DOKK1 AND THE URBAN WATERFRONT



URBAN MEDIASPACE AARHUS

Dokk1 and the waterfront are much more than just a building and an open outdoor area – it is a new urban space.

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DOKKI AND THE NEW URBAN WATERFRONT

PROJECT PLAYERS

schmidt hammer lassen architects are the architects and coordinating contractor for the project, and are working with Arkitekt Kristine Jensens Tegnestue and Alectia A/S as sub-consultants. Rambøll Denmark is the client consultant on the project

PROJECT CONCLUSION

Dokk1 and the car park opened in June 2015, while the urban waterfron will be completed in 2016. The final paving along the light railway will be laid in 2017. Dokk1 and the new urban waterfront are part of the Urban Mediaspace Aarhus project, the largest construction project ever undertaken by the City of Aarhus. The purpose of the project is to transform the Aarhus Inner Harbour from an industrial and ferry port to an urban space. Through closer integration between the city and the water, the project will come to greatly influence both the port areas and life in the city of Aarhus. The area is close to Aarhus city centre, the cathedral, the pedestrian shopping streets and the river milieu. The Urban Mediaspace Aarhus project includes Dokk1, the main library and the municipal Citizens' Services department, a fully automated parking system with space for 1,000 cars, three new urban waterfront areas, new infrastructure, preparations for a new light railway, the opening-up of the last stretch of the river Aarhus Å and climate protection of the city centre. Through the creation of a number of new squares and recreational areas, Dokk1 and traffic re-routeing, the area is destined to become a diverse and active multi-functional urban space.

The project is being carried out in partnership with Realdania and Realdania Byg, which are involved in establishing the open spaces along the waterfront and the automated car park.





City floor, standard: 8,750 sq.m. The Harbour Square: 11,000 sq.m. Recreational levels: 6,050 sq.m. Seating: 970 sq.m. City floor, special: 58,000 sq.m. Urban Context, including bridges: 9,210 sq.m.

- » Building gross floor area: 28,000 sq.m.
- » Library and Citizens' Services: approx. 17,500 sq.m.
- » Area to let: 10,500 sq.m.
- » Arrivals centre: 500 sq.m.
- » Technical installations, depots etc.: 4,000 sq.m.
- » Basement: Capacious with space for automated parking system for 1,000 cars
- » Covered outdoor area under the building: 10,500 sq.m.
- » No. of expected visitors per day: 3,500
- » No. of parking spaces: 1,000
- » No. of bicycle parking spaces: 500
- » Total construction sum: Approx. DKK 2 billion

MASTER PLAN

A junction is the term which best describes the vision of the overall master plan, with Dokk1 as a distinctive hub around which life in the city revolves and moves in many different directions. The dynamic, hovering shape of the roof is inspired by the revolving movement of this non-directional urban space.

Integrating the city centre and the harbour is essential. This is achieved by continuing the promenade along the river around Dokk1 to the open spaces along the waterfront. At the mouth of the river, large flights of steps are created all the way down to the water, producing a new and vibrant urban pulse on this spot. The sense of coherence envisaged in the master plan is created by an extensive paved area – the city floor – stretching from the urban front across Kystvejen and the light rail tracks and all the way to the water's edge.

The new open spaces along the waterfront lend themselves to a variety of completely new activities, while the promenade of buildings along Kystvejen which mark the edge of the city become directly connected to the water.

Consisting of three spacious and versatile urban spaces, the new waterfront is structured around the idea of three squares distinguished by their respective qualities and their suitability for different usages.



The master plan for Aarhus' new urban waterfront and Dokk1 is based on the city's scenic location: the terrain stretches from the lakes to the west along the river to the bay in the east, and with the woodlands to the north and south.



The master plan with the waterfront and Dokk1 synthesises the connection between the river and the bay.



WHAT IS DOKK1

Dokk1 houses the main library and the Citizens' Services department in Aarhus. Dokk1 is designed as the library of the future; the relocation of the existing main library at Mølleparken will thus involve both expansion and development.

Dokk1 has numerous facilities for social activities, association activities and networking. With its project rooms, study cells, media, café, teaching rooms, halls, activity and multi-functional spaces and not least its many informal open areas, the building is a flexible and dynamic sanctuary for everyone in search of knowledge, inspiration, and personal development, i.e. an open and accessible learning environment promoting democracy and a sense of community. Dokk1 provides access to differentiated knowledge as well as the latest media solutions, and accommodates in-depth study as well as a variety of activities and forms of expression.

