

2nd edition, January 2008

Original

R

Accessibility to stations in Europe

L'accessibilité des gares en Europe

Zugänglichkeit der Bahnhöfe in Europa



UNION INTERNATIONALE DES CHEMINS DE FER
INTERNATIONALER EISENBAHNVERBAND
INTERNATIONAL UNION OF RAILWAYS



Documents

Document Sharing Hub

Leaflet to be classified in Volumes:

I - Passenger and Baggage Traffic

VII - Way and Works

Application:

With effect from 1 July 2008

All members of the International Union of Railways

Record of updates

1st edition, May 2001

Creation of the Leaflet

2nd edition, January 2008

Changes have been made to the terminology used in this leaflet to bring it into line with the new definitions for railway stakeholders set out in the EU Directives and in the 1999 CIV Uniform Rules, which entered into force on 01/07/2006.

The leaflet has also undergone a thorough overhaul to take on board the findings of the AEIF (see List of abbreviations) working party responsible for drafting the TSI on accessibility for people with reduced mobility.

The person responsible for this leaflet is named in the UIC Code

Contents

Summary	1
1 - European stations	2
1.1 - Scope	2
1.2 - Targets	2
2 - Standards	5
2.1 - General	5
2.2 - Station overview	6
2.3 - Details of station layout	7
Appendix A - Complete set of sketches and their standards	9
A.1 - Station access	9
A.2 - In-station area	11
A.3 - Platform access	23
A.4 - General features	31
Appendix B - Statistics concerning the travel habits of PRM (persons with reduced mobility) in Europe	40
List of abbreviations	42
Glossary	43
Bibliography	44

Summary

The purpose of the leaflet is to define a uniform framework governing the design of European stations to ensure consistency in the measures taken to facilitate access for the mobility impaired.

Participating establishments will form a stations network facilitating the mobility of persons in Europe and making train travel more attractive, both of which remain key UIC aims (see point 1.2.3 "the accessible stations concept"). These stations may be referred to as accessible stations providing they meet the accessibility requirements laid down in this leaflet.

"People with Reduced Mobility" (PRM) means all people who have difficulty when accessing railway infrastructure.

Account should also be taken of those people for whom travel is difficult owing to their circumstances such as individuals accompanied by young children or loaded down with shopping bags, parcels or luggage.

Indeed almost all of us at some stage experience varying degrees of reduced mobility, which is why a well-designed railway transport chain fosters the growth of travel by train.

This leaflet addresses aspects affecting accessibility and the standards governing achievement thereof. It also defines the accessible stations concept.

The body of the leaflet comprises a compilation of sketches and diagrams setting out the standards to be met by equipment and facilities. These form the cornerstone of an accessible station and serve as a benchmark. The technical standards given in this leaflet are recommendations that shall not supersede but rather complement national standards

The application of fundamental standards should take on board the special requirements affecting railway operations to guarantee safety and order. It should also take on board the objectives pursued by carriers and passenger terminal managers as customer-driven service companies. It is important to draw the attention of carriers and passenger terminal managers to customer requirements in terms of cleanliness and safety.

Proper and gradual implementation of these standards will pave the way for comfortable travelling conditions at European level and, by extension, will make life easier for senior citizens and the mobility impaired. Hence, the leaflet is of vital importance for carriers and passenger terminal managers.

Appendix A lists and explains all sketches and standards.

Appendix B contains statistics concerning the travel habits of senior citizens in Europe.

1 - European stations

1.1 - Scope

This leaflet deals with the accessibility of European stations and aims to facilitate train journeys

At present, a number of European stations have achieved varying levels of accessibility. If additional stations are to make the grade, the quality standards set for station components and dealt with in this leaflet should be taken on board when effecting refurbishments or repairs or for new construction projects.

All these standards must be applied gradually. In this way, it will be possible to achieve the degree of accessibility required to attract more passengers.

