

Bowed Beam

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\$600.00

TB L
~~CHAPTER 10~~
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TABLE 1604.3
 DEFLECTION LIMITS^{a, b, c, h, i}

(Length of Beam) $L \leq$ inches ($L \div 240$)

CONSTRUCTION	L	S or W ^f	D + L ^{d, g}
Roof members: ^e Supporting plaster or stucco ceiling Supporting nonplaster ceiling Not supporting ceiling	#360	#360	#240
	#240	#240	#180
	#180	#180	#120
Floor members Exterior walls and interior partitions: With plaster or stucco finishes With other brittle finishes With flexible finishes	#360	—	#240
	—	#360	—
	—	#240	—
	—	#120	—
Farm buildings	—	—	#180
Greenhouses	—	—	#120

For SI: 1 foot = 304.8 mm.

- For structural roofing and siding made of formed metal sheets, the total load deflection shall not exceed #60. For secondary roof structural members supporting formed metal roofing, the live load deflection shall not exceed #150. For secondary wall members supporting formed metal siding, the design wind load deflection shall not exceed #90. For roofs, this exception only applies when the metal sheets have no roof covering.
- Interior partitions not exceeding 6 feet in height and flexible, folding and portable partitions are not governed by the provisions of this section. The deflection criterion for interior partitions is based on the horizontal load defined in Section 1607.14.
- See Section 2403 for glass supports.
- For wood structural members having a moisture content of less than 16 percent at time of installation and used under dry conditions, the deflection resulting from $L + 0.5D$ is permitted to be substituted for the deflection resulting from $L + D$.
- The above deflections do not ensure against ponding. Roofs that do not have sufficient slope or camber to assure adequate drainage shall be investigated for ponding. See Section 1611 for rain and ponding requirements and Section 1503.4 for roof drainage requirements.
- The wind load is permitted to be taken as 0.42 times the "component and cladding" loads for the purpose of determining deflection limits herein.
- For steel structural members, the dead load shall be taken as zero.
- For aluminum structural members or aluminum panels used in skylights and sloped glazing framing, roofs or walls of sunroom additions or patio covers, not supporting edge of glass or aluminum sandwich panels, the total load deflection shall not exceed #60. For continuous aluminum structural members supporting edge of glass, the total load deflection shall not exceed #175 for each glass lite or #60 for the entire length of the member, whichever is more stringent. For aluminum sandwich panels used in roofs or walls of sunroom additions or patio covers, the total load deflection shall not exceed #120.
- For cantilever members, L shall be taken as twice the length of the cantilever.