

# Efficient mobility. Sustainable technology.

## Schindler 7000

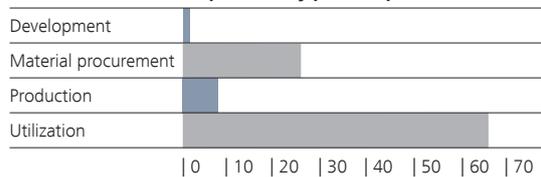
### Sustainability today

Sustainable urban development is a major challenge for planners and architects in the 21<sup>st</sup> century. Schindler supports visions and plans for sustainable buildings with energy-efficient and ecologically sound mobility solutions. The Schindler 7000 high-rise elevators ensure mobility in commercial and residential buildings.

### Efficient operation

Schindler high-rise elevators are built to be highly efficient in every respect: be it in performance, space or energy usage. From the first steps of development, to smart material use in production, through to optimizing energy consumption during utilization, Schindler is securing ecologically sound solutions today and for the future.

#### Total environmental impact (%) by product phase



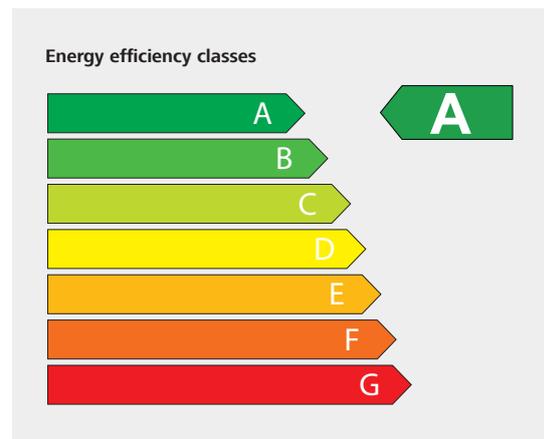
The energy consumed while an elevator is in service (utilization phase) accounts for two-thirds of its environmental impact.

The energy required for daily operation of a building has the biggest impact on the environment – the same applies to elevators. The amount of energy an elevator consumes while in service is crucial to determining its environmental impact; energy efficiency is therefore an important feature of Schindler 7000 elevators.

### Energy efficiency classification

Seven consumption classes provide a transparent and factual overview when rating elevators according to their energy performance. They range from "A" to "G" with "A" being the best-in-class system. The rating combines measurements of both stand-by and travel energy. The elevator's frequency of use, travel height and speed are also considered as they have a strong influence on the rating.

The measurements and classification are a guideline for Schindler to further contribute to sustainable building development.



Selected measurements run by Schindler and third parties show that the Schindler 7000 can provide an energy efficiency classification in the "green" range from "A" to "B".

| Reference measurements  |          |          |
|-------------------------|----------|----------|
| Schindler 7000          |          |          |
| Load (kg)               | 1 600    | 1 150    |
| Speed (m/s)             | 7.0      | 3.5      |
| Number of stops         | 9        | 9        |
| Travel height (m)       | 154      | 80       |
| Trips per year          | 500 000  | 350 000  |
| Usage category          | 5        | 4        |
| <b>Efficiency class</b> | <b>A</b> | <b>B</b> |

The measurement standard is VDI 4707 established in March 2009 by the Association of German Engineers. The VDI standard applies to the assessment of energy efficiency of elevators. Installed units were measured as per a standard configuration.

# More brainpower. Less environmental impact.

## Efficient system

Schindler strives to contribute to sustainable and energy-efficient buildings. The Schindler 7000 high-rise elevators therefore follow an efficient system approach, resulting in clever, fully engineered products in which all parts harmoniously interplay and are perfectly adjusted to each other. Schindler systems convince planners and operators alike, through their optimized energy demands, ecologically responsible production and material usage, convenient planning, fast installation and trouble-free maintenance.

## Drive

- Synchronous and asynchronous gearless motor technology
- Outstanding ACVF technology
- Best in class Power factor 1 technology and THD (total harmonic distortion) of  $\leq 5\%$
- Top efficiency factors
- Reduction of energy consumption
- Return of regenerated energy to power line

## Car and hoistway

### Car:

- Automatic switch-off of car lighting if elevators are not in use
- LED car lighting technology
- Use of highly efficient roller guide shoe

### Door:

- Highly efficient synchronous and asynchronous motor
- Low-friction mechanics

## Control

- Traffic Management System
- Schindler development: intelligent, energy-saving application thanks to latest microprocessor technology
- More performance with fewer elevators
- Direct travel with minimum stops
- Faster availability of cars
- Reduction of empty car operation
- Automatic switch-off display of landing operating panel

