

You thought you knew but didn't

Sumitomo Riko's Business

Episode 12: Housing environment products

Well, time for
the next products

I'll introduce you to
TRC dampers for buildings

I look forward
to it!

Industrial Products and
Materials Business Unit
Mr. Ono

Umm ...
How do TRC dampers for
buildings differ from those for
wooden houses?

The basic idea
is the same

Here!

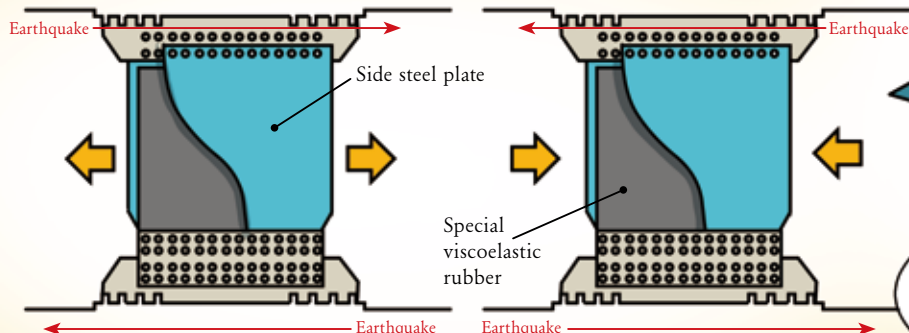
It's thin,
like a board!

Can something
like this protect
a big building?

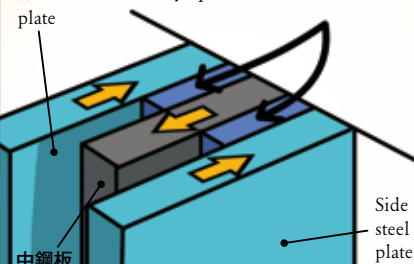
In spite of their appearance, they can be up to 300 tons,
and they bear a weight that is tens or hundreds of times
greater than those for housing

Actually, anti-seismic technologies were originally developed
for high-rise buildings and later extended to housing

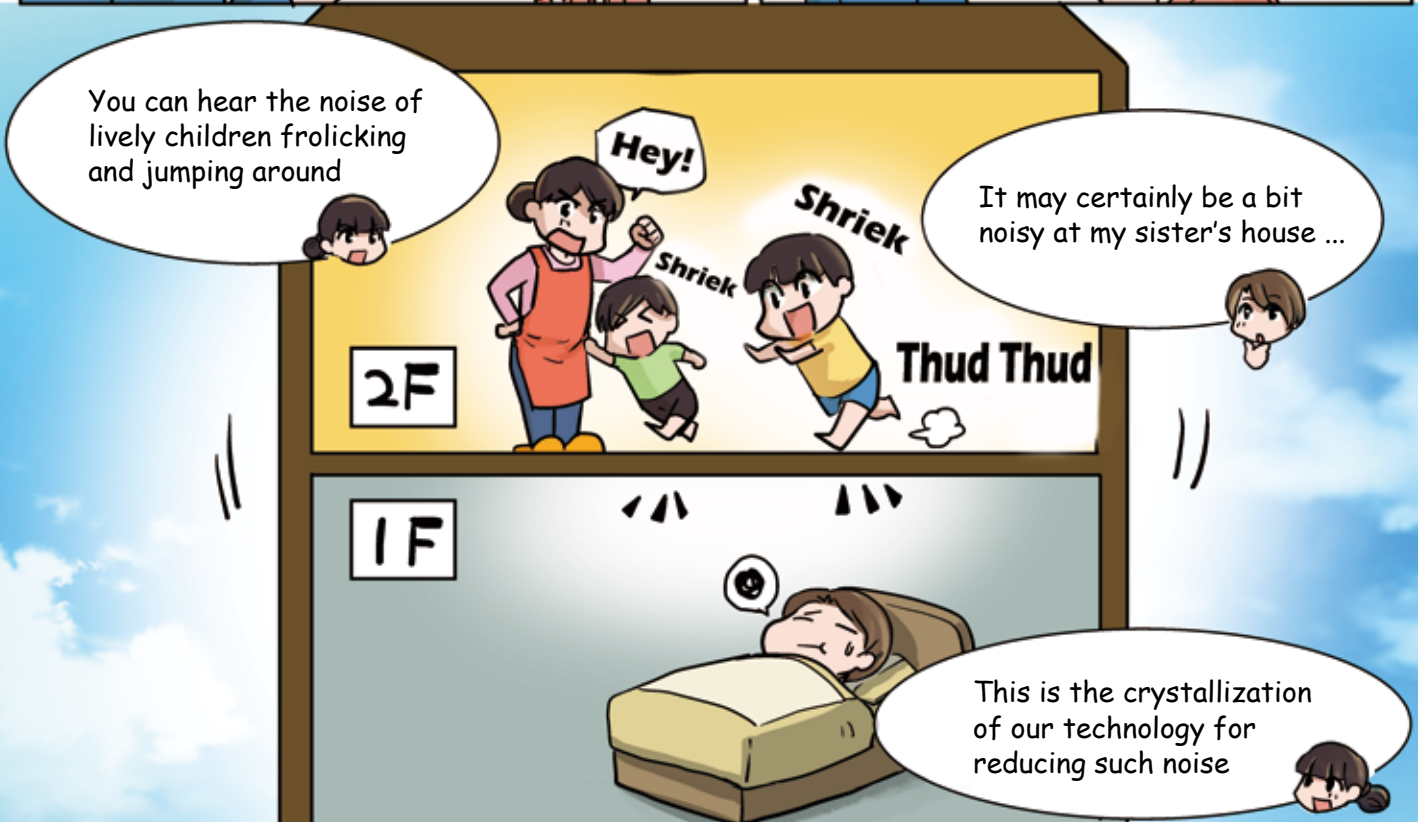
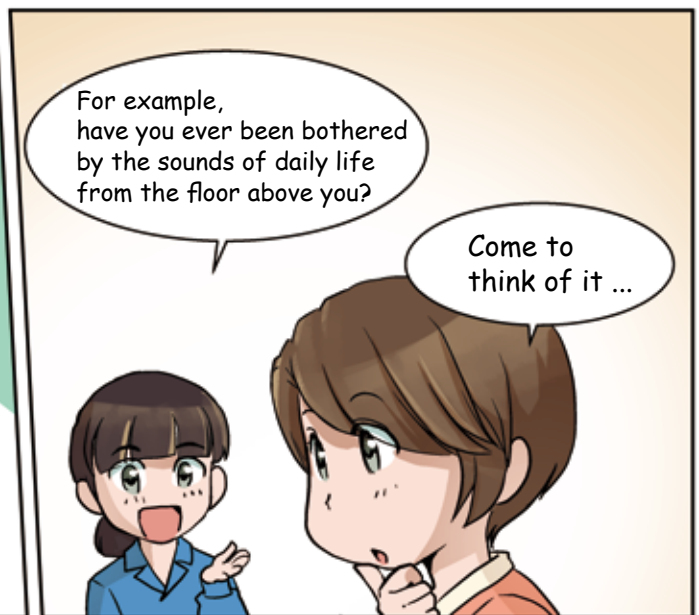
They are thin and compact but,
as I think Mr. Kotani explained earlier,
they reduce seismic energy by converting
it to heat energy



