



# Reykjavík Building Policy for Schools and Leisure Centres





Environmental and Planning Sector  
Department of Education and Youth

# Reykjavík Building Policy for Schools and Leisure Centres

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## PREFACE

Reykjavík is a growing city and new districts need new buildings to host school and leisure activities. Simultaneously, the densification of urban areas has led to an increased number of students in well-established neighbourhoods. As a result of this development the existing school and leisure centre building need to be renovated and upgraded, to ensure that present and future requirements are met.

The Reykjavík Building Policy for Schools and Leisure Centres frames encompasses work instigated by the Reykjavík Education Policy. The policy is also critical part of Reykjavík's Green Plan, that outlines the city's future vision of an urban community characterised by healthy environments, equal opportunities and a dynamic economy using natural resources sustainably.

Simultaneously, Department of Education and Youth and the Environmental and Planning Sector of the Reykjavík City Council has published guidelines for new buildings, extensions, and renovations of housing for preschools, leisure centres, compulsory schools and school bands. The policy features instructions for designers with guidelines

on requirements for individual areas, connections, size, materials, equipment, etc.

A design brief is drafted for all new building, extension and renovation projects. An emphasis is placed on broad participation in creating the design brief where all major stakeholders are offered an opportunity to shape the unique aspects of each building. Furthermore, it is important to keep in mind the needs of potential users when designing new buildings, renovations, extensions and outdoor areas. A key to preparing a design brief is to conduct a needs analysis, where consultation with users sheds light on their diverse needs and expectations as well as facilitating universal access.

It is important that the policy and guidelines are evaluated regularly to extract experiences, new ideas, and changing demands and needs. These three pillars: the policy, guidelines and design brief form the whole that designers should keep in mind, together with the respective laws and regulations.

## MAJOR DESIGN THEMES

The Reykjavík Building Policy for Schools and Leisure Centres is grounded in three themes that frame major goals and emphases. Each theme involves emphases regarding buildings and their environment and brings to bear the goals of the Education Policy, quality in man-made environments and the future vision of the Green Plan.

### THE EDUCATION POLICY AND SCHOOL BUILDINGS

Here, the focus is directed at the framework required for buildings that serve schools and leisure activities, in order to encompass the basic principles of the education policy. The diverse needs of children and the staff that serve them should be met by a custom design environments with full respect for equality, diversity and inclusion.

### BUILDING, ENVIRONMENT AND SOCIETY

This theme revolves around architecture and spatial qualities, i.e., how particular features of the structure are connected to ensure flexibility and diversity in use and management. At the same time emphasis is placed on creating a continuum between the built environments and the community.

### RESPONSIBLE DESIGN

The Green Plan is Reykjavík's future vision for a green renewal of the community of tomorrow. The decisions-making process regarding buildings for schools and leisure centres should be guided by the three sustainability dimensions; environmental, economic and social. The appearance and functionality of the buildings should inform children and adults alike how to successfully build and design structures that leave natural resources intact for future generations and stand as a paradigm of a fruitful and just society. The goal is buildings and environments that support carbon neutrality, the preservation of natural areas, biological diversity, and a fair and diverse urban community.

# THE EDUCATION POLICY AND BUILDINGS



The future vision of the Reykjavík Education Policy emphasises that dynamic school and leisure activities offer children and adolescents the education and experiences that allow them to realise their dreams and have a positive impact on their environment and society.

Education is an important part of each person's life where school, and leisure activities play an increasingly larger role in the daily life of children and adolescents. The future is undecided, we cannot be certain of how we will spend our leisure time, and what professions or technology will be dominant in the year 2030. However, we do know that individuals need to acquire the ability to learn, both formally and informally, through active participation in society.

The Education Policy lays the foundation for progressive schooling and leisure activities, based on the strengths of Icelandic society. The policy is intended to meet the challenges entailed in constant societal and technological changes that transform children's pedagogical environment along with traditional ideas of education. The policy focuses on developing school and leisure activities into a creative learning community. It centres on the children, their needs and wellbeing in the present and in the future, while at the same time underscoring staff empowerment and increased professionalism within schools and leisure centres.

The central goal is that all children develop, thrive, and belong in a democratic society characterised by human

rights and respect for the diversity of human life. It is important that children learn how to succeed and develop a strong self-image and belief in their own abilities. That they learn to read for pleasure, acquire knowledge and develop an understanding of society, nature and the world as a whole. That they are encouraged to show initiative, creative and critical thinking and adopt a healthy lifestyle. The role of staff in schools and leisure centres is to meet the needs of children and facilitate their holistic development along with preparing them for active participation in a rapidly changing multicultural and multinational democracy.

The construction of new buildings, extensions and renovations of school and leisure facilities present an opportunity to reconsider school practices and curriculum content to develop a new formal and informal learning spaces suited for the present and the future. Every possibility should be utilised to create conditions and frameworks for progressive practices, changing needs and societal expectations, and new abilities where the child and its future are prioritised.

It is worth keeping in mind that children's needs differ, i.e. by age, gender, school level, ability and interest. It is important to account for the physical, mental, cognitive and social needs of individuals and groups, every day, throughout the year. It is essential that equality, diversity and inclusion are addressed in the design of facilities for schools and leisure centres, as well as fulfilling all requirements for universal access.

**It is important to ensure that buildings and facilities that serve schools and leisure activities provide an appropriate learning spaces for ambitious practices and facilitate the full participation, health, safety and wellbeing of students and staff.**

# “LET OUR DREAMS COME TRUE”

The Reykjavík Education Policy “Let Our Dreams Come True” emphasises that all schools and leisure centres should facilitate the five fundamental competencies: social skills, self-empowerment, literacy, creativity and health. It is imperative that the design of buildings for schools and leisure activities incorporate these fundamental aspects in the design of spaces, environments and facilities. Moreover the two missions of the policy, children’s active participation and cooperation of teachers and staff, should enrich all design procedures. It should be apparent to the families of how the learning space reflects and adapts to the growing needs of the children.

The purpose is to prepare children to lead a responsible life in a free society characterised by understanding, peace, mutual respect, human rights and friendship. It is important that the buildings support the development and strengthening of social skills across the school and leisure activities.

## SOCIAL SKILLS

### From the Education Policy:

Social skills refer to the ability to engage in fruitful social relations with others and to positively impact the community and environment. Strong emphasis is placed on children’s ability to cooperate, put themselves in other’s shoes, and treat others with kindness and respect. Social skills are, amongst others, associated with emotional literacy, a strong sense of justice, and leadership skills. First and foremost, social skills develop through active participation in democratic cooperation when children are offered the opportunity to express their ideas and put them into practice. In this way, children can actively participate in shaping the society to which they belong.

