

Creating holistic architecture requires a sense of perspective

BESSARDS' Studio takes pride in being a small studio, since it allows them to control the entire architectural process. BIM generates a crucial overview for the holistic approach of this architectural firm.

BESSARDS' STUDIO
Powerhouse Company Denmark

Rubjerg Knude Lighthouse by BESSARDS' Studio /
JaJa Architects (Photo: Hampus Berndtsson)

Company Name:
BESSARDS' Studio

Location:
Denmark

Type:
Architecture and research

Established:
2005



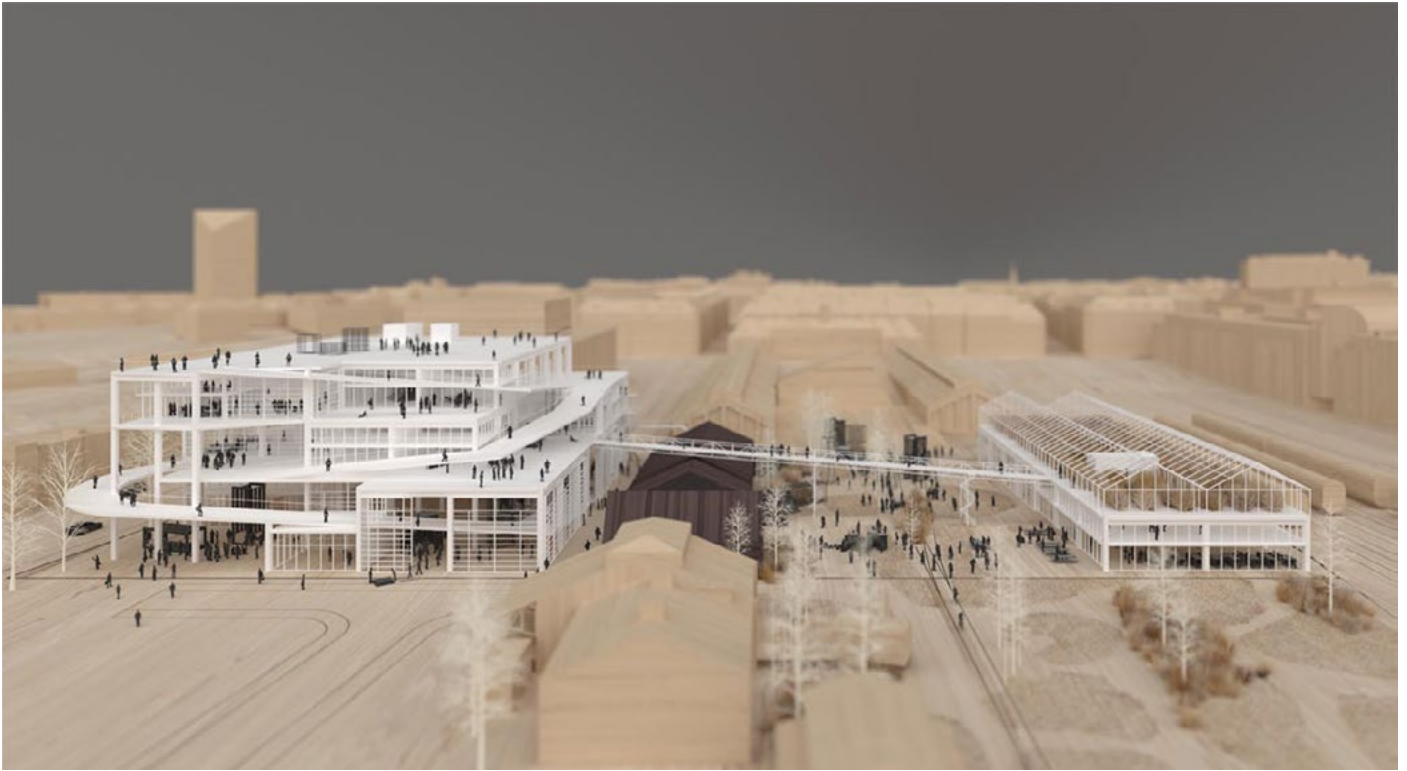
Villa L by BESSARDS' Studio / Powerhouse Company (Photo: Christian van der Kooy)

“For architects, digital tools reignite the joy of seeing their work being built.” This is how Charles Bessard links his company's embrace of the latest digital tools with the basic satisfaction architects get when they see their projects realized.