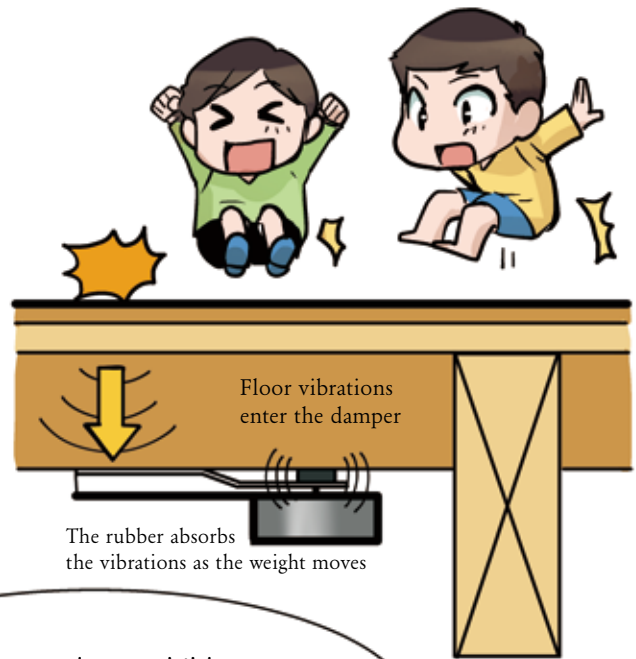
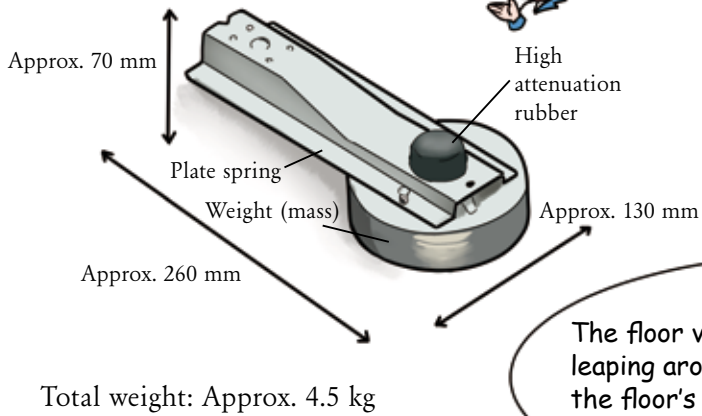
Converted to heat energy
by special viscoelastic rubber



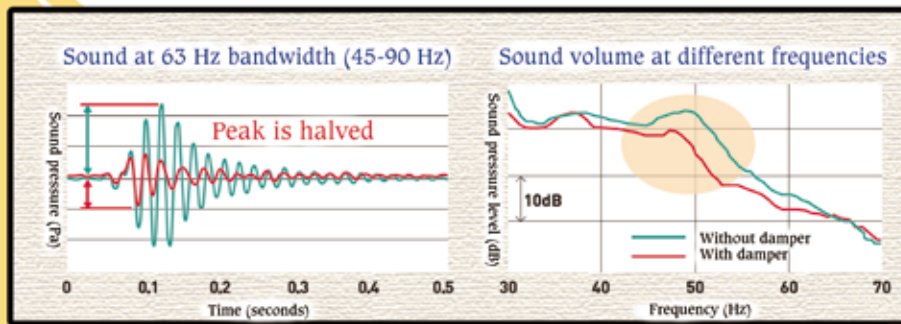
We do a numerical analysis
to see if a proper anti-seismic
effect has been shown



It's a complex damper that controls floor vibrations with vibration suppressing effect by the movement of a plate spring and a weight and high attenuation rubber



The floor vibrates due to children leaping around, etc., but the damper controls the floor's vibrations and so reduces the noise transmitted to the room below



I see
It reduces vibrations
by two mechanisms

That's right!

Amazing!

So basically this product contributes to "comfort"

Yes, it does

It resolves problems with sounds of daily life in apartment buildings, duplex houses, etc. where people on different floors live different lives!

Oooh!

Clap Clap

It's also popular with house builders because the structure of the floor doesn't need to be changed!