NAME OF BUILDING

In autumn 2012, we initiated a process to find a name for the building.

Suggestions were submitted by hundreds of citizens, partners and employees. Based on 1,250 suggestions, the panel of judges chose the name Dokk1. Among other things, the panel emphasised the fact that Dokk1 says something about the location of the building in the context of the city, while also providing food for thought. "It conjures up associations of the harbour and life there. At the same time, the name refers to a place where we can be recharged [it is pronounced 'dock it' in Danish] and connect to the world at large.

Moreover, the name is simple, idiomatic and clever at the same time."

The various ways of pronouncing the name may be slightly confusing: [dokken], [dok én], [dok ét]. However, in true democratic spirit, all the pronounciations are considered to be correct. On the other hand, there is only one correct way of spelling the name: Dokk1.



DOKK1 – ARCHITECTURE

Dokk1 is not just a building. It is a place for exchanging knowledge and a place of opportunity, a cultural meeting place which fundamentally changes people's perception not only of the square Europaplads and the harbour, but of the entire city.

Openness and 360-degree contact with the city are the words that best describe the Dokk1 design. Dokk1's entirely open façade intentionally connects the interior with the exterior, ensuring close integration with its surroundings – modern city life, the historical city centre, the industrial port, the great expanse of the bay, and the horizon. The square Europaplads extends all the way under the building, producing a covered outdoor arrivals and transit area with a completely unique character. Here, travellers meet in a large dynamic space with uninterrupted views of the river, the water, the city and the new waterfront.

Large sculptural stairs connect the level above with the promenade along the river and the waterfront, inextricably linking the building and the city. At the same time, ascending to the outdoor area at level 01, visitors can enjoy the truly magnificent views of the vast urban waterfront areas and the horizon beyond.





CROSS-SECTION

- 1. Area to let
- 2. Administration
- 3. Families and children
- 4. Citizen's Services
- 5. Media area
- 6. City floor and parking lifts
- 7. Automatic Car Park





LEVEL 0

- 1. Automatic Car Park
- 2. Magic Mushrooms
- 3. Goods-in
- 4. Lift and escelator
- 5. Light Rail



LEVEL 01

- 1. Reading Room
- 2. Non-fiction
- 3. Study Rooms
- 4. Small Hall
- 5. Large Hall
- 6. The Living Room
- 7. Café
- 8. Meeting Room
- 9. Teaching Room
- 10. Citizens' Services
- 11. Main Entrance
- 12. Fiction
- 13. The Playground
- 14. The Ramp



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A selection of building materials \blacktriangleright



LEVEL 02

- The Alley
 The Gong
- z. me dong
- 3. Eating Areas
- 4. Nursing Room
- 5. The Stage
- 6. The Family Lounge
- 7. Children's Lab
- 8. The Box
- 9. 0-3 years
- 10. Gaming Street
- 11. Tweens Lab
- 12. Makerspace
- 13. Administration





Some of the building's many angles \blacktriangleright



- 1. Area to let
- 2. Staff canteen



The multifaceted roof plate is a distinctive architectural element of Dokk1. The roof plate is clad in expanded metal and contrasts with the building's large window sections.





PLAYGROUND

FACTS

- The Salling foundations have donated DKK 7 million towards the construction of the play facilities.
- » The Danish company Monstrum has designed and built the play area.
- » In designing the play area, giving children with special needs or disabled children the opportunity to join in has been a key priority.

The Playground is Dokk1's first-class playground at first-floor level. The playground occupies the expansive outdoor deck encircling Dokk1 seven metres above ground.

Here, you can meet the Bear, the White-tailed Eagle, the Chinese Dragon and the Monkey – when not leaping from ice floe to ice floe.

The playground consists of five primary play areas, each representing a continent and designed for different types of play. Depending on the direction you take, new experiences await. A round-the-world expedition is marked in the deck, connecting the five areas and spiced with stories and fun facts.

The playground is designed for all the family as a place where children and adults can play together.



CORE VALUES

Dokk1 is the city's knowledge and cultural centre. Through involving citizens, users, networks, employees and politicians, seven core values have been developed for Dokk1:

- » The citizen as key factor
- » Life-long learning and a sense of community
- » Diversity, cooperation and networking
- » Culture and events
- » Bridge-building between citizens, technology and knowledge
- » Flexible and professional organisation
- » Sustainable icon for Aarhus

The seven core values have been adopted by the Aarhus City Council.

