

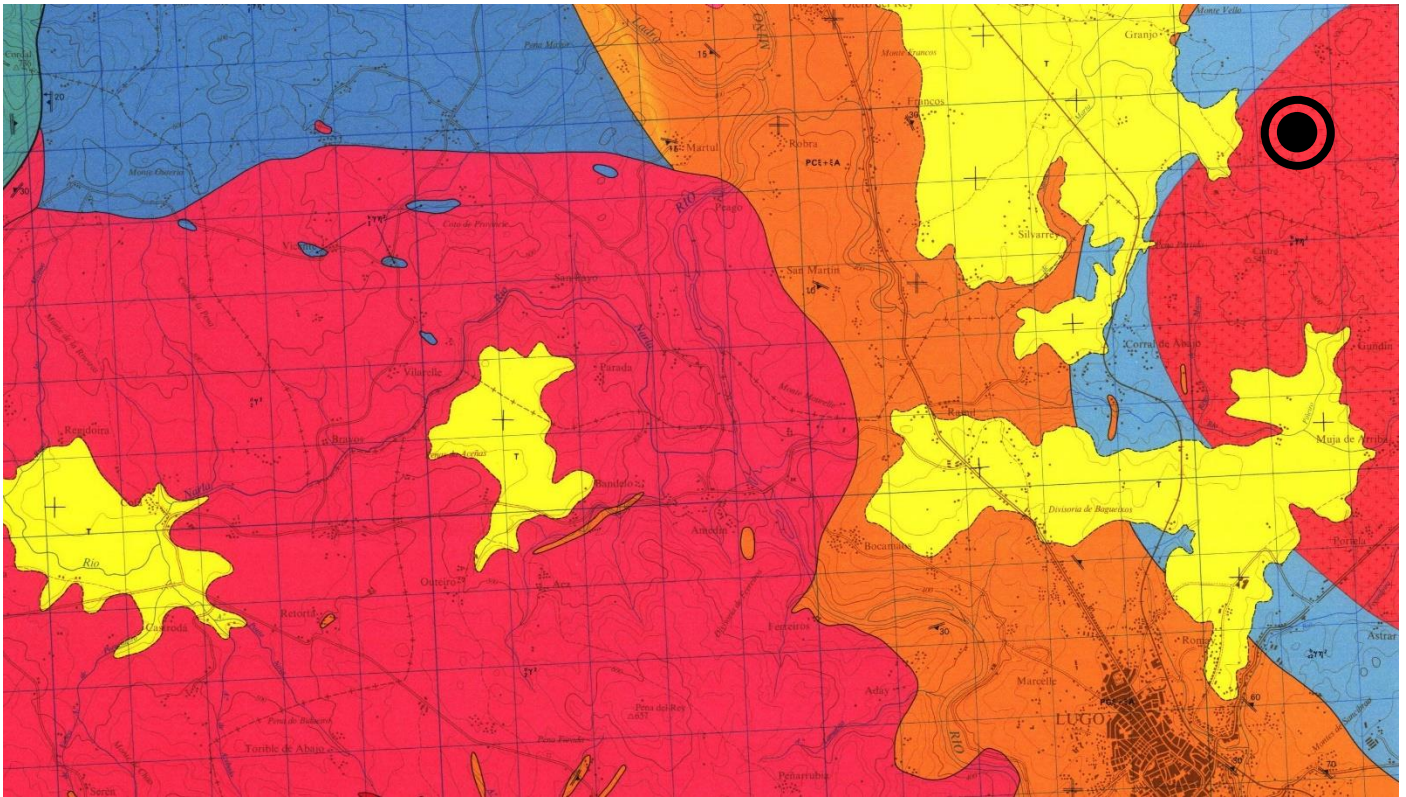
Rosa Lugo



Short description: Biotitic granite of medium to coarse grain (2.5-3.5 mm), some of the feldspars can reach up to 35 mm.

Commodity (vocabulary)	Lithology (vocabulary)	Typical colour (code list)	Place of origin			
			Country	County / District / Province	Municipality / Community	Place/town / Village
biotite granite	granite	pink	Spain	Lugo	Mosteiro/ Outeiro de rei	Mosteiro/ Outeiro de rei

Geological setting



Geology: It is a massif that intrudes with clear contacts in Precambrian rocks of the Vilalba Series and in the Paleozoic rocks of the Cándana Group. It is made up of coarse grained porphyritic biotitic granodiorites. The Lugo massif has a leucocratic character and the presence of biotite. Two facies have been identified within these massifs based on the presence or absence of microcline megacrystals:

- Central facies, defined by the presence of quartz porphyroblasts and K-feldspar.
- Border facies, which surrounds the previous one forming a ring of up to 1 km. wide, characterized by its coarse grain without megacrystals and an allotriomorphic texture.

It is affected by a subvertical fracture that favors the alteration and presents enclaves of the schists in which they intrude, especially in the border facies. The intrusion of the granite bodies causes an aura of contact metamorphism that overlaps the regional metamorphism that appears in the area.

Production: Production from a single quarry.

Geological age: Pennsylvanian.

Geological unit: Lugo massif.

Physical properties

Apparent density (EN 1936) kg/m ³	Open porosity (EN 1936) % vol	Water absorption at atmospheric pressure (EN 13755) % wt	Uniaxial Compressive strength (EN 1926) MPa	Flexural strength under concentrated load (EN 12372) MPa
2640		0.32	131.9	10.66

Real density (EN 1936) kg/m ³	Total porosity (EN 1936) % vol	Water absorption coefficient by capillary (EN 1925) (g/m ² x s ^{0,5})	Flexural strength under constant moment (EN 13161) MPa

Frost resistance (EN 12371)				
Technological Test (Test A)				Identification Test (Test B): Number of cycles completed prior to stone failure
Flexural strength (EN 12372) after freeze-thaw cycling, MPa	Number of cycles	Uniaxial compressive strength (EN 1926) after freeze-thaw cycling, MPa	Number of cycles	

Resistance to ageing by thermal shock (EN 14066)			
Change in dynamic modulus of elasticity (increase: +; decrease: -) %	Change in open porosity (increase: +; decrease: -) %	Change in ultrasound pulse velocity (increase: +; decrease: -) %	Change in flexural strength under conc. load (increase: +; decrease: -) %

Abrasion resistance (EN 14157)			Resistance to salt crystallisation (EN 12370)	Breaking load at dowel hole (EN 13364)	
Method A - Wide Wheel Abrasion Test, mm	Method B - Böhme Abrasion Test, cm ³ / 50cm ²	Method C - Amsler Abrasion Test, mm	Change in mass (increase: +; decrease: -), %	Breaking load, N	Thickness of the test specimens, mm
				2714	

Slip resistance by means of the pendulum tester (EN 14231 / CEN/TS 16165)			Rupture energy (EN 14158), Joule	Thermal Conductivity (EN 1745), W/m·K
Tested surface finish	Slip Resistance Value — SRV			
	Dry test condition	Wet test condition		

Source of information: Quiroga, J.R., Casares, A., Míguez, V., Vidal, J.R. (1997): La Piedra de Galicia. Xunta de Galicia, 319 págs. ISBN: 84-453-2037-8.

Sources of more information

Type of information	Name of provider	URL
This data sheet	Instituto Geológico y Minero de España (IGME)	http://www.igme.es/
Non-commercial directory		
Commercial directory		
Scientific publication		
Other publication	Quiroga, J.R., Casares, A., Míguez, V., Vidal, J.R. (1997): La Piedra de Galicia. Xunta de Galicia, 319 págs. ISBN: 84-453-2037-8.	

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