



Bond Behavior of Glued-In Timber Joint with Deformed Bar Epoxied in Glulam

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Summary:

This paper describes the test program of glued-in deformed bar timber joint conducted in pull-pull configuration, which aims to investigate the bond behavior of glued-in deformed bar systems in glulam. The varying parameter are bar slenderness ratio and glue-line thickness. In order to obtain the bond stress distribution along the anchorage length, special deformed bar with strain gauges attached internally were designed. Test results show that both the bar slenderness ratio and glue-line thickness have obvious influence on withdrawal strength and bond behavior of glued-in deformed bar joint. Failure modes of specimens are also analyzed in this paper. Ductile failure modes of glued-in rod timber joint could be realized with reasonable design.

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