

ACCESSIBLE ELEVATORS COMPLIANT WITH EN81-70-2018

We offer a range of solutions for ensuring compliance with various codes and regulations, including accessibility, vandal resistance, and operation during a fire. This factsheet gives an overview of the main requirements introduced in the new EN81-70-2018 European standard.

The EN81-70 standard defines elevator controls, distances, dimensions, contrasts and accessories that facilitate access for people using wheelchairs or walking aids. KONE EcoSpace®, KONE MonoSpace® 500, KONE MonoSpace® 700, KONE TranSys™ and KONE MiniSpace™ elevators are all available with EN81-70-2018 compliance.

FUNDAMENTAL REQUIREMENTS

The EN81-70-2018 standard introduces requirements for elevator car size and interiors:

- A handrail must be installed in the elevator car on the side of the car operating panel (COP)
 - If the distance between the COP and the adjacent corner is less than enabling 400 mm handrail fit on wall, then a handrail must be installed on both sides of the COP
 - For car types 1, 2, and 3 (please see table 1) the handrail can be installed on the wall opposite the COP, if the front wall width is less than the depth of the handrail
 - For car types 4 and 5 the second handrail must be installed on the wall opposite the COP or on the back wall.
- Mirror is mandatory for car types 1, 2 and 3
- Decorative finishes must not reduce the nominal car depth and width of each car type by more than 15 mm on each wall.
 - There shall be no additional features attached to the car walls below a height of 800 mm which may restrict the accommodation and turning of passengers using wheelchairs or passengers with other walking aids. This

would particularly be the case for type 1 and type 2 cars restricting the minimum depth and for type 4 cars restricting the smaller minimum dimension. In some cases it may be necessary to increase the nominal car width or depth by a few mm, depending on wall finishing used, to compensate the extra space needed.

- Signalization-related requirements
 - The audible signal strength must be adjustable between 35 and 65 dB(A) for car environments. In noisy environments, sound level should be adjustable up to 80 dB(A).
 - A 30 % contrast is required:
 - from push button to faceplate or immediate surroundings
 - symbol on push button to the background of button
 - faceplate to its surroundings on landing
 - there is no luminance contrast requirement for devices mounted on the doorframe
 - there is no luminance contrast requirement between the COP and the faceplate when the COP contains five (5) or more buttons

| CAR TYPE | MINIMUM CAR WIDTH (mm) | MINIMUM CAR DEPTH (mm) | MINIMUM CLEAR OPENING WIDTH (mm) |
|----------|------------------------|------------------------|----------------------------------|
| 1 | 1000 | 1300 | 800 |
| 2 | 1100 | 1400 | 900 |
| 3 | 1100 | 2100 | 900 |
| 4 | 1600 or | 1400 | 900 |
| | 1400 | 1600 | 900 |
| 5 | 2000 or | 1400 | 1100 |
| | 1400 | 2000 | 1100 |

Table 1: Car types and dimensions



An example of the contrast requirement

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