Like other hard surfaces, edges and corners can chip if struck by heavy objects. Eased or mitered edges help.

### Can it go outside?

Potentially, but exterior use should be confirmed against the exact product's UV/weathering and freeze-thaw documentation.

### Is it real marble?

No. Marble-look designs reproduce the visual character of marble in a manufactured mineral surface.

### Will the color fade in sunlight?

The sintered category is known for strong UV color stability because there is no resin to yellow.

### Is 12 mm strong enough for a countertop?

Yes, 12 mm is a recognized countertop thickness for sintered stone when properly supported and fabricated.

### Should I choose 12 mm or 20 mm?

12 mm gives a slim modern look and less weight; 20 mm matches a standard 2 cm countertop and adds stiffness. See Understanding 12 mm & 20 mm.

### How long has sintered stone been around?

Large-format sintered countertop slabs were introduced around 2010–2012, building on centuries of ceramic sintering.

### Is it safe for my family?

Yes. A finished, installed surface does not release dust in normal use, and the non-porous surface is easy to keep clean.

### Can I cut on it?

It resists knives well, but cutting directly on it will dull your knives and can mark the surface. Use a cutting board.

### Can it crack from heat?

Quality sintered stone is very heat resistant. Avoid extreme, localized thermal shock, such as a red-hot pan left on a cold surface.

### Can I have a thick-looking edge?

Yes. A mitered built-up edge can make the countertop appear 1 to 2 inches thick or more.

### Can I use an undermount sink?

Yes. Undermount, integrated and farmhouse sinks can all be used with proper cutouts and support.

### Is it food-safe?

The non-porous surface is easy to keep hygienic. Food-contact certification is being confirmed by design.

### Can chips be repaired?

Small chips can often be filled by a fabricator; on designed surfaces repairs can be harder to make invisible.

### Why do some designs have to be bought as a set?

Book-match and A/B/C designs are continuous patterns across slabs, so they are sold together.

### Does the edge show a different color?

The current collection has a white body, so cut edges show white unless a mitered edge continues the design.

## Common Myths About Sintered Stone

| Myth | Fact |
|---|---|
| "It's just thin tile." | It is related to porcelain, but produced as very large, dense slabs designed for countertops and architecture. |
| "It's indestructible." | It is very hard and resistant, but edges can chip from sharp impacts. Normal care still matters. |
| "12 mm is too thin for a countertop." | 12 mm is a recognized countertop thickness for sintered stone when properly supported; 20 mm is also available. |
| "It needs special cleaners." | Warm water and a mild, neutral cleaner are all it normally needs. |
| "It must be sealed like granite." | Its very low porosity means it generally never needs sealing. |
| "You can't put a hot pan on it." | It has excellent heat resistance; trivets are still good practice for extreme or prolonged heat. |
| "Any countertop shop can cut it." | It requires proper blades, handling and experience; choose a fabricator familiar with sintered surfaces. |
| "It looks fake." | High-definition design and real-stone references produce very convincing natural looks — view a full slab or large sample to judge. |

## Product Documentation & Responsible Claims

Duhon Imports believes customers should be able to understand exactly what they are purchasing. The dimensions, nominal thickness, origin and manufacturer-stated composition and finish information in this guide relate to the current collection. Broader performance descriptions explain recognized characteristics of the

sintered-stone material category.

Before any performance characteristic is represented as a tested specification of an individual Duhon Imports SKU, the supporting manufacturer or independent test documentation should be reviewed. Duhon Imports is obtaining and organizing technical documentation for the collection.

## Documentation being verified

- Technical data sheet and safety data sheet (SDS)
- Water absorption, stain/chemical resistance and abrasion/scratch data
- Flexural/breaking strength and thermal/thermal-shock data
- UV/weathering and freeze-thaw data for exterior applications
- Slip-resistance (DCOF) data for any finish represented for flooring
- Fire classification and available food-contact/low-emission certifications
- Crystalline-silica information and fabrication safety guidance
- Country/Certificate of Origin documentation
- Care, fabrication and installation instructions
- Warranty terms
- Confirmation of surface-print, through-body or vein-through construction by SKU

Customer note: Final suitability for a particular installation depends on the selected SKU, fabrication design, support conditions, environment and installation method. Product specifications and warranties should be confirmed at the time of purchase. Natural variation in shade and pattern between production batches can occur; approve your actual slabs before fabrication.

# Glossary

| Term | Meaning |
|---|---|
| A-B / A-B-C sequence | Consecutive slabs designed so the pattern continues from one slab to the next. |
| Book match | Mirror-image slabs placed side by side to create a symmetrical pattern. |
| Body | The material beneath the decorative surface, visible at edges and cutouts. |

| Term | Meaning |
|---|---|
| Calacatta | A marble style with a bright white background and bold gray or gold veining. |
| DCOF | Dynamic coefficient of friction — a measure of slip resistance for floors. |
| Crystalline silica | A natural mineral found in sand, stone and many building materials; dust from cutting it must be controlled. |
| Gauged porcelain tile panel (GPTP) | The U.S. standards term (ANSI A137.3) for thin porcelain panels and slabs. |
| Eased edge | A nearly square edge with lightly softened corners. |
| Etching | A dull mark caused by acid reacting with a surface — common on marble, resisted by sintered stone. |
| Fabricator | The professional shop that templates, cuts, finishes and installs slabs. |
| Mitered edge | Two pieces joined at 45° so the edge appears as a thick solid slab with continuous veining. |
| Mohs hardness | A 1–10 scale of scratch resistance; diamond is 10. |
| Overhang | The portion of a countertop extending beyond its supporting cabinet. |
| Porosity / water absorption | How much liquid a material can absorb; lower values mean better stain resistance. |
| Remnant | Usable material left over after the main pieces are cut from a slab. |
| Respirable crystalline silica | Fine silica dust created by cutting or grinding stone; controlled with wet methods and protection. |
| Sintering | Fusing particles together with heat and pressure without fully melting them. |
| Template | A precise pattern of the installation area used to cut the slab pieces. |

| Term | Meaning |
|---|---|
| SDS | Safety data sheet — the document listing a product's composition and safe-handling information. |
| Ultra-compact surface | A marketing term for very dense sintered surfaces. |
| Through-body | Construction in which the body color closely matches the surface throughout the thickness. |
| Waterfall | A countertop that continues vertically down the end of an island to the floor. |