



AUREA | STONE

ARCHITECTS & DESIGNERS
PRODUCT MANUAL





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THE MOST REALISTIC MATCH TO NATURAL MARBLE

Aurea, or divine proportion, is often considered as the ultimate expression of beauty.

With Aurea Stone we exemplify this perfection, through the most realistic match to natural marble, which brings beauty, balance and harmony in art and design to your life.

Aurea Stone is perfect for an extensive range of interior commercial and residential applications, such as kitchen counter tops, bathrooms, flooring, wall or furniture cladding, reception counters or bar tops. These surfaces are not suitable for exterior use, or areas where resins may be exposed to UV.

This Architect's and Designer's Manual (or A&D Manual) provides professionals with current and relevant information regarding Aurea Stone quartz, as well as best practices, enabling architects and designers to oversee their projects with confidence.



ADVANTAGES

Our continuous technology advances, demanding quality standards and quality control have resulted in the development of a unique tool: **Phi Technology**. It is a one-step, ambient temperature, ambient pressure process that both incorporates and exceeds the standard manufacturing method and mixing composition that dominates the engineered stone industry, culminating in an exclusive natural looking stone that has been pursued for years, with results incomparable to competitors.

Which raises the question, what makes Aurea Stone so remarkably different?



TRANSLUCENCY

Like natural stone patterns, our veins show a unique translucent transparency that will make you believe they are real.

BEAUTY OF NATURAL STONE

The incredible shifting of shades and movement inside our patterns make them so unique that they are rivaled only by natural stone.

EVEN STRONGER THAN GRANITE

Phi Technology produces a notably enhanced surface, suitable for any application, and with much better durability than any other material you have worked with.

WHITEST

The way Aurea Stone is produced, together with its Phi Technology, provides a grain-less surface with an astonishing white background, which is two full shades whiter than competitors.

BETTER CONSISTENCY

Any application is possible, not only with the look of a high-end natural stone, but with a reliably consistent appearance and price, for any quantity needed. Perfect for projects large or small.

LESS WATER ABSORPTION

Much less water absorption than other engineered stone options.

LESS STAINS

Phi Technology offers a stainless surface.

EASY TO CUT AND MANUFACTURE

Our material is very easy to cut and manufacture, and what's more important, you can use the entire slab with no waste.

PRODUCT DESCRIPTION

Aurea Stone grew from our strong desire to present the world with the most natural, believable marble designs. The result? A peerless quartz with high definition character movement and sharp, clean, tight lines, which in previous generation quartz often appear blurry or washed out. **Having perfected the white marble quartz through Phi Technology, we have created a new product generation: QUARTZ 2.0.**

We produce slabs of quartz with a ‘no grain’ surface, with a better light reflection and higher shine. No other in the market is brighter, or whiter. What’s more, Aurea Stone’s translucency is unmatched. And Aurea Stone’s unparalleled depth is evident through soft and subtle undertones of color beneath the surface.

The integral solidity and strength of Aurea Stone’s quartz surfaces provide designers and architects with the widest possible choice of profile options, equaling those available in natural stone products. This freedom allows you to explore creative concepts and endless practical applications.

Precision and efficiency defines our material. Whether for private quarters, work areas or public spaces, Aurea Stone’s quartz represents a solid asset that ensures value for money and return on investment for years to come.



TECHNICAL SPECIFICATIONS

TEST ITEMS	TEST METHODS	TEST RESULTS	
APPARENT DENSITY	EN14617-1:2005	2360Kg/m ³	
WATER ABSORPTION	EN14617-1:2005	0.03%	
FLEXURAL STRENGTH	EN14617-2:2008	44.8MPa	
SLIP RESISTANCE (POLISHED)	EN14231:2003	SRV “dry”: 55 SRV “wet”: 12	
ABRASION RESISTANCE	EN14617-4:2005	20.6 mm	
THERMAL SHOCK RESISTANCE	EN14617-6:2005	Mass loss: 0.03% Flexural strength loss: 2.9%	
IMPACT RESISTANCE	EN14617-9:2005	4.89J	
CHEMICAL RESISTANCE	EN14617-10:2005	Classification: C4	
LINEAR THERMAL EXPANSION	EN14617-11:2005	19.80 10 ⁻⁶ /°C	
COEFFICIENT			
DIMENSIONAL STABILITY	EN14617-12:2005	Classification: A	
MOH’S HARDNESS	EN101	7	
RESISTANCE TO CHEMICALS AND STAINING AGENTS	EN14688, CLAUSE 5.5	STAINING AGENT	CLEANING TEST
		CH ₃ COOH (10% V/V)	REMOVAL
		NaOH (5% m/m)	REMOVAL
		C ₂ H ₅ OH (70% V/V)	REMOVAL
		NaOCl (5%)	REMOVAL
		METHYLENE BLUE (1% m/m)	REMOVAL
		NaCl (170 G/L)	REMOVAL

AUREA STONE: PRODUCT DESCRIPTION

RESTRICTIONS

Aurea Stone is intended for interior use exclusively. Avoiding exposure to the following situations is highly recommended:

1. Excessive heat. Aurea Stone is strong and heat resistant; however one should avoid stressing the material with sudden thermal shock. Also, chronic or acute exposure to high heat can scorch the resin binders. Never set hot pans directly on the surface and always use hot pads or trivets to protect your counters.

2. Chemicals. Any product containing trichloroethane, methylene chloride, abrasives, pH levels greater than 8 or less than 5, hydrofluoric acid, liquid bluing, gentian violet or aggressive cleaning compounds must be avoided.

3. Acids. Common acids such as hydrochloric, muriatic or sulfuric do not affect Aurea Stone surfaces. In concentrated solutions, and after being exposed 24hrs, some acids including nitric acid will discolor the material, although they will not compromise its strength. Hydrofluoric acid spills should be removed immediately to avoid any reaction in the countertop. In case of accidental exposure to these substances, wash meticulously with clean water as soon as possible.

4. Bases: Sodium hydroxide and potassium hydroxide in concentrations of 10% or higher will mark the material; therefore, any accidental spill any accidental spill must be cleaned up immediately. Household cleaning products containing sodium and potassium hydroxide in typical concentrations do not damage Aurea Stone surfaces.

5. Solvents. Most solvents are not harmful. Household cleaners and industrial strength solutions of methyl ethyl ketone (MEK) have shown any effect on Aurea Stone. Solvents that can be safely used in pure concentration only in Aurea Stone include: acetone, mineral spirit, methylene chloride, lacquer thinner, isopropyl alcohol, trichloroethane.

6. Staining agents. Aurea Stone material is impervious to common laboratory staining agents. It is not permanently stained by povidone-iodine (betadine), potassium permanganate or tincture of iodine. Residual stains of betadine or iodine on light-colored Aurea Stone cleans off with chlorine bleach. Darker colors show no stain from these agents. However, some colors can be stained by prolonged contact with solutions of gentian violet, blue ink and some lipsticks.



PRODUCT PROCEDURE

Manufacturing: 97% of the water used during manufacturing is reclaimed using filtration and recycling systems. Regenerative thermal oxidizers remove particulate matter from the atmosphere, reducing air pollution and ensuring a safer work environment.

Regional fabrication: surfaces can be produced by fabricators located close to the building site.

Product lifespan: Aurea Stone is a very durable material. A 15-year warranty is available.

Recommended cleaning and maintenance: Aurea Stone is a very low maintenance material. Unlike natural stone, it does not need periodic resealing for stain resistance, and its good looks can be maintained without the use of harsh cleaning chemicals. This improves indoor air quality and eliminates the environmental impact of sealers and cleaning chemicals.

Product reuse: The high strength of Aurea Stone can make it possible to remove surfaces without excessive breakage. The durability of the material therefore permits it to be reused in another location.

ART COLLECTION

The first Aurea Stone Collection, called the Art Collection, is inspired by the great beauty brought to light by history's most esteemed artists, including Michelangelo, Rodin, Dalf, Shakespeare, Picasso and Phidias.



DINERGY IS THE PATTERN FORMING PROCESS CREATED BY THE UNION OF OPPOSITES.

This pattern forming can be seen throughout nature. Dinergy is the concept that the Golden Rectangle is made up of two unequal parts, a minor and a major part that are joined in a harmonious whole.

Michelangelo was inspired to paint the Sistine Chapel by the Dinergy concept of Nature. He used Cangianti techniques.

Cangianti is characterized by the painter's changing to a different, lighter, hue when the original hue cannot be made light enough or conversely, changing to a darker hue when the original hue cannot be made dark enough.

AUREA STONE Dinergy patterns show so many different shades, colors, lights and darks on each vein, you'll believe they came from nature itself. And the only difficulty will be in choosing between the major or the minor designs.



