



Would you like to enhance the sustainability of concrete?

Concrete industry professionals are making the simple choice to reduce concrete's carbon footprint about 10% by switching from ordinary portland cement (OPC) to portland-limestone cement (PLC). PLC is intended to fully replace OPC.

Buzzi Unicem USA's transition from OPC to PLC is only one step in our commitment to improve our sustainability practices. Buzzi Unicem is a leading partner in a European research project called Cleanker. The name Cleanker signifies production of clean clinker. An emerging technology known as calcium looping achieves high energy efficiencies with a CO₂ capture over 90%. A demonstration unit is being tested at Buzzi Unicem's cement plant in Vernasca, Italy.

As a supporting member of the Portland Cement Association, Buzzi Unicem USA vigorously aided in the development of a roadmap to achieve carbon neutrality across the concrete value chain by 2050. This roadmap provides solutions for the built environment by optimizing the 5Cs: clinker; cement; concrete; construction; and carbonization.

Product Description

Buzzi Unicem USA's portland-limestone cement (PLC) Type IL is formulated with a higher limestone content and manufactured with less embodied energy than ordinary portland cement (OPC). Buzzi Unicem USA aims to produce PLC Type IL that meets or exceeds the performance requirements of ASTM C150 Standard Specification for Portland Cement Types I and II.

Buzzi Unicem USA's PLC offers its customers the ability to produce concrete with superior plastic and hardened properties while reducing its impact on global climate change.

Quality

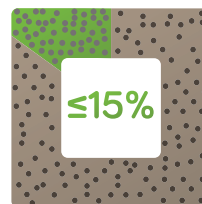
Portland-limestone cement (PLC) Type IL is governed by ASTM C595 or AASHTO M 240 Standard Specification for Blended Hydraulic Cements. It is a blended cement manufactured with a limestone content between 5% and 15%. Optimized particle packing and enriched nucleation sites allow PLCs to match the performance of ASTM C150 Standard Specification for Portland Cement Types I and II.

Buzzi Unicem USA's quality objectives demand equivalent or improved performance of concrete made with PLC compared to OPC.



OPC

ASTM C150 Standard Specification for Portland Cement sanctions a limestone portion up to 5%.



PLC

ASTM C595 or AASHTO M 240 Standard Specification for Blended Hydraulic Cements authorizes a limestone content between 5% and 15%.

