

Otis boosts elevator ride quality and breathes new life into older buildings with its Ultra™ system.

BENEFITS

A Smoother Ride

Before and after tests in actual installations show improvements in ride quality of as much as 50 percent. The result is exceptional passenger satisfaction and reassurance.

Consistent Performance

The self-adjusting design allows for greater operational tolerances resulting in a smoother, more consistent ride.

Easy Installation

Upgrading existing equipment requires no special setup, meaning quick installation with minimal downtime.

Roller

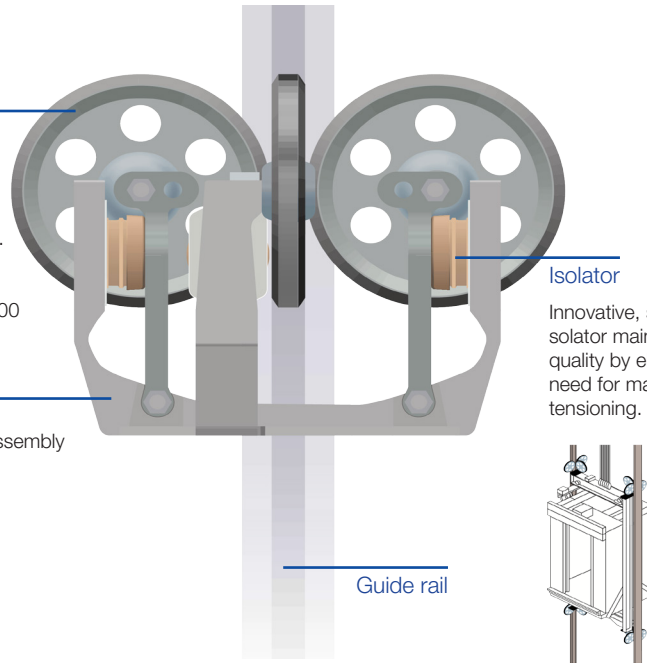
Long-life rubber compound mounted on aluminum hub. Available for applications between 350-1,800 feet per minute (1.6-9.0 m/s).

Frame

Rigid cast-steel assembly

Isolator

Innovative, self-adjusting solator maintains ride quality by eliminating the need for manual spring tensing.



Engineering a Luxury Ride

Roller guides travel along hoistway rails to keep your elevator car properly aligned as it moves up and down in the hoistway. They help smooth your elevator's ride by absorbing vibration, much the way the shock absorbers in an automobile's suspension help it glide over bumps in the road. As in an automobile, the quality of the ride depends on the quality of the suspension.

Our Ultra™ roller guides are the culmination of research and development efforts by the Otis Global Engineering Group. Instead of relying on springs, the Ultra™ roller guides employ a unique, innovative solator that has been proven to reduce lateral cab vibrations by as much as 50 percent. The result is a dramatic improvement in ride quality at a fraction of the cost of a rail re-alignment.

Cost-Effective Operation

Rail re-alignment costs are considerable and result in extensive elevator downtime. Because of the Ultra™ roller guides' greater ability to adjust to varying rail conditions, the rails require less frequent re-alignment caused by car-loading and building shifts. Conventional spring-based roller guides require manual tensioning and adjustment to maintain ride quality. The Ultra™ roller guides' innovative isolator is self-adjusting, providing consistent ride quality with minimal maintenance.

Car balance also affects the performance of conventional roller guides. Ultra™ roller guides reduce the effect of car imbalance, providing reliable and consistent ride quality.

As a result of these innovations, the Ultra roller guides deliver dependable performance with far less maintenance than conventional roller guides.

New Life for Older Buildings

As buildings age, they tend to settle, causing shifts in hoistway rail alignment. Continual loading and unloading of the elevator car also contribute to rail misalignment. The result: a notable increase in sway and vibration in the elevator cab, giving rise to passenger anxiety and complaints.

The Ultra roller guides' self-adjusting feature tolerates rail misalignments of up to 1/4 in. per 16 feet (7 mm per 5 meters) of rail section. This means more consistent ride quality as well as a significant reduction of elevator downtime over the life of a building.

A Wide Range of Applications

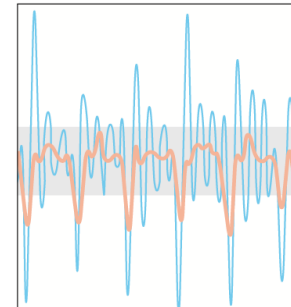
The Ultra roller guides are available in 7-7/8 in. (200 mm) and 10 in. (260 mm) roller sizes. The Ultra™ roller guides serve as a direct replacement for original Otis equipment and are easily adaptable to other existing equipment. The Ultra™ roller guides are designed for loads of up to 5,500 lbs. (2,500kg) and speeds of 350 -1,800 feet per minute (1.6-9.0 m/s). Ultra™ roller guides have been shown to dramatically improve the lateral ride quality of elevator systems.

Delivering Peace of Mind

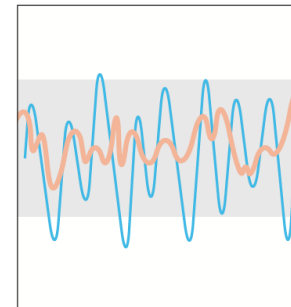
Ride quality is a very tangible concern from a passenger's standpoint. With the installation of Ultra™ roller guides, lateral vibration tests demonstrate an improvement of up to 50 percent. This translates into greater passenger comfort and peace of mind. A more enjoyable ride contributes to an enhanced perception of overall building quality.

Tests demonstrate that Ultra roller guides reduce vibration by as much as 50 percent over conventional roller guides.

Front-to-back movement



Side-to-side movement



- Conventional roller guide
- Ultra roller guide

