

Crema Cenia

Pedra d'Ulldecona

Pedra Sènia

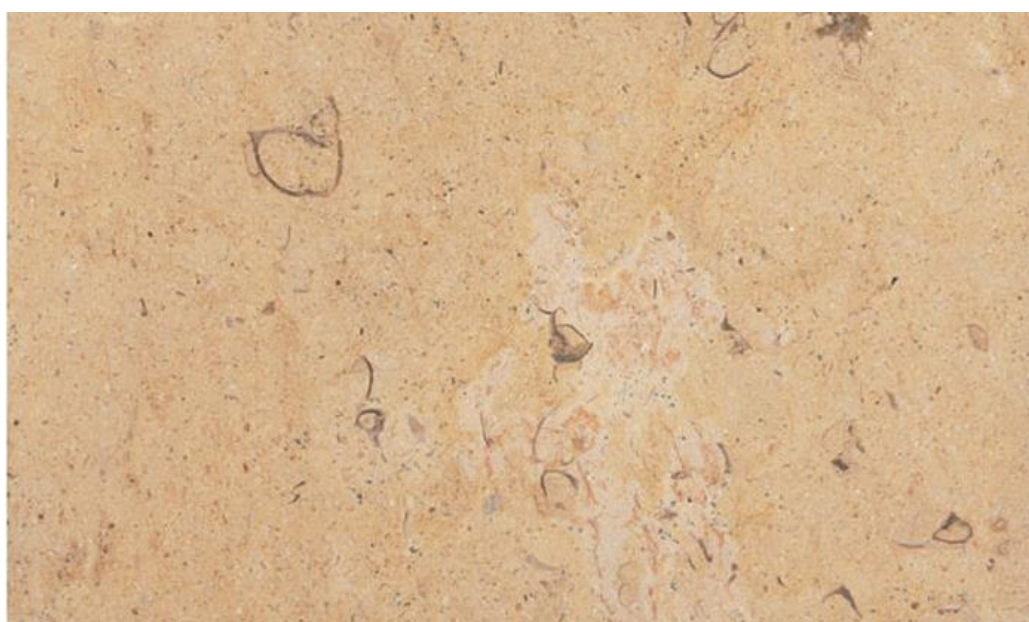


Image source: www.pedrescipan.com

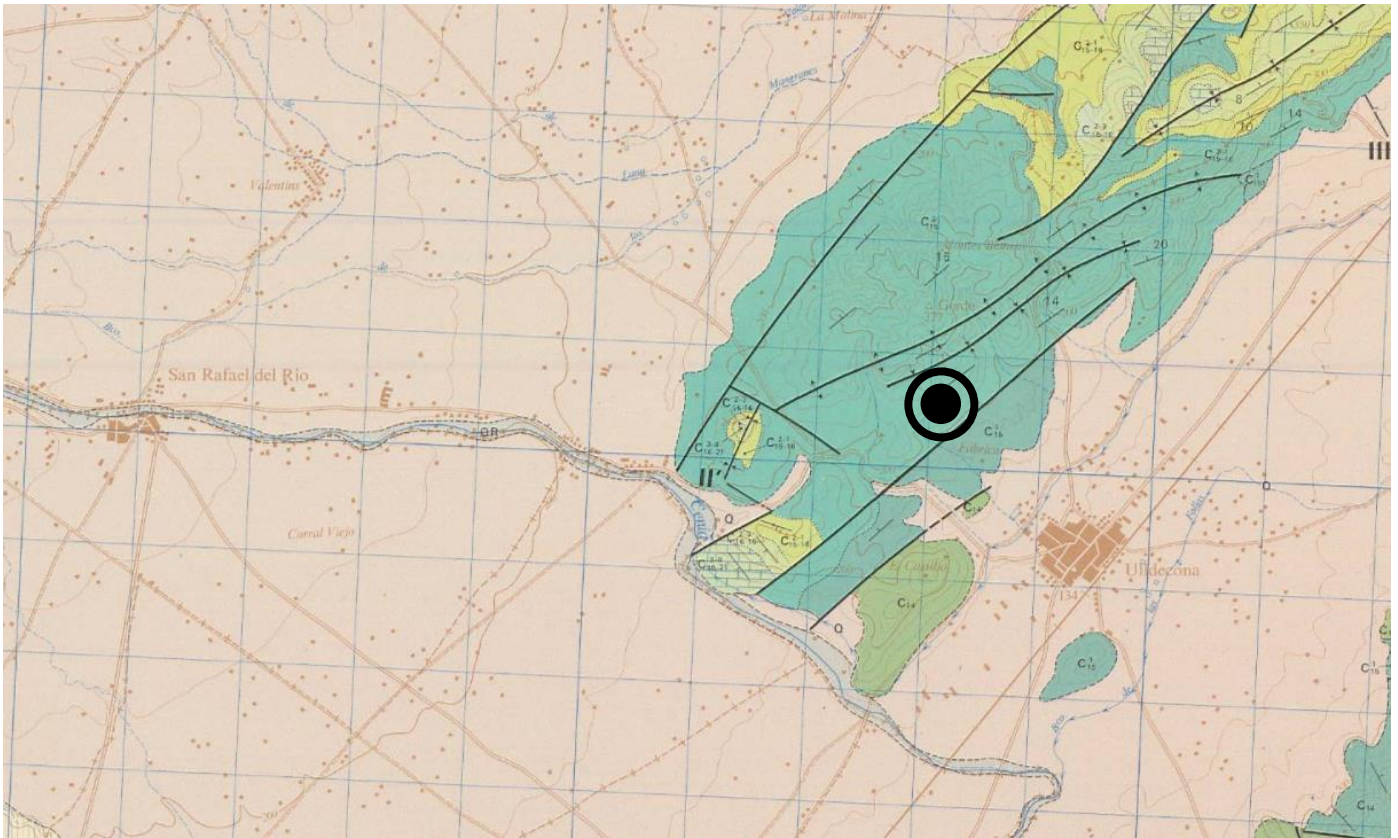
5 cm

Short description:

Highly homogeneous cream-brown limestone.

Commodity (vocabulary)	Lithology (vocabulary)	Typical colour (code list)	Place of origin			
			Country	County / District / Province	Municipality / Community	Place/town / Village
Limestone	Limestone	cream	Spain	Tarragona	Ulldecona	Ulldecona

Geological setting



Geology:

From the geological point of view, the Ulldecona limestones are located in a transition zone between the southern part of the Catalan Coastal Range (Cordillera Costero Catalana) and the Iberian Mountain System (Sistema Ibérico). The area of the Caliza Cenia quarries is made up of carbonate materials from the Lower Jurassic-Cretaceous age. The stratigraphic series of this area is characterized by the alternation of sections of carbonate platform (limestone) and marly deposits.

The Aptian age materials (among which is located the Ulldecona limestone) correspond to solid limestones with an estimated thickness of 40 meters.

Geological age: Cretaceous (Aptian)

Application, use and heritage



Palacio de Justicia, Bilbao.
Image source:
www.balzola.com



Cladding. Modern building.
Image source: www.andresmarin.com



Sagrada Família, Barcelona.
Image source: www.litosonline.com

Description:

Pedra Ulldecona or Crema Cènia has been and is being used mainly as a n ornamental rock and specifically for the cladding of buildings, paving and cultural heritage restoration. This rock has been used in buildings of great importance such as the Sagrada Família (Barcelona), the Kursaal (Palacio de Congresos de San Sebastián), the Palace of Justice of Bilbao, among others.

Nowadays, there are several active quarries around all the region that exploit the Ulldecona stone.

Petrography

Petrographic images available at: David Fernández Burriel (2009): Caracterització de calcàries explotables com a roca ornamental al Montsià. TFM – Enginyeria Tècnica de Mines. (in Catalanian)

