

**Table 12.2-1 Design Coefficients and Factors for Seismic Force-Resisting Systems**

Seismic Force-Resisting System	ASCE 7 Section Where Detailing Requirements Are Specified	Response Modification Coefficient, R <sup>a</sup>	Overstrength Factor, Ω <sub>0</sub> <sup>g</sup>	Deflection Amplification Factor, C <sub>d</sub> <sup>b</sup>	Structural System Limitations Including Structural Height, h <sub>n</sub> (ft) Limits <sup>c</sup>				
					Seismic Design Category				
					B	C	D <sup>d</sup>	E <sup>d</sup>	F <sup>e</sup>
A. BEARING WALL SYSTEMS									
1. Special reinforced concrete shear walls <sup>l, m</sup>	14.2	5	2½	5	NL	NL	160	160	100
2. Ordinary reinforced concrete shear walls <sup>l</sup>	14.2	4	2½	4	NL	NL	NP	NP	NP
3. Detailed plain concrete shear walls <sup>l</sup>	14.2	2	2½	2	NL	NP	NP	NP	NP
4. Ordinary plain concrete shear walls <sup>l</sup>	14.2	1½	2½	1½	NL	NP	NP	NP	NP
5. Intermediate precast shear walls <sup>l</sup>	14.2	4	2½	4	NL	NL	40 <sup>k</sup>	40 <sup>k</sup>	40 <sup>k</sup>
6. Ordinary precast shear walls <sup>l</sup>	14.2	3	2½	3	NL	NP	NP	NP	NP
7. Special reinforced masonry shear walls	14.4	5	2½	3½	NL	NL	160	160	100
8. Intermediate reinforced masonry shear walls	14.4	3½	2½	2¼	NL	NL	NP	NP	NP
9. Ordinary reinforced masonry shear walls	14.4	2	2½	1¾	NL	160	NP	NP	NP
10. Detailed plain masonry shear walls	14.4	2	2½	1¾	NL	NP	NP	NP	NP
11. Ordinary plain masonry shear walls	14.4	1½	2½	1¼	NL	NP	NP	NP	NP
12. Prestressed masonry shear walls	14.4	1½	2½	1¾	NL	NP	NP	NP	NP
13. Ordinary reinforced AAC masonry shear walls	14.4	2	2½	2	NL	35	NP	NP	NP
14. Ordinary plain AAC masonry shear walls	14.4	1½	2½	1½	NL	NP	NP	NP	NP
15. Light-frame (wood) walls sheathed with wood structural panels rated for shear resistance or steel sheets	14.1 and 14.5	6½	3	4	NL	NL	65	65	65
16. Light-frame (cold-formed steel) walls sheathed with wood structural panels rated for shear resistance or steel sheets	14.1	6½	3	4	NL	NL	65	65	65
17. Light-frame walls with shear panels of all other materials	14.1 and 14.5	2	2½	2	NL	NL	35	NP	NP
18. Light-frame (cold-formed steel) wall systems using flat strap bracing	14.1	4	2	3½	NL	NL	65	65	65
B. BUILDING FRAME SYSTEMS									
1. Steel eccentrically braced frames	14.1	8	2	4	NL	NL	160	160	100
2. Steel special concentrically braced frames	14.1	6	2	5	NL	NL	160	160	100
3. Steel ordinary concentrically braced frames	14.1	3¼	2	3¼	NL	NL	35 <sup>j</sup>	35 <sup>j</sup>	NP <sup>j</sup>

*Continued*