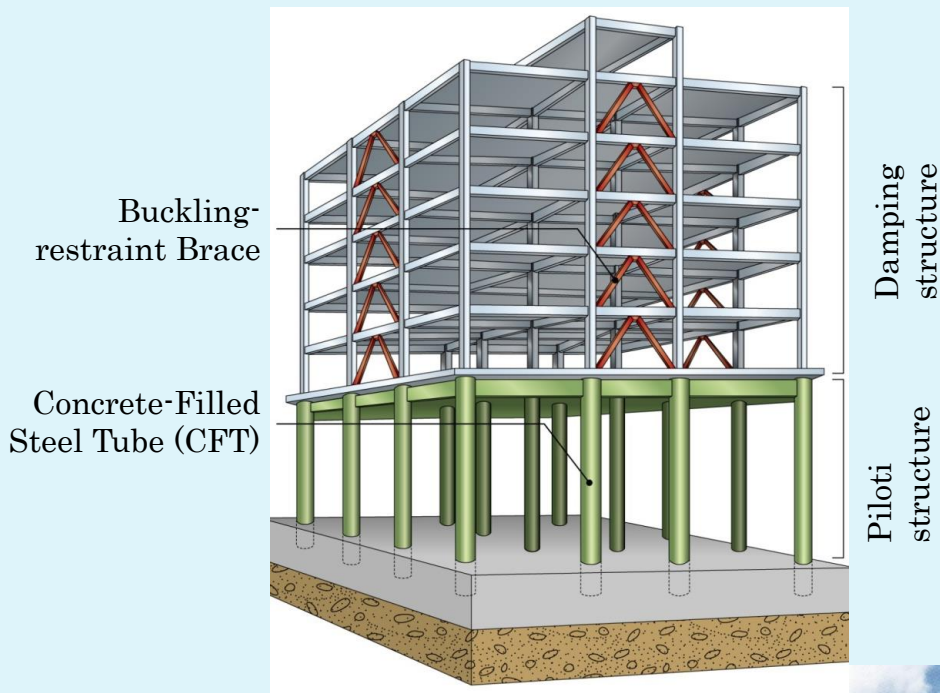


12. Steel structure disaster protection center building

Disaster protection building in quake resistance and tsunami resistance.

- Superior earthquake-proof and tsunami-proof safety
- Versatile use of space



High-performance circular steel
tube for the CFT structure



Damping structure
by buckling-restraint brace

Applicable sector

Government building

Disaster prevention base

Standard Condition of application

Feature

Improvement of tsunami-proof safety

- ✓ Avoids the destructive force of tsunami by a **pilotis structure**, the height of which exceeds the height of the postulated tsunami.
- ✓ **CFT structure** of high yield strength and high stiffness is employed for pilotis columns to improve tsunami-proof safety.

Achievement of flexible space planning by employing long span structure

- ✓ The steel structure enables a long span structure, which provides a **flexible space** planning with fewer columns.
- ✓ It is easy to use this space as multipurpose-use space in an emergency and to plan layout change, etc. in the future.

Improvement of seismic performance

- ✓ **Vibration control structure** using **buckling-restrained brace** is employed for the superstructure to improve seismic performance.
- ✓ The seismic force applied to the pilotis structure is reduced by lightweight construction solution using a steel structure.

Shorter construction period and reduction of field work are possible

- ✓ **Construction period can be shortened** compared to the RC structure, and immediate restoration and reconstruction are possible.
- ✓ Field work in disaster areas can be reduced since structural steel frames would be shop-fabricated.

Track Record

Overseas: None

Japan: A lot of results

Cost

For particulars, please contact us using the contact information below.

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