### We achieve this by:

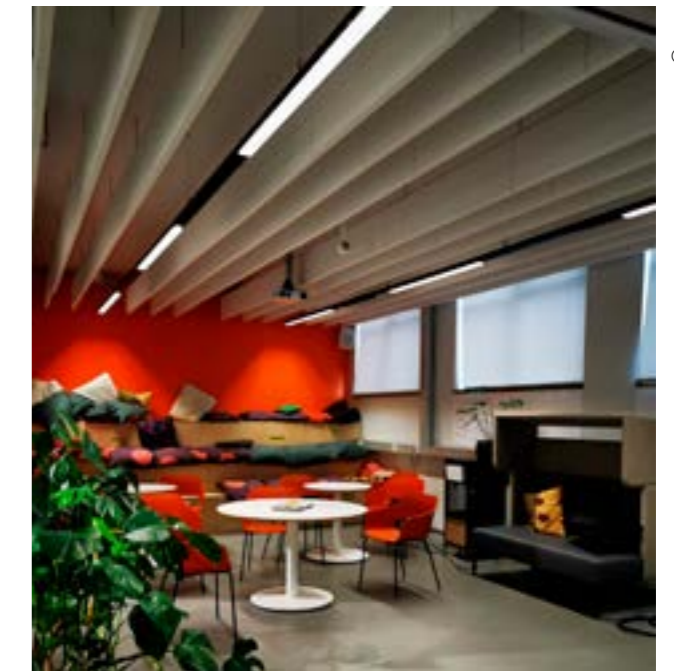
- Providing large spaces for cultural events and gatherings of large groups
- Providing areas for different sizes of groups to meet, study, work and play.
- Providing smaller areas for teamwork of both children and adults
- Providing outdoor areas to promote children’s socialising and play
- Designing diverse areas that encourage active participation of children and adults

Spaces for cultural events and gatherings of large groups



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Smaller areas for teamwork of both children and adults



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Diverse areas that encourage active participation of children and adults



Providing outdoor areas to promote children’s socialising and play

## SELF-EMPOWERMENT

### **From the Education Policy:**

Self-empowerment refers to the process of gaining belief in one's own abilities. Children learn to recognise their strengths and weaknesses as well as to set goals and achieve them. Self-empowerment is based on self-discipline and determination. A strong self-image helps children make independent and responsible decisions, face adversity, and peacefully coexist with others. Self-discipline and social skills are closely related and both impact children's self-confidence, learning outcomes, and overall success in life.

Children are encouraged to show initiative, practice creative and critical thinking and adopt a healthy lifestyle.

### **We achieve this by:**

- Designing age-appropriate environments and facilities in a way that provides a sense of belonging and safety.
- Offer environments and facilities that encourage self-help, autonomy and resilience
- Create an environment that supports children's self-image and gives them an opportunity to attend to their interests and strengths
- Designing areas that encourage diverse and creative approaches for project work, information processing and sharing of findings
- Placing a "stage" both inside and outside for drama performances, drama expressions and events
- Ensuring that the environment inside and outside offers myriad of opportunities to tackle both physical and social challenges, while meeting demands in terms of equality and diversity

## LITERACY

### **From the Education Policy:**

Literacy refers to the ability to read, comprehend, interpret, and actively engage with written language, words, numbers, images and symbols. Taken broadly, the term refers to literacy regarding varying forms of media, the environment, social behaviour, and situations. Literacy is by nature a social phenomenon and language education begins at birth. Good reading skills in Icelandic are the key to acquiring knowledge and comprehension of the community and the environment.

Generally, schools and leisure centres seek to encourage children to acquire knowledge and increase their understanding of society and the environment.

### **We achieve this by:**

- Providing access to diverse information and reading material, both digitally and in book form
- Using multimodal platforms and exhibitions to present project outcomes
- Offering a comfortable space where it is possible to sit down with a book or listen to a story read out loud
- Offering appropriate facilities and equipment for scientific inquiries and facilitate nature-, information- and technological literacy
- Providing an environment that stimulates a sense of discovery and a continuous search for knowledge
- Offering an outside area where it is possible to experience and conduct scientific investigations in nature and nature's laws.
- Creating learning environments that offer cooperation and cooperative learning, and where emotional literacy is encouraged, along with multiple forms of expression and the ability to emphasize with others.

**CREATIVITY**

**From the Education Policy:**

Creativity is a multifaceted process that is essentially based on curiosity, creative and critical thinking, but which also relies on knowledge, initiative, and skill. Creativity flourishes when it meets diverse challenges, questions, and solutions, and where an emphasis is placed on the creative process itself and its visibility. Children’s creativity produces something of value in and of itself, as well as for society and/or the local community.

Creativity and creative thinking skills develop in a multitude of ways, both indoors and outdoors, in cooperation with others, or individually. The buildings and facilities that serve schools and leisure centres should be designed and located to encourage and support all manner of creativity.

**We achieve this by:**

- Designing appropriate facilities and space for diverse art and vocational education, creative and artistic expression
- Designing spaces dedicated to theatrical performances, public speaking and artistic projects of individuals or groups
- Creating outdoor areas that support creative games, experiments, and play with water, sand or mud
- Offering facilities that encourage children to engage in free play and creatively/ artistically express themselves using a wide variety of materials
- Offering facilities which use progressive technologies and design thinking for learning and innovation, e.g. Makerspace and Fablab
- Creating multipurpose individual spaces to write music and practice instruments, edit photographs, etc.

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Outdoor areas that support creative games, experiments, and play with water, sand or mud

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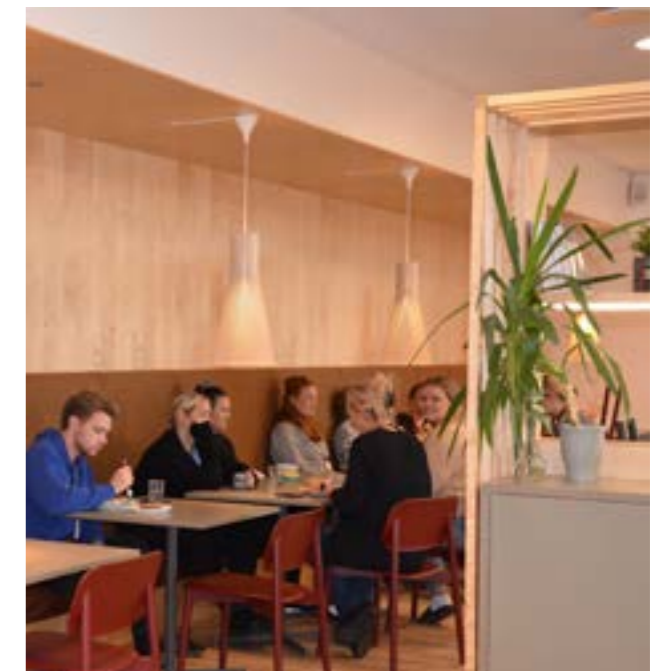
Diverse areas that encourage active participation of children and adults

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Facilities which use progressive technologies and design thinking for learning and innovation, e.g. Makerspace and Fablab

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Breakroom for staff

## HEALTH

### **From the Education Policy:**

Health refers to e.g. lifestyle choices, consumer behaviour, physical ability, reproductive health, and physical and mental wellbeing. Ideas about health have developed through increased knowledge of the interplay between mind and body, the natural and social environment, and the effects of chemicals and nutrition. A healthy individual is someone who maintains a healthy lifestyle and has the ability to safeguard his or her own health. Children's day-to-day wellbeing is the foundation for active participation, increased abilities, and success in school and leisure activities.

