10 - Mineralogy and interfacial transition zone features of recycled aggregate concrete

Author links open overlay panel

https://doi.org/10.1016/B978-0-12-824105-9.00013-5Get rights and content

Abstract

The intrinsic features of cementitious composites depend largely on the constituent materials compositions. The former is also known to be responsible for the overall mechanical performance of the composite materials. This chapter reported the mineralogy of recycled aggregate concrete (RAC) as affected by the concrete compositions. The processes involved in the microstructural development, mineralogy, and concept of interfacial transition zones in RAC were described. The influence of supplementary cementitious materials on the mineralogy modifications in RAC is also reported. The study also discussed microscale analysis of RAC using scanning electron microscope and the various hydration products commonly found in RAC.

Keywords

Mineralogy interfacial transition zone RCA