

Geosynthetic clay liners

as mineral layer



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A geosynthetic clay liner (GCL) is a factory-produced material on roll which mostly consists of two layers of non-woven geotextile with an intermediate layer of sodium bentonite powder. The two layers of geotextile are joined together by a sewing process (needle punched non-wovens). This creates a perfect stable mat with high internal shear resistance. If the bentonite mat comes into contact with water the sodium bentonite swells up and thus creates a waterproof mineral layer.

GCL's are mainly used for landfill cappings, for IBC materials, water and emergency lagoons, oil tank terminals and other industrial applications.

GCL's are usually installed in a dry environment. However, Genap has developed a technique that allows the GCL's to be installed underwater. This means that we can also install waterproof layers in ports and canals that cannot be dried out.