



## Bond Behavior between Glulam and GFRP's by Pullout Tests

<https://research.thinkwood.com/en/permalink/catalogue560>

Author: Sena-Cruz, José  
 Branco, Jorge  
 Jorge, Marco  
 Barros, Joaquim  
 Silva, Catarina  
 Cunha, Vitor

Publisher: ScienceDirect

Year of Publication: 2011

Country of Publication: Netherlands

Format: Journal Article

Material: Glulam (Glue-Laminated Timber)

Topic: Connections  
 Design and Systems

Keywords: GFRP  
 Bond behavior  
 Pull-Out Tests  
 Stress-Slip

Language: English

Research Status: Complete

Series: Composites Part B: Engineering

Online Access: Free

### Resource Link

[https://repositorium.sdum.uminho.pt/bitstream/1822/14777/1/Article\\_Composites%20Part%20B\\_R1.pdf](https://repositorium.sdum.uminho.pt/bitstream/1822/14777/1/Article_Composites%20Part%20B_R1.pdf)



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

<https://research.thinkwood.com/en/permalink/catalogue537>

Author: Ling, Zhibin  
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Lu, Weidong

Year of Publication: 2014

Country of Publication: Canada

Format: Conference Paper

Material: Glulam (Glue-Laminated Timber)

Topic: Connections  
Mechanical Properties

Keywords: Glued-in Rods  
Bond behavior  
Withdrawal Strength  
Pull-Pull tests  
Failure Modes

Language: English

Conference: World Conference on Timber Engineering

Research Status: Complete

Notes: August 10-14, 2014, Quebec City, Canada

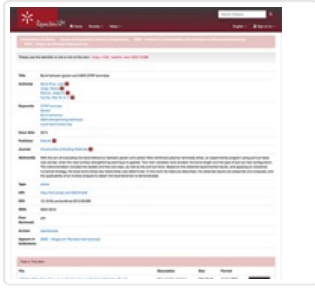
### Summary:

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 ...

Online Access: Free

### Resource Link

[http://schr.ws/hosted\\_files/wcte2014/59/ABS147\\_Ling\\_web.pdf](http://schr.ws/hosted_files/wcte2014/59/ABS147_Ling_web.pdf)



## Bond Between Glulam and NSM CFRP Laminates

<https://research.thinkwood.com/en/permalink/catalogue331>

Author: Sena-Cruz, José  
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Publisher: ScienceDirect

Year of Publication: 2013

Country of Publication: Netherlands

Format: Journal Article

Material: Glulam (Glue-Laminated Timber)

Topic: Design and Systems

Keywords: Carbon Fiber Reinforced Polymer  
Pull-Out Tests  
Bond behavior  
Stress-Slip

Language: English

Research Status: Complete

Series: Construction and Building Materials

### Summary:

With the aim of evaluating the bond behaviour between glulam and carbon fibre reinforced polymer laminates strips, an experimental program using pull-out tests was carried, when the near-surface strengthening technique is applied. Two main variables were studied: the bond length and the type of pull-out test configuration. The instrumentation included the loaded and free-end slips, as well as the pullout force. Based on the obtained experimental results, and applying an analytical-numerical strategy, the local bond stress-slip relationship was determined. In this work the tests are described, the obtained results are presented and analysed, and the applicability of an inverse analysis to obtain the local bond law is demonstrated.

Online Access: Free

### Resource Link

[https://repositorium.sdum.uminho.pt/bitstream/1822/21509/1/JP-021\\_2013\\_Sena-Cruz\\_et\\_al\\_Construction%20and%20Building%20Materials\\_R1.pdf](https://repositorium.sdum.uminho.pt/bitstream/1822/21509/1/JP-021_2013_Sena-Cruz_et_al_Construction%20and%20Building%20Materials_R1.pdf)



# Numerical Simulation on Bond Behavior Between Glulam and Glued-In Rod

<https://research.thinkwood.com/en/permalink/catalogue1607>

Author: Ling, Zhibin  
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Year of Publication: 2016

Country of Publication: Austria

Format: Conference Paper

Material: Glulam (Glue-Laminated Timber)

Topic: Connections  
Mechanical Properties

Keywords: Glued-In-Rod  
Joints  
Numerical Simulation  
Stress-Slip  
Bond Behavior

Language: English

Conference: World Conference on Timber Engineering

Research Status: Complete

Notes: August 22-25, 2016, Vienna, Austria  
p. 2093-2099

## Summary:

Glued-in rod is a type of effective connector for timber structures. In the last decades, considerable researches have been conducted on the bond behavior between timber and glued-in rod experimentally and theoretically. This paper presents the numerical simulation on the bond behavior of glulam joints with glued-in steel rod. Glulam is...

Online Access: Free

## Resource Link

<http://hdl.handle.net/20.500.12708/172>