

**NC Department of Insurance  
Office of the State Fire Marshal - Engineering Division  
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**2x Dimensional Lumber Not Acceptable as Heavy Timber Construction**

**Code:** 2018 Building Code  
**Section:** 602.4

**Date:** September 6, 2018

**Question:**

Can dimensional lumber that does not meet the dimensional requirements of Section 602.4 for sawn heavy timber be mechanically or chemically fastened together in the field to meet the minimum dimensional requirements of and be used for Type IV Heavy Timber (HT) construction?

**Answer:**

No. The expectation is that structural members constructed in the field by mechanically or chemically fastening together dimensional lumber as described above will not react equal to a single sawn member under equal fire conditions.

An assembly that has been tested by an approved testing agency and is proven by that agency as equal to or better than HT is acceptable if approved by the local code enforcement official having jurisdiction.

A manufactured glulam (glued-laminated) member is considered heavy timber if it meets the requirements of Section 602.4.

**Keywords:**

Primary fire district, deck, porch, floor, wall, roof, column, truss, wood