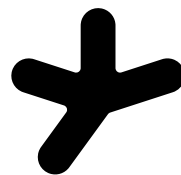


# House of Disability Organisations





# House of Disability Organisations

- 4 Preface
- 5 Introduction
- 6 Core Values
- 10 Realisation of the building
- 14 Design
- 24 User perspectives

**Dear reader**

Every day I go to work in the House of Disability Organisations – one of the world's most accessible office buildings. In every square meter we have done our best to create a building with space for everyone. That is not just good for me, a blind person, or for others with disabilities. An inclusive building provides a good working environment for all.

Our vision is a society where persons with disabilities can participate, contribute and be part of their communities. For that vision to come true, dissemination of universal design is essential.

We want to inspire others, to build for all people. I hope you will help us share the story of our house and the ideas of inclusive architecture and universal design.

*Kind regards*

*Thorkild Olesen,*

*Chairman, Disabled People's Organisations Denmark,  
DPOD*

**IN 2012, THE** majority of Disabled People's Organisations Denmark's (DPOD) member organisations moved into a new office building in Høje Taastrup, outside of Copenhagen. From the very beginning, there was a shared understanding between the property developer (DPOD), the advisors and the contractors, that the project should become a Danish and international beacon of inclusive architecture – as the world's most accessible office building.

In other words, the building was to serve as a model example; an office building with accessibility and equality of use irrespective of disability and fully integrated into all solutions, from the building itself, through interior design, furniture, and communi-

cations. The mantra throughout was, that accessibility is necessary for some, but good for everyone.

### **A beacon for inclusive architecture**

By conceiving, designing, and constructing the building as an equally accessible environment, we have created a house where all 300 employees and visitors can move around freely and work on equal terms – whether they have a disability or not.

The building is still a beacon for inclusive architecture. Rather than maintain status quo, we prefer to see the House of Disability Organisations as a dynamic laboratory for the continued development of new and innovative solutions to enable an equal work life for all.

In a broader social perspective, this approach contributes to the creation of an inclusive labour market, where no one is prevented from participating because of physical barriers. Persons with disabilities want to live an active and independent life. That becomes possible only when society is accessible and inclusive for all.







## Universal design

Universal design is a design strategy that is based on an inclusive and diverse mindset. This approach focuses on involving the users and thus on developing solutions, where human abilities, knowledge, requirements, and wishes are integrated in the design from day one. The purpose of universal design is to create equal, inclusive, and accessible buildings and outdoor areas. In this way, everyone can participate, experience and function in man-made environments on their own or accompanied by others. As such, universal design adheres to the guiding principles of the UN Convention of the Rights of Persons with Disability.

Accessibility is one of the means to achieve an inclusive environment, but not in the sense of creating additional and specific solutions for persons with disabilities, that do not necessarily generate equality. Rather, when viewed through the lens of universal design, accessible solutions are solutions that can be used by many and that contribute to a functional and aesthetic design. Through universal design, different user needs can be met by different solutions. The point is to incorporate a general usefulness in every solution, in a building and in society as a whole.



A person with a cane is walking up a modern wooden staircase. The person is wearing a light blue sweater and dark blue jeans. The staircase has light-colored wooden steps and a white railing with a wooden handrail. The background is a bright, modern interior with a glass ceiling.

### **Understanding disability**

Disability arises when a person with an impairment meets a socially created barrier in their surroundings. The barrier can be either physical or attitudinal. This understanding challenges the understanding of disability as a personal, medical problem, that should be dealt with by the individual, replacing it with an understanding that places responsibility for creating equal conditions for people with impairments with the society.



## **The UN Convention on the Rights of Persons with Disabilities**

The Convention on the Rights of Persons with Disabilities was adopted by the UN in 2006 and ratified by Denmark in 2009. This means that Denmark has committed to securing basic human rights for persons with disabilities. When it comes to the physical environment, persons with disabilities should be guaranteed equal access to all buildings, including schools, homes, hospitals, and workplaces, in addition to roads and public transport. The Convention states that accessibility is a human right, and that all involved actors should be educated on this topic.

