

Permeability Degradation of Permeable Pavement Material Due To Clogging

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Clogging is one of major determinants in the lifespan of permeable pavements; the permeability and infiltration capacity of pavements can degrade much with physical clogging of pores in pavements. A series of laboratory experiments were conducted to understand and quantify the physical clogging and threshold value for particles governing physical clogging. Two different clogging particle distributions, reported by Seoul Metropolitan City and Duncan (1999), were prepared and used for clogging. The clogging particles were spread on the permeable pavement material under a constant head set up. For the specimens with area of 300x300 mm, and porosity of 0.20, the clogging particles of about 200 g, made the samples clogged reaching the terminal permeability. Both clogging particles reduced the coefficient of permeability by about 85%. Further efforts are needed to standardize the test procedure and investigate other specimens.

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