

# **ANALYSING THE ACCESSIBILITY OF A NURSING HOME**

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Abstract		
<p>The goal of this thesis was to analyze the accessibility of a nursing home. This thesis and the accompanying analysis dealt with nursing home Villa Toukola, which is part of the Attendo chain of healthcare providers. The theoretical part of this thesis discusses the nursing home facilities themselves, accessibility requirements in the nursing homes and the functional capacity of nursing home customers.</p> <p>The accessibility analysis of the nursing home was performed using the accessibility checklists provided by the Finnish Association of People with Physical Disabilities. The checklists used are included in Appendix 1.</p> <p>The results of the analysis indicate that the accessibility of Villa Toukola was up to the latest standards as could be expected of a new facility. Recommendations also arose from the analysis, which can be implemented to develop the accessibility even further. The results as well as the general recommendations for analyzing nursing home accessibility can be used by enterprises that have a base of elderly customers to analyze and develop their facilities and services to meet the requirements of the clientele.</p>		
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<p>Tämän opinnäytetyön tarkoitus oli analysoida hoivakodin esteettömyyttä. Opinnäytetyön ja esteettömyysanalyysi toteutettiin hoivakoti Villa Toukolalle, joka on osa Attendo Oy:tä. Opinnäytetyön teoriaosa käsitteli hoivakotien toimitiloja, niiden esteettömyysvaatimuksia ja asukkaiden toimintakykyä.</p> <p>Hoivakodin esteettömyyttä analysoitiin käyttämällä Invalidiliiton tuottamia esteettömyyden tarkastuslistoja. Käytetyt tarkastuslistat löytyvät opinnäytetyön lopusta liitteestä 1.</p> <p>Tutkimuksen tulokset osoittavat, että Villa Toukolan esteettömyys vastaa tämänhetkisiä esteettömyysvaatimuksia. Analyysin tuloksista nousi kuitenkin esiiin kehitysehdotuksia, joilla toimitilan esteettömyyttä voitaisiin kehittää entisestään.</p> <p>Analyysin tuloksia, sekä listattuja yleisiä ehdotuksia voidaan käyttää sekä vanhainkotien, että muiden toimitilojen esteettömyyden analysoitiin ja kehitykseen. Ehdotukset sopivat erityisesti toimitiloihin, joiden asiakaskuntaan kuuluu paljon ikäihmisiä.</p>		
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## 1. Introduction

The number of elderly people that require around the clock care is currently increasing in Finland. This is mostly due to increased life expectancy caused by the advancements in the fields of medicine, improved living conditions and healthier lifestyle choices as well as the high birth rates after the Second World War. The elderly people that currently inhabit the nursing homes are old and have various physical and mental disabilities. Physical disabilities and mental disorders often cause the functional capacity on an elderly person to decrease. The decreasing functional capacity lowers a person's ability to participate in previously normal daily activities and eventually even the fundamental activities of daily living.

Accessibility helps decrease the barriers that limit a person with a decreased functional capacity from managing the daily activities and is therefore needed to support the ageing population. Accessibility can be used to remove barriers, promote self sufficiency and independency, reduce risks of accidents and therefore affect the overall wellbeing of nursing home customers.

The aim of this thesis is to study the accessibility requirements of nursing home customers and analyze the accessibility of nursing home Villa Toukola based on those requirements. The goal of the analysis is to provide the facility with precise data on the current accessibility of the facility and point out possible improvements towards a more accessible nursing home.

The theory part of this thesis studies the functional capacity of nursing home customers and their requirements towards accessibility. The information about the functional capacity of nursing home customers was gathered from research data, studies and articles. The information about the functional

capacity of nursing home Villa Toukola's customers was gathered by interviewing the director of the nursing home. This method of data gathering was chosen mostly because the nursing home customers are for most part unable to answer to questionnaires or interviews coherently due to memory disorders.

The second part of this thesis includes the accessibility analysis of the nursing home Villa Toukola. The analysis was conducted with the accessibility analysis checklists produced by the Finnish Association of People with Physical Disabilities (FPD) (Appendix 1). The analysis measures the accessibility through precise measurements, observations and estimations which are backed up by the provided instructions.

The third part of this thesis presents the findings of the accessibility analysis. The findings are then compared to the optimal and recommended circumstances. The results are also elaborated through pictures taken off the accessibility features. The results are also supplemented with recommendations that can be utilized to further increase the accessibility of nursing homes or other businesses that have a large segment of elderly customers.

The future changes in the population structure of Finland increases the need of research and development in the field of elderly care. The ageing population presents an unprecedented pressure on the government to keep service quality levels high while having to provide the services for a much larger segment of the population. The topic of nursing home accessibility combines the author's interests in social sustainability with the degree program of facility management as well as his future goal of working in the healthcare industry. The author was also able to utilize his knowledge of customer oriented service design in the thesis.

## **2. Nursing Home Villa Toukola**

The client of this thesis is nursing home Villa Toukola. Villa Toukola is a part of Attendo Oy which is a private healthcare and social services company that was originally founded in Sweden in 1987 and branched out to Finland in 2000. Attendo currently employs around 6300 people in Finland and is one of the largest private healthcare providers in the country with 410 mil € revenue in Finland in the year 2014.

Villa Toukola itself is a new facility as it was built in 2011 and it is located just outside of the town centre of Alajärvi in southern Ostrobothnia in Finland. The nursing home rests in a quiet area surrounded by mostly woods and a few detached houses down the road. The nursing home has 29 individual rooms as well as two rooms that can accommodate two people. The nursing home is comprised of two group homes. Both of the group homes have a central dining and living room area as well as a terrace. The facility also has a shared bathing and sauna area, a facility kitchen where the meals for the customers are prepared as well as administrative and social facilities for the staff. The individual customer rooms are 20.1-20.4m<sup>2</sup> and include a private bathroom in each room. The twin rooms are 25m<sup>2</sup> also with a private bathroom. (Attendo Oy website)

As an around the clock nursing home Villa Toukola's customers are mostly very old and have multiple illnesses that lower their functional capacity so much that they require around the clock care and surveillance. The facility currently has (as of 18.9.2015) 31 customers, 17 in the group home Impivaara and 14 in the group home Jukola which are both named after famous places in the traditional Finnish epic Kalevala. Out of the 31 customers 11 are using a wheelchair, 17 are using a wheeled walking aid and

2 are not using any walking aids. Out of the 31 customers 29 are suffering from diseases that lower their functional capacity. (Interview with the manager of the nursing home Tellervo Saukko)

Attendo Oy has strong company vision – empowering the individual which incorporates a lot the elements of accessibility such as being able to participate and to be heard, being encouraged towards independency, safety and increased quality of life. All of these goals can be supported by through an accessible facility. Attendo's core values also have a lot of accessibility related points such as individuality of the customer, quality of service, attention to details, safety and security. (Attendo Oy website)

Attendo also has a strong emphasis on quality. The company has a quality policy which states that the customer is at the center of the operation. Accessibility is in its essence about acknowledging and fulfilling the individual needs of the customers.

### **3. Ageing Population**

As discussed in the introduction the number of elderly people with a low functional capacity in Finland is increasing rapidly. The next segment of the thesis presents the data about the ageing population and changes in the dependency ratio. These changes are at the core of why we require development in the field of elderly care.

#### **Demographic Changes and Projections**

The population of Finland is aging rapidly. According to the statistics center of Finland the percentage of people over the age of 65 in the population is now 19.4%, 15% up from the year 2000 and estimated to reach 25.6% by the year

2030 at which point it will stay at that level for the next decade as shown in figure 1. The portion of over 85-year olds in the population is projected to reach 6.1 % by 2040 up from 1.8 in 2009. (Statistics Center of Finland, Population. 2015)

	<b>Unit</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>
Population	1 000	5 631	5 848	5 985	6 096	6 228
0–14 v.	%	16,6	16,0	15,4	15,4	15,2
15–64 v.	%	60,8	58,4	58,4	57,7	56,6
65– v.	%	22,6	25,6	26,2	26,9	28,2

Figure 1. Population Projection in Finland (Statistics Center of Finland, Demographic statistics, 2015)

As the life expectancy of the population becomes higher half of the additional years will be healthy years. (Vaarama M, Moisio P, Karvonen S. 2010).

Nevertheless illnesses that lower the functional capacity such as dementia will increase substantially due to the ageing of the population which lead to an increasing demand of around the clock care if no major discoveries regarding the illnesses occur. The oldest age groups have also grown the fastest in recent decades for example the number of over 90 year olds increased by 73% from 1990 to 2000. (Heikkinen E. 2005)

### **The Dependency Ratio**

The dependency ratio signifies the ratio of people under the age of 15 and older than 64 to the working-age population which is the 15 to 64 year-olds. The dependency ratio indicates the possible changes in the social and economical trends and support requirements of a population. Children under the age of 15 and elderly people over the age of 65 are usually the groups that require the most social and healthcare services and are economically dependent on the working population. The growing segment of elderly people implies that increasing investments need to be made in social services and elderly care systems in the future. (The Statistics Center of Finland. 2009)

Figure 2 displays the changes in the dependency ratio in Finland as well as the projections until 2060. It is important to note that this is a crude approximation and does not take into account people who are financially independent before the age of 15 and after 65. The projected change in the dependency ratio does however present an unprecedented pressure for healthcare and social services for the elderly as the amount of money from taxes decreases relative to the number of people actively using those services. (The Statistics Center of Finland. 2009)

**Figure 2. Dependency ratio 1940-2060. (Statistics Centre of Finland)**

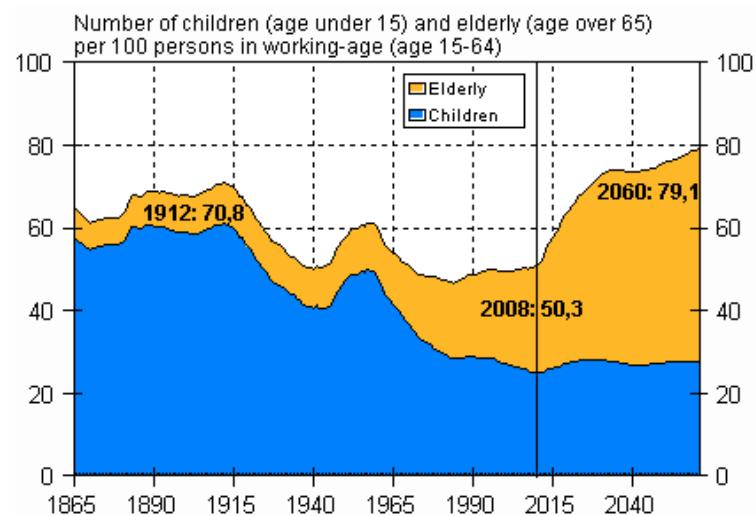


Figure 2. Dependency ratio 1940-2060. (Statistics Centre of Finland. 2009)

The ageing population as well as the morbidity rate and the growing dependency ratio are all parts of the topicality of this thesis. Accessibility can have a positive effect on the available resources of the elderly care industry in general while providing higher quality service for the users. Accessibility can also positively affect the wellbeing of the nursing home customer and reduce the risk of costly accidents.

### **Cost of Elderly Care**

Approximately one third of the funds targeted towards social and welfare services are used for elderly care and the majority of this amount is used for various institutional care services. The increasing dependency ratio in addition to the increased life expectancy increases the demand for changes in the system and the government in Finland has been rolling out new acts in the past years to address that. (Niiranen P. 2013, 16)

## **4. Functional Capacity of Elderly People**

Functional capacity signifies a person's physical, psychological and social capabilities to perform the daily tasks that are of significance to that person in the environment that he or she lives in. Functional capacity is in its essence a balance between the abilities, health condition and environmental factors and the aspirations the person has for his or her daily living. A person's functional capacity is affected by the environment in both a positive and negative way.

(National Institute for Health and Welfare (THL) –website. 2015)

Functional capacity is a multidimensional concept and there are various different ways to structure it. One of the more commonly used methods is dividing the functional capacity into physical, psychological, cognitive and social dimensions.

### **Physical Functional Capacity**

Physical functional capacity signifies a person's ability to perform the physical daily activities that are of importance to him or her. Physical functional capacity consists of actions such as endurance and muscular strength, movement of joints and limbs, control of posture and motion and the control

over the central nervous system that affects all of these things. Senses like hearing and seeing are also an important part of physical functional capacity. (Koskinen S, Lundqvist A, Ristiluoma N. 2012, 120)

Physical functional capacity is also divided into: instrumental activities of daily living (IADL) and activities of daily living (ADL) functions. IADL-functions include for example preparing meals, going shopping, using a phone and so on. ADL-functions are then the basic functions such as managing personal hygiene, dressing up, eating and moving around. Both ADL and IADL functions are measured with various tools such as Bathel, FIM, Katz, RaVa and the RAI-system. (Finne-Soveri H. 2013)

### **Psychological Functional Capacity**

Psychological functional capacity consists of the person's psychological wellbeing, mental health, control over one's life and the mental resources a person has to cope with the individually significant daily activities.

Psychological functional capacity includes for example the ability to feel, to receive and process information, to experience and create impressions of the surrounding environment and the ability to plan and take part in decisions that involve the life of the individual. It is also important to make a distinction between psychological and cognitive levels of functional capacity. While cognitive functions such as processing information are essential to the psychological functional capacity the cognitive functional capacity is studied as its own dimension. (THL –website. 2015)

### **Cognitive Functional Capacity**

Cognitive functional capacity signifies a person's ability to process information to be able to perform the daily activities. Cognitive functions are, as previously mentioned psychological functions that relate to the gathering, processing, storing and using of information to perform the desired activities. Areas of cognitive functions are for example learning, concentration, observation,

problem solving, memory and linguistic functions such as producing speech. (Tuulio-Henriksson A. 2011, 1)

Cognitive functional capacity is accessed through interviews and observations in addition to cognitive function tests. Early stages of memory disorders and dementia are measured for example with the CERAD –test. Some of the more common cognitive tests include CDR, MMSE and RAI-system's CPS. (Finne-Soveri H. 2013)

### **Social Functional Capacity**

Social functional capacity is comprised of an individual's social skills, temperament, motive, goals and values in interaction with the social network, community and society. Social functional capacity manifests in a person taking part in the social endeavors of the social network, community or society.

(Tiikkanen P, Heikkinen R. 2011, 1)

Social functional capacity is closely linked with all of the other dimensions of functional capacity. As the other dimensions deteriorate social functional capacity often also takes a negative effect. (Finne-Soveri H. 2013)

### **ICF Classification**

The International Classification of Functioning, Disability and Health (ICF) is a framework created by the World Health Organization (WHO) in 2001. The framework is intended for organizing and documenting information regarding functional capacity and disability. The ICF's concept of functioning is the "*dynamic interactions between a person's health condition, environmental factors and personal factors.*" (WHO. 2013, 3)

The ICF classification does not make a clear distinction between various health conditions but instead sets all health conditions on an equal level and mainly looks at them in how they affect the functional capacity and disability of

the individual. However the ICF does recognize the role of the environmental factors in creating disability or improving the functional capacity of a person. The ICF classification can be divided into two parts: part one regards functional capacity and disability and part two the contextual factors. Both of these segments also have two sub segments. Part one has (i) body functions and body structures and (ii) activities and participation. Part two has (i) environmental factors and (ii) personal factors. The components and their interactions are presented in figure 3. (WHO. 2013. 3-5)

**Figure 3. The ICF Model: Interaction between ICF components**

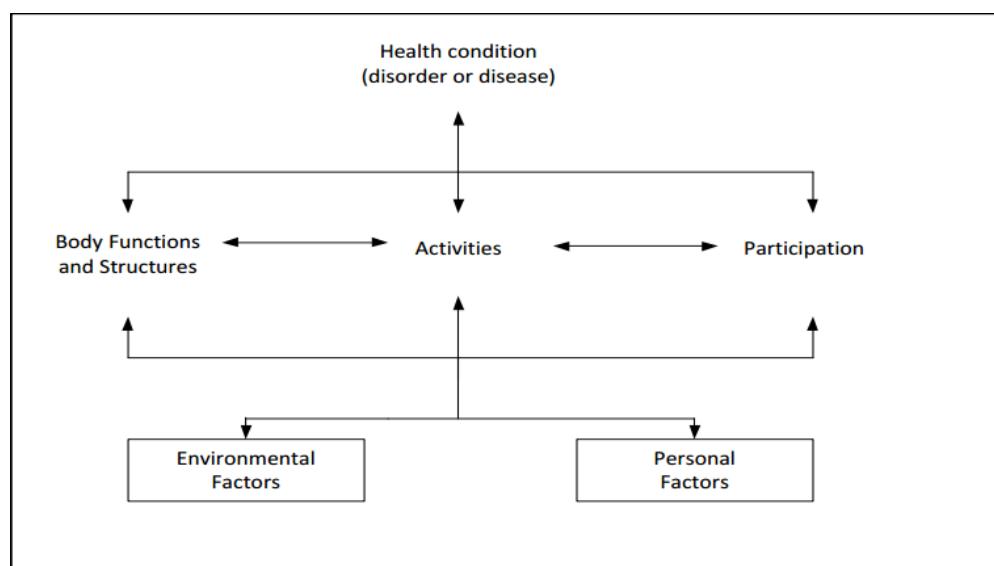


Figure 3. The ICF Model: Interaction between ICF components. (WHO. 2013, 5)

### **The Affect of Ageing on the Functional Capacity**

The ageing process and the changes in the functional capacity are individual and the different components of functional capacity do not change simultaneously. Ageing affects every person differently and changes in the areas of functional capacity happen during different times. (Heikkinen E. 2005)

In situations where there are no diseases present the deterioration of the physical and psychological abilities is also common which in turn restricts the lifestyle of the person and makes independent actions harder. Studies have shown that diseases and the deterioration of body functions can be prevented or slowed down by proactive measures such as rehabilitation. Accessibility can also be categorized as a proactive measure. Improving the functional capacity of an elderly person through a more accessible environment can have positive effects in all of the areas of functional capacity. (Heikkinen E. 2005)

The aim of the health policy in Finland is to maintain the health and functional capacity of the older segments of the population in a state that allows independent living for as long as possible. There has been positive development due to lifestyle changes as well as developments in the healthcare industry but nevertheless old ages comes with increased morbidity and decreasing functional capacity. (Heikkinen E. 2005)

## **Functional Capacity of Nursing Home Customers**

Most nursing home patients are going to spend the rest of their lives one facility making it in a sense their home and entire world. In most cases the functional capacity of the user will deteriorate during the time they spend in a nursing home. Facilities can impact the issue by either accelerating or reducing the rate of which the users' mental and physical abilities deteriorate.

(Carr R. 2011)

Nursing home customers often suffer from diseases that lower their functional capacity. Some of the most common diseases include memory disorders such as dementia and Alzheimer's disease, cardiovascular diseases including strokes, diabetes, backwash from a hip injury and other psychiatric diseases irrespective of memory disorders. (Finne-Soveri H. 2009)

This next section will present some of the most common issues that impact on the functional capacity of nursing home customers.

