**FRASH Method**

Fujita **Rc** column **And Steel Hybrid beam system**

**Suitable for constructing mid-low level Office buildings, Hospitals**

### - Outline of Method -

- Fujita’s new hybrid structure with RC column and S beam with beam ends being RC
- Combination with RC and seismic walls, allows flexibility in design and enables a reasonable floor planning
- Capable of creating flexible large space without columns which is difficult with RC beams

**Outline of FRASH method**

### - Characteristics of Method -

#### - Reduction of skeleton cost -

- Compared to S, reduction of steel use and fabrication
- In case of eccentric core type, compared to S, reduction by app. 10%

#### - Creation of large space -

- Using hybrid beam, enables 10-15m wide flexible large space
- According to the span, capable of combining hybrid beam with RC beam

#### - Improvement of habitability -

- Compared to S, vibration due to strong wind and earthquake is reduced
- Compared to S, usual floor vibration is reduced

**FUJITA CORPORATION**
Outline of Method

- Fujita’s original hybrid structure with RC column and S beam
- Characteristics of RC and S enables a reasonable structure with large span and more usable interior space
- Simple band plate reinforcement of beam column joint improves seismic performance

Characteristics of Method

- Choice of 3 kinds of joint
- Capable of omitting fire proof coating of joint (Achieved Assessment of Technology)
- Compared to RC, used in 10-18m large span building
- Compared to SRC and S, cost is reduced by 10-20%
- Compared to SRC, construction time is shortened by 25%