

Background information for the opening of De Krook

The building

The building can be read as a stack of horizontal plateaus with a view of the Scheldt, which are intended to create a city within a city. In order to realise this aim, the building also needs to function like a city with its streets and squares. The physical link with the surrounding city is created by means of attractive views across the urban landscape. The building functions like a traditional department store, with its large atria and signature staircases which almost seem to be able to draw people upwards into the building. The ability to see inside and visual connections between the inside and outside are also important. Visual connections and meeting spaces highlight the public nature of the building, which welcomes its surroundings as a result. The building spills over into the surrounding area, entering into a dialogue with it. The exterior and interior merge to form a single unit. The building is thoroughly at home in its location, both inside and out, and will become Ghent's living room. The building is therefore extremely transparent and open, allowing local residents to meet here once again and discover what this reclaimed location has to offer.

Design team

- the Ghent-based **COUSSEE & GORIS architecten** with architects Ralf Coussée and Klaas Goris

together with

- the Spanish-Catalan firm **RCR Architectes** with architects Rafaël Aranda, Carme Pigem and Ramon Vilalta. Last week, they were awarded the Pritzker Architecture Prize.

Project management

The cooperative partnership Waalse Krook with the following shareholders:

- City of Ghent
- Province of East Flanders
- Ghent University
- imec

Project duration

The supervision and management of this urban renewal project were entrusted to A-RES in 2010. Together with the firm ADVISERS, A-RES was also responsible for cost control during the entire course of the project. De Krook's foundation stone was laid in 2013. The shell of this spectacular

building was completed 3 years later.

Tender phase: 2010

Demolition: 2011

Digging and archaeological surveys: 2012

Decontamination phase: 2013

Building phase: 2013 – September 2016

Fit-out phase: September 2016 – March 2017

Figures

- 16,000 tonnes of rubble
- Construction site: 4,450 m²
- Total surface area: 17,557 m²
- Steel structure: 2,200 tonnes
- 956 tonnes of steel reinforcements
- 8000 m³ of concrete
- Signature staircase: 23,500 kg, 6.5 m wide, 13.6 m long
- 16.2 km of blinds
- Triple-glazed external windows: 7,615 m²
- 2 cm internal windows: 1,175 m²
- 12,000 m² of carpet
- 750 bicycle parking spaces
- 502 seats
- 447 jobs

Budget

Contribution by the shareholders and Flemish government for new construction:

- City of Ghent: 15 million
- imec: 7.5 million
- Ghent University: 7.5 million
- Province of East Flanders: 10 million
- Flemish government (Cultural Infrastructure Fund): 25 million

Cost price:

- New construction: 52 million euros + land contributed by the city of Ghent: 4.9 million euros
- Fitting out: 8.6 million euros (divided between the partners for offices, library with book transport system, laboratories, radio studio etc.)
- Landscape development: 10 million euros (by the city of Ghent, TMVW, W&Z and Auquafin)

Krookcafé

MTM bvba will cater for hungry and thirsty visitors in the Krookcafé. They are developing a contemporary catering concept which ties in seamlessly with the rhythm of the building, offering breakfast, lunch and tapas at aperitif time.

Wintercircus

Alongside the new building, the Wintercircus also forms part of the new district known as 'De Krook'. The municipal development authority sogent is renovating the old circus to form a centre for innovative economy, culture and events. This initial phase will start before the construction holidays and will last a maximum of one year. The Wintercircus will open its doors to the general public in 2020.

imec@DeKrook

In De Krook, imec focuses strongly on Flemish innovation. Imec guides companies through the various steps of the innovation process, from the moment of conception right through to the fully functional product or service. Although imec is using its unique nano and digital technologies for this, it is not enough. Innovation with a positive impact on society can only be achieved if companies, the research world, citizens and the government join forces.

DataWall: 10 interlinked screens in the central atrium of De Krook, forming an artistic and interactive platform. Imec's data wall is more than a mouthpiece for sharing research results. It is a window which enables interaction between researchers and visitors to De Krook, a place where people can participate in ongoing studies and a microphone which allows them to make their views heard on social themes.

Phosphotron is an immersive laboratory which brings visitors into a virtual/augmented reality on the basis of the latest technologies.

- Companies will be able to test their innovative solutions in a virtual reality context here, as not all solutions can be tested in real life due to their complexity or cost. Examples include solutions for emergency situations and specific hospital situations.