AUGUSTE RODIN'S MONUMENTAL MARBLE SCULPTURE OF TWO NAKED LOVERS FUSED IN PASSION, "THE KISS," REPRESENTS PAOLO AND FRANCESCA, TWO CHARACTERS BORROWED FROM DANTE'S DIVINE COMEDY.

It must be one of the frankest – and most popular – images of love in the history of art.

As with many of Rodin's sculptures, "The Kiss" is designed to be viewed from every angle and Rodin wanted the piece to be believable and real.

Although it wasn't done intentionally, Rodin repeated the sculpture many times until he found the correct size for it: 181.5 cm x 112.3 cm. Exactly an AUREA PROPORTION.

Deep in the Apuane Mountains of Tuscany, Italy are the most beautiful white marbles the world has ever known.

It is here that the rich tradition of Italian marble production began, and it is these exquisite stones that have inspired so many throughout human history.

Continuously quarried for over 2,000 years, this classic symbol of wealth and refined taste has been employed in the construction of many of Western civilization's most important monuments. Statuario is the most precious variety of these Italian marbles. With dramatic veining against an icy white backdrop, Statuario makes an exceedingly powerful statement in any design.

Timeless in its beauty, its crisp white background and grey veining brings a profound sense of elegance and sophistication to any project.

Now, thanks to Phi Technology, you have DIVINE. A unique Statuario that will fit perfectly in your own dream projects.



IF YOU EPITOMIZE SOMETHING, YOU'RE A PERFECT EXAMPLE OF THAT THING.

Picasso may have been the epitome of creativity, elegance and perfection.

His rigorous work ethic meant that he was able to apply his creative genius to a diverse range of media, including sculpture, ceramics, mosaics, drawing, printmaking, collage and stage design.

The aura of Picasso's 'Midas' touch, and his magnetic persona and turbulent personal life, peppered with muses and lovers who fueled his impassioned creative drive, all ensured that he was the first Western artist who, in his own lifetime, became an international celebrity whose work achieved mass appeal.

The Golden veins of EPITOME may be a synthesis of the influence and message that Pablo Picasso tried to share through his art: Nature, Passion and Elegance all in one design: EPITOME



ABRAHAM LINCOLN, THE GREAT 16TH PRESIDENT, WAS KNOWN FOR MANY THINGS; FREEING THE SLAVES, WINNING THE CIVIL WAR, AND HOLDING THE UNION TOGETHER, TO NAME A FEW.

But, he was also one of the most literary presidents to exist. Of the three books that sat on his White House desk, one of them was the works of Shakespeare – a writer Lincoln cherished throughout his life. He also enjoyed going to the theater, which in his day, often meant viewing the Shakespearean works, as well.

Shakespeare has been credited for introducing more than 3,000 words to the English language by the Oxford dictionary. It is estimated that his vocabulary ranged from 17,000 to a dizzying 29,000 words – at least double the number of words used by the average speaker.

Because of the Union of these two exquisite human beings, we have been inspired to develop the very unique: LINCOLN.

CALACATTA LINCOLN marble is quarried from a gallery quarry near Aspen, Colorado, discovered in 1873. Characterized by a clean white background, and with distinct grey veining, this is an all-American marble with great character and beauty, and directly connected to AUREA proportions:

The Lincoln Memorial in Washington, D.C. has a length of 192 feet and a width of 119 feet. The ratio between these is 1.6 ... the Golden Ratio.

We invite you to discover the magic and exquisiteness of LINCOLN, so close your eyes, make a wish and ...



PARAGON: A MODEL OR PATTERN OF EXCELLENCE OR PERFECTION OF KIND.

In the art world, there are countless famous works of art that we all recognize, but can we always name the artist behind them?

There are a handful of artists whose signature styles make their pieces easily recognizable, like Da Vinci, Van Gogh, Picasso, Warhol, Pollock and, of course Dalí, whose painting

“The Persistence of Memory” has made him the single most famous representative of Surrealism, and quite possibly the most widely recognized artist in the world.

Something similar happens with **Paragon**, a new AUREA STONE white marble color that will remain forever unforgettable to the eyes with a deep and elegant pattern design, creating unique spaces that will persist in anyone’s memory.



THROUGHOUT HUMAN HISTORY, THE RATIO FOR LENGTH TO WIDTH OF 1.618 HAS BEEN CONSIDERED THE MOST PLEASING TO THE EYE.

This ratio was named the golden ratio or Aurea Proportion by the Greeks. In the world of mathematics, this numeric value is called “PHI,” and it’s named for the master Greek sculptor Phidias.

Phidias was a Greek sculptor, painter and architect. His statue of Zeus at Olympia was one of the Seven Wonders of the Ancient World.

Phidias also designed the statues of the goddess Athena on the Athenian Acropolis, in the Parthenon, which all exemplify an Aurea Proportion.

Phidias is often credited as the driving force behind the Classical Greek sculptural design. Today, most critics and historians consider him one of the greatest of all ancient Greek sculptors.

This Aurea Stone color is not only a tribute to the discoverer of PHI but a masterpiece of design that fills your spaces with colors and patterns that rival Nature herself.



SFUMATO IS ONE OF THE FOUR CANONICAL PAINTING MODES OF RENAISSANCE ART.

The word sfumato comes from the Italian language and is derived from fumo (smoke). "Sfumato" translated into English means soft, vague or blurred.

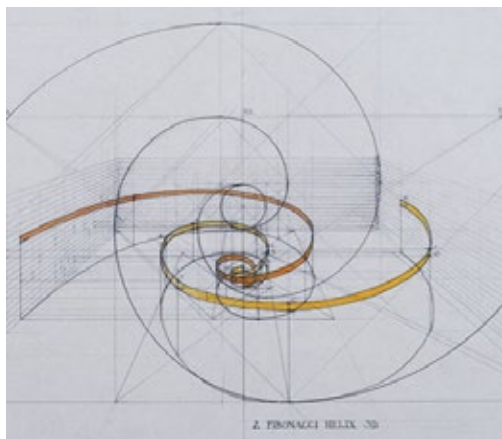
Leonardo da Vinci (1452-1519) became the most prominent practitioner of Sfumato - his famous painting of the Mona Lisa exhibits the technique.

Leonardo da Vinci described sfumato as "without lines or borders, in the manner of smoke or beyond the focus plane."

This **VENATINO SFUMATO** offers a **unique transparency and mildness in its veins and background that can be only compared to an artwork created by ancient masters like Leonardo.**

Now you can enjoy it with all the advantages of an AUREA STONE product and the beauty of nature.

FINISH AVAILABLE: SILK



Def. A curve on the surface of a cylinder or cone such that its angle to a plane perpendicular to the axis is constant. Helixes can spiral clockwise or counter-clockwise and one would be the mirror reflection of the other.

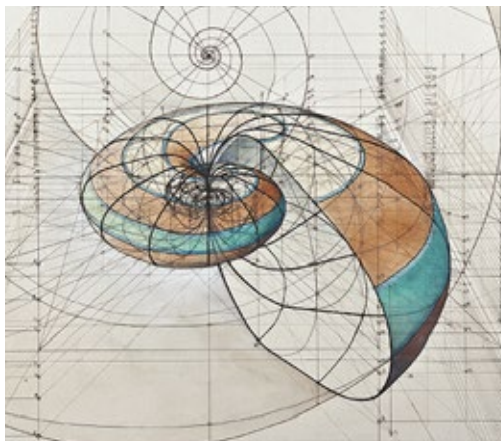
The use of the Arabic numerals permitted Fibonacci to find that there are numbers whose ratio is the same as the ratio of their sum to the larger of the two quantities. This ratio can help us understand the nature of phenomena like the helixes found in storms, cyclones and hurricanes, or in the structure of the DNA, which is based on the ratio between, precisely, 21 and 34.

Long before the discovery of DNA, the caduceus, a double helix of two serpents coiled around a wand, was regarded as the symbol of the Greek god Hermes, messenger of the gods, purveyor of incantations and protector of merchants.

COLOR DESCRIPTION

Dark grey background with an attractive and subtle white veining throughout. The dramatic contrast of the white vein against the warm grey base makes this color a very elegant and sophisticated stone. No only shows personality, strength and character, but also grace and contemporaneity.

FINISHES AVAILABLE: SILK & POLISHED



The early mathematician Fibonacci introduced Arabic numerals to the West.

He also discovered the number sequence found in everything from daisies to databases.

