

ILERSTONE

**ARCHITECTURAL
STONE
CONSULTANTS**



VICTORIOUS WARRIORS
WIN FIRST AND THEN GO
TO WAR, WHILE DEFEATED
WARRIORS GOTOWARFIRST
AND THEN SEEK TO WIN.

SUNTZU - THE ART OF WAR



ABOUT US

Since 1986, our mission is to provide consulting and technical services for everyone who uses marble, onyx and stone in construction and sailing.

A thirty-year long journey that, day by day, project by project, has created a professional competence, a source of experiences matured also in international fields, which is put at the disposal of the customer.

Consulting means to assist a company in each step of the project, making available its knowledge: an additional know-how which is added to the existing one.

Consulting means to find the best solution, take quickly action to solve problems often unexpected. Consulting means to suggest the best material for each project, to check, to verify the correct cutting and installation, to supply the best product.



STONE SOURCING



Spain has a very varied geology, reflected in the variability of the natural stone typology throughout the country.

The use of natural stone has its roots in the far Iberian period.

Then the Romans; and the magnificent Arabic architecture that gave us masterpieces like the Cordoba's Mosque or the Alhambra in Granada, and the gothic period with its Cathedrals and Monastery. From the past to the present days, with the wonderful works of the Modernisme's architects like Anton Gaudì or Lluís Domènech, a long tradition and experience in the use of the natural stone that we revive in the actual stone industry.

But what do you look for when choosing an ornamental stone for your project?

What are the main criteria for choice?

First, the aesthetic factor that will determine the character of the entire project is decisive. After that, we will go to evaluate those aspects more properly technical, related to the petrographic structure of the material. And last but not least, the cost.

In the end, once these three elements have been identified, the choice of material will be nothing more than a harmonious balance between economic conditions and technical, functional and aesthetic needs.

And the richness and variety of Spanish ornamental rocks, provides the designer with a wide range of opportunities to achieve that harmony.

The richness and variety of Spanish ornamental rocks, provides the designer with a wide range of opportunities to achieve that harmony. In the specific area of geology related to ornamental stones, we can divide Spain into three general areas: Siliceous, Calcareous and Clay.

In detail, the area that interests us most at this moment is the Calcareous, which from the north of the Pyrenees, involves the Basque Mountains, the Cantabrian Mountains, and then reconnect, through the Iberian System, to the Mediterranean and the Baetic System.

Practically a large inverse zeta occupying the eastern part of Spain.

This vast area can be further subdivided into five sub-areas: the Basque-Navarre, which takes the northern zone, the Catalan, the Levante zone, and the two Andalusian areas, the Baetic and the southwest.

In quantitative terms, the highest concentration per ton of material extracted and processed is found in the Levante and Betica

areas. In particular the districts of Novelda-Elche-Monforte, in the province of Alicante and, further south, the district of Macael, in the Andalusian province of Almeria.

Between these two districts, there is, among Murcia and Comunidad Valenciana, the rich area of extraction of Emperador marble, Marfil, Capri and other classic materials of the Spanish tradition.

MATERIAL

PALINURO GREY

When design meets elegance, it finds Palinuro Grey. A precious opportunity for every architect who seeks distinction and class, whatever the project, classic or modern.

The elegance of grey adapts beautifully to any color combination and is able to satisfy any furnishing requirement.

Palinuro Grey is a material with a high resistance that makes it extremely suitable for any type of environment, be it cold or hot and ensures high performance over time.



NERO COLATORAO

The rock extracted is composed of limestone with an intense grey color and excellent crystallization, which allows us to obtain a very good level of polishing giving it an intense black color, hence the name of Nero Calatorao.

Although it is thought that the extraction and use of this material can be traced back to the Roman era, the first documents and testimonies date back to the Muslim period. But it was in the 16th century that the stone had its peak, being used in both civil and religious buildings and monumental sculptures.

Currently, it is used both indoors and outdoors.



GRIS PULPIS

The Gris Pulpis is a limestone that has been used since the 10th century.

It is in the last years of the last century that the diffusion of this material has had an international turn, and from a purely national use, as the Goya Hall of the Prado Museum in Madrid or the Oceanographic Park in the City of Arts and Sciences in Valencia has arrived to the Bulgari stores in Las Vegas and Dubai.

Very appreciated by architects from various countries, it has entered the world of luxury materials, going to embellish interiors and exteriors many international buildings.

