Supplementary material
to the
Engineering Structures
manuscript entitled
“Serviceability Limits of Reinforced Concrete Hinges”
authored by

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February 25, 2019

This document contains figures illustrating the sensitivity of serviceability limit states of reinforced concrete hinges with respect to (i) material properties of steel and concrete, as well as (ii) structural properties of the concrete hinges. Unless otherwise stated, the design diagrams refer to the triaxial compressive strength of concrete $|F_{ck}| = 100$ MPa, Young’s modulus of concrete $E_{cm} = 37$ GPa, the yield stress of steel $f_{yk} = 550$ MPa, Young’s modulus of steel $E_{sm} = 200$ GPa, and the reinforcement ratio $\rho = 1.0\%$. 
Figure 1: Sensitivity with respect to the triaxial compressive strength of concrete $|F_{fc}|$

Figure 2: Sensitivity with respect to the yield stress of steel $f_{yk}$
Figure 3: Sensitivity with respect to the reinforcement ratio $\rho$

Figure 4: Sensitivity with respect to $F$, the ratio of triaxial-to-uniaxial compressive strength, for the strength class C30: $|f_{ck}| = 30$ MPa, $E_{cm} = 33$ GPa
Figure 5: Sensitivity with respect to $F$, the ratio of triaxial-to-uniaxial compressive strength, for the strength class C35: $|f_{ck}| = 35$ MPa, $E_{cm} = 34$ GPa

Figure 6: Sensitivity with respect to $F$, the ratio of triaxial-to-uniaxial compressive strength, for the strength class C40: $|f_{ck}| = 40$ MPa, $E_{cm} = 35$ GPa
Figure 7: Sensitivity with respect to $F$, the ratio of triaxial-to-uniaxial compressive strength, for the strength class C45: $f_{ck} = 45$ MPa, $E_{cm} = 36$ GPa

Figure 8: Sensitivity with respect to $F$, the ratio of triaxial-to-uniaxial compressive strength, for the strength class C50: $f_{ck} = 50$ MPa, $E_{cm} = 37$ GPa