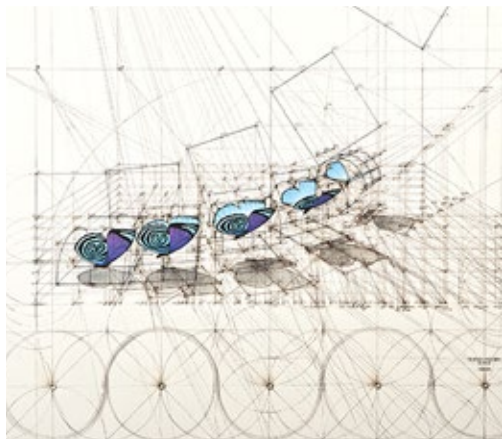
Fibonacci also laid the groundwork for our modern-day mathematical understanding of certain shapes in nature, including Nautilus shells.

These shapes are called logarithmic spirals, and Nautilus shells are just one example. You also see logarithmic spiral shapes in spiral galaxies, and in many plants such as sunflowers.

COLOR DESCRIPTION

Super White overall tone with light grey and gold veining. Nautilus presents a vintage style, perfect for any classy and fineness environment.

FINISHES AVAILABLE: SILK & POLISHED



Def. A Fibonacci sequence is a list of numbers in which every element after the first two is the sum of the two preceding elements. The general example of a Fibonacci sequence starts with the number one as the first two elements. 1, 1, 2, 3, 5, 8...

By developing his eponymous proportion, Fibonacci found the trail that leads us to a mathematical explanation of what was called since the distant 5th century BC the Golden Ratio, or Golden Proportion.

According to the astronomer Johannes Kepler, if we divide increasing consecutive Fibonacci numbers the result will get closer and closer to that proportion, an irrational number itself with an approximated value of 1.6180339887... The Golden Number.

The first known artist to have used the Golden Proportion in his designs was the magnificent sculptor and architect Phidias, author of, among other works, the statue of Zeus at Olympia, one of the Seven Wonders of the Ancient World. Is in Phidias' honor that this number, which embodies the Golden Proportion, has been represented by the Greek letter Phi: ϕ .

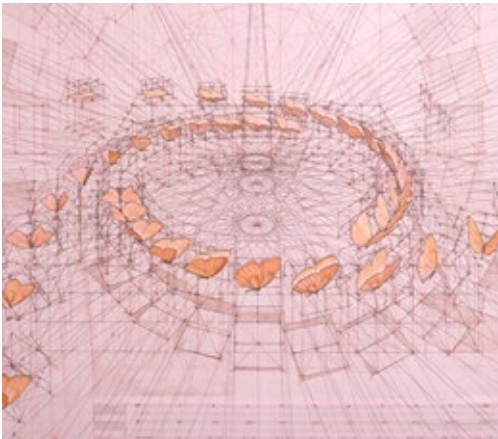
This quasi-magic ϕ , along with its mathematical ratios and proportions, can be found everywhere: hurricanes, galaxies, animal bodies, harmonics, music, light... It seems to bond the beauty of the cosmos, from its smallest manifestations to its largest spatial structures.

COLOR DESCRIPTION

Grey veins and curving shadows performing in a peerless white background. With an exquisite and classic timeless appearance, SEQUENCE corresponds to the perception of beauty.



FINISHES AVAILABLE: SILK & POLISHED



The early mathematician Fibonacci introduced Arabic numerals to the West.

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AUREA STONE: SLAB INFORMATION

SIZE

The slab dimensions of Aurea Stone's quartz surfaces are: **JUMBO SLAB: 126" x 63"** or **ORIGINAL SLAB: 120" x 56.5"**. These options give fabricators the flexibility to maximize their utilization of the material.

JUMBO SLABS

1600mm/63"



3200mm/126"

ORIGINAL SLABS

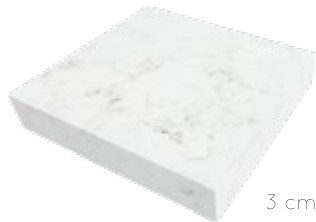
1400mm/56.5"



3000mm/120"

THICKNESSES

The slabs are available in two thicknesses: 3/4" and 1-1/4", to make possible a multitude of applications.



3 cm
1-1/4"



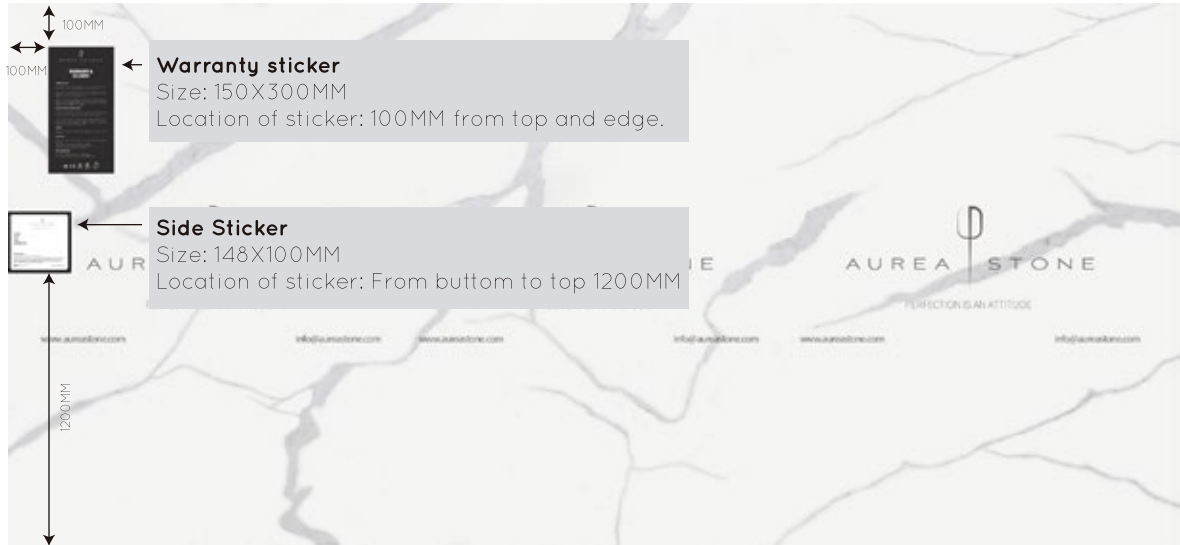
2 cm
3/4"

All colors are available in all sizes and thicknesses.

AUREA STONE SLAB LABELS

Standard Aurea Stone Label on Front of Slabs.

Each slabs will be put three stickers: **Warranty sticker, Slabs Edge Sticker, Tear off Paper**



Tear off sticker and edge sticker information:

1. Item name
2. Item number
3. Production batch
4. Shade number

For example:

CALACATTA DINERGY L 801 1717 SHADE005 are on both stickers and they must be the same.



Standard Aurea Stone Label on the Back of Slabs



PRE-FABRICATION:

Any failure by a Fabricator to comply with the recommended methods of manipulating the product may result in refusal of an end user claim. **In order to protect your own interests, Aurea Stone requires that you carefully read and follow these pre-fabrication, fabrication and installation instructions.**

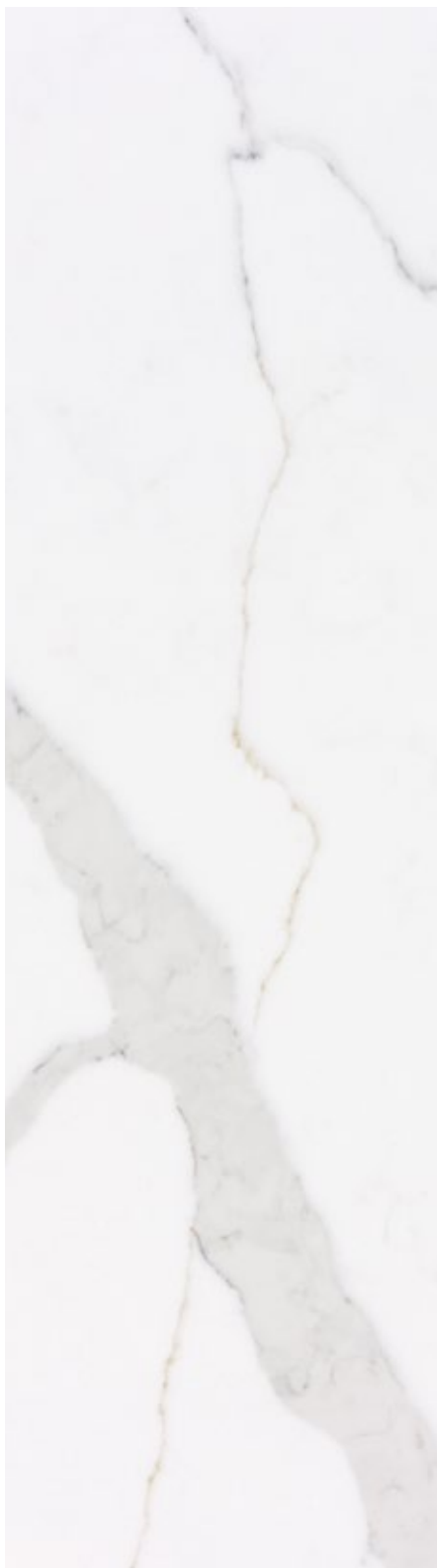
Please direct any questions about the recommendations in this manual to your local Aurea Stone official distributor.