The Gris Pulpis is a homogeneous microcrystalline rock and as such has good performance against alterations due to the attack of salt, acid or changes due to frost/ thaw. T

It has good polishing ability, and its aesthetic and physical properties make it suitable for use as an ornamental stone both for interior and exterior.



OVERALL TECHNICAL MANAGEMENT

Study the project and possible solutions to try to anticipate the probable problems, prepare the final drawings for the laboratory and lastly organize and control the production.

This is what determines the success of a project.



The use of stone materials in the building project, in its complexity, is divided into several stages. The high cost of the raw material and its processing requires careful study and careful design to reduce waste to the maximum.

Below is a brief and concise description of the general operational lines of the use of stone materials in the building project.

These services can be offered in totality, or only in the part that at that time needs the company.

preliminary

In the initial phase, the study of the material, the selection criteria according to the intended use and the physical mechanical characteristics is essential for a successful outcome of the project. At this stage it is also important to write a BoQ (Bill of Quantity), that is, a detailed list of what you will have to produce on which you will base, then, the development of the project, from the estimate to the drafting of the production program.

This is the phase in which the foundations of the project are laid, where the experience in its preparation can make a difference in the realization. If BoQ, planning, technical analysis of the project and material research are carefully prepared, the realization will then be very fluent

engineering

The next step is to draft the project's BoQ, in accordance with the customer's requests and the architect's project, all the executive drawings necessary for production are made. Once verified and approved, the cutting lists required by the various laboratories to carry out the work will be produced.

production

the most delicate phase when you get to the heart of the project. The choice and purchase of materials, the choice of laboratories, according to their production capabilities and skills, the organization of the production process according to planning, product control, both in the preliminary stage and during processing, the dry-lay for the final verification, and finally the packaging.

logistics

Handling, at every stage, is always a delicate operation. From the procurement of materials to the various movements and the final delivery of the goods. Organizing everything with logic and rationality means reducing time and costs. Ensuring that the material necessary for the progress of the project is always present where it is needed, whether it is the laboratory or the construction site, is essential for the success of a project.

HISTORY CASES

AZAMANTA YACHT

Azamanta is a motor yacht with an overall length of 55 m. The yacht's builder is Heesen Yachts from The Netherlands, who launched Azamanta in 2015. The superyacht has a beam of 9,6 m, a draught of 3,15 m and a volume of 757 GT.

The work consisted essentially of the realization of mosaic claddings and pavers, most of which were pre-assembled into modules.

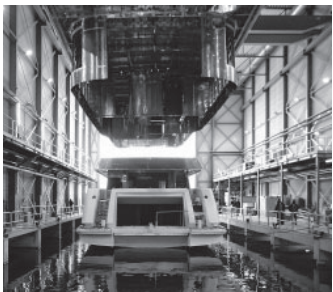
The interior designer submitted some sketches in which were illustrated, in addition to the design of the mosaic, the aesthetic guidelines of the chromatic composition.

From the initial draft of the designer, through a series of feasibility studies made with the manufacturer of the mosaic, a color mix that satisfied both the



aesthetic characteristics required by the architect and the needs of the manufacturer related to the availability of materials to be used was determined. Area by area, room by room, were produced guide-tickets in which the mix of materials was shown in the established tone.

A fundamental step for the success of the project that allowed proceeding quickly with the execution of the products.



MULTNOMAH CENTRAL COUNTY COURTHOUSE

The new tower located on Portland's downtown waterfront accommodates the essential functions of a modern courthouse. A 17-story building with stone and glass.

The stone used, about 14,000 sqmt (151,000 sqft) is a Spanish limestone named Amalfi, a natural stone of sedimentary origin characterized by fine grain and uniform beige color.

Depending on the area of extraction, this stone can have different shades in the form of water, which gives it a unique and distinctive appearance.

Due to this variation, the architects staff asked to check some slabs in various tones.

A range of fourteen slabs was shown to the team during the meeting.

They rejected two slabs because too much grey and accepted, but for using in specific location, two slabs more yellowish.

From these ten slabs fully accepted the architects made a new selection dividing by tone and by giving a different area to each tone. We prepared also a mock-up representative of the architectural features to give a better idea of the effects of lights and shades.

The main concern was to make sure that the client had the information and tools necessary to complete the project, and working together we were able to achieve this.



MICROSOFT

SILICON VALLEY

CAMPUS

This project is a winner of a 2021 AIA COTE Top Ten Award.



Nestled low into the landscape, this updated campus imagines a new kind of workplace – in form, function, aesthetic, and connection – that is first and foremost about the wellbeing and symbiosis of people and place.

