STAIRCASES

in ultra high performance concrete







ACCORDION STAIRCASES



CIRCULAR STAIRCASES



LOOSE STEPS



BESPOKE STAIRCASES









WE MAKE YOUR STAIRCASE DREAMS COME TRUE

Stairs from Hi-Con are bespoke solutions that are tailored to the individual project to match the architectural expression and functionality of the building. We design staircase solutions that add value for the architect, the engineer, the contractor, the developer and the end user.

We always take advantage of the unique properties of Ultra High Performance Concrete (UHPC) in our staircase solutions, which means you get freedom in the design and aesthetic expression of the stairs, a slender and minimalist design and an almost steel-like strength. This brochure presents a selection of our accordion stairs, spiral stairs, winding stairs, stairs with loose steps and custom stairs, as well as the installation principles used. We hope the brochure inspires you to design exactly the staircase solution you are dreaming of

ADVICE AND KNOWLEDGE ARE A PART OF THE PACKAGE

When choosing a staircase solution from Hi-Con, our knowledge and advice are always included as part of the collaboration. We always recommend our customers and partners to involve in the process as early as possible, as this increases the chance of fulfilling your expectations and dreams of a specific staircase solution. When you use UHPC in your building project, a wealth of opportunities are included to combine form, function, installation principles and aesthetic design - we gladly contribute our knowledge and experience to optimise the building process and to create the best solution.



ADVANTAGES OF ULTRA HIGH PERFORMANCE CONCRETE

THIS IS WHAT YOU GET WITH HI-CON STAIRCASES:

- Bespoke solutions
- Slender and minimalist design
- Freedom of design
- 100+ years durability
- Minimal maintenance
- Easy installation
- Lightweight elements
- Fire resistant material

HICON

A NEW GENERATION OF CONCRETE

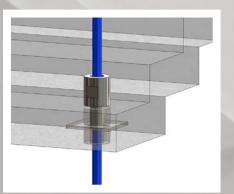
In 1986, the engineers at Aalborg Portland invented a brand new type of concrete with a complex mix of cement binders and steel fibres, which they named CRC: Compact Reinforced Concrete.

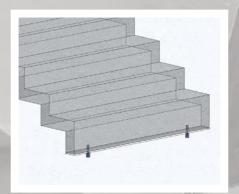
The concrete proved to be incredibly strong and durable. It is not particularly porous and therefore it sits tightly on the reinforcement, which is utilised for a small covering layer. The concrete utilises the reinforcement effectively without cracking, even under extreme conditions.

MATERIAL SAFETY WITH OUR CONCRETE

Hi-Con has been working on developing the original CRC since 2001. Today, Hi-Con uses its own generation of ultra high performance concrete, called CRC i2®, i3® and i4®. This generation has the same high material safety as the original CRC and is the world's best-documented and well-tested UHPC.







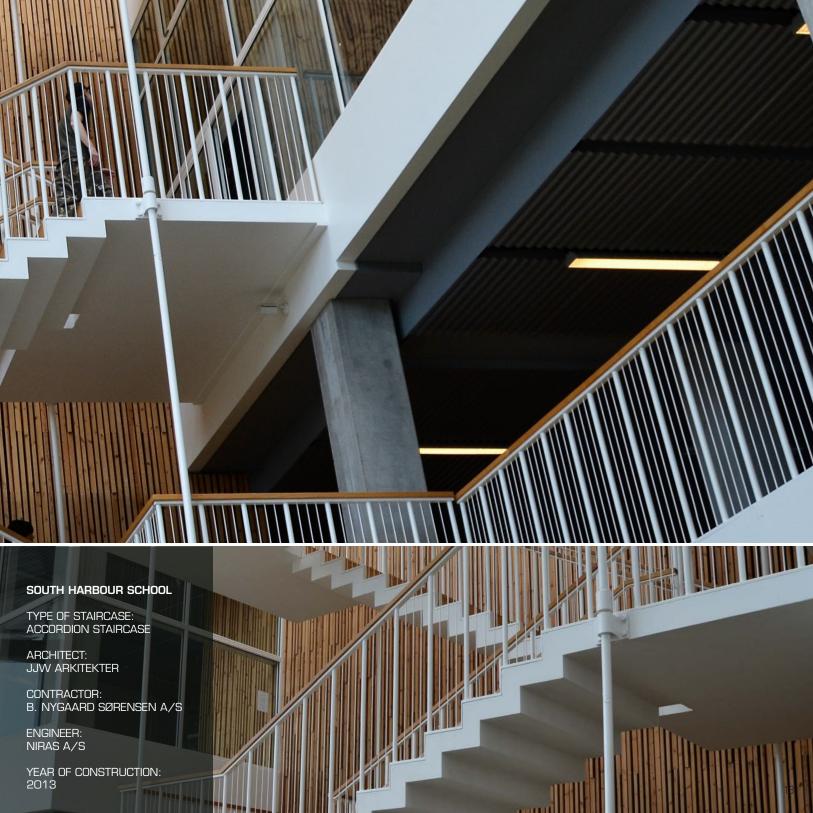


ACCORDIONSTAIRCASES

An accordion staircase is a self-supporting staircase solution. If a solution with extra-long spans is needed, a beam is sometimes required to support the stairs in an integrated and elegant way. The steps can measure down to 50 mm thickness, they have a long durability and, like all our staircases, each accordion staircase is bespoke.

