

# The importance of accessibility in the event of disasters (fire evacuation)

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# Overview

- Enter vzw - Flemish center for expertise in accessibility
- Specific needs of people with disabilities during a fire evacuation – conflicts accessibility and evacuation?
- Accessibility and evacuation: equally important
  1. An accessible building
  2. Evacuation procedures and training
  3. Evacuation in multi-storey buildings – *specific solutions?*
- Conclusions

# Enter, Flemish center for expertise in accessibility

➔ Contribute to a coherent policy and inclusive approach by

- inspiring,
- informing,
- promoting Universal Design,
- research,
- projectworking
- together with users, professionals and decision makers



# including accessibility in all domains of life



■ public buildings



■ public space



■ mobility



■ housing



■ healthcare



■ culture and leisure



■ tourism



■ education



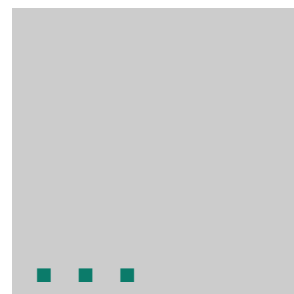
■ green spaces



■ communication



■ sports



## In de kijker

**Open brief: Toegankelijkheid  
gegarandeerd**

**Onze open brief mee  
ondertekenen? Dat kan!**

### Enter nieuwsbrief

Wil je op de hoogte blijven?  
Geef dan hier je e-mail adres.



## Enter vzw, Vlaams Expertisecentrum Toegankelijkheid

Expertise in toegankelijkheid verankeren in diverse domeinen.

**Inspireert, informeert,  
sensibiliseert**

Iedereen kan bij Enter terecht  
voor alle vragen rond  
toegankelijkheid.

**Onderzoekt**

Door in Vlaanderen de vinger  
aan de pols te houden en  
nieuwe  
toegankelijkheidsconcepten  
te ontwikkelen.

**Ondersteunt en werkt  
samen**

We bouwen mee aan een  
daadkrachtig en coherent  
Vlaams  
toegankelijkheidsbeleid.

### Themawebsites

### Publicaties

**Studiedag Onroerend Erfgoed en  
Toegankelijkheid op 28/03**

**Workshop Toegankelijke  
schoolgebouwen op 21/03**

[Volg ons op Facebook »](#)

[Volg ons op Twitter »](#)

## De vele gezichten van toegankelijkheid



Publieke gebouwen



Publieke omgeving



Mobiliteit



Wonen



Zorg



Cultuur en vrije tijd



# Equal Opportunities Flanders (EOF)

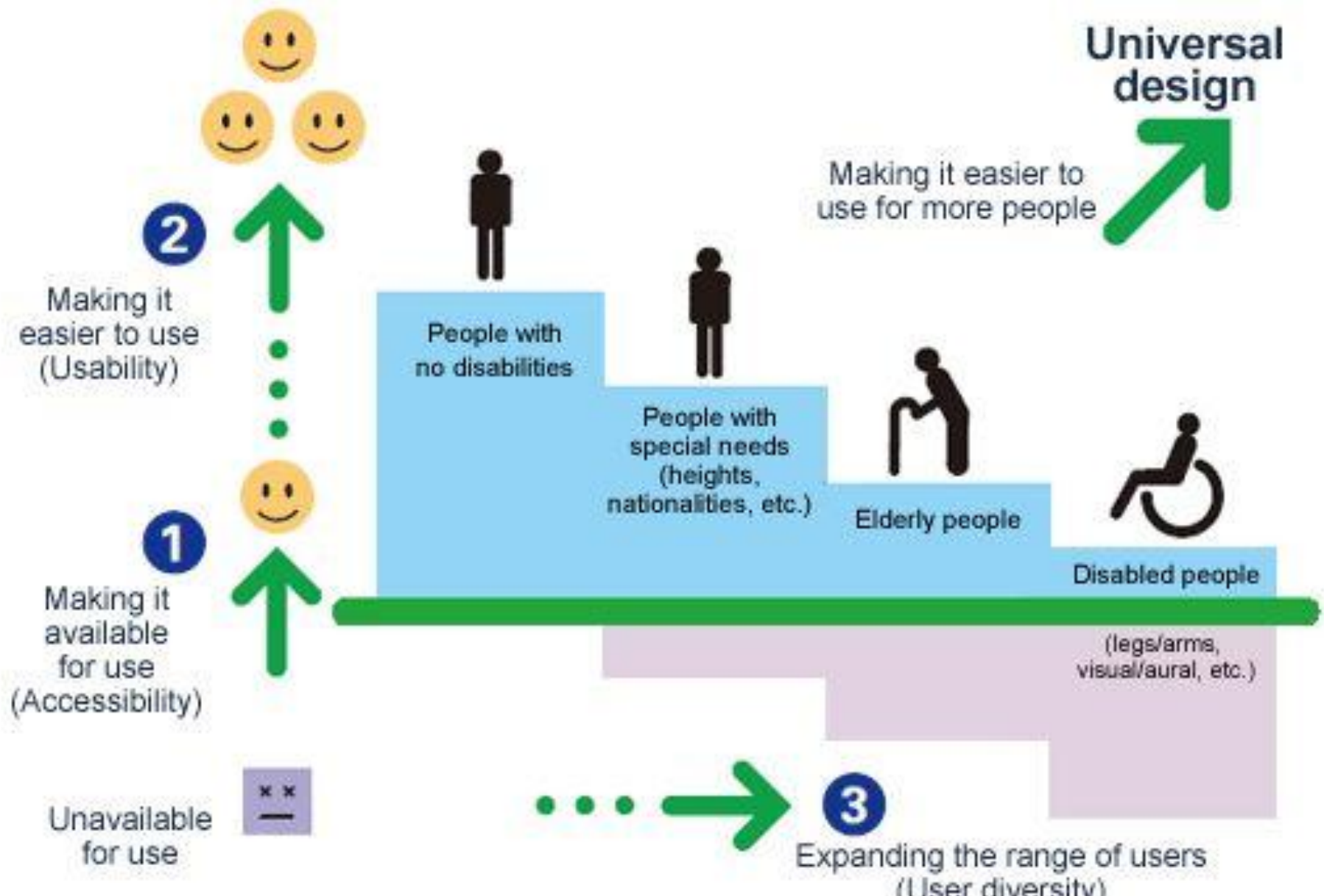
## Open coordination method Equal Opportunities

