Tech Note: Textured Geomembranes

Both LLDPE and HDPE are now available with a textured surface. Textured one side or both, texturing is an effective means of not only increasing the geomembranes' friction angle between the geomembrane and the backfill, it is also an important safety feature.

Walking on an exposed smooth geomembrane with wet muddy boots can be a challenging task, one which can, and has, caused falls and injuries in the field. By selecting a textured geomembrane the friction between the liner and foot traffic can be increased. This increase in friction is not only effective at increasing safety on an exposed geomembrane liner it is an important design consideration. A textured geomembranes higher soil retention angle may allow a steeper slope over certain soils or protective geotextiles in backfilled liner applications. By increasing the angle of the slope, a smaller footprint is needed to provide the same containment volumes.

During the manufacturing process, nitrogen is introduced to the outer layer of the geomembrane. Once the nitrogen is no longer compressed by the extrusion process it rapidly expands creating the desired surface roughness. This surface roughness can be quantified and is measured in terms of its "Asperity Height". Contain Enviro stocks geomembranes with an asperity height of 10 mil; however other asperity heights are available by custom order.

Contain Enviro Services has over 15 years of geomembrane installation experience and can help guide you through your project. With access to the complete range of materials, Contain Enviro can suggest the most cost-effective material while still meeting the timing, environmental and safety requirements of your project.

For More Information, Please Visit Our Website www.contain.ca