## **The UN Global Goals**

The overall principle of the UN's 17 Global Goals, 'Leave No One Behind', reflects the fundamental principles of human rights that are equal treatment and non-discrimination. The principle is part of Goal No. 10, which focuses on minimising inequality, and Goal No. 11, which aims to create sustainable cities and communities; namely a sustainability that, in addition to economic and environmental aspects, takes on the social aim of including all members of society.



**THE GLOBAL GOALS**  
For Sustainable Development

# Realisation of the building

## Dialogue as the central theme

The process prior to the realisation of the House of Disability Organisations in many ways broke with common practice. As the property developer, DPOD realised early on that the task had to be dealt with unconventionally, in order to achieve an innovative result.

DPOD decided to go for a turnkey contract competition, however the price would count for only 25 per cent in the assessment of proposals, while the qualitative criteria would amount to 75 per cent. For this reason, the bidders had to hand in their price offers in sealed envelopes, which were only opened after the qualitative aspects of the offers had been appraised. With this approach, DPOD wanted to demonstrate that a universally designed office building does not have to cost more than a standard office building, as long as universal design is implemented from the beginning as an integrated design strategy.

A new collaborative concept was also introduced: the architects, engineers and contractors were first pre-qualified individually and then brought together in five teams by DPOD. Normally, the turnkey contractor picks their own team





of advisors, but DPOD wanted to do things differently. The expectation was, that new collaborations would result in new creative ideas and realisations, since those involved could not rely on previously established procedures.

Throughout all phases – from tender, pre-qualification, competition through construction of the building – open dialogue and collaboration between the parties involved was the central theme. This extended to the build site itself, with the contractors taking time to explain the vision behind the building to the craftsmen. This process was one of the main reasons that the ambition of creating a building that works equally well for all users, while at the same time serving as a model example, was achieved.

### **Crash course led to new understanding**

It was no secret to the participants that in the end only three teams would participate in the planned turnkey competition and present design draft and cost estimates. In order to select the final three teams all participants had to take part in and pass a compulsory course organised by DPOD in collaboration with the Danish Building Research Institute (SBI).



One of the purposes of the crash course, was to let participants experience the kind of challenges people with a disability encounter in everyday life. Therefore, the course featured a number of 'try-it-yourself exercises', where the participants tested the physical environment of a building while using either a wheelchair, hearing protectors, or mobility stick and blindfold. This was an eye-opener in terms of understanding the singular importance of accessibility as an architectural premise, as well as understanding some of

the building's future users' realities. Broadening the perspective, this also ensured that all participants had the same requisite knowledge and were thus able to discuss the different options from the same point of departure. In essence, a common vision was created.

### **User involvement**

An extensive user involvement process had been carried out prior to the competition. In two parallel tracks, the process identified the users' requirements for the layout of work-



places as well as the work cultures of the individual organisations. The purpose was to get a picture of what was required to create an office building that could accommodate all types of impairments. Many different solutions have thus been made in the building. In this way, there is always a solution that works for the individual, regardless of the person's impairment.

## Connected to the surrounding world

The House of Disability Organisations is located approximately 350 meters from public transit at Høje Taastrup station with easy access to the motorway. The House is a solitary building in an open landscape and is visible from the station. In order to integrate the building with the surrounding urban space, and to prevent it from becoming an isolated island of universal solutions, it has been deliberately linked to the infrastructure that connects with the rest of society. A footpath, which is separated from traffic and provided with a guideline, leads pedestrians safely from the station to the main entrance without crossing through traffic.

The location of the house divides the area into two different outdoor spaces, each with its own function and atmosphere. To the east are the arrival and parking areas, as well as the main entrance, while a sensory garden with recreational areas and varied vegetation, such as fruit trees and raised beds with flowers and herbs, occupies the landscape west of the building. A gravel path with a natural guideline that follows the shape of the building winds its way through the garden, connecting to a car-free walking zone along the building's southern and eastern facades. The path is laid with gravel, that is smaller in diameter than normal gravel making it easier for people with walkers or in wheelchairs to use the path. The garden also has a fenced area, where guide and service dogs can run freely.

