عنوان مقاله:

Using of Finite Element Method for Investigation of Creep Compliance of Glasphalt Mixture

محل انتشار:

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نویسندگان:

Mostafa Sadeghnejad - *M. Sc. Student, Dept. of Civil Engineering, University of Guilan, Rasht, I. R. Iran*

Mahyar Arabani - *professor, Dept. of Civil Engineering, University of Guilan, Rasht, I. R. Iran*

Reza Jamshidi - *Assistant professor, Dept. of Civil Engineering, University of Guilan, Rasht, I. R. Iran*

خلاصه مقاله:

In recent years, many researches are down to investigate the effect of glass on dynamic properties and mechanical performance of Hot Mix Asphalt. In these researches, the improvement of behaviors of glasphalt in compare with conventional asphalt is illustrated against the fatigue cracking, rutting performance and permanent deformation. Creep phenomenon is one of the most important damages that occur during the service life of asphaltic pavements. Wheel track test (WTT) is one the most applicable test that carried out on asphaltic samples for evaluation of creep compliance. The scope of this research is using of finite element method in simulation of wheel track test to investigate creep compliance of glasphalt pavement. To achieve this goal, ABAQUS software is used to simulate wheel track test and outputs of model are compared with the experimental observations. The results of this research shown that presented model can completely characterize creep behaviors of glasphlt mixtures.

کلمات کلیدی:

Glasphalt, Finite Element, ABAQUS, Creep Compliance