



Bond Behavior between Glulam and GFRP's by Pullout Tests

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Summary:

To evaluate the bond behavior between glulam and GFRP rods, applied according to the nearsurface mounted strengthening technique, an experimental program composed of beam and direct pullout tests was carried. In this experimental program three main variables were analyzed: the GFRP type, the GFRP location into the groove, and the bond length. From the monitoring system it was registered the loaded and free end slips, and the pullout force. Based on these experimental results, and applying an analytical-numerical strategy, the local bond stress-slip relationship was calculated. In this work the tests are described, the obtained results are presented and discussed, and the applicability of the inverse analysis to obtain the local bond law is demonstrated.

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