

780 CMR: MASSACHUSETTS AMENDMENTS TO THE *INTERNATIONAL BUILDING CODE 2021*

CHAPTER 23: WOOD

2303.1.14 Add subsection and table as follows:

2303.1.14.1 Native Lumber. Native lumber shall be acceptable for use in one- and two-family dwellings, barns, sheds, and agricultural and accessory structures. Native lumber shall also be acceptable for use in one- or two-story structures as columns when the design loads are 25% greater than required in 780 CMR 16.00; as joists, principal beams, and girders in floor constructions when the design loads are 15% greater than required in 780 CMR 16.00; and as other elements when the design loads are as required in 780 CMR 16.00.

When native lumber is used, it shall be subject to the following requirements:

1. **Sizing Criteria:** For lumber, sized in accordance with the DOC PS-20, figures for maximum fiber stress and modulus of elasticity for framing grade No. 2 shall be used in establishing span and spacing characteristics for all structural members.
2. **Stress Criteria:** Lumber which is sized in excess of the dimensions established by the DOC PS-20 for the given nominal size referenced shall be allowed to have a maximum fiber stress increase above that provided in section 2303.1.14 item 1 in proportion to the increased bearing capacity of the cross section as provided in Table 2303.1.14.

TABLE 2303.1.14 NATIVE LUMBER - ALLOWABLE STRESSES

Nominal size	Actual lumber size (closest size which does not exceed the size shown) width (in.) x height (in.)	Multiplier factor based on lumber width	Value to be added to multiplier factor for lumber with larger widths than those shown in column two for width increases:	
			$> \frac{1}{4}$ and $\leq \frac{1}{2}$ in.	$> \frac{1}{2}$ and ≤ 1 in.
3 x 8	2 ½ x 7 ½	1.0 x F _s	0.10	0.20
	2 ½ x 7 ¾	1.07		
	2 ½ x 8	1.14		
3 x 10	2 ½ x 9 ½	1.0	0.10	0.20
	2 ½ x 9 ¾	1.05		
	2 ½ x 10	1.11		
3 x 12	2 ½ x 11 ½	1.0	0.10	0.20
	2 ½ x 11 ¾	1.04		
	2 ½ x 12	1.09		
3 x 14	2 ½ x 13 ½	1.0	0.10	0.20
	2 ½ x 13 ¾	1.04		
	2 ½ x 14	1.07		
4 x 10	3 ½ x 9 ½	1.0	0.07	0.14
	3 ½ x 9 ¾	1.05		
	3 ½ x 10	1.11		
4 x 12	3 ½ x 11 ½	1.0	0.07	0.14
	3 ½ x 11 ¾	1.04		
	3 ½ x 12	1.09		
4 x 14	3 ½ x 13 ½	1.0	0.07	0.14
	3 ½ x 13 ¾	1.04		
	3 ½ x 14	1.08		

2303.1.14.2 Native Lumber. Native lumber that has been sized in accordance with the sizing requirements of American Softwood Lumber Standards PS 20-20 and that has not been grade-stamped under the authority of a Lumber Grading Bureau shall be acceptable for use in one and two family dwellings, barns, sheds and agricultural and accessory structures, if the following requirements are met:

1. The native lumber producer is licensed and the mill producing the native lumber is registered in the Commonwealth of Massachusetts in accordance with the requirements in 780 CMR 110.R4.
2. The lumber is sold directly by the landowner or employee of the sawmill that milled the lumber to the owner of the dwelling to be constructed or that person's authorized representative.
3. The lumber conforms with product and inspection standards under American Softwood Lumber Standard PS 20-20.
4. The lumber is certified by an inspector who is certified by an accredited independent third party agency of the American Lumber Standard Committee.