CIBSE Guide D: 2025

Chapter 10 – Escalators and moving walks

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What does Chapter 10 do?

*Escalators and moving walks*

- Introduction
- Definitions, commonly available equipment and duty
- Principal components
- Installation planning
- Drive systems, energy usage and safety devices
- Modernising escalators and moving walks
- Commissioning, testing and maintenance
- Actions after an incident involving an escalator or moving walk
- Escalator or moving walks and LOLER
What has changed since 2020?

Regulations and Directives

• Machinery Regulation (Regulation (EU) 2023/1230) was published on 29th June 2023, but will not enter force until 20th January 2027

• Machinery Directive 2006/42/EC, enacted into GB law by the Supply of Machinery (Safety) Regulations, will be withdrawn on 19th January 2027; there is no transition period

• The Machinery Regulation is being reviewed by CEN TC10 WG2 to ascertain how this will affect future revisions of EN 115-1/ISO 8103-1
What has changed since 2020?

*Codes and Standards*

- EN 115-1:2017 is being adopted as the basis for ISO 8103-1
- The first version of ISO 8103-1 will **not** be a harmonised standard; EN 115-1 will continue as a harmonised standard
- This ISO standard will be revised to include fall protection and some other minor amendments; estimated publication date is 2026
- EN ISO 8103-1 will then become a harmonised standard; EN 115-1 will be withdrawn
- ISO 8103-1 will be developed to incorporate mutually agreed ASME and JIS safety requirements to become a truly global escalator standard
What has changed since 2020?

**Codes and Standards**

- EN 115-2:2010 “Safety of escalators and moving walks — Part 2: Rules for the improvement of safety of existing escalators and moving walks” was updated in 2021 to bring it in line with EN 115-1:2017

- EN 115-5:20XX “Safety of escalators and moving walks — Part 5: Replacement of existing escalators/moving walks in existing buildings” will be published late 2023/early 2024

- This provides protective measures for five common scenarios when replacing existing units to ensure they conform with the essential requirements of the Machinery Directive

5.2 Free Height

5.3 Reduced standing area in machinery spaces, driving station and return station

5.4 Escalators with 35° inclination and more than 6 m rise

5.5 Reduced unrestricted area for escalators/moving walks without shopping trolleys

5.6 Reduced horizontal step run at lower landing
Fall Protection

- The starting point is the Norwegian TEK10 building regulations which have required additional fall protection since 2010.
- Although raising the balustrade height to 1100 mm prevents accidental falls over the side, it does not prevent falls due to misuse e.g. handrail surfing or sitting on the handrail.
- CEN TC10 WG2 Ad Hoc Mechanics proposals have been forwarded to SAC in China for further development.
- Fall protection is likely to be required where the fall hazard is >2 m measured vertically from the handrail to the ground.
- Minimum height likely to be 150-200 mm above handrail height, but in all cases min. 1100 mm above step nose on incline section.
Areas to be reviewed:

- Reference documents and standards
- 10.2.2 – Guidance on maximum moving walk pallet width in relation to angle of inclination
- 10.3 & 10.4.2 – Width of skirting deflector should be taken into consideration to ensure minimum 200 mm evacuation space is maintained between trolley and skirting panel
- 10.3 – Guidance on additional stop switches 2-3 m before comb intersection line when required by EN 115-1
- 10.4.1 – Guidance on fall protection and handrail height; a 1000 mm handrail height is a better compromise for providing a firm handhold if fall protection is fitted.
Questions?