These quality standards should enable all passengers, including those with reduced mobility, to travel throughout Europe by train with a satisfactory level of comfort in a non-discriminatory way, secure in the knowledge that carriers and passenger terminal managers have provided compatible facilities to guarantee them access to stations.

Moreover, it is accepted that steps need to be taken to harmonise the interchange facilities laid on for transfer between modes in the transport chain. **Be that as it may, this leaflet does not address problems connected with intermodality or arising outside the station.**

By steadily improving station accessibility it will be possible to guarantee all passengers peace of mind when travelling. In this way, their mobility and autonomy can be bolstered and their interaction with society increased.

1.2 - Targets

When tackling the issue of mobility in stations and on trains, there is no denying that many passengers don't feel secure when travelling (e.g. passengers with luggage and accompanied by young children, pregnant women, foreigners and illiterate people).

1.2.1 - Passengers concerned

"People with Reduced Mobility" (PRM) means all people who have difficulty when using trains or the associated Infrastructure. This includes - according to the *PRM TSI*, point 2.2 (see [Bibliography - page 44](#)) - the following categories:

- *Wheelchair users (persons who due to infirmity or disability use a wheelchair for mobility)*
- *Other mobility impaired including:*
 - *people with limb impairment,*
 - *people with ambulant difficulties,*
 - *people with children,*
 - *people with heavy or bulky luggage,*
 - *elderly people,*
 - *pregnant women.*

- *Visually impaired.*
- *Blind people.*
- *Hearing impaired.*
- *Deaf people.*
- *Communication impaired (meaning persons who have difficulty in communicating or understanding the written, or spoken language, and including foreign people with lack of knowledge of the local language, people with communication difficulties, people with sensory, psychological and intellectual impairments).*
- *People of small stature (including children).*

Impairments may be long-term or temporary, and may be visible or hidden.

However, PRM does not include people that are alcohol or drug dependent, unless such dependency has been caused by medical treatment.

1.2.2 - Socio-economic aspects

- increase opportunity to travel,
- longer life expectancy,
- individualisation of demand.

Demographic and economic trends are boosting the demand for transport.

This increased demand is not necessarily directed towards rail, which faces competition from other modes.

The quality of the services provided at an accessible station have a major impact on the passenger's choice.

Stations need to be accessible for all. This leaflet should help integrate the disabled and the mobility impaired, etc.

Carriers and passenger terminal managers must invest to make stations more accessible to such individuals thereby ensuring that they are not marginalised.

Moreover, European countries are passing a growing number of laws and decrees requiring compliance with renovation rules for all public buildings, cf. also the PRM TSI.

The fact that all train journeys begin and end in a station is sufficient reason alone to render access to stations easy and non-discriminatory.

1.2.3 - Implementation

The accessible station concept - Definition

1. An accessible station is an area in which there are no obstacles whatsoever and all facilities are easy to reach.
An "**accessible station**" must satisfy the basic accessibility criteria defined in this leaflet to ensure maximum autonomy for all categories of passenger.
2. An "**accessible station**" also ensures that reliable, simple and easy-to-grasp services and facilities are provided under all circumstances.
3. Access to "**accessible stations**" should also be examined in harness with local authorities (parking facilities, pavements, paths leading to the station entrance, etc.).
4. Changes, i.e. renovation and rebuilding work, which can be justified in technical and economic terms and are to be undertaken in the natural scheme of things, will have to take account of accessibility standards, whilst complying, where necessary, with requirements for the protection of historically "listed" monuments as well as environment and urban planning imperatives.

2 - Standards

2.1 - General

The standards set out in this leaflet represent the findings of a wide range of studies which were conducted in member countries and have culminated in building legislation and decrees in a range of European countries (see [List of abbreviations - page 42](#)).

