

## Preliminary Report of Microtremor Measurement on Metro Building

Date of measurement : July 23<sup>rd</sup>, 2001

- Fourier Spectrum of East Point -



Fig.1 External appearance of measured building

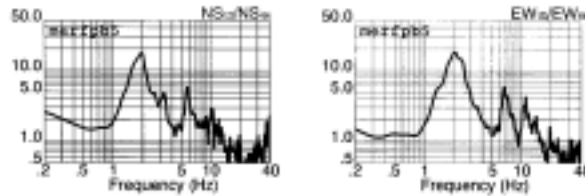
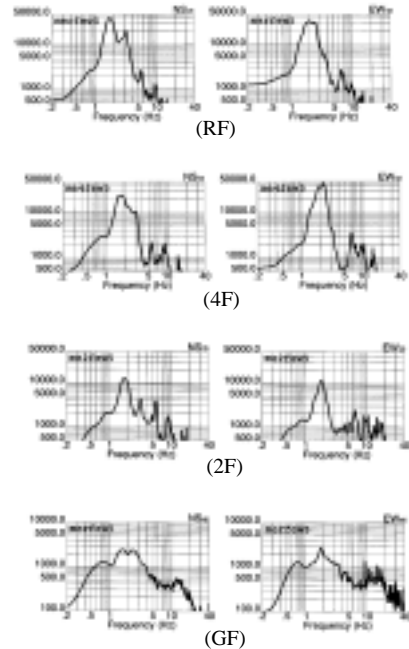
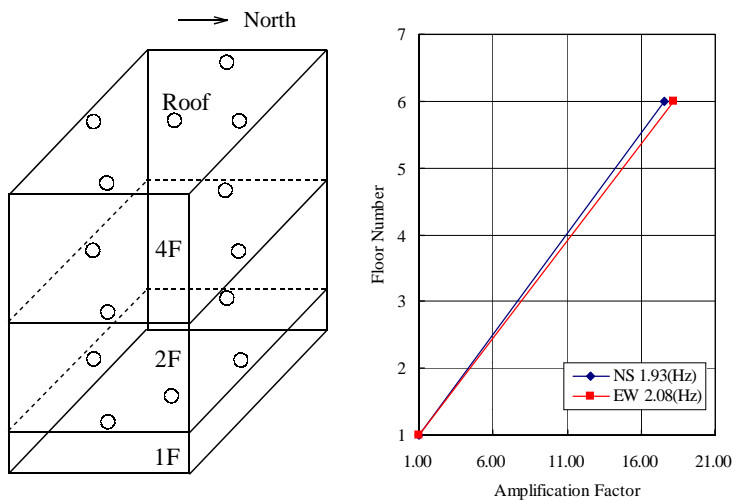


Fig.2 Estimated quasi-transfer spectrum of center point on the roof



### Predominant Frequencies

Statistic value

$$F = (10 \sim 16)/N$$

$$= 1.67 \sim 2.67(\text{Hz})$$

Measurement value

NS component      F=1.93(Hz)  
EW component      F=2.08(Hz)

F: Frequency (Hz)

N: Number of stories (Floor)

Fig.4 Measurement points on each floor and vibration mode