Our intervention concerned building 2, 5 and the Theater.

The biggest effort was the collaboration with the architect's staff to find and propose different solutions until satisfy the creative inspiration of the architect.

Made of Cenia Beige, a Spanish limestone quarried in Catalonia, the architect's desire was to create a homogeneous and well-aggregated mix of shades between the different shades of the different benches. Initially five tone variations were used for all buildings; later the designer decided to reduce the variations to three benches only, mixed in different percentages thus creating a general shade of darker mix and lighter. The material was sandblasted in its flat part and had a sloped long side honed.

Buildings 2 and 5 were clad with the lighter mix, while for the Theatre both mixes were used: the light for the upper part, the dark for the lower one.

The most important building, the Theatre Conference Centre. Biconvex in plan, unlike buildings 2 and 5, where only some portions of the walls are covered with stone alternating with large glass surfaces that give light and put into virtual contact inside and outside the building, the Theatre is completely covered. And always unlike buildings 2 and 5, where a single mix was used, the light one, in the Theatre were used both mixes: the light for the upper part, the dark one for the lower

The shading/fading of tones is not only determined by the different tones of the benches, but also by the finish that alternated a flat part bushhammered with a slope part honed, creating a play of light that gave dynamism to the elliptical shape of the vertical plane.



THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

Located in the metropolitan city of Concepción, Chile, the temple is located along the banks of the Biobío River, which flows from the Andes mountains westward into the Pacific Ocean.

A historically appropriate slate tile covering is used for the entire structure.

In the part that interests us, the interior, was used Beige Saint Michel, a yellowish limestone extracted in Spain.

After a careful search for the most suitable material to meet the client's request, with several samples submitted, we reached the final definition, with a meeting held in the presence of the client, a representative of the temple and the staff of architects. Eight slabs representing the range of material were submitted and seven were approved, some with remarks.

The signed and countersigned slabs were to remain, as a reference, for a period of eight months after the last container was shipped.

The project, basically divided into two separate sales orders, required the supply of about 600 square meters of tiles to 1.5 cm thick for floors and many other items consisted of shaped skirting boards, stairs, caps and covers, counters, etc. for a total of another 400-500 square meters in different thickness.

The production of the baptismal font cover was particularly demanding. With a dodecagonal plan, it consisted of eleven shaped pieces, linear in the external profile, curved in the internal one. Some very slight modifications were made to the shape, approved by the customer, to adapt it to the needs of the CNC machine.

Cladding, caps and borders completed the font. The material was then selected so that the whole structure could be as toned as possible and finally all dry-laid to check on its success.

It was an interesting job to make executive designs and then see the tangible result. But in the end, it was a rewarding experience.



SHANGHAI CENTRAL BUILDING

Shanghai Central Building is a 1996 project. 9,000 square meters of Rosa Porriño and Mahogany Brown granite as exterior cladding for a central office of a bank and several commercial offices. Designed by architect Mitchell Minquan Gao of G&S International of Minneapolis, in partnership with the Jiangsu Zhongda Architectural Engineering Co of Nanjing and built by Shanghai New Era Real Estate of Shanghai. China National Building Materials and Equipment Import & Export (C.B.M.I.E.) of Beijing, suppliers for materials, contacted me, to request a complete consultation for the cladding. As first I had a meeting with the architect to study the project for the execution of drawings and the installation solution, also giving some technical advice to simplify the production. Then I made all the executive drawings, cut sheets and I controlled the production and installation. This project is a turning point in my professional life: this was the first project that I managed in whole parts and in complete autonomy.



WALDORF ASTORIA WASHINGTON - DC

Built between 1892 and 1899, the General Post Office was in operation until 1914 as headquarter of US post in Washington.

In 2012, after years of discussion and an uncertain future, was converted in a luxury hotel by the Trump family enterprise.

Many precious materials were used, including Statuario Marble and Emperador Dark for the public areas. We were involved for the Spanish material, supplying tiles for floors, claddings and vanity tops.



M/V FANTASIA - MSC CRUISE SHIP

Cruise ship "Fantasia" from MSC, Mediterranean Shipping Company. 130,000 tons of mole, 1650 cabins, 18 bridges. One of the largest cruise ships currently sailing and admiral of one of the most important international shipping companies. A comparison with an extremely complex reality by the management of the project between the different contractors and subcontractors.

