Heidelberg Materials

Environmentally responsible cement with excellent performance

ecocem™ PLC





What is portland limestone cement?

Portland limestone cement (PLC) is manufactured using clinker (the main ingredient in cement) with up to 15% micro-sized limestone.

Production of this earth-friendly cement generates about 10% less CO_2 than other portland cements, while still delivering the consistency, versatility and performance Heidelberg Materials' customers expect.

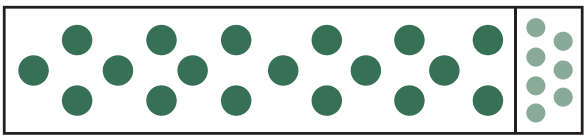
Additionally, the higher surface area of fine limestone provides surfaces for silicates to form and grow through a process called "nucleation." Calcium-Silicate-Hydrate (C-S-H) is the main binding phase in concrete and forms around cement grains. Manufacturing with limestone particles gives the C-S-H more places to grow, allowing more complete reactions.

Earth-friendly without sacrificing the versatility and performance you expect

Traditional portland cement

95% Ground Clinker

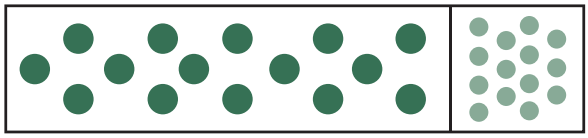
Less than 5% Limestone



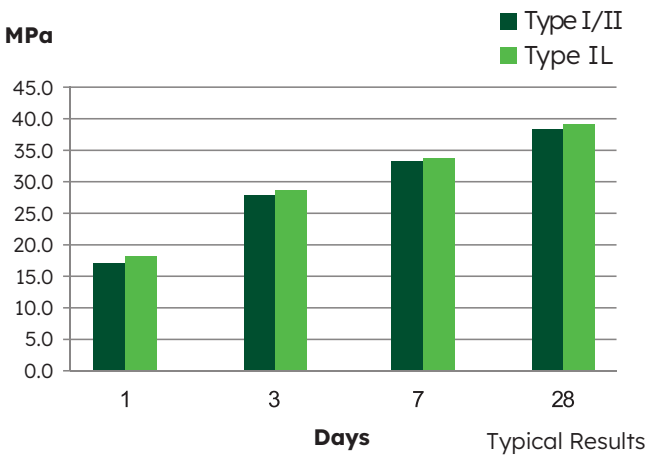
Portland limestone cement

85% Ground Clinker

Up to 15% Limestone



Type IL compared to Type I/II cement



Typical Results

EcoCemPLC™ Applications

Designed for use in the production of concrete block and pavers.

The use of EcoCemPLC™ decreases CO_2 emissions nearly 10% while still producing products with the same level of strength and durability as those manufactured with ordinary portland cement. It also reduces the appearance of efflorescence in concrete block and pavers and helps with mixture compaction due to the optimized particle size distribution.









Can be used for concrete pavement and soil stabilization.

EcoCemPLC™ can be used on highways, streets and roadways, parking areas, site development projects, airports and in many other construction applications. This product can help where sub-soils are not suitable for construction and can also be utilized in Full-Depth Reclamation (FDR) applications by recycling the existing asphalt pavements.

Advantageous for ready mixed applications.

The use of EcoCemPLC™ has a measurable effect on the environmental impact of the concrete utilized in structures. It provides a way for producers to differentiate their concrete as a “green” product without affecting the strength, durability or cost of the product. Many times there are enhanced synergies with supplemental cementitious materials like slag and fly ash when used in combination with EcoCemPLC™. It is why we can say Your Concrete Just Got Greener®.





Material to build our future

Heidelberg Materials is transforming the heavy building materials industry with sustainable, digital solutions to build our future. In North America we operate more than 450 locations making us leading producers of aggregates, cement, slag, concrete and asphalt.

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For more information, visit

heidelbergmaterials.us