

# Granite from Galicia

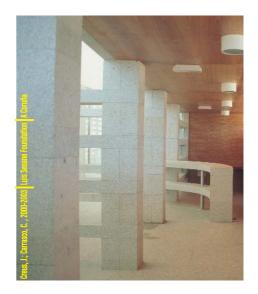
committed to contemporary architecture

#### 1. THE MERITS

OF GRANITE Granite has been a fundamental material in the conception of architecture throughout history and its evolution can be followed both within traditional as well as in vanguard architecture.

It is employed in architecture as a decorative as well as a structural element due to its sturdiness, simplicity, beauty and adaptability. It lends itself to the creative challenges of contemporary architecture like no other material and given its warmth it contributes to the establishment of spaces of relationship. Since granite blends in perfectly with all scenery, it can be adapted to any surrounding.

The development of new technologies, machinery and the industrialization of the worthiness of granite has brought with it infinite possibilities and new uses of this material in architectonic design, confirming its plasticity, timelessness and accomplishing the same level of excellence, even bettering them, of glass, steel and wood, with which it is completely convergent and combinable contributing its greater resistance to deterioration.







Granite offers a wide range of innovative, resistant, and long-lasting state-of-the-art systems for fixing clamps; providing, furthermore, insulation which in turn saves on overall costs for thermal control and insulation. Its resistance and sturdiness is a guarantee against external aggressions in such that it forever retains its simple, sober, yet elegant, design. It presents a very homogeneous composition and comes in multiple textures and varieties, adapting itself to any contemporary architectural use or project.

In Galicia, the expert knowledge concerning the functions, uses and applications of granite can be taken as part of the Galicians' "genetic heritage". Over the centuries, both professionals and companies have developed a culture of granite to an extent that at present it is one of the most advanced industries in this field in Europe.

From the quarrying and transformation to the laying and design, all sorts of applications have been developed in view of the most innovative and daring architectural challenges. Granite is a world within itself in Galicia, where the possibilities of associating both design and innovation are limit-less.

In the most demanding markets worldwide there are examples of the architectural development of granite exported from Galicia; proof of which are works such as Tokyo's City Hall, the Paris Underground, the Museum of Shanghai or the Council of Europe Building, among others.



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2. BUILDING METHODS AND PRODUCTS

Building methods and products stemming

from granite provide, on the one hand, excellent construction features and, on the other, exceptional qualities both from an aesthetic and technical point of view.

Concerning construction features, it is worthwhile to underline its ability to adapt and mould itself to architectural requirements, its low maintenance costs, resistance to ice and water absorption, ease of lasting, safe clamping and placement.

In relation with the aesthetic and technical aspects of building methods and products, it must be pointed out that granite provides great stability under important loads, since it is extremely resistant to compression. This characteristic makes it extremely firm and consistent, only surpassed by stainless steel. On the other hand, it is very resistant as well to external aggressions, since it possesses high resistance to abrasion and warping. Also noteworthy is its optimal thermal capacity and high conductivity. These properties of granite make it the ideal material for exteriors as well as interiors. Aesthetics is another outstanding feature of granite, because of its wide range of varieties, tonalities, and textures, which open up the imagination to original designs.



In fact, there is a wide range of products. Among the most relevant are the following:

- Pavements: floor tiles, paving stones, kerbs, skirting boards.
- Sheeting/Paneling: large slabs or plates, small slabs.
- Stairs: steps, risers, block steps.
- Masonry: rough stones, parpens, ashlars.
- All-purpose stonework: railings, chimneys and fireplaces, countertops, cornices, columns, enclosures, fountains, religious art.

And there is a continuous growth in response to construction systems and specific applications such as:

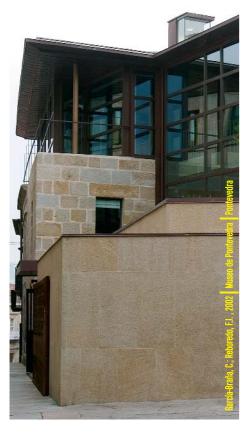
- Façades with granite stonework.
- Roofing and decks.
- Sheeting/Paneling.
- Interior paneling.
- Defenses.
- Ornamental elements
- Exterior pavements.
- Street furniture.