Before manipulating any Aurea Stone material, you must perform a visual inspection for defects and ensure any necessary color matching. As you would before cutting any material, we recommend you complete the following steps to help guide your inspection:



- 1 Do not inspect slabs with the protective film on.
- 2 Inspect both the front and the back of slabs for any defects.
- 3 Look for any hairline cracks in the slab.
- 4 All slabs should be checked for accurate color matching before fabrication, whether the layout calls for them to be seamed or unseamed.
- 5 When book matching Dinergy or Divine patterns, make sure that the main veins match/line up 70 percent or more. Similarly, make sure that the third pair of veins match/line up 50 percent or more. When book matching veins, make sure veins have a similar direction and a similar shape.
- 6 Check slabs for correct dimensions, warpage, irregular spots, or other defects that make the slab unacceptable for fabrication.
- 7 Check for accurate color matching of all Aurea Stone colors, and the orientation/layout of pattern flow.
- 8 Once the fabricator has deemed a slab to be acceptable for fabrication and the slab is cut or machined in anyway, the slab cannot be exchanged. The fabricator is responsible for determining if the slabs are fit for fabrication. If they are not, they should be exchanged with their supplier. Aurea Stone will not accept claims for any of the above once the slab is modified or fabricated in any way.

Please note: Aurea Stone will not accept any claims for any of the above if the slab is modified or fabricated in any way. You are responsible for determining if the slabs are fit for fabrication. If they are not, they should be exchanged with your supplier.



VEINING/COLOR-MATCH

Always inspect all material before fabrication. **Aurea Stone replicates marble and is a veined material that has a non-directional pattern.** During the layout process it is very important to use extra care in layout relative to your seam locations. Aurea Stone vein distribution can be different throughout the slabs and at all edges, whether factory or fabricated. Our veined patterns will require a somewhat more careful/specialized layout to produce the optimal esthetic look.

Color-matching slabs before fabricating is a very important step. It is typical and expected for quartz slabs to exhibit slight color variation between batches and/or production cycles, due to the complex blending of natural minerals and raw materials.

If your job requires more than one slab you will want to check the Aurea Stone labels to check batch number along with the shade number of each slab. After inspecting all slab numbers, it is important to remove the protective plastic film. Now you will want to visually inspect slabs for color variation, color match and any other defects before cutting material.

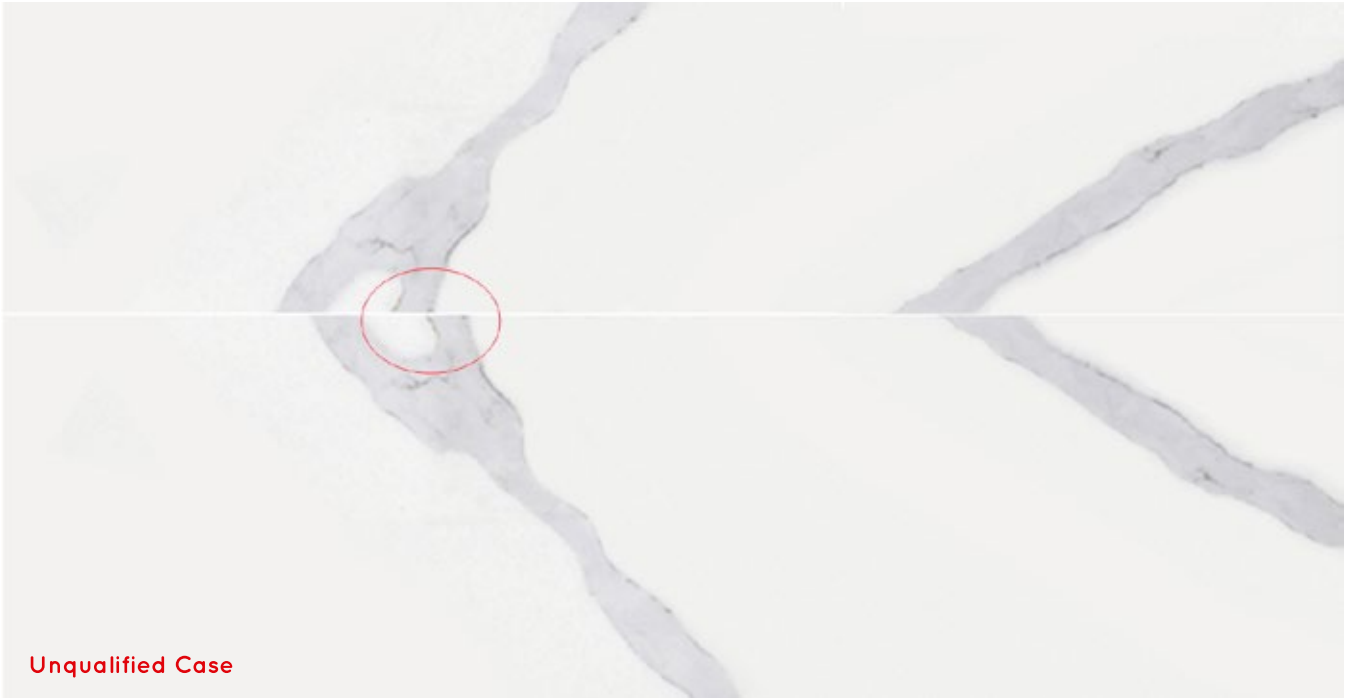
During layout don't forget to consider backsplashes. It is important that they color match and have vein patterns similar to those on the countertop.

Layout is one of the most important processes in fabricating Aurea Stone and vital to ensuring the best end result. Because Aurea Stone closely replicates the look of natural marble, it requires a little additional attention in this process to maximize the homeowner's lasting enjoyment.

AUREA DINERGY & DIVINE BOOK MATCH STANDARD

Examples of Qualified Book Matches for Aurea Stone:

When book matching: Make sure that the main veins match/line up 70 percent or more, and that the third pair of veins match/line up 50 percent or more. Keep in mind: The book match will not be 100 percent perfect as some variation in main vein pattern is normal.

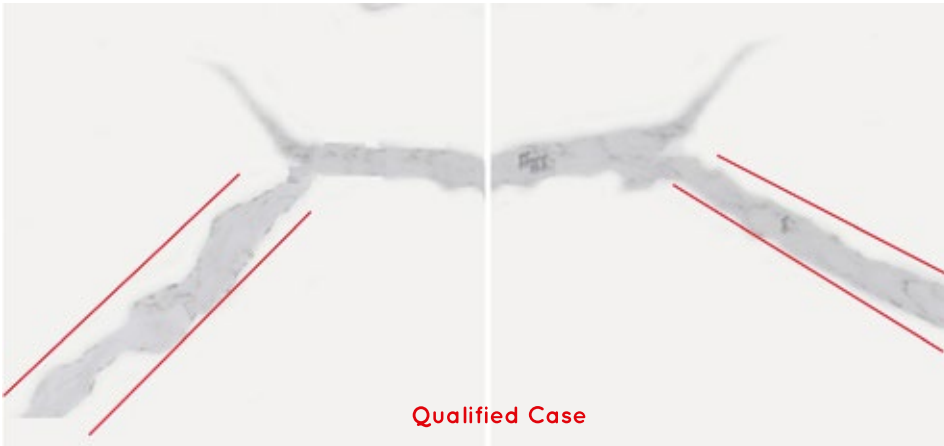


AUREA STONE: PRE-FABRICATION

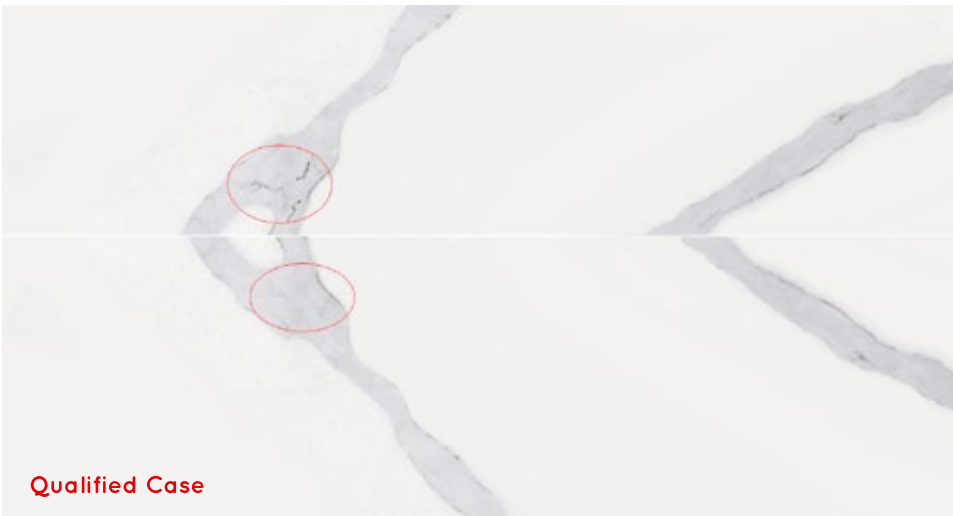
When book matched, 2 pairs of main veins connect area >70%, one pair main veins have different shape (mainly different width)



When book matched, the veins have both a similar direction and a similar shape.



