

Learning Objectives

- Understand how the material properties of wood can affect construction in order to resolve common framing challenges.
- Understand how the consistency of design and building practices can impact the quality of wood structures and how to use consistency to improve construction.
- Learn how moisture affects wood products and how to prevent some common challenges arising from moisture exposure.
- Understand how wind or seismic forces impact the roof, walls, floors, foundation, and connections of a structure; the concept of a continuous load path; and its importance in structural integrity.

The Main Ideas

- 1. Wood has a strong and weak direction
- 2. Wood moves
- 3. Strive for consistency
- 4. Load path continuity
- 5. Protect construction from moisture

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Wood Properties

- Checking Evaluation
- Guidelines established for what size checks are OK without an engineering analysis
- Published in Owners Guide to Understanding Checks in Glued Laminated Timber

IS MY GL	JLAM OK?
Is the span of the g 10 times th Exemple: Depth is 12;	lulam greater than he depth? your is greater than 10°
T	NO
Where do the	checks appear?
BOTTO	M FACE
	80
Is the depth of the check width of the bears, and	PACE less than one-find the lis the length less than
one-third the len	ph of the beam?
END Is the length of the ch	FACE reck or split less than
one-holf the dept	h of the member?
	NO 1
NO STRUCTURE CONCERN	
	Consolit designed and ession
If the checks on your building's	If checks in a glulam exceed thes
If the checks on your building's glulom pose no shuctural problems, engineering analysis	If checks in a glulam exceed thes sizes and shuctions, a qualified design professional should
If the checks on your building's glutern pose no shuctural problems, engineering analysis is not required. These account required. These	If checks in a gluiom exceed they sizes and situations, a qualified design professional shauld evaluate the effect of the checks
If the checks on your building's glular pose no structural problems, engineering analysis is not required. These recommendations apply to both simple span beams and multiple	If checks in a glular exceed thes sizes and siluctions, a qualified design professional shauld evaluate the effect of the checks in accordence with EWS Technica Note: Evaluation of Check Sizes i

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