

CDM

CDM-ISO-ELEVATOR-FIX

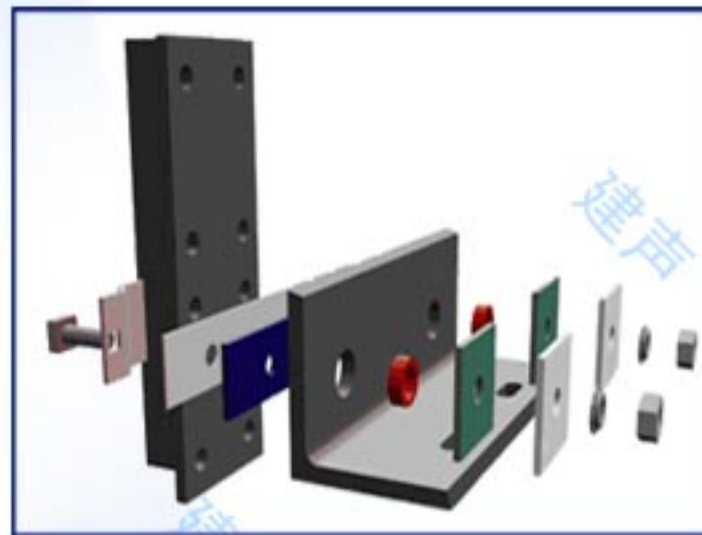
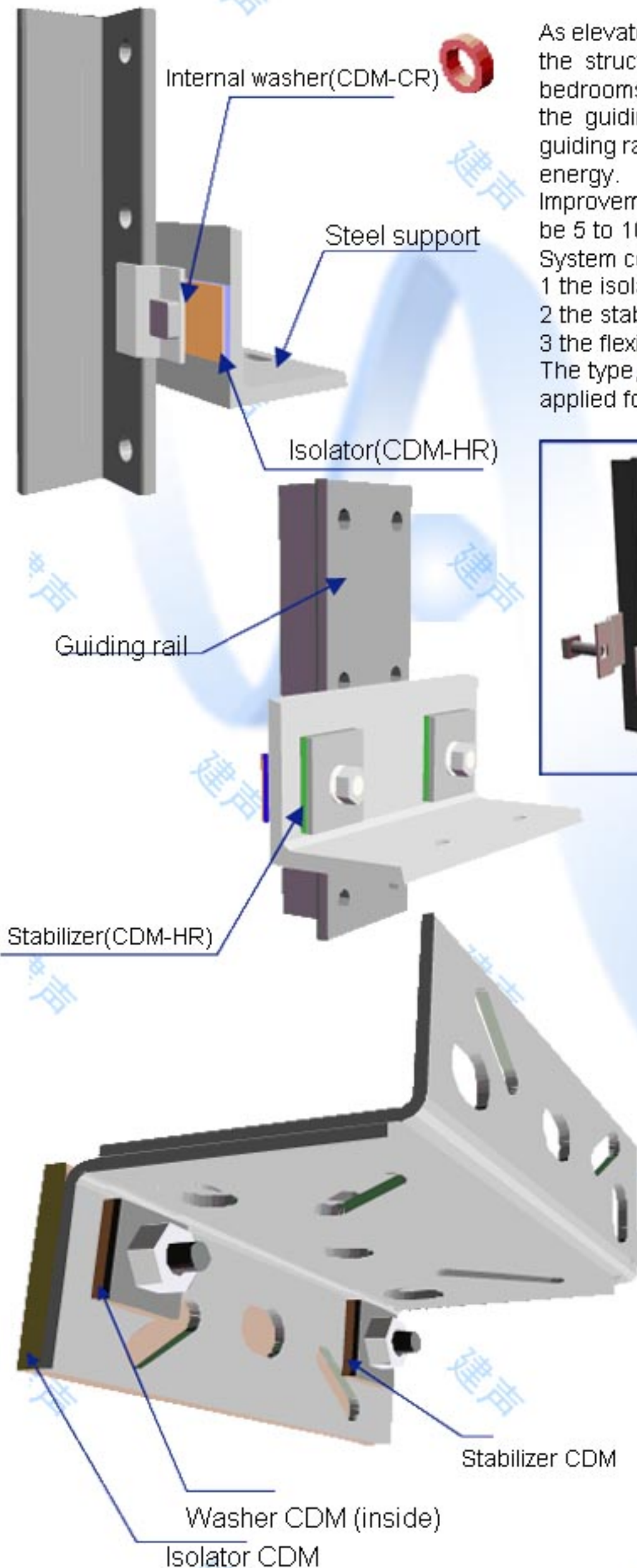
As elevators travel up and down a building they transmit vibration and noise into the structure, often creating disturbance to noise sensitive spaces such as bedrooms, meeting rooms etc. The main source of vibration transmission is via the guiding rails. CDM-ISO-ELEVATOR-FIX is a system that decouples the guiding rails from the shaft structure, hence significantly reducing the transmitted energy.

Improvements of re-radiated noise levels to adjacent spaces can be expected to be 5 to 10dB.

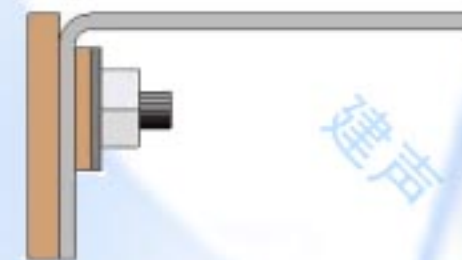
System components:

- 1 the isolator
- 2 the stabilisers
- 3 the flexible washers

The type, size, shape and thickness of these elements depends on the lift type, applied forces, performance requirements and other job specific criteria.



Close up view of the fixation device



SITUATION:

Thyssen-Krupp, one of the most important elevator manufacturers, won a job for the installation of 2 (electrical) elevators in a luxury residential building, located at Rua do Quelhas, 28.

PROBLEM:

The Acoustical Consultant defined very low noise levels inside the building, whereas the elevator shafts were located next to some sleeping rooms.

SOLUTION:

The use of a CDM ISO-ELEVATOR-FIX isolation system nearly based on CDM-HR materials of 10mm thick (see drawing) to completely decouple the guiding rail fixations from the shaft walls.