

06-025 Study of degradation of brick pressed used ornamental rock waste

gustavo de castro xavier

Pedrosa, L.C. (1); Xavier, G.C.(1); Alexandre, J. (1); Azevedo, A.R.G. (1); Monteiro, S.N. (2); Vieira, C.M.F. (1)/(1) UENF; (2) IME

The major producers of ornamental rock countries are: Italy, China, Spain, India and Brazil. In this context, Brazil is a producer of ornamental stone and stands out for presenting amazing "geodiversity" mineral. Among the states with the highest yield, the Espírito Santo stands out, contributing 47% of national production, with 61% of the capacity of sawing that State, where 90% are in Cachoeiro de Itapemirim-ES, which are produced 496,000 tons of waste/year. These wastes can pollute the environment. This work uses the rock waste to replace up to 60% by weight of sand in the production of bricks pressed into place. In addition, submit the bricks in wetting and drying cycle's tests up to 120 days. The results show that with the brick with waste remains stable, with 30% loss of strength, and the brick without waste failing completely.