

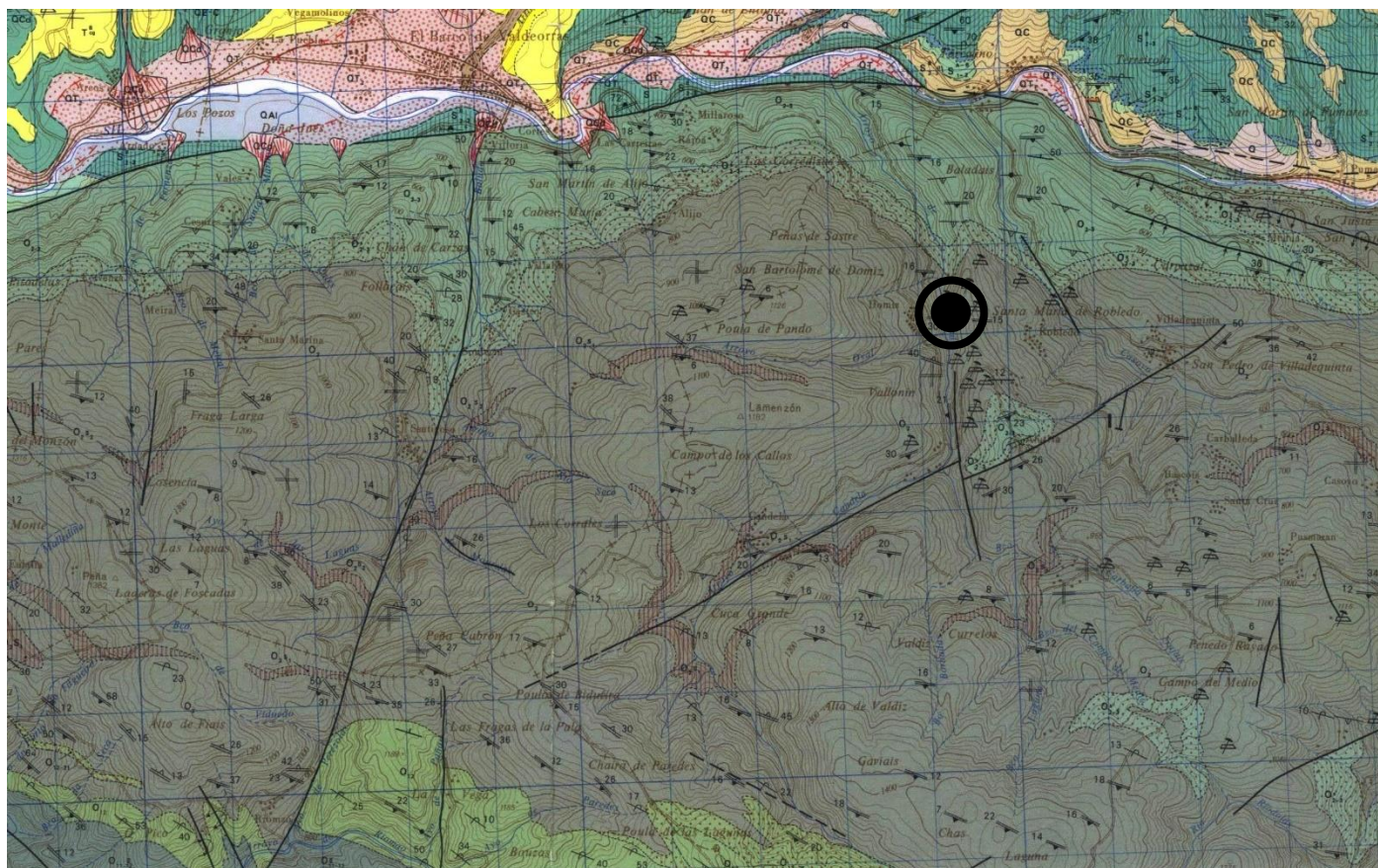
Valdeorras Domiz



Short description: Medium grained gray slate with homogeneous and smooth surfaces, without metallic minerals.