### **Dementia**

Dementia is a memory disorder that decreases the person's ability to learn new or recollect previously learned information. Dementia also often causes issues with producing speech such as aphasia as well as problems understanding the meaning of seen things. Dementia can, depending on its origin be either temporary, progressive or permanent. (Huttunen M. 2014)

Dementia is a common reason why an elderly person might be subject to institutional care. The most common reason why a demented person needs around to the clock care is behavioral symptoms and especially aggressive behavior. Some of the other common reasons include loss of physical functional abilities, nocturnal restlessness as well as being unable to perform the basic ADL-functions. (Sulkava R. 2010)

Dementia is common among the ageing population. Statistically 10% of 75-84 year olds suffer from dementia and around a third of over 85 year olds have moderate or difficult symptoms of dementia. (Sukava R. 2005)

### **Depression and Dejection**

Depression is the most common psychiatric diseases amongst elderly people. Depression can be triggered by other diseases or it can manifest alone. Depression among other psychotic disorders as well as dementia can trigger behavioral symptoms such as inappropriate behavior when the person perceives and interprets the surrounding environment or experience falsely. Behavioral symptoms such as aggressiveness and nocturnal activity can present increased stress to the environment as well as the caregivers. (Finne-Soveri H. 2013)

Dejection signifies the incident when a person is suffering from a long period of bad mood and melancholy. Dejection is also common among the older population although only 5% of 75-84 year olds suffer from clinical depression it is estimated that 40% of over 84 year olds suffer from dejection. (Heikkinen E. 2005)

Both depression and dejection decrease the psychological and cognitive functional capacity. Depression can also increase the feeling of exhaustion which can lead to decreasing physical activity. (Huuhka K, Leinonen E. 2011)

### **Hip Fractures**

Hip fractures are common among the oldest segment of the population. Over 50% of the 7000 annual (1996-2008) hip fracture incidents happened to over 80 year olds. Some of the other common diseases in nursing homes such as decreased physical abilities, memory disorders and some medicines also increase the risk of hip fractures. Hip fractures can decrease the functional capacity of the nursing home customer especially on their physical activities

as hip fractures can make moving painful and reduce mobility. Rehabilitation after a hip fracture is essential for maintaining the functional capacity of the patient. It is also important that appropriate measures to prevent reoccurring falls and accidents are prevented. Accessibility creates a safer environment which additionally also promotes independent physical activities which are essential for the recovery from hip fractures. (Huusko T, et al. 2011)

Norton R. et al. (1999, 137-139) conducted a study in 1991-1994 in which studied the connection between hip fractures and living arrangement. The study revealed that hip fractures were almost four times as likely for people in institutional care. The increased risk comprised of decreased cognitive functional capacity, previously suffered fractures, previous accidents, difficult diseases, weight loss and decreased physical functional capacity. Although the study was conducted in New Zealand the results can be considered relevant also in Finland. (Jäntti P. 2011)

### **Loss of Hearing**

Hearing problems are common among elderly people. A person who is suffering from loss of hearing is more susceptible for disturbing sounds and echoes which decrease the ability to make out words and sentences. Blurred sounds and the decreased ability to participate in normal conversations can lead to feelings of neglect and decreased social functional capacity. (FPD ESKEH –project. 2009, 23)

### **Loss of Vision**

Nursing home customers often suffer from various stages and types of seeing problems that are normal to ageing. Ageing especially decreases the eyes' ability to adapt to changes in lighting. This can be problematic when moving from space to space as the eyes need a longer time to adapt to the changing lighting levels which can create a risk of accidents. (FPD ESKEH –Project. 2009, 28)

## 5. Nursing Homes

Nursing homes and other long-term care service providers are a part of the traditional health care services. While traditional healthcare providers focus mainly treating the immediate healthcare needs of the patient the nursing homes also have to maintain the quality of life, independence, dignity and wellbeing of their users. (Walker D. 2002, 15)

A person is not eligible for any given elderly care service type solely based on their age. Instead an elderly person can submit him or herself to an assessment where the need for service is established and the appropriate service method is chosen. If an elderly person is deemed unable to manage their activities of daily living by themselves they can be placed in one of these three types of living arrangements listed below. (Sosiaalihuoltolaki § 21; The social welfare law (1301/2014))

- **Assisted Living** consists of care services that the person requires such as cooking, cleaning, washing, laundry, actions to upkeep their functional capacity and actions that assist social interaction and participation.
- **Intensified Assisted Living** consists of care and services, similar to assisted living but targeting more demanding users often with physical or cognitive issues which require around the clock care and supervision.
- **Institutional Care** is suitable for customers who require the most care and help often from two caregivers to complete daily activities. In practice institutional care is referred to only as long term hospital environments or health center wards. (Suomi.fi)

The act on the care services for older persons underwent a major change in January 2015 when the Finnish parliament passed the changes to § 14 and added the new § 14 a and § 15 a. The changes made it harder for a person to qualify for institutional care by changing the qualifications to be more or less solely based on medical or safety reasons. Non-institutional services such as home care, assisted living and family caregivers are now the primary focus of services for older persons. The change to the act has been criticized for lacking insight of the underlying issues. Marja Jylhä, the professor of gerontology at Tampere University criticizes the change and its lack of taking into account the fast ageing population as well as the biological ageing process in general. Jylhä notes that around the clock care is currently used mostly by really old people during the final months of their life and continues to say that this would force older people to live home where they cannot humanely do so. (Van Der Meer M. 2014)

A person can be subject to institutional care which can only be arranged if it is deemed necessary for the wellbeing and safety of the person. The institutional care, rehabilitation and treatment must be arranged according to the person's individual needs. The living environment must also be safe, home like, stimulative as well as private and promote the individuality and the functional capacity of the person. The rights for self-determination and privacy also has to be respected when carrying out institutional care. Many care facilities and hospitals have started to modify their facilities to a more home-like but institutional facilities and their nature of routines is still a reality for the care of older persons today. (Sosiaalihuoltolaki § 22; The social welfare law (1301/2014))

In Finland, nursing homes have been subject to a large number of studies in the past years. Three main categories of nursing home research have arose in the last decade: (i) nursing homes as communities of care, work and living environment, (ii) the financial efficiency and quality of care and (iii) the functionality of the environment and comfort of the customers. Vuorinen L. 2003, 6)

Nursing home customers in Finland are usually quite old and have various illnesses that require around the clock care. In 2010 the average age of nursing home customers was 83.2 years. Nursing home customers are also mainly women. In 2010 the number of women in the nursing homes was 72.3% compared to men. This might of course change as the life expectancy continues to increase but currently women outlive men by a vast majority. (Porre-Mutkala P. 2012, 6)

The aim of nursing homes and long term care in general is to provide elderly people with around the clock services for the rest of their lives. Due to the terminal nature of long term care the quality and service structures need to be carefully thought. The care facility must take into consideration the functional capacity and satisfaction of the customer. The quality of care and the care environment are also important aspects of delivering the desired level of service. (Porre-Mutkala P. 2012, 6)

## **6. Accessibility**

Accessibility is a broad subject and it can manifest in different levels for example the geographical, cultural, political and social environments all have their own unique forms of accessibility. In this thesis the term accessibility will be used mostly to describe the accessibility of the physical environment which covers all built environments. (Pikkarainen. 2007, 14).

People are different when it comes to accessibility; they have different requirements and restrictions of navigating and using a built environment. When the environment does not meet the user's requirements barriers for accessibility are created. (FPD, ESKEH-Project. 2009, 7)

Physical accessibility does not only consist of the ability to move. Hearing and seeing are also an important area of the physical environment and accessibility also applies there. Removing the barriers of moving, hearing and seeing increases the person's ability to participate and communicate effectively and the ministry of social affairs and health defines accessibility fittingly as the ability to use services, tools, understand information and the ability to partake in decision making that involves oneself regardless of age, sickness, disability or other constraints. (Ministry of Social Affairs and Health. 2013, 19)

Accessibility takes into account the different requirements of people depending on their situation and helps them maintain their functional capacity. Accessibility is in its simplicity about acknowledging and taking into account the different requirements between different people when designing, building or maintaining a built environment. An accessible environment is a necessity for a portion of the population but it can also be beneficial for everyone else using that environment. (Esteettömyystiedon keskus, Esteetön.fi)

A facility is accessible when it is functional, safe and pleasant for all of its users. Additionally the space and all of the functions within should be as easy to use and as logical as possible. The building is designed for the people, not the other way around. (FPD –website. 2015).

Accessibility also involves us all as it has been estimated that people spend 40% of their life with a disability that decrease their ability to move or function. In addition the trend of the developing healthcare and increasing life expectancy it is likely that most of us are going to live longer lives than our forebears and will require accessible features in our golden years. (FPD, ESKEH-Project. 2009, 7)

## Finnish Law Regarding Accessibility

The constitution of Finland sets the legal grounds for accessibility in two parts. Chapter 2 § 6 states that all people are equal and shall not be treated differently regardless of their sex, age, origin, language, religion, conviction, opinion, health, disability or any other reason.

*“Everyone is equal before the law. No one shall, without an acceptable reason, be treated differently from other persons on the ground of sex, age, origin, language, religion, conviction, opinion, health, disability or other reason that concerns his or her person.”*

—The Finnish Constitution, Chapter 2 § 6 - Equality (L 11.6.1999/731).

Chapter 2 § 20 of the constitution also on the topic of accessibility states that the public authorities must guarantee a healthy living environment and the possibility to influence decision making regarding their own living environment for all citizens

*“Nature and its biodiversity, the environment and the national heritage are the responsibility of everyone. The public authorities shall endeavour to guarantee for everyone the right to a healthy environment and for everyone the possibility to influence the decisions that concern their own living environment.”*

—The Finnish Constitution, Chapter 2 § 20 – Responsibility for the Environment

Being treated equally is one of the most basic rights of human beings.

Accessibility is one of the important tools that need to be utilized in order to manifest true equality.

## **The Land Use and Building Act and the Land Use and Building Decree**

The land use and building act and decree govern the general conditions, construction, technical requirements, permits and supervision of building. Section 117 d of the land use and building act states that anyone who constructs a building must make sure that the building is designed and built in a way that the use and maintenance of the building is safe. The same act also talks more specifically about accessibility in 117 e §. The act states that anyone who enters construction of a building must make sure that the building and its yard must be designed according to its intended use, number of users and number of floors in a way that is accessible with emphasis on children, elderly and the disabled people's requirements. (The Land use and Building Act 132/1999)

## **The National Building Code of Finland**

The national building code of Finland is maintained by the ministry of the environment and it supplements the land use and building act with specifications, requirement and recommendations regarding all building in Finland. The building codes F1 "Barrier-free building", F2 "Safety in use buildings" and G1 "Housing design" state the minimum requirements and recommended specifications regarding accessibility in physical environments.

## **The Act on the Care Services for Older Persons**

The act on the care services for older persons (28.12.2012/980) also has a few mentions of accessibility. § 15 state that when a person's need for service is evaluated the accessibility of the person's surrounding environment needs to be taken into account. The same law states in § 22 that the service provider must make sure that the facilities used by elderly people are sufficient, safe, accessible, homelike and appropriately designed for their needs. (The Act of the Care Services for Older Persons 28.12.2012/980)

## The Social Welfare Act and the Social Welfare Edict

The social welfare edict (607/1983) 11 § states that when carrying out institutional care the living environment must be safe, homelike, stimulative and it needs to promote the recovery, self sufficiency, privacy and independency of the user.

### **Quality Recommendations to Guarantee a Good Quality Life and Improved Services for Older People**

The act on the care services for older persons is also supplemented by the ministry of social affairs and health in Finland which periodically publishes a brochure called *“quality recommendations to guarantee a good quality life and improved services for older people.* “ The latest issue was published 2013 to supplement the new, previously mentioned law. The recommendations are not the minimum standards but rather what are good practices accessibility included. (Ministry of Social Affairs and Health. 2013)

### **Dimensions of Accessibility**

As stated earlier accessibility is a broad subject which covers a lot of different areas of the environment. To clarify the accessibility requirements and dimensions the Finnish Association of People with Physical Disabilities has produced a breakdown of the most common accessibility requirements and dimensions. The different dimensions are presented with issues and examples hereafter. (FPD ESKEH –project. 2009, 8)

- Level differences
  - Level differences are hard to overcome for a person with disabilities that affect their moving. Even a small ledge or stairs are impossible for a person in a wheelchair to overcome. Level differences can also present a risk of injury for people with lowered vision or cognitive disorders. Level differences can be

alleviated for example with lanes that do not have stairs or ledges or by installing ramps and building elevators.

- Need for space
  - People with disabilities often require aids such as wheelchairs to move around. The need for space for a person using a wheelchair is usually greater than the average person. The physical environment should be designed in a way that they have sufficient space to navigate using such aids.
- Distance
  - Long distances can also become inaccessible for a person with disabilities. Especially elderly people have less energy to walk longer distances. The accessibility of long distances can be alleviated with for example by adding resting places.
- Orientation
  - Making an environment support orientation is especially important for people suffering from poor vision or loss of vision completely as well as people with cognitive disorders. Orientation can be assisted in the facility with the right choice of materials, clear and uncluttered spaces and easy to navigate design. Other senses such as hearing can also be utilized for orientation with for example voice signals.
- Balance
  - Balance is a crucial part of the safety of a built environment. Surfaces should be non-slippery and even to prevent falling. The balance factor can also be promoted with handrails and methods of keeping surfaces dry or non-slippery, such as sanding outdoor walkways.

- Reach
  - The ability to reach certain places and objects is especially relevant for people using wheelchairs as well as people suffering from reduced mobility of their upper body and arms. Facility design should take into account people with limited reach by for example installing coat racks on different levels and placing door handles on accessible heights.
- Weakness
  - People with reduced physical abilities, especially older people can experience inaccessibility with actions that require strength such as opening heavy doors. Weakness can be compensated by installing automated systems such as electronic doors and light to use door handles.
- Complexity
  - Complexity occurs when a certain device or instructions are not comprehended by the person trying to use them. Complexity can be alleviated with clarity and simplicity in design of both the device as well as the instructions.
- Safety
  - Accessibility promotes safety for example by installing appropriately measured ramps for disabled person to use instead of stairs. Safety features such as warning stripes on stairs as well as on protruding ledges also improve safety.
- Communication
  - Communication is essentially about hearing, understanding and language. The most common accessibility promoting communication features are for example installing induction loops to aid the hearing impaired. Signs can also be used to increase communication accessibility by for example adding

clear pictures next to signs to accommodate people with seeing or cognitive impairments.

- Allergies

- Allergies can decrease accessibility by making an environment unpleasant or out of limits for a person. The most common problems with allergies are animals, perfumes and other scents, cigarettes and allergenic plants. Unclean environments and dust can also trigger allergies that create inaccessibility.

## **Hearing and Seeing Environments as Part of Physical Accessibility**

### **Hearing Environment**

An accessible hearing environment is acoustically well designed to prevent noise pollution and can be supplemented with audio systems to increase the users' ability to hear. A person suffering from a lowered ability to hear suffers from noise pollution and echoes more than a person with normal hearing. Disturbing echoes and background noise can decrease the person's ability to participate in the normal daily activities by tiring them or inhibiting them from participating in normal social behavior. The hearing environment can also benefit people suffering from loss of vision by creating a clearer audio image of the space. (FPD ESKEH –project. 2009, 23-27)

### **Seeing Environment**

An accessible seeing environment is the combination of light, color and contrast. Lighting is especially important in entrances, stairs, ramps, lanes and with signs and guides. Lighting has to be powerful enough to light the space as well as even but it cannot create distracting reflections or dazzle. One of the most common discrepancies in the seeing environment is the uneven distribution of light which creates problems especially for people suffering from bad eyesight. Uneven lighting makes dimmer parts of the space harder to

make out and brighter parts can dazzle. Dazzling can be prevented for example with lighting solutions such as keeping the lighting levels even throughout the facility and the combination of both direct and indirect lighting can also prevent unwanted glare and dazzling. Additionally material choices such as using matte finishes instead of smooth metals or painted wood can reduce glare effects which might decrease the ability for a visually impaired person to operate in a space. (FPD ESKEH –project. 200, 27)

Cernin et al. state in their 2003 study *Color Vision in Alzheimer's Patients: Can We Improve Object Recognition With Color Cues* that color coding the environment with vivid colors may improve the short term memory and functional capacity. The study also suggests that color coding is especially useful for long term care facilities that host people with cognitive and memory disorders. (Cernin P. Keller B. Stoner J. 2003, 255-265)

### **Accessibility in Nursing Homes**

Ageing presents many challenges to a nursing home customer. Previously normal daily activities become harder and at some point even impossible to perform without assistance. The functional capacity of elderly people can be increased through accessibility. Accessibility promotes the physical, psychological, cognitive and social functional capacity of an elderly person through increasing independent functions, reducing the need for assistance and aids, decreasing the risk of accidents and decreasing the risk of certain diseases. (SUFUCA –project)

Accessibility increases the safety of nursing home customers. Falling incidents make up a total of over 1000 deaths in elderly people yearly and can also lead to hip fractures as discussed earlier. Falling can also lead to a fear of moving around which leads to decreased physical activities and other negative effects. Accessibility can decrease the risk of accidents and at the same time increase the possibility for a nursing home customer for independent physical

activities which also decrease the likelihood of falling incidents among other health benefits. (The National Institute for Health and Welfare. 2014, 1)

Accessibility also promotes the autonomy of the nursing home patients. Lidz Fischer and Arnold (Lidz et al. 1992, 4) already proposed in their 1992 book “Erosion of Autonomy in Long Term Care” that the focus of institutional and long term care will move towards a more individualistic method which promotes autonomy. Rather than the patient following the doctors' or nurses' orders patient autonomy focuses more on following the patients' whishes. This is a trend that has and continues to manifest in the decision making in Finland which can be seen in the new act of care services for the elderly.

Accessibility, as the main topic of this thesis deals with many of the factors contributing to good quality service in nursing homes. Safety, individuality, self sufficiency and physical wellbeing are all greatly affected by the accessibility of the living environment of an elderly person. Nursing homes require a great deal of thought into accessibility if they aim to provide good quality care.

### **Accessibility Analysis**

Accessibility analysis is as method to analyze the accessibility of a built physical environment. The aim of the analysis is to research how well the facility or other area meets the requirements of all of its users. Accessibility analyses can be used to create precise quantitative information on the accessibility of a built environment by comparing the measured data against existing requirements and recommendations. The comparison then reveals possible shortcomings which can then be addressed later on. The analysis also allows for the researcher to classify and quantify the spaces according to the data and present the findings. (The Finnish Association of People with Physical Disabilities. ESKEH –Project. 2009, 7-9)

Accessibility analysis is a method which companies and organization can utilize to track are the requirements set by the regulators met. The

accessibility analysis can also be used to analyze a higher classification of accessibility such as for people with special needs. Once the analysis is completed the organization can fix the immediately and easily modifiable issues, create a plan for repairs and modifications later on as well as publish a report or statement on the current accessibility. (FPD ESKEH -Project. 2009, 11-12)

The accessibility analysis can be a powerful tool for organizations that want to develop their facilities and services to suit all people. The accessibility of a facility increases the independence and preserves the functional capacity as well as decreases the need for assistance of a person. (FPD ESKEH -Project. 2009, 8-11)

The accessibility analysis of a built environment is conducted by measuring, observing and to some extent estimating the current state. Tracking the environment for sense-related issues often require the most estimating and more precise measurements on it such as sound level (dB) or luminance measurements are not a part of normal accessibility analyses. (FPD ESKEH - Project. 2009, 12)

### **The Finnish Association of People with Physical Disabilities: Accessibility Analysis for a Built Environment.**

The Finnish Association of People with Physical Disabilities' (FPD) ESKEH – project developed an analysis method for studying the accessibility of a built physical environment. The ESKEH –project was conducted in 2007-2009 and was funded by RAY (Finland's Slot Machine Association). The project partners include for example the Association of Finnish Local and Regional Authorities, the Finnish Association of Architects, the Ministry of the Environment, the Ministry of Social Affairs and Health, the Helsinki Kaikille –project, The Central Union for the Welfare of the Aged and many others. (FPD, ESKEH-Project. 2009, 7)

The aim of the project was to create a uniform and universally applicable accessibility analysis to serve in place of the wide variety of different methods and tools used before it. The project studied various different national and international accessibility analyses and the most prominent ones were put together to create one that would yield reliable and applicable results. Many organizations were involved in the making of the analysis tool to gain as much and as broad knowledge of the subject as possible. The project yielded an analysis method that includes analysis checklists and criteria as well as instructions for performing the analysis and presenting the results. (FPD, ESKEH-Project. 2009, 3; ARA. 2015)

The checklists are initially created for analyzing the accessibility of public buildings as well as other public spaces but they can be used to analyze more specific facilities or facility features such as nursing homes in this thesis. The checklists are publicly available on the FPD's esteetön.fi –website. The guidebook is intended for both the executor and the recipient of the analysis. The guidebook gives precise instructions on how to execute the accessibility analysis. (FPD -website. 2009)

The goal of the analysis is to study how well a facility or other built environment serves the needs of its users and to give concrete recommendations on how to improve the accessibility and fix possible deficiencies. (FPD, ESKEH-Project. 2009, 7)

This particular analysis method was chosen because it is very detailed and comes with in depth instructions for the researcher on how to conduct the analysis and how to analyze the results therefore increasing the reliability of the research and the possibility of accurate recommendations. (FPD, ESKEH-Project. 2009, 5)

The FPD's accessibility analysis is widely used currently in Finland as the go to accessibility analysis tool. Major facility companies and organization such as Senaatti kiinteistöt and many public sector organizations such as the cities

of Helsinki, Salo and Joensuu all promote the PFD's accessibility analysis as prominent a tool for measuring the accessibility of a built environment.

