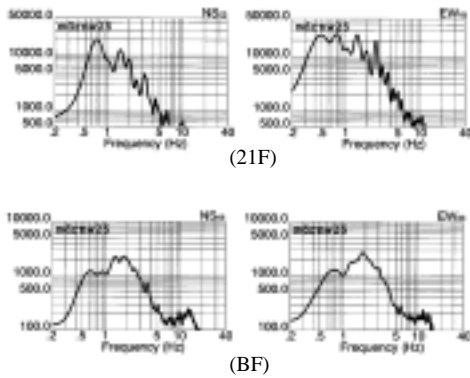


## Preliminary Report of Microtremor Measurement on Reforma (Madrid)

Date of measurement : October 28<sup>th</sup>, 1999

Fourier Spectrum of South-East Point on the Building of 21 Stories



Fourier Spectrum of South-East Point on the Building of 14 Stories

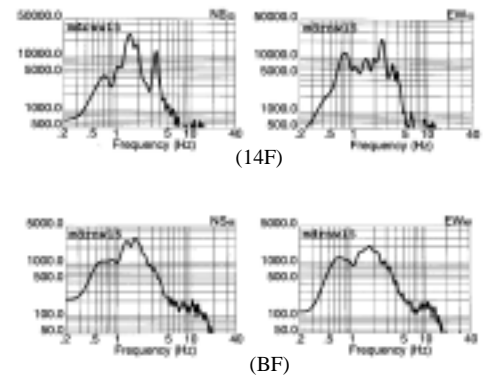


Fig.1 External appearance of measured building

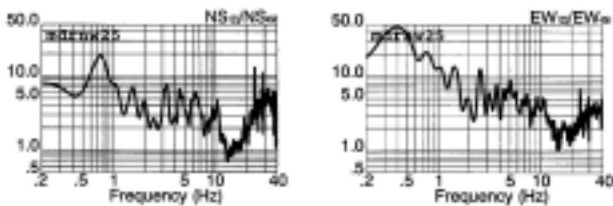


Fig.2 Estimated quasi-transfer spectrum of south-east point on the roof (21F)

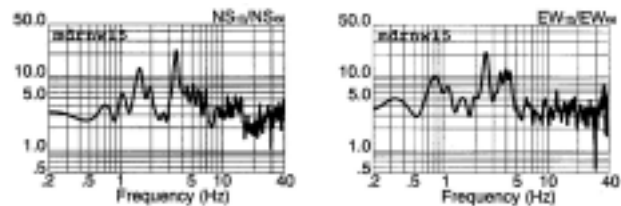


Fig.3 Estimated quasi-transfer spectrum of south-east point on the roof (14F)

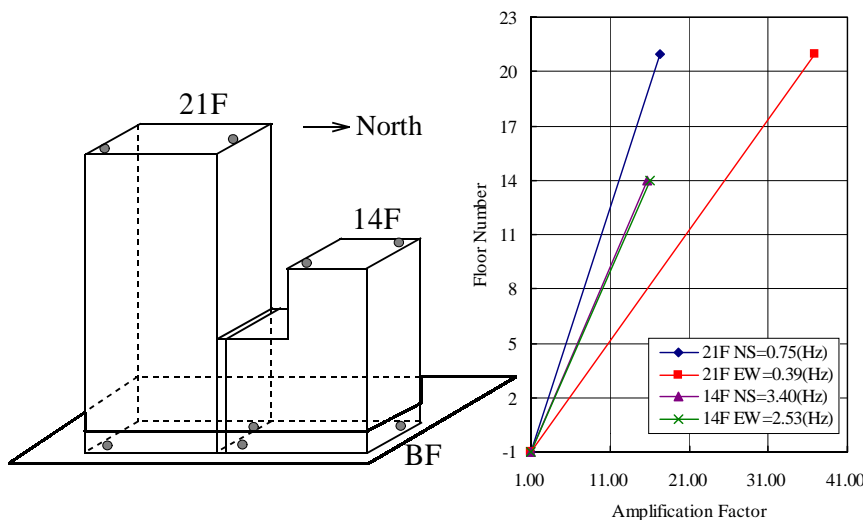


Fig.4 Measured points on each floor and vibration mode

### Predominant Frequencies

Statistic value

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

(21F) 0.48~0.76(Hz)

(14F) 0.71~1.14(Hz)

Measurement value

(21F)

HL component F=0.75(Hz)

EW component F=0.39(Hz)

(14F)

HL component F=3.40(Hz)

HT component F=2.53(Hz)

F: Frequency (Hz)

N: Number of stories (Floor)