Children are encouraged to adopt a healthy lifestyle and develop an ability to safeguard their own wellbeing.

### **We achieve this by:**

- Designing spaces and facilities in a way that ensures all children's sense of safety and wellbeing
- Providing a shared space where children can practise fine and gross motor skills, e.g. skipping, crawling, climbing, balancing, etc.
- Ensuring good flow between indoor and outdoor areas to encourage outdoor education programs
- Offering facilities for nature experiences and gardening, both indoor and outdoor and in nearby green areas
- Providing spaces where children can have their meals in a calm atmosphere and where their autonomy in relation to meal times is fostered
- Providing facilities which offer diverse athletic activities for individuals, variously sized groups both educationally and recreationally.
- Offering facilities where a calm retreat from everyday hustle and bustle can be found

## PROFESSIONALISM AND COOPERATION AT THE FOREFRONT

### **From the Education Policy:**

The city's schools and leisure work is led by progressive employees who reflect on their practices, work together towards shared goals, and who strive to integrate new methods and work practices. The staff initiates cooperation with parents. The development of education is strengthened through diverse and interdisciplinary cooperation within and between workplaces.

To facilitate interdisciplinary practices, it is imperative to provide staff with appropriate facilities and equipment, and also create space and time for reflection and rest. Families of children in schools and leisure centres are important collaborators of the staff and share with them pedagogical and educational responsibilities. It is therefore important that buildings offer engaging facilities that are welcoming to parents and families of diverse backgrounds, with the aim of encouraging participation in their children's learning and play.

### **We achieve this by:**

- Ensuring a space that offers cooperation between the staff of preschools, compulsory schools and leisure centres
- Locating staff areas within the building so they can use their time more efficiently
- Offering areas where staff can focus and rest
- Providing clear directions to enter and move around the buildings
- Providing a warm and welcoming entry
- Offering accessible meeting rooms
- Providing space where parents can meet each other and staff



## CONTINUITY AND RISING TEMPO IN WORK WITH CHILDREN

### TODDLERS

Reykjavík places rich emphasis on ensuring that children can enter preschool as soon as parental leave is completed, whether it is in specific day-care centres or day-care units. The environment of children who enter preschool in their first year should be designed in view of their emotional, social, physical and motor development. Adjustment along with care, characterises the child's first preschool year, in the first steps toward learning together with other children. The wellbeing and safety of children and caregivers are key aspects in ensuring a successful transition into preschool life. For children of that age, the preschool environment needs to be comfortable, defined and secure. There must be facilities to meet the children's basic needs including rest and sleep, food and drink, diaper changing as well as play and motion both indoors and outdoors. It is also important to consider the ways in which the space welcomes parents and families, and gives them the feeling that they are welcome in the preschool activities.

### OLDER PRE-SCHOOLERS AND THE YOUNGEST COMPULSORY SCHOOL STUDENTS

A growing number of families are selecting afterschool leisure centres for their children in grades 1-4. The key competencies of preschool and compulsory schools have been coordinated through the National Curriculum and municipalities are tasked with offering leisure activities that adhere to standards regarding professional quality. It is important to respond to the societal call for increased cooperation and flexibility regarding children's learning and play. It is therefore advisable that the preschools and the youngest level of compulsory schools and leisure centres share facilities whenever possible. Care, learning and developmentally appropriate atmosphere are woven together under a single roof, where diverse professionals create holistic school and leisure activities in close collaboration. Such an arrangement requires a fresh approach and overlap of several fields, everything from architectural design to organisation and administration. Three traditions meet at that juncture: preschool,

compulsory school and leisure centres. Knowledge and culture merge in daily activities, learning and play, creating a continuum. Young compulsory school students and older preschool children need flexible learning environments suited for diverse experiences and activities that characterise that stage of learning including access to spaces for motion, play, art workshop and lunchroom.

In preschools it is natural that children jump in puddles, make mud cakes, roll around in snow or grass and dash into the wind. It is important to sustain an outdoor culture and the facilities required for it for children up to nine or ten and create opportunities for outdoor activities, teaching and nature exploration to help develop their resilience and endurance. There needs to be a clear connection between buildings and the surroundings that should work together to form a holistic and child centred environment. Outdoor areas should reflect nature, with the natural and the manmade working together to create shelter, work and play areas.

### OLDER COMPULSORY SCHOOL STUDENTS AND ADOLESCENTS

The National Curriculum calls for greater flexibility in education, stating that children should have broad choices concerning topics, learning methods, learning environments and modes of presenting their findings. At the same time, there is an emphasis that children have access to proper educational materials on all curricular levels of

the compulsory school, where requirements increase with age. Adolescents want to have many choices regarding social relationships and friends meeting others with diverse interests, at times they want to disappear into the crowd, or become the hero of the day, depending on their daily form. It is important that adolescents have access to professionals with varied backgrounds; specialised teachers, leisure advisors, guidance counsellors, sports trainers, coaches, artists and chefs, who can inspire and support them so everyone can realise their potential. The needs of children and adolescents must be recognised and accommodated so they can flourish in their interests and make their dreams come true.

It is important that the buildings have appropriate facilities for learning all subjects that can be shared with work and art studies as well as social functions, and sports activities. The buildings can also double as a social center for the local community. As well as there are various functional considerations the spaces should be designed to serve the needs of different groups of children, adolescents and adults. Adolescents generally prefer not to eat in a traditional canteen. Instead a café format with comfortable seating arrangements have been adopted for school and leisure centres. They can be used throughout the day, e.g. for group work, in social centre activities and in other social and cultural work. It is important that the buildings are well connected with the surrounding grounds to strengthen the bond between school, leisure, society and nature.

Young compulsory school students and older preschool children need flexible learning environments suited for diverse experiences and activities that characterise that stage of learning including access to spaces for motion, play, art workshop and lunchroom.



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# BUILDING, ENVIRONMENT AND SOCIETY



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Architectural structures are built to last for decades. With them, permanent value is created and an environment for coming generations. Reykjavík's goal is that school and leisure activities shall all be served by inventive, functional, high quality architecture. The buildings and their external areas should be a place of security and belonging for all the residents of the neighbourhood.

**To ensure the best outcome it is essential that the procurement, design and construction of the buildings is to the highest standard to minimise maintenance and maximize flexibility and longevity.**

### **THE EDUCATIONAL COMMUNITY AND THE MAN-MADE ENVIRONMENT**

It is important that the buildings that serve school and leisure activities are well connected to the community and its character incorporated in the design process. Buildings, external spaces, location and design, should all reinforce the presence of the building in the, bolster the community and help children in learning about their environment.

The educational community is the children, staff, parents and everyone else associated with it. The man-made environment and its design must facilitate learning, work and play, and give individuals the sense that they belong to a community. It should strengthen the community and meet diverse needs.

It is always important irrespective whether the project is a new building, an extension or renovations to a significant building that it should strengthen the community sense of place, and facilitate successful school and leisure practices for the future.

Buildings and outdoor spaces should be considered as a holistic entity but also provide specific support for the different elements and needs within the program.

The context and character of the building and its environment should reinforce the sense of belonging and participation for its users.

