



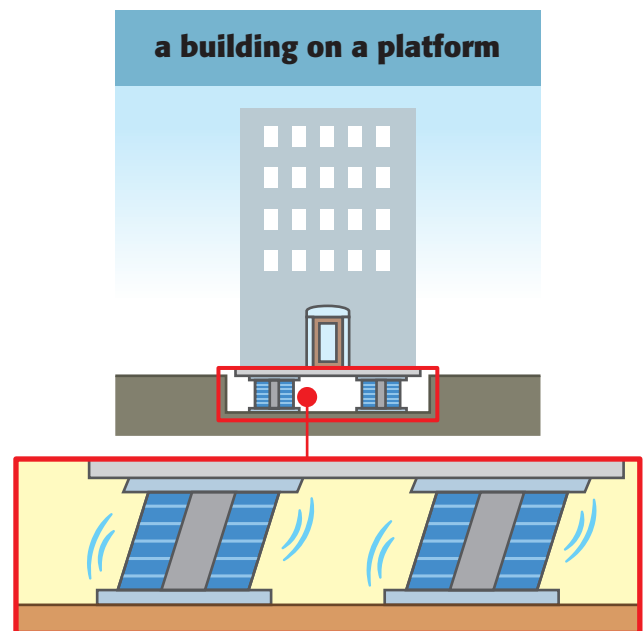
EARTHQUAKE-PROOF BUILDINGS

Earthquake-proof Designs

Apart from using tuned mass dampers, engineers have developed other ways to make buildings more stable during earthquakes.

Base Isolation

Instead of building a structure directly connected to the ground, the structure is built on a platform that keeps the building away from the ground so that the building does not come into direct contact with it. When an earthquake occurs, the flexible joints between the platform and the ground moves, minimizing the forces from the earthquake being transmitted to the building. This enables the building to remain stable during earthquakes.



Flexible joints move and sway during earthquakes.

Wooden Structures

Wood is not as strong as concrete, but it is flexible, which allows it to absorb some of the forces from earthquakes. For this reason, wooden buildings can maintain their stability during earthquakes.

Concrete is strong and able to withstand compressive forces. However, it cannot tolerate bending or tensile forces; therefore, concrete buildings collapse easily when earthquakes happen.