Mention should be made of the following documents (see [Bibliography - page 44](#)) in particular:

- *Directive 2001/16/EC of the European Parliament and the Council of 19 March 2001 on the interoperability of the trans-European conventional rail system*
- *Commission Decision of 30 May 2002 concerning the Technical Specification for Interoperability relating to the infrastructure sub-system of the trans-European high speed rail system referred to in Article 6(1) of Council Directive 96/48/EC*
- The directives related to the second railway package, see *EU Official Journal L 164, 30 April 2004*.
- The EU Regulation on Passenger Rights related to the third railway package and the *PRM TSI* adopted by the European Commission on 20.06.2006.

Reference should also be made here to the findings of the COST 335 study quoted in paragraph 7.5.1 of the above-mentioned high speed TSI "*COST 335 - Passengers' accessibility of heavy rail systems*" (see [Bibliography - page 44](#)).

The main studies used to frame these standards were carried out:

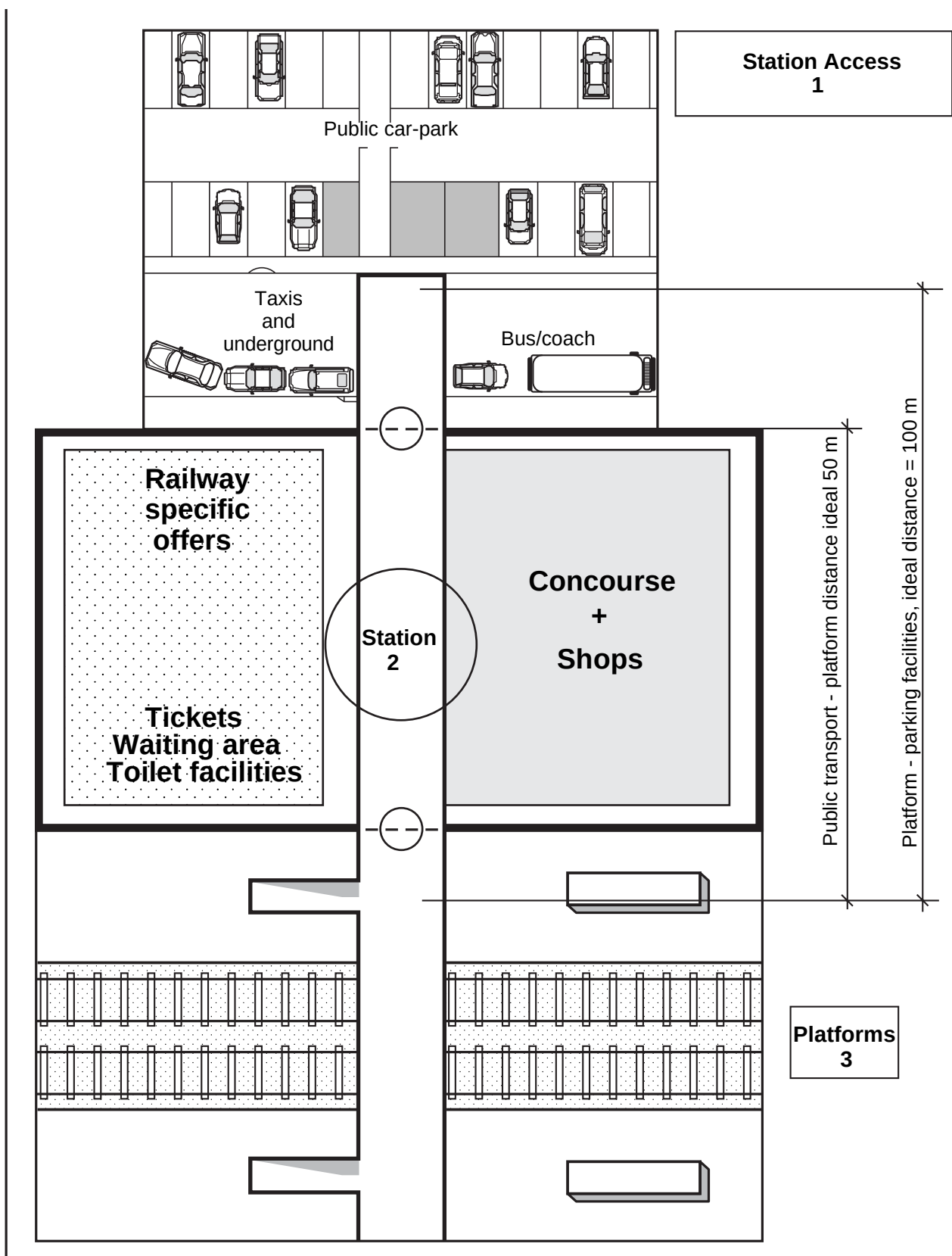
- *by a range of European associations:*

