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## **Investigation of the Effect of Various Mixing Designs and Macro Textures on the Skid Resistance of Roller Compacted Concrete Pavement Surface**

*The purpose of this study is to investigate strategies to improve the skid resistance of roller-compacted concrete. Since the main weakness of roller-compacted concrete is the lack of pavement macrotexture, in this study, three types of macro textures, 1-Seeding (in three aggregate sizes), stamping (in two sizes), and grooving (one-way and two-way) were considered. In this research, eight mixing designs were selected to make roller-compacted concrete samples. The skid resistance of treated samples for 28 days before and after abrasion was evaluated by a British pendulum test. The results showed that concrete surface abrasion reduces the skid resistance of concrete samples by about 10%. The results also showed that changing different mixing designs did not have a significant effect on skid resistance. While the skid resistance is completely dependent on the type of macrotexture so that the grooved macrotexture shows the highest and the seeding shows the lowest skid resistance before and after abrasion.*

**Keywords:** Roller Compacted Concrete Pavement, Mixing Design, Skid Resistance, Micro/Macro-Texture, Abrasion.

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