

TABLE R301.7
ALLOWABLE DEFLECTION OF STRUCTURAL MEMBERS^{b, c}

STRUCTURAL MEMBER	ALLOWABLE DEFLECTION
Rafters having slopes greater than 3:12 with no finished ceiling attached to rafters	$L/180$
Interior walls and partitions	$H/180$
Floors (including deck floors)/ceilings with plaster or stucco finish	$L/360$
<u>Ceilings with plaster or stucco finish</u>	$L/360$
<u>Ceilings with gypsum board or other flexible finishes</u>	$L/240$
All other structural members	$L/240$
Exterior walls— wind loads^a with plaster or stucco finish ^a	$H/360$
Exterior walls with other brittle finishes ^a	$H/240$
Exterior walls with other flexible finishes ^a	$H/120^d$
<u>Exterior walls with gypsum board interior finish^a</u>	$H/180$
Lintels supporting masonry veneer walls ^{e d}	$L/600$

Note: L = span length, H = span height.

a. The wind load shall be permitted to be taken as 0.7 times the Component and Cladding loads for the purpose of the determining deflection limits herein.

b For cantilever members, L shall be taken as twice the length of the cantilever.

c. For aluminum structural members or panels used in roofs or walls of sunroom additions or patio covers, not supporting edge of glass or sandwich panels, the total load deflection shall not exceed $L/60$. For continuous aluminum structural members supporting edge of glass, the total load deflection shall not exceed $L/175$ for each glass lite or $L/60$ for the entire length of the member, whichever is more stringent. For sandwich panels used in roofs or walls of sunroom additions or patio covers, the total load deflection shall not exceed $L/120$.

~~d. Deflection for exterior walls with interior gypsum board finish shall be limited to allowable deflection of $H/180$.~~

e. ~~d.~~ Refer to Section R703.7.2

Reason: This is intended to be an editorial clean-up and not change any current requirements for deflection criteria. The current combined row for floors and ceilings with plaster and stucco

finish is confusing because “floors/ceilings” is an expression used to designate horizontal assemblies. Separating floors out into their own row is an improvement in clarity. Questions have been raised about deck deflection, so a reference to deck floors was included in the row for floors. Separate rows for walls with gypsum finishes were also added, since this is common and it may not be clear which criteria to use with gypsum. Application of wind loads for all exterior walls is made more clear by deleting the reference to wind loads in the table but retaining it in the footnote, and adding the footnote designation in all exterior walls rows.