

Eco-Safe Pavé

~ Fine-Grained Porous Asphalt Pavement ~

Revêtement Eco-Safe Pavé

~ Asphalte poreux à granulats fins ~



Eco-Safe Pavé, a fine-grained porous asphalt pavement, was jointly developed by Metropolitan Expressway Co., Ltd. and Nichireki Group Co., Ltd. to mitigate pothole formation in drainage pavements. First adopted in 2015, it now covers approximately 30% of the total Metropolitan Expressway network.

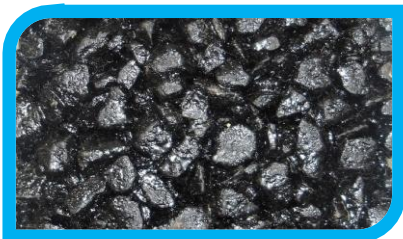
Characteristics of Eco-Safe



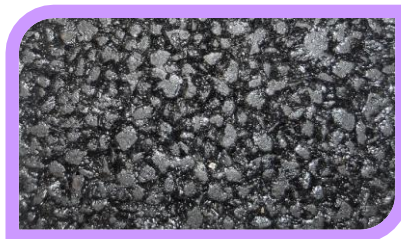
Economical: Low fuel cost and high durability (low life cycle cost)

Eco-friendly: Ultra-low traffic noise and reduction of CO₂ emissions

Safety: Potholes, splash reduction, and hydroplaning prevention



Conventional pavement
(Permeable, low-noise pavement)



Eco-Safe Pavé
(Fine surface texture)



Infrastructure Technology
Development Award

Economical

The fine surface texture prevents rubber tire deformation, improving the fuel efficiency of passing vehicles by **4.5%**, compared with conventional permeable low-noise pavement.

Eco-friendly

Improving the fuel efficiency of passing vehicles reduces CO₂ emissions. The installation of this pavement is scheduled to be completed in 2034, by which time CO₂ emissions are expected to be reduced by approximately **57,000 tons/year** (equivalent to emissions from 15,000 households). Traffic noise is also lower than that of conventional low-noise pavement by 7.5 dB, so environmental traffic noise loads are significantly reduced.

Safety

Eco-Safe Pavé has higher durability than conventional high-performance pavement and excellent pothole resistance. Since pavement thickness has been reduced to 3 cm, even if a pothole occurs, it will not damage the wheels of passing vehicles.

Eco-Safe Pavé is also as effective as conventional permeable pavement in terms of **splash reduction and hydroplaning prevention**, thereby helping to create a safe driving environment even under wet weather conditions.

Metropolitan Expressway Company Limited.

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