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**YÜRÜYEN MERDİVEN VE YÜRÜYEN BANTLAR-
GÜVENLİK KURALLARI-KONSTRÜKSİYON VE TESİSATI
İÇİN TADİL 2**

Safety rules for the construction and installation of escalators
and passenger conveyors Amendment 2

TÜRK STANDARDLARI ENSTİTÜSÜ
Necatibey Caddesi No.112 Bakanlıklar/ANKARA

Ön söz

- Bu standard, Türk Standardları Enstitüsü tarafından ilgili Avrupa standardı esas alınarak Türk Standardı olarak kabul edilmiştir.

ICS 91.140.90

English version

Safety rules for the construction and installation of escalators and passenger conveyors

Règles de sécurité pour la construction et l'installation des
escaliers mécaniques et trottoirs roulants

Sicherheitsregeln für die Konstruktion und den Einbau von
Fahrtreppen und Fahrsteigen

This amendment A2 modifies the European Standard EN 115:1995; it was approved by CEN on 16 January 2004.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This amendment exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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Foreword

This document (EN 115:1995/A2:2004) has been prepared by Technical Committee CEN/TC 10 "Lifts, escalators and moving walks", the secretariat of which is held by AFNOR.

This Amendment to the European Standard EN 115:1995 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2005, and conflicting national standards shall be withdrawn at the latest by February 2005.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Introduction

When elaborating EN 115:1995 intense and careful discussions on the mandatory introduction of deflector devices (brush guards) took place. A great majority of CEN/TC 10/WG 2 decided that at this time the requirements regarding the rigidity of the skirting, the clearances between skirting and steps, and the reduction of coefficient of friction for the skirting are sufficient to prevent from trapping. Deflector devices have been permitted in addition to the before mentioned requirements. Major concerns against that point of view were raised by the UK delegation.

Meanwhile opinion has changed world-wide, and even countries that prohibited the installation of such devices are now about to require deflector devices by giving clear criteria (e.g. the USA based on the A. D. Little study) or at least permit its use to meet the increasing demands on safety.

More than 10 years experience with these devices in the UK prove that the number of accidents has been reduced significantly in the area between the fixed skirting and the moving step band. This knowledge together with requirements from Australia and the USA influenced the answer to an interpretation request on that subject in which criteria for deflector devices are laid down and has been introduced into the present Amendment 2.

1 Modification of 0.5.3

0.5.3 shall be amended as follows:

"0.5.3 If, exceptionally, means of transportation, e.g. push chairs, luggage trolleys or baggage carts, shall be carried on escalators or passenger conveyor, special measures shall be agreed between the manufacturer of the escalator/passenger conveyor, the manufacturer of the means of transportation and the customer. Within those measures, it has to be taken care that the conditions defined in this document are observed when selecting the means of transportation. The measures to be taken are governed by very different conditions which make standardisation within the scope of EN 115 impossible."

2 Modification of 5.1.5.6.3

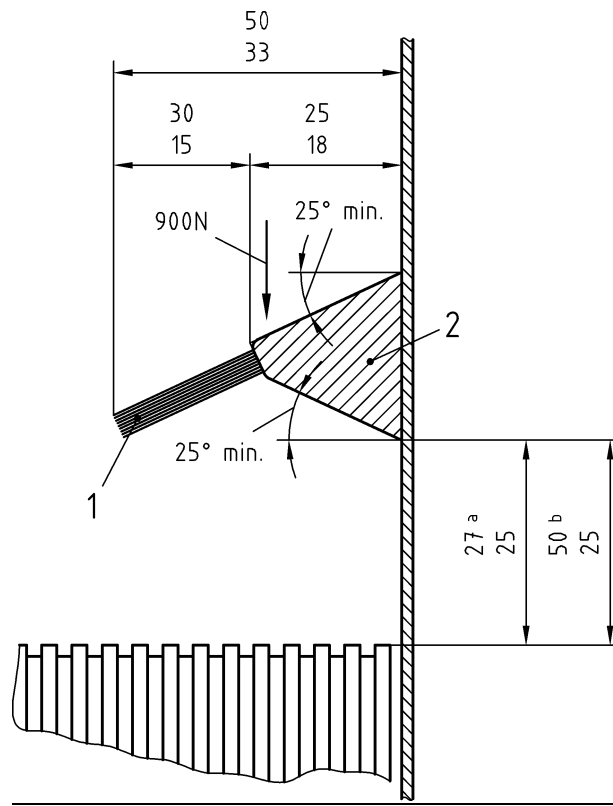
5.1.5.6.3 shall be amended by a fourth condition as follows:

"5.1.5.6.3 On escalators, the possibility of trapping between skirting and steps shall be reduced.

For this purpose, the following four conditions shall be fulfilled:

- a) sufficient rigidity of the skirting according to 5.1.5.6.2;
- b) clearances to be in accordance with 11.2.1;
- c) reduction of coefficient of friction by the use of suitable materials or suitable type of lining for the skirting;
- d) installation of skirt deflectors which fulfil the following requirements (see Figure 9):
 - They shall consist of a rigid and a flexible part.
 - They shall have a minimum projection of 33 mm and a maximum of 50 mm from the vertical face of the skirt panels.
 - They shall withstand a force of 900 N vertically to the line of attachment of the rigid part without detachment or permanent deformation. The force related to the rigid part shall be applied to an area of 600 mm².
 - The rigid parts shall have a projection of between 18 mm and 25 mm and withstand the defined strength requirements. The flexible part shall have a projection of between 15 mm and 30 mm.
 - A clearance of 25 +2/-0 mm shall be provided between the lowest part of the underside of the rigid part and perpendicular to the line of the step nose, throughout the inclined portion of travel.
 - The clearance between the lowest part of the underside of the rigid part of the skirt deflector and the top of any step cleat at the true horizontal portion of travel shall be between 25 mm and 50 mm.
 - The lower surface of the rigid part shall be bevelled not less than 25° upward and the upper surface shall be bevelled not less than 25° downward from skirt panel.
 - The rigid part of the deflector shall be designed without sharp edges. Fastening heads and joint connections shall not extend into the path of travel.
 - The terminal end piece shall be tapered to give a flush interface with the skirting. The terminal end piece of any skirt deflector shall end not less than 50 mm and maximum 150 mm prior to the comb intersection line.
 - If the skirt deflector is an extension of the interior profile 5.1.5.7.2 applies. If the skirt deflector is attached or an integral part of the skirting 5.1.5.1.1 and 5.1.5.6 apply.

Dimensions in mm



Key

- 1 flexible part
- 2 rigid part
- ^a in the inclined area
- ^b in the transition and horizontal areas

NOTE This Figure has not been drawn to scale. It only serves to illustrate the requirements.

Figure 9 – Requirements on skirt deflectors"

Annex ZA
(informative)

Clauses of this European Standard addressing essential requirements or other provisions of EU Directives.

This European standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association and supports essential requirements of EU Directive:

— Machinery Directive 98/37/EC, amended by Directive 98/79/EC.

WARNING : Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

Compliance with this standard provides one means of conforming with the specific essential requirements of the Directive concerned and associated EFTA regulations.