

CEMATRIX™

Cellular Concrete Solutions

DESCRIPTION:

Cellular concrete in its most basic form consists of a cementitious material (Portland cement and/or Fly Ash), water, and a carefully constituted air bubble system.

APPLICATIONS:

CEMATRIX™ Cellular Concrete has lightweight, insulating, fire resistance, energy absorption and sound attenuation properties. Some applications include:

- shallow utility insulation and/or trench reinstatement,
- lightweight backfill behind retaining walls and bridge abutments,
- low density engineered fill,
- hot oil tank support and insulation,
- insulation under slabs and foundations on permafrost,
- road insulation and granular sub base replacement,
- grouting and void filling,
- replacement of weak or unstable soils,
- pipeline support and/or insulation, and
- insulation beneath in-floor heating systems,

CEMATRIX™ CAPABILITIES:

CEMATRIX™ has the following engineering and operational capabilities:

- **GEOTECHNICAL and STRUCTURAL DESIGN ASSISTANCE** — **CEMATRIX™** has in house engineering staff that can assist our clients in preparing designs. Where needed, third party consultants are retained to provide design assistance.
- **THERMAL ANALYSIS** — **CEMATRIX™** utilizes TEMP/W, a finite element geothermal modeling program developed by GEO-SLOPE International, to assist in developing thermal designs.
- **MATERIAL MIX DESIGN** — For each specific application, **CEMATRIX™** can customize material properties such as *compressive strength, thermal conductivity, permeability and flowability*.
- **LABORATORY TESTING** — Research and development is continually ongoing in our laboratory to refine existing mix designs and develop new materials to meet our clients' needs.
- **QUALITY CONTROL** — Continuous monitoring of material properties throughout cellular concrete production is critical to manufacturing consistent, high quality cellular concrete. To that end, **CEMATRIX™** conducts continuous quality assurance testing during each project. Upon request, reports are provided to our clients upon conclusion of the work.
- **SPECIFICATIONS** — **CEMATRIX™** can work with our clients to develop an appropriate specification for any project.
- **INSTALLATION** — **CEMATRIX™** has mobile production equipment ranging in capacity from 20 to 150 cubic metres of cellular concrete per hour, thus assuring that projects are completed quickly and efficiently.