1. Maximum considered earthquake response is calculated in accordance with the dynamic analysis requirements of Section 17.6, explicitly considering the nonlinear characteristics of the isolation system and the structure above the isolation system.
2. The ultimate capacity of the isolation system and structural elements below the isolation system shall exceed the strength and displacement demands of the maximum considered earthquake.
3. The structure above the isolation system is checked for stability and ductility demand of the maximum considered earthquake.
4. The displacement restraint does not become effective at a displacement less than 0.75 times the total design displacement unless it is demonstrated by analysis that earlier engagement does not result in unsatisfactory performance.

17.2.4.6 Vertical-Load Stability

Each element of the isolation system shall be designed to be stable under the design vertical load where subjected to a horizontal displacement equal to the total maximum displacement. The design vertical load shall be computed using load combination 5 of Section 2.3.2 for the maximum vertical load and load combination 7 of Section 12.4.2.3 for the minimum vertical load where S_{DS} in these equations is replaced by S_{MS}. The vertical loads that result from application of horizontal seismic forces, Q_E, shall be based on peak response due to the maximum considered earthquake.

17.2.4.7 Overturning

The factor of safety against global structural overturning at the isolation interface shall not be less than 1.0 for required load combinations. All gravity and seismic loading conditions shall be investigated. Seismic forces for overturning calculations shall be based on the maximum considered earthquake, and W shall be used for the vertical restoring force.

Local uplift of individual elements shall not be allowed unless the resulting deflections do not cause overstress or instability of the isolator units or other structure elements.

17.2.4.8 Inspection and Replacement

a. Access for inspection and replacement of all components of the isolation system shall be provided.
b. A registered design professional shall complete a final series of inspections or observations of structure separation areas and components that cross the isolation interface prior to the issuance of the certificate of occupancy for the seismically isolated structure. Such inspections and observations shall indicate that the conditions allow free and unhindered displacement of the structure to maximum design levels and that all components that cross the isolation interface as installed are able to accommodate the stipulated displacements.
c. Seismically isolated structures shall have a monitoring, inspection, and maintenance program for the isolation system established by the registered design professional responsible for the design of the isolation system.
d. Remodeling, repair, or retrofitting at the isolation system interface, including that of components that cross the isolation interface, shall be performed under the direction of a registered design professional.

17.2.4.9 Quality Control

A quality control testing program for isolator units shall be established by the registered design professional responsible for the structural design.

17.2.5 Structural System

17.2.5.1 Horizontal Distribution of Force

A horizontal diaphragm or other structural elements shall provide continuity above the isolation interface and shall have adequate strength and ductility to transmit forces (due to nonuniform ground motion) from one part of the structure to another.

17.2.5.2 Building Separations

Minimum separations between the isolated structure and surrounding retaining walls or other fixed obstructions shall not be less than the total maximum displacement.

17.2.5.3 Nonbuilding Structures

Nonbuilding structures shall be designed and constructed in accordance with the requirements of Chapter 15 using design displacements and forces calculated in accordance with Sections 17.5 or 17.6.

17.2.6 Elements of Structures and Nonstructural Components

Parts or portions of an isolated structure, permanent nonstructural components and the attachments to them, and the attachments for permanent equipment supported by a structure shall be designed to resist seismic forces and displacements as prescribed by this section and the applicable requirements of Chapter 13.