Experimental Verification on the Shear Strength of Chemically Anchored Steel Bar

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Abstract

The anchoring method by means of chemical adhesive is recently getting special attention in the strengthening, remodelling or extending existing reinforced concrete structures. This paper presents the test results of 20 single anchored steel bar embedded in concrete. The main variables of the test specimens were development length, embedment length, and type of the embedment length of steel bar. The shear strength of the specimens obtained from the tests showed close agreements with the values calculated by ACI 318–02.

Keywords: anchored steel bar, shear strength, type of the reinforcing bar, development length