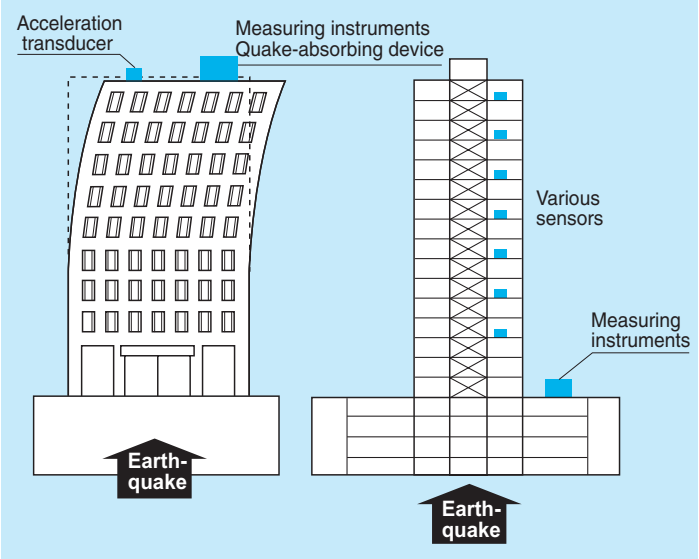
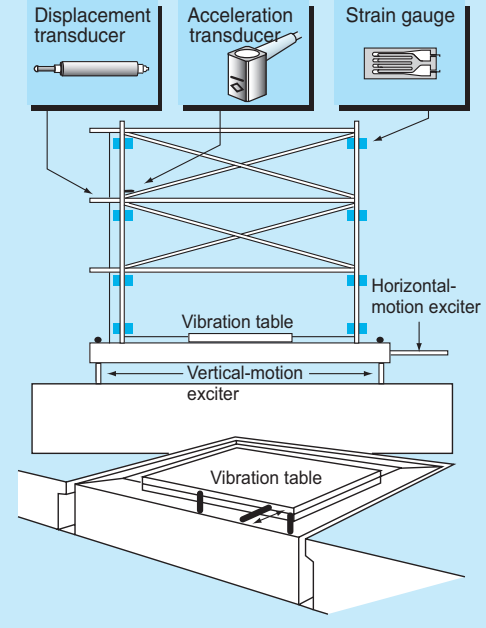
16 Quake Damping and Absorbing Measurement

A quake-damping structure uses various types of damping materials. For example, laminated rubber having low horizontal rigidity, slide bearings and so on are designed as part of the quake-damping structure in order to damp seismic force. A quake-absorbing structure uses a powerful shock-absorbing device to absorb seismic energy. Static and dynamic conditions of a structure are measured to check its quake-damping and quake-absorbing performance..





■ A list of Measuring Instruments

Measurement items	Instruments	Type	Description
Vibration acceleration	Acceleration transducer	ARF-A	Installed on the foundation or beam of a structure to measure the vibration acceleration caused by earthquakes.
Vibration displacement	Displacement transducer	CDP	Measures the amount of vibration displacement caused by shaking of a structure.
Strain/stress	Strain gague	FLA	Measures the strain and stress of each part of a structure.
	Reinforcing bar meter	KSA-A, KSAT-A	
Crack displacement	Displacement transducer	PI	Measures the degree of opening of a crack caused by earthquakes.
	Crack displacement transducer	KG-A	
Damper load, displacement	Load Cell	TCLP-NB	Measures the variation of dynamic displacement and load of dampers caused by earthquakes.
	Displacement transducer	CDP	

■ Measuring System Block Diagram