

13.1.6 Reference Documents

Where a reference document provides a basis for the earthquake-resistant design of a particular type of nonstructural component, that document is permitted to be used, subject to the approval of the authority having jurisdiction and the following conditions:

- a. The design earthquake forces shall not be less than those determined in accordance with Section 13.3.1.
- b. Each nonstructural component's seismic interactions with all other connected components and with the supporting structure shall be accounted for in the design. The component shall accommodate drifts, deflections, and relative displacements determined in accordance with the applicable seismic requirements of this standard.
- c. Nonstructural component anchorage requirements shall not be less than those specified in Section 13.4.

13.1.7 Reference Documents Using Allowable Stress Design

Where a reference document provides a basis for the earthquake-resistant design of a particular type of component, and the same reference document defines acceptance criteria in terms of allowable stresses rather than strengths, that reference document is permitted to be used. The allowable stress load combination shall consider dead, live, operating, and earthquake loads in addition to those in the reference document. The earthquake loads determined in accordance with Section 13.3.1 shall be multiplied by a factor of 0.7. The allowable stress design load combinations of Section 2.4 need not be used. The component shall also accommodate the relative displacements specified in Section 13.3.2.

13.2 GENERAL DESIGN REQUIREMENTS**13.2.1 Applicable Requirements for Architectural, Mechanical, and Electrical Components, Supports, and Attachments**

Architectural, mechanical, and electrical components, supports, and attachments shall comply with the sections referenced in Table 13.2-1. These requirements shall be satisfied by one of the following methods:

1. Project-specific design and documentation submitted for approval to the authority having jurisdiction after review and acceptance by a registered design professional.
2. Submittal of the manufacturer's certification that the component is seismically qualified by at least one of the following:
 - a. Analysis, or
 - b. Testing in accordance with the alternative set forth in Section 13.2.5, or
 - c. Experience data in accordance with the alternative set forth in Section 13.2.6.

13.2.2 Special Certification Requirements for Designated Seismic Systems

Certifications shall be provided for designated seismic systems assigned to Seismic Design Categories C through F as follows:

1. Active mechanical and electrical equipment that must remain operable following the design earthquake ground motion shall be certified by the manufacturer as operable whereby active parts or energized components shall be certified exclusively on the basis of approved shake table testing in accordance with Section 13.2.5 or experience data in accordance with Section 13.2.6 unless it can be

Table 13.2-1 Applicable Requirements for Architectural, Mechanical, and Electrical Components: Supports and Attachments

Nonstructural Element (i.e., Component, Support, Attachment)	General Design Requirements (Section 13.2)	Force and Displacement Requirements (Section 13.3)	Attachment Requirements (Section 13.4)	Architectural Component Requirements (Section 13.5)	Mechanical and Electrical Component Requirements (Section 13.6)
Architectural components and supports and attachments for architectural components	X	X	X	X	
Mechanical and electrical components with $I_p > 1$	X	X	X		X
Supports and attachments for mechanical and electrical components	X	X	X		X