

IN SITU SERVICE CAPABILITY OF TACK COATS

C. Raab & M.N. Partl

Empa, Duebendorf, Switzerland

ABSTRACT

The use of tack or bond coats between different pavement layers is state of the art in most countries. Despite this fact, there are still some unanswered questions about best practice of application and additive and enduring effects of tack coats. The paper summarizes the results of an in situ evaluation of tack coats use and performance in Switzerland. In this research different parameters such as the influence of tack coat kind (polymer modified/non-polymer modified) and amount (application rate) of tack coat as well as the influence of time of application and the effect of application on milled surfaces were investigated. Further, an important point regarding the effectiveness of tack coats is the question of long term performance resp. the question after what time the bond will be optimal developed. Therefore, bonding properties determined directly after construction were compared to bonding properties determined after 2 months and bonding properties determined after trafficking. The results showed that the influence of short term curing and accelerated trafficking was not always visible but that the bonding properties clearly improved over a longer period of time.