A Hi-Con CRC i2® accordion staircase is a simple staircase, with a light and elegant expression that is easy to install.











THE SCHOOL ON STRANDBOULEVARDEN

TYPE OF STAIRCASE: HELICAL STAIRCASE

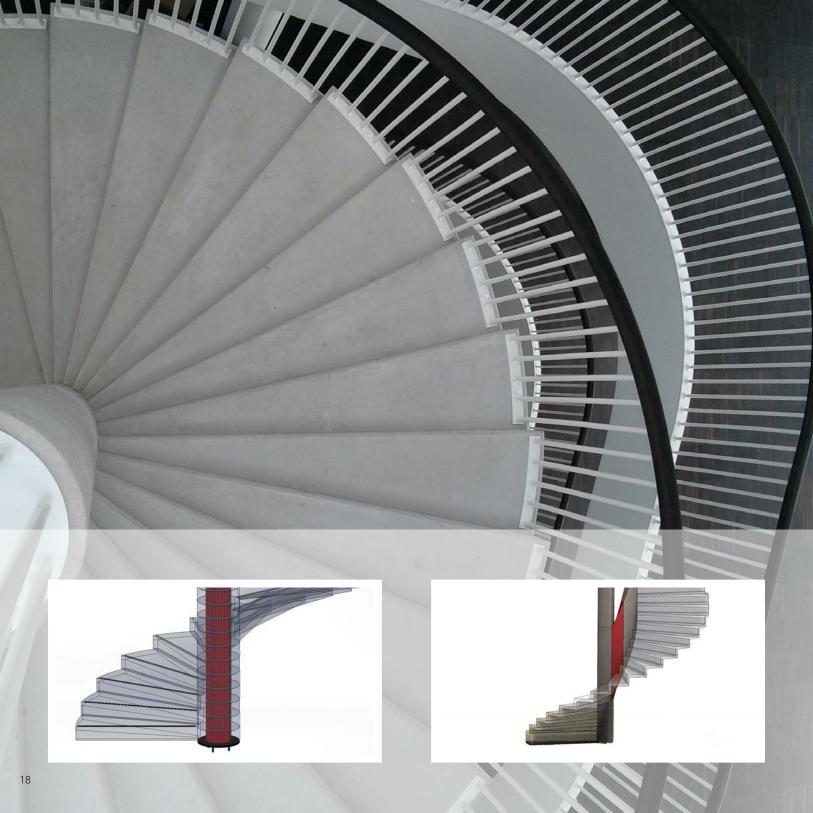
ARCHITECT: NØHR & SIGSGAARD ARKITEKTFIRMA A/S

CONTRACTOR: B.NYGAARD SØRENSEN A/S

ENGINEER: LYNGKILDE A/S RÅDG. ING.







CIRCULARSTAIRCASES

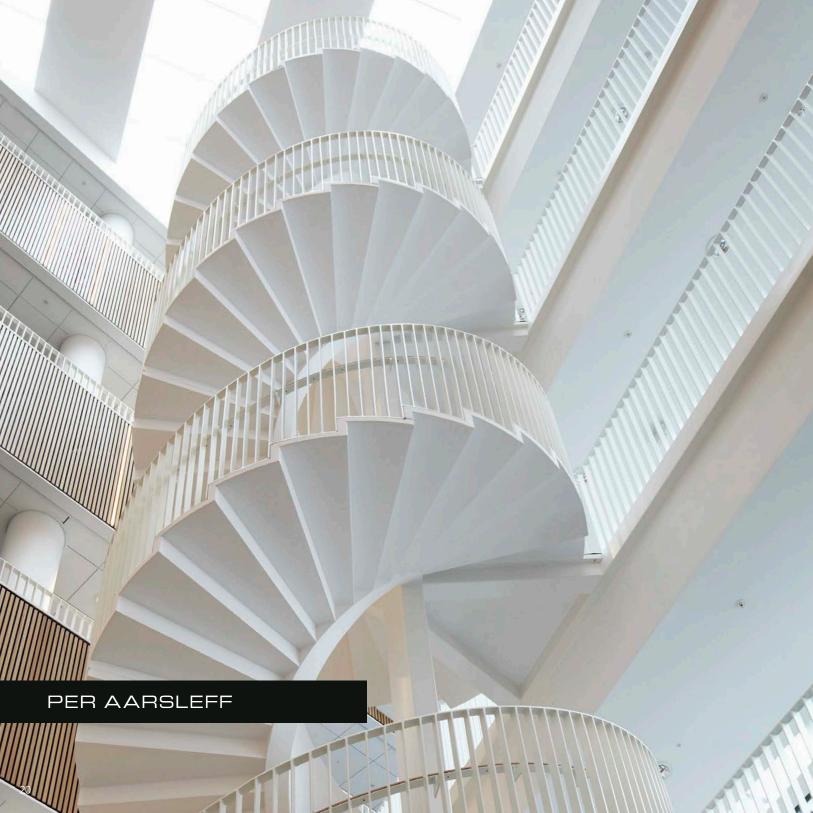
Circular staircases are characterized by their elegant, slender and twisting design. Whether the solution becomes a spiral or a winding staircase, we can cast the steps with a thickness of only 50 mm.

