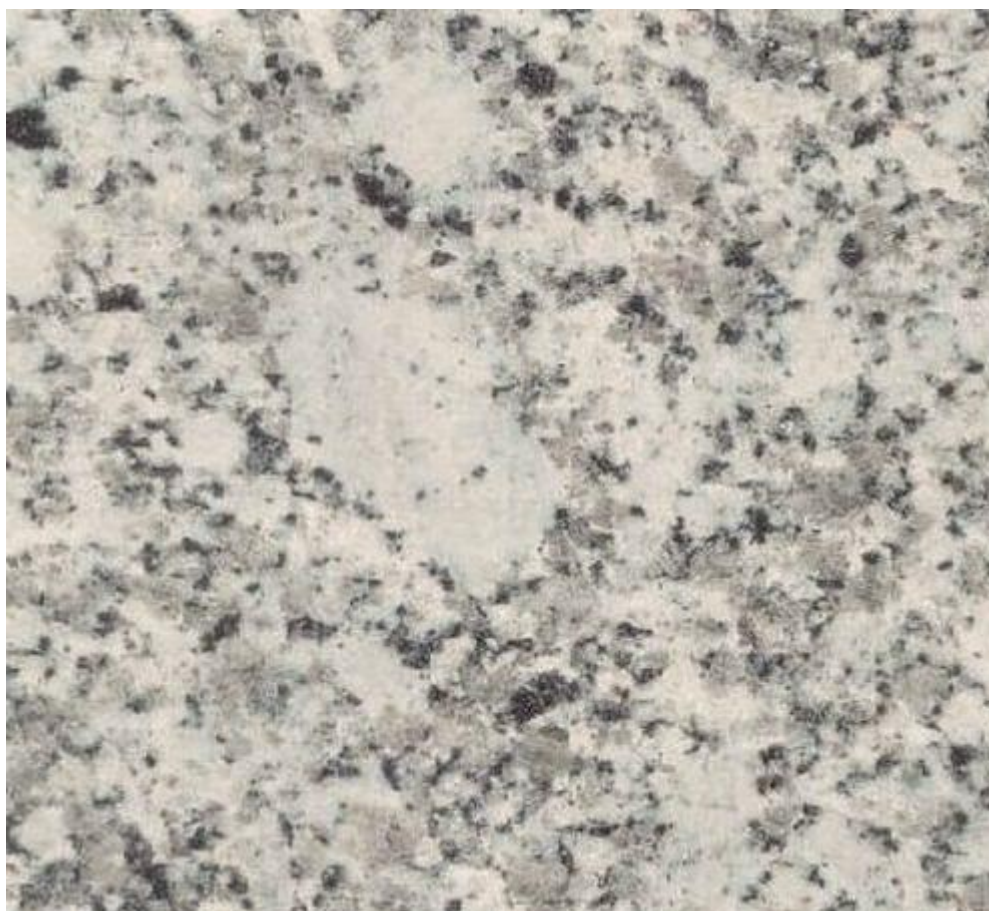


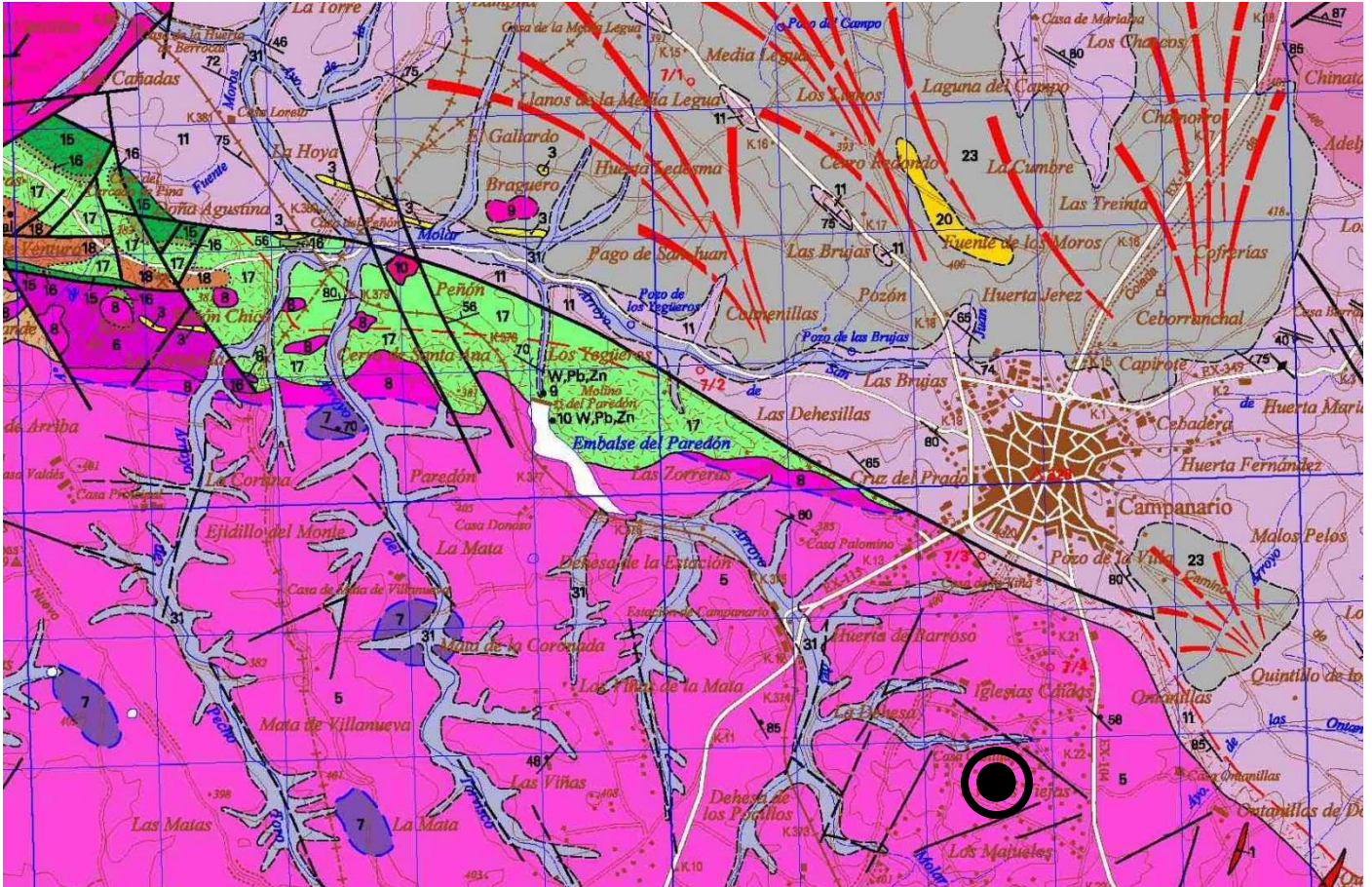
Gris Campanario



Short description: Two-mica granite with medium to coarse grain. Megacrystals up to 35 mm are present, although the average size ranges from 1.9 to 2.7 mm.

Commodity (vocabulary)	Lithology (vocabulary)	Typical colour (code list)	Place of origin			
			Country	County / District / Province	Municipality / Community	Place/town / Village
granite	granite	grey	Spain	Badajos	Campanario	Campanario

Geological setting



Geology: It is a geographical differentiation of the Massif de la Haba, known as Stock de Campanario.

La Haba Massif is a granitic massif lithologically constituted by cordieritic megaporphytic granites as the main facies. They are characterized by the large size of the whitish K-feldspar crystals of up to 15 cm, as well as by the 1 to 3 cm long black cordierite prisms. As a whole, it is a light-colored, gray to creamy rock with a very coarse grain, the homogeneity being important, only affected sporadic accumulations of crystals, mica alignments, and quartzofeldspathic bands. The enclaves are scarce and no larger than 15 cm. With these characteristics, the sometimes called Campanario Gray and, texturally and compositionally further away, the Blanco Valle are exploited.

Production: The production comes from a single quarry south of Campanario. This granite has been exploited at least since Roman times, as can be seen from the study of architectural elements studied in the nearby Sanctuary of Piedraescrita, where the elements are reused from previous constructions.

Geological age: Late Carboniferous (323.2 Ma)

Geological unit: Campanario stock.

Application, use and heritage



Description: Sanctuary of Piedraescrita gateway (Campanario, Badajoz).

Petrography

Description: Two-mica granite and medium to coarse grain. Megacrystals up to 35 mm are present, although the average size ranges from 1.9 to 2.7 mm.

Source of information: <http://www.igme.es/>

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
2630	0.4	0.18	164	

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
		0.51	

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
				1950	

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: La Piedra Natural de España. Directorio 2005. Roc Maquina.

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	Piedras Naturales de España. Anuario General 1988. Roc Maquina. / Granitos de España. 1990. ITGE. / Atlas de Rocas Ornamentales de Extremadura. Junta de Extremadura. / Piedras Naturales de España. Anuario 1988. Roc Maquina. / La Piedra Natural de España. Directorio 2000/01-2004-2005-2007. Roc Maquina /	http://www.granitosgomezcaceres.com/contenido.htm
Commercial directory		
Scientific publication		
Other publication		

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