Public Toilets

Present on the various bridges of the ship, were composed of washbasins in structure. Two supports and a plan of different dimensions, a hole or two holes. The materials used in the common areas, Emperor Light by the men's baths and Rose Aegean by those of the women, is worked and assembled with a thickness of 5 mm plus 30 mm honeycomb; also by the fitness area, with the Verde Guatemala, used interchangeably by men and women bathrooms. In the VIP area, the toilets as well as the washbasin were decorated with a mirror covered with material glued on a supporting structure; for this area have been used Onyx Caramel by the men's bathrooms and Rose Aegean by those of the women.

Red Velvet Restaurant

The Red Velvet Restaurant is the main restaurant of the boat; arranged on two bridges, the five and the six, it is paved, in the areas of passage, with tiles 30x30 in Black Marquiña approached to red carpet by the area tables. On each bridge are present four inlays in Negro Marquiña and Fior di Pesco. The bridges are connected by two curved stairs plus a semicircular staircase to access the podium, always in Negro Marquiña. The serving shelves of the waiters, Waiter's Station, were composed of plans of black granite assembled.

Of different measures and forms, its realization has requested a discreet commitment either in the planning phase or in the production. Plan and shores united roundings imposed by the standards to American sanitary to which it was referred.

The Health Club "Aurea"

Bridge 14, Health & Fitness. Flowerpots, fountains and desktop reception, all made of Green Onyx assembled on wooden or aluminum structures provided by the contractor. A work of excellence representing the diamond tip of what made on the boat Splendida. Two curved walls made bookmatched, always in Onyx and the realization of the two saunas, in mosaic. As a project, the curved pieces that even composed the different manufactured parts being divided into many parts had to give the idea of the single piece. Despite the polychromy of the material, with patient work of selection, it has managed to satisfy the client's requests. Several unique pieces adorn the hallways and the main spa room of one of the largest cruise ships in sailing.



LA PIAZZA

MILANO-BICOCCA

Inserted in the plan of transformation of the Pirelli area to the Bicocca, wide zone in the zone North of Milan, to the border with Sesto San Giovanni, the project The Piazza, work of the study Gregotti Associati International, it is formed by ten residential buildings, that enclose a vast interior space, clad with 40.000 square meters of splitted stone, in ventilated façade.

An arduous project, in which no one believed. But the tenacity and a thorough study of the technical problems have allowed the realization of the exterior cladding of this impressive residential complex in the heart of Milan.

The stone used, a quarzoarenite of Indian origin, predominantly Modak, has different colorations according to the use: splitfaced yellow stone on the outside, grey stone polished by stairs and landings of interior stairs and white stone sanded by the paving of the interior square.

The outer cladding, the most articulated part of the project, provided the pose of an insulating "coat", of the support structure and the cladding, constituted by splitfaced yellow stone with thickness 3-4 cm. The standard panels have a dimension of 800x580 mm and 400x580 mm. To close panels of various sizes that sometimes abundantly exceed the meter.



GRAND THÉÂTRE

DE PROVENCE

Always from the Gregotti Associati International studio, the Salles du Spectacles du Pays de Aix covers the typology of the La Piazza project. Quantitatively less consistent, the ventilated façade cladding is constituted by ca. 6,000 mq of yellow quarzoarenite. To this are added ca. 2.000 mq of entrance paver formed by 60x30 cm tiles in Acquabianca (Marmól de Carrara) and 60x10 cm listels in grey quarzoarenite. In addition, different types of stairs with embankments and paving with cubes complete the project. The work, both for its importance as cultural center of the territory, strongly supported by the mayor of the city that has given birth to Paul Cezanne, and for the architectural lines, has requested an important attention in its realization.

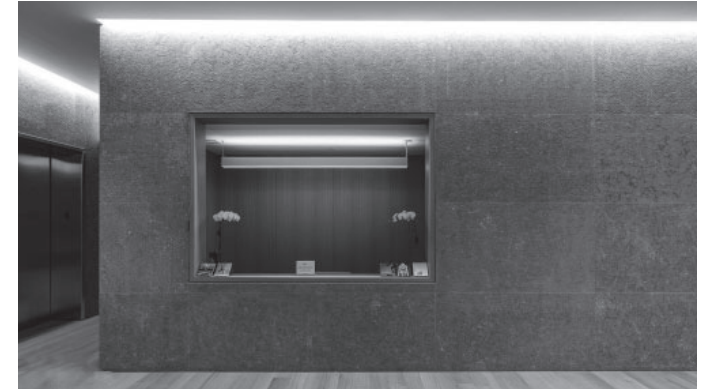
Curved and fastened lines that are added in a brave geometry, which have particularly engaged in the planning of the supporting structure of the ventilated walls and in the realizations of the executive drawings by the pose of the pieces. The quality control carried finally, has delivered to the city of Aix en Provence a work of high-quality headquarters of important cultural events.



