## The need for anti-earthquake measures

## THK's "RDT Viscous Dampers" for building exteriors Short construction period, major impact

The Board of Education in the city of Akita is currently having all of the city's elementary schools and junior high schools that were built prior to the enactment of the new building standards law in 1981 inspected for quake-resistance. School buildings that do not meet the new standards will be retrofitted for quake-resistance.

The Chikuzan elementary school in Akita has a 110-year history. The present school building, completed in 1972, does not meet the new standards. During the inspection it was determined that many parts of the building would have to be reinforced. This would have taken a great deal of time using traditional construction methods and would have required the construction of a temporary school building. Fortunately, THK's "RDT Viscous Dampers" for building exteriors offered the perfect solution. The cost was reasonable, and the construction work took only six months. This proved to be a great advantage, as it minimized the impact of the work on the school's operations. The vibration-dampings were given a covering



Exterior of the Chikuzan elementary school building in the city of Akita after the installation of viscous dampers for quake-resistance

to improve their somewhat intimidating appearance.

During the lwate and Miyagi inland earthquakes, schools built using conventional methods incurred cracked walls and broken pipes, but this sort of damage was conspicuously absent at the Chikuzan elementary school. School officials reported that the building had proven to be sufficiently quake-resistance.