#### **We achieve this by:**

- Consulting with all parties in the school community regarding the design process
- Allowing the unique aspects of the environment and place to influence the design of buildings and outdoor areas
- Maintain good connection between external spaces and major public transportation routes
- Carefully locate entrances and plan internal circulation

Using moveable furniture and equipment instead of fixed interiors that are suitable only for certain age groups

Making sure that daylight flows well into spaces used for longer periods



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Choosing colours and materials that help give a sense of wellbeing. Offering spaces of different shapes, sizes and spatial experience

Paying careful attention to sound design, insulation and distribution

### WELLBEING AND SENSORY STIMULI

Wellbeing is the basis for learning and work, and architecture and spaces influence the way we feel. Environments stimulate our perception and support increased development and this is why the environment should not be neutral, but instead facilitate and nurture. A building and its surroundings should stimulate the senses through brightness, sounds, smells and surfaces. Positive sensory stimuli impacts the perceiver both physically and emotionally, and increases understanding of the environment and sharpens experiences. These experiences can be further heightened by the incorporation of art as an integral part of the design.

It is important that spaces are scaled to the age of their users to create a comfortable atmosphere that supports children's sense of safety and wellbeing. This should also be the case for other spaces that the children frequent throughout the day.

Emphasis is placed on good lighting and its positive effects on users. Daylight is especially important, and spaces should be designed to maximise the penetration of daylight throughout the day. Acoustics should be carefully considered for the building as a whole so users can work in peace and quiet without having to experience unnecessary disturbance and stress from noise.

#### We achieve this by:

- Using diverse building forms
- Choosing colours and materials that help give a sense of wellbeing
- Offering spaces of different shapes, sizes and spatial experience
- Using moveable furniture and equipment instead of fixed interiors that are suitable only for certain age groups
- Ensuring that the design and implementation takes account of the different ways various age groups use spaces
- Making sure that daylight flows well into spaces used for longer periods
- Including spaces where daylight can be blocked (drama performances, dances, etc.)
- Paying careful attention to sound design, insulation and distribution

### THE INTERPLAY AND MULTI-USE OF SPACES

Buildings for schools and leisure centres should be shaped in a way where the flow between the different aspects of schooling becomes simple, natural and efficiently planned. In general, flexibility and diversity should be the guiding principles in the building's design. However, there should also be a possibility to close partition to create a quiet, safe and calm areas. Similarly the building/buildings and outdoor areas should form a whole which, despite serving differing roles, are interconnected.

An emphasis is placed on ensuring that the spaces can be adjusted to the needs and aims in school and leisure work, both now and in the future. It is imperative that the building and its segments are multi-functional and capable of being interconnected. An emphasis is placed on creating as many spaces as possible that can be utilised all day, every day. However, the focus on space sharing and its multi-use will make demands for how areas are demarcated.

#### We achieve this by:

- Ensuring good flow between areas and spaces inside the buildings as well as between outdoor and indoor areas
- Creating a platform for different work and teaching methods
- Viewing all areas together as one continuous educational zone
- Using windows and curtain walling to maintain a visual connections, a sense of life, overview, and safety, all bathed in daylight.
- Facilitating multi-use and cooperation between preschool, compulsory school, school band, leisure centre and social centre with soft borders and flexible spaces
- Arranging access between different sections of the building in a way that ensures multi-use
- Locating entryways to buildings in an accessible manner
- Using light walls and large door frames to make it easier to transform spaces
- Using folding walls and sliding walls where necessary



# INSIDE AND OUT, ALL YEAR ROUND

Preschools, schools, leisure and social centres are children’s educational environments, a home away from home, a meeting place and a place of calm and comfort. It is their own arena ., summer, winter, spring and autumn.

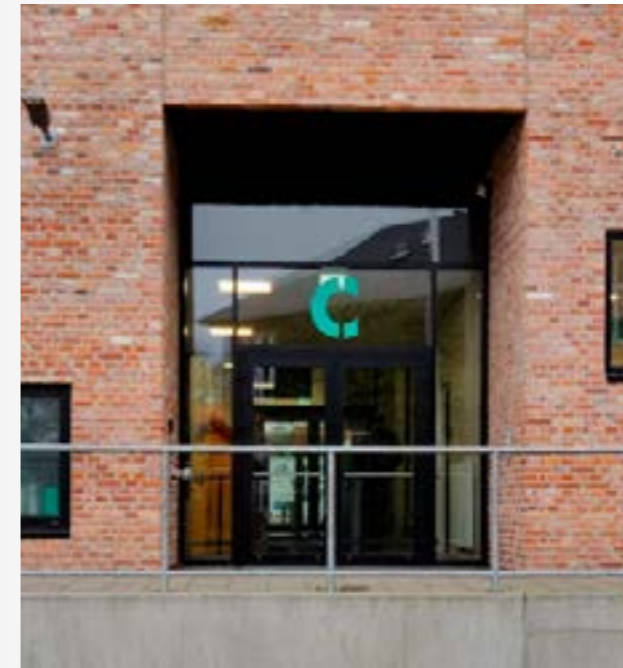
## ALL DAY

With the exception of a four week break preschool children spend all year at school. When the school day or school year is over the leisure centre and social centre take over. The school band teaches music throughout the day and in the hours after school. School staff work late into the evening and the building is used by the public in various ways. The idea that school buildings are closed and lifeless at the end of the school day or year is a thing of the past. These aspects must be kept in mind through all design, whether it is facilities for children, staff, other users, design of support spaces, external areas, or entrances. High quality building materials and intelligent design can keep maintenance and repairs at a minimum, creating spaces that can withstand sunlight, rain and frost. The premises are cleaned throughout the day, staff is at work and the canteen open all year, the grounds are in constant use. Building maintenance is undertaken alongside school activities and entrances must be able to cope with snow-covered winter wear as well as muddy boots. It is important to meet the demands of diverse practices and weather conditions around the clock, all year long.

### We achieve this by:

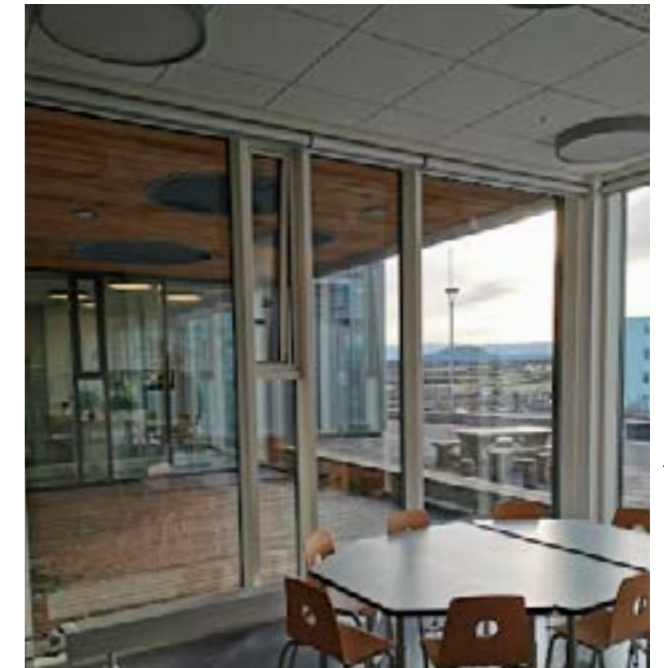
- Dividing the basic design of space into children’s area, public area and staff area
- Ensuring that entryways and foyers serve their purpose under all weather conditions
- Ensuring that the ventilation system and fenestration are optimised for differing temperatures
- Position window instalments and location of dwelling spaces in a way where sunlight does not cause problems due to insufficient air quality
- Manage fenestration so there is no negative impact on the interior climate
- Manage fenestration to maximise daylight and visual connection to the surroundings. Ensuring that the entire building, especially windows, doors, roofs and external ventilation system is constructed to withstand water, snow and storms
- Ensuring that spaces can be continually
- Choosing materials for outdoor areas, equipment and vegetation, that are suitable for year-round use