BESSARDS' Studio is in a beautiful former storehouse opposite Fælledparken in Østerbro, Copenhagen. The firm's history can be traced back to 2005, when Charles Bessard founded Powerhouse Company with his partner, Nanne de Ru. Powerhouse was an international practice with great ambitions and offices in Copenhagen and Rotterdam. The cooperation between them lasted more than 10 years after which they grew apart and went separate ways. Charles Bessard founded BESSARDS' Studio, which is directed by him and his wife, Lotte Bessard. While Powerhouse's strategy was to become a large practice with all that it entails, BESSARDS' Studio focuses on optimizing the workflow; a compact architectural practice where partners and employees have the skills necessary to follow the projects from A to Z in close collaboration with the developer.

Everyone is responsible for the entire process

“We want to be a small, efficient architectural office, where all architects can take care of all parts of the architectural process,” Charles Bessard, one of the partners at BESSARDS' Studio, explains. “Being a small practice offers greater freedom to approach each project in a new way. This means that all employees have total responsibility for their projects. This way, we maintain our position



New AArch – competition of the new architecture school in Aarhus by BESSARDS' Studio / Lacaton Vassal architects

as skilled craftsmen, and spend less time on management and administration. The goal for BESSARDS' Studio is not growth, but to be able to embrace good craftsmanship and understanding of the overall construction process," he says.

"We hope to change the architectural process so architects have a holistic approach to each project they engage with."

Details are central

"Details are not just details. It may not be the first thing you notice, but the detail is ultimately what defines the functionality of a building, the overall experience of the building and the atmosphere of the various rooms. A detail can tell the whole story about a building. We want to create buildings full of details like a Swiss army knife. But the miracle only happens when everything is thought through from the very beginning, lifting the building to a higher level – the area, the building site, the materials, the budget and the function," explains Lotte Bessard, who is the second partner at BESSARDS' Studio.

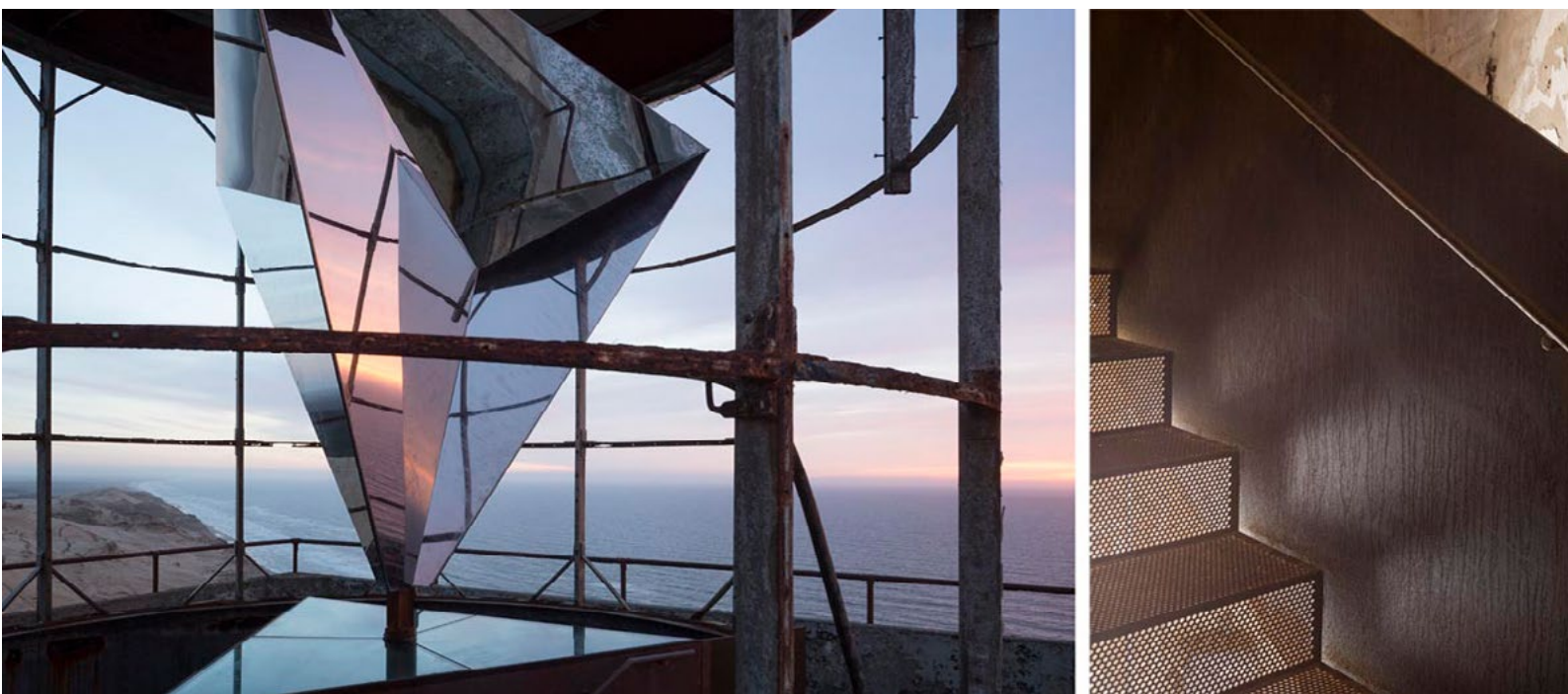
BESSARDS' Studio projects range from private homes and boat designs to lighthouse renovation and the transformation of a large industrial factory building into a climbing hall. Projects span