- **Vertical policy:** Accessibility creates equal opportunities (via legislation, research, publications, tools, cooperation with civil society)
- **Horizontal policy (mainstreaming)**
  - within the Services for General Government Policy
  - coordination of the integration of accessibility perspectives in all Flemish policy fields – open method of coordination
  - Every domain makes an actionplan + budget

# Partner for Flanders policy on accessibility

- 1/5/2015
  - Independent Flemish agency
  - Merge with 5 accessibility organisations
  - Municipalities, provinces, industry
  - events
  - Multi-disciplinary team of 50 persons

# Accessibility by universal design





# Specific needs of people with disabilities during a fire evacuation

## Mobility impairments

- Wheelchair users (independent or with help)
- People with walking difficulties (sometimes with walking stick, aids ...)
- Temporary limitation (broken legg ...)
- People with little stamina/endurance (heart patients ...)

## Needs?

- No heavy doors <=> door pumps for firesafety
- No obstacles (steps, steep slopes , stairs ...)
- Sufficient space to manoeuvre
- Accessible (reachable) elements such as fire alarm ...
- Banisters
- Rest areas



# Specific needs of people with disabilities during a fire evacuation

## Visual impairments

The visibility is limited or non existent.

### Needs?

- Braille, strongly contrasting colors for signalisation, sound ...
- Good wayfinding - transparent (to avoid orientation problems) and stable (modifying spaces as little as possible) structure



# Specific needs of people with disabilities during a fire evacuation

## Hearing impairment

Deaf, hard of hearing ...

Needs?

- Combination of the auditive signal with a light signal or tactile signal (vibration)



# Specific needs of people with disabilities during a fire evacuation

## Mental / cognitive disabilities

Mental or cognitive problems due to handicap but also ... stress-situations, autism, dementia, confused, not knowing the building ...

### Needs?

- Simple information
- Transparent logical structure (to avoid orientation problems)