When book matched, the two slabs have the same shade of veins. We allow some of the veins to have the black lines inside the veins.



SUPPORT REQUIREMENTS

Structures with support on four (4) sides. Structures supported on four sides do not require any additional support for either 2 cm or 3 cm material if the countertop depth is less than 26" and the countertop length is less than 118".

However, if the above dimensions are exceeded, support will be required every 36".

Structures with support on three (3) sides (i.e. dishwashers, frameless cabinets, desks, and Lazy Susans). Structures which are supported on three sides require additional support. Guidelines for 2 cm and 3 cm material are as follows:

- 2 cm & 3 cm materials with countertop depths greater than 26" need support every 24".
- 2 cm material with countertop depth less than 26" needs support every 24".
- 3 cm material with countertop depth less than 26" needs support every 36".

Some suggested support materials for cabinets that need additional support for Aurea Stone Quartz: plywood, wood, MDF board, structural steel.

All non-moisture resistant materials or products are not acceptable for use as support material. (OSB, Particle Board, etc.)

All of the above information should be taken into consideration by the fabricator during the templating and layout/measuring procedure. This will help avoid problems during the fabrication and installation process. Not following the procedures in this fabrication guide will void any warranty given by Aurea Stone.



OVERHANG / CANTILEVER

- Overhangs cannot exceed 1/3 of the countertop depth and must have a minimum length of 24".
- Material that is 2 cm requires support every 24".
- Material that is 3 cm requires support every 36".
- Overhang ratios require that two-thirds of the width/length of the material be supported; one-third of the width/length of the material can be unsupported (an overhang).
- No cutouts or cored holes are permitted on any overhangs.
- Additional support (i.e. support bars or 3/4" plywood) may need to be added to meet additional span requirements.
- Overhangs that exceed cantilever rules will need to add columns, corbels or legs to be properly supported as follows:

Overhang	No Support Needed	Corbels Required	Columns Required
2 cm material	≤ 8"	> 8"	> 18"
3 cm material	≤ 12"	>12"	> 24"

- Corbels should always be mounted to a stud for proper support of the material.

RECOMMENDED SUPPORT MATERIAL FOR CABINETS:

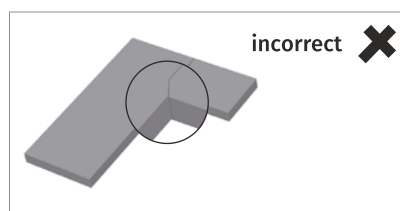
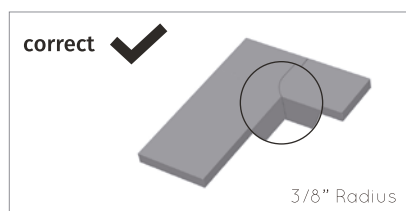
- Plywood, wood, medium density fiberboard and structural steel are the recommended support materials for cabinets that need additional support for Aurea Stone.
- Materials or products that are not moisture resistant, like oriented strand board and particle board, are not acceptable as support material.

The above information should be taken into consideration during the templating and layout/measuring process. This will help to prevent any problems during the fabrication and installation process. Not following the procedures in this fabrication guide voids any warranty provided by Aurea Stone Inc

SEAM LOCATION

During the layout process determine all your seam locations. This is very important for the esthetics of the material and kitchen. There are several locations for seams that should be avoided.

- Seams through the center of the sink cutout.
- Seams should not be placed where there is direct sunlight.
- Seams should never be above an under-counter dishwasher.



AUREA STONE: PRE-FABRICATION

TEMPLATING

It is very important to capture all information necessary to accurately fabricate all portions of the job, including sink and appliance centerlines, faucet hole locations, finished edges, overhangs, etc. It is also highly recommended that all appliances, sinks, cooktops or other items that require a cutout of the countertop, be on site when the fabricator is templating the job.

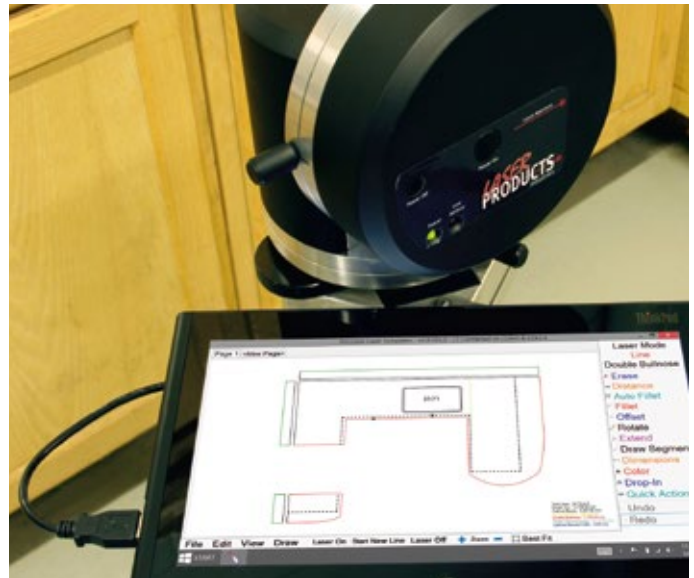
It is highly recommended that all appliances, cook-tops, sinks, or any item that penetrates the countertop be on site when the job is templated.

DIGITAL TEMPLATING

Today there are many digital templating methods from which to choose.

Digital templating is used to capture accurate countertop dimensions and configuration data. Digital templating has the advantage of being able to send the digital information directly to compatible fabrication equipment, such as computer numerical control (CNC) machines, bridge saws and waterjets. These digital systems use lasers, digital cameras and point-to-point digitizers.

Digital templating technology is a faster, more accurate and efficient way to measure jobs because information can be transferred digitally to your fabrication equipment.



MANUAL TEMPLATING

Handmade fabrication templates are created to accurately transfer the measurements and configurations from the job site to the fabrication shop. The most common items used are thin plywood, luan strips and cardboard. Job drawings contain the specific job information and are very important to support the actual template.

It is important to capture all necessary information to accurately fabricate all aspects of the job, including sink and appliance centerlines, faucet hole locations, finished edges and overhangs. It is recommended that all appliances, sinks, cooktops, or any other item that requires a cutout on the countertop be on site when the job is templated.



AUREA STONE: PRE-FABRICATION

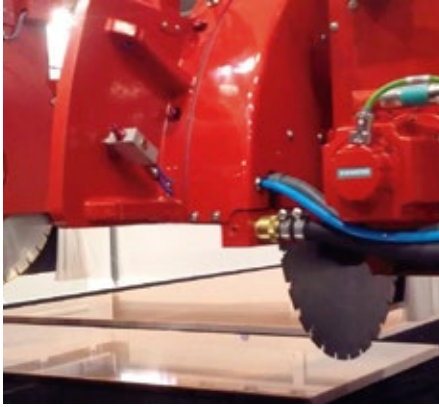
INFORMATION TO GATHER FROM HOMEOWNER:

- Choice of 2 cm or 3 cm material
- Name of Aurea slab selection
- Determine seam locations if needed
- Edge profile
- Backsplash
- Sink location
- Faucet location
- Appliance locations (i.e. cooktop/range, refrigerator, dishwasher)
- Location of additional items (i.e. soap dispenser, sprayer)
- Clarify inside corners (if using one piece of material for countertop, then use a 3/8-inch core bit for corners as internal corners must have a 3/8" radius at minimum; if using two pieces of material, use a square, two-piece seam)

Very important regarding cabinets:

Make sure that the cabinets are finished and installed properly. Fabricator must verify that all cabinets are level. The top of the cabinets must be true and flat with no more than a 1/16" slope over the span of 18". The cabinets must be adjoined to each other and secured to the immediate wall. All cutouts and seams must be properly supported; there should also be extra structural support around the dishwasher.