Commodity (vocabulary)	Lithology (vocabulary)	Typical colour (code list)	Place of origin			
			Country	County / District / Province	Municipality / Community	Place/town / Village
slate of tectonic compres	slate	grey	Spain	Orense	Carballada de Valdeorras (OR- OU)	Carballada de Valdeorras

Geological setting



Geology: The Losadilla Formation is a very monotonous set of shales with sandy laminations of centimeter to decimetric scale thicknesses and some layer of sandstone, with coarse detrital lithologies being more abundant in the western part of the southern branch of the Trout Synclinorium. The slates are gray, in areas with bands of different shades, quite homogeneous and with few metallic minerals. The thickness of this formation varies from 150 to 200 m. This unit has levels of slates from 15 to 20 m that are exploited for roofs.

Production: High activity in the Leon area, while in Galicia it is not exploited at present.

Geological age: Upper Ordovician.

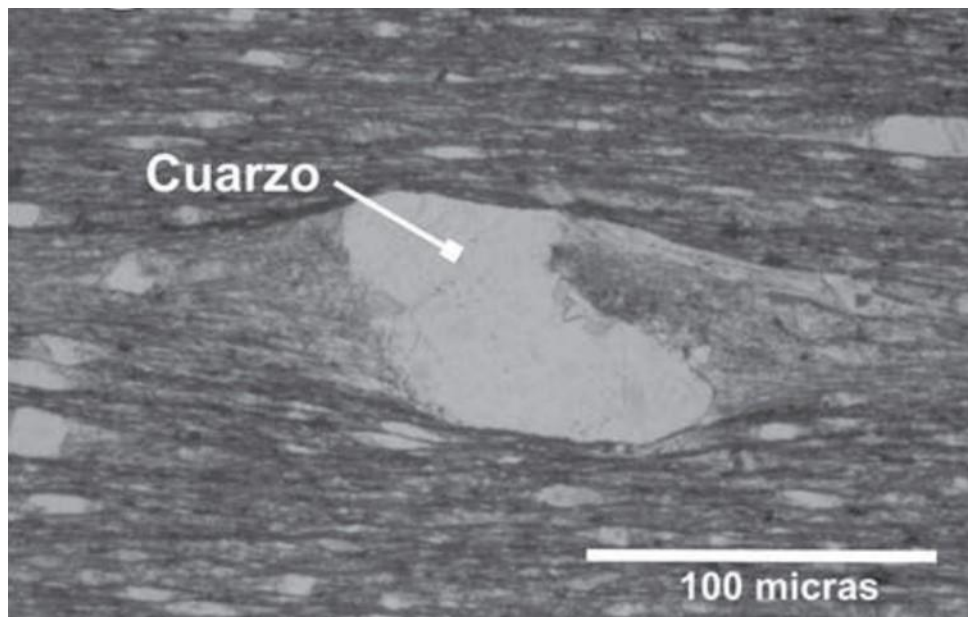
Geological unit: Losadilla Formation.

Application, use and heritage



Description: Slates for roofing in a building.

Petrography



Description: Quartz clast with development of pressure tails. La Baña District, Losadilla Formation.

Source of information: V. Cárdenes, A. Rubio Ordóñez, A. López Munguira y C. Monterroso. 2010. Petrografía y mineralogía de las pizarras para cubiertas de la Península Ibérica en relación con su calidad. Trabajos de Geología, Universidad de Oviedo, 30 : 412-420.

Mineral composition

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

Mineral 1 (%)	Mineral 2 (%)	Mineral 3 (%)	Mineral 4 (%)	Mineral 5 (%)	Mineral 6 (%)	Mineral 7 (%)
Chlorite (15-40%)	Feldspars (0-15%)	Mica (30-50%)	Quartz (20-35%)			
Mineral 8 (%)	Mineral n (%)					

Source of information: V. CÁRDENES, A. RUBIO ORDÓÑEZ, A. LÓPEZ MUNGUIRA Y C. MONTERROSO. 2010. Petrografía y mineralogía de las pizarras para cubiertas de la Península Ibérica en relación con su calidad. Trabajos de Geología, Universidad de Oviedo, 30: 412-420.

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
2810		1.3	83.21	36.2

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
				2905	

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	V. CÁRDENES, A. RUBIO ORDÓÑEZ, A. LÓPEZ MUNGUIRA Y C. MONTERROSO. 2010. Petrografía y mineralogía de las pizarras para cubiertas de la Península Ibérica en relación con su calidad. Trabajos de Geología, Universidad de Oviedo, 30 : 412-420	
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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