The present invention relates to the construction industry, and more specifically to asphalt mixtures, which are subject to increased requirements for noise reduction and durability. The object of the invention is to provide a mixture of asphalt for noise reducing pavements with good acoustic, mechanical and operational properties. Asphalt mixture for noise reducing pavements consisting of a mixture of fillers comprising fractionated rubble and mineral powder, adhesion enhancer, cellulose fiber and polymer modified bitumen, characterized in that the mixture of fillers consists of 5 to 8 mm granite rubble fraction, as well as mineral powder and 0 to 2 mm granite rubble separated by sieving, with a component ratio by weight %: 5-8 mm granite rubble fraction - 77.0-85.0; 0-2 mm granite rubble separated by sieving - 7.0-12.0; mineral powder - 2.0-6.0; adhesion enhancer - 0.01-0.03; cellulose fiber - 0.30 - 0.60; bitumen - 5.0-6.5.