AUTOMATED PARKING FACILITY

A key part of Urban Mediaspace Aarhus is an innovative and fully automated parking facility with 1,000 parking spaces. Here, you leave your vehicle in a light and pleasant terminal with views of the bay, after which it is mechanically conveyed to an empty slot underground. Architecturally, parking should be a carefully conceived quality experience. Thanks to its fully automated solution, the car park will be the largest and most advanced automated parking system in Europe.

The parking terminals where drivers leave and collect their cars are an integrated part of the building's substructure. Light and transparent, the terminals are positioned on an esplanade running down towards the water. You drive your car into a box, and it disappears into the ground. You are then free to ascend up into the building or venture out into the city. When you come to pick up your car, it is brought up to you.

The automated parking facility represents an investment in a thriving city life, as well as a high quality of life in Aarhus. It replaces a large number of conventional parking spaces along the streets and in the squares, freeing up space for other pursuits. The facility is intended to inspire new parking solutions which are well integrated with the city and provide a high-quality experience for users.



FACTS

- The car park has been constructed by the City of Aarhus and Realdania Byg in partnership.
- Following completion, Realdania
 Byg has taken over ownership of the automated parking system.
- » Securitas is responsible for running the facility.
- The system has been supplied by the German company Lödige Systems GmbH.

Photo: Susanne Eeg / Realdania Byg

The architectural and spatial experience of the water indentation in the cathedral axis, Hack Kampmanns Plads and the Harbour Square is ey to the unique quality of the area. /iews of the water and the Bay of Aarhus can be enjoyed from Skolegyde. The squares unfold, each with their own distinctive paving, an nvitation to use the new and versatie urban waterfront for events, physical activities, play and recreation.

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CATHEDRAL AXIS / HACK KAMPMANNS PLADS NORTH / THE HARBOUR SQUARE SOUTH

WATERFRONT AND URBAN SPACES – ARCHITECTURE

The new urban waterfront is a gateway to new ways of experiencing the bay, the harbour and the water. The central urban waterfront stretches from the river Aarhus Å and Mindet to the Nørreport intersection to the north and is bounded by Kystvejen. The sense of coherence envisaged in the master plan is created by an extensive paved area – the city floor – stretching from the urban front across Kystvejen and the light rail tracks and all the way to the waterfront. Three new spaces emerge, each with its own unique character and functionality: the dynamic transit area Europaplads, which extends underneath Dokk1; the open square Hack Kampmanns Plads near Toldboden with its historical buildings; and last but not least the Harbour Square, an asphalted area suited for all manner of activities and events. Expansive open spaces at staggered levels stretch towards the water, establishing large south-facing terraces. From there, you can walk barefoot right down to and out into the water. A new and vibrant scene is created at the beautiful and atmospheric urban waterfront which lends itself perfectly to all kinds of recreational activities.



The master plan tackles the area's general direction of motion from city to water – length- and crosswise.

Three spaces in one – one master plan with various spatiality and characteristics which provides versatile opportunities for recreation and activity.



THE HARBOUR SQUARE

TRANSS

THE HARBOUR SQUARE

The new Harbour Square is a large, flexible and open space designed for different types of activities, fun and games. To the east, the Harbour Square features large steps which can be used for spectating or seating. A landing stage is established at the foot of the steps, making it easy to get ashore from kayaks, canoes or rowing boats. The Harbour Square is designed for different types of activities and events, depending on the time of year. It accommodates spontaneous activities like street skating, street performances and ball games as well as special seasonal activities such as beach bars or Christmas markets and very large events such as concerts, markets or tournaments.



PAVINGS

As a uniting feature, the paving of the various open spaces and squares brings together the new urban waterfront. Expansive, pale concrete surfaces on the City Floor, inviting pale granite on the open recreational levels and dark asphalt on the Harbour Square. The materials' graphic and tactile finish creates a poetic and changeable grading between light and dark, between reflections and shadows. The paving materials range from black to white, from solid to liquid.



ART

A sum corresponding to 1% of the total construction budget has been earmarked for works of art – to be installed both inside Dokk1 as well as in the open outdoor spaces. The art budget totals approx. 17 million Danish kroner.