## 7. Villa Toukola Accessibility Analysis

As stated earlier the FPD's accessibility analysis (Appendix 1) was chosen as the foundation for the accessibility analysis of Villa Toukola. The original accessibility analysis includes 21 checklists for all kinds of facility features. The categories that are applicable for Villa Toukola were chosen from the list and are listed below. The corresponding checklists can be found in Appendix 1.

- Entrance (Appendix 1 pages 74-81)
- Hallways (Appendix 1 pages 82-83)
- Doors (Appendix 1 pages 84-85)
- Ramps (Appendix 1 pages 86-87)
- General Spaces (Appendix 1 pages 88-91)
- Repository Spaces (Appendix 1 pages 91-94)
- Toilets (Appendix 1 pages 95-100)
- Dressing/Washing Room (Appendix 1 pages 101-107)
- Sauna (Appendix 1 pages 108-109)
- Guidance (signs etc.) (Appendix 1 pages 110-111)

### Results of the Analysis

#### Initial Data

The target facility is a nursing home Villa Toukola. The facility was built in 2011 and it is located in Alajärvi, Southern Ostrobothnia at Pihlajarinteentie 9, 62900 approximately 1km away from the city center of Alajärvi. The analysis was performed for the whole facility and the parking area. The area of the

facility assessed is a total of 1425 m<sup>2</sup>. The operational level of the facility is on the ground floor with only a maintenance room is located in the small second floor which was not analyzed. The analysis was conducted 12.10.2015 and lasted for approximately 4 hours.



Figure 4: Location of Nursing Home Villa Toukola in reference to the city centre (Black marker on the bottom of the picture) Picture taken from [www.Fonecta.fi](http://www.Fonecta.fi) maps.

The functional capacity of the nursing home customers was also researched by interviewing the nursing home manager. 29 out of the 31 customers suffer from some sort of disease which lowers their functional capacity. 11 of them use a wheelchair and 17 use a wheeled walking aid. These facts were taken into account when choosing the analysis materials.

### **Analysis Tools and Methods**

The checklist points that require length or height measurements were done with a ruler and a tape measure and longer distances were calculated using the floor plan. The checklist points that require measuring the slope of something such as ramps were done with a spirit level. The checklist points that require observations or estimations were done by the author with the help

of the instructions given for each point in the FPD's accessibility analysis instructions.

The checklist was mostly made up of yes or no questions and the answer yes is always the desirable option for example "Is there a sign leading to the facility" and the yes answer is the desirable option. The results of the analysis are, therefore, presented in a way that highlights both the positive existence of accessibility features and the negative lack of such features.

The recommendations after the analysis list the various accessibility features that could or should be addressed to increase the facility's accessibility.

### **Arrival**

The arrival at Villa Toukola presented the first accessibility issue. The address given on the website is correct but the accompanying map (Google maps) points to a wrong location within the city of Alajärvi. Fonecta maps service as well as apple maps were both also tested and they mark the address in the correct location. This is most likely due to the fact that the road as well as the facility are relatively new and did not exist before 2011.

The location itself as presented in Figure 4 above has its positive and negative issues. As the facility is located outside of the city centre area access with public transportation is difficult, given that Alajärvi does not have a lot of public transportation. The road leading to the facility is, however, new and also includes a pedestrian sidewalk thus increasing accessibility by foot. The signs to the facility are marked well with one sign coming in from the main road and one at the turn to the facility. The sign itself is large enough and has a good color-background contrast which helps noticing it. The signs were approximately at eye level (1400-1600mm) which also aids perceiving them. (FPD ESKEH –project. 2009, 36)



Figure 5: Road leading to Villa Toukola.

### **Parking Space**

The parking spaces are located right in front of the facility. The parking area is well marked and has an even asphalt surface which makes moving around using a wheelchair or walking aid easier. There are 18 regular parking spaces and two for the handicapped. The parking space is even and does not have potholes or other flaws. The parking space is well lit even at night with several lamp posts surrounding it. (FPD ESKEH –project. 2009, 52)

The spaces for the handicapped (Figure 6) are large enough and in close enough to the main entrance of the facility. The handicapped parking spaces were marked with the international symbol of access (ISA). The ISA-sign was placed 1 meter off the ground and approximately 20 cm from the parking spot which could create an issue if a car is parked in front the sign blocking it. The parking spaces could also be marked better by painting the ISA symbol also on the asphalt. (FPD ESKEH –project. 2009, 52-53)

Cars escorting customers in or out of the facility have a designated parking space directly in front of the facility for loading and unloading passengers. There is also a designated place to park a bicycle on the other side of the parking area.



Figure 6: Disabled parking spaces and main entrance of Villa Toukola

### **Entrance**

The entrance of the facility can be easily noticed from the front of the building. There is a sign which states the name of the facility and also serves as a guide to the front doors. The guide is however rather small and is located higher than eye level. Perceiving the guide could be further improved by lighting the guide and placing it lower on the wall closer to eye level.

Perceiving the main entrance is easy as the front doors are located in an inset and it is covered with a roof. The roof also keeps the front of the doors dry which makes it easier to navigate. The entrance has two dark colors in the adjacent walls which could make it harder to detect for a visually impaired user but the contrast between the light surface floor and darker walls does improve the detectable contrast of the space. The area around the entrance is even throughout and does not have any flaws on the surface. The entrance area is well lit and does not create a dazzle when entering into the facility. (FPD ESKEH –project. 2009, 65-68)

The entrance area features a sitting place opposite to the front doors (Figure 7) for example waiting for taxis. The furniture is placed in a way that they are not blocking any of the passageways through the entrance area. The bench and swing set are placed under the roof which increases their usability even in poor weather. The furniture create a good contrast which makes them easy to see and they also have seats on two different heights at 450 mm and 570 mm which are recommended seating heights for disabled people by the FPD. There is also a table which has an open space underneath it which makes it suitable for sitting at with a wheelchair. (FPD ESKEH –project. 2009, 65-68, 82-84)



Figure 7: Seating place in front of the main entrance of Villa Toukola

One concern arose that arose from the entrance was that from the entrance terrace area which has direct access to the loading dock of the kitchen which can be seen in the below figure 8. The loading dock has a drop which might cause an accident especially for fragile elderly users. Additionally as a large portion of the customer are suffering from various memory disorders they might accidentally wonder from the terrace to the loading dock and fall from the ledge. The section leading from the terrace to the loading dock could be installed with a gate which should be fitted with a STOP –sign or similar.

Furthermore the ledge should be fitted with a warning stripe at the end for better detection. There was also stairs leading to the second floor maintenance and HVAC –room which should also be fitted with a gate and a STOP –sign.



Figure 8: Entrance (Left) and loading dock (right) of Villa Toukola

### **Main Entrance Ramp**

The surface of the ramp is smooth and hard which makes it easier to use with a wheelchair or walking aid. The ramp has adequate space of more than Ø 1500mm both in front and after the ramp for wheelchair users to turn around. The ramp is straight and around 6000 mm long with a longitudinal slope of 1:12,5 or 8% and sideways slope of less than 2% which make the ramp easy enough for a disabled person to use. The FPD does however suggest that the ramps for disabled persons should be only 5% of longitudinal slope. The ramp is only wide enough for a single wheelchair or walking aid at the time but sufficiently wide for a person using it with the assistance of a caregiver. The color contrast of the ramp is easy to detect because of the light color floor versus the dark railings. The light floor also makes detecting the beginning of the ramp easier coming from the parking lot asphalt but the entrance end of

the ramp is harder to detect as the outside floor of the entrance is the same material as the ramp. The ramp has 900-1000 mm high sides with handrails on top. (FPD ESKEH –project. 2009, 76-79)



Figure 9: Ramp leading to the entrance of Villa Toukola

The handrails do not present a risk of entanglement which is positive. The handrails are however too wide to firmly grab with one hand which decrease the accessibility of the ramp. The recommended shape of the handrails is either a round, oval or rounded and they should be 30-40mm in diameter to allow a firm one handed grasp. The handrails should also extend over the beginning and end of the ramp by at least 300 mm but currently they stop right at the end. The sensation of feeling can also be used to increase accessibility by changing the materials used at the end of the ramp as well as the handrail which would make it easier to detect the beginning and ending of the ramp especially for visually impaired users. Accessibility of the ramp could also be further increased by installing a secondary handrail at 700 mm in height. (FPD ESKEH –project. 2009, 76-79)

The starting point of the ramp leading to the main doors had an uneven finish. The slope of the uneven part was also more than 8% which could make it harder for customers using wheelchairs or walking aids to roll to the ramp.

### Main Entrance Stairs

The entrance also has stairs leading up to the front door (figure 10). The stairs are straight and only for five steps which does not require a platform for resting. The height of the steps is 140mm which is below the recommended maximum of 160mm and depth of the stairs is 300mm which is within the recommendations as well. The stairs are partially covered by a roof which helps keeping them dry and non-slippery easier. The stairs do not have open steps but the steps do have a slightly protruding edge which can increase the risk of accidents on the stairs. The stairs are also the same color throughout which can produce issues of detection for visually impaired person. Detecting the stairs could be improved by painting or installing a darker stripe to the front of each step to create a detectable contrast or installing a light strip under the protruding section of each step. The stairs have a similar handrail as the ramp and the same issues with the width of the gripping part also apply. The stairs only feature a handrail on one side of the stairs which can be seen from figure 10. (FPD ESKEH –project. 2009, 72-73)



Figure 10: Stairs leading to the front door of the entrance of Villa Toukola

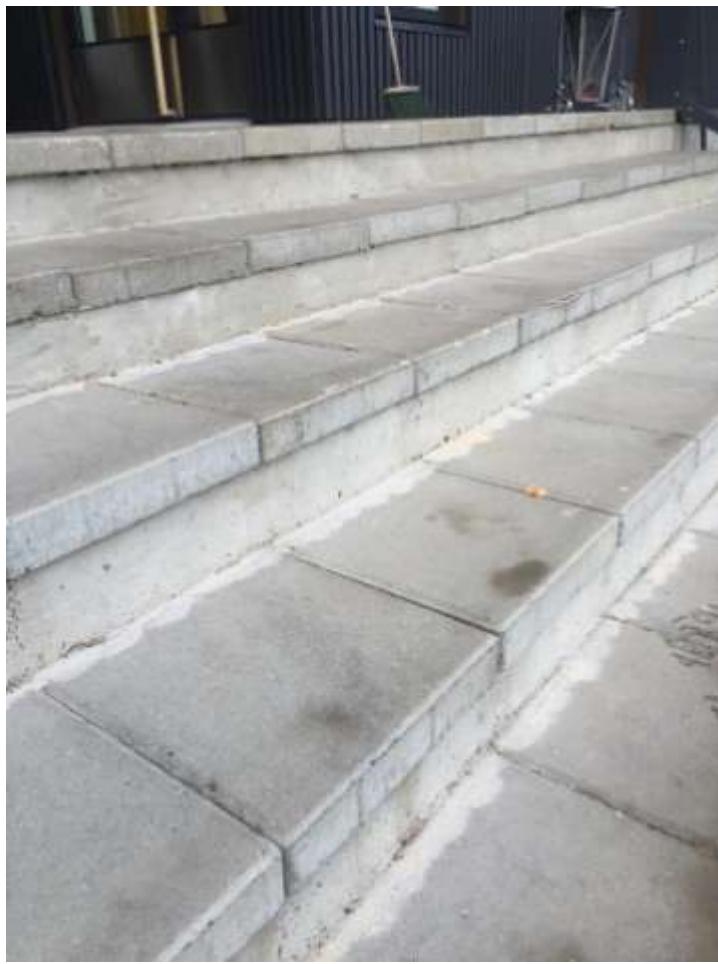


Figure 11: The stairs and the protruding edges leading to the main entrance of Villa Toukola

### **Entrance Doors**

The front doors are easily detectable from the entrance of the building. There is adequate space of Ø 1500 mm both in front and after the front door for performing a turn with a wheelchair. The door is also wide enough (over 850 mm) to easily enter using a wheelchair or walking aid. The door opens automatically using a motion detection system which also detects small people and wheelchair users but the fact that the doors are automatic was not presented anywhere. The automatic door opening system also did not recognize if the door hit a person opening up and because the door is quite heavy this could present a potential risk of accidents. Furthermore the ground

does not have a marking to indicate the radius of the opening door which would reduce the risk of hitting the door to some degree. The system kept the door open for approximately 20 seconds which is a little too fast and the recommended time is 25 seconds to allow slow movers and walking aid users to pass. (FPD ESKEH –project. 2009. 69)

The door has a large glass window which covers the whole door except for the kick plate at the bottom of the door which measures over the recommended 300 mm height. The glass is fully transparent which decreases the ability for people to detect the door and can even risk hitting it. The door should be fitted with a contrast stripe at eye level (1400-1600 mm) to increase the door's visibility. The second door after the vestibule has a similar glass window which should be fitted with the contrast stripe. (FPD ESKEH –project. 2009, 71)

The threshold of the outer door was fitted with a metal ramp to lower the threshold but the it still measured around the maximum height of 20 mm which is difficult to roll over using a wheelchair or walking aid and such a difficulty was noticed in the customers using the door during the analysis. The metal ramp threshold being a different material and slightly a different color does however make the threshold easier to detect. (FPD ESKEH –project. 2009. 69-70)

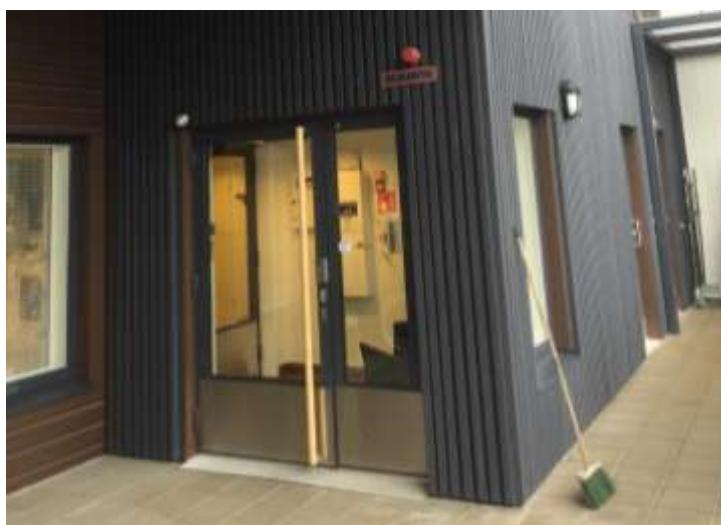


Figure 12: The main entrance doors of Villa Toukola

### The Vestibule

The vestibule has sufficient room to turn around with a wheelchair ( $\varnothing$  1500 mm). The vestibule has a grate but the holes between are less than 5 mm wide which makes it easier to use and does not cause a risk of tripping. The vestibule has sufficient and even lighting which decreases the dazzling effect coming from a darker space to a bright indoor area. The vestibule has proper color contrast between the darker color floors versus lighter color walls. The inner door is also operated automatically with a motion detector but it does however open into the vestibule. Similar to the outside door the door did not stop when it hit a person and there should also be markings on the floor to indicate the range of the opening door. The vestibule had a 500 mm high seat which was not in the way of moving about the space. The vestibule also had a small floor plan of the facility which helps to navigate the facility. Similar to the outside door the inner door did not have a contrast stripe. The inner door had a slightly lower threshold compared to the outdoor one. (FPD ESKEH – project. 2009. 69-70)



Figure 13: Villa Toukola's entrance vestibule

## Coat Rack

All of the rooms as well as the staff's quarters have their own storage places for clothing and this section covers only the general coat rack at the front doors. The coat rack is set so that it is away from the main lanes and does not pose a risk of accidents. The space under the coat rack is open which does make it easier to access it using a wheelchair or walking aid. The coat rack does however only have hooks on one height at 1450 mm which is too high for wheelchair users to use. It would be recommended to install additional hooks to for example the behind wall at lower heights such as 1100-1200 mm which is better accessible with a wheelchair and walking aid. Also a sign acknowledging the coat rack would improve the detectability as well as additional lighting above the rack itself. (FPD ESKEH –project. 2009. 82-83)



Figure 14: Coat rack in Villa Toukola

## Hallways

The hallways inside the nursing home are all designed in the same way and have the same features. The floors of the hallways are hard, even and non-slippery and exceed the required measures of 900 mm wide and 2200 mm high throughout. There are neither fixed or non-fixed objects to block the hallways on either the ground or hanging from the walls or ceiling. The floor does not have a confusing or misleading pattern on the surface which is especially crucial for the accessibility of customers with memory disorders. The floors do not however have a contrast color stripe or different material to guide people. A contrast stripe or material could be installed to increase the guidance in the facility. (FPD ESKEH –project. 2009. 68-69)

The basic lighting in the hallways (seen in Figure 15) is operated by an automatic motion detection system. The lighting integrated with the motion detection system does create uneven lighting which could make the space harder to navigate for people with seeing problems. Additionally the doors at the end of the hallways have a large glass window letting in natural light but do create a distracting reflection from the glossy floor material as seen in figure 15. The glass windows could be fitted with a coating or skin that reduces the amount of glare from the floors. These could also act as a contrast stripe which the doors were also missing. (FPD ESKEH –project. 2009. 28-30)

The hallways have handrails throughout the facility which significantly increases the accessibility of the spaces. The handrails are placed 900 mm off the floor and they are round 40 mm in diameter and 50 mm from the wall which makes them easy to grasp firmly with one hand. The handrails are attached on the bottom side which allows for a person to run their hand along the handrails freely. The ends of the handrails however are not bent downwards or to the wall which creates a risk of entanglement. (Esteetön.fi – website)

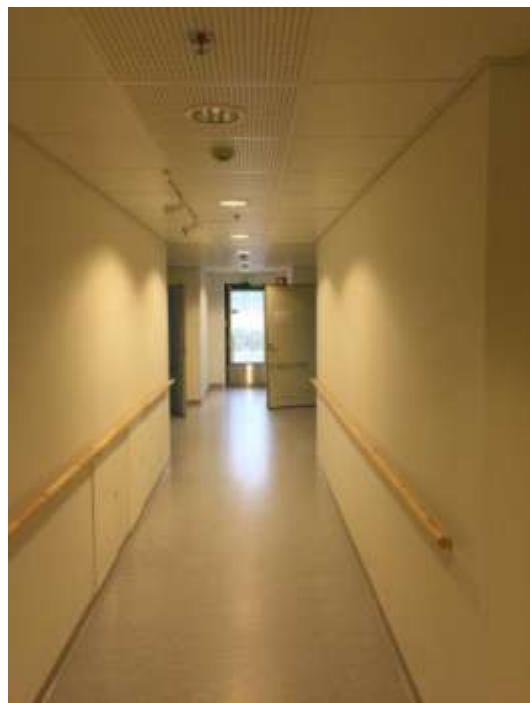


Figure 15: Hallway in Villa Toukola



Figure 16: Hallway handrails in Villa Toukola

## Individual Rooms

The individual rooms are accessed directly from the hallway. The rooms are numbered and they have the surname of the inhabitant marked on them. The height of the markings was properly placed on eye level. The numbering itself was confusing as there are two numbers for each door and this should be changed for clarity. The surname was also marked with a small dymo sticker which is too little for a person with seeing problems to read easily. Additionally when the door is open the numbers and surnames can't be read which could be addressed by marking them to the wall next to the opening side of the door instead.

