

ERRATA

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Chapter 7: Deleterious Reactions of Aggregate With Alkalis in Concrete

Pages 279-364

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Several instances throughout this chapter, the unit “square micrometer” (μm) was inadvertently printed as “square millimeter” (mm). The locations with the corrected units are indicated below:

PAGE 302, last paragraph, line 2:

“(i.e., hollow, enclosed). Individual α -quartz grains smaller than $\sim 0.1 \mu\text{m}$ have a measurably”

PAGE 303, first paragraph, line 6:

“a consequence, α -quartz particles $< 0.1 \mu\text{m}$ will dissolve, whereas at the same time, dissolved”

PAGE 303, fifth paragraph, line 9:

“grained quartz $< 60 \mu\text{m}$, chalcedony, opal. Very fine grained silica $< 10 \mu\text{m}$, and/or different”

PAGE 313, second paragraph, line 7:

“ground to $\sim 70 \mu\text{m}$ or finer rather behaves as an expansion inhibitor (also see Figg 1981; Hudec”

PAGE 314, seventh paragraph, line 4:

“ $0.25 \mu\text{m}$ diamond renders (thin) sections suitable for EPMA analysis, it does inflict damage”

PAGE 326, first paragraph, line 3:

“desired thickness, for concrete with its fine-grained paste typically $20 \mu\text{m}$. The thin section is”

PAGE 336, fourth paragraph, line 5:

“beam current (pA), spot diameter (μm), acquisition time (s), EDS dead time (percentage of real”

PAGE 338, fifth paragraph, lines 6-8:

“to $20 \mu\text{m}$ (to spread the incident energy over a sufficiently large area), beam current should not exceed 2 nA, and counting time limited to 30-40 s. This practically limits current density per unit surface to $\sim 6.4 \text{ pA}\cdot\mu\text{m}^{-2}$.”

PAGE 338, seventh paragraph, lines 1-4:

“Katayama (2010a) uses 15 kV, 0.12 nA, beam diameter $0.4 \mu\text{m}$ as verified by the imprint left on the 15 nm thick carbon coating, with a resulting current density of $\sim 950 \text{ pA}\cdot\mu\text{m}^{-2}$, i.e., about 150 \times greater than recommended by Morgan and London (1996). With the actual beam surface area ($0.126 \mu\text{m}^2$), maximum beam current should rather have been 8 pA, which is still”