Ensuring that entryways and foyers serve their purpose under all weather conditions

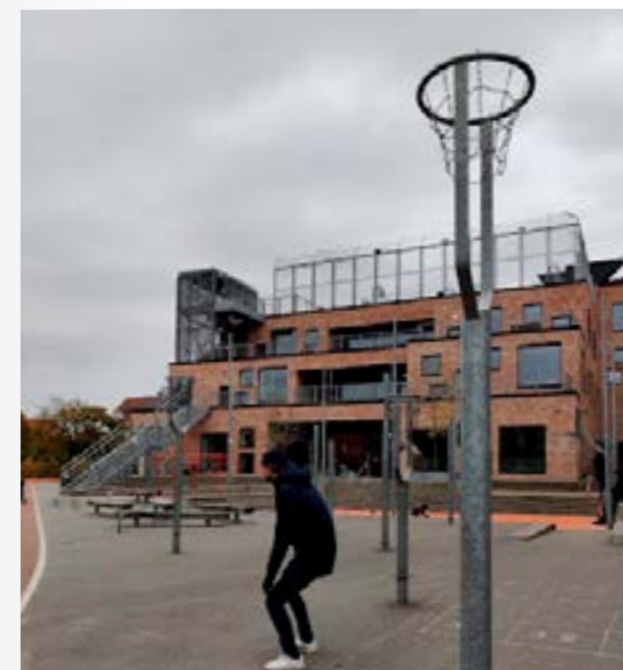


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Dividing the basic design of space into children’s area, public area and staff area



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Choosing materials for outdoor areas, equipment and vegetation, that are suitable for year-round use

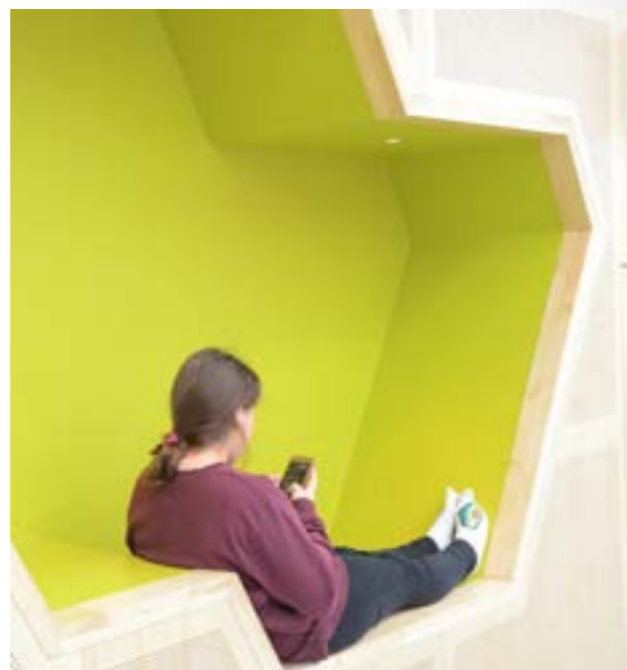
Creating a safe environment for children both inside and outside, which also challenges them to engage in various physical exercise

E.g. running track, ropes and climbing walls in hallways and in multi-functional areas



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Organising canteens with varying equipment, high and low tables, quiet rooms, cosy corners or “cafes” to appeal to the various age groups

Demarcating special areas for certain age groups such as lockers and rest areas

### INSIDE - HOMEY AND HEALTHY ENVIRONMENT

A homey and healthy atmosphere should govern all decisions regarding the shaping and demarcation of space. The concept “home” is significant for children and adults in making spaces that encourage belonging and feel comfortable and safe. Children should be encouraged to set their mark through creative means to make the environment their own.

Movement and sports are not only in the gymnasium but are practised throughout the entire building. There should be versatile facilities on offer for movement and physical exercise.

Healthy, diverse and nutritious food is on offer. Meals will vary depending on the children’s age, but may consist of porridge for breakfast, a hot meal for lunch, an afternoon snack and a fruit snack. The canteen and other areas where food is consumed should be charming and comfortable, and contribute to a positive food culture, because serving food, eating together, and cleaning the dishes, are all part of education. The spatial structure and acoustics of eating areas must be fitting for the age and development of the children. In the canteen, the children can pick up food, eat and put away the dishes when the meal is over. Diverse furnishings are on offer, where the children can choose seating depending on their mood.

#### We achieve this by:

- Creating a safe environment for children both inside and outside, which also challenges them to engage in various physical exercise, e.g. running track, ropes and climbing walls in hallways and in multi-functional areas
- Offering possibilities for movement and activity, inside and outside, with movement areas that encourage play, both during leisure time and in short recesses
- Offering gymnasiums in various sizes, where it is possible, among other things, to play ball games, practice yoga, dance and wrestle.
- Demarcating special areas for certain age groups such as lockers and rest areas
- Organising canteens with varying equipment, high and low tables, quiet rooms, cosy corners or “cafes” to appeal to the various age groups

## OUTSIDE - WHERE THE LIFE IS

The outdoor areas, school grounds and surroundings of preschools, schools, and leisure centres are the interface with the society they serve. The buildings and the outdoor areas are owned collectively by the citizens of Reykjavík and are open to the local community throughout the year. A rich and exciting playground increases and improves children's outdoor life through free play and versatile movement even after the formal day at school or the leisure centre. Proper conditions need to be created on the grounds for outdoor activities, outdoor education and physical exercise as well as constructive teamwork and communication that strengthens social skills. The outdoor areas should be designed in a way that they form good connections to nature and strengthen the perception of nature and beauty.

It is important to keep weather conditions in mind. Areas to maximise sun and shelter are needed to facilitate the children's play and communication, with particular focus on structures that minimise the effects of wind and rain. It is particularly important to ensure good shelter for entrances.

Outdoor education is a regular part of the activities over the entire day, all year round and the surroundings should be an integral part of the learning environment.

Playgrounds for the youngest children (1-3 years) must be demarcated, safe and challenging by providing ample sensory stimuli and interesting outdoor discoveries. Children enjoy crawling into, over and around objects. Even though playgrounds should be safe it is important not to have them all covered with rubber tiles, but instead ensure that the children have access to natural materials, not simply mud, sand and gravel, but also bushes, grass and moss. The outdoor areas for the youngest children need to be located close to their inside areas.

