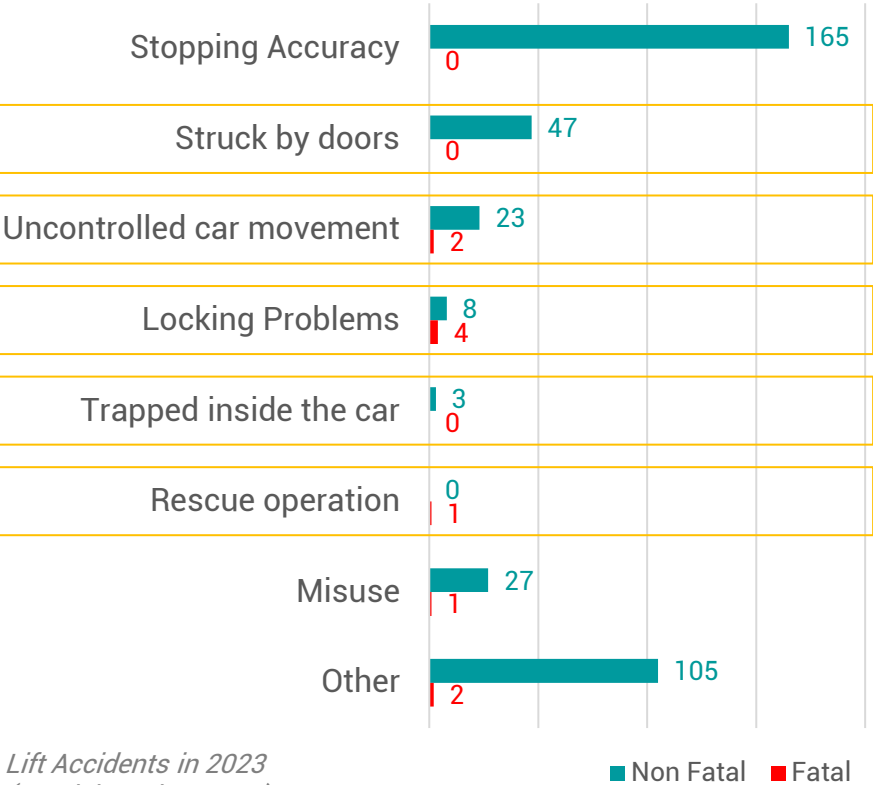


# Norms & Standardization actual status and next steps

Asansor, Istanbul 2025



# Setting the Stage: facts are friends



Lift Accidents in 2023  
(Gemici-Loukas,2024)

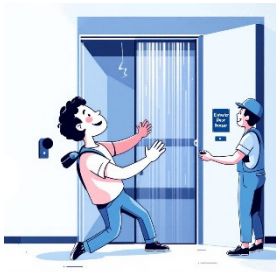
■ Non Fatal ■ Fatal

388 Total Accidents Reported (10 Fatal)



88 Door-Related  
Accidents (7 Fatal)

Linked to inadequate door  
protection systems.



95% Preventable  
Incidents

Proper safety measures can  
avoid most door accidents.

# Current Regulatory Landscape: EN 81-20/50

## EN 81-20

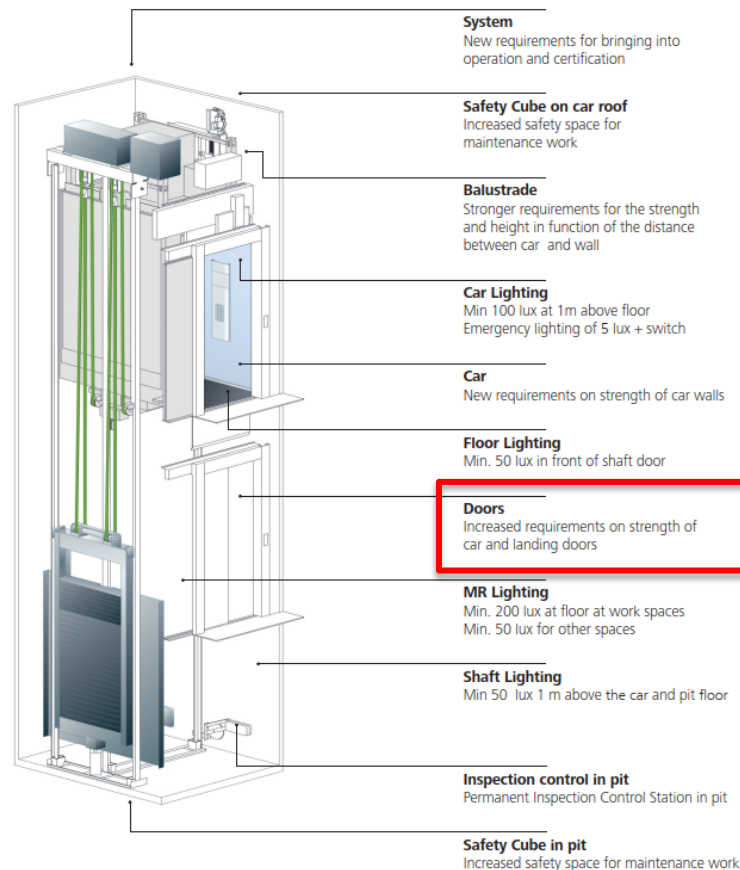
- Construction and installation standards.
- Door clearances, lighting, emergency operation.

