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Dear Editor

The Asphalt Interlayer Association always appreciates the opportunity to disseminate correct information to interested parties. In contrast, when we attempt to do that and the information is edited by additions or deletions to our quotes, we believe the picture painted can be easily misunderstood.

We would like to remind your readers that over 100 million square meters of interlayers are installed every year and over 30 years of projects have provided volumes of documented successes of extended pavement life in all climates and varying applications due to the use of fabric interlayers.

As an Association we have also prided ourselves in aggressively addressing Quality Control and Quality Assurance issues, as we would think every industry should do. Our mission is to provide the consumer the best possible product by making proper selection of projects, materials and construction procedures. To that end we have developed a QC/QA Manual, a Test Kit, and testing procedures to assure maximum product performance in accordance with manufacturers specifications.

In your March 2000 article about waterproof membranes you stated that the *“tack coat binder applied has to be precisely correct”*. This is misleading from a construction standpoint. “Precisely correct” is virtually impossible due to the fact that one of the factors that controls application rate is the condition of the existing surface (very dense to very open). That can vary throughout the project. The application rate would therefore need to be adjusted infinitely as one proceeded along the project. **WHAT WE DO SAY IS THAT MINIMUM APPLICATION RATE IS CRITICAL!** We therefore recommend a fabric weight of 4.1 oz/sy yd and an application rate of .25 gal per square yard, plus or minus .03 gal per square yard. The latter is to compensate for that changing condition of the paving surface.

Between quotes by me was inserted a comment that ***“the excess asphalt binder can soften the new overlay and cause a weak spot”***. I am certainly not aware of any documentation to support that assertion. In contrast, I refer you to the position of Joe Button, consulting engineer and asphalt products researcher @ Texas A&M since 1972. I quote Mr. Button as he specifically disagrees with the following characterization:

***2. The binder used in the interlayer, unless minimized, causes bleeding or rutting of overlays.***

The misconception is that the interlayer is a source for “excess” asphalt. In reality, a properly installed membrane system uses ALL of the asphalt applied for the interlayer system. Specifically, the manufacturer provides the asphalt retention volume for their fabric. This is typically about .25 gallons per square yard (33.6 oz/sy, .114 kg/m<sup>2</sup>) for a 3.7-3.8 oz/sy (126-129gm/m<sup>2</sup> fabric). {Note: The .25 gallons/sy includes .05 gal/sy to tack to the old and new surface}. In other words, when placing a fabric of this weight, ALL of the liquid asphalt placed at the prescribed rate will be needed for the interlayer system with no asphalt available for any other system (the old or new asphalt).

Current construction practices, unfortunately, find installers reducing the binder application rate in order to avoid “potential” bleeding, rutting and slipping problems of the new overlay.

However, when one looks at the volume of asphalt available from the interlayer system, one can see that the quantity is insufficient to impact the integrity of the overlaying section.

Example:

Assume compacted asphalt weight to be 144 lbs/cf. For a 2” lift that translates to 216 pounds per sy. If the mix is 5.5% asphalt binder that is 190 oz of liquid asphalt in the hot mix. Based on the studies by Mr. Button, of TTI, the asphalt content of the hot mix has to be increased by .6 to 1.0% to change the physical properties of the mix. This is an additional 21 to 35 oz/sy. To add this much liquid asphalt in the interlayer phase, one would need to apply the binder at between .50 & .53 gal/sy.

You also stated **“distorted fabric can cause a weak spot in the asphalt overlay”**. I believe clarification is due here. We are *always* concerned about the quality of the membrane should excessive large wrinkles or laps occur in the installation. In those scenarios the paving machine can pull them toward the surface and in effect create a cold joint.

In summary our association believes that QUALITY products with QUALITY inspection installed by QUALITY contractors, provide QUALITY results. We would welcome all inquiries to our Association for free materials that we provide on the benefits and proper installation of waterproofing interlayers. (916) 388-1499 26 Light Sky Court, Sacramento, Ca 95828

Sincerely,

Ray Myers

Executive Director

Asphalt Interlayer Association