

RICE HUSK ASH CONCRETE-A REVIEW

Satyendra Nath¹, Vikas Srivastava² and P.K. Mehta³

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ABSTRACT : The use of industrial or agricultural by-product substitutions for cement has greatly contributed to sustainable development practices. Rice Husk is one such waste product that causes disposal problems. India is second largest producer of rice in the world and the effective use of rice husk ash in concrete is promising. Rice Husk Ash has good pozzolanic properties and as such it has been used as a highly reactive pozzolanic material which can be blended with Ordinary Portland Cement (OPC) for the production of durable concrete. Addition of rise husk to Portland cement improves the early strength of concrete and forms a calcium silicate hydrate (C-S-H) gel around the cement particles which is highly dense and less porous. Partial replacement of OPC by rice husk ash improves the mechanical properties viz compressive strength, flexural strength, tensile strength, bond strength, modulus of elasticity and reduces permeability, chloride penetration and chloride diffusion of concrete. This paper presents a review of the effect of rise husk ash on properties of fresh and hardened concrete.

Key Words: Rice husk, flexural strength, modulus of elasticity, permeability.