

Fun Facts about BLOX and Lille Langebro

BLOX is a big project.

- The groundbreaking took place on 13 May 2013.
- More than 1 million man-hours went into the construction.
- Many different nationalities were involved (including Danish, Polish, German, British, Romanian, Icelandic, Italian, Dutch and Portuguese).
- The general contractor, Züblin, had an office staff of 40 on site.
- Realdania's client team had 12 members.

The building has a footprint of 74 x 75 metres.

- Usain Bolt running at world-record speed would be able to run around the building in 30 seconds.

The excavated soil amounts to 82,000 m³, weighing 140,000 metric tons.

- The excavated soil would fill 33 Olympic-size swimming pools.
- The soil made up 4,000 lorry loads, which were driven to the town of Køge, where it was used for the expansion of the harbour.
- The excavated soil weighs as much as 28,000 elephants. If the elephants were lined up in a row, they would reach from BLOX all the way across the island of Funen to the town of Fredericia.

At its deepest, the building extends 17 metres below terrain.

- This is equivalent to about 10 people standing on top of each other.
- It is equivalent to an average five-storey residential building in Copenhagen. Buried underground, that is.

The building stands approx. 26 metres above terrain.

- That is 15 metres less than Copenhagen's Round Tower (-;

A total of 250 secant piles were cast (bored concrete piles at 20 metres' depth).

- The piles provide a waterproof wall around the construction area, keeping ground water and water from the harbour out and reducing the pressure of the surrounding soil on the basement walls.
- A large basement is like an empty bathtub under water. The basement is held down by 300 deep anchors securing the bottom of the tub to the ground.

The building's total weight is estimated at 80,000 tons.

- This includes approx. 50,000 tons of concrete and approx. 7,500 tons of steel/rebar. The rest is made up of glass, technical installations, cables, floors, furniture and so forth.
- BLOX contains as much iron and steel as the Eiffel Tower (a little over 7,000 tons).
- The building weighs about the same as 1.7 km of six-lane motorway. (The road profile of a one-metre stretch of motorway that is 30 metres wide and 1 metre deep weighs approx. 45 tons).

The building has a total floor space of approx. 27,750 m².

- This is equivalent to four soccer fields.
- It is equivalent to the total floor space of Amalienborg Palace (26,500 m²) or the Black Diamond (28,000 m²).
- DAC's floor space is approx. 5,900 m², including both exhibition and office space.
- BLOX's office space is approx. 5,700 m² (approx. 10,000 m² including the space at the nearby Fæstningens Materialgård).
- The underground car park has a floor space of approx. 4,700 m².
- The residential space (gross area including share of the common area) is approx. 3,300 m².
- Fitness.dk has approx. 1800 m².

- The playground area is approx. 1200 m².
- The restaurant has a floor space of approx. 950 m² distributed on two floors.

One of Denmark's biggest mobile cranes was used for the steel construction.

- It can lift up to 600 tons at a time. That is equivalent to 400 cars.

Large flagstones on the edges of the roof keep the glass railings in place.

- The stones weigh more than 350 tons – and keep the glass railings from being swept away by the wind!

There are 22 rental apartments on the building's two top floors.

- They form a community at the top of the building with patios and common areas around the large skylight. (In Denmark, a village is defined as a settlement with fewer than 200 inhabitants).

The total residential floor space is 3,300 m², the flats varying in size between approx. 120 and 200 m².

- The average size of a Danish home is 112 m².

Urban spaces and playground space around BLOX and along the harbour front account for approx. 5,500 m².

- This is almost twice the size of the city square Gråbrødretorv in central Copenhagen, which is approx. 2,830 m².
- Bryghuspladsen has almost the same size and dimensions as the city square Frue Plads in central Copenhagen (between the Church of Our Lady and the University of Copenhagen), approx. 2,760 m².

The playground space is approx. 1,200 m².

- That is the equivalent of 100 children's rooms of 12 m² each.

The fully automated underground car park will have room for 350 cars.

- The underground car park frees up at least 3,500 m² of street-level space, which can be used for recreational and other purposes instead.
- Lined up on street level, the cars would form a line that is almost 2 kilometres long.

The solar cell unit on the roof produces 145,000 kW/h a year.

- That is equivalent to the average annual electricity consumption of 23 households.

Clean rainwater from the roof and the urban space around BLOX is separated out and led directly into the harbour.

- That spares the Copenhagen sewers of 8,500 m³ rainwater a year, which is equivalent to 55 households' annual amount of wastewater.

The building encapsulates Christians Brygge (Ring II), especially in order to reduce noise.

- The noise dampening is so effective that the level of traffic noise inside the building is equivalent to the sound of a light breeze.

The project showroom had more than 15,000 visitors during the construction period.

- That is equivalent to half the population of the Danish city of Hillerød.
- The showroom was open from September 2014 through January 2018.

The Lille Langebro bridge will be 160 metres long and 7 metres wide.

- The beautiful curvature of the bridge adds extra length. That is necessary to prevent the bridge from being too steep in this narrow stretch of the harbour.

The bridge spans in Lille Langebro weigh 600 tons.

- They are built in the Netherlands and shipped to Denmark on a big barge. In Denmark they are mounted directly on the bridge piers using a floating crane.

Lille Langebro is a swing bridge.

- The opening of the two spans is controlled from Langebro, so the two bridges open and close in synchrony.
- When the bridges are up, the fairway is 35 metres wide.

The Lille Langebro bridge has a free height of 5.40 m.

- That provides enough of a clearing for the harbour buses to sail under the bridge, which reduces the need to open the bridge.

The Lille Langebro bridge reduces the pressure on the nearby Langebro bridge and offers a calmer alternative, especially for cyclists.

- About 40,000 cyclists use Langebro on an average weekday, and many cyclists feel insecure in the dense traffic.
- As many as 3,000 pedestrians and 10,000 cyclists are expected to use Lille Langebro every day.

The name 'Lille Langebro' (Little Langebro) was chosen after an open public process.

- The name was a favourite among the more than 1,000 proposals that were submitted, and it has now been officially approved by the City of Copenhagen.

About BLOX

BLOX is much more than a building; it is a new destination on Copenhagen's harbour front located in between Langebro bridge and the Black Diamond building that houses the Royal Library. BLOX was funded and built by the private association Realdania. The building forms the venue for the Danish Architecture Center's exhibitions and activities and for BLOXHUB – an interdisciplinary inspiration environment for sustainable urban development.

- Realdania's subsidiary, Realdania By & Byg, was the client for BLOX and is the owner of the building.
- BLOX is a building surrounded by urban spaces, a pedestrian bridge across Frederiksholms Kanal and the upcoming Lille Langebro bridge (for bicyclists and pedestrians) between BLOX and Christianshavn.
- Low-energy building fitted with solar cells and connected to district cooling provided by HOFOR – Greater Copenhagen Utility.
- The plot previously had a high plot ratio and was the site of Kongens Bryghus (the King's Bewhouse), among other buildings. The buildings on the plot burned down in 1960, and until 2006, when Realdania By & Byg bought it from the City of Copenhagen, it was used as a playground and a privately operated, temporary car park.
- The City of Copenhagen and Realdania are working together to develop the area around BLOX.
- BLOX is officially inaugurated by HM the Queen on 4 May 2018.
- The Lille Langebro bridge opens in autumn 2018.