

Method to Evaluate Accessibility in Built Environment

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Abstract. Accessibility is not an opinion. It is an agreement. Accessibility can also be measured. But how to measure it? The method ESKEH gives the guidelines for trained accessibility auditors to evaluate accessibility in built environment.

Keywords. Accessibility, accessibility audit, built environment, evaluation method

Introduction

An accessible environment means independence and equality, and it reduces the risk of accidents. Accessibility is a necessity for people with a disability, but everyone benefits from it. Also, the rapidly aging population increases the need for accessibility. Accessibility is good basic solutions and the indicator of a well-functioning society. We need reliable information concerning accessibility.

1. The evaluation method ESKEH

The method ESKEH was created in 2007–2009 at the Finnish Association of People with Physical Disabilities. Earlier accessibility was evaluated in many different ways depending on the evaluator's background, knowledge and experience, and leading to varying results. A commonly agreed method and criteria to evaluate the accessibility of built environment was needed, instead of using nearly 20 different check-lists. ESKEH provides factual information on accessibility. This information is valuable to be able to make cognizant decisions e.g. when planning the renovation of a building.

At the end of the project the content for a training program for accessibility evaluators was planned. The first course was organized together with Metropolia university of applied sciences. Today three other Finnish universities run this course.

2. Wide co-operation was needed

A wide range of disability, elderly and cultural organizations, ministries, authorities and institutes were represented in the steering and working groups of the project. During the project the method was tested and commented by many more organizations.

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3. Building regulations as the base – a common agreement was needed

The basis of the criteria in ESKEH are Finnish building regulations. They are quite general, including few real orders or exact information. They are based more on the idea that architects and other planners know how to do.

Finnish and foreign check-lists, guidelines and good practices were studied to set the criteria. The working group consisted of organizations having own guidelines and check-lists, and it was extended with others to guarantee the wide view on accessibility and equality. These are e.g. various disability and elderly organizations, ministries, the Finnish Association of Architects, National Institute for Health and Welfare etc.

Each of over 2000 criteria had to be agreed on. This is where all the wide knowledge and consensus were needed: how should good contrasts be defined, how long must a lift's door stay open, how the accessibility of a toilet should be measured etc.

4. Accessibility can be measured

Every criterion can be measured. Every time a new criterion was added the measuring method was considered, as well. E.g. how to measure the exact height of a threshold or how much force is needed to open a door? The tools for measuring sensory environment can be expensive and complex to use. Simple methods of observing the quality of acoustics and visual environment are given in ESKEH.

5. The manual

"How to Evaluate the Accessibility of Built Environment" is a manual for both trained accessibility auditors and for those who need it. It includes four parts: the introduction, instructions for clients ordering accessibility audits, instructions for auditors and a model report. It also includes main accessibility legislation and some vocabulary.

The instructions for auditors concerns preparations, information about tools and accessories, instructions for measuring (acoustics, visual environment, guiding, walking and green areas, entrance, moving indoors, facilities, fire safety and accessibility) as well as reporting. The result is reported in a tabular form including proposals how to improve accessibility, what is their urgency, is there any danger etc. All results are compared every time to the criteria.

6. ESKEH – continuing development

Since the method was developed it has been extended to include new types of facilities. Last year the criteria for sports facilities were included. It will be followed this year by the accessibility criteria for nature trails.

References

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