A wide range of disabled persons organisations were consulted.

- *by the European Conference of Ministers of Transport (ECMT)* (see [List of abbreviations - page 42](#)).

The standards used to draft this leaflet have been presented to most of the ministerial bodies in each country and to key associations. **Some have already entered into force.**

2.2 - Station overview



2.3 - Details of station layout

A station comprises four sections:

- station access,
- in-station area,
- platform access,
- general station features.

All these should be obstacle free. All sketches and their standards are presented and explained based on this layout in Appendix [A - page 9](#).

2.3.1 - Station access

- Routes leading to the station concourse should be direct, cutting to a minimum angle, 90° turns and corners.
- It is recommended that boards be placed at station entrances explaining the different paths and routes in the station. Signage to indicate station routes should be printed clearly, simply and in several languages. Extensive use may be made of the pictograms set out in *UIC Leaflet 413* (see [Bibliography - page 44](#)) as they are generally understood by all. Route indicator boards should preferably be lit to make them more visible.
- Lighting must be sufficiently bright. Counters, ticket vending machines and all other special facilities must be clearly indicated.
- Efforts should be made to avoid covering the station concourse with constructions, shops or bike sheds as this clutters up the entrances and impedes visibility of the building as well as the most important signs.

2.3.2 - In the station

The station concourse should be as spacious as possible, well lit and clean.

It may contain:

- a reception and information centre,
- a ticket sales office,
- a waiting zone,
- toilets,
- shops and other services.

It is recommended that the station concourse be designated a no-smoking zone, with smoking areas clearly marked and ashtrays provided.

It is advocated that shops and other facilities be positioned in such a way that they do not:

- block incoming and outgoing passenger flows,
- conceal key station features.

In the long-term, a standardised and clearly-identifiable system should be used in stations. The location of the different shops should be clearly marked in the diagram of the station layout.

2.3.3 - Platform access

Access to platforms is to be made as easy as possible by providing ramps or lifts, tactile guidance strips, signposting and pictograms. Platform edges should be marked with a tactile warning strip.

It is recommended that the distance between the station concourse and the platforms be less than 100 m.

