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Corrigendum

Corrigendum to "Hybrid fibre reinforced ultra-high performance concrete beams under static and impact loads" [Eng. Struct. 245 (2021) 112921]

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The authors regret, in the article "Hybrid fibre reinforced ultra-high performance concrete beams under static and impact loads" published in ENG STRUCT. 2021; 245, in Section 3.2.3, the content "vi. Determine the crack opening distance, ω (i.e. Eq. (9)-(10)). Match the analytical value and the value from step (i) by adjusting the length of the crack, αd_e, and repeating from step (ii)." and the Eqs. (9) and (10) should be omitted.

Rather than the described step "vi" and the Eqs. (9) and (10), the relationship between the crack length αd_e and crack opening distance ω was determined based on experimental results presented in the paper. The relationship between mid-span displacement and CMOD could be obtained from Fig. 6. The mid-span deflection Δ_t is equated to the sum of the central elastic deflection Δ_e and the additional deflection due to cracking Δ_c:

$$\Delta_t = \Delta_e + \Delta_c$$

Before cracking, the central elastic deflection Δ_e is expressed as follow:

$$\Delta_e = \frac{1}{48} \times \frac{PL^3}{EI}\left[1 + 2.85\left(\frac{d_e}{L}\right)^2 - 0.84\left(\frac{d_e}{L}\right)^3\right]$$

The plane rotation of the prism is

$$\theta = \tan^{-1}\left(\frac{2\Delta_c}{L}\right)$$

The experimental $\Delta_t$versus CMOD relationship could be transferred to αd_e versus ω relationship:

$$\mathrm{COD} = \mathrm{CMOD} - 2 \times a_0 \sin\theta$$

$$\alpha d_e = \frac{\mathrm{COD}}{2\tan\theta}$$

The omitted information does not impact the analytical results or the scientific conclusions of the article in any way. The authors would like to apologise for any inconvenience caused.

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