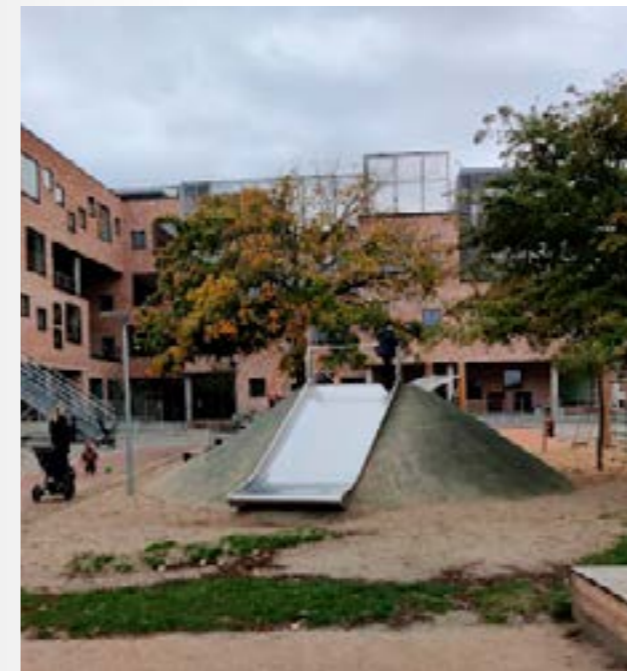
The playground for older preschool children and the youngest level of school and leisure centres should be exciting and offer a plenitude of experiences and adventures. These playgrounds can be located a little further away from the.

The playground for older children and adolescents must meet their need for physical exercise and rest and assist outdoor learning opportunities. Adolescents' outdoor areas should be especially inspiring for outdoor activities, including appropriate facilities for football, basketball, and so on.

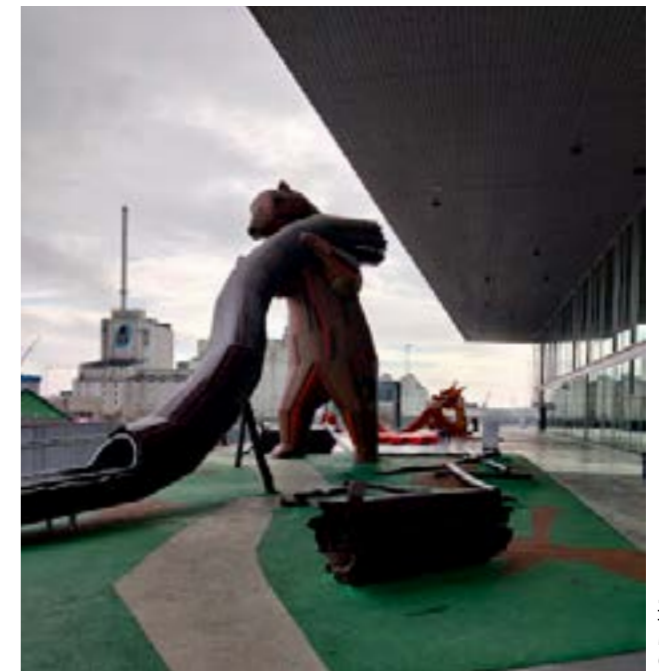
### We achieve this by:

- Using durable materials and placing rubber tiles on sensitive areas where necessary
- Offering areas demarcated for specific sports, e.g. football fields with artificial grass and basketball courts. Instead of the dominant centralised football field, the whole outdoor area should be divided into several different segments, emphasising neutral choice of colours and equipment, so children can choose where and how to play, free from submitting to the pressure of stereotypes in the environment
- Designating a certain area for outdoor education classes
- Offering areas that are influenced by nature as much as possible, where nature and the man-made merge seamlessly into one another
- Using sheds, storehouses, shelters or chests to store equipment in the outdoors
- Installing durable equipment that stimulates motility
- Offering challenges, possibilities to run, climb, crawl through tunnels, dig, play with mud, hide from lions and tigers or train for participation in athletic competitions
- Creating shelters using boulder walls or made from other natural materials, trees, vegetation or mounds, forming a comfortable space for communication and conversation
- Providing children with the opportunity of engaging directly with grass, sand, water, mud, gravel, trees, leaves, and varying kinds of vegetation, and at the same time various species of small animals
- Offering "chat areas" for the mid and upper levels
- Viewing the outdoor area as an educational arena spanning a multitude of subject areas

The whole outdoor area should be divided into several different segments, emphasising neutral choice of colours and equipment, so children can choose where and how to play, free from submitting to the pressure of stereotypes in the environment



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Using sheds, storehouses, shelters or chests to store equipment in the outdoors  
Bluegreen sustainable drainage systems

Installing durable equipment that stimulates motility



# RESPONSIBLE DESIGN



**No one left behind.**  
**In Reykjavík, the green transformation is based on justice, fairness and participation. Citizens live in safety and can have a positive impact on their own lives and those of others, now and in the future.**

Responsible design paves the way for the future with an awareness for environmental, economic and social aspects. Responsible design the future and embraces new technology, knowledge, ideas and diversity.

## THE GREEN PLAN

The Green Plan policy is Reykjavík's future vision to the year 2030 and connects the city's other key policies and plans to that vision. The Green Plan is a vision for a future city community characterised by wholesome environments, equal opportunities and a dynamic economic life that treats natural resources with respect. The plan has three key dimensions: Economic, social and environmental. All three must be fulfilled to achieve.

## GREEN GROWTH

In Reykjavík there is dynamic green growth, a competitive urban community and a fertile environment for creative ideas that attract potential residents, visitors and investors.

## CARBON NEUTRAL CITY

Reykjavík is a flourishing, exciting and healthy city that aims for carbon neutrality in the year 2040.

## OUR REYKJAVÍK

The Reykjavík community is based on justice, fairness and the participation of children and adults. The city's residents lead a safe life in where they can positively impact their own lives and the lives of others, now and in the future.

## ENVIRONMENTALLY-FRIENDLY DESIGN

The preparation, design, construction and maintenance of Reykjavík's buildings should have a focus on the environmental implications. It is necessary to uphold the city council's resolution, from 8 October 2015, on the sustainability assessment of buildings, in accordance with BREEAM method, along with goals of the Green Plan and Reykjavík's Green Bond Framework. The design process should rigorously work toward sustainability, in administration and organisation, through choice of materials and in life-cycle analyses.

### We achieve this by:

- Prioritising the health and wellbeing of the buildings' users in the design process
- Minimising the ecological footprint through careful and thoughtful design
- Conducting life-cycle analysis
- Choosing materials and designs that minimises ecological footprint and buildings' operational costs
- Ensuring that the preparation and design process accounts for life-cycle costs and not solely start-up costs
- Working with bluegreen sustainable drainage systems and surface permeability as possible

## BUILDING INFORMATION MODELLING

It is important to ensure professional practice in the process of preparing, designing, constructing and maintaining a building. In digital transformations it is necessary to identify how technological solutions can be used in design and to manage information about the design and construction process. It is also important to review how quality and transparency can be increased, improve risk management and gain a deeper understanding and oversight from preliminary plans and throughout the building's lifetime.

