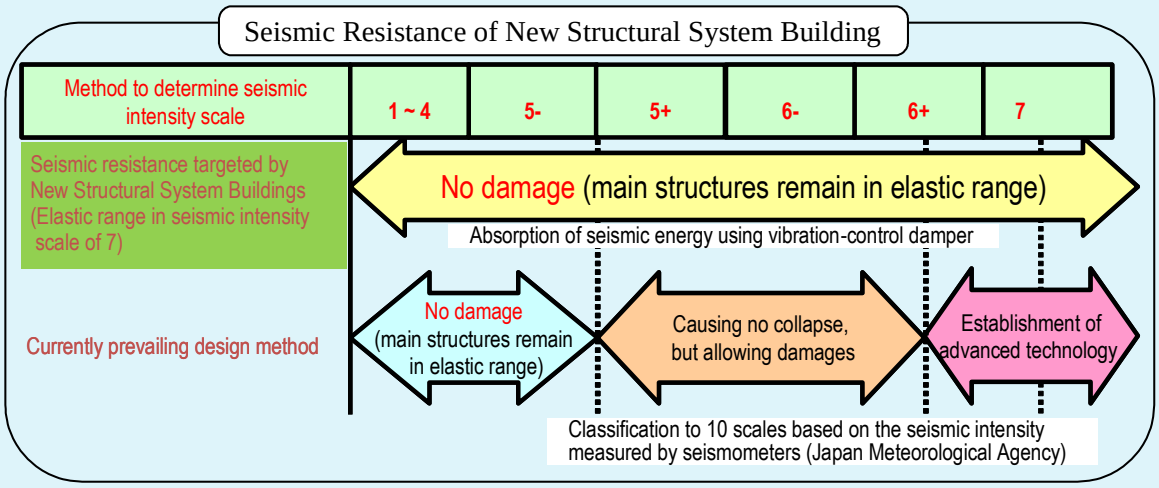
09. New Structural System Buildings Employing Innovative Steel Materials

The proposed buildings are expected to house municipal governments & community centers etc.

■The proposed buildings are designed & developed so as to ensure the continuous functioning during mega-earthquake.

Current Design：Under mega-earthquake, structures does not collapse, but suffers damages.

Proposed system ： By means of ultra high strength steel & dumping devices, main structural systems can be maintained being elastic with no damages under mega earthquake.



Applicable Sector

Pilot Projects Conceivable in "**New Structural System Buildings Employing Innovative Structural Materials**"

Multi-purpose facilities: Community center equipped with advanced disaster prevention facil

・Outer shell structural system with no use of welding and employing coupled vibration control technique (or suspension structure)
・No damage for seismic intensity 7 earthquakes, elastic design
・Use of innovative steel materials by 15% in total steel product amount
・Maximized resources recycling means of 3R of steel products

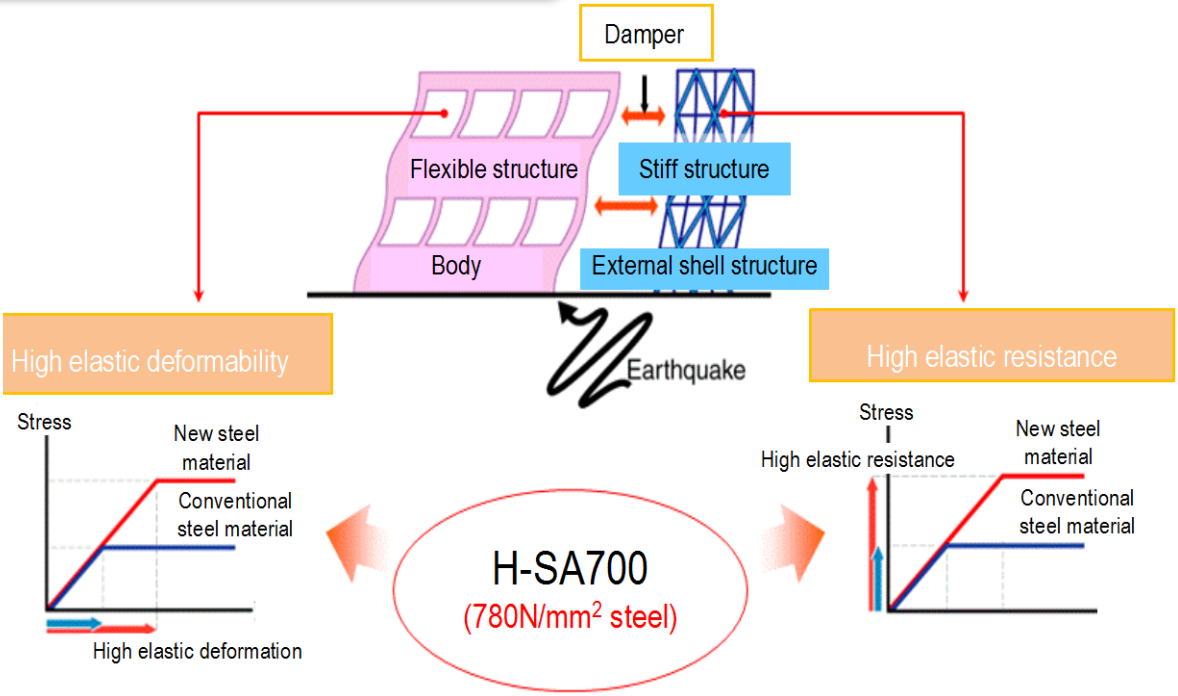
Medium and high-rise business facilities: Medium and high-rise, large-space office buildings built in

・Double core-type vibration-control structures, large space
・Slender columns in outer perimeter, and concrete-filled steel (CFT) tube columns in middle
・No damage for seismic intensity 7 earthquakes, columns and beams employing innovative structural materials, CFT columns, steel dampers

High-rise business facilities: Multi-purpose high-rise, buildings built in urban redevelopment Projects and highly-dense area

・Structures incorporating high-performance vibration-control devices into composite frames composed of moment frame or tube structures and outrigger frames
・No damage for seismic intensity 7 earthquakes, elastic design ; safety + habiability during strong winds

Feature



Track Record

The design concept & the materials are adopted in practice.

Cost

To get information, please ask the contact shown bellow.

Contact

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