# Accessibility and evacuation

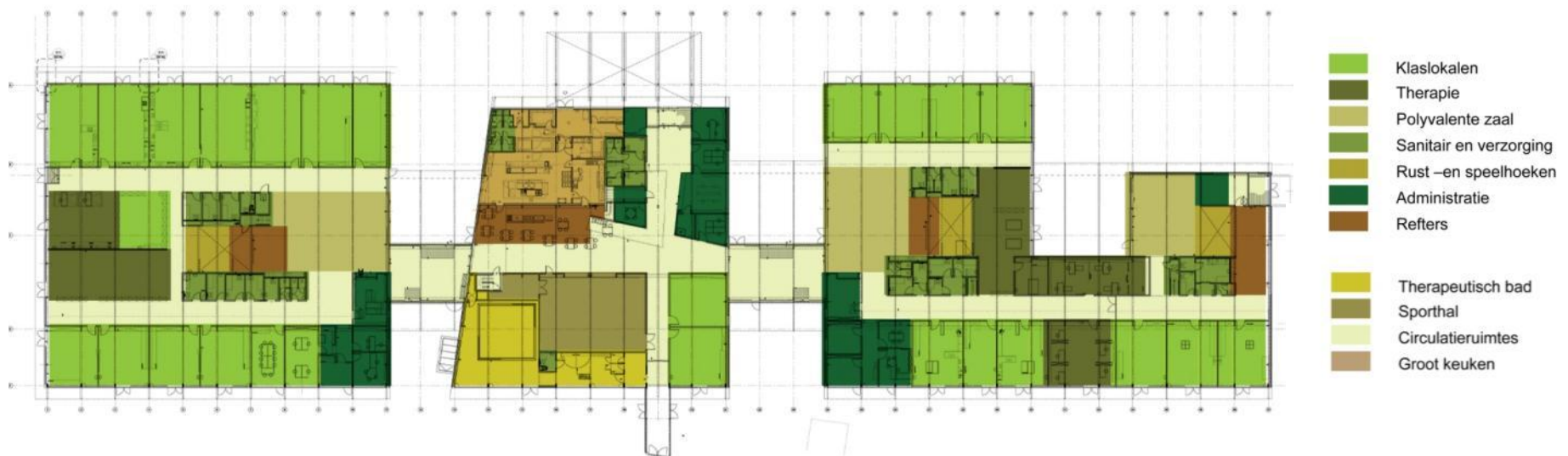
equally important

1. Including evacuation / accessibility in the concept building
2. Evacuation procedures and training
3. Specific solutions

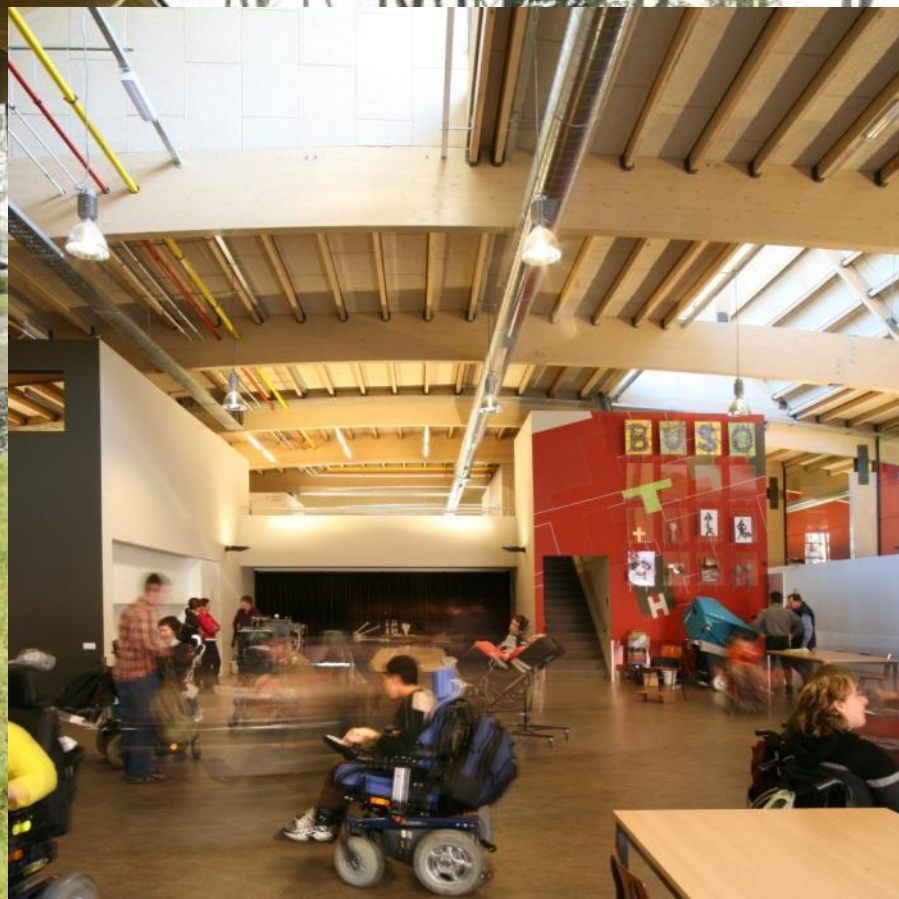
# Accessibility and evacuation

## 1. The building should be accessible for all -> accessible design

Sint-Gerardus Diepenbeek  
school for children with motor impairments







# Accessibility and evacuation

## 1. The building should be accessible for all -> accessible design

The regulation on accessibility in Flanders gives a basis for accessibility in public buildings – linked to the building permit

Regional Planning Regulation accessibility (1/3/2010)

- Public buildings (>150m<sup>2</sup>) must be accessible on the ground floor and all other floors
- Other floors are mostly accessible by elevator

**But!**

- Evacuation is not included in the regulation – only the accessibility



# Accessibility and evacuation

## 2. Evacuation procedures and training

- an evacuation plan including people with a disability
- clear procedures
- training and exercises
- presence of trained personnel is essential.