The doors to the individual rooms were wide enough (over 850 mm) and had sufficient space of Ø 1500 mm in front and inside the room for wheelchair and walking aid users. The doors do not have thresholds which make them more accessible. The doors are opened with a handle which is easy to spot due to the contrast of the handle and door colors and the handles were light enough for an elderly person to open. The inside side of the door also had a handrail which can be used by wheelchair users to open to door easier. The door increases the accessibility of the hearing environment in the room as it is a sound proofing door. When the door is closed the sounds from the dining and TV-area cannot be heard in the room which decreases noise pollution. (FDP ESKEH –project. 2009, 69)

The room has movable furniture which increases the flexibility of the space. Most of the furniture is a darker color compared to the walls and floor which creates a good detectable contrast. The beds are electronically adjustable which increases their usability for all kinds of different requirements. The cabinets have shelves on different levels which allows for wheelchair users to use the easier.

## Individual Bathrooms

Each of the individual rooms has an attached bathroom. The door to the bathroom is wide enough (over 850 mm) and does not have a door pump which makes opening the door harder. The door is a similar color to the wall's and bathroom tiles which might make it harder for a person with seeing problems to detect. The door has the required sufficient space of Ø 1500 mm both in front and inside to bathroom. The bathroom does not have a threshold which makes it easier to use with a wheelchair or a walking aid. The individual room's bathroom door has a sliding door with a round hole for a door handle. The sliding door increases the accessibility of the bathroom as it does not get in the way on either side but customer suffering from for example loss of fine motoric skills might have difficulties opening the door because of the handle type. The inside side of the door had a similar bar handle as the door to the individual rooms themselves for easier opening from a wheelchair. The bathroom door does not have a toilet sign or symbol which might not be so crucial as the inhabitant is only using the bathroom but it would be a minor addition and could increase the clarity of the space especially given that many of the customers have memory disorders. (FPD ESKEH –project. 2008, 93-97)



Figure 17: Individual room bathroom door in Villa Toukola

The toilet seat itself is within the recommended range of 480-500 mm in height and the height cannot be adjusted. The user can access the seat directly from in front or from the left or right side depending on the particular layout of the room. There is sufficient space of 800 mm on one side of the toilet to access it from the side from a wheelchair for example. There is also some space behind the toilet seat for a caregiver to assist a person onto the toilet seat. The seat has a detachable and adjustable handrail on one side of the toilet and there is a possibility to install another one on the other side as well. The handrails reach beyond the toilet which increases the accessibility of the seat itself. Additionally the handrail on the wash basin can be reached from the toilet seat and used for getting up or onto a wheelchair. The toilet seat has a button function for flushing and the button is a good contrast which increases its detectability but is usually harder to use for customer suffering from loss of functional capacity compared to an automatic or pull-up button type of flushing mechanism. The toilet does not have an automatic washing and drying function. The distance from the seat to the hand held shower head is a rather long and over the recommended < 300 mm and the washbasin's water tap is quite far as well. Additionally the shower head on the actual shower is closer and can be used for the same purpose. (FPD ESKEH –project. 2008, 93-97)

The bathrooms have a stationary wash basin. The wash basin has the recommended 1200x1200 mm of free space in front of it and its placed on a good 800 mm height which makes it easy to use for wheelchair and walking aid users. The profile of the basin is thin which gives enough leg space underneath the basin so a person in a wheelchair can access it properly. The washbasin faucet has a level function which is light to use. The soap dispenser is attached to the mirror cabin on the wall and is much higher than the recommended 900 mm. The hand towel dispenser is also placed in the mirror cabin which is over the recommended 900 mm. The trash bin is located in the corner of the bathroom between the basin and the toilet seat which could make it hard to reach from a wheelchair. The bin does not however

block any actions in the facility and can be operated with one hand due to it being an open bin.

The bathroom has a handrail leading to the showering area which can be used to lower oneself down onto the shower seat. The handrail is 900 mm high and has a vertical portion at the shower seat which helps a person sitting down. The handrail is within the recommended dimensions for diameter and Appendix. The handrails as well as the shower seat are a darker color compared to the wall which creates a good contrast and helps detect them. The floor is non-slippery even when wet. The toilets do not have an alarm button or similar but the customers do have an alarm button themselves which they can use to call the nurses as well as having nursing staff there 24/7



Figure 18: Individual Bathroom in Villa Toukola.

## Group Home Dining and Living Room

Both the group homes have a combined dining and living room area at the center of each wing. The route to each group home is well marked with a large sign above the doors of the wing. The text on the sign is clearly printed and has a good contrast of black text on white background. The letters are also bigger than the recommended which increases the detectability of the sign. The sign is made from a non-glaring material and the lighting around the sign is even. (FPD ESKEH –project. 2008, 28-29)

The access to the dining and living room area is directly from the main hallway. The doors are always open. The frames are darker than the walls which create a good contrast and make them easier to detect. There is sufficient space of Ø 1500 mm behind and after the doors. There is no threshold at the doors.



Figure 19: Doors leading from the group home dining and living room area in Villa Toukola.

The dining area of the group homes consists of a kitchen area and tables. The intended lanes in the dining area are wide enough (over 900 mm) to easily move around with a wheelchair or walking aid and have several spots where a wheelchair or walking aid person can turn ( $\varnothing$  1500 mm). The walls in the dining area also have similar handrails as the hallways. The tables and chairs are all movable with a good contrast from the walls and floors. The chairs are 450 mm high with smooth even seats, arms rests and back rests of a good general height. The arm and backrests help people with physical functional capacity users use the chairs more easily. The tables are 750 mm high and have a 700 mm free space underneath them which makes using a wheelchair easy. The seats are all of the same height. The accessibility to the dining area could be improved by adding a few chairs of varying height or adjustable ones. (FPD ESKEH –project. 2008, 90-91)

The acoustic environment in the dining and living room area was good. The ceiling is fitted with a noise cancelling plates and the center of the room also has a set of noise cancelling plates on the ceiling. The space does not have a long disturbing echo which increases the accessibility of the hearing environment and is especially beneficial for the customer suffering from a reduced ability to hear. There was some background noise coming from the dishwashers and air conditioning but it was quite low and not continuous. The lighting was similar to that of the hallways. It was sufficient but did create some shadowy areas possibility decreasing the detectability of the space. (FPD ESKEH –project. 2008, 27-29)



Figure 20: Noise cancelling material used in the group home's dining area of Villa Toukola

### Dressing Room

The facility has a shared sauna and dressing room which are used by all the customers. The entrance to the sauna is from the bathroom and the entrance to the bathroom is from the dressing rooms. The entrance to the dressing room is from the main hallway. The door to the dressing room and sauna does not have a proper sign which states what the space is. There is similar numbering on the door as the individual rooms. The clarity of the signage could be improved by marking the space clearly with a shower/sauna icon and text on the wall on the opening side of the door so it does not get blocked if the door is open. (FPD ESKEH –project. 2008, 36-37)

Door itself is similar to the individual doors as well. The color of the door is quite close to the wall which might make it more difficult to detect. The handle is a darker color which makes it easier to detect. The handle is also light enough for an elderly person to open with one hand. There is a sufficient

space of over Ø 1500 mm of space both in front and behind the door and there is an additional free space of over 400 mm on the opening side of the door. The door does have a threshold which makes accessing easier using a wheelchair or walking aid. The doors not have a bar handle (similar to the individual room's bathrooms) which would make closing and opening the door easier especially for customers using a wheelchair. (FPD ESKEH –project. 2008, 69-71)

The dressing room has a sufficient amount of space for dressing and undressing (Ø 2100 mm). The floor of the dressing room is even and non-slippery even when wet. The dressing room does not have handrails mostly due to the design of the space but they would improve the accessibility of the room. The dressing room has clothes hangers on the wall behind the bench which makes them hard to reach especially from a wheelchair. The clothes hangers are also quite high (1600 mm) and they are only on one height. Accessibility could be increased by installing hangers on lower levels for wheelchairs users and otherwise physically disabled people to be able to reach them. The bench and other furniture have a good contrast and can be easily detectable. The furniture is also placed so that they are not in the way and do not pose a threat of accidents. The bench is exactly the recommended height (500 mm) and long enough (over 1200 mm) but to increase the accessibility there could be seats with different heights or adjustable seats as well as seats with armrests which would help a physically challenged person to sit up and down. Additionally the dressing room could be fitted with one or more horizontal bar handles for example behind the bench which help a physically challenged person to sit up or down more easily. The dressing room was well lit and had even lighting throughout. (FPD ESKEH –project. 2008, 97-98)



Figure 21: Dressing room in Villa Toukola

### **Shower Room**

The shower room is directly adjacent to the dressing room. The door to the shower room can be easily detected and has a good color contrast compared to the floor and walls. The door is sufficiently wide (over 850 mm) and there is sufficient space of Ø 1500 mm before and after the door to the shower room. There however was not sufficient space of 400 mm next to the opening side of the door as there was a washbasin and a cabin. There was no threshold going into the shower room which is especially important as walking aids are not taken into that area and they often give the user a heads up about an incoming threshold. The shower room door had a simple handle which can be operated by an elderly person using one hand. There however wasn't a bar handle for wheelchair users on either side of the door. (FPD ESKEH –project. 2008, 69-71)

The showering area does not have any level differences and has a sufficient space of Ø 1300 mm for accessible showering. The facility has at least one shower wheelchair which can be used to shower in. The showering area has a

adjustable shower seat which can be lifted up to create more space. The seat is within the recommended 400 x 500 mm size and 500 mm high. The shower room has handrails all around which makes moving around easier and safer. The handrails are positioned in a way that they do not get in the way of activities there. The showering area itself has vertical bar handles which make getting on and off the shower seat easier. The shower room floor is a similar material as the dressing room which is non-slippery even when wet. The shower room floor has a few non-fixed floor drain covers which might cause a risk of an accident. (FPD ESKEH –project. 2008, 97)

The showerhead is adjustable and there is also a handheld showerhead on a lower tap. The shower itself and the shower seat are both appropriately over 400 mm off the corner. There also was a 3 tier shelf for bath products which can be reached from the shower seat as well. (FPD ESKEH –project. 2008, 97)

The shower room also has a fixed wash basin but its not similar to the ones in the individual bathrooms. The wash basin does however have adequate space in front of it as well as underneath it to allow access with a wheelchair. (FPD ESKEH –project. 2008, 97)

The lighting in the shower room was quite bright but even and there was no glare from any surface or item. The lights were not automatic though, which would be a desirable feature. The light switch was placed on an appropriate height (between 850-1100 mm) and proximity to the corners (>400 mm). The light switch might be hard to detect for a person with vision problems as it was the same color as well the wall behind it. (FPD ESKEH –project. 2008, 97, 27)

## **Sauna**

The shared sauna of the facility is accessed through the shower room. There is an adequate space of over Ø 1500 on both sides of the door as well as more than 400 mm next to the opening side . The door opens outside into the shower room which makes it easier to use. The door is more appropriately more than 850 mm wide and light enough to be opened with one hand by an elderly person. There is no bar handle on either side of the door which would make the door more usable for a physically challenged person or a customer using a wheelchair. The door is tinted glass which is not really transparent but contrast stripes could be added to further increase the detectability of the door. (FPD ESKEH –project. 2008, 99-100)

The sauna room itself has adequate space for two wheelchairs at the time (Ø 1300 x 2) and the floor of the room is the same non-slippery material as the shower room. The sauna stove is traditional Finnish sauna stove with rocks and the outside is covered with a fence or railing. A single 500 mm high and over 2100 mm long bench has been fitted instead of the regular multi level sauna benches which makes it safer for customers with physical disabilities. The wall next to the bench is fitted with an 'L' shaped handrail which helps move to and from the bench. The vertical portion of the handrail is within the recommended 700-900 mm. The handrail is also 40 mm from the wall and 30-40 mm in diameter which makes it easy to grasp with one hand. The ends of the handrail are bent to the wall which prevents entanglement. The bench also has a movable platform underneath it which can be used as a place to keep one's feet. The platform can also be used to help getting onto the bench or it can be stored away if multiple wheelchair users are using the sauna at the time. (FPD ESKEH –project. 2008, 99-100)

The lighting in the sauna was adequate as a sauna should have a dimmer, more atmospheric lighting. The lack of more powerful lighting can be compensated by creating good contrast on the furniture. However the bench as well as the foot rest was both the exact same color as the walls which

decrease their detectability. Especially the foot rest if left drawn out could pose a risk of tripping. The floor and handrails however had a good darker contrast versus the walls and furniture which made them easy to detect. The detectability of the bench should be improved by adding a darker wood or other material as the edge board of the bench. (FPD ESKEH –project. 2008, 99-100)

### **Development Ideas for Villa Toukola's Accessibility**

This section highlights the development ideas for nursing home Villa Toukola's accessibility that arose from the analysis. Some of the features are already discussed in the analysis results but this section lists the recommendations in a clearer fashion.

#### **Arrival:**

Arriving to the facility only presented one difficulty as the website's map was misleading. This could and should be addressed by for example adding one of the maps that correctly pinpoint the facility's location.

#### **Parking Space:**

The sign for the disabled parking was placed quite low. If a car parks in front of the sign it will block anyone else from seeing it. This can be easily addressed by installing a longer pole for the sign. The disabled parking spaces should also be marked with an ISA symbol painted onto the concrete. This would also improve the detectability if the sign would be blocked.

There is a designated space for taxi and other pick up's in front of the facility but the space is not marked in any way. This could be addressed by painting a parking space rectangle on the concrete with the word TAXI for example. The perception of the parking spot could also be improved by adding a taxi sign on the wall next to the space.

The bike park could also be marked better with a sign featuring a bicycle symbol. The lane leading from the bicycle park could also be painted onto the concrete.

### **Entrance:**

The entrance has a sign which states the name of the facility. The detectability of the sign could be improved by installing lights above it so it can be seen also in the dark. The sign could also be placed a little lower and closer to eye level which would make it easier to detect. Addressing these factors would improve the clarity of the entrance and the information of the sign.

The entrance has a direct access to the loading dock of the kitchen. The path leading to the loading dock should be fitted with a gate and a sign which states that there is no access for anyone besides staff. The ledge of the loading dock should also be marked with a contrast or warning stripe to make it more easily detectable. Addressing these factors would improve the safety of the nursing home customers by reducing the risk of accidents which they might induce.

### **Main Entrance Ramp:**

The main entrance ramp could be developed by lowering the slope and adding a horizontal resting place in the middle. A long and high slope ramp can be tiring for an elderly person to use. The ramp could also be made wider to allow two wheelchairs to pass one another simultaneously. This could also be addressed by installing a wider area on the resting place.

The handrails of the ramp are not within the recommended dimensions. The handrails should be exchanged for 30-40 mm in diameter bars which are attached from the bottom. The handrails should also extend over both ends of the ramp. A secondary handrail could also be installed 700 mm high which

would improve the accessibility of the ramp especially for customers using a wheelchair as the 900 mm railing might be too high to reach properly. Both ends of the ramp could also be fitted with a caution material on the ground which would alert a person of the incoming ramp. These types of handrails are easier to use especially for physically challenged customers. Appropriate handrails an important factor in creating a safe ramp or stairs as they help with the balance of the user.

### **Main Entrance Stairs:**

The protruding edges of the steps should be marked better by installing a contrast stripe or material on the edges of the stairs or installing a light strip underneath the protruding portions. The handrails are also similar to the ramp's and therefore could also be changed as per the same dimensions as mentioned in the ramp's section. The other side of the stairs could also be fitted with a handrail as it currently does not have one therefore creating two accessible entrance points on the stairs.

### **Entrance Doors:**

The fact that the entrance doors are automatic should be presented somewhere for example on a sign as well markings on the ground which show the opening range of the door. The system should also be modified so that it detects if the door hits a person or item. The system also only kept the door open for 20 second and should be modified to keep the door open for at least 25 seconds for slower elderly people to enter easily.

The glass doors on the front doors should be fitted with a contrast stripe to increase the detectability. The threshold of the entrance doors could also be made more accessible by installing a lower slope ramp to replace the current one.

**The Vestibule:**

Similar to the automatic system that open's the entrance doors, the vestibule door does not recognize if it hits something and this should be addressed to prevent any incidents recurring from it. Additionally and again similar to the entrance door markings should be painted on the floor to inform about the range of the opening door. A contrast stripe should be added to the glass door to increase its detectability.

**Coat Rack:**

The coat rack should be fitted with more hooks on different levels. Hooks on 1100-1200 mm are more accessible from a wheelchair instead of the current 1450 mm ones. A sign could be installed at the coat rack to inform its existence.

**Hallways:**

The floors of the hallways could be made more accessible by painting a contrast stripe or adding a guiding material which would increase the facility's guidance. The lighting on the hallways could be improved by installing different types of lamps which spread the light more evenly. The doors at the end of the hallways should be could be covered with a skin or other coating material which would allow natural light to pass but not create distracting reflection or glare. The ends of the handrail should be tilted down or to the side to prevent entanglement.

**Individual Rooms:**

The confusing numbering on the individual rooms should be addressed by removing the other numbers from them. The surnames could also be presented better by installing larger signs which would fit bigger and clearer text. The numbers as well as surnames could also be placed on the opening side of the door on the wall to prevent them from being blocked from vision if the door is open.

**Individual Bathrooms:**

The bathroom doors could be repainted with a different color to create a better and clearer contrast from the walls and floor. The type of door handle could be changed to a vertical bar handle which would be easier to operate instead of the current hole type. The doors could also be fitted with a toilet sign to increase the clarity of the space.

The toilet flushing mechanism could be changed to an automatic flushing type or a pull-up button which are both easier to operate compared to the current push-down type. The hand held shower head could be placed closed to the toilet seat to make it easier to reach even for a person with limited physical functional capacity.

The intended place for the soap dispenser could be lowered as the current placement is quite high and hard to reach from a wheelchair. Similar to the soap dispenser the hand towel dispenser is quite high and should also be lowered for wheelchair users to reach. The faucet on the wash basin could be changed to an automatic motion detecting version which is easier to use instead of the current leaver one.

Additionally a permanent alarm system could be installed to the toilets for the possibility that a customer does not have their personal alarm device with them when using the facility.

**Group Home Dining and Living Room:**

The accessibility of the lighting in the dining room could be improved by adding lamps that emit a more even lighting instead of the current “spot” lamps.

