Determination of Longitudinal and Lateral Friction Standards for Sri Lankan Roads

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In recent years, Srilanka has an unprecedented scale of adding new roads and expressways through funding from various foreign agencies. During last few years, more than **4500 km** length of '**A**' and '**B**'class has already been improved and open to public. With the improvement of roads, the exposure to accidents appears to be significant. Though appropriate methods are adopted during the design stage to ensure the road safety and due considerations were taken during the construction stages, it is wondering some significant accidents are taking place and it may be purely because of the nature of the new road for road users. Pavement friction design is one of the key elements required for ensuring highway safety.

The longitudinal as well as lateral friction determines the functional performance of the roads. The geometric design is carried out in Srilanka is based on Austroads, AASHTO publications and the guideline of RDA publication in the year of 1998, which is also prepared based on Austroads and AASHTO publications. It is a timely decision in local context to test the applicability of these parameters and to find out any variations and to provide recommendations. The outcome from this research will be very useful in the geometric design of highway, Pavement Management and construction techniques. An extensive literature review was carried out and based on the methodology and guidelines cited and it is experimented in local roads for dry and critical wet conditions.

The information provided, will serve as the basis for many of the guidelines and recommendations. Most importantly, it presents information on **a)** Coefficient of longitudinal friction for asphalt **b)** the design of highway improvements with the longitudinal and lateral friction.

Keywords: Longitudinal and Lateral friction, Pavement management, Geometric design

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