

## The Efficiency of the Resin for Steel Concrete Adhesion

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**Abstract :** Repair is always the result of the appearance of apparent disorder or aggravation of a mass. Which had hitherto been considered minor if not negligible: The work was not done according to plan. So; the examination of causes can lead to thinking about repair. While the application of the epoxy resin has become a hot topic. In this context, we conducted an experimental campaign (48 specimens are tested beakout) whose objective is based on three points: 1- Highlight the importance and influence of important parameters (compressive strength of concrete anchorage length and diameter of the steel bar) on routes (steel-concrete and steel-concrete epoxy resin) 2- Understanding the influence of the parameters mentioned above on the relationship that may exist between the peel strength and slippage. 3- Faces of cracks and failure modes. This study shows that passage of a compressive strength of 40 MPa to 62 MPa increases the adhesion between the steel bar and concrete and for specimens with or without epoxy resin. The loading force was increased form 40 to 81 kM kN, a rate if increase in loading over 100% In addition, for specimens with and without epoxy resin. increased breakout force through a specimen without a specimen with resin ranging from 20% to 32%.

**Keywords :** epoxy resin, peel strength, anchors, slip diameter steel rod, anchor plain concrete and concrete with moderate resistance

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