

## TECHNICAL BULLETIN: 20-03

### **IB PVC Single Ply Contact with Asphalt Based Materials and Self Adhered Membranes**

IB PVC Single Ply membrane and associated roof flashing accessories are constructed from high-quality, flexible polyvinyl chloride formulations. During new, reroofing, or recover roof installations, care must be taken to provide proper separation between IB PVC Single Ply products and bitumen-based materials such as asphalt, coal-tar, or rubberized asphalt; butyl rubber based, and other non-compatible materials. These materials are often present on existing surfaces, exposed during reroofing/recover replacements, or used for transition or other flashing and barrier purposes within the building envelope or roof construction.

Adverse interaction can occur leading to diminished performance, failure and/or loss of warranty coverage for the IB PVC membrane and other material. High performance plasticizers formulated within IB PVC membrane materials if directly exposed to asphalts, rubberized asphalts and similar compounds commonly used in self-adhered air/vapor/moisture underlayment, can react with these materials. While many underlayment and barrier type products utilize surface films such as HDPE, metallic foils, coated fiberglass mats or other materials which are in themselves compatible with the IB PVC membrane, exposure to non-compatible compounds can still occur at underlying seams, joints, end laps, fastener penetrations, sealants and adhesives used with those products.

Common conditions which may result include:

- Staining / discoloration of IB PVC membrane
- Changes in physical properties of the PVC membrane material
- Premature deterioration, aging (loss of flexibility / stiffening)
- Adverse interaction with PVC membrane adhesives and sealants / reduced or failed membrane adhesion
- Liquification or deterioration of asphalt or self-adhered compounds, loss of adhesion, staining, delamination, and changes in other properties or performance of the incompatible materials

Proper detailing of flashing, transition and other potential contact areas between materials is critical to successful installation and long-term performance. Many common intersections can be successfully separated with metal flashing or other materials. During reroof and recover operations, adequate protection of exposed IB PVC membrane materials can avoid or minimize exposure to asphalts or non-compatible products. Contact IB Technical Services for more information on product compatibility, IB specifications and construction details involving installations of IB PVC Single Ply with these materials and products.