2.3.4 - General station features

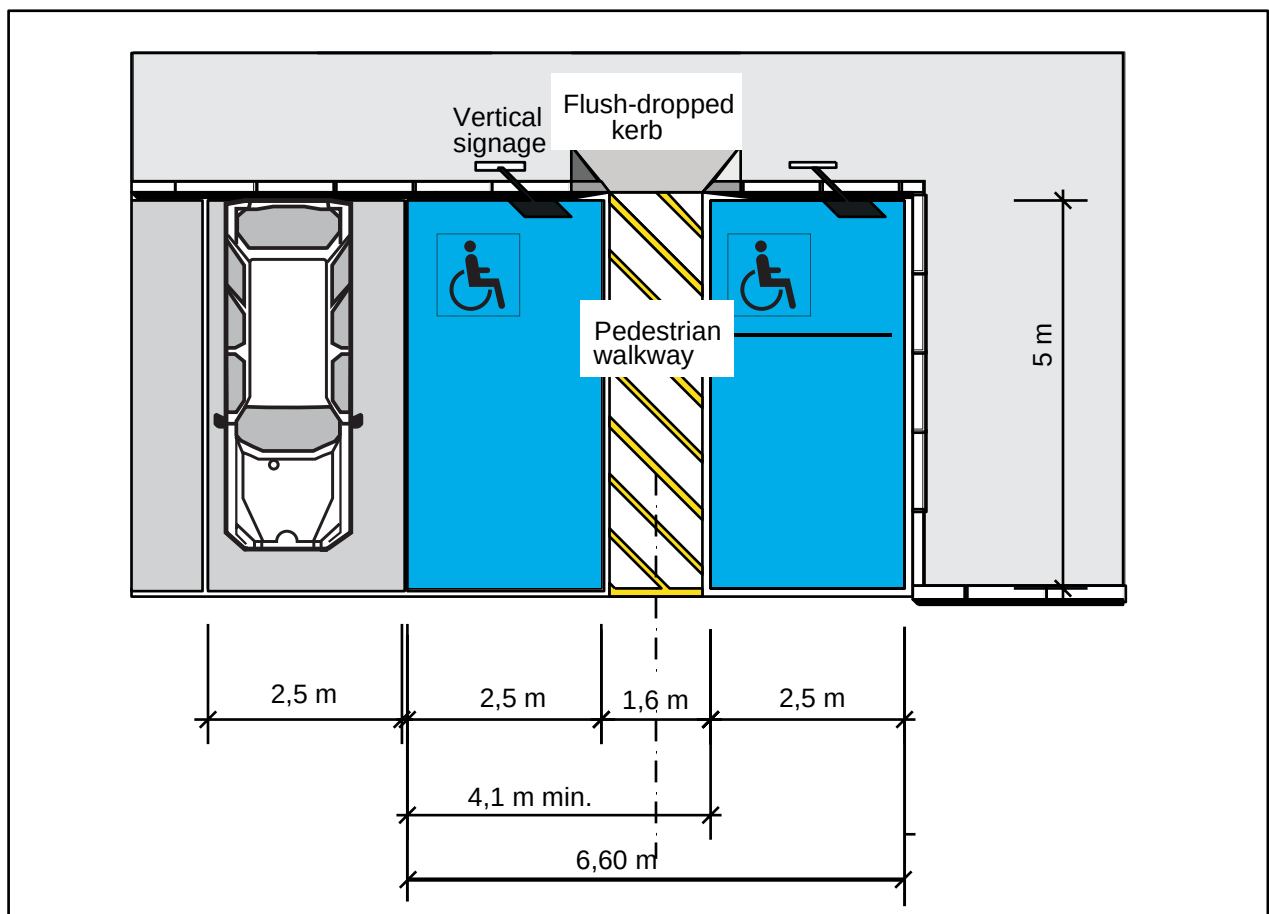
This point describes all common features.

Appendix A - Complete set of sketches and their standards

A.1 - Station access

Reference is made to *DIN 18024* (see Bibliography - page 44).

A.1.1 - Parking spaces for the disabled



It is recommended that the distance from car parks and parking zones to the station concourse should not exceed 150 m or a 5 minute walk.

Disabled persons' parking facilities should be very clearly indicated and may under no circumstances be used for normal parking.

Disabled parking bays must be wide enough to enable transfer between a wheelchair and the vehicle. A gap of at least 1,60 m (width and depth) must be left along the long side of a disabled car-parking bay. If there are several adjacent disabled parking bays, extra room can be gained by accepting the movement area (1,60 m) between both bays. In principle, parking places for cars must be planned in accordance with national regulations. If the disabled parking bay is located at the edge of the pavement, it should be 6,60 m in length.