Prototyping Lab: In the prototype lab, imec will offer the latest technologies such as 3D printing, laser cutting and vinyl printing to turn an idea into a tangible prototype which can be tested on your end users

- from early stage prototypes through to finished products

Sensor network

- on the basis of sensors which are distributed throughout the building, we will carry out various measurements and post the results on the data wall

Co-CreationLab: the place to refine user research and involve end users in innovation and technology

- Research and innovation require direct involvement on the part of the end user. Co-creation sessions will allow us to modify research questions, guarantee better end results and work in a more market-oriented way

Ghent University@DeKrook

De Krook provides Ghent University with more opportunities to present its research to the outside world and to involve visitors in academic activities. The university is developing its own public activities for the first time, which will be evident from the extensive calendar of events.

Lectures: Kraks@DeKrook

In the series Kraks@DeKrook, we demonstrate that research isn't a distant reality at all. From March to June, Ghent University and imec will be organising lectures on topics relating to culture, media, entrepreneurship and education. This series is intended to bring research results closer to you, the users. We are therefore providing an informed framework to help you deal with this changing society, in which technology plays an increasingly central role. You certainly don't need to be a scientist to follow this series!

21 March 2017 - Fake news? Are we looking at the news critically enough?

How is news compiled and how can this affect our view of the world? Find out more during this evening, when various researchers and journalists will present their points of view.

28 March 2017 - Games in De Krook!? The importance of play.

Why will the library soon have video games in its collection? We will be exploring the possibilities offered by video games as a form of culture. Discover fascinating games about serious subjects and brainstorm how they could be used to make the world a better place.

18 April 2017 - What if reading isn't child's play?

Reading is important for a child's development. However, some children have trouble reading. What are reading difficulties and how are they established? How can we make less skilled readers enthusiastic all the same? Which tools exist to help children with dyslexia? This evening will reveal ways to make reading fun for these children once again.

25 April - Smartphone, social media, games... Can we manage without technology these days?

What's the situation with media use in Flanders? Are we all addicted to technology? When does our use of smartphones, social media and games start to become a problem? Discover your digital profile and learn tips to help you adopt a sensible approach to technology.

3 May 2017 - Online hate or freedom of speech?

Should we be allowed to say anything we like online or do we sometimes go too far? What can cause online hate messages and what can we do to stop them?

16 May 2017 - Are we too easily seduced by new forms of advertising?

Are we always aware what constitutes advertising and what doesn't? After all, the internet is throwing up plenty of new kinds of advertising. During this evening, you will discover which forms of advertising currently exist, how to identify them yourself and how we can make children and young people 'advertisement-wise'.

6 June 2017 - Can technology make us healthier?

Fitbits, exergames and doctor Google: what is the link between technology and our health? How can

technology make us healthier and what are the pitfalls?

14 June - So what is big data exactly?

We hear the phrase big data all the time, but what does it actually mean? Discover what big data is, how it is used and how you come into contact with it in everyday life.

Media and ICT research group (MICT)

A few concrete examples of research in the media experience lab and immersive space:

- experiments with augmented reality, more specifically into possibilities for corporate training (e.g. learning how to use a particular machine) using augmented reality
- experiments with virtual reality: researching shopping experiences in VR, possibilities of VR for STEM education (e.g. demo by Karel Van Acoleyen from the physics group on the theory of relativity), the impact of specific VR experiences on attitudes (e.g. a VR video of Syrian refugees versus a video on a laptop)
- experiments with eye tracking

All kinds of activities will also take place in the co-creation lab, including:

- research into the possibilities of VR in various sectors such as the health sector, manufacturing, education, retail etc.
- involving citizens in developing the house, hospital, city etc. of the future, and more specifically in making it 'smart' on the basis of sensor technology

Culture and Education research group

- Research into the impact of art and culture, relating to cultural education projects
- Research into changing reading cultures and (online) reading groups
- Research into evolutions within cultural participation and experience
- Development of teaching modules for graphic novels/games/novels/films
- Establishment of themed collections of fiction on specific subjects (relating to themed public activities)
- Research into the use of stories in education
- Helping to expand the library's games collection

Institute for Psychoacoustics and Electronic Music (IPEM)

- IPEM is working hard to develop the ArtScience lab which will enable augmented reality in the music production arena. The lab will have full acoustic insulation, a mobile truss, a 3D audio rendering system with 64 loudspeakers and a motion capture system which makes it possible to manipulate virtual sound objects by means of physical movement. A visual augmented reality component is also being developed in collaboration with ID-lab. The ArtScience lab focuses on physical interaction with augmented reality. It also researches ways of optimising this interaction to ensure its subsequent seamless application in the real world.

