

ACCESSIBLE ELEVATORS COMPLIANT WITH EN81-70-2017

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 EN81-70-2017 European standard.

The EN81-70-2017 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 compliance.

FUNDAMENTAL REQUIREMENTS

The EN81-70-2017 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

An example of the contrast requirement:





Car type	Minimum car width (mm)	Minimum car donth (mm)	Minimum clear anoning width (mm)
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	1400	900
	or		
	1400	1600	900
5	2000	1400	1100
	or		
	1400	2000	1100

Table 1: Car types and dimensions

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