

SUMMARY



Foto: Kristin Andréé

Evaluation of Refuge Areas for People with Reduced Mobility

Safe refuge areas have been included in the Swedish National Board of Housing, Building and Planning's building regulations since 2011 as an evacuation solution for persons with reduced mobility when it is not possible to evacuate to a safe place from a public space. The Swedish Work Environment Authority's regulations on Workplace Design require temporary evacuation places to the same extent as evacuation routes from an accessible workplace in cases where it is not possible to evacuate to a safe place.

Purpose and Objectives

The main aim of this study is to enhance understanding regarding the design of safe refuge areas concerning the selection of two-way communication, placement within buildings, signage, and their accessibility. Additionally, the study aims to investigate the extent to which these points might be utilized during a fire evacuation and to examine how intended users perceive the environment at the safe refuge area.

The goal is to evaluate safe refuge area based on user-friendliness and design in accordance with user needs. Furthermore, the goal is, based on the new knowledge gained, to provide a recommendation on how evacuation points should be designed to meet the needs of users. The objective is for the recommendation to lead to a uniform and accessible design of safe refuge area.

Methods

Statistical data has been gathered to examine how often safe refuge areas have been used during evacuations. An inventory has been

conducted to study how existing safe refuge areas have been designed in terms of accessibility, signage, type of two-way

communication, and placement. A survey with hypothetical scenarios has been conducted to gain insight into what intended users think about safe refuge areas. Additionally, a semantic environmental assessment has been conducted to further increase understanding of how intended users perceive the environment at the safe refuge area.

Results

There is a need for a uniform design of safe refuge areas where accessibility is ensured. A result of the project is a recommendation for the design. Information for intended users' needs to be distributed to increase awareness of the concept. The safe refuge areas should be included in operation and maintenance plans similar to evacuation routes and fire alarms.

RESEARCH TEAM

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