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The revised prEN81-41 and the new EN81-42: State of the approval process of the two standards

Paolo Tattoli





European Federation for Elevator Small and Medium-sized Enterprises aisbl

### prEN81-41 e prEN 81-42

Platforms with not completely enclosed carrier = = Platforms without doors in the carrier Platforms with enclosed carrier = = Platforms with doors in the carrier

- Although the topic is very similar, CEN/TC10 has assigned the two standards to two distinct WGs:
  - WG8 (prEN81-41)



The result is that, despite the efforts made by the two WGs, some technical solutions will not be aligned.

It is better to specify that with/without doors is the real case of the more general concept completely/not completely closed carrier



WG8 - Stairlifts and vertical platforms for people with impaired mobility Convenor Mr. Paolo Tattoli (after 2022) - 1

- EN 81-41:2010 Vertical lifting platforms intended for use by persons with impaired mobility
- Revision 2021 received a positive formal vote in July 2021
- National Members approving: 16, disapproving: 2
- In delaying the publication, on February 2023 a negative assessment from HAS Consultant has been released



### WG8 - Stairlifts and vertical platforms for people with impaired mobility Convenor Mr. Paolo Tattoli (after 2022) - 2

• ...

• EN 81-41:2010 - Vertical lifting platforms intended for use by persons with impaired mobility

- WG8 asked for a meeting with HAS Consultant to share decisions on changes to be introduced to the draft
- Some problems for this because the HAS Consultant is UNKNOWN
- After a detailed request the meeting was agreed and organized: the changes introduced into the 2023 coming from the HAS Consultant comments are now shared with HAS Consultant



### WG8 - Stairlifts and vertical platforms for people with impaired mobility Convenor Mr. Paolo Tattoli (after 2022) - 3

- EN 81-41:2010 Vertical lifting platforms intended for use by persons with impaired mobility
- ...
- Last WG8 decision (September 2023) is to introduce the technical changes to the EN 81-41 draft coming from comments from first formal vote (German and Austria comments); these comments led the negative assessment of France and Germany
- The concerns from Austria about EHSR 6.4.2 of machinery directive 2006/42/EC are closely monitored and hopefully solved (with agreement of HAS consultant)
- Currently, the draft is under revision to be submitted to a second Formal Vote

Let's see some technical content of the current draft



## **Revision of EN 81-41**

- Alignment to EN 81-20 and EN 81-50
- Added toothed belts as suspension means (coated ropes and flat belts not included)
- Traction drive
- No changes for the remote alarm (except the deletion of the initial word «note»)



# **Machinery Directive**

**Control device** 

- Annex I
- 6.4.2. Controls at landings
- Controls, other than those for emergency use, at landings shall not initiate movements of the carrier when:
  - a) the control devices in the carrier are being operated
  - b) the carrier is not at a landing



# **Machinery Directive**

**Control device** 

- Due to the Austrian Federal Ministry reporting on possible non-compliance with the Machinery Directive, WG8 has changed the requirements to include a person detection device inside the load carrier
- The platform will operate from the landing with the push-button automatic control when no person is detected in the load carrier
- The landing controls are disabled when the carrier is occupied or in the event of a failure of the person detection device



## **Revision of EN 81-41**

#### **ACTUAL VERSION**

- 5.5.15.2.1 Control devices located on the platform, which are used to control the movement of the platform shall be dependent upon hold-to-run.
- 5.5.15.2.2 Control devices located at landings, which are used to control the movement of the platform shall be not holdto-run
- 5.5.15.2.3 A detection means that is shall be provided able to detect a person on the platform shall be provided.
- The detection means:
  - a) shall be an electric safety device as per 5.5.11.1; and
  - b) when triggered, shall prevent a call from any landing control; and
  - c) shall be monitored to detect its failure; and
  - d) in case of its failure:
    - 1) when the carrier is at a landing, shall prevent a call from any landing control;
    - 2) the travelling carrier shall continue its travel till the destination landing;
    - 3) the carrier operation shall continue and remain available as per 5.5.15.2.1.



#### WG13 - Vertical lifting appliance with enclosed carrier Convenor Mr. Paolo Tattoli (after 2015) - 1

- In 2011 CEN/TC10 decided to have two separate dedicated standards for the lifting appliances
  - With not completely enclosed carrier
  - With enclosed carrier
- After consultancy among members:
  - for the second one, the new WG13 has been appointed to develop the new EN81-42 - Vertical lifting appliance with enclosed carrier intended for use by persons, including persons with disability



#### WG13 - Vertical lifting appliance with enclosed carrier Convenor Mr. Paolo Tattoli (after 2015) - 2

- Works on EN81-42 started in 2015
- Public enquiry in September 2022. National Members approving: 17, disapproving: 2
- Comments from HAS Consultant (negative assessment)







- EN 414 as base
- Content:
  - $\circ$  0. Introduction
  - $\circ$  1. Scope
  - o 2. Normative references
  - o 3. Terms and definitions
  - <u>"List of significant hazards" moved to Annex H</u>
  - o 4. Safety requirements and/or protective/risk reduction measures
  - o 5. Verification of the safety requirements and/or protective/risk reduction measures
  - 6. Information for use
  - o Annex

For Chapter 4 the reference is Chapter 5 of 81-20



**Platforms with enclosed carrier** 

### prEN 81-42 – Chapter 4

#### It contains the same topics as Chapter 5 of UNI EN 81-20 except for shock absorbers

- 4.1 General
- 4.2 Well and machinery spaces
- 4.3 Landing doors and carrier doors
- 4.4 Carrier, counterweight and balancing weight
- 4.5 Suspension means and related protection means
- 4.6 Precautions against free fall, excessive speed, unintended carrier movement and creeping of the carrier
- 4.7 Guide rails
- Buffers (not provided)
- 4.8 Lift machinery and associated equipment
- 4.9 Electric installations and appliances
- 4.10 Protection against electric faults; failure analysis; electric safety devices
- 4.11 Controls Final limit switches Priorities



### prEN 81-42 – Annexes

- Annex A (informative) Building interfaces
- Annex B (informative) Guidance in selection of lifting appliances
- Annex C (informative) Recommendations for the provisions and use of specially adapted control devices, switches and sensors
- Annex D (normative) Additional requirements concerning accessibility and usability by persons with disability
- Annex E (informative) In-use periodic examination, tests and servicing
- Annex F (normative) Safety components Tests procedures for verification of conformity
- Annex G (normative) Alternative suspension means
- Annex H (informative) List of significant hazards
- Annex ZA (informative) Relationship between this European Standard and the essential requirements of EU Directive 2006/42/EC aimed to be covered

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#### WWW.EFESME.ORG

secretariat@efesme.org p.tattoli1@gmail.com