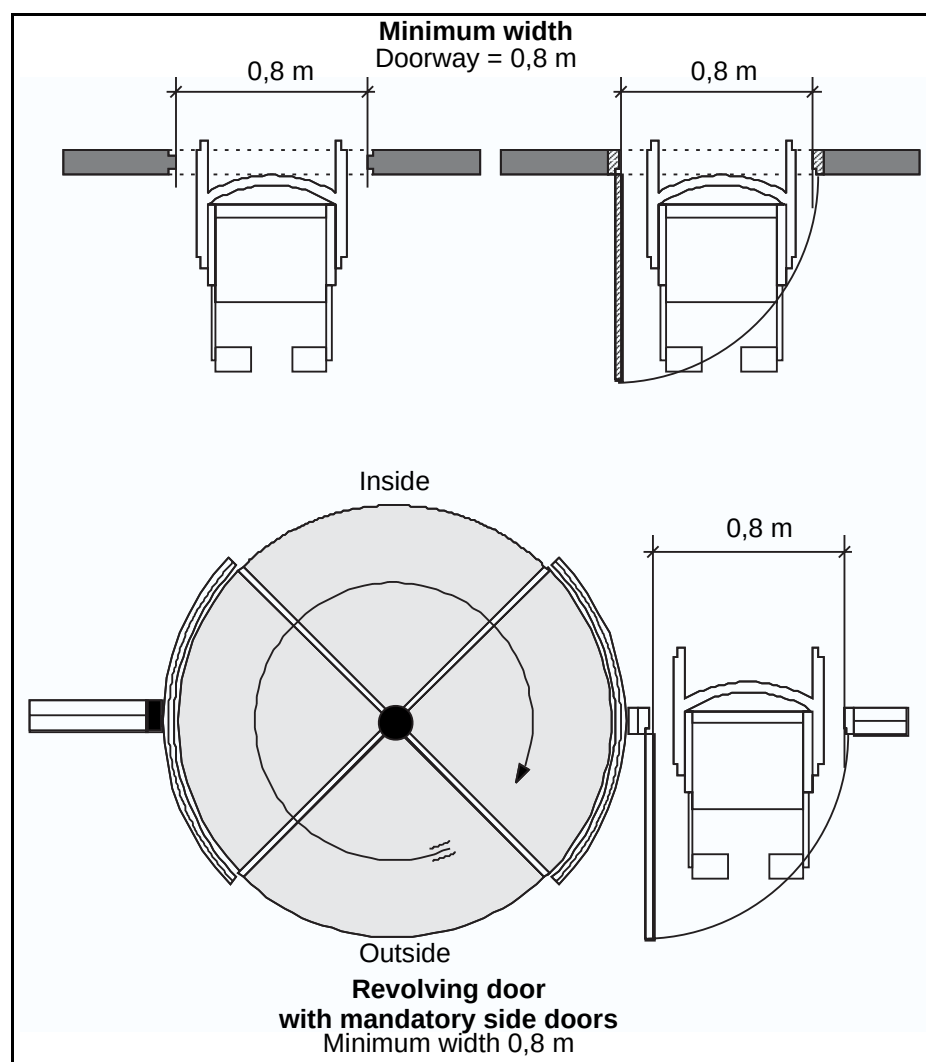
It is suggested that a number of set-down parking spaces be provided, with parking time limited to 20 minutes on average.

All transport modes may be used to carry passengers to and from the station: bus, underground, regional express, taxi, special vehicles, etc.

The distance between the arrival points of these feeder services and the station entrance should be as short as possible.

Bollards: these should be avoided as they represent an obstacle for several customers: the visually-impaired, wheelchair users, elderly people, etc.

A.1.2 - Doors and entrances



According to point 4.1.2.4 of the PRM TSI, doors and entrances shall have a minimum clear opening width of 800 mm, free headroom of 2 100 mm.