**Dressing Room:**

The door leading into the dressing room/sauna area should be fitted with a sign or a symbol to increase the clarity of the space. The color of the door could also be changed to create a better contrast compared to the almost similarly colored walls. This could also be done by painting the door frame with a darker color. The door could also be fitted with a vertical bar handle which is easy to operate even for a physically challenged person.

The dressing room's coat hangers could be placed differently or replaced with a shelf or other method of storage. The current place of the hangers is difficult to reach using a wheelchair and the clothes would hang over the bench where people change. Coat hangers should also be placed on different heights for example 1100-1200 mm is a good height for a coat hanger for customers using a wheelchair. The dressing room could be fitted with seats on different heights in addition to the 500 mm high bench. Vertical handrails could also be installed on the walls especially at the bench which would make dressing and undressing easier.

## **Shower Room**

The table on the opening side leading into the shower room should be placed differently as the recommended 400 mm of free space at the opening side of the door is partly blocked by it. A bar handle should be installed on the door as to make it easier to operate for an elderly person. The non-fixed floor drain covers should be changed to fixed ones to prevent accidents that could occur.

The shower room wash basin could be changed to more accessible similar to the ones in the individual bathrooms which had a low profile and a handrail on the edges. The light switch could be changed or painted so it would have a better color contrast versus the walls to make it easier to detect. The lighting in the shower room could also be changed to an automatic system which is more accessible.

### **Sauna:**

The sauna door could be fitted with a bar handle preferably made out of wood which does not heat up too hot. The glass door to the sauna should also be fitted with a contrast stripe to increase its detectability. The contrast between the bench and the walls could be increased by painting the bench a darker color and adding a contrast stripe on the edge of the bench.

## **8. Conclusions**

The goal of this thesis was to study and implement appropriate methods to analyze the accessibility of the physical environment of a nursing home. The FPD's accessibility analysis checklists proved to be the most suitable and reliable method for analyzing the accessibility and it was therefore chosen for the task.

The accessibility analysis itself was a success, the accessibility analysis forms proved to be a great way to analyze the accessibility of a nursing home precisely. The accessibility features that are important to nursing home customers were all present in the checklists. The analysis itself focused on the physical accessibility features of the facility therefore; other accessibility dimensions were not studied. The reliability of the results of the analysis comes from the reliability of the source and the precise nature of the points studied. The analysis did not include any assumptions and the results provide precise measurement data which was compared to the requirements or recommendations set by the legal authorities and expert organizations on the topic.

Improving the physical accessibility of the facility does, however, affect the other dimensions of accessibility. Physical accessibility promotes the individual activities of the customers. Removing level differences, addressing the requirements for space, balance, reach and distance all improve the nursing home customer's ability to function independently in the facility. Individual physical activities benefit the customer's physical wellbeing by increasing their physical condition, muscle strength, body control, range of motions and alertness.

Physical accessibility also affects the social accessibility of the nursing home customers. Being able to independently move around the facility to meet and talk to other customers helps maintain the social connections which affect the social functional capacity of the customers. Physical accessibility features such as the hearing and seeing environments help create an environment which supports social interaction even in the case disabilities that might otherwise restrict it. Improving the social accessibility also helps the customers to participate in the social endeavors of the community and the decision making that involves them.

Physical accessibility can also affect the wellbeing of the nursing home customers through safety. A safer physical again promotes the individual activities of the customers. A safer facility through accessibility can also decrease the number of accidents that occur which has a direct positive influence on the wellbeing of the customers. A safe physical environment may also affect the psychological wellbeing of the customers by enhancing the feeling of safety and therefore removing psychological barriers that might have previously restricted a person from engaging in certain activities.

Physical accessibility at Villa Toukola was all in all very close to the recommended levels in almost all of the measured factors. Nevertheless improving the accessibility even further benefits both serving the changing needs of the nursing home customers and staying competitive in the industry. The results yielded some recommendations for further developing the level of accessibility. The results were also easy to analyze as the answer was always of the type is or is not accessible according to the recommendations.

Further research and development on the accessibility of Villa Toukola could take the form of conducting a precise sense related accessibility analysis on the hearing and seeing environment with proper tools such as decibel and lumen meters. The accessibility of the social environment could be studied by an expert of that field. Other accessibility related issues that could be studied further include for example actors that cause allergies such as dust, allergenic plants as well as the fragrance use of the customers and/or staff and equality factors such as do the customers receive equal attention from nurses or is it skewed towards a certain section of the group.

## 9. General Recommendations

Accessibility manifests in both the little and big things. Developing accessibility benefits both the customers and the staff. This section lists suggestions on improving the accessibility of a nursing home based on the research on the functional capacity requirements of the elderly as well as findings of Villa Toukola's accessibility analysis.

Improving the accessibility of nursing homes right now prepares them for the future increase in demand that is eminent due to the ageing population.

Having an accessible facility that promotes the individuality and self sufficiency of the customers which means that the company can provide services according to the changing needs of the populations as well as the goals of the government. Offering these kinds of services with the assistance of accessibility is a key element in staying competitive in the future as the requirements for nursing homes shift towards a more individualistic method of care.

When starting to develop the accessibility it is important to first study the intended use of the environment and the requirements of the customers. In nursing homes functional capacity is often studied through different tools and methods such as ADL and IADL tools which measure the ability of a person to perform normal daily activities. These results can be used as a basis for setting the required level of accessibility. If the functional capacity of nursing home customers is good and they are able to coherently answer to questions it is beneficial also to study the needs and wants of the customers to see what spaces are the most important for good accessibility. Readymade accessibility surveys can be found for example on the FPD website ([www.invalidiliitto.fi](http://www.invalidiliitto.fi)).

Analyzing the physical barriers of a nursing home is the most important factor of accessibility. If a person cannot exit their room or enter a space

independently because of a physical barrier the accessibility of any space beyond that point is obsolete. Removing restricting physical barriers such as high thresholds, stairs without ramps, heavy doors and too narrow passageways is the most important to nursing home accessibility. Physical accessibility of a space can be improved by for example installing ramps next to stairs, ramping high thresholds or removing them altogether, installing light-to-use door handles and installing handrails to all open walls. Material choices are also important to consider when improving nursing home accessibility. Floors should always be non-slippery, non-reflective, even and easily detectable.

Colors are also an important factor of physical accessibility. Clear colors and good contrast improves the clarity of a space which is especially important in nursing homes as several customers often have problems with their eye sight as well as cognitive disorders such as dementia which lower their ability to perceive their surroundings. Contrast stripes on glass doors, guiding colors on floors and walls, contrast colors on doors, stairs and other areas increase the detectability of the environment which in turn makes it more clear, safer and easier to navigate. Improving the lighting of a nursing home can also improve the accessibility of the facility. Even lighting makes an environment easier to perceive which in turn enables an elderly person to navigate the space more easily. Improper lighting conditions and glaring materials such as polished wood and metal can create irritating glare which decreases the accessibility of a space. Replacing glaring materials with matte or otherwise non-reflecting items increase the accessibility of a space whilst making it more enjoyable to use. Developing accessibility is a noble goal. It is essentially about equality and maintaining the quality of life of people. Every one of us will need accessibility features in the future which makes accessibility a joint cause. Hopefully this thesis helps the readers understand the significance of accessibility and maybe even start to look critically at their own surrounding environment and its accessibility.

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# 11. Appendices

## 11.1. Appendix 1

Appendix 1 (1/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

1 SISÄÄNKÄYNTI		Kriteeri	Mitta	K	E	Ek
Sijainti:						
1.0.	Hahmottuuko sisäänkäynti rakennuksen julkisivusta? <i>(helposti löydetväissä)</i>					
1.1.	Onko sisäänkäynti katettu?					
1.2.	Onko sisäänkäynti valaistu?					
	• sisäänkäynnin valaistusvoimakkuus?	≥ 50-200 lx	lx			
1.3.	Onko sisäänkäyntiä mahdollista käyttää itsenäisesti?					
1.4.	Onko kulku pääsisääenkäynnille opastettu?					
	• onko opaste helposti havaittavassa paikassa?					
	• onko opaste läheltä katsottavissa? ( <i>pääsy opasteen ääreen</i> )					
	• opasteen tekstin korkeus maasta?	1400-1600 mm	mm			
	• tekstin kirjasinkoko? ( <i>suhteessa katseluetäisyteen</i> )	15, 25-40, 70-100 mm	mm			
	• onko opasteessa käytetty helppoluista kirjasintyyppiä?					
	• onko opasteessa käytetty symboluja?					
	• onko kohokirjoitusta tai -symboluja?					
	• onko opasteessa kontrasti tekstin / symbolin ja taustan välillä?					
	• onko opasteen pinta himmeä ja häikäisemätön?					
	• onko opaste tasaisesti valaistu?					
	• onko opaste sijoitettu kulkuväylän ulkopuolelle? ( <i>ei törmäysvaaraa</i> )					
	• onko opasteessa ilmoitettu etäisyys sisäänkäynnille?	jos ≥ 50 m				
1.5.	Onko sisäänkäynti merkity opasteella? ( <i>esim. rakennuksen nimi</i> )					
	• onko opaste helposti havaittavassa paikassa?					
	• onko opaste läheltä katsottavissa? ( <i>pääsy opasteen ääreen</i> )					
	• opasteen tekstin korkeus maasta?	1400-1600 mm	mm			
	• tekstin kirjasinkoko? ( <i>suhteessa katseluetäisyteen</i> )	15, 25-40, 70-100 mm	mm			
	• onko opasteessa käytetty helppoluista kirjasintyyppiä?					
	• onko opasteessa käytetty symboluja?					
	• onko opasteessa käytetty kohokirjoitusta tai -symboluja?					
	• onko opasteessa kontrasti tekstin/symbolin ja taustan välillä?					
	• onko opasteen pinta himmeä ja häikäisemätön?					
	• onko opaste tasaisesti valaistu?					
1.6.	Onko sisäänkäynnin yhteydessä ääniopaste ( <i>äänimajakka</i> )?					
1.7.	Onko sisäänkäynnin edustalla ohjaava pintamateriaali?					



Appendix 1 (2/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

	Kriteeri	Mitta	K	E	Ek
1.8.	Onko sisääntulon välittömässä läheisyydessä koteen opastaulu?				
	• sijaitseeko opastaulu helposti havaittavassa paikassa?				
	• onko opaste looginen? ( <i>kaikki tilat ja kohteet mainitut opasteissa</i> )				
	• onko opastaulu läheltä katsottavissa? ( <i>pääsy opasteen ääreen</i> )				
	• opastaulun tekstin korkeus maasta?	1400-1600 mm	mm		
	• tekstin kirjasinkoko? ( <i>suhteessa katseluetäisyyteen</i> )	15, 25-40, 70-100 mm	mm		
	• onko opasteessa käytetty helppolukuista kirjasintyyppiä?				
	• onko opasteessa käytetty symboleja?				
	• onko opasteessa käytetty kohokirjoitusta / -symboleja?				
	• onko opasteessa käytetty pistekirjoitusta?				
	• onko opasteessa kontrasti tekstin / symbolin ja taustan välillä?				
	• onko opasteen pinta himmeä ja häikäisemätön?				
	• onko opaste tasaisesti valaistu?				
1.9.	Onko opasteen yhteydessä pohjapiirros rakennuksesta?				
1.10.	Onko tunnusteltavaa kohokarttaa?				
1.11.	Onko tunnusteltavaa rakennuksen pienoismallia?				
<b>Lisätietoja</b>					

## Appendix 1 (3/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

Korkeus- ja tasoverot sisäänkäynnin yhteydessä	Kriteeri	Mitta	K	E	Ek
<b>1.12.</b> Onko sisäänkäynnin yhteydessä portaita?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• portaiden tyyppi?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• suoravartiset			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• kierreportaat / kaarevat portaat			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• porrassaskelmien (nousujen) lukumäärä?		kpl	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko portaissa välitasannetta (10-15 nousun jälkeen)?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• portaiden leveys?	$\geq 1200 \text{ mm}$	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• porrasskelman nousu (korkeus)?	120 mm (ulko)	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	$\leq 160 \text{ mm}$ (katettu)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• porrasskelman etenemä (syvyys)?	400-420 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	$\geq 300 \text{ mm}$ (katettu)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• pysykkö portaiden nousu / etenemä samana ja askelrytmi tasaisena läpi portaiden?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• rastita E, jos portaissa on avoaskelmia			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• rastita E, jos porrasskelmissä on ulkoneva reuna			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko jokaisen askelman reunassa kontrastiraita?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko portaiden alkamis- ja päättymiskohdassa varoitusalue?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko portaan alle joutuminen (törmäysvaara) estetty?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>1.13.</b> Onko portaissa käsijohde?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko käsijohde portaan molemilla puolilla?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko käsijohde yhtenäinen/katkeamaton?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko käsijohde kahdella korkeudella?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• käsijohteen korkeus / korkeudet?	$700 \text{ ja } 900 \text{ mm}$	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• jatkuuko käsijohde portaan päissä yli portaan alkamis- ja päättymiskohdan?	$\geq 300 \text{ mm}$		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko käsijohde muodoltaan pyöreä tai pyöristetty suorakaide?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• pyöreän käsijohteen halkaisija?	$\varnothing 30-40 \text{ mm}$	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• pyöristetyn käsijohteen ympärysmitta?	120-160 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko käsijohde kiinnitetty alhaalta?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• käsijohteen etäisyys seinästä?	$\geq 45 \text{ mm}$	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko käsijohteen pääti taivutettu sivulle/alas?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• erottuvatko käsijoheet tummuuskontrastina taustastaan?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• rastita E, jos käsijohteen materiaalina on käytetty nikkelia, kumia tai keinokumia			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



## Appendix 1 (4/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

	Kriteeri	Mitta	K	E	Ek
<b>1.14.</b> Onko sisääntekynni yhteydessä luiska?					
• onko luiska katettu tai varustettu sulanapitojärjestelmällä?					
• onko luiskan pinta kova, tasainen ja märkänäkin luistamaton?					
• onko luiska suoravartinen?					
(kääntyy ainoastaan välitasanteiden kohdalla)					
<b>Jos luiska kääntyy välitasanteella niin,</b>					
välitasanteen leveys?	$\geq 1150$ mm	mm			
välitasanteen pituus?	$\geq 1150$ mm				
• vapaan tilan leveys luiskan alkamiskohdan edessä?	$\geq 1500$ mm	mm			
• vapaan tilan pituus luiskan alkamiskohdan edessä?	$\geq 1500$ mm	mm			
• vapaan tilan leveys luiskan päättymiskohdan jälkeen?	$\geq 1500$ mm	mm			
• vapaan tilan pituus luiskan päättymiskohdan jälkeen?	$\geq 1500$ mm	mm			
• luiskan pituus?		mm			
<b>Jos luiskan pituus yli 6000 mm, niin</b>					
• onko luiskassa välitasanne?					
• välitasanteen pituus?	$\geq 2000$ mm	mm			
• välitasanteen pituuskaltevuus?	$\leq 2$ %	%			
• välitasanteen sivukaltevuus?	$\leq 2$ %	%			
• luiskan leveys?	$\geq 900$ mm	mm			
• luiskan pituuskaltevuus?	$\leq 5\%$	%			
• luiskan sivukaltevuus?	$\leq 8\%$ (katettu)	%			
• luiskan sivukaltevuus?	$\leq 2$ %	%			
• onko luiskassa suojaruna tai rajautuuko luiska seinään?					
• onko suojaruna / seinä luiskan molemilla puolilla?					
• suojarunon korkeus?	$\geq 50$ mm	mm			
• onko luiskan alkamis- ja päättymiskohdassa varoitusalue?					
• erottuuko luiska tummuuskontrastina kulkuväylästä?					
<b>1.15.</b> Onko luiskassa käsijohde?					
• onko käsijohde luiskan molemilla puolilla?					
• onko käsijohde yhtenäinen/katkeamaton?					
• onko käsijohde kahdella korkeudella?					
• käsijohteen korkeus/korkeudet?	$700$ ja $900$ mm	mm			
• jatkuuko käsijohde portaan päissä yli portaan alkamis- ja päättymiskohdan?	$\geq 300$ mm	mm			
• onko käsijohde muodoltaan pyöreä tai pyöristetty suorakaide?					
• pyöreän käsijohteen halkaisija?	$\varnothing 30-40$ mm	mm			
• pyöristetyn käsijohteen ympärysmitta?	$120-160$ mm	mm			
• onko käsijohde kiinnitetty alhaalta?					
• käsijohteen etäisyys seinästä?	$\geq 45$ mm	mm			
• onko käsijohteen pääti taivutettu sivulle/alas?					
• erottuvatko käsijoheet tummuuskontrastina taustastaan?					
• rastita E, jos käsijohteen materiaalina on käytetty nikkelia, kumia tai keinokumia					



Appendix 1 (5/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

## Appendix 1 (6/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

Ovi	Kriteeri	Mitta	K	E	Ek
1.20. Onko ovi helposti hahmotettavissa ? (erottuu tummuuskontrastin avulla)			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.21. Vapaan tilan leveys ovien välittömässä läheisyydessä?	$\geq 1800 \text{ mm}$	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.22. Vapaan tilan pituus ovien välittömässä läheisyydessä?	$\geq 1800 \text{ mm}$	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.23. Oven vapaa leveys?	$\geq 850 \text{ mm}$	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.24. Kynnyksen korkeus?	$\leq 20 \text{ mm}$	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Jos kynnyks <math>\geq 20 \text{ mm}</math>, niin kynnyksen malli</b>					
• suorareunainen					
• porrastettu					
• pyöristetty					
• luiskattu (kynnysluiska tai -kiila)					
1.25. Onko ulko-oven yhteydessä jalkasäleikköä (ritilä, rappuralli)?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• jalkasäleikön tasoeron korkeus	$\leq 20 \text{ mm}$	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• jalkasäleikön rakojen leveys?	$\leq 5 \text{ mm}$	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.26. Onko ovi mahdollista kiinnittää aukiasentoon?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko ovenpysäytin/aukipitotappi sijoitettu niin, ettei siitä aiheudu törmäys- tai kompastumisvaaraa?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.27. Oven typpi			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• käsin avattava ovi (esim. sarana-, liuku-, veräjäovi)			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• sähköisesti avautuva tai avattava ovi			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• pyörövi			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• läpinäkyvä ovi			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• muu, mikä?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Jos käsin avattava ovi, niin</b>					
• oven painikkeen / vetimen korkeus?					
• erottuuko oven painike / vedin tummuuskontrastina taustasta?					
• vapaa tila oven vieressä aukeamispuolella?					
• oven avaamiseen tarvittava voima?					
• onko ovi avattavissa yhdellä kädellä?					
<b>Jos sähköisesti avautuva tai avattava ovi, niin</b>					
• reagoiko oven tunnistin myös lyhytkasvuisiin ja lapsiin?					
• onko ovessa turvatunnistin, ettei ovi tule päälle?					
• toimiiko sähköinen ovi <b>avauspainikkeella?</b>					
• avauspainikkeen korkeus?					
• avauspainikkeen etäisyys nurkasta?					
• onko avauspainike sijoitettu seinään oven aukeamispuolelle?					
• erottuuko avauspainike tummuuskontrastina taustasta?					
• onko avauspainike merkitty (esim. ISA-tunnuksella)?					
• kuinka kauan ovi pysyy auki?					
• onko oven aukeamiskaari merkitty lattiaan?					
		väh. 25 s		sek.	