FABRICATION



CUTTING

Before cutting any slabs of Aurea Stone, calculate the square footage, length, and width of material needed to finish the project. This is very important when using Aurea Stone, because each batch and slab are unique and have specific shades that need to be matched for each job. If your measurements come up short, it may create color match concerns if more material must be ordered. Thoroughly inspect each slab for color, pattern, and defects. Do not use material with visible manufacturing defects unless the layout/job allows you to work around them.

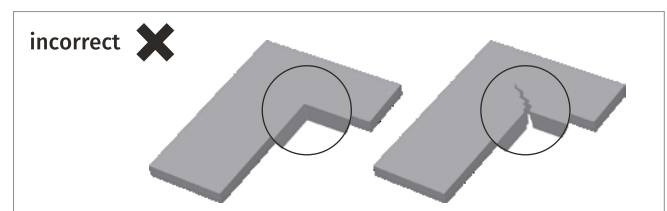
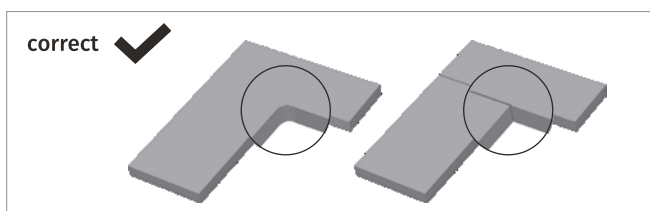
- 1** When cutting Aurea Stone Quartz, no matter what equipment you are using, the workpiece and tooling should always be kept cool with sufficient water for your diamond tooling and waterjets. Always avoid excessive heat with all diamond cutting tools.
- 2** The very first cut made on every Aurea Stone slab should be along the longest edge of the slab. Then you may proceed to cut along the shortest edge.
- 3** When using a bridge saw, you should never plunge cut.
- 4** It is important that you never cut square corners when fabricating Aurea Stone. This can create stress points in the countertop that is being fabricated, which can result in cracking.
- 5** Always use diamond core bits for all corners or radius cutting.
- 6** Corners that are fabricated on a single slab must have a minimum of a 1/4" radius.
- 7** Cross cutting should never be used when fabricating Aurea Stone countertops. Always use a diamond core bit to create your radius. This should always be used on inside corners, so any internally-angled corner must have a radius. Never cross cut.
- 8** Keep in mind that quartz slabs have a percentage of resin in each slab, which can allow some warping or bowing to occur, depending on storage practices and/or weather conditions. If this occurs, you should use the 'double-pass' cutting technique. First you make a cut half the length of your intended cut, and stop. This will relieve the tension, and the slab will flatten out. Then proceed with a second cutting pass to finish the cut.

CUTOUTS

Cutouts can be completed with several different types of equipment. A bridge saw can be used for straight cuts but all radius work needs to be cored with diamond core bits, and without any cross cutting. CNC machines are also very popular, and should be used following the same guidelines given for bridge saw use. Waterjets can be another alternative, with the proper abrasives and water pressures.

Please keep these considerations in mind:

- 1 L or U-shaped countertops with inside corners should always be fabricated from a single slab and must have a minimum of a 3/8" radius. Always keep in mind this rule: 'The larger the radius, the stronger the corner.'
- 2 If the distance between the cutout and the seam is less than 6", the seam needs to be supported. During the layout process this can be achieved by ensuring all seams are over cross members of the cabinets below. Alternatively, cross members need to be added.
- 3 Internal cutouts on all corners should have a 1/4" radius at minimum.
- 4 Cutouts for all drop-in sinks, cooktops, outlets, slide-in stoves, etc. should include an extra 1/8" from the edge to allow for expansion.
- 5 Faucets, soap dispensers and other cutouts range from simple core holes to complex cutouts for specialized equipment. Always have all equipment which requires cutouts on the jobsite during the installation process. This is the safest and best way to determine the shape or size of the core or cutout.
- 6 Always use the manufacturers' recommendations when available.
- 7 The customer should sign off and make the final decision regarding the location and the size of every cutout in their countertop.
- 8 Additional support should be added to both ends of each cutout if the base cabinet cross bars are not within 3" of cutout.
- 9 All cutouts for heat-producing equipment (cooktops, etc.) should have a 9-mil aluminum foil tape to minimize the transfer of heat to Aurea Stone Quartz. Always follow manufacturers' guidelines.



LAMINATION

A 'laminated edge' is created by gluing pieces of slab material together to create a variety of edge profiles including mitered edges, stacked edges, and drop edges. The lamination process is also used to create more sophisticated edge profiles.

Stacked Edges

An additional 1.5" wide strip of material is cut from the same slab during fabrication. The piece is glued to the underside of the countertop along the front edge to create a thicker edge. Example: If you are using 2 cm material it will create a 4 cm or 1.5" thick edge. If a plywood substrate is required underneath your 2 cm countertop for support, the laminated stacked edge also serves to hide the plywood from sight. This process can also be done with 3 cm material.

When laminating, it is important to make sure that the lamination piece is the full length of the top piece and that the corners are cut at 45 degrees. If for some reason the two laminated pieces must be joined, the joint must be cut at a 45-degree angle. The use of a mitered end cut reduces stress on the material that may cause stress fractures.

The lamination strip should be cut from the same slab as the countertop surface material to ensure a color match. When cutting the piece to be laminated, add the lamination piece size to your cutting measurements to ensure that a lamination strip of the correct length and color is available for the lamination process. A 45-degree corner joint is recommended to minimize the stress on the corners.

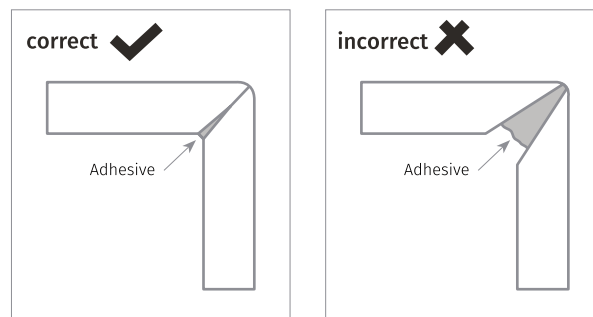
1. A 45-degree corner joint is recommended to minimize the stress on the corners.
2. Use full-length lamination pieces if possible.
3. On long countertop runs where a joint may be required, make sure that the joint in the laminated piece is at 45 degrees to minimize stress points.
4. Proper clamping is recommended every 3-4" for a secure, tight bond.

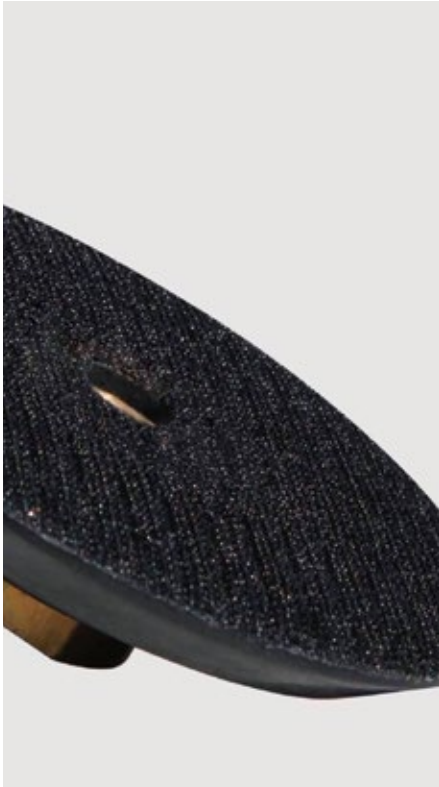
Mitered Edge

A mitered edge is made up with a perfect 90-degree angle, by joining two separate pieces of Aurea Stone Quartz, each cut at a 45-degree angle. Gluing them together will create a perfect 90-degree angle piece of quartz. Generally, it's done with 2cm material. Also, the longer the apron, the harder it is to hide your seams because it's more difficult to clamp. It is never recommended to have a mitered edge over 4 inches unless a special support is added.

Adhesives:

We recommend that a cartridge-style acrylic or epoxy that is already color matched for Aurea Stone quartz be used. Aurea Stone quartz is translucent, so solid colors will not match the translucency of the stone. Acrylics and epoxies have a chemical attraction to the stone and will provide the tightest seams. This is very important for mitered edge details because, when properly done, the adhesive is not visible.