3. ARCHITECTURE EXECUTED IN

Why granite? Granite is a material which lends itself to infinite use of its wide range of

possibilities because of its wide range of structures, colour, beauty, strength (longlasting, high resistance to compression) and its ability to withstand the elements of time; this is the reason why granite is currently the choice in all forms of construction: in blocks and in sheeting, as well as in all areas of architecture such as commercial, family housing, residential, collective, facilities and furnishings, public areas, industrial. Nowadays, granite is considered a choice for the future since it combines its longevity with low maintenance costs and unique beauty.





## 4. PRODUCTION, PLACEMENT AND REGULATIONS

PRODUCTION The raw material goes through different cutting and superficial treatment processes so as to produce sheets or blocks to

measure and then on to the finishing processes of the piece. The sheets come in different finishes such as serrated, pumiced, polished, shiny, pockmarked, bubbled and sandy. All of these show the many possibilities of finish granite affords, depending upon the function or placement of the piece, that is, the desired effect one wishes in the final project.

PLACEMENT Both the high aesthetic quality and the unquestionable advantages of thermal isolation and energy savings have increasingly attracted contemporary architecture's attention to ventilated walls. The ventilated façade or wall is a system for paneling buildings, leaving an air chamber between the insulation and the paneling. It consists of a substructure fixed to the building, an air chamber, an exterior face and a layer of insulation fixed to the outside wall. The paneling is fixed to a structural metal support by means of clamping elements which transmit the weight to the structure of the building. Among the advantages is the elimination of thermal bridges and, as a consequence, condensation, as well as acting as an extremely efficient isolation for the building.

REGULATIONS Each variety of granite possesses its own physical characteristics, which lend it a differential identity. Based on this concept, the European regulation for the EC market for natural stone products is being applied, (UNE-EN 1341, outdoor tiling; UNE-EN 1342, outdoor stone pavement ...), which looks over the compliance with the regulations of the Community Guidelines concerning each product. Physical characteristics are established by regulated tests under community regulations. Granite is a material which "inspires trust", behind which lies a whole process of technical harmonization and evaluation of conformity for the whole of the European territory.

The production system of granite in Galicia is subject to the international regulations concerning safety systems for the laying of natural stone within constructions.

The use of granite in architecture lends thermal, acoustic and conservation features which all form part of the concept of sustainability as applied to construction.

### 5. MARKETS AND AGENTS

MARKETS The presence of Galician granite in many buildings in major cities on

all five continents confirms the importance of the Galician industry, borne out by the quality, variety of products, highly skilled workmanship, innovation in processes and machinery in constant evolution. The industry of granite is one of the most dynamic and competitive in the world. At present, Galicia is the second producer inside Europe and sixth worldwide; for about 25 years, there has been a concerted effort in investment and research which can be witnessed in the final product in its aesthetic and functional values.

Galicia holds an outstanding position in the global market of granite. Galician granite presents greater and greater added value as a source for specialization and differentiation of the product and for acknowledgement in the most demanding markets. In fact, the capacity for creating excellence and worth is a differential of the companies tied in with architecture in granite. It should be pointed out that granite produced in Galicia can be found in constructions and applications all over the world: proof of which is the amount of exportation to USA, France, Poland, Portugal, Morocco, and Ireland, the most demanding clients and destinations.



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#### **AGENTS**

### THE CONFIDENCE IN THE USE OF GRANITE IS GUARANTEED BY ALL MAJOR GALICIAN AGENTS.

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PRODUCTS		
Anaya, J., Vond, P., 2004 Building of flats Pontevedra  COMPANIES	Pavements Sheeting/Paneling Stairs Masonry All-purpose stonework Others	Cleus, J.; Carrasso, C., 2000-2003 Luis Second Foundation A Coruña
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