## Appendix 1 (7/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

	Kriteeri	Mitta	K	E	Ek
<b>Jos pyöröovi, niin</b>					
• onko pyöröoven yhteydessä vaihtoehtoinen esteetön ovi?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Jos läpinäkyvä ovi, niin</b>					
• onko ovessa kontrastimerkinnät?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• kontrastimerkintöjen korkeus lattiasta?	1000 ja 1400-1600 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko oven alareuna suojattu potkulevyllä?	≥ 300 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Tuulikaappi</b>					
<b>1.28.</b> Onko sisäänkäynnissä tuulikaappi?					
• tuulikaapin vapaa leveys?	≥ 1500 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• tuulikaapin vapaa syvyys?	≥ 1500 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• rastita E, jos tuulikaapissa on tasoeroja?					
• rastita E, jos tuulikaapissa on kulkua haittaava kumimatto/ritilä?					
• maton/ritilän rakojen leveys?	≤ 5 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• valaistusvoimakkuus?	200-300 lx	lux	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko sisäovi helposti hahmotettavissa ?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• vapaa tila oven sivulla aukeamispuolella?	≥ 400 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• oven vapaa leveys?	≥ 850 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• kynnyksen korkeus?	≤ 20 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Varusteet</b>					
<b>1.29.</b> Onko oven yhteydessä ovikello?					
• erottuuko ovikello tummuuskontrastin avulla taustasta?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ovikellon korkeus maasta?	850-1100 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ovikellon etäisyys nurkasta?	≥ 400 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko ovikellon yhteydessä opaste?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• tekstin kirjasinkoko?	≥ 15 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko ovikello valaistu?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>1.30.</b> Onko oven yhteydessä summeri/ovipuhelin?					
• erottuuko summeri/ovipuhelin tummuuskontrastin avulla taustasta?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• summerin/ovipuhelimen korkeus maasta?	850-1100 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• summerin/ovipuhelimen etäisyys nurkasta?	≥ 400 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko summeri/ovipuhelin varustettu			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• äänimerkillä?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• valomerkillä?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko summerin/ovipuhelimen yhteydessä opaste?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• tekstin kirjasinkoko?	≥ 15 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko summeri/ovipuhelin valaistu?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



Appendix 1 (8/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

	Kriteeri	Mitta	K	E	Ek
1.31. Onko sisäänkäynnin yhteydessä työaikapääte / kulunvalvontalaite?					
• sijaitseeko työaikapääte oven aukeamispuolella?					
• erottuuuko työaikapääte tummuuskontrastin avulla taustasta?					
• työaikapääteen korkeus maasta?	850-1100 mm	mm			
• etäisyys nurkasta?	$\geq 400$ mm	mm			
• onko työaikapääte varustettu					
• äänimerkillä?					
• valomerkillä?					
• onko työaikapääteen yhteydessä opaste?					
• tekstin kirjasinkoko?	$\geq 15$ mm	mm			
• onko työaikapääte valaistu?					
<b>Vaihtoehtoinen sisäänkäynti</b>					
1.32. Jos pääsisäänkäynti ei ole esteeton, niin onko kohteeseen vaihtoehtoinen sisäänkäynti? (täytä oma lomake)					
• matka pääsisäänkäynniltä vaihtoehtoiselle sisäänkäynnille?		m			
• onko kulku vaihtoehtoiselle sisäänkäynnille opastettu?					
• onko opasteessa ISA-tunnus?					
• onko opasteeseen merkitty etäisyys vaihtoehtoiselle sisäänkäynnille?	jos $\geq 50$ m				
<b>Lisätietoja</b>					

## Appendix 1 (9/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

2 KÄYTÄVÄ		Kriteeri	Mitta	K	E	Ek
Sijainti:						
2.0.	Onko käytävän pintamateriaali kova, tasainen ja (märkänäkin) luistamaton?					
2.1.	Käytävän vapaa leveys?	$\geq 900 \text{ mm}$	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2.2.	Käytävän vapaa korkeus? (jos vapaata korkeutta rajoittavia esteitä)	$\geq 2200 \text{ mm}$	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2.3.	Käytävän pituuskaltevuus? (jos luiskattuja kohtia)	$\leq 8 \%$	%	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2.4.	Rastita E, jos käytävällä kiinteitä esteitä? (törmäys-, kompastumis-, kiinnitakertumis tai putoamisvaaraa aiheuttavia kiinteitä esteitä)			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Jos kiinteitä esteitä, niin</b>						
käytävän vapaa leveys esteiden kohdalla?		$\geq 900 \text{ mm}$	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2.5.	Rastita E, jos käytävällä tasoeroja / yksittäisiä (porras)askelmia?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Jos tasoeroja, niin</b>						
tasoeron / askelman korkeus?			mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Kalusteet</b>						
2.6.	Onko käytävällä tukikaiteita / käsijohteita?					
• tukikaiteen / käsijoteen korkeus?		900 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko käsijohde muodoltaan pyöreä tai pyöristetty suorakaide?				<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• pyöreän käsijoteen halkaisija?		$\varnothing 30-40 \text{ mm}$	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• pyöristetyn käsijoteen ympärysmitta?		120-160 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko käsijohde kiinnitetty alhaalta?				<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• käsijohteen etäisyys seinästä?		$\geq 45 \text{ mm}$	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko käsijohteen päät taivutettu sivulle/ alas?				<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• erottuvatko käsijoheet tummuuskontrastina taustastaan?				<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• rastita E, jos käsijohteen materiaalina on käytetty nikkelää, kumia tai keinokumia				<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.7.	Onko käytävällä istuimia levähtämiseen?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko ne sijoitettu käytävän sivuun?				<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• erottuuko istuimen alue materiaali- ja/tai tummuuskontrastina käytävän pintamateriaalista?				<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• erottuvatko kalusteet tummuuskontrastina taustastaan?				<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko erikorkuisia istuimia?				<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• istuinkorkeus/korkeudet		300 / 450 / 500-550 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



## Appendix 1 (10/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

	Kriteerit	Mitta	K	E	Ek
• onko osassa istuimia selkänoja?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko osassa istuimia käsinojat?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko istuinosa tasainen?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko istuimen jalkatila avoin?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• levähdyspaikkojen välinen etäisyys toisistaan (pitkillä käytävillä)?	≤ 25 m	m	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Valaistus, häikäisy ja kontrastit</b>					
2.8. Valaistusvoimakkuus?	200-300 lx	lx	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2.9. Onko tilassa automaattinen valaistuksen ohjaus? (esim. liiketunnistin)			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2.10. Onko valaistus tasainen ja häikäisemätön?	Jos ei ole, niin rastita E, jos kulkureitille jää pimeitä katvealueita? rastita E, jos valaistus sisällä aiheuttaa häikäisyhaittaa? rastita E, jos ulkoa tuleva valo aiheuttaa häikäisyhaittaa?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2.11. Helpottavatko väri- ja kontrastierot tilan hahmottamista? (esim. erottuuko lattia kontrastivärisenä seinistä)			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2.12. Onko käytävällä näkövammaisen liikkumista opastava pintamateriaali tai tummuuskontrastina erottuva opasteraita?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2.13. Rastita E, jos käytävän pinnassa harhaanjohtavaa kuviointia? (vaikutelma tasoerosta tai epätasaisuudesta, harhaanjohtava tai voimakas kuvointi)			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Lisätietoja</b>					



Appendix 1 (11/37) Accessibility Analysis Checklist (PFD, ESKEH – Project)

3 OVI		Sijainti:	Sijainti:		Sijainti:		Sijainti:						
			K	E	Ek	Mitta	K	E	Ek	Mitta	K	E	
3.0.	Onko ovi helposti hahmotettavissa (erottuu tummuuskontrastin avulla)?	Kriteeri	Mitta	K	E	Ek	Mitta	K	E	Ek	Mitta	K	E
3.1.	Vapaan tilan leveys oven välittömässä läheisyydessä?						≥ 1500 mm						
3.2.	Vapana tilan pitius oven välittömässä läheisyydessä?						≥ 1500 mm						
3.3.	Oven vapaa leveys?						≥ 850 mm						
3.4.	Kynnyksen korkeus?						≤ 20 mm						
<b>Jos kynnis <math>\geq 20</math> mm, niin kynnyksen malli</b>													
• suorareunainen													
• porrastettu													
• pyöristetty													
• liuskattu (kynnysluiska tai -kiila)													
3.5.	Oven typpi?												
• käsin avattava ovi (esim. sarana-, liuku-, veräjäovi)													
• sähköisesti avautuva tai avattava ovi													
• pyöröovi													
• läpinäkyvä ovi													
• muu, mikä?													
<b>Jos käsin avattava ovi, niin</b>													
• oven painikkeen / vetimen korkeus?							850-1100 mm						
• erottuuvo oven painike / vedin tummuuskontastina taustasta?													
• vapaa tila oven vieressä aukeamispuolella?							≥ 400 mm						
• oven avaamiseen tarvittava voima?							10 N (1 kg)						
• onko ovi avattavissa yhdellä käellä?													
<b>Jos sähköisesti avautuva tai avattava ovi, niin</b>													
• reagoilko automaattioven tunnistin myös lyhytkausvaijien ja lapsiin?													
• onko ovessa turvattunista, ettei ovi tule päälle?													
• toimiiko sähköinen ovi <b>avauspainikkeella</b> ?													
• avauspainikkeen korkeus							850 mm						



## Appendix 1 (12/37) Accessibility Analysis Checklist (PFD, ESKEH – Project)



## Appendix 1 (13/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

5 LUISKA		Kriteeri	Mitta	K	E	Ek
Sijainti:						
5.0.	Onko luiskan pinta kova, tasainen ja märkänäkin luistamaton?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5.1.	Onko luiska suoravartinen? <i>(kääntyy ainoastaan välitasanteiden kohdalla)</i>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<b>Jos luiska kääntyy välitasanteella, niin</b>					
	välitasanteen leveys?	≥ 1150 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	välitasanteen pituus?	≥ 1150 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5.2.	Vapaan tilan leveys luiskan alkamiskohdan edessä?	≥ 1500 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5.3.	Vapaan tilan pituus luiskan alkamiskohdan edessä?	≥ 1500 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5.4.	Vapaan tilan leveys luiskan päättymiskohdan jälkeen?	≥ 1500 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5.5.	Vapaan tilan pituus luiskan päättymiskohdan jälkeen?	≥ 1500 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5.6.	Luiskan pituus?		mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<b>Jos luiskan pituus yli 6000 mm, niin</b>					
	• onko luiskassa välitasanne?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• välitasanteen pituus?	≥ 2000 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• välitasanteen leveys?	≥ 1150 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• välitasanteen pituuskaltevuus?	≤ 2 %	%	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• välitasanteen sivukaltevuus?	≤ 2 %	%	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5.7.	Luiskan leveys?	≥ 900 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5.8.	Luiskan pituuskaltevuus?	≤ 8 %	%	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5.9.	Luiskan sivukaltevuus?	≤ 2 %	%	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5.10.	Onko luiskassa suojaruna tai rajautuuko luiska seinään?					
	• onko suojaruna / seinä luiskan molemilla puolilla?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• suojarunun korkeus?	≥ 50 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5.11.	Erottuuko luiska tummuuskontrastina kulkuväylästä?					
5.12.	Onko luiskassa käsjohde?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• onko käsjohde luiskan molemilla puolilla?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• onko käsjohde yhtenäinen/katkeamaton?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• onko käsjohde kahdella korkeudella?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• käsjohteen korkeus/korkeudet?	700 ja 900 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• jatkuuko käsjohde portaan päissä yli portaan alkamis- ja päättymiskohdan?	≥ 300 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• onko käsjohde muodoltaan pyöreä tai pyöristetty suorakaide?	Ø 30-40 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• pyöreän käsjohteen halkaisija?	120-160 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• pyöristetyn käsjohteen ympärysmitta?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



Appendix 1 (14/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

	Kriteeri	Mitta	K	E	Ek
• onko käsijohde kiinnitetty alhaalta?					
• käsijohteen etäisyys seinästä?	≥ 45 mm	mm			
• onko käsijohteen päät taivutettu sivulle/alas?					
• erottuvatko käsijohteet tummuuskontrastina taustastaan?					
• rastita E, jos käsijohteen materiaalina on käytetty nikkelia, kumia tai keinokumia					
<b>5.13. Onko luiska valaistu?</b>					
• valaistusvoimakkuus?	300-500 lx	lx			

## Appendix 1 (15/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

TILA (peruslomake)		Kriteeri	Mitta	K	E	Ek
Sijainti:						
Opastus						
Onko kulku tilaan opastettu?					<input type="checkbox"/>	<input checked="" type="checkbox"/>
• onko opaste helposti havaittavassa paikassa?					<input type="checkbox"/>	<input checked="" type="checkbox"/>
• onko etäisyys kohteeseen merkity opasteeseen?	jos $\geq 50$ m				<input type="checkbox"/>	<input checked="" type="checkbox"/>
• opasteen sijoitustapa					<input type="checkbox"/>	<input checked="" type="checkbox"/>
kulkuväylän yläpuolella					<input type="checkbox"/>	
kulkuväylän sivulla seinällä tms.					<input type="checkbox"/>	
<b>Jos kulkuväylän yläpuolella, niin</b>						
• opasteen korkeus?	$\geq 2200$ mm		mm		<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko opasteessa käytetty helppoluista kirjasintyyppiä?					<input type="checkbox"/>	<input checked="" type="checkbox"/>
• onko opasteessa käytetty symboleja?					<input type="checkbox"/>	<input checked="" type="checkbox"/>
• onko opasteessa tummuuskontrasti tekstin/symbolin ja taustan välillä?					<input type="checkbox"/>	<input checked="" type="checkbox"/>
• onko opasteen pinta himmeä ja häikäisemätön?					<input type="checkbox"/>	<input checked="" type="checkbox"/>
• onko opaste tasaisesti valaistu?					<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Jos kulkuväylän sivulla seinällä tms., niin</b>						
• onko opaste sijoitettu niin, ettei se aiheuta törmäysvaaraa?					<input type="checkbox"/>	<input checked="" type="checkbox"/>
• onko opaste lähestä katsottavissa? (pääsy opasteen ääreen)					<input type="checkbox"/>	<input checked="" type="checkbox"/>
• opasteen tekstin korkeus lattiasta?	1400-1600		mm		<input type="checkbox"/>	<input checked="" type="checkbox"/>
• tekstin kirjasinkoko? (suhteessa katseluetäisyyteen)	15, 25-40, 70-100 mm		mm		<input type="checkbox"/>	<input checked="" type="checkbox"/>
• onko opasteessa käytetty helppoluista kirjasintyyppiä?					<input type="checkbox"/>	
• onko opasteessa käytetty symboleja?					<input type="checkbox"/>	
• onko opasteessa käytetty kohokirjoitusta tai -symboleja?					<input type="checkbox"/>	
• onko opasteessa tummuuskontrasti tekstin/symbolin ja taustan välillä?					<input type="checkbox"/>	<input checked="" type="checkbox"/>
• onko opasteessa käytetty pistekirjoitusta?					<input type="checkbox"/>	<input checked="" type="checkbox"/>
• onko opasteen pinta himmeä ja häikäisemätön?					<input type="checkbox"/>	<input checked="" type="checkbox"/>
• onko opaste tasaisesti valaistu?					<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tilaopaste / huoneopaste						
Onko tila merkity opasteella?					<input type="checkbox"/>	<input checked="" type="checkbox"/>
• onko opaste sijoitettu seinään oven aukeamispuolelle?					<input type="checkbox"/>	<input checked="" type="checkbox"/>
• opasteen tekstin korkeus lattiasta?	1400-1600 mm		mm		<input type="checkbox"/>	<input checked="" type="checkbox"/>
• tekstin kirjasinkoko?	$\geq 15$ mm		mm		<input type="checkbox"/>	<input checked="" type="checkbox"/>
• onko opasteessa käytetty helppoluista kirjasintyyppiä?					<input type="checkbox"/>	
• onko opasteessa käytetty symboleja?					<input type="checkbox"/>	
• onko opasteessa käytetty kohokirjoitusta / -symboleja?					<input type="checkbox"/>	
• onko opasteessa tummuuskontrasti symbolin / tekstin ja taustan välillä?					<input type="checkbox"/>	<input checked="" type="checkbox"/>



## Appendix 1 (16/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

	Kriteeri	Mitta	K	E	Ek
• onko opasteessa käytetty pistekirjoitusta?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko opasteen pinta himmeä ja häikäisemätön?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko opaste tasaisesti valaistu?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Sisäänkäynti tilaan</b>					
Onko tilaan esteetön pääsy suoraan aulasta, käytävästä tai muusta vastaavasta tilasta?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Onko ovi helposti hahmotettavissa ?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vapaan tilan leveys oven välittömässä läheisyydessä?	≥ 1500 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vapaan tilan syvyys oven välittömässä läheisyydessä?	≥ 1500 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Oven vapaa leveys?	≥ 850 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Kynnyksen korkeus?	≤ 20 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Jos kynnys ≥ 20 mm, niin kynnyksen malli</b>					
• suorareunainen			<input type="checkbox"/>		
• porrastettu			<input type="checkbox"/>		
• pyöristetty			<input type="checkbox"/>		
• luiskattu (kynnysluiska tai -kiila)			<input type="checkbox"/>		
<b>Oven typpi?</b>					
• käsin avattava ovi (esim. sarana-, liuku-, veräjäovi)			<input type="checkbox"/>		
• sähköisesti avautuva tai avattava ovi			<input type="checkbox"/>		
• läpinäkyvä ovi			<input type="checkbox"/>		
• muu, mikä?			<input type="checkbox"/>		
<b>Jos käsin avattava ovi, niin</b>					
• oven painikkeen / vetimen korkeus?	850 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• erottuuko oven painike / vedin selkeästi taustasta?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• vapaa tila oven vieressä aukeamispuolella?	≥ 400 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• oven avaamiseen tarvittava voima?	≤ 10 N (≈ 1 kg)	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko ovi avattavissa yhdellä kädellä?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Jos sähköisesti avautuva tai avattava ovi, niin</b>					
• reagoiko automaattioven tunnistin myös lyhytkasvuisiin ja lapsiin?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko ovessa turvatunnistin, ettei ovi tule päälle?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko ovessa <b>avauspainike</b> ?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• avauspainikkeen korkeus?	850 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• avauspainikkeen etäisyys nurkasta?	≥ 400 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko avauspainike sijoitettu seinään oven aukeamispuolelle?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• erottuuko avauspainike tummuuskontrastina taustasta?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko avauspainike merkitty (esim. ISA-tunnuksella)?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• kuinka kauan ovi pysyy auki?	≥ 25 s	s	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko oven eteen merkitty oven aukeamiskaari?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



## Appendix 1 (17/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

	Kriteeri	Mitta	K	E	Ek
<b>Jos läpinäkyvä ovi, niin</b>					
• onko ovessa kontrastiraita/-merkintää?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• kontrastiraidan/-merkinnän korkeudet?	1000 ja 1400-1600	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko oven alareuna suojattu potkulevyllä?	≥ 300 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Tila</b>					
Vapaan tilan leveys?	≥ 1500 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vapaan tilan syvyys?	≥ 1500 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Kulkuväylän vapaa leveys kalusteiden kohdalla?	≥ 900 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Kalusteet</b>					
Ovatko kalusteet siirrettäviä?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Erottuvatko kalusteet tummuuskontrastina taustastaan?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Onko erikorkuisia istuimia?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Istuinkorkeus/-korkeudet?	300 / 450 / 500-550	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Onko korkeussäädettäviä istuimia?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Onko osassa istuimia selkänoja?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Onko osassa istuimia käsinojat?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Onko istuinosa tasainen?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Onko istuimen jalkatila avoin?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pöydän korkeus?	800 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vapaan polvitilan korkeus?	≥ 670 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vapaan polvitilan syvyys?	≥ 600 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vapaan polvitilan leveys?	≥ 800 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Onko korkeussäädettäviä pöytää?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Onko pöytien yhteydessä pistorasioita?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Akustiikka</b>					
Onko tila varustettu induktiosilmukalla?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• toimiiko induktiosilmukka? (kuuluvuusalue)			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko induktiosilmukasta kertova opaste (T-opaste)?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Onko jokaisen istumapaikan kohdalla pöytämikrofoni?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Onko tilassa muu äänensiirtojärjestelmä tai kuulon apuvälineitä?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• mikä tai mitä?					
Rastita E, jos tilassa on puheen kuolemista häiritsevää kaikuisuutta (pitkä jälkkaiunta-aika)?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