The parking area is level-free, laid out with a smooth asphalt surface, making it easier for those who are blind or wheelchair users to move around in the parking lot. The area contains 48 disabled parking spaces



of varying size. These are located closest to the main entrance, connected to it via pedestrian passages outlined with white stripes that contrast with the black asphalt, making it clearly visible to people with visual impairments. In addition to these are 100 ordinary parking spaces, 10 EV parking spaces and 2 parking spaces for craftsmen, all with visible indication of function.

A guideline of concrete is designed as a low plinth that separates the footpath from the parking area along the building's east facade. The separation of the footpath and parking



area ensures that it is safe to walk along the facade of the house, without the risk of cars driving onto the footpath. In addition to creating a boundary, the plinth has multiple functions, as it also contains fixtures such as benches, bins, and signs, preventing users of the house from colliding with these.



Footpaths lead across the parking area to the entrance, where a raised pattern in the pavement attracts the users' attention. The pattern continues through the grate at the entrance and onto the carpet inside the entrance, providing a tactile change of direction while also serving as a guideline. The grate is



designed to prevent dog paws and mobility sticks from getting stuck. The automatic sliding glass doors at the entrance are equipped with horizontal markings to make them visible to people with visual impairments.

### **A starfish with four arms**

The overall idea behind the building is that all universal solutions are incorporated from the very beginning of the design process, from the main features of the building through its functions and details. This means that the universal solutions are naturally integrated in the building, – making them indistinguishable as disability aids, so as not to expose users of the building.

The house is shaped like a starfish with four arms and there is a good reason for this. At first, the architects drew a circular building, but a round building is boundless and therefore very difficult to navigate in for the blind and people with visual impairments. Instead, the circle was squeezed in four places, resulting in the four arms. The glass-covered atrium thus became pentagonal, creating distinct orientation points in each bend.



The atrium connects all floors and serves as the building's central nervous system: this is where people meet and interact, and from here it is possible to navigate in relation to the four office floors, which face respectively north, northwest, southwest and southeast. Similarly, from the office wings you can orientate yourself towards the light from the atrium and find your way back to the center of the house.

### **Wayfinding through colours, light and sound**

Colours, light and sound are intentionally used to create a workplace where all employees can work on equal terms.

Colours are an important navigating tool, and each office wing therefore has its own signature colour: red, blue, green and purple. The colours were selected based on the degree of contrast in relation to the surroundings and to each other. They are found on the walls of the office wings facing the atrium, as well as on the entire central core of each wing, and employees and visitors can use the colours to orient themselves in the building. The colours are also apparent on the house's overview signs, where they are used to indicate the location of each organisation.



## Functions

The building is a four-story structure with a basement. The public ground floor features a reception, lounge, meeting center and canteen, while the basement contains a fitness room and a room for media production.

The three upper floors are non-public and contains small and larger offices as well as open office areas, with meeting rooms and facilities such as kitchenettes, wardrobes, copy rooms, flex rooms and toilets. All offices are facing the facades, while the service facilities are located in the center of each office wing.

## Facts

Inaugurated: 2012

Area: 12,600 m<sup>2</sup>

Construction costs: approx.  
DKK 260 million

Price per square meter  
(excl. building plot and  
fixtures): DKK 15,997





During the day, the glass-covered atrium almost always provides an adequate amount of daylight, which rarely requires the use of artificial light. Daylight is good for everyone, but it is also easier for people with impaired hearing to lipread in daylight.

The acoustics in the large atrium have also been given particular attention, with many people passing through daily. A lot of effort is required to create a comfortable sound environment for everyone, but especially for people with visual impairments, as they also navigate using sound. Good acoustics are also important for people with mental or cognitive disabilities, who are easily overstimulated, and for people with hearing impairments. Therefore, the balcony railings in the atrium have more than one function: they both provide safety and help regulate the acoustics in the room thanks to their circular, perforated fronts, which are lined with sound-absorbing material behind the surface. Finally, the perforated design offers a good view of the entire room for wheelchair users, and others who cannot look over the railings.

The office windows are taller than the suspended installation ceilings, with low walls below the windows. This ensures that an ample amount of daylight reaches the interiors of the offices and also provides an optimal view of the outside.