Description:

Highly homogeneous cream-brown limestone.

At a microscopic scale, this rock corresponds to a bioclastic limestone (grainstone to packstone) with very low porosity. In some cases, rock can appear intensely dolomitized showing crystalline textures (dolosparite). Grains in primary textures correspond to foraminifera, rudists and miliolids.

Source of information:

- 1) David Fernández Burriel (2009): Caracterització de calcàries explotables com a roca ornamental al Montsià. TFM – Enginyeria Tècnica de Mines. (in Catalanian)
- 2) Spanish Geological Survey (IGME)
- 3) RocMaquina, Piedras Naturales, maquinaria y equipos. ISSN: 0214-0217.

Mineral composition

If no accurate number, use MM=main minerals, SM = Subordinate minerals, AM=accessory minerals

Mineral 1 (%)	Mineral 2 (%)					
Calcite (MM)	Dolomite (MM)					

Source of information:

- 1) Spanish Geological Survey (IGME)
- 2) RocMaquina, Piedras Naturales, maquinaria y equipos. ISSN: 0214-0217.

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
2680	1.5	1.2	136.9	27.93

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
		1.61	

Source of information:

- 1) David Fernández Burriel (2009): Caracterització de calcàries explotables com a roca ornamental al Montsià. TFM – Enginyeria Tècnica de Mines. (in Catalanian)
- 2) Spanish Geological Survey (IGME)
- 3) RocMaquina, Piedras Naturales, maquinaria y equipos. ISSN: 0214-0217.

Sources of more information

Type of information	Name of provider	URL
This data sheet		
Non-commercial directory	Spanish Geological Survey	www.igme.es
Commercial directory	RockMaquina – Piedras naturales, maquinaria y equipos.	
Scientific publication	David Fernández Burriel (2009): Caracterització de calcàries explotables com a roca ornamental al Montsià. TFM – Enginyeria Tècnica de Mines. (in Catalanian)	
Other publication		

Compiled by:	Instituto Geológico y Minero de España (IGME) http://www.igme.es/	 Instituto Geológico y Minero de España
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