

Neoloy® Geocells - Safety & Chemical Resistance

Introduction – PRS

PRS Geo-Technologies (PRS) is a certified and licensed manufacturer of cellular confinement system systems since 1996. PRS Geo-Technologies developed and manufactures its own proprietary and patented brand of cellular confinement system, under the name Neoloy[®] Geocell (formerly PRS-Neoweb), which is comprised of a Neoloy[®], a patented novel polymeric alloy.

For over 20 years our Engineering and Manufacturing Divisions have gained unique expertise in designing, manufacturing and implementing geocell solutions. PRS operates in 75 countries with 10,000+ successful project implementations for leading international companies worldwide.

PRS holds ISO 9001-2008 certification for its manufacturing and quality control processes, CE Marking (EU), as well as other international, government & regulatory agency approvals and certifications. All our geocells are tested in full compliance with industry-wide test procedures and international standards, both by in-house and external 3rd party laboratories.

Neoloy Geocell – High Chemical Resistance

Neoloy[®] is a high-strength novel polymeric alloy (NPA) developed by PRS for the Neoloy Geocell. Neoloy combines the ductility of HDPE with the dimensional stability and creep resistance of polyester to

provide optimal performance – strength, rigidity, and chemical stability – over time.

This unique material provides Neoloy Geocells with unrivaled long-term resistance to: creep, fatigue, stress-cracking, temperature extremes, oxidation and UV light. Special additives and manufacturing processes make Neoloy Geocell highly resistant to UV radiation.

In addition, Neoloy is a non-corrosive, inert engineering thermoplastic resistant to external



environmentally harsh conditions, wind and dust and water. It is chemically resistant to all natural occurring alkaline and acidic soil conditions, toxic waste and biologically resistant to attack by bacteria and fungi.

Material Safety Data Sheet (MSDS)

Made of an inert polymeric material, Neoloy Geocells can be used safely in close proximity to people and habitations and as part of a soil stabilization solution without any environmental impact to underground, water or other natural systems.

See the separate PRS NEOLOY GEOCELL MSDS for specifics regarding the health, hazards, safety and emergency information regarding the product.



Certified Quality

PRS Geo-Technologies has an ISO 9001:2008 certificate of quality management system continuously since 2003 for the manufacture and marketing of cellular confinement system for soil stabilization and infrastructure systems, from raw materials to finished product. Neoloy Geocell subjects all Neoloy Geocell sections to a battery of quality, reliability, and durability tests under the ISO 9001 quality management system.

In addition, **PRS also holds ISO-14001-2004 for environmental management**, in order to assess the environmental impact of its activities and products, measure environmental performance and improvement and set a systematic approach to environmental objectives and achieving them; and ISO-18001.2007 for occupational health and safety management.

PRS is in full compliance with EU requirements for CE Marking. All PRS products and processes meet the mandates of all relevant European Directives for construction products, traceability and factory production control; and PRS certifies that its products



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meet the relevant EU safety, health or environmental requirements.

Warranty

PRS-GeoTechnologies warrants that the Neoloy Geocell sections that it ships to be free from defects in material and workmanship at the time of manufacture, and during normal use and service for a period to be determined by the project requirements, typically 75 years. Neoloy Geocell is warranted against deterioration in the following categories:

- Creep resistance long term strength
- UV Resistance
- Anti-oxidant depletion (exposed or buried in soil/concrete)
- Physical durability / dimensional stability

Disposal at End of Service Life

Neoloy Geocell will not degrade for several hundred years after typical 75-year service life. As such, the Neoloy Geocell may be left in place, for example in a road pavement structure (for example with asphalt), with no long-term detrimental effects to the environment or humans.

Alternatively, PRS Neoloy Geocell may also be removed and subject to standard disposal and recycling procedures for HDPE piping and geosynthetics materials, which may include recycling the HDPE resins for future manufacturing use.