Appendix 1 (18/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

## Appendix 1 (19/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

7 SÄILYTYSTILAT / VAATENAULAKOT		Kriteeri	Mitta	K	E	Ek
Sijainti:	Opastus					
	7.0. Onko kulku tilaan opastettu?					
	• onko opaste helposti havaittavassa paikassa?					
	• onko etäisyys kohteeseen merkity opasteeseen?	jos $\geq 50$ m				
	• opasteen sijoitustapa					
	kuluväylän yläpuolella				<input type="checkbox"/>	
	kuluväylän sivulla seinällä tms.				<input type="checkbox"/>	
	Jos kulkuväylän yläpuolella, niin					
	• opasteen korkeus?	$\geq 2200$ mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• onko opasteessa käytetty helppolukuista kirjasintyyppiä?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• onko opasteessa käytetty symboleja?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• onko opasteessa tummuuskontrasti tekstin/symbolin ja taustan välillä?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• onko opasteen pinta himmeä ja häikäisemätön?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• onko opaste tasaisesti valaistu?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Jos kulkuväylän sivulla seinällä tms., niin					
	• onko opaste sijoitettu niin, ettei se aiheuta törmäysvaaraa?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• onko opaste lähetä katsottavissa? (pääsy opasteen ääreen)			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• opasteen tekstin korkeus lattiasta?	1400-1600	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• tekstin kirjasinkoko? (suhteessa katseluetäisyyteen)	15, 25-40, 70-100 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• onko opasteessa käytetty helppolukuista kirjasintyyppiä?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• onko opasteessa käytetty symboleja?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• onko kohokirjoitusta tai -symboleja?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• onko opasteessa tummuuskontrasti tekstin/symbolin ja taustan välillä?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• onko opasteessa käytetty pistekirjoitusta?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• onko opasteen pinta himmeä ja häikäisemätön?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• onko opaste tasaisesti valaistu?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Tila					
	7.1. Vapaan tilan leveys?	$\geq 1500$ mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	7.2. Vapaan tilan syvyys?	$\geq 1500$ mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	7.3. Kulkuvälien vapaa leveys kalusteiden kohdalla?	$\geq 900$ mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	7.4. Onko lattia tasainen, kova ja märkänäkin luistamaton?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



## Appendix 1 (20/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

Kaapit ja lokerot	Kriteeri	Mitta	K	E	Ek
7.5. Onko säilytystilassa kaappeja tai säilytyslokeria?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ovatko niiden ovet ja lukot helppokäyttöisiä? (avaus, lukitus jne.)			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko säilytyslokeria sijoitettu eri korkeuksille?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• kaappien ja lokeroiden avaamismekanismin/lukon korkeus?	850-1100 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko avaamismekanismi käytettäväissä yhdellä kädellä?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• erottuvatko kaappien / lokeroiden numerot tummuuskontrastina taustasta?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ovatko numerot käsin tunnistettavissa (kohonumero)?	$\geq 15$ mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• numeroiden koko?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko lukollisten kaappien avainten numerointi selkeä?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vaatenaulakot					
7.6. Onko tilassa vaatenaulakoita/-tankoja?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko ripustuskoukkuja tai vaatetankoja sijoitettu useammalle eri korkeudelle?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• vaatetankojen/ripustuskoukkujen korkeus/korkeudet?	1100-1200, 1400-1600 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• pääseekö naulakon ääreen myös apuvälineiden kanssa? (kalusteen alaosassa ei kenkätelinettä tai esim. korotettu sokkeli)			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko naulakko tai vaatetanko sijoitettu siten, ettei se aiheuta törmäysvaaraa?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Muut kalusteet					
7.7. Onko säilytystilassa istuimia?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko erikorkuisia istuimia?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• istuinkorkeus/-korkeudet?	300 / 450 / 500-550 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko korkeussäädettäviä istuimia?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko osassa istuimia selkänoja?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko osassa istuimia käsinojat?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko istuinosa tasainen?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko istuimen jalkatila avoin?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7.8. Onko säilytystilassa laskutaso/hylly?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• laskutason/hyllyn korkeus?	900 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7.9. Onko säilytystilassa peiliä?					
• peilin alareunan korkeus lattiasta?	300-900 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• peilin yläreunan korkeus lattiasta?	$\geq 2000$ mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko peilin yhteydessä häikäisemätön valaisin?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



Appendix 1 (21/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)



## Appendix 1 (22/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

**16 ESTEETÖN WC**

Sijainti:

**Sijainti ja yleiset tiedot**

**16.0.** Onko wc-tilaan esteetön pääsy suoraan aulasta, käytävästä tai muusta vastaavasta tilasta?

**16.1.** Onko esteettömän wc:n sijoitus käyttäjän tai avustajan sukupuolesta riippumaton?

**16.2.** Onko esteetöntä wc auki ja käytettävissä ilman erillistä pyyntöä?

**Opastus**

**16.3.** Onko kulku wc tilaan opastettu?

- onko opaste helposti havaittavassa paikassa?
- onko etäisyys kohteeseen merkity opasteesseen?
- opasteen sijoitustapa

kulkuväylän yläpuolella

kulkuväylän sivulla seinällä tms.

**Jos kulkuväylän yläpuolella, niin**

- opasteen korkeus?
- onko opasteessa käytetty helppoluista kirjasintyyppiä?
- onko opasteessa käytetty symboleja?
- onko opasteessa tummuuskontrasti tekstin/symbolin ja taustan välillä?
- onko opasteen pinta himmeä ja häikäisemätön?
- onko opaste tasaisesti valaistu?

**Jos kulkuväylän sivulla seinällä tms., niin**

- onko opaste sijoitettu niin, ettei se aiheuta törmäysvaaraa?
- onko opaste läheltä katsottavissa? (pääsy opasteen ääreen)
- opasteen tekstin korkeus lattiasta?
- tekstin kirjasinkoko? (suhteessa katseluetäisyyteen)

jos  $\geq 50$  m

$\geq 2200$  mm

1400-1600 mm

15, 25-40,  
70-100 mm

Kriteeri Mitta K E Ek

- onko opasteessa käytetty helppoluista kirjasintyyppiä?
- onko opasteessa käytetty symboleja?
- onko opasteessa käytetty kohokirjoitusta tai -symboleja?
- onko opasteessa tummuuskontrasti tekstin/symbolin ja taustan välillä?
- onko opasteessa käytetty pistekirjoitusta?
- onko opasteen pinta himmeä ja häikäisemätön?
- onko opaste tasaisesti valaistu?

mm

mm

mm



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Tilaopaste / huoneopaste	Kriteeri	Mitta	K	E	Ek
<b>16.4.</b> Onko wc-tila merkitty opasteella (ISA-tunnus)?					
• onko opaste sijoitettu seinään oven aukeamispuolelle?					
• opasteen korkeus lattiasta?	1400-1600 mm	mm			
• onko opasteessa käytetty kohokirjoitusta tai -symboleja?					
• onko opasteessa käytetty pistekirjoitusta?					
• onko opasteessa kontrasti symbolin ja taustan välillä?					
• onko opasteen pinta himmeä ja häikäisemätön?					
• onko opaste tasaisesti valaistu?					
<b>Ovet</b>					
<b>16.5.</b> Onko ovi helposti hahmotettavissa?					
(erottuu tummuuskontrastin avulla seinästä)					
<b>16.6.</b> Vapaan tilan leveys oven välittömässä läheisyydessä?	≥ 1500 mm	mm			
<b>16.7.</b> Vapaan tilan syvyys oven välittömässä läheisyydessä?	≥ 1500 mm	mm			
<b>16.8.</b> Oven vapaa leveys ?	≥ 850 mm	mm			
<b>16.9.</b> Vapaa tila oven vieressä aukeamispuolella?	≥ 400 mm	mm			
(oven sisä- ja ulkopuolella)					
<b>16.10.</b> Onko ovi mahdollista avata ja sulkea sekä sen lukkoa käyttää yhdellä kädellä?					
<b>16.11.</b> Oven avaamiseen tarvittava voima?	≤ 10 N (≈ 1 kg)	N			
• rastita E, jos ovessa on ovensulkija (ovipumppu)?					
<b>16.12.</b> Onko oven sisäpuolella (saranareunassa) vaakasuuntainen lankavedin?					
• lankavetimen korkeus lattiasta?	800 mm	mm			
<b>16.13.</b> Kynnyksen korkeus?	≤ 20 mm	mm			
Jos kynnys ≥ 20 mm, niin kynnyksen malli					
• suorareunainen					
• porrastettu					
• pyöristetty					
• luiskattu (kynnysluiska tai -kiila)					
<b>Mitoitus</b>					
<b>16.14.</b> Onko wc-tila peilikuvaltyyppinen?					
(vapaa tila istuimen ja seinän välillä ainoastaan toisella puolella)					
<b>16.15.</b> Vapaan tilan leveys wc-istuimen edessä?	≥ 1500 mm	mm			
(pyörätuolin pyörähdyssympyrä)					
<b>16.16.</b> Vapaan tilan syvyys wc-istuimen edessä?	≥ 1500 mm	mm			
(pyörätuolin pyörähdyssympyrä)					
<b>16.17.</b> Vapaa tila wc-istuimen ja seinän välillä, vasemmalla puolella?	≥ 800 mm	mm			
(kartioittajan suunnasta katsottuna)					
<b>16.18.</b> Vapaa tila wc-istuimen ja seinän välillä, oikealla puolella?	≥ 800 mm	mm			
(kartioittajan suunnasta katsottuna)					
<b>16.19.</b> Vapaa tila wc-istuimen ja seinän välillä, istuimen takana?	300 mm	mm			



## Appendix 1 (24/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

Istuin	Kriteeri	Mitta	K	E	Ek
<b>16.20.</b> Wc-istuimen korkeus (mitattuna istuinrenkaan päälle)?	480-500 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>16.21.</b> Onko wc-istuin korkeussäädetävä?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>16.22.</b> Onko wc-istuimen yhteydessä käsituet?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko käsituki wc-istuimen molemilla puolilla?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko käsitukien malli ylös-/alaspäin kääntyvä?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko käsitukien käytö mahdollista yhdellä kädellä?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko käsituki varustettu wc-paperitelineellä?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• käsitukien korkeus?	800 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ovatko käsituet korkeussäädetäviä?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• käsitukien välinen etäisyys toisistaan?	600 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ulottuvatko käsituet wc-istuimen etureunan ohitse?	≥ 200 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>16.23.</b> Kuinka wc-istuimen huuhtelu toimii?				<input checked="" type="checkbox"/>	<input type="checkbox"/>
• painike (painonappi)?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• vedettävä nuppi?			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• automaattihuuhotelu?			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>16.24.</b> Onko pesevä ja kuivaava wc-istuin?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>16.25.</b> Etäisyys wc-istuimelta käsisuihkuun?	≤ 300 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>16.26.</b> Etäisyys wc-istuimelta käsisuihkun sekoittajaan/pesultaaseen?	≤ 300 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>16.27.</b> Etäisyys wc-istuimelta wc-paperitelineeseen?	≤ 300 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>16.28.</b> Etäisyys wc-istuimelta keppitelineeseen?	≤ 300 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Varusteet ja kalusteet</b>					
<b>16.29.</b> Onko wc-tilassa käsienvessualla?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• pesultaan tyyppi?					
• kiinteä			<input type="checkbox"/>		
• korkeussäädetävä			<input type="checkbox"/>		
• kallistettava			<input type="checkbox"/>		
• vapaan tilan leveys pesultaan edessä?	≥ 1200 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• vapaan tilan syvyys pesultaan edessä?	≥ 1200 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• pesultaan korkeus lattiasta (käyttökorkeus)?	800 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• pesultaan alla olevan vapaan polvitilan korkeus?	≥ 670 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• pesultaan alla olevan vapaan polvitilan syvyys?	≥ 600 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• pesultaan vapaan polvitilan leveys?	≥ 800 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• pesuallashanahan tyyppi?					
• automaattihana			<input type="checkbox"/>		
• yksiotehana (vipuhana)			<input type="checkbox"/>		
• kaksiotehana			<input type="checkbox"/>		<input checked="" type="checkbox"/>



## Appendix 1 (25/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

		Kriteeri	Mitta	K	E	Ek
<b>16.30.</b> Saippuatelineen korkeus?		900 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>16.31.</b> Käsipyyhetelineen / käsienvauvanlaitteen käyttökorkeus? <i>(mitataan esim. liketunnistimen korkeus)</i>		900 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>16.32.</b> Onko wc-tilassa roska-astia?				<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• onko se avattavissa/käytettävässä yhdellä kädellä (ei poljinroskis)?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• onko se sijoitettu niin, ettei se ei liikkumista tilassa?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>16.33.</b> Onko wc-tilassa yhtenäiset tukikaiteet?				<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• tukikaiteen/kaiteiden korkeus	900 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• onko tukikaiteet sijoitettu niin, etteivät ne haittaa tilan käyttöä?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>16.34.</b> Onko wc-tilassa vaatekoukuja?				<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• vaatekoukkujen korkeus/korkeudet?	1100-1200, 1400-1600 mm	mm mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>16.35.</b> Onko wc-tilassa laskutaso/hylly tms.?				<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• laskutason/hyllyn korkeus?	900 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>16.36.</b> Onko wc-tilassa peili?				<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• puolipeilin alareunan korkeus lattiasta?	800-900 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• kokovartalopeilin alareunan korkeus lattiasta?	300 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• peilin yläreunan korkeus lattiasta?	≥ 2000 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>16.37.</b> Onko wc-tilassa vauvanhoitopöytä-/taso tai apupöytä?				<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<b>Jos kyllä</b> , niin onko hoitopöytä-/taso			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• ylös/alas käännettävä			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• kiinteä			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	• onko se sijoitettu niin, ettei se estä liikkumista tilassa?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Lattia</b>						
<b>16.38.</b> Onko wc-tilan lattia märkänäkin luistamaton?				<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



## Appendix 1 (26/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

Hälytslaite	Kriteeri	Mitta	K	E	Ek
<b>16.39.</b> Onko wc-tilassa hälytslaite, jolla voi hälyttää apua ongelmatilanteissa?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• hälytyslaitteen typpi?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• painonappi			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• vedettävä naru			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• tilan ympäri seinällä kiertävä naru			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Jos painonappi, niin</b>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
onko painike sijoitettu niin, että siihen ylettyy wc-istuimelta?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
onko painike sijoitettu niin, että siihen ylettyy lattialta?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
painikkeen korkeus lattiasta?		mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Jos vedettävä naru, niin</b>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
onko naru sijoitettu niin, että siihen ylettyy wc-istuimelta?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
onko naru sijoitettu niin, että siihen ylettyy lattialta?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
narun korkeus lattiasta?		mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Jos tilan ympäri seinällä kiertävä naru, niin</b>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
narun korkeus lattiasta?	200-300 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• erottuuko hälytysnaru / -painike tummuuskontrastina taustasta?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko hälytysnaru / -painike merkity symbolilla?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• toimiiko hälytys?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko oven ulkopuolella valo ja äänimerkki hälytyksestä?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• välitetäänkö tieto hälytyksestä			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• kuulovammaisille (valomerkki)?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• näkövammaisille (äänimerkki)?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ohjautuuko hälytys kiinteistönvalvontaan yms.?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko lukittu ovi avattavissa ulkopuolelta hätätilanteessa? (esim. ns. vahtimestarin avaimella)			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko hälytyslaitteen yhteydessä matkapuhelinnumero, johon voi soittaa tai lähetä tekstiviestin hätätilanteessa?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko kuitauspainikkeen yhteydessä toimintaojeet väärän hälytyksen sattuessa?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



Appendix 1 (27/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

## Appendix 1 (28/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

<b>17 PUKEUTUMIS- JA PESEYTYMISTILAT</b>		
Sijainti:	Eristetty wc	
<b>Erillinen lomake täytetty</b>	<b>Esteetön wc</b>	<input type="checkbox"/>
<b>Sijainti ja yleiset tiedot</b>	<b>Kriteeri</b>	<b>Mitta</b>
<b>17.0.</b> Onko pukeutumis- ja peseytymistilojen yhteydessä esteetön wc? <i>(täytä lomake Esteetön wc)</i>		<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>17.1.</b> Onko pukeutumis- ja peseytymistilaan esteetön pääsy suoraan aulasta, käytävästä tai muusta vastaavasta tilasta?		<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>Opastus</b>		
<b>17.2.</b> Onko kulku tilaan opastettu?		<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<ul style="list-style-type: none"> <li>• onko opaste helposti havaittavassa paikassa?</li> <li>• onko etäisyys kohteeseen merkity opasteeseen?</li> <li>• opasteen sijoitustapa           <ul style="list-style-type: none"> <li>kulkuväylän yläpuolella</li> <li>kulkuväylän sivulla seinällä tms.</li> </ul> </li> </ul>	jos $\geq 50$ m	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>Jos kulkuväylän yläpuolella, niin</b>	$\geq 2200$ mm	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<ul style="list-style-type: none"> <li>• opasteen korkeus?</li> <li>• onko opasteessa käytetty helppoluista kirjasintyyppiä?</li> <li>• onko opasteessa käytetty symboleja?</li> <li>• onko opasteessa tummuuskontrasti tekstin/symbolin ja taustan välillä?</li> <li>• onko opasteen pinta himmeä ja häikäisemätön?</li> <li>• onko opaste tasaisesti valaistu?</li> </ul>	mm	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>Jos kulkuväylän sivulla seinällä tms., niin</b>		
<ul style="list-style-type: none"> <li>• onko opaste sijoitettu niin, ettei se aiheuta törmäysvaaraa?</li> <li>• onko opaste läheltä katsottavissa? (<i>pääsy opasteen ääreen</i>)</li> <li>• opasteen tekstin korkeus lattiasta?</li> <li>• tekstin kirjasinkoko? (<i>suhdeessa katseluetäisyyteen</i>)</li> </ul>	1400-1600 15, 25-40, 70-100 mm	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<ul style="list-style-type: none"> <li>• onko opasteessa käytetty helppoluista kirjasintyyppiä?</li> <li>• onko opasteessa käytetty symboleja?</li> <li>• onko opasteessa käytetty kohokirjoitusta tai -symboleja?</li> <li>• onko opasteessa tummuuskontrasti tekstin/symbolin ja taustan välillä?</li> <li>• onko opasteessa käytetty pistekirjoitusta?</li> <li>• onko opasteen pinta himmeä ja häikäisemätön?</li> <li>• onko opaste tasaisesti valaistu?</li> </ul>	mm	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>



## Appendix 1 (29/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

Tilaopaste / huoneopaste	Kriteeri	Mitta	K	E	Ek
<b>17.3.</b> Onko tila merkitty opasteella?					
• onko opaste sijoitettu seinään oven aukeamispuolelle?					
• opasteen tekstin korkeus lattiasta?	1400-1600 mm	mm			
• tekstin kirjasinkoko?	≥ 15 mm	mm			
• onko opasteessa käytetty helppolukuista kirjasintyyppiä?					
• onko opasteessa käytetty symboleja?					
• onko opasteessa käytetty kohokirjoitusta / -symboleja?					
• onko opasteessa tummuuskontrasti symbolin / tekstin ja taustan välillä?					
• onko opasteessa käytetty pistekirjoitusta?					
• onko opasteen pinta himmeä ja häikäisemätön?					
• onko opaste tasaisesti valaistu?					
<b>PUKEUTUMISTILA</b>					
<b>Pukeutumistilan ovi</b>					
<b>17.4.</b> Onko ovi helposti hahmotettavissa ? (erottuu tummuuskontrastin avulla)					
<b>17.5.</b> Vapaan tilan leveys oven välittömässä läheisyydessä?	≥ 1500 mm	mm			
<b>17.6.</b> Vapaan tilan syvyys oven välittömässä läheisyydessä?	≥ 1500 mm	mm			
<b>17.7.</b> Vapaa tila oven vieressä aukeamispuolella?	≥ 400 mm	mm			
<b>17.8.</b> Oven vapaa leveys?	≥ 850 mm	mm			
<b>17.9.</b> Kynnyksen korkeus?	≤ 20 mm	mm			
Jos kynnys ≥ 20 mm, niin kynnyksen malli					
• suorareunainen					
• porrastettu					
• pyöristetty					
• luiskattu (kynnysluiska tai -kiila)					
<b>17.10.</b> Onko ovi mahdollista avata ja sulkea sekä sen lukko käyttää yhdellä kädellä?					
<b>17.11.</b> Oven avaamiseen tarvittava voima?	≤ 10 N (≈ 1 kg)	N			
• rastita E, jos ovessa on ovensulkija (ovipumppu)?					
<b>17.12.</b> Onko oven sisäpuolella (saranaareunassa) vaakasuuntainen lankavedin?					
<b>Tila</b>					
<b>17.13.</b> Pukeutumistilan vapaan tilan leveys?	≥ 2100 mm	mm			
<b>17.14.</b> Pukeutumistilan vapaan tilan syvyys?	≥ 2100 mm	mm			
<b>Lattia</b>					
<b>17.15.</b> Onko pukeutumistilan lattia märkänäkin luistamatton?					



