

ROP PORTUGUESE NATURAL STONES PORTAL

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MAIN OBJECTIVES

National and international dissemination of the potential of Portuguese Natural Stones. Support for all stakeholders in this industry, including prescribers and end consumers.

METHODOLOGY

Development of the 2nd computerized version of the ROP Portal

Link: <https://geoportal.lneg.pt/en/databases/rop/>

It consists of an extensive database of Portuguese natural stones, catalogued by their commercial names. It includes quarrying sites, stone characteristics and suppliers, but also an expert system based on physical-mechanical properties, aiming to adapt the stone selection to each application type.

Some news from the 2nd version



- ✓ More physical-mechanical properties.
- ✓ Georeferencing (WGS84) of quarrying sites/nuclei on the Map of Portugal.
- ✓ “Search by features” with application advices, for some characteristics and value ranges.
- ✓ “Insert application case” with the possibility of including images.

NEW KNOWLEDGE FOR EUROPE

ROP Portal — english version

The 2nd version of the ROP Portal is bilingual, like the 1st, allowing an international consultation.

The European standard — EN — in physical-mechanical testing

The consultation of the ROP Portal is of particular interest in the European Union, taking into account that almost all of the physical-mechanical properties, contained in the technical sheets, were determined according to European test methods (EN).

FINAL CONSUMERS

Quarrying and processing companies of natural stones, architects, builders and the general public.

**ARTICULATION WITH
EU LEGISLATION**

EU Regulation No. 305/2011 and its amendment is the legislation currently in force for natural stone products. This determines the issuance of the Declaration of Performance, an essential document for CE marking, in which the manufacturer assumes responsibility for the performance of the product in relation to the properties considered essential to declare for natural stone, by the European standard for that product. Most of the properties considered essential are listed in the “Technical Sheets”.

MORE INFORMATION

Technical Sheets

Igneous Stones



Show 20 entries

Search:

Lithological Type	Commercial Names (common)
GRANODIORITE	"AZULÁLIA" / AZUL ÉVORA / CINZENTO ESCURO
GRANITE	AMARELO DE FIGUEIRA
GRANITE	AMARELO DE FONTE ARCADA
GRANITE	AMARELO DE LUZELOS / AMARELO PARDO
GRANITE	AMARELO MONDIM

Metamorphic Stones



Show 20 entries

Search:

Lithological Type	Commercial Names (common)
SLATE	ARDÓSIA DE CANELAS
SLATE	ARDÓSIA DE VALONGO
SLATE	ARDÓSIA DO MARÃO
MARBLE	AZUL LAGOA
MARBLE	BRANÇO / BRANCO VIGÁRIA

MORE INFORMATION



Technical Sheets

Sedimentary Stones



Show entries

Search:

Lithological Type

Commercial Names (common)

LIMESTONE

"ST. FLORIENT ROSE" / ABANCADO "ST. FLORIENT"

"ST. FLORIENT ROSE" / ABANCADO "ST. FLORIENT"

LIMESTONE

Description and location	Physical-mechanical properties, chemical analysis and recommended applications	Petrographic examination, geological context and quarries' general features	Suppliers	Application cases	Insert application case
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Macroscopic description

Microcrystalline pinkish and beige limestone, bioclastic and calciclastic, with coarse elements and some stylolites, spathized.

Region of extraction

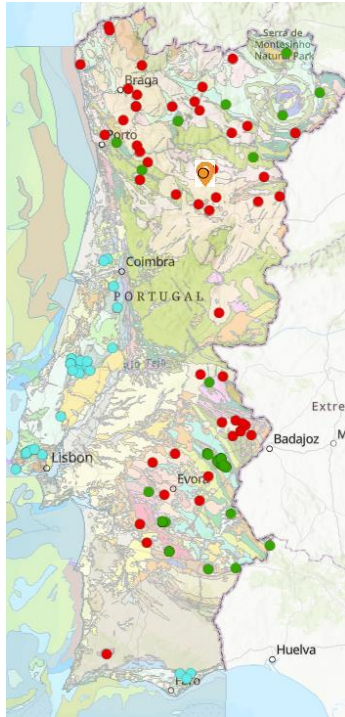
District: LISBOA
Municipality: SINTRA
Parish: TERRUGEM
Place: LAMEIRAS<



MORE INFORMATION

 [See on the Map](#)

MAPA ▾ NAVEGAÇÃO ▾ TEMAS ▾ PESQUISA ▾ FUNCIONALIDADES ▾ AJUDA Encontrar um endereço ou local



Identificar


Rochas Ornamentais Portuguesas

Pedreiras de Rocha Ornamental

Id:	163
Nome:	CINZENTO ARIZ / "ZIRA GRAY"
Código:	RI-GR E002
Tipo Rocha:	ROCHAS ÍGNEAS
Tipo Litológico:	GRANITO
Latitude:	40,933141
Longitude:	-7,634236
Mais informações:	
Mapa:	

Latitude: 40.9351 Longitude: -7.6548
Morada: Não foram encontradas moradas.