While the building has been designed to allow in daylight, this can be controlled by employees, who can control the lighting in their office according to individual needs and preferences. The external shading consists of two systems: one comprises fixed vertical metal slats that run down the facade ending just above the ground floor. The slats have a rough surface

and are powder coated in a light golden tint that creates a warm light in the offices, regardless of orientation. In addition, outdoor automated blinds can be individually controlled by employees.

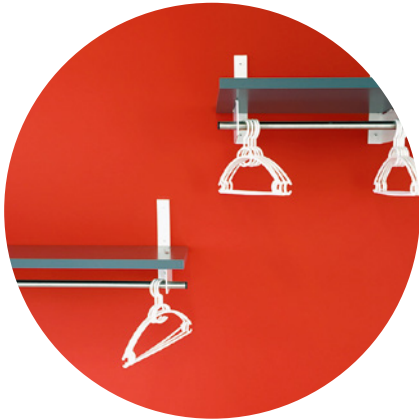
**Careful detailing**

The building features many well-thought-out solutions and details, demonstrating that equality and opposing needs do not have to collide.



● The reception is a good example of how to solve a physical barrier using universal design. The counter is simply designed in two different levels, which means that anyone can get information and help in an equal manner and at eye-level, whether they are standing or sitting in a wheelchair.

● The main staircase, which leads all the way up through the atrium, is located next to the elevators. This means that two employees with different needs can choose the solution that works best for them – and then continue talking on the next floor. The elevators can be operated with an ordinary pushbutton or with a foot panel. Activation of the foot panel makes it unnecessary to use the buttons inside the elevator, as it stops on all floors. The elevator also opens at both ends, so wheelchair users will not have to turn around to get out.



- As in the reception, the wardrobes also accommodate different heights, as coats can be hung at two different levels. This solution helps as many people as possible to be self-sufficient in the house.

- In the buildings ground floor and in the basement, you can follow a guideline all the way around the atrium. Guidelines help people using mobility sticks navigate the house.



- The signage is also a part of the building's wayfinding strategy, and here clarity is a keyword. This is a good help for everyone, and a special help for people with mental or cognitive disabilities. The signs use both colors and raised letters, so there are more ways to read the signs.

- Many details in the house are quite small, but of great importance. One example is the small round metal studs, which are half inserted in the wooden handrail, and are used by people with visual impairments to navigate. In the handrail by the stairs, one stud indicates that you are on the first floor, two studs indicate the second floor, and three studs indicate the third floor. The studs can also be found in the handrail every time you pass by a hallway. The metal studs also make for a decorative element.

● One identical design of all bathrooms does not create equality. Different user needs have thus resulted in no less than seven different types of toilets distributed around the house, so that everyone can find one that they can use. Pictograms on the doors to the bathrooms show where the toilet and sink are placed. This example proves that different user needs can be met by different solutions, either by designing one solution for all or by providing solutions for all.



● The door handles are custom designed for the building. They are made of plastic, which means that they are not cold to touch. They are not heavy to push down, which is important for users with arthritis. There is also plenty of space between the handle and the door so that the handle is easy to grip.



● Changing the air inside the building 2.5 times as often as in an ordinary office building ensures an optimal indoor climate with efficient ventilation, where pollen and diesel particles from the nearby railway are filtered out. This is good for everyone and especially important for employees with allergies or asthma.



● The electric sockets are easy to find, being black on bright walls or white on colored walls. Contrasting colours help people with visual impairments.



● The building contains three fireproof zones, with the world's first equal access evacuation system. The fire doors are equipped with motors, which make them easier to open and ensures that wheelchair users and people with walking impairments can get themselves to safety. The fireproof zones are overpressured, which prevents smoke from entering the room, so that people can stay safe for up to an hour inside the zone. Emergency generators ensures that elevators function even through loss of power. This means that everyone can evacuate themselves. When the fire alarm goes off, you can not only hear it, but also see it as red lights in the ceiling will start flashing. Fire drills have shown that with 300 employees in the house, with 20 per cent wheelchair users, the building can be evacuated within six minutes.



● On every floor break rooms equipped with daybeds offer the option of taking a rest. Breakrooms can be necessary for people with cognitive or mental disabilities, or anyone else, in need of rest during the workday.



● Telecoils are an important solution for people with hearing impairments. Telecoils are available at the reception desk, in the elevators and in all meeting rooms.







