

## **BLENDING PROPERTIES OF EVA BASED POLYMER MODIFIED BITUMEN**

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### *ABSTRACT*

Ethylene vinyl acetate (EVA) based polymers modify bitumen by forming a tough, rigid, three-dimensional network to resist deformation. Since EVA based polymer modified bitumen (PMB) is usually highly elastic, its properties are dependent upon the quantity of polymer in the PMB, the type of EVA used, the nature of the base bitumen, and also the time-temperature profile during blending process.

This paper presents a laboratory evaluation of the effect of blending time and temperature on the properties of EVA based PMB. The Evatane<sup>®</sup> 2805-bitumen blends (5% by weight of the base bitumen) have been prepared at various mixing times (20, 30, 60, 90 minute) and temperatures (170°C-185°C) and their properties have been determined by conventional test methods such as the penetration test, softening point test, thin film oven test, storage stability test etc. The results gained from the study were then evaluated.

*KEY WORDS:* Polymer, modification, EVA, blending time, temperature