### We achieve this by:

- Using a building information model
- Making sure that the city has a building information model when construction is completed to refer to whilst managing the building
- Ensuring that information systems are in accordance with the city's construction classification system
- Ensuring that models are appropriate for material quantities cost estimations and life cycle assessment

### THE CITY'S HERITAGE AND HISTORY

There is much value entailed in buildings, architectural heritage and settlement patterns. The architectural and cultural heritage brings us together, interwoven with history and our roots. The heritage has shaped and created us and is part of our self-image. The buildings of Reykjavík's schools and leisure centres make their mark on various neighbourhoods. They refer to the time they were built and the future they were intended to serve. Existing buildings represent their contemporary vision of education and architecture. It is important to protect them and add extensions in a way that respects their architectural characteristics and historical context, while ensuring that the creation of value and quality of environment for future generations is maximised.

#### We achieve this by:

- Ensuring the protection and maintenance of the man-made environment in accordance with its historical and architectural value
- Facilitating the active use and development of buildings while respecting their origins
- Ensuring the preservation of the characteristics of noteworthy buildings and their surroundings.

Ensuring the protection and maintenance of the man-made environment in accordance with its historical and architectural value



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Facilitating the active use and development of buildings while respecting their origins

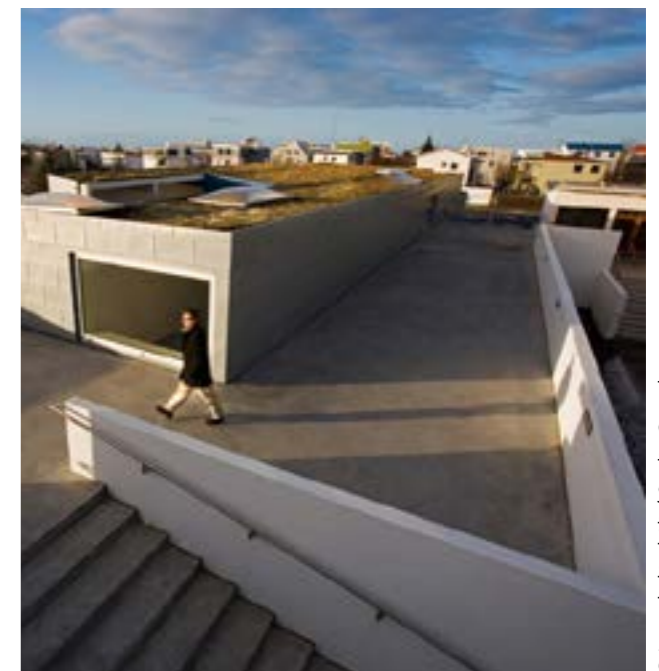


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Ensuring the preservation of the characteristics of noteworthy buildings and their surroundings.



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Taking into account the accessibility for all in every design inside and out



Ensuring that acoustics are appropriate for the activities of each area

Dalskóli / Vaarkitektar

### EDUCATION WITHOUT PREJUDICE – EVERYONE TOGETHER

Educational and play environments should be planned to support the participation of all children and staff. When buildings are renovated or extended accessibility, inclusive education, increased equality, more active democracy, cultural diversity and increased activity of all children in learning, work and play must always be taken into account.

The principles of universal design should guide all decision-making, design and implementation to accommodate the diversity of people with different characteristics, abilities and limitations. In this way the buildings and environments are underpinned with the values of equality and equal opportunity to ensure accessibility and increase the quality of life. This is applicable not only for the physical environment, but also for transport systems, information provision, equipment and systems.

Good connections, both inside and out, are essential for universal access and it is important to address all possible obstacles. The feelings and autonomy of children with physical disabilities and sensory impairments depend, among other things, on their accessibility to the buildings and outdoor areas.

Particular attention must be focused on the design of spaces intended for children with prolonged support needs. Poor acoustics, such as echoes, clamour, as well as

poor lighting, can cause considerable suffering to sensitive individuals. In general, spaces should have appropriate acoustics and lighting that is free from glare and flickering. There also needs to be an opportunity to offer children and adolescents areas where they can, for example, play cards and boardgames, read, and converse without exposure to constant noise and disturbances.

#### We achieve this by:

- Taking into account the accessibility for all in every design inside and out
- Ensuring that acoustics are appropriate for the activities of each area
- Ensuring that lighting conditions are appropriate for each area
- Choosing building materials that limit the emission of irritating smells
- Making sure that smells associated with e.g. canteens and art and vocational classes don't waft throughout the building
- Keeping in mind equality, democracy and diversity throughout the design process
- Ensure that gender neutral toilets and dressing rooms are provided.

### ENVIRONMENTALLY FRIENDLY PUBLIC TRANSPORT

The buildings of schools and leisure centres should be coordinated with Reykjavík's public transportation policy and offer environmentally friendly transportation. The policy assumes that less people will travel by car and instead go by foot, bicycle or public transportation. Traffic should be minimised, and an emphasis placed on a good paths that link with the wider path network. The infrastructure needs careful consideration with a consistent emphasis on active and environmentally friendly transportation means. There should be special focus on the planning of bicycle paths to ensure that, for example, fast routes don't cross play areas.

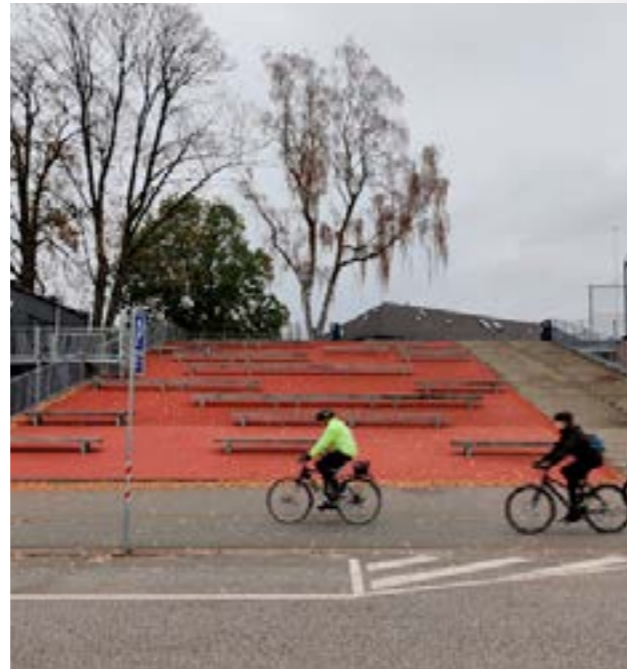
#### We achieve this by:

- Keeping facilities to park bicycles owned by children and parents close to entrances
- Offering a covered bicycle storage or proper locked facilities where people can store bicycles, helmets, electric scooters etc.
- Offering an appropriate area to park prams by the preschool for parents who take their children to school on foot
- Ensuring the safety of paths used by children to and from schools and leisure centres, as well as access to public transportation
- Offering changing rooms and showers for staff

Keeping facilities to park bicycles owned by children and parents close to entrances



Ensuring the safety of paths used by children to and from schools and leisure centres, as well as access to public transportation



Ensuring the safety of paths used by children to and from schools and leisure centres, as well as access to public transportation.



