

Resisting forces prediction in reinforced concrete

Zorislav Sorić

*Faculty of Civil Engineering, University of Zagreb, Fra Andrije Kačića Miošića 26, 10000
Zagreb, CROATIA*

SUMMARY

This model predicts behaviour of the Pull-Pull specimen that is subjected to a monotonically increasing load. The Pull-Pull specimen is composed of a reinforcing bar embedded in concrete cylinder. The bar is pulled at both ends. The analytical model defines the bond as a series of discrete resisting forces which act at each bar lug. The intensity of resisting forces varies along the bar length, and depends upon the concrete resistance to the applied load. The basis of this model lies in the compatibility of the displacement of a reinforcing bar and surrounding concrete.