565 BROOME STREET SOHO TOWER - NYC

Renzo Piano's Soho Tower, 565 Broome Street, in the neighborhoods of Soho, one of most iconic districts of New York.

The project also included a Spanish Grey Limestone, Blu Nobili. This material, mostly flamed, was used for external paving, internal paver and cladding. It was used in common areas at ground level, 3rd, 5th and 7th levels for a total of 1,500 sqmt (around 16,000 sf).



WMATA

WASHINGTON-DC

The design-build project is a renovation of an existing building to create the new mixed-use offices.

Located near the L'Enfant Plaza Metro Station, the design converts an outdated office building into state-of-the-art architecture.

The new design includes new mixed-use podium spaces, a new glass curtain wall, and two new upper floors!



20 EAST END AVENUE NEW YORK CITY

20 East End Avenue carries forward the vocabulary of great New York apartment houses with the special inflection of the East End neighborhood. The massing and detailing recalls 1920s and 1930s New York residential buildings, as do its materials—Cunningham grey brick, with the first and second floors in limestone and a bush-hammered black granite water table—and its bay windows, Juliet balconies, and crown of setback terraces.



THE ROYAL ROMANCE SUPERYACHT

Built by De Vries Scheepsbouw (Feadship Group) in Makkum (Netherlands), the Royal Romance has been planned to easily accommodate up to 14 guests.

With a length of 92.50 meters and a gross mass of 2933 tons, a Master Suite, 6 guest rooms, Gym, Beach Club, Health Club, Sauna, Halls and Lounges sumptuously decorated with marbles and precious woods puts it among the 5 XL Feadship Vessels.

One of the most extraordinary features of Royal Romance is its interior design, product of **Seymour**



Diamond's creativity, with floors, claddings and decorations made of marble and semi-precious, as the Makrana, white Indian marble with which the Taj Mahal has also been made, or the Vietnam White inlaid with Lapislazulis, Red Jasper, Red Agata, Malachite, Nacre and other stones, produced with the precise Rajasthani experience. And more, precious pavers and claddings in various onyx adorn elegant bathrooms, each room was inspired by a different style, Venetian, Greek, Roman, Indian... and many others



750 CHAIN BRIDGE

Situated on the banks of the Potomac, surrounded by a huge green park, the neoclassical style villa traces the very popular architecture in the Washington DC area, recalling the style of the time of the founding fathers. The architect's aim was to "recreate a feeling of antiquity", a vestige of a glorious past, emotions recreated not only by the forms of Tuscan style, but also from the same raw material. Made of stone, a Spanish limestone tending to light gray, some attempts were made to make the sense of antique required by the architect.

At the end, after making some samples in different finishes, the choice fell on a simple brushed that gave the stone an worn effect, as if worn out by time.

The area where the dwell-



ing was located is particularly wet, and its climatic conditions are highly damaging to the stone. Just think that the Washington area has 84 cycles of frost/thaw.

But the petrological characteristics of the material, certified by tests, made it suitable for outdoor use. The project consisted of an external part that included the production of parapets, cornices, chimneys, door and window frames, some floors for terraces and, above all, the Main Entrance and the Garden Porch. Inside the stone was placed in fireplaces, frames, some floors and walls. Approved samples for the range of material and defined type of finish, production has begun.

Divided into four phases, the same engineering shared the same timing.

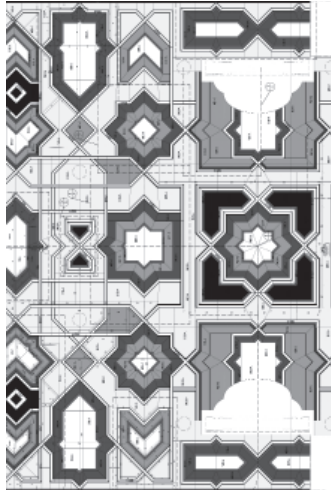
ENGINEERING

Essentially, the engineering phase concerns the production of the graphic works required for the successive production phase.

Starting with the architectural drawings provided, and considering the variations and modifications made during the preliminary phase, we proceed to make the executive drawings or **shop drawings** that will be sent to the customer for final approval.