## EN 81-50

- Design rules, calculations, testing.
- Door strength, safety device performance.

## ADDITIONAL STANDARDS

- EN 81-58: Fire resistance.
- EN 81-71: Vandalism resistance.
- ...



# EN 81-20/50: Ensuring Door Safety



1

## STRENGTH & RIGIDITY

Static load tests verify door  
withstands forces  
Dynamic impact tests  
simulate collision

2

## CLOSING FORCE LIMITATION

Force measurement  
prevents crushing

3

## DOOR REOPENING

Must reopen upon  
obstruction by means of  
light curtains  
Protects vulnerable users

4

## MOVEMENT PREVENTION

Car cannot move with open  
doors

# The Future of Elevator Safety: Introducing ISO 8100



Planned date coordinated between ISO/TC 178 and CEN/TC 10

**DAV**  
**Q2 2025**  
**Q4 2025**

**OJEU Citation**  
**Q4 2025**  
**Q2 2026**  
**(expected)**

**DOW**  
**EN 81-20/50**  
**Q2 2028**  
**Q4 2028**

ISO/TC 178 has started the revision of ISO 8102-20 to fully cover EHSRs 1.1.9 and 1.2.1.

There is no reason to revise EN ISO 8100-1/2, when the revised ISO 8102-20 is published.

## EN 13015

The standard to remain as hEN but to be heavily revised to limit the content only to the requirements for making maintenance instructions.

## Main safety hENs

EN 81-20 -> EN ISO 8100-1

EN 81-50 -> EN ISO 8100-2

## Supplementary hENs

referenced by the main hENs

EN 81-28:2022

EN 81-58:2022

EN 12016:2013 -> EN ISO 8102-2

EN 12015:2020 -> EN ISO 8102-1 to follow the EN ISO 8100-1/2 schedule (to be cited under the EMC directive)

## Other supplementary hENs

EN 81-21:2022 EN 81-72:2020

EN 81-22:2021 EN 81-73:2020

EN 81-70:2022 EN 81-77:2022

EN 81-71:2022 EN 13015:2008

**New Annex ZA covering MR**

**End of Citation**  
**EN 81-20/-50 (DCPC)**  
**Q4 2028**  
**(expected)**

Latest date for any or all standards

**DAV**  
**Q1 2028**

**OJEU Citation**  
**Q3 2028 (expected)**

**DOW**  
**Q1 2030**

Latest date based on the end of validity of M/599

Each standard may be made available as soon as possible. However, to reduce confusion in the market and undue burden to the stakeholders, all standards to be made available at the same!



**We, as Wittur, we're already testing our products for ISO 8100**

# ISO 8100-1: Key Technical Updates compared to EN81-20



1

Addition of requirements for vertically moving landing and car sliding doors

7

Addition of requirements for a movable platform in the shaft pit

2

Addition of requirements for suspension means other than steel wire ropes

8

Extension of the requirements for preventing hands from being drawn into doors

3

Inspection journey beyond the final stops

9

Coordination of the requirements for the brake with the overload limit values

4

Addition of requirements for automatic emergency release

10

Revision of the performance and monitoring of the engine brake

5

Addition of requirements for traction elevators with increased usable car area

11

Revision of the requirements for ladders for access to the shaft pit

6

Revision of the requirements for SIL-rated circuits (formerly PESSRAL)

12

Definition of the classification of the fire behavior of electrical cables

13

Addition of requirements for compensating devices that extend into the protected space in the shaft pit into the shaft pit

# ISO 8100-1: Key Technical Updates for Door Systems



1

## REDUCED CLEARANCES

**5mm** max panel gaps vs 6mm in EN 81-20/50

2

## ENHANCED RETAINERS

Detailed testing with lower guides removed

3

## GLASS DOOR FINGER PROTECTION

New requirements prevent finger dragging

4

## ROBUST LOCKING

Precise location and force testing specs

# Ensuring a Safer Future



1

## SAFETY FIRST

Elevator door safety is non-negotiable—prioritizing passenger protection must remain the industry's top commitment.



2

## EVOLVING STANDARDS:

EN 81-20/50 sets a strong baseline, while ISO 8100 advances global alignment and continuous safety improvements.



3

## SHARED RESPONSIBILITY

Achieving safety requires strict adherence to standards, regular maintenance, and continuous education across the industry.



*Foster collaboration across the sector (manufacturers, installers, inspectors, associations) to uphold and advance safety standards*



Thank you  
for your attention!