# Accessibility and evacuation

## 3. Evacuation in multi-storey buildings –specific solutions?

*Principle: the use of the elevator is not allowed*

Solutions?

- lift with priority call for fireman

Alternatives

- Evacuation through a wall opening or waiting terrace
- Horizontal evacuation
- Waiting zone
- Evacuation by stairs with evacuation chairs



# Evacuation in multi-storey buildings

## Lift priority call

### Additional building requirements (fire prevention standards)

- a room before the elevator with self-closing or in case of fire self-closing doors
    - ! Self closing doors should be easily opened by wheelchair users
  - The elevator cage is accessible for minimum 1 wheelchair user and 1 accompany (min. 1,1 m (W) x 1,4 m (D))
  - Elevator doors automatically open and close – with min. 80cm
  - emergency electrical power and fire resistance of the electrical wiring
- > expensive solution -> 4 alternatives



# Evacuation in multi-storey buildings

## Alternative 1: evacuation through a wall opening or waiting terrace

- The terrace must be sufficient and accessible to persons with disabilities.
- Only applicable for low and mid-rise buildings
- Only applicable for a small number of people with reduced mobility (eg. Apartments)





# Evacuation in multi-storey buildings

## Alternative 2: horizontal evacuation to an other compartment

- People with disabilities can reach (without stairs) an other (fire)compartment in the building
- The (fire)compartment should be a safe place



# Evacuation in multi-storey buildings

## Alternative 3: waiting zone

= protected areas where a person can wait briefly until help arrives.

- The evacuation plan is essential.
- There is a bidirectional communication system.
- A waiting area is NOT an area where people with disabilities can be left until help turns up.



# Evacuation in multi-storey buildings

## Alternative 3: waiting zone

- The person in the waiting area must be constantly informed of the situation and assured that necessary actions are taken for his evacuation.
- The waiting areas have adequate fire protection.
- The waiting areas can't reduce the width of the escape routes. A minimum width is guaranteed.
- only applicable for low and mid-rise buildings AND for a small number of people with reduced mobility (eg. Apartments)



# Vertical evacuation in a building

## Alternative 4: evacuation by stairs with evacuation chairs

- For this alternative each person with a disability must be accompanied by an able-bodied person who has been trained to operate an evac-chair.
- The preparation of an evacuation plan and a permanent presence of trained personnel is essential.
- only applicable for low and mid-rise buildings
- only applicable for a small number of people with reduced mobility (eg. Apartments)



# Conclusions

- Include evacuation and accessibility from the design of a building
- Tailormade solutions : cooperation between Accessibility Expert & expert on firesafety
- Fire safety can't be an alibi for excluding people



# Rolstoelgebruikers niet meer toegelaten in aantal zalen Kinopolis

29/04/2011 om 08:42 door ffranckx

 Print



Rolstoelgebruikers niet meer toegelaten in aantal zalen Kinopolis

Dat komt omdat rolstoelgebruikers sinds kort niet meer worden toegelaten in een aantal filmzalen. Als reden voor de maatregel roept Kinopolis Group de brandveiligheid in: "Rolstoelgebruikers kunnen de filmzalen zonder rolstoelhelling niet langer per lift bereiken. Indien er brand uitbreekt, mag de lift immers niet gebruikt worden", klinkt het.

## Website

"Het klopt dat vier van onze veertien filmzalen in Hasselt niet langer toegankelijk zijn voor rolstoelgebruikers", bevestigt Myriam

Dassonville van de Kinopolis Group.

Ze benadrukt dat de nieuwe maatregel niet tot gevolg heeft dat rolstoelgebruikers sommige films uit het aanbod niet meer zouden kunnen bekijken. "De films worden niet toegewezen aan een bepaalde zaal. De programmatie wijzigt regelmatig. Op de website vinden ze wanneer welke films in welke zalen draaien en of die zalen voor hen toegankelijk zijn."

Maar zo eenvoudig is het voor Mieke niet. "Omdat ik in een rolstoel zit, is een verplaatsing voor mij niet evident. Ik kan niet gaan en staan waar en wanneer ik wil. Ik moet daarvoor beroep doen op familie of vrienden."



# Thank you!

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