INSULFOAM A CARLISLE COMPANY

TECHNICAL BULLETIN

TECHNICAL BULLETIN # 1020

SUBJECT: INSULFOAM GF® COMPATIBILITY WITH OTHER MATERIALS

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InsulFoam GF (geofoam) has many uses in geotechnical projects. These various applications will undoubtedly combine InsulFoam GF with other geosynthetic materials. Material compatibility should be taken into account when selecting geosynthetic materials that will be used with InsulFoam GF.

Designers have been specifying adhesives, membranes and other components in their geosynthetic applications. Adhesives or other components that contain coal tar or aromatic hydrocarbons such as xylene, acetone, toluene, and MEK etc. can cause compatibility issues with styrene products including InsulFoam GF. When adhesives and coatings are specified they should be styrene compatible products.

Certain road projects incorporating InsulFoam GF have required that the InsulFoam GF be covered with a geomembrane. These membranes are derived from several polymer bases. Most membrane types such as TPO, HDPE, and EPDM etc. have no compatibility issues with InsulFoam GF. When PVC membranes are to be utilized in direct contact with styrenes the type of PVC needs to be determined.
PVC membranes are of two types, internally plasticized based on Elvaloy® polymers or an externally plasticized product. Internally plasticized PVC's have no compatibility issues with InsulFoam GF.
The externally plasticized products when placed in direct contact with styrenes can cause dissolution of the styrene and or embrittlement of the PVC membrane. These externally plasticized membranes can cause deformation to occur in InsulFoam GF. This phenomenon can be eliminated by divorcing the externally plasticized PVC from the geofoam.

If you have more questions pertaining to InsulFoam GF, contact the Insulfoam-Technical Center at 800-469-8870.

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