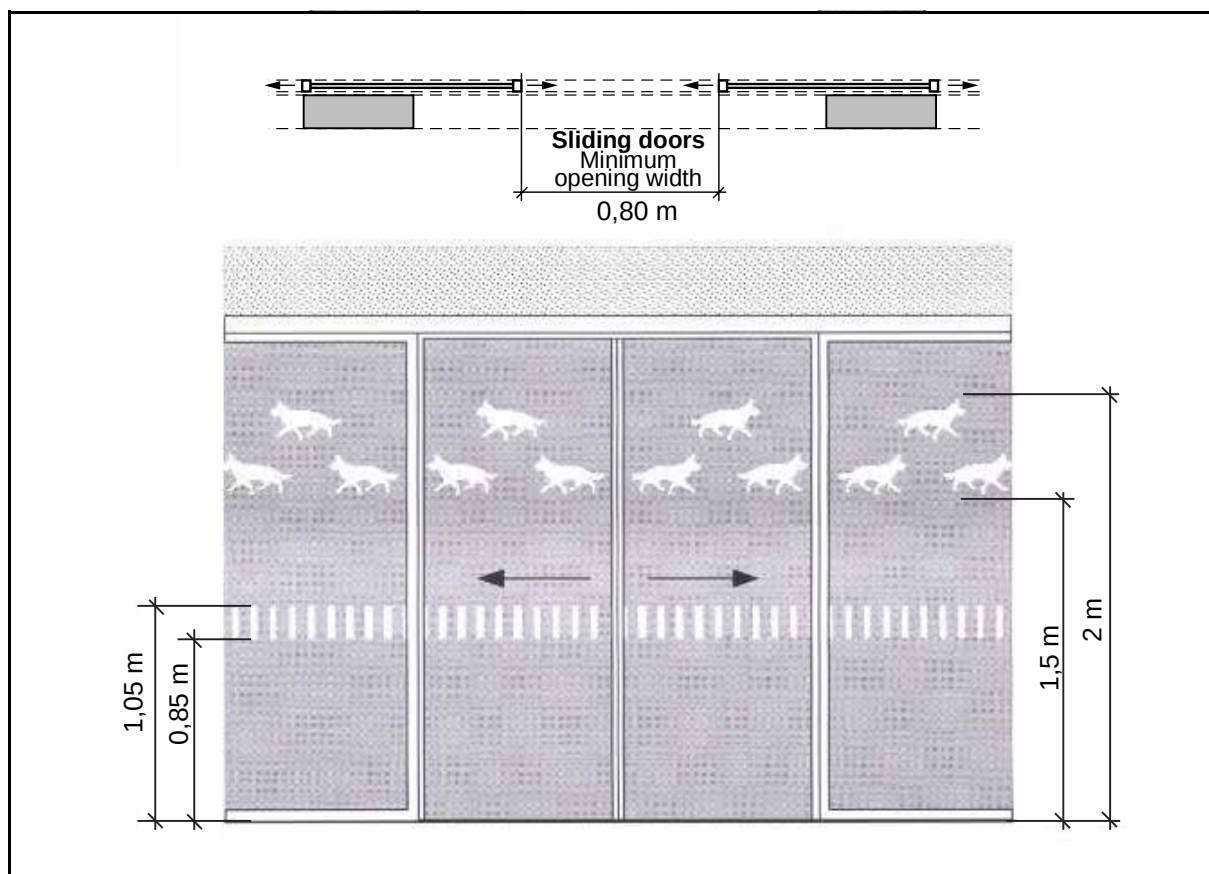
Revolving doors tend to be found in colder countries since they have the advantage of never fully opening the station up to outside air and thus conserving heat. They should however be avoided as they render access difficult for visually-impaired people, wheelchair users, people with bikes or prams etc.

Where such doors exist, **a tactile strip must be fitted on the ground to guide the blind and visually impaired.**

At least 1 manually operable door with a minimum width of 0,80 m must be provided next to the revolving door.

A.2 - In-station area

A.2.1 - Automatic doors



Automatic doors should be made of robust and security glass.

They should slide open automatically to ensure unhindered access for passengers with luggage and wheelchair users. If the sliding mechanism fails, the doors should remain open.

