

**Table 13.6-1 Seismic Coefficients for Mechanical and Electrical Components**

| Mechanical and Electrical Components   | $a_p^a$ | $R_p^b$ |
|--|---------|---------|
| Air-side HVAC, fans, air handlers, air conditioning units, cabinet heaters, air distribution boxes, and other mechanical components constructed of sheet metal framing   | 2.5     | 6.0     |
| Wet-side HVAC, boilers, furnaces, atmospheric tanks and bins, chillers, water heaters, heat exchangers, evaporators, air separators, manufacturing or process equipment, and other mechanical components constructed of high-deformability materials | 1.0     | 2.5     |
| Engines, turbines, pumps, compressors, and pressure vessels not supported on skirts and not within the scope of Chapter 15   | 1.0     | 2.5     |
| Skirt-supported pressure vessels not within the scope of Chapter 15  | 2.5     | 2.5     |
| Elevator and escalator components  | 1.0     | 2.5     |
| Generators, batteries, inverters, motors, transformers, and other electrical components constructed of high deformability materials  | 1.0     | 2.5     |
| Motor control centers, panel boards, switch gear, instrumentation cabinets, and other components constructed of sheet metal framing  | 2.5     | 6.0     |
| Communication equipment, computers, instrumentation, and controls  | 1.0     | 2.5     |
| Roof-mounted stacks, cooling and electrical towers laterally braced below their center of mass   | 2.5     | 3.0     |
| Roof-mounted stacks, cooling and electrical towers laterally braced above their center of mass   | 1.0     | 2.5     |
| Lighting fixtures  | 1.0     | 1.5     |
| Other mechanical or electrical components  | 1.0     | 1.5     |
| Vibration Isolated Components and Systems <sup>b</sup>   |         |         |
| Components and systems isolated using neoprene elements and neoprene isolated floors with built-in or separate elastomeric snubbing devices or resilient perimeter stops   | 2.5     | 2.5     |
| Spring isolated components and systems and vibration isolated floors closely restrained using built-in or separate elastomeric snubbing devices or resilient perimeter stops   | 2.5     | 2.0     |
| Internally isolated components and systems   | 2.5     | 2.0     |
| Suspended vibration isolated equipment including in-line duct devices and suspended internally isolated components   | 2.5     | 2.5     |
| Distribution Systems   |         |         |
| Piping in accordance with ASME B31, including in-line components with joints made by welding or brazing  | 2.5     | 12.0    |
| Piping in accordance with ASME B31, including in-line components, constructed of high or limited deformability materials, with joints made by threading, bonding, compression couplings, or grooved couplings  | 2.5     | 6.0     |
| Piping and tubing not in accordance with ASME B31, including in-line components, constructed of high-deformability materials, with joints made by welding or brazing   | 2.5     | 9.0     |
| Piping and tubing not in accordance with ASME B31, including in-line components, constructed of high- or limited-deformability materials, with joints made by threading, bonding, compression couplings, or grooved couplings                        | 2.5     | 4.5     |
| Piping and tubing constructed of low-deformability materials, such as cast iron, glass, and nonductile plastics  | 2.5     | 3.0     |
| Ductwork, including in-line components, constructed of high-deformability materials, with joints made by welding or brazing  | 2.5     | 9.0     |
| Ductwork, including in-line components, constructed of high- or limited-deformability materials with joints made by means other than welding or brazing  | 2.5     | 6.0     |
| Ductwork, including in-line components, constructed of low-deformability materials, such as cast iron, glass, and nonductile plastics  | 2.5     | 3.0     |