Special concrete

座長:齋藤尚(土木),山﨑順二(建築)

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[1194]EFFECT OF SPECIFIC SURFACE AREA OF FIBER INCORPORATED IN CEMENTITIOUS COMPOSITES ON SHIELDING EFFECTIVENESS ACCORDING TO ELECTRICAL CONDUCTIVITY

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This study investigates the shielding effectiveness of concrete as protective properties. It is reported that the shielding effectiveness of electromagnetic pulsu(EMP) is closely related to electrical conductivity. Amorphous metallic fiber, smooth steel fiber, and hooked steel fiber were incorporated into cementitious composites to increase electrical conductivity, and the correlation between electrical conductivity and shielding effectiveness was analyzed. The results showed that the electrical conductivity of amorphous metallic fiber with large specific surface area was the highest, and the shielding effectiveness reached saturation after a certain critical point.

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