Outdoor area where it is possible to put up a shade sail.

### SAFETY ISSUES

Buildings, grounds and all facilities should offer a healthy and safe environment for children, staff and guests, and give a sense of security and wellbeing. An emphasis should be placed on entrances, access, access control, surveillance, security guidelines, evacuation routes, fall protection, fire protection, floor material, ventilation, illumination, temperature, acoustics and noise protection.

### HEALTHY HOUSING

School and leisure centre buildings should provide a healthy environment that safeguards wellbeing, improves performance, ensures attendance and encourages students and staff to harness solution-oriented approaches. Healthy internal environments dependant, among other things, on good air quality, lighting conditions, use of space, safety, accessibility and enclosure. The design, renovation and maintenance of the buildings need to take these aspects into account and follow research-based guidelines concerning improved health, wellbeing and user performance.

The school building environment should support, and not hinder, opportunities to develop and thrive as children spend a majority of their time outside their homes in school buildings and leisure centres. The frequency of infections, disease and other ailments as well as absenteeism can be lowered through the maintenance of healthy environments in buildings.

A healthy environment consists of buildings in harmony with nature and the accessibility users to an environment that offers opportunities for movement, closeness to nature, social encounters and healthy food.

Air quality is with a consequence of design and maintenance and is a significant factor in environment-related health. The quality of air is dependent on the frequency of air changes, level of humidity, choice of materials and user behaviour.

Children are particularly sensitive to environmental stimuli caused by materials and chemicals and it is important to carefully select the materials used for construction, renovation or maintenance, in order to ensure their future health. There are many chemicals in cleaning products and construction materials which can have a detrimental impact on health. Environmentally friendly products are not always healthy and this should be a factored in the choice of materials.

In order to facilitate a positive experience for students and wellbeing inside the buildings, it is important to consider enclosure, use of space and aesthetics. Buildings require regular maintenance and this should be done in accordance with original design intentions and requirements.

**We achieve this by:**

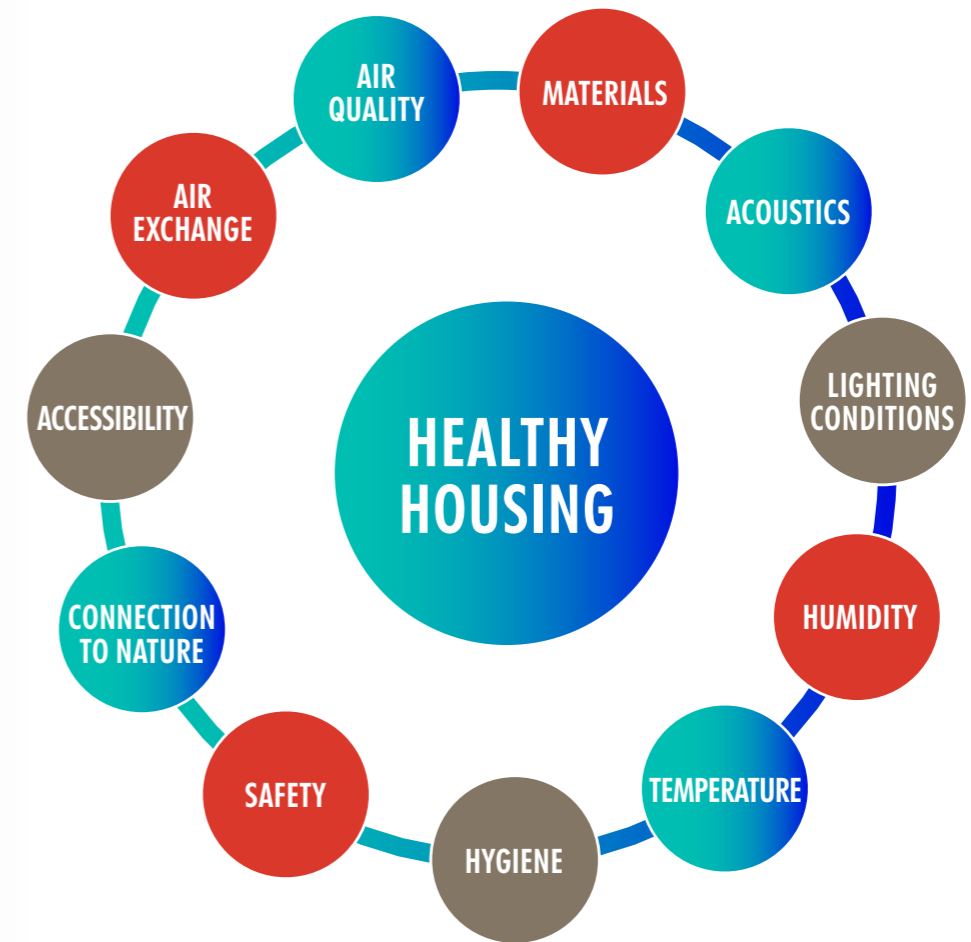
**Design:**

- Ensuring moisture safety; dry building, follow guidelines regarding moisture safety, select appropriate materials according to conditions and dampness degree, minimise maintenance, and ensure durability of material by choosing quality products
- Consider air change frequency; there is a ventilation system, ample enough air change that fulfils minimal standards regarding construction regulations on school buildings, good accessibility, to ensure the maintenance of the ventilation system, openable windows are accessible and placed in accordance to use
- Choosing materials with low vapour of volatile compounds that don't negatively affect air quality (fixtures, furniture, paint, flooring, and other permanent materials)
- Registering the use of construction materials to make maintenance easier for later renovations
- Making sure the design allows for proper cleaning and dust removal
- Ensuring good acoustics, fulfil standards regarding school buildings and address the local circumstances
- Ensuring proper lighting, fulfil standards regarding school buildings and address requirements for each space
- Fulfilling all requirements concerning safety and accessibility in the buildings and environment

**We achieve this by:**

**Construction/Renovations:**

- Ensuring quality in construction processes, follow guides from producer on use and setup
- Ensuring that timing of construction does not disturb air quality and student safety
- Ensuring that renovations lead to better air quality, lighting and acoustics in accordance with current regulations
- Ensuring that construction work does not disrupt air quality, work is not undertaken where users are in close proximity, ensure that construction areas are marked off, especially when repairing damage from humidity
- Checking which materials will be disposed of before construction begins, especially asbestos
- Choosing materials with low emissions
- Choosing materials that are best suited for each place, with reference to humidity levels, use, wear and tear
- Paying careful attention to ventilation where there is a change in the use of areas or organisation



**We achieve this by:**

**Maintenance:**

- Informing staff about the importance of air quality and how it can be maintained in daily practice
- Ensuring maintenance of ventilation systems according to handbook (cleaning and filter exchange)
- Ensuring air circulation that appropriate to the area function
- Ensuring accessibility to openable windows, which are opened regularly, in between classes at minimum
- Choosing environmentally friendly and odourless cleaning products
- Carefully selecting materials for school and leisure activities that could impact air quality, e.g. for arts and crafts