## Appendix 1 (30/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

Pukeutumistilan kalusteet ja varusteet	Kriteeri	Mitta	K	E	Ek
<b>17.16.</b> Onko pukeutumistilassa yhtenäiset tukikaiteet?					
• tukikaiteiden korkeus/korkeudet?	500 ja 900 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko tukikaiteet sijoitettu niin, etteivät ne haittaa tilan käyttöä?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>17.17.</b> Onko pukeutumistilassa vaatekaappeja tai säilytyslokeria?					
• pääseekö kaapin / lokeron ääreen myös apuvälineiden kanssa? (esim. kalusteen edessä ei kiinteää penkiä)			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko kaappeja / lokeria sijoitettu eri korkeuksille?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• kaappien ja lokeroiden avaamismekanismi/lukon korkeus?	850-1100 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko avaamismekanismi käytettäväissä yhdellä kädellä?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• erottuvatko kaappien / lokeroiden numerot tummuuskontrastina taustasta?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ovatko numerot käsin tunnistettavissa (kohonumero)?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• numeroiden koko?	≥ 15 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko lukollisten kaappien avainten numeroointi selkeä?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>17.18.</b> Onko pukeutumistilassa vaatenaulakoita/-tankoja?					
• onko vaatenaulakoita tai -tankoja sijoitettu useammalle eri korkeudelle?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• vaatenaulakoiden/-tankojen korkeus/korkeudet?	1100-1200, 1400-1600 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• pääseekö naulakon ääreen myös apuvälineiden kanssa? (esim. kalusteen edessä ei kiinteää penkiä)			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko naulakko tai vaatetanko sijoitettu siten, ettei se aiheuta törmäysvaaraa?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>17.19.</b> Onko pukeutumistilassa käytettäväissä pehmustettu laveri / hoitotaso makuulla pukeutumista varten?					
<b>17.20.</b> Onko pukeutumistilassa penki?					
• penkin korkeus?	500 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• penkin pituus?	≥ 1200 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko tilassa pitkä penki makuulla pukeutumista varten?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• penkin korkeus?	500 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• penkin pituus?	≥ 2100 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• penkin leveys?	600-700 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>17.21.</b> Onko pukeutumistilassa istuimia?					
• erottuvatko kalusteet tummuuskontrastina taustastaan?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko erikorkuisia istuimia?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• istuinkorkeus/-korkeudet?	300 / 450 / 500-550 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko osassa istuimia selkänoja?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko osassa istuimia käsinnojat?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko istuinosa tasainen?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• onko istuimen jalkatila avoin?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



Appendix 1 (31/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

	Kriteeri	Mitta	K	E	Ek
<b>17.22.</b> Onko pukeutumistilassa kampauspöytä/hiustenkuivauspiste?					
• pöydän korkeus?	800 mm	mm			
• vapaan polvitilan korkeus?	≥ 670 mm	mm			
• vapaan polvitilan syvyys?	≥ 600 mm	mm			
• vapaan polvitilan leveys?	≥ 800 mm	mm			
<b>17.23.</b> Onko pukeutumistilassa pistorasioita?					
• pistorasioiden korkeus lattiasta?	400-1100 mm	mm			
<b>17.24.</b> Onko pukeutumistilassa laskutaso/hylly?					
• laskutason/hyllyn korkeus?	900 mm	mm			
<b>17.25.</b> Onko pukeutumistilassa peiliä?					
• puolipeilin alareunan korkeus lattiasta?	800-900 mm	mm			
• kokovartalopeilin alareunan korkeus lattiasta	≥ 300 mm	mm			
• peilin yläreunan korkeus lattiasta?	≥ 2000 mm	mm			
• onko peilin yhteydessä häikäisemätön valaisin?					
<b>Valaistus, häikäisy ja kontrastit</b>					
<b>17.26.</b> Pukeutumistilan valaistusvoimakkuus?	≥ 300 lx	lx			
<b>17.27.</b> Onko valaistus tasainen ja häikäisemätön?					
<b>Jos ei ole</b> , niin					
rastita E, jos tilaan jää pimeitä katvealueita?					
rastita E, jos valaistus sisällä aiheuttaa häikäisyhaittaa?					
rastita E, jos ulkoa tuleva valo aiheuttaa häikäisyhaittaa?					
(esim. vastavalohäikäisy)					
<b>17.28.</b> Helpottavatko väri- ja kontrastierot tilan hahmottamista?					
(esim. lattia erottuu tummuuskontrastina seinistä)					
<b>Jos kyllä</b> , niin					
onko pukeutumistilassa kontrastit lattian ja seinän välillä?					
erottuvatko kalusteet/varusteet tummuuskontrastina lattiasta?					
erottuvatko kalusteet/varusteet tummuuskontrastina seinistä?					
<b>17.29.</b> Onko pukeutumistilassa automaattinen valaistus?					
<b>Jos automaattinen valaistus</b> , niin					
onko liiketunnistin sijoitettu niin, että se havaitsee myös lyhytkasvuiset ja pyörätuolilla liikkuvat?					
<b>Jos ei</b> , niin					
valokatkaisijan korkeus?	850-1100 mm	mm			
valokatkaisijan etäisyys nurkasta?	≥ 400 mm	mm			
erottuuiko valokatkaisija tummuuskontrastina seinästä?					
<b>Lisätietoja</b>					

## Appendix 1 (32/37) Accessibility Analysis Checklist (PFD, ESKEH –Project)

PESEYTYMISTILA	Kriteeri	Mitta	K	E	Ek
<b>Peseytymistilan ovi</b>					
17.30. Onko ovi helposti hahmotettavissa? (erottuu tummuuskontrastin avulla)			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.31. Vapaan tilan leveys oven välittömässä läheisyydessä?	$\geq 1500$ mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.32. Vapaan tilan syvyys oven välittömässä läheisyydessä?	$\geq 1500$ mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.33. Vapaa tila oven vieressä aukeamispuolella?	$\geq 400$ mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.34. Oven vapaa leveys?	$\geq 850$ mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.35. Kynnyksen korkeus?  Jos kynnys $\geq 20$ mm, niin kynnyksen malli • suorareunainen • porrastettu • pyöristetty • luiskattu (kynnysluiska tai -kiila)	$\leq 20$ mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.36. Onko ovi mahdollista avata ja sulkea sekä sen lukko käyttää yhdellä kädellä?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.37. Oven avaamiseen tarvittava voima? • rastita E, jos ovessa on ovensulkija (ovipumppu)?	$\leq 10$ N ( $\approx 1$ kg)	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.38. Onko oven sisäpuolella (saranareunassa) vaakasuuntainen lankavedin?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Tila</b>					
17.39. Peseytymistilan vapaan tilan leveys?	$\geq 1500$ mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.40. Peseytymistilan vapaan tilan syvyys?	$\geq 1500$ mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Lattia</b>					
17.41. Onko peseytymistilan lattia märkänäkin luistamaton?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Peseytymistilan suihkupaikka</b>					
17.42. Onko suihkuun tasoeroton pääsy?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.43. Suihkupaikan vapaa tilan leveys?	1300x1300 tai	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.44. Suihkupaikan vapaa tilan leveys?	900x1600 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.45. Onko käytettäväissä lainattava suihkupyörätuoli?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.46. Onko suihkupaikassa kiinteä, seinälle kääntyvä suihkuistuin? • istuimen korkeus? • istuimen leveys ja syvyys	500 mm 400 x 500 mm	mm mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.47. Onko käytettäväissä pitkä penkki makuulla peseytymistä varten? (pesulaveri) • pesulaverin korkeus? • pesulaverin pituus? • pesulaverin leveys?	500 mm 2100 mm 600-700 mm	mm mm mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.48. Onko suihkupaikan seinissä yhtenäiset tukikaiteet? • tukikaiteiden korkeus? • onko tukikaiteet sijoitettu niin, etteivät ne haittaa tilan käyttöä?	500 ja 900 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



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	Kriteeri	Mitta	K	E	Ek
17.49. Onko suihkupaijan seinässä pystytuki?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.50 Onko suihkutilan lattia märkänäkin luistamaton?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15.51. Rastita E, jos suihkutilan lattialla on irrallisia lattiaritilöitä?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Suihkukaluste</b>					
17.52. Onko suihkun korkeus säädetävissä?	700-1900 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.53. Onko irrallista käsisuihku?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.54. Suihkukalusteen etäisyys nurkasta?	≥ 400 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.55. Onko suihku varustettu automaatisesti toimivalla sekoittajalla?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.56. Pesutarvikekorin / -hyllyn korkeus?	≤ 900 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Käsienpesuallas</b>					
17.57. Onko peseytymistilassa käsienpesualla?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.58. Pesualtaan tyyppi?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• kiinteä			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• korkeussäädetävä			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• kallistettava			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.59. Vapaa tila pesualtaan edessä?	≥ 1200 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.60. Pesualtaan korkeus lattiasta (käyttökorkeus)?	800 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.61. Pesualtaan alla olevan vapaan polvitilan korkeus?	≥ 670 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.62. Pesualtaan alla olevan vapaan polvitilan syvyys?	≥ 600 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.63. Pesualtaan vapaan polvitilan leveys?	≥ 800 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.64. Pesuallashanahan tyyppi?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• automaattihana			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• yksioihana (vipuhana)			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• kaksioihana			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Valaistus, häikäisy ja kontrastit</b>					
17.65. Peseytymistilan valaistusvoimakkuus?	≥ 300 lx	lx	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.66. Onko valaistus tasainen ja häikäisemätön?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Jos ei ole</b> , niin			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
rastita E, jos tilaan jää pimeitä katvealueita?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
rastita E, jos valaistus sisällä aiheuttaa häikäisyhaittaa?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
rastita E, jos ulkoa tuleva valo aiheuttaa häikäisyhaittaa?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(esim. vastavalohäikäisy)			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.67. Helpottavatko väri- ja kontrastierot tilan hahmottamista?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(esim. lattia erottuu tummuuskontrastina seinistä)			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Jos kyllä</b> , niin			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
onko peseytymistilassa kontrastit lattian ja seinän välillä?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
erottuvatko kalusteet/varusteet tummuuskontrastina lattiasta?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
erottuvatko kalusteet/varusteet tummuuskontrastina seinistä?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



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	Kriteeri	Mitta	K	E	K
17.68. Onko peseytymistilassa automaattinen valaistus?					
Jos automaattinen valaistus, niin onko liiketunnistin sijoitettu niin, että se havaitsee myös lyhytkasvuiset ja pyörätuolilla liikkuvat?					
Jos ei, niin valokatkaisijan korkeus?	850-1100 mm	mm			
valokatkaisijan etäisyys nurkasta?	≥ 400 mm	mm			
erottuuko valokatkaisija tummuuskontrastina seinästä?					
<b>Hälytyslaite</b>					
17.69. Onko peseytymistilassa hälytyslaite, jolla voi hälyttää apua ongelmatilanteissa?					
• hälytyslaitteen tyyppi?					
• painonappi					
• vedettävä naru					
• tilan ympäri seinällä kiertävä naru					
Jos painonappi, niin onko painike sijoitettu niin, että siihen ylettyy suihkuistuimelta?					
onko painike sijoitettu niin, että siihen ylettyy lattialta?					
painikkeen korkeus lattiasta?		mm			
Jos vedettävä naru, niin onko naru sijoitettu niin, että siihen ylettyy suihkuistuimelta?					
onko naru sijoitettu niin, että siihen ylettyy lattialta?					
narun korkeus lattiasta?		mm			
Jos tilan ympäri seinällä kiertävä naru, niin narun korkeus lattiasta?	200-300 mm	mm			
• erottuuko hälytysnaru / -painike tummuuskontrastina taustasta?					
• onko hälytysnaru / -painike merkity symbolilla?					
• toimiiko hälytys?					
• onko oven ulkopuolella valo ja äänimerkki hälytyksestä?					
• välitetäänkö tieto hälytyksestä					
• kuulovammaisille (valomerkki)?					
• näkövammaisille (äänimerkki)?					
• ohjautuuiko hälytys kiinteistönvalvontaan yms.?					
<b>Lisätietoja</b>					

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<b>18 SAUNA (LÖYLYHUONE)</b>		<b>SAUNA</b>			
<b>Sijainti:</b>					
<b>Erillinen lomake täytetty</b>		Pukeutumis- ja peseytymistilat			
		Esteetön wc			
<b>Löylyhuoneen ovi</b>		<b>Kriteerit</b>	<b>Mitta</b>	<b>K</b>	<b>E</b>
18.0. Vapaan tilan leveys oven välittömässä läheisyydessä?		≥ 1500 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18.1. Vapaan tilan syvys oven välittömässä läheisyydessä?		≥ 1500 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18.2. Vapaa tila oven vieressä aukeamispuolella?		≥ 400 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18.3. Avautuuiko ovi ulospäin?				<input type="checkbox"/>	<input checked="" type="checkbox"/>
18.4. Oven vapaa leveys?		≥ 850 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18.5. Onko ovi avattavissa ja suljettavissa yhdellä käellä?				<input type="checkbox"/>	<input checked="" type="checkbox"/>
18.6. Oven avaamiseen tarvittava voima?		≤ 10 N (≈1 kg)	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18.7. Onko oven sisäpuolella (sarana puolella) puinen lankavedin?				<input type="checkbox"/>	<input checked="" type="checkbox"/>
• lankavetimen korkeus lattiasta?		800 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18.8. Onko lasiovi jaettu puitteilla / merkitty kontrastimerkinnällä?		1000 ja 1400-1600 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• kontrastimerkinnän korkeus/korkeudet lattiasta?				<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Mitoitus</b>					
18.9. Löylyhuoneen vapaan tilan leveys?		2 x Ø 1300 mm	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18.10. Löylyhuoneen vapaan tilan syvys?		(=2 pyörätuolia)	mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18.11. Onko löylyhuoneen lattia märkänäkin luistamatona?				<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Kiuas</b>					
18.12. Kiuakan tyyppi ja sijoitustapa					
normaali kiuas				<input type="checkbox"/>	
kiertoilmasauna				<input type="checkbox"/>	
laskettu kiuas (kiuaskivet lattian tasossa)				<input type="checkbox"/>	
laskettu lattia + ritilälattia				<input type="checkbox"/>	
18.13. Onko kiuas suojattu?				<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Laueteet</b>					
18.14. Laueteiden tyyppi					
normaali laudetyyppi				<input type="checkbox"/>	
korkeussäädetäväät lauteet				<input type="checkbox"/>	
lauteenen penkki				<input type="checkbox"/>	



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<b>20 OPASTUS</b>		<b>Kriteeri</b>	<b>Mitta</b>	<b>K</b>	<b>E</b>	<b>Ek</b>
<b>Sijainti:</b>						
<b>Saapuminen</b>						
<b>20.0.</b> Onko kulku pääsisäänkäynnille opastettu?						
• onko opaste helposti havaittavassa paikassa?						
• onko opaste läheltä katsottavissa? ( <i>pääsy opasteen ääreen</i> )						
• opasteen tekstin korkeus maasta?	1400-1600 mm	mm				
• tekstin kirjasinkoko? ( <i>suhteessa katseluetäisyteen</i> )	15, 25-40, 70-100 mm	mm				
• onko opasteessa käytetty helppolukuista kirjasintyyppiä?						
• onko opasteessa käytetty symboleja?						
• onko kohokirjoitusta tai -symboleja?						
• onko opasteessa kontrasti tekstin / symbolin ja taustan välillä?						
• onko opasteen pinta himmeä ja häikäisemätön?						
• onko opaste tasaisesti valaistu?						
• onko opaste sijoitettu kulkuväylän ulkopuolelle? ( <i>ei törmäysvaaraa</i> )						
• onko opasteessa ilmoitettu etäisyys sisäänsäänkäynnille?	jos ≥ 50 m					
<b>Sisäänsynti</b>						
<b>20.1.</b> Onko sisäänsynti merkity opasteella? ( <i>esim. rakennuksen nimi</i> )						
• onko opaste helposti havaittavassa paikassa?						
• onko opaste läheltä katsottavissa? ( <i>pääsy opasteen ääreen</i> )						
• opasteen tekstin korkeus maasta?	1400-1600 mm	mm				
• tekstin kirjasinkoko? ( <i>suhteessa katseluetäisyteen</i> )	15, 25-40, 70-100 mm	mm				
• onko opasteessa käytetty helppolukuista kirjasintyyppiä?						
• onko opasteessa käytetty symboleja?						
• onko opasteessa käytetty kohokirjoitusta tai -symboleja?						
• onko opasteessa kontrasti tekstin/symbolin ja taustan välillä?						
• onko opasteen pinta himmeä ja häikäisemätön?						
• onko opaste tasaisesti valaistu?						
<b>Rakennuksen yleisopaste</b>						
<b>20.2.</b> Onko sisääntulon väliittömässä läheisyydessä opastaulu?						
• sijaitseeko se helposti havaittavassa paikassa?						
• onko opaste looginen? ( <i>kaikki tilat ja kohteet mainittu opasteessa</i> )						
• onko opastaulu läheltä katsottavissa? ( <i>pääsy opasteen ääreen</i> )						
• opastaulun tekstin korkeus maasta?	1400-1600 mm	mm				
• tekstin kirjasinkoko? ( <i>suhteessa katseluetäisyteen</i> )	15, 25-40, 70-100 mm	mm				
• onko opasteessa käytetty helppolukuista kirjasintyyppiä?						
• onko opasteessa käytetty symboleja?						