- At the same time, IPEM is working to develop a "super-challenge" relating to new artistic forms of expression which will actively involve artists in the technological and scientific developments. IPEM therefore wishes to reinstate its historic (1960-70) role as an experimental centre for innovative developments in the music world. In the process, IPEM will make full use of its world-renowned expertise in the field of physical music cognition to create new forms of artistic expression which call upon augmented realities.

Artists can test out the latest technologies in the ArtScience lab, on the condition that their artistic research can also be used to drive the scientific research.

Bibliotheek@DeKrook

In De Krook, for the first time Ghent will have a building which was truly designed for the function of city library. In this digital era, a city library is still relevant but its role is definitely changing. In a society which offers an abundance of information, there is a growing need to help people navigate the available knowledge. De Krook's activities will be tailored accordingly. The library will remain an oasis of peace and quiet, with the same extensive collection of books, CDs, DVDs etc. It will have more cosy reading corners and quiet reading and study areas than before. However, it will also become a place to meet other people during lectures or debates, to develop skills in workshops, to experiment in the 'maker's lab', to collaborate in research and much more besides. A new story starts here.

FIGURES

- free membership
- 350,000 books, CDs and DVDs
- 11 km of bookshelves
- 72 screens
- Total number of (active) borrowers: 68,281
 - 83% = over the age of 15
 - 17% = under the age of 15
- 1,710,154 items borrowed each year
 - 162 items borrowed during each opening hour
 - 6.87 items borrowed per local resident

ICT: what's new?

The KROOKBIB APP, OR A RECEPTIONIST IN YOUR SMARTPHONE

De Krook is the **first library in Flanders** to offer a smartphone-friendly catalogue. Library members can now download the new (free) KrookBIB app, which shows at a glance which items are still on their card and when they need to be returned. And now it couldn't be easier to search the collection, extend the borrowing period or reserve items. A unique extra feature is the custom reading tips which are offered both in the app and online. The app will be available in Google Play and the App Store from 10 March, free of charge.

CUSTOM READING TIPS

Exclusively for its members, the library has developed custom reading tips via the website. People who sign up for these tips will receive personalised reading suggestions based on their previous borrowing and specified reading preferences. Members who wish to use this service must have both a My Ghent profile and a My Library profile and must naturally allow access to their borrowing history.

A NEW ONLINE PROFILE

My Ghent + My Library = My Ghent Library!

From now on, all library matters can be dealt with on the updated website of De Krook Library. In order to do this, you will need to create and then link a My Ghent profile with a My Library profile. Members who do so can see which items they have borrowed and the return dates, follow up on reservations, extend borrowing periods, create lists **and pay online!**

ONLINE PAYMENTS

From 6 March, De Krook Library will be **the first library in Flanders** to enable online payments via mijn.library.be. All outstanding amounts on your own card and any associated cards can now be paid via Bancontact, Mastercard or credit card on the website. People who use a banking app can pay using the Bancontact QR code.

DIGITAL SIGNAGE

The new library has 72 screens. 66 are interactive touch screens which have been incorporated into the shelves. These screens are intended to provide visitors with information, directions and inspiration. For example, they will show the 'Gent Leent' application (see below), various interesting information sheets, Bieblo or other information. The other six non-interactive screens are located at the entrance past the rotating door and tell visitors which activities are being organised in De Krook that day and where.

BIEBLO, DISCOVER THE PERFECT BOOK FOR YOU

Bieblo is a new visual, digital application for children between the ages of 7 and 11. Children can drag various illustrations to a thumbs-up or thumbs-down icon. This will generate an overview of reading books which tie in with their choices and are also available in the library at that time. Bieblo runs on the screens in the children's library and is a collaboration between Cultuurconnect and De Krook Library.

Cultuurconnect is a laboratory for local cultural policy which aims to find solutions to the digital challenges of our society. Together with libraries, cultural and community centres, we develop ideas into services which encourage people to experience culture in new ways.

GENT LEENT, AN INNOVATIVE VISUALISATION OF BORROWING DATA

For the time being, this application can only be found on the screens on the library shelves. In a light-hearted way, it shows what Ghent residents are borrowing and therefore reading. 'Gent Leent' (Ghent Borrows) allows visitors to apply filters such as age, gender, language, season etc. to the choices of Ghent library users. This provides a different view of the library's collection and therefore serves to inspire. It offers a new search method alongside the conventional method of searching in the catalogue, and an innovative way to view the open data of Ghent's new library. This is a collaboration between Bits of Love and De Krook Library.