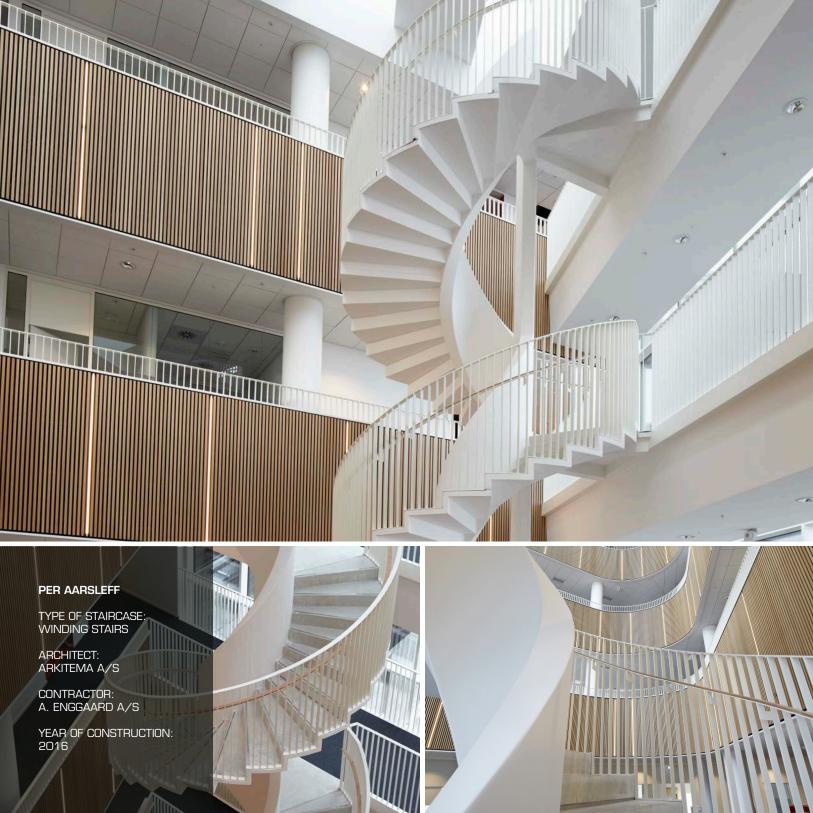
SPIRAL STAIRCASES

The spiral staircase is characterized in that it revolves around a centrally located column. When the individual steps are stacked, they form a spiral, which is subsequently reinforced and cast. The spiral then becomes the supporting element and acts as the column around which the steps twist.

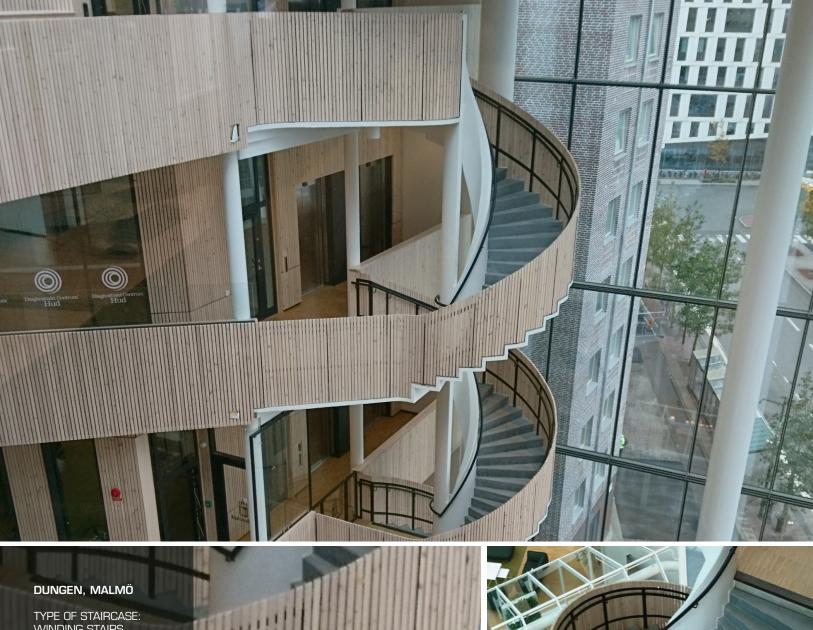
WINDING STAIRCASES

A winding staircase is characterized by the opening in the centre of the stairs. A winding staircase is not supported by a centrally placed column, but instead by an internal beam. A winding staircase often requires more space and comes in many elements that are assembled on-site with CRC i2® JointCast.

