- **Igneous Stones**
- **Metamorphic Stones**
- **Sedimentary Stones**

● ● ● Bullets are linked to each technical sheet (click on )

 [Search](#)

[By commercial name](#)

SEARCH BY THE STONE COMMERCIAL NAME

Insert stone commercial name (partial or entire):

MORE INFORMATION

 Search

By quarrying location

SEARCH BY QUARRYING LOCATION

Municipality where the stone is quarried:

AGUIAR DA BEIRA (GUARDA)

Search

By features

Expert technical decision support system

SEARCH BY STONE FEATURES
(select value ranges for the desired properties)

Lithological Type: 

Colour: 

Requirement level: 

Range matching the search: 

Additional range matching the search: 

Property	Value Range	Very low	Low	Medium	High	Very high
Flexural strength under concentrated load	≥ 8.0 MPa			Medium	High	Very high
Uniaxial compressive strength	≥ 80 MPa			Medium	High	Very high
Advice: Outdoor paving in wetlands						
Water absorption at atmospheric pressure	$\leq 0.2\%$	Very high	High	Medium	Medium to low	Low
Apparent density	> 2650 kg/m ³	Very low	Low	Low to medium	Medium	High
Open porosity	$\leq 0.5\%$	Very high	High	Medium	Medium to low	Low
Advice: Interiors, Exteriors with low weathering, Exteriors with high weathering exposure						
Water absorption coefficient by capillarity	Any value		High	Medium		Low
Frost resistance — Technological test (decrease < 20% in the evaluated property):						
Flexural strength under concentrated load	Not required		Low	Medium		Very high
Uniaxial compressive strength	Not required		Low	Medium		Very high
Frost resistance - Identification test:	Not required	Low	Medium	Medium to high	High	Very high
Resistance to ageing by thermal shock:	Not required					
Advice: Unsuitable for paving, Light traffic (E.g. private residences), Moderate traffic (E.g. stores), Moderate to heavy traffic (E.g. supermarkets), Heavy traffic (E.g. airports), Very heavy traffic (E.g. streets and roads)						
Abrasion resistance:						
Capon Test (Wide Wheel Abrasion Test)	Any Value	Very low	Low	Low to medium	Medium	High
Amsler Abrasion Test	≤ 3.5 mm	Very low	Low	Low to medium	Medium	High
Advice: Interiors, Exteriors, Exteriors						
Breaking load at dowel hole	Any Value		Low	Medium		High
Advice: Household horizontal floors, Public and/or outdoor horizontal floors, Ramp indoor floors, Ramp outdoor floors						
Slip resistance by means of the pendulum tester:						
SRV "dry"	Any Value	Low	Low to medium	Medium		High
SRV "wet"	Any Value	Low	Low to medium	Medium		High
Linear thermal expansion coefficient	Any Value	Very high	High	Medium		Low
Advice: Unsuitable for paving, Private use, Collective use, Public use, Susceptible to very strong impacts						
Rupture energy	Any Value	Very low	Low	Medium	High	Very high

Maximum number of results to be displayed:

Search 

User-selected ranges according to its technical needs

MORE INFORMATION



Search

By features

SEARCH RESULTS

Commercial Names (common)	NUMBER OF PROPERTIES MEETING THE CRITERIA (X/Y)
BRANCO / BRANCO VIGÁRIA	7/77
BRANCO COM VERGADAS	7/77
BRANCO CORRENTE/ BRANCO ESTREMOZ/ ESTREMOZ BRANCO	7/77
BRANCO DE CABANAS	7/77
BRANCO DO OLIVAL GRANDE	7/77
BRANCO LEVEMENTE VENADO	7/77
BRANCO ROSADO	7/77
BRANCO VENADO DA CRUZ DOS MENINOS	7/77
BRANCO VENADO DA FONTE DA MOURA / BRANCO PARDAIS	7/77
BRANCO VENADO DA LAGOA / BRANCO LAGOA	7/77

X - Number of properties that meet the criteria
Y - Total number of properties defined

Make new search

**MAIN BIBLIOGRAPHIC
GROUNDWORK**

- Moura, A. C., Martins, O. R., Ramos, J. F. et al. (1983) — Catálogo de Rochas Ornamentais Portuguesas, Vol. I. Laboratório da Direção Geral de Geologia e Minas. S. Mamede de Infesta.
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