This step is necessary for clarifying every doubt before starting production.

Once the final drawings are defined, the **production tickets** needed to manufacture the project components in the dimensions and details required by the customer are drawn.



These reports must be prepared based on and in accordance with the production characteristics of each individual production unit. It is essential for the success of the project that the technical staff has an appropriate knowledge of the procedures and production potential of each individual factory to efficiently distribute work and prepare suitable papers for each individual reality.

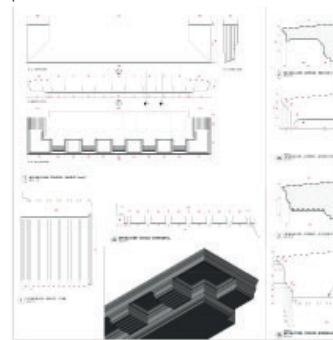
For quantitatively larger projects, in agreement with the site manager, a priority of areas will be established which will determine the production history.

Then, by making slight modifications, **laying drawings** will be made

that will help the installation staff to place the pieces in the correct position.

And that will also help with a possible dry-lay requested by the customer. At this point we have the essentials to start production. Along with the shop drawings and production tickets ordered by priority and containing the instructions required for the construction of individual pieces, a "slabs list" is also provided, in which the data necessary for the procurement of the material are indicated: thickness, quantity, surface finish.

As much as we want to consider the production process of stone 'automatizable' and 'industrializable', the **craft** part remains and will always remain the soul of this profession.



PRODUCTION



The preparation made so far will be useful to organize and realize the project in the best way.

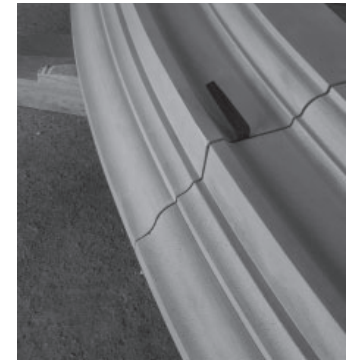
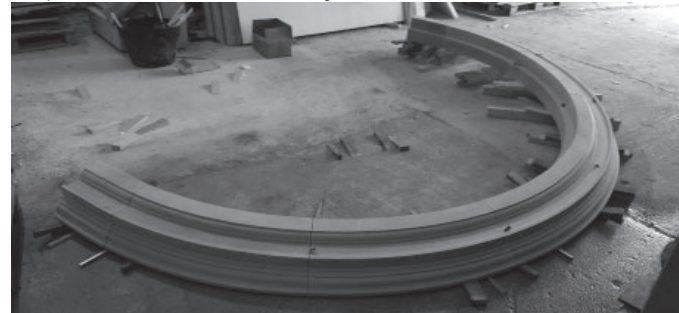
The first step, the acquisition of the material in blocks in the quantity needed and the quality determined by the aesthetic-chromatic criteria decided by the architect.

In addition to production tickets and detail drawings, during the previous phase also summary reports are produced that show the total quantities required, subdivided by

finishes and thicknesses to be obtained, and the average size of the pieces to be used in selecting blocks of a size which minimizes the wastage.

Once the material is acquired, the first phase will be finalized from which plates will be obtained in the required thickness and finishes.

During the preliminary phase, the study of the project, it was also determined what facilities are needed for the successful implementation of it and on this basis which laboratories can meet these needs. At this point, following the production priorities requested by the customer, the work is divided between the various laboratories (which can be one or more) that will be followed step by step to verify the correct production and solve any



problems that may arise. Regular and constant inspections, carried out according to the complexity of production, will verify its correct execution and can detect any errors in time.

At the end of the production process, to check everything, a dry-lay of the artefact will be performed in order to correct any small inconsistencies that are difficult to detect on the single piece.

This is a summary of what it means for us to create, manage and control the production of a stone project. A delicate task, performed with care and skill that makes us get this feedback from customers: *"Luca, the Pacific project is proceeding wonderfully. Everyone is very impressed with your team's work. Architects, GC and masons cannot believe how well it is all going together."*



WE CAN SEARCH, FIND AND CHECK THE BEST MATERIALS FOR YOUR PROJECTS AMONG A VARIETY OF SELECTED SUPPLIERS. WHAT WE OFFER IS TECHNICAL SUPPORT FOR YOUR PROJECTS AND AN ADDITIONAL OPPORTUNITY FOR YOUR BUSINESS.

DON'T HESITATE TO GET IN TOUCH.

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