The success criteria for the art are:

- » The works of art must be integrated into the project. The art must stimulate and supplement the architecture of the building and the open outdoor spaces in engaging and surprising ways.
- » The works of art must be of such a high standard as to attract visitors in their own right.
- » The works must be contemporary art of a high quality.

In cooperation with the architects, a number of sites around the building have been identified as being particularly suited for integrating art.

In cooperation with the City of Aarhus's Committee for Visual Arts, a number of calls have been advertised inviting artists to submit proposals.

THE GONG

The Gong by Kirstine Roepstorff is a 7.5-metre-long tubular bell suspended from the skylight above the media ramp. From the maternity ward at Aarhus University Hospital, new parents can activate a hammer which is mounted on the gong. The sound from the gong can be heard in the area around the media ramp.

MAGIC MUSHROOMS

Magic Mushrooms by the art duo Elmgreen & Dragset is a large work of art adorning the underside of the media ramp at level 0. The work takes the form of a city in reverse. Visitors experience the work as they move under the building.

POSEIDON

Poseidon by the group of artists 'A Kassen' is an outdoor bronze sculpture for the new urban waterfront. The work is created by pouring liquid bronze into the harbour basin. As the bronze solidifies, an unpredictable dynamic and abstract sculpture is created.

CLIMATE CHANGE PROTECTION

To protect the city centre along the river Aarhus Å from future flooding as a result of global climate changes, climate change protection is an integral part of the project. The measures include the installation of lock gates and also a pumping station at the mouth of the river, as well as a high-water barrier between Dokk1 and Skolegyde.

At normal water levels, the gates are open. At extreme water levels, the gates can be closed to prevent the water from the bay from running up the river and flooding the city centre. At the same time, integrated pumps ensure that the water from the river is pumped out into the harbour basin, thereby ensuring that the river does not burst its banks. A high-water barrier has been created by raising Dokk1 and the traffic corridor between Europaplads and Skolegyde (light rail tracks and road) to an elevation of 2.5. This means that the whole area – and thereby the city centre – is protected against tidal surges of up to 2.5 metres above normal water level.



ACCESSIBILITY

Free and equal access for everybody is a key element. All design principles and solutions have therefore been developed with this in mind.

Both inside Dokk1, in the outdoor spaces and in the parking facility, focus has been on accessibility, access conditions, wayfinding, patterns of movement, planting, security, functional aids, rest stations, lighting etc.

An accessibility consultant has been involved throughout the project period, who has regularly assessed the solutions and advised on solutions and alternatives. Particular focus has been given to the visually impaired, the hard of hearing, wheelchair users, people with walking difficulties, people with allergies, dyslexics and persons with cognitive impairments.

It is the ambition of the City of Aarhus to ensure accessibility, both in the conventional physical sense and when it comes to access to information and communication.



SUSTAINABILITY



Environmentally sound project engineering has ensured a strong focus on sustainability and the environment. This has included a focus on reducing energy consumption, both during construction and in the life of the building, on the reuse of existing materials, on the use of natural products, and on protecting the local environment.

Dokk1 has been built according to the low-energy building 'Class 2015' standard. Sustainability has been a focal point, both in the architectural design and in the choice of technical solutions. Energy optimisation has been achieved, among other things, through the installation of a large solar cell system on the roof of Dokk1 and through the use of seawater cooling. Also, the compactness of the building and the resulting smaller surface area help to reduce thermal loss. The sizing and relative positions of the various levels have been designed to create natural shade, thereby minimising resource consumption.

USER INVOLVEMENT

Only by involving future users and important players is it possible to create a new urban waterfront and a building of enduring appeal to citizens.

Based on the Aarhus model for citizen involvement, account has been taken of the intended use by citizens, their ideas and wishes, thereby giving them a say throughout the development process and in the final project.

Citizens, networks, employees and partners are all key users of Dokk1 and the new urban waterfront. Taking future users as its starting point, the project has been strengthened through continuous involvement processes. Importantly, the potential scope for influencing the project has been made very clear, and the user involvement processes have been timed to coincide with phases in the project which have allowed genuine influence.

Dokk1 and the new urban waterfront will be known as a place for unique cooperation – in the development phase, during construction and following project completion.





Plans, sketches and visualisations: schmidt hammer lassen

Read more about the project at www.urbanmediaspace.dk If you have questions or comments please contact the project

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