POLISHING

One of the most important aspects is selecting the right polishing pads for Aurea Stone Quartz. There are a lot of different brands in the market, but it is important not to select polishing pads that have colored resin. These pads can be great for granite and are able to reach a quality polish but require an excessive amount of water and time; and can transfer the resin's color to the edges of the Aurea Stone Quartz. **Aurea Stone recommends using white resin pads only in all applications, whether hand polishing, or using an automatic edge polisher or CNC machine.**

Rigid Backer Pads:

Flexible backers work well for concave profile edges, such as ogee edges; there is no need to use a flexible backer on most other profiles. Keep in mind that all automatic edge machines use extremely rigid polishing tools and backer pads; these machines will produce a far better edge than what many fabricators can do by hand.

Polishing Pads:

Common problems include both using too much water and not enough water, and not using the proper polishing technique.

- When too much water is used while applying pressure to the center of the pad, the water gets trapped in between the pad and the stone, causing a hydroplaning effect. This causes the water to escape to the outer edges of the pad, making it difficult for the polishing pad to effectively polish the edge or edge's surface. This will result in a spotty polish.
- When too little water is used, the polishing pads tend to flex or cup outwards around the center of the pad (mainly with higher grits). This causes the outer edges of the polishing pad to touch the surface, but will not allow the center of pad to polish. The tendency is to apply more pressure, which also leaves a spotty polish.
- When polishing the edge detail on Aurea Stone quartz, be sure to use the entire polishing pad surface, which is stated in the tips below. When polishing any bullnose edge, it is important to use the center of the pad only as it will give the proper water distribution for the pad and the stone.
- Never use a final buffing pad for Aurea Stone quartz. These come in black and buff and contain different chemicals and no diamonds and are meant to bring granite to a high polish. The final step for polishing Aurea Stone quartz is to use a grit level of 3000.
- Dry polishing the edge profile may cause overheating of Aurea Stone quartz. Excessive heat to the stone can alter the physical properties of the slab which can cause micro-fissures not visible to the naked eye. This can lead to chipping, discoloration and a poor, uneven polish. Never use dry polishing pads on Aurea Stone quartz.
- Aurea Stone quartz should never be polished on the top surface of the manufactured finish.

Polishing Tips: When polishing any edge detail on Aurea Stone quartz you should use the proper amount of water. Polishing pads with grit levels of 50-400 have a higher concentration of diamonds and require less water; a trickle from your center water feed will be sufficient. Higher 800-1,500 grit pads have less diamond content and require more water. Using the proper water flow allows the pads to work faster.

Polishing should be done in circular motion, utilizing the edges of the polishing pad as it rotates from the top half of the edge to the bottom half as it moves down the piece. While polishing, you will feel resistance with each grit level, which is the diamonds polishing. Allowing the diamonds to do the work requires less pressure from the polisher. When resistance is no longer felt, it is time to change the polishing pad to the next grit. Follow this procedure until you arrive at the final grit level.



Air/Electric Polisher RPM:

The rpm for all air/electric polishers should be between 2,800-4,000. It is best to start at 2,800 rpm and increase as needed. Anything over 4,000 rpm could result in burning or smearing the resin on your edge detail. This is where the color of the resin on the polishing pad makes a big difference. If the edge is burned with a white resin polishing pad, it can be easily removed with denatured alcohol. However, the dye in colored resin polishing pads can create a major problem when working with white, translucent quartz.



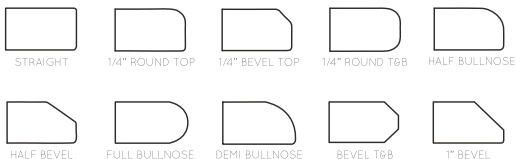
EDGE DETAIL

When profiling edges on Aurea Stone quartz, it is best to use a machine with diamond tooling to produce the desired shape. CNC machines, and other specific edge profiling machines, are recommended for producing consistent edge profiles. Some standard or basic edges can be achieved using only hand tools and diamond cup wheels. A combination of both machine and hand labor produces the best results when creating edge detail.

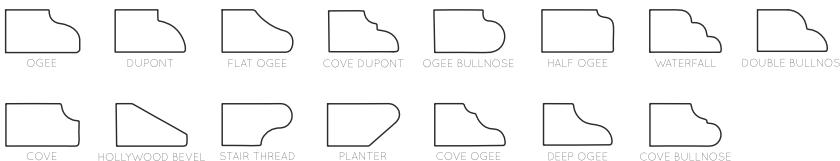
Edges: **We recommend that all outer edges of the countertop be beveled**, which will improve the material's resistance to chipping and also remove sharp edges and thereby prevent possible cuts. Keep in mind that the larger the bevel, the greater the resistance to impact. A hidden edge, which is typically against a wall, should have a minimum bevel of 1mm; an exposed edge should have a minimum bevel of 3mm. All cutouts, whether exposed or hidden, should follow the same rules regarding the size of the bevel.

Aurea Stone quartz edge details include a wide variety of profile edge options. Many manufacturers produce profiling wheels for both CNC machines and handheld routing machines. All profiling wheels will work Aurea Stone quartz, although some exotic edges require a thicker edge.

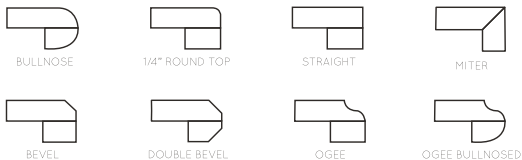
POPULAR EDGES



PREMIUM EDGES



LAMINATED EDGES



INSTALLATION

It is important that cabinets are leveled, and shimmed where necessary, to 1/16" tolerances prior to final countertop installation. Check all cabinets for level.

- 1** After the support system is installed and leveled, installation of the Aurea Stone quartz countertops can begin. Measure cabinets and verify that the pieces will fit before placing the Aurea Stone quartz on the countertop.
- 2** Bring the pieces in one at a time, and test fit them in their proper place on the cabinets. Adjust as necessary to ensure a good fit and proper alignment. Always make any necessary cuts outside, cutting wet to control dust.
- 3** Space should always be allowed as Aurea Stone quartz needs room to expand. Each countertop requires at least 1/8" at each wall for expansion and contraction. Fill the gap between the wall and countertop with silicone.
- 4** After all of the pieces have been adjusted for fit, you will need to attach the tops to the cabinets and support strips using caulk that is 100 percent silicone. Apply silicone caulk approximately every 8"-12" around the perimeter of the cabinet, and at the cross supports. Do not use epoxy adhesive, acrylic adhesive or the product Liquid Nails. The purpose of the silicone is to allow the top to expand/contract as needed.
- 5** Use extra silicone on all corners and joints, and around all cutouts.



SEAMS

Seam tolerance is generally the same for all hard-surface countertop material. The recommended seam width is 1/16"; recommended seam tolerance is +/- 1/32". Both pieces should be level across a seam, with a tolerance of +/- 1/32". One side of a seam can be slightly raised, or one side can be slightly lowered, but not both.

The two edges to be seamed must be cut straight and true. If a waterjet is used for cutting, the edges should be ground flat to remove any grooves from the cutting process.

Test fit to make sure that the two pieces to be seamed together form a tight, level and uniform seam before applying adhesive. Shim and level pieces if required. Also, check to make sure the color and vein pattern matches across the seam.

Always clean the joined edges with denatured alcohol and wipe clean with a white cloth. Apply strips of tape to the top and underside of the two pieces to be joined/seamed. Put tape on each side of the two pieces, leaving about 1/4" between the pieces. This prevents adhesive from dripping into the cabinets and allows for easy clean-up on the top surface.

If possible, use a pneumatic seam setter with a vacuum and posts/pins to level and to make seams as tight and inconspicuous as possible. Several manufacturers sell this equipment. Seams should never be more than 1/16" wide.

ADHESIVE

Seams should be made using a pre-mixed cartridge adhesive, which can be either acrylic or a two-part epoxy system.

Insert the adhesive cartridge in the seaming gun with a fresh, disposable mixing tip. Always purge the adhesive (generally the length of the tip you are using) with your cartridge adhesive system to ensure that the adhesive and hardener is properly mixed before seaming the material. After each use, remove and replace the tip, otherwise the remaining adhesive will cure in the tip.

Remove the used tip and replace the original cap for an airtight seal. The normal cure time for acrylics is about 15-20 minutes in 70° F. During the summer month's hot temperatures, work time is reduced. During winter's colder temperatures, work time is increased. The cure time for two-part epoxy systems can be anywhere from 2-6 hours.

