

Caliza Blanco Paloma

Piedra Paloma

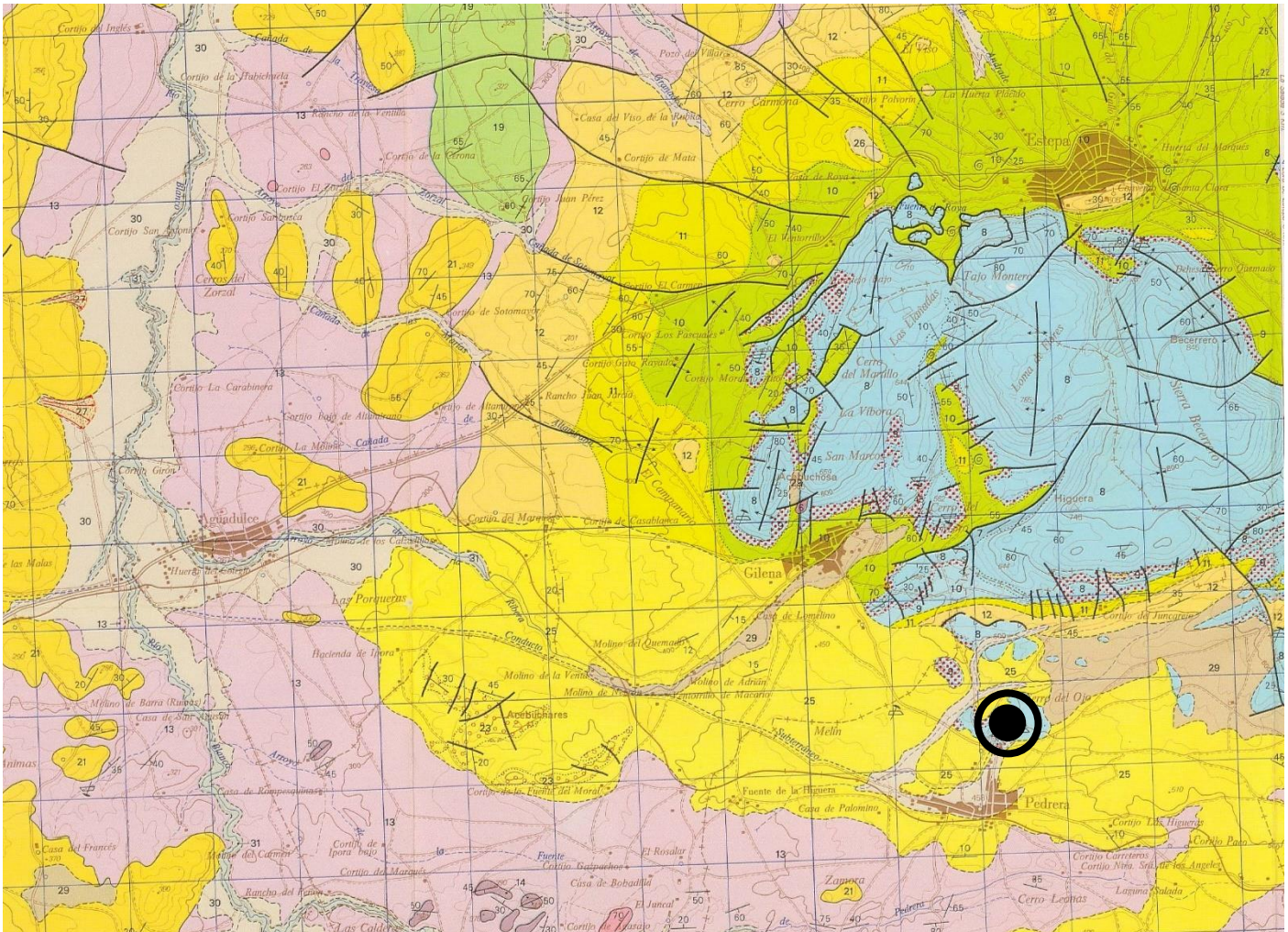


2 cm

Short description: Calcite, present in a 99% of the limestone, formed also with accessory components as oxides and quartz.

Commodity (vocabulary)	Lithology (vocabulary)	Typical colour (code list)	Place of origin			
			Country	County / District / Province	Municipality / Community	Place/town / Village
oolitic limestone	limestone	cream	Spain	Sevilla	Pedreira	Pedreira

Geological setting



Geology: Massive white limestones with oolites and oncolithes (up to 2 cm in size).

Production: Produced in the Matagallar quarry located in Pedrera, Seville since 1925. The quarry has been constantly developed up to the present, being today a modern operation that includes the whole chain of production, from the extraction to the exportation of the limestone.

Geological age: Bajociense (171,6-167,7 million years).

Geological unit: Jabalcruz-Camarena formation.

Application, use and heritage



Description: Private residence (image taken from <https://www.piedrapaloma.com/es/>).

Petrography

Description: Texture characterized by numerous fossil fragments of cm scale in a recrystallized biomicritic matrix. Observations: Sedimentary carbonate rock of marine origin, formed by a considerable amount of organic matter in a recrystallized micritic matrix of calcite. The organic fossiliferous fragments are composed of a microcrystalline calcite of micritic style (grain size is less than 5 microns), calcite of the matrix is majorly also micritic, with recrystallization, where calcite reach sizes between 0'0150 and 0'0625 mm. Main minerals: Calcite. Accessory minerals: Opaques.

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
2428		3,7	98,8	13,8

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	
14,6	48			

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
24,9				1100	

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		
	63,8	64	1,2	

Source of information: <https://www.piedrapaloma.com/wp-content/uploads/2019/07/ficha-tecnica-piedrapaloma.pdf>

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	Piedra Paloma	https://www.piedrapaloma.com/es/
Scientific publication		
Other publication		

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