



Seismic retrofit methods for existing RC and SRC building, e.g., schools, apartments and offices

Retrofit by Internal Brace

Internal Direct-Joint Brace System

Retrofit method of directly jointing brace and frame by anchors to beams and columns.



- Wide opening
- Cost reduction
- Shortened construction period

Retrofit by External Frame

External Hybrid Frame System

Retrofit method of jointing external RC or SRC frame to beams and columns.



- Same wide opening
- Construction with using
- Ease-of-use is not affected

Retrofit by Internal Brace

Self-Installing Brace Method

Retrofit method of directly jointing pre-stressed precast braces to beams and columns.



- Pre-fabricated product shortens construction period
- Noise reduction by using no anchor
- Cost reduction

Retrofit for Columns and Beams

Application of Reinforced Sheets System

Retrofit method of wrapping carbon or aramid fiber sheets around beams or columns.



- Shortened construction period compared with Steel Wrapping Method
- No welding and water needed
- Noise reduction as no machinery is required