

## More on Lime

Lime is environmentally superior to cement and is estimated to produce 80% less carbon during manufacture.

Limestone is one of Earth's most abundant minerals.

Mortar is required to take up irregularities in the sizes of brick or blocks and to add adhesion.

Bedding mortar must be spreadable, must set hard, support the weight of all above it. Its strength must not compete with the strength of the brick or block.

When used well, Lime is said to make the best and most versatile binder in the world.

Lime concrete was used widely in ancient times and in the 18<sup>th</sup> and 19<sup>th</sup> centuries for use in canals, bridges and the construction of large buildings.

Hydrated lime is the lime available in bags from builder's merchants. This is favoured where conditions are not too harsh and is rated class C1

Hydraulic lime is used for wet environments or can be used completely under water.

The water resistance is due to clay inclusions within the raw material.

Lime should be mixed with sharp angular particles of sand or crushed limestone. The mixing ratios are usually 3 or 4 aggregate to one lime, mixing a little cement with lime mortar can weaken it by giving an early set and inhibiting the lime to set naturally over the longer period.

Hydraulic Limes deteriorate over time.

Bagged dry hydrated limes are easy to handle, but seldom match the quality of lime putty. Bagged lime deteriorates with age, contact with damp or air. The quality can be resurrected by mixing with sand and water and leaving to mature for a minimum of 1 day.