TYPE OF STAIRCASE: SPIRAL STAIRS

ARCHITECT: WITRAZ

CONTRACTOR: NCC CONSTRUCTION A/S





LOOSESTEPS

When you use Hi-Con's loose steps in your staircase solution, you can easily and elegantly design a staircase with a sleek and simple expression. Our CRC i2® loose steps are lightweight elements that are simply mounted on walls or beams. The length, width and risers can vary from project to project, just as the loose steps can be supplied with different surfaces.









ARTING

TYPE OF STAIRCASE: LOOSE STEPS

CONTRACTOR: CASA

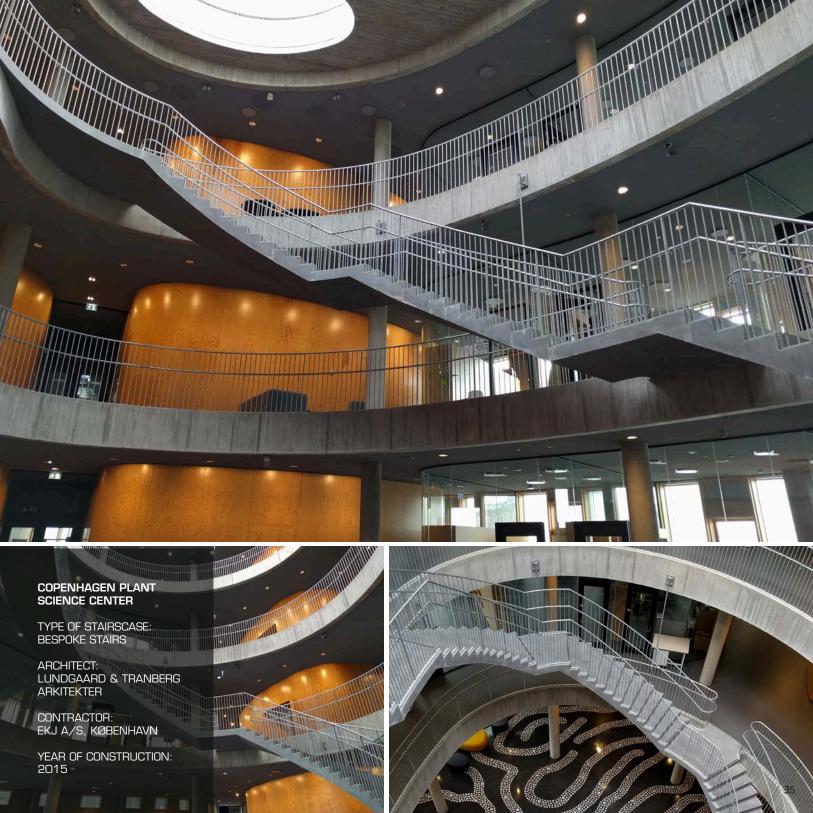




CUSTOMSTAIRCASES

Custom staircases is a staircase solution that is not one of the types of stairs mentioned earlier, and where an extraordinary solution is required. This may be the case where there is a need to develop a new installation principle, where there is a need to combine several different types of stairs, where there is a need to use new shapes or colours or something else entirely. No challenge is too great - at Hi-Con we like a challenge, and we would love to help make your dream come true.









CONTRACTOR: KBS BYG A/S

ENGINEER: JØRGEN NIELSEN RÅDG. ING.



SURFACES

STANDARD ANTI-SLIP SURFACES

Anti-slip surfaces are especially useful for walking areas or similar areas where it is desirable to safeguard against the surface becoming slippery in wet and humid weather. The design on the surface can vary and there are many options for creating the expression you dream of - the only limit is your imagination.





KONTAKT OS:



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(iii) / COMPANY/HI-CON-A-S(iv) @ HICONCRETE(iv) / HICONCRETE

The innovative potential of ultra high performance concrete is huge, and in the future, you will see many new applications of this fantastic building material.

However, unlocking the potential requires open and innovative collaboration and networking among parties in the construction industry - project developers, architects, engineers, contractors, manufacturers, customers and end users.

We invite everyone to take part in the work of exploring the potential of the future of ultra high performance concrete.



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