



LIFE18 ENV/IT/000201 With the contribution of the LIFE programme of the European Union

LIFE E-VIA

Electric Vehicle noise control by Assessment and optimisation of tyre/road interaction



Mix design

The University 'MEDITERRANEA' of Reggio Calabria (UNIRC) analysed more than 150 solutions in the literature (friction courses), based on acoustic and non-acoustic performance, in order to select appropriate solutions. Their characteristics and impacts were considered and preliminary tests were carried out. From 150 asphalt concretes, nine mixtures were selected, based on many characteristics, including: 1) Acoustic response. 2) Expected life by referring to mechanistic properties. 3) Permeability. 4) Friction. 5) ENDT value.

Based on these latter, open asphalt concretes with Nominal Maximum Aggregate of 6 mm (AC6) were selected.

An accurate plan of experiments was set up and followed in order to design and validate the final mixtures. Two types of mixtures were finally designed and tested (AC6 with and without crumb rubber).





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Laboratory experiments



Airflow Resistance

Corelok









