

AQUAERiX™

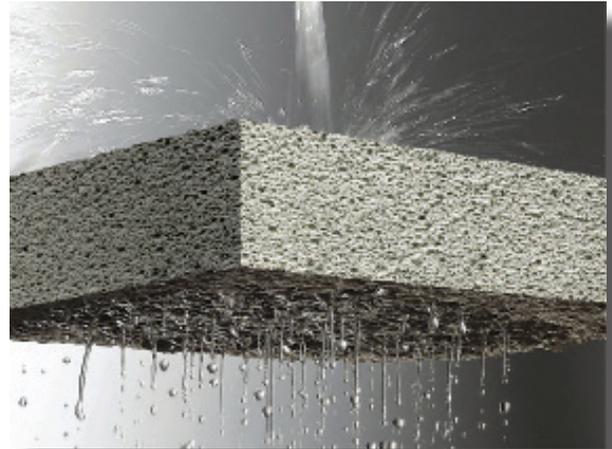
Permeable Low-Density Cellular Concrete (PLDCC)

Permeable low-density cellular concrete (PLDCC) produced using our AQUAERiX™ product is environmentally safe, and supports sustainable development.

AQUAERiX™

Typical Permeable Applications and/or Projects

- Sports Fields & Golf Courses
- Self-Leveling Fill
- Drainage Structures
- Tunnel Backfill
- Underground Tanks & Pipelines
- Soil Stabilization
- Permeable Roadbase
- Foundation Drains
- Annular Backfill
- Load-Reducing Engineered Fill
- Water Retention
- Pipeline Beds
- Greenhouse Floors
- Fill for Abandoned Mines
- Impact Absorption
- Bridge Approach & Landslip Repair



The use of low-density cellular concrete (LDCC) continues to increase worldwide. Innovative products from Aerix Industries™ are helping to drive this powerful trend, including the introduction of AQUAERiX, a patented synthetic foaming agent for production of PLDCC. (Patent No. US 8,172,937).

AQUAERiX produces an engineered, permeable, open-cell, low-density concrete, able to stabilize soil without disturbing or redirecting natural water flow. AQUAERiX PLDCC provides proven geotechnical solutions for applications requiring drainage capacities exceeding those obtainable from compacted soil or controlled low strength material (CLSM).

Engineered cement slurry mixes can range from 40 to 210 psi, with wet cast densities from 25 to 35 pcf. AQUAERiX is very durable, allowing the use of bottom ash in the mix design, which supports sustainable development and may increase the number of points awarded to a project under the LEED system. When site conditions or project schedules require faster set times, accelerating admixtures, if approved by the Aerix team, can be incorporated into the mix.



Aerix Industries™
Engineering Solutions for Project Savings

AQUAERiX™

Permeable Low-Density Cellular Concrete (PLDCC)

AQUAERiX™ is an advanced patented synthetic foaming agent that utilizes open-cell technology. The bubble coalesce creating a capillary structure allowing for water to pass through.

AQUAERiX permeable low-density cellular concrete (PLDCC) is environmentally safe and supports sustainable development through the LEED system.



LEED CREDITS

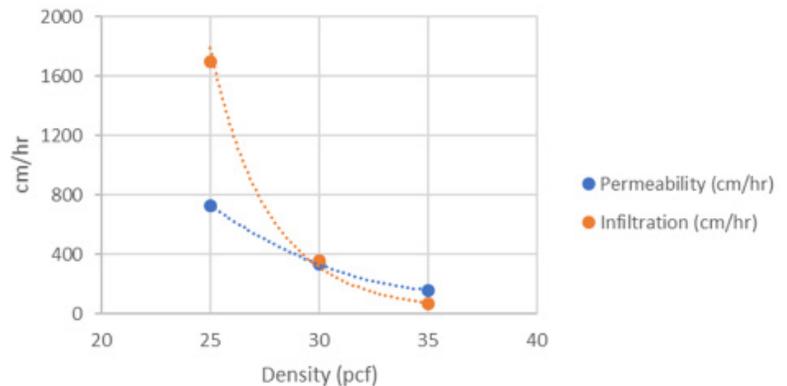
Using AQUAERiX PLDCC can help increase the number of points awarded to a building under the LEED system

By allowing water to pass through and infiltrate, AQUAERiX PLDCC helps reduce storm water flow, which may contribute to LEED Credit SS 6.1 and SS 6.2.

By helping to integrate spacing and drainage less site area may need to be used to manage storm water allowing a more compact site development footprint, which may contribute to LEED Credit SS 5.1 and SS 5.2

When incorporating fly ash in the mix design, AQUAERiX PLDCC substitutes partially for cement, which may contribute to LEED Credit MR 4.

PLDCC, blended with Aquaerix foam, is generally placed between 25 pcf (400 kg/m³) and 35 pcf (561 kg/m³) to obtain the best permeability and infiltration.



Source: University of Missouri - Kansas City, J.T. Kevern



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