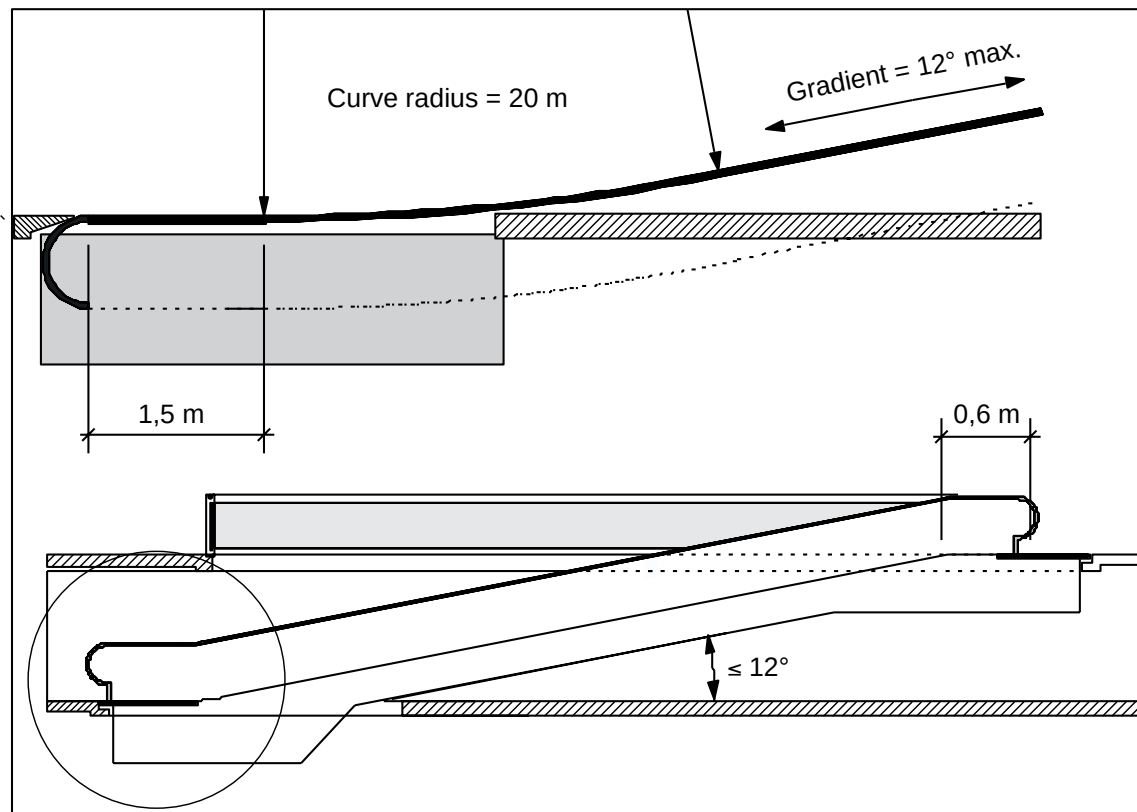
Doors should bear logos or contrasted patterns (signs, decorative figures, etc.) to prevent passengers from banging into the glass surface.

Logos may be affixed at two height ranges: 850 - 1 050 mm on the one hand and 1 500 - 2 000 mm on the other hand. *According to point 4.1.2.6 of the PRM TSI, these markings shall contrast with the background against which they are viewed and be a minimum of 100 mm high.*

Doorways should be at least 800 mm.

These doors may also be found within a station or to provide access to platforms.

A.2.2 - Travelators - Escalators



Travelators

Compliance with the standards set out below is vital. Excessively sharp gradients could cause passengers caught in the upward/downward motion to trip up.

Travelators should have a minimum width of 1 m and non-slip surfaces. A handrail must be fitted between 700 mm and 1 000 mm.

According to TSI point 4.1.2.17, the maximum slope is 12 degrees (21,3 %) and the maximum speed is 0,75 m/sec. The travelators shall be designed in accordance with European or National Rules.