

TL-0010 — Chemical Compatibility of BITUTHENE[®] Membranes with Other Materials Technical Letter (US Version)

The chemical compatibility of BITUTHENE[®] self adhered membranes with other materials is generally not an issue if the material contacts the high density polyethylene surface of the membrane. If the contact area is the rubberized asphalt component of the membrane, there is need to investigate further. As a general rule, the connecting material must be sound, functional and firmly bonded to the substrate. The BITUTHENE[®] membrane should overlap onto the existing product a minimum of 6 in. (150 mm).

The design of the connection between the two materials will vary depending on the composition of the material. Some of the more common materials are detailed below.

Waterproofing Materials

Cured Neoprene

BITUTHENE[®] membranes may be applied directly to clean, cured neoprene. Dusty neoprene must be cleaned and primed with BITUTHENE[®] Adhesive Primer B2 LVC prior to the attachment of the new membrane.

Uncured Neoprene

Uncured neoprene is not compatible with the rubberized asphalt component of the membrane. Therefore, BITUTHENE[®] membranes should not be applied directly to uncured neoprene. When the membrane must terminate onto uncured neoprene, an oil resistant barrier layer between the rubberized asphalt and the uncured neoprene is required. This barrier layer should be a 4 mil to 6 mil (0.1 mm to 0.15 mm) aluminum or polyester sheet, fully adhered to the uncured neoprene. Priming of the aluminum or polyester is not necessary. A two part polyurethane may also be utilized as a barrier, if fully cured.

Butyl Sheet

BITUTHENE[®] membranes can be applied directly to butyl sheet using the same guidelines as described for cured neoprene.

Chlorinated Polyethylene (CPE)

BITUTHENE[®] membranes can be applied directly to chlorinated polyethylene. Follow the guidelines for cured neoprene.

Polyvinyl Chloride (PVC)

Plasticized (flexible) PVC is not compatible with the rubberized asphalt adhesive of the BITUTHENE[®] membrane. Therefore, the membrane should not be applied directly to PVC sheet waterproofing without the use of a barrier layer. Refer to uncured neoprene for application guidelines. BITUTHENE[®] membranes can be applied to PVC pipe or other rigid PVC.

Ethylene Propylene Diene Monomer (EPDM)

EPDM is not compatible with the rubberized asphalt component of the BITUTHENE[®] membranes. Therefore, these membranes should not be applied directly to EPDM. Refer to uncured neoprene for application guidelines.

Asphalt or Coal Tar Residue

Asphalt or coal tar must be fully cured, sound and firmly bonded to the substrate. All surfaces must be primed with BITUTHENE[®] Adhesive Primer B2 LVC prior to installation of the BITUTHENE[®] membranes.

Polyurethane Based Fluid Applied Waterproofing

Many fluid applied waterproofing systems are made from polyurethane. BITUTHENE[®] membranes will adhere to clean, dry, fully cured polyurethane waterproofing. Priming of the polyurethane surface with BITUTHENE[®] Adhesive Primer B2 LVC is necessary. Polyurethanes modified with asphalt or coal tar do not affect compatibility with BITUTHENE[®] membranes.

Asphaltic Dampproofing

BITUTHENE[®] membranes may be installed directly over cleaned, asphaltic dampproofing. Priming of the dampproofing with BITUTHENE[®] Adhesive Primer B2 LVC is necessary. Allow primer to dry fully prior to applying membrane and follow all other application instructions.

Wood Preservatives and Treatments

Avoid contact with wood treated with creosote, pentachlorophenol or linseed oil.

Sealant and Caulking Materials

Polyurethane

Two part polyurethanes are acceptable for use under BITUTHENE[®] membranes, provided they are fully cured (i.e. solvent has evaporated completely). Single part urethanes are generally moisture cured and, if covered by the membrane, will not cure. One part and two part polyurethanes may be used on top of the membrane.

Polysulfides

Do not allow any contact. Even residual amounts of polysulfides will cause severe damage to the rubberized asphalt component of the membrane.

Butyl

Butyl sealants are acceptable for use under the membrane, provided they are fully cured (i.e. solvent has evaporated completely). Butyl sealants may be used on top of the membrane.