Since its inauguration in December 2012, the building has been a community for disability organisations and other organisations related to the field of disability. A large number of disability organisations moved into the building in 2012. Some have moved out again and new organisations have moved in over recent years. In 2023, 30 organisations work in the House of Disability Organisations, of which 16 are member organisations of DPOD.

With approximately 300 people working in the building, the House of Disability Organisations has had a lot of different users since 2012. The question is whether the efforts to create an equal workplace have succeeded?

In 2016, the Danish Building Research Institute (SBI) carried out a thorough evaluation of the house and the users' experiences. The evaluation showed that much has been achieved and that the users are



generally satisfied with the house. Overall, users also agree that the building is both accessible and equal. But the evaluation also pointed to a number of solutions that did not work as expected.

Based on this knowledge and experiences from the users' everyday life, the house has been continuously adapted and developed.

### **Dynamic laboratory with exemplary value**

It was never the intention that the building become a static image of accessible solutions, dated 2012. Rather, the building should continue being a laboratory, where changes are made on an ongoing basis, and new solutions can be developed based on emerging knowledge and new experiences. As such, the house

will continue to have exemplary value in the future, partly because the knowledge gained can be replicated in similar building projects, and partly in a wider societal perspective, by illustrating the socio-economic value in designing urban spaces, buildings and landscapes using universal design and an inclusive architectural perspective.

DPOD work to ensure that people with disabilities can live a life like everyone else. People with disabilities should be able to participate, contribute and be part of their com-



munity. In other words, it should be common sense and a great advantage to society, if no people are isolated in their homes due to physical barriers in buildings and cities. When physical barriers are removed, more people can work and participate in society on equal terms.

Read more about the house here:

[www.handicaporganisationerneshus.dk](http://www.handicaporganisationerneshus.dk)

Are you interested in booking the building's meeting facilities? Contact us by e-mail [mc@hhdrift.dk](mailto:mc@hhdrift.dk) or phone 44 14 40 98.

Stay informed about our House on LinkedIn at the profile [LinkedIn - House of Disability Organisations](#)





## **STAKEHOLDERS**

### **Property developer:**

Disabled People's Organisations  
Denmark (DPOD)

### **Advisor to the property**

**developer:** Gottlieb Paludan  
Architects, Rambøll, mtre

### **Turnkey Contractor:** NCC

**Advisors:** CUBO Arkitekter,  
Force4 Arkitekter, NIRAS,  
Møller & Grønberg

## **FOUNDATIONS**

### **Construction of the building:**

Realdania, Den A.P. Møllerske  
Støttefond, VILLUM FONDEN

### **Project development**

**and implementation:** Realdania,  
Augustinus Fonden,  
Bevica Fonden, Vanførefonden



© Danske Handicaporganisationer, 2023  
2nd edition

Editors 1st edition: Tony Bech og  
Jens Anton Tingstrøm Klinken,  
Danske Handicaporganisationer

Editors 2nd edition: Emilie Marie Thams  
and Katrine Mandrup Tang, Disabled  
People's Organisations Denmark (DPOD)

Text: Birgitte Kleis,  
Arkitekturformidling.dk

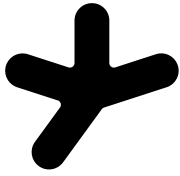
Design: Jesper Lind Jans,  
10 - Graphic Design & Publishing

Photos:

- Martin Schubert: Page 4, 5, 6, 8, 9,  
10, 11, 15, 18 (right and left),  
19 (right), 23, 25, 26, 27, back cover
- Tony Bech: Side 12, 13 (bottom  
right), 20 (bottom right), 21 (top left)
- René Sørensen Overby: Page 13 (top  
left og bottom left), 19 (top left), 28
- Jens Markus Lindhe: Page 16, 20 (left)
- Malene Anthony Nielsen: Page 22, 24
- Jesper Lind Jans: Page 20 (top right),  
21 (top right)
- Jeppe Carlsen: Front cover, 18 (middle)

Print: Narayana Press





You can read this magazine online at  
[www.handicaporganisationerneshus.dk](http://www.handicaporganisationerneshus.dk)

Core Values  
Realisation of the building  
Design  
User Perspectives