SINKS

For all sink installations, whether they are top-mount or under-mount, we recommend that you follow the sink manufacturer's recommendations and guidelines.

- 1** We recommend that all sink installations be fully structurally supported without reliance on the Aurea Stone quartz as a form of support.
- 2** Under no conditions can mechanical fasteners (screws, nails, etc.) be affixed directly to Aurea Stone quartz. These items will rust with moisture and the rust will bleed through the stone.
- 3** For under mount sink installations, follow the minimum edge profile recommendations around the cutout to prevent chipping. Fasteners or clips should be used along with silicone.
- 4** All sinks must be sealed to the countertop using 100 percent silicone.
- 5** Always follow the sink manufacturer's recommendations. Some sinks may require support systems like cradles, rail systems and sink setters.



BACKSPLASH

Considerations for installation of Backsplash materials:

- 1** A backsplash is typically 3" in height unless a full backsplash is desired. The backsplash should always be cut from the same lot or batch as the countertop material.
- 2** Cut all backsplash material to the sizes required for the project. The top edge and any exposed ends should be polished. Generally, the backsplash has a flat top with a slightly beveled edge.
- 3** Dry-fit the backsplash to make sure that all joints and edges are tight. Apply a continuous 1/8" bead of silicone to the bottom of the backsplash that will be adhered to the countertop surface. Then place dabs of 100-percent silicone every 4"-6" on the back, unpolished side of the stone and adhere it to the wall.
- 4** Do not hard-seam backsplash to countertop.
- 5** Aurea Stone can be installed as a backsplash behind a gas, induction or vitroc ceramic cooktops. Install cooktops following the manufacture's instruction, paying special attention to insulation requirements and materials.

The cutout requires a minimum distance of 60mm to the backsplash and 80mm to the edge.

All cooktops requires a minimum distance of 120mm from the perimeter of the nearest burner, to any vertical application to avoid heat transfer.

For L or U-shaped countertops, cooktop requires no less than 25mm to the corner.



CARE & MAINTENANCE:

Aurea Stone quartz requires very little maintenance to keep the surface looking its best. It is a non-porous material, therefore cleaning with a damp cloth and warm clear water, and mild soap if desired, is all that is required.

The pH activity level is what determines the best maintenance cleaner for Aurea Stone. For example, most neutral cleaners have a pH balance of 7; however, some neutral cleaners are stronger than others because they have higher pH activity levels. Some neutral cleaners are not active enough to thoroughly clean the quartz/stone surface, while some neutral cleaners are too active for the quartz/stone.

Consequently, Aurea Stone has created a cleaner/conditioner that has the perfect pH balance and pH activity level for customers' daily cleaning needs. It was designed to gently remove dried-on soils, grease, oily residues, spills and dried-on foods. This streak free cleaner contains a conditioner that maintains Aurea Stone surfaces and will help to protect your investment for years.

Aurea Stone Solutions Cleaner/Conditioner, with a pleasant fragrance, will help keep the surface beautiful, spot free and shiny. It wipes off very easily with a paper or cotton towel.

ACTIONS TO AVOID:

- **Do not expose**, in use or otherwise, Aurea Stone to abrasive or strong alkaline or acid or free radicals or oxidizers or the like (whether high, neutral or low pH) cleaners. Various chemicals are corrosive and/or erosive in their ability to attack any structure including Aurea Stone. Be very aware of these potential damages to your surface.

- Although our Phi Technology has improved the material resistance, you must remember that the surface is not heat, chemical or fracture proof in any form. Be aware of the potentially damaging effects of these items to your Aurea Stone.

- **Do not expose** Aurea Stone to products including, but not limited to, bleach, oven cleaners, Comet®, Soft Scrub®, SOS®, products with pumice, batteries, paint removers, furniture strippers, tarnish or silver cleaners, or the like. Do not use abrasive or harsh scrub pads. Do not apply any sealers, penetrants or topical treatments to Aurea Stone under any circumstances. Such products will wear off and cause the gloss to appear dull or inconsistent.

ADDITIONAL CONSIDERATIONS

Aurea Stone is made with pure natural quartz. Variation in the natural stone color pattern, size, shape and shade are inherent and unique characteristics to be expected with this product. This does not affect the material performance in any manner.

Color blotches are intended and designed into many designs to enhance the natural beauty. Samples are small select cuts from a slab; they do not exhibit all the characteristics of a design and therefore are not fully representative of what will be installed. Product will not be replaced due to these variations.

Aurea Stone is durable and more resistant to surface damage than other stone. However, all stone can be damaged by force and no material is chip-proof. Objects hitting edges, particularly at sinks or dishwashers, may generate chips. Though a minor knife slip will dull the knife and not harm Aurea Stone, no stone surface is scratch proof. Surface markings are more visible on monotone designs than multi-colored surfaces.

Aurea Stone is not a seamless product; seams are visible. Where there are seams, the product pattern and shade can change.



CERTIFICATIONS:

Aurea Stone is internationally certified to ensure maximum safety and protection. Such certificates offer consumers the assurance that Aurea Stone is a safe, top-quality material. Our certificates offer a 100% guarantee.



NSF

With the NSF certificate, Aurea Stone is deemed to be a safe material for direct contact with all types of food. This certificate is endorsed by esteemed organizations such as the FDA (Federal Drug Administration) and WHO (World Health Organization)



GREENGUARD

This certificate proves that Aurea Stone does not generate any substance that is harmful to the environment. It also certifies the use of our surfaces in closed areas.



GREENGUARD GOLD

Aurea Stone has also been awarded the “Greenguard Children & Schools Certificate,” which confirms maximum safety in its applications for schools and universities.

AUREA STONE: WARRANTY

When considering investing in a premium quartz surface like Aurea Stone, there is one thing you should know: the surface you choose is only as good as the company that stands behind it, especially when it comes to our customer service. At Aurea Stone we know that once the installation is complete, our job has just begun.

GUARANTEED COVERAGE

This warranty applies only to Aurea Stone engineered quartz products.

Aurea Stone is exclusively suitable for interior residential applications.

Validity of the warranty:

25-year Residential Limited Warranty. Aurea Stone guarantees that our material will be free from manufacturing defects during the indicated period.

The following warranty is offered by Aurea Stone on its quartz countertop materials. No other entity is authorized to offer any warranty agreement related to Aurea Stone quartz.

To use the warranty, one must register the product at <https://aureastone.com/Australia/warranty-activation/> and show the original purchase receipt. In the case a buyer purchasing a new home built with Aurea Stone counters, Aurea Stone honors the house purchase contract as an original receipt. Owners are allowed a maximum of 6 months, from the receipt date, to register their warranty.

Once registered, the warranty is personal and non-transferrable. The warranty holder is the physical person that registers his/her personal information in the indicated link above. The named beneficiary agrees to allow any and all authorized employees of Aurea Stone to enter the property to examine the defective product and take pictures of the material and any installation imperfections.

The warranty covers only manufacturing defects found to adversely affect the installation of Aurea Stone in residential applications. Aurea Stone has the right to repair or replace any material it deems defective, at its sole discretion.

To obtain assistance during this warranty, you must contact the establishment from which your purchased Aurea Stone or alternatively, you may contact Aurea Stone directly.

The warranty applies only to material that has been used and maintained by following the care and maintenance rules, as prescribed herein by Aurea Stone.

EXCLUSIONS

1. Those products that have not been completely paid are excluded from the warranty.

2. Products installed in exterior applications are not covered. Neither are damages caused by incorrect use, abuse, or exposure to excessive heat, weather or ultraviolet light. Also excluded are damages caused by physical or chemical abuse, or by inappropriate care or maintenance.

3. Because Aurea Stone does not have control over fabrication, manipulation, cutting or installation, any incidental and consequential damages arising from these activities produced are not covered. These items are understood and agreed to be the responsibility of the independent fabricators and installers involved in each project.

4. This warranty does not cover any fabrication or installation costs, nor the incidental costs incurred by other trades, including but not limited to plaster work, plumbing, electrical or structural work, etc.

5. Aurea Stone is not responsible for the cost of transporting any replacement material to the destination.

6. The warranty does not cover installed products with manufacturing defects that were, or should have been, known or visible to installers at the time of installation, including, without any limitation, possible differences of color or tone.

7. Any and all installations in flooring applications, wall cladding or similar, as well as commercial uses are expressly excluded.

8. Aurea Stone is not responsible for any damages arising from causes beyond its control, including but not limited to, acts of God, any and all problems associated with architectural design or structural engineering, structural movement, acts of vandalism or accidental damage.



ARCHITECTS & DESIGNERS

PRODUCT MANUAL





AUREA | STONE