NEW LIBRARY CARDS, THE BOOK TRANSPORT SYSTEM and RFID

The new library cards and all the materials are equipped with RFID technology or radio-frequency identification (**RFID**), a technology which makes it possible to remotely save information to and read information from so-called **RFID** tags on or in objects. This technology is intended to simplify the process of borrowing and returning books. The book transport system brings the materials to the relevant floor, which also gives the library staff more time for personal contact.

The book transport system at De Krook is the largest in Belgium and has an extra-large buffer which can hold around 300 books. By means of the four collection points in the Agora, the books are transported to the sorting room on level -2. They are then transported 40 metres down the corridor until they reach the book lift which is no less than 25 metres high and is located in the centre of the building.

The book transport system consists of several hundred metres of conveyor belts. It also includes:

- 4 collection points for the automatic collection of the materials
- 1 smart return point (night safe) which immediately removes the books from your card
- 9 borrowing points
- 1 payment machine
- 1 reservations shelf where reserved items are placed ready for borrowing
- 1 intelligent shelf in the children's library where the books are immediately removed from the card

As well as being large, this system is also extremely energy efficient. The conveyor belts only operate when required and use a minimal amount of energy when doing so, thanks to the efficient controllers.

THEMED DIGITAL DOCUMENTS

There is one more library online. The digital library on the website features the digital newspaper and magazine kiosk as before, but now it also includes the Home Academy with lectures by professors from all over the world.

In addition, there is now a good collection of (online) documents on a wide variety of literary, historical and social themes which are intended to help people understand the world better and establish critical links. The library believes that the ability to read well and think critically are the only ways to distinguish fake news from what is truly relevant.

Special mention must be made of Pieter and Jet Steinz, who take a well-known novel from world literature as their starting point and then establish links between this work and other books in a light-hearted and visual way.

OTHER NEW FEATURES

YOUTH LIBRARY

The new Youth Library is an absolute first for De Krook Library. Young people who have grown out of the children's library but still feel too young for the adult collection now have their very own place in De Krook. It has its own collection of books, comic strips and graphic novels and its own range of activities. In order to keep a finger on the pulse of what interests this age group, the library created Team Krook. This is a group of committed young people who help to determine what should go on the shelves, which games are worth playing or which workshops simply should not be missed. There is also a separate lending point.

CHILDREN'S LIBRARY

Not new, but certainly a considerable improvement. 1,000 square metres of reading and learning pleasure for children from 0 to 12-14: that means 50% more space. There are cosy reading areas for the children and workstations for their parents, complete with power points. In the two Youth Studios (Vos and Haas) children can meet writers in real life, learn to draw or philosophise together. A new feature is the smart returns shelf which automatically removes the books from your library card.

NEW, ACTIVE PRESENTATION

In this new building, the collection will be neatly arranged on the shelves as usual but will also be displayed by the staff on inviting stands and presentation units more than was previously the case. This will allow visitors to explore beyond their usual sections. On the screens, visitors can also explore the collection themselves and look for inspiration.

TOURS

Every month, the library organises tours for individual visitors. Each month will have a different angle.

ACCESSIBLE TO ALL

The new building is accessible to wheelchair users. Auditory support is provided for blind and visually impaired visitors in the lifts. In addition, the library organises tours with interpreters for newcomers who do not speak Flemish and can provide Flemish sign language interpreters on request.

Public activities

TOGETHER WE ARE STRONGER

The library will be strengthening its connections with various partners to enable it to help more people in the right way.

For example, Vormingplus is bringing its comprehensive range of educational offerings to De Krook. In the various rooms, they will be teaching people how to improve their social, cultural or personal skills.

In collaboration with Vormingplus and Digitaal Talent@Gent, there will be a Digital Talent Point on the second floor of De Krook. This has computers and people who can provide help and advice if required. People can also immerse themselves in a digital theme at a course or workshop run by the Digilab. The Krookcafé will host Mediacafés on Thursdays for people with a digital challenge which they would like to conquer.

The second floor also houses De Stap (study advisory point) and the Wetswinkel (legal advice centre). They will be providing specialist advice at set times.

A few exciting new formulas:

- Ghent lectures to introduce visitors to the comprehensive Ghent collection
- Kraks@DeKrook are lectures on research themes which are relevant to De Krook: culture, new media, entrepreneurship, education etc.