

## What is Limestone

Limestone is one of the world's most popular natural stone materials. In fact, it is now one of the most popular flooring options in the UK, especially in the residential environment. It is also used in cladding and various stonework, including limestone hearths, vanities, shower trays, bath surrounds, etc.

Limestone is a sedimentary rock, mainly composed of mineral calcite. The primary source of the calcite is usually marine organisms (fossils of which can be found in certain types of limestone, e.g., Bone or Sina Siro), which settle out of the water column and are deposited on the ocean floors as pelagic. Secondary calcite may also be deposited in super-saturated meteoric waters (ground water that reaches earth's surface as precipitation), as is evidenced by the creation of stalagmites and stalactites. Limestone makes up approximately 10 percent of the total volume of all sedimentary rocks.

Most types of limestone are softer and more porous than granite or marble. Limestone, however, is typically harder and less porous than sandstone.

Limestone quarries can be found in many countries, including Europe, in particular France, Spain, Italy, Germany, the UK.

Limestone comes in different colours, including:

- White or off-white like Antalya Cream, White Cappuccino or Crema Bianco;
- Beige (the most typical limestone colour) like Desert Gold, Jura Beige, Crema Moca, Desert Gold;
- Blue like Bateig Azul (which is strictly speaking somewhere between sandstone and limestone in terms of hardness);
- Brown like Aubergine limestone;
- Grey like Platinum Grey or LeChateau.

Examples of limestone used in world famous buildings:

- St Marc limestone in the Louvre Museum
- Caliza Capri limestone In the British Museum
- Poiseul Beige in the Musée des Invalides

Like many natural stones, most types of limestone come in different grades. The most typical attribute of the grade is the grain quality – stones with smaller grains and more consistent in colour are superior in quality to (and therefore have a higher grade than) stones with larger grains or colour variations. It is essential to bear this in mind when choosing limestone.

Some Examples of Limestone	Picture [a rough guide only]	Technical characteristics – extracts [provided in good faith & to the best of our knowledge]
Antalya Cream		Bulk density: 2,400 kg/m <sup>3</sup> Compressive strength: 78.4 N/mm <sup>2</sup> Water absorption: 6.5%
Antique Gold		Bulk density: 2,590 kg/m <sup>3</sup> Compressive strength: 80 N/mm <sup>2</sup> Water absorption: 3%
Bateig Azul		Bulk density: 2,300 – 2,500 kg/m <sup>3</sup> Compressive strength: 18 - 61 N/mm <sup>2</sup> Water absorption: 6%
Bone		Bulk density: 2,640 kg/m <sup>3</sup> Compressive strength: 75 N/mm <sup>2</sup> Water absorption: 4.7%
Aubergine		Bulk density: 2,690 kg/m <sup>3</sup> Compressive strength: 158-170 N/mm <sup>2</sup> Water absorption: 0.4 %
Crema Bianco		Bulk density: 2,680 kg/m <sup>3</sup> Compressive strength: 99.08 N/mm <sup>2</sup> Water absorption: 3.5%.
Desert Lilly		Bulk density: 2,600 kg/m <sup>3</sup> Compressive strength: 100 N/mm <sup>2</sup> Water absorption: 4%
Jerusalem Gold		Bulk density: 2,630 kg/m <sup>3</sup> Compressive strength: 76.42 N/mm <sup>2</sup> Water absorption: 2%
Desert Beige		Bulk density: 2,640 kg/m <sup>3</sup> Compressive strength: 77-85 N/mm <sup>2</sup> Water absorption: 3%
Jura Grey		Bulk density: 2,600 kg/m <sup>3</sup> Compressive strength: 140 - 160 N/mm <sup>2</sup> Water absorption: 4%
LeChateau		Bulk density: 2,490 kg/m <sup>3</sup> Compressive strength: 88 N/mm <sup>2</sup> Water absorption: 4%
Platinum Grey		Bulk density: 2,480 kg/m <sup>3</sup> Compressive strength: 87 N/mm <sup>2</sup> Water absorption: 4.5%
Sina Siro		Bulk density: 2,700 kg/m <sup>3</sup> Compressive strength: 130 - 155 N/mm <sup>2</sup> Water absorption: 4%
White Cappuccino		Bulk density: 2,500 kg/m <sup>3</sup> Compressive strength: 87 N/mm <sup>2</sup> Water absorption: 4.5%