from big and small competitions to research and teaching. “Our ultimate approach to architecture has an impact on the projects we engage in,” adds Lotte Bessard. “The holistic approach is always implemented from multiple directions at the same time: the customer/users, the location, the function, the budget, the structure, the material. Occasionally, the tasks are conducted from a top-down approach. At other times, the approach is reversed, and a detail, a design principle or a material becomes the starting point for the entire project.”

BIM creates an overview

For developers, it is essential that the architect is in control of the budget. This requires the architect to deliver a financial estimate early in the process. “We want to control the quantities to know the price of the building. Some solutions are cheap to buy, but expensive to execute. However, our goal is to get an early overview of the price of a building at an early stage,” Lotte Bessard adds.

The most important thing is the ‘Touch and feel’ of the building - an expression Apple also uses to describe their software and hardware.



Rubjerg Knude Lighthouse by BESSARDS' Studio / Jaja Architects (Photo: Hampus Berndtsson)

“You start with a more precise foundation and you can jump from drawing details back to overall design approaches and vice versa. Here, ARCHICAD is a unique tool compared to other BIM programs”

Charles Bessard, Architect

“Working on an architectural competition is just like scratching a bit of the surface. 90% of the work you do in a competition is about concepts, visualizations and presentations. We like to build our projects, and much of the experience and enjoyment architecture brings, can’t be explained in a picture,” Charles says.

The holistic approach, where the architect constantly shifts between scales and jumps back and forth in the process, is one of the reasons why BIM has been so important to the small office.

“BIM helps us all discover and maximize our own potential. To connect all parts of the process, we require a unified tool. BIM allows us to produce more accurate price estimates, and it gives us full control over the project,” Lotte Bessard explains. “Customers who contact us are not interested in cookie-cutter houses or standard solutions. When it’s not standard, it’s hard for external consultants to calculate the right price – so it is crucial that we have a precise overview and a full understanding of the project.”

Village House by BESSARDS’ Studio (Photo: Åke E. Son Lindman)



An indispensable part of the process

During the short period of time BESSARDS' Studio have existed, BIM has rapidly become an indispensable part of the process. "When designing everything in just one model, we get more control in the earlier stages," Charles Bessard points out. BIM is also a way of securing the company. "The architect must become increasingly immersed in the details and construction of a building. This will make the buildings cheaper, and at the same time will increase the quality. With more control in the early stages, architects will be able to design flawless buildings," Charles adds.

"It's fantastic"

Everyone at BESSARDS' Studio is fascinated by working with BIM. "It is fantastic! With ARCHICAD, we work in 3D from start to finish, which means that we save a lot of working hours. At the same time, we can embed models with even more information, thereby creating a bridge between the different phases of the project," Charles explains. He sees many more benefits in using Building Information Modeling: "BIM allows you to jump back and forth between phases, between concepts and detailing, between design solutions and budget strategies. You start with a more precise foundation and you can jump from drawing details back to overall design approaches and vice versa. Here, ARCHICAD is a unique tool compared to other BIM programs."

Another way to see BIM as a holistic tool is related to the traditional stages of the building process. "The traditional phases are not necessarily something to strive for. A holistic workflow makes the process richer, more consistent, and the result better," Charles states, while Lotte nods. "It is important for the creative process, that the workflow is satisfactory for the architect. It boosts the energy level and supports a creative and productive dialogue with the developer and the contractor."

New meets old

One example is designing a modern house with a thatched roof. Since the outer layer of the roof is very thick, with a thin construction on the inside, there is a need for sketching with composite components in ARCHICAD. This makes it possible to see the height of the walls, allowing the architects to properly understand the

house. On a thatched house, lower outer walls result in a more harmonious expression. This is sketched, tested and visualized directly in ARCHICAD, with a detail that is exaggerated at the same time, but also inadequate, as the holistic approach requires switching between the phases of the design process.

Everything is done in BIM

Gathering all the information and all phases in one model makes work faster. Therefore, BESSARDS' Studio have allocated resources to become professionals at visualizing directly in ARCHICAD. The practice also uses BIMx with Virtual Reality and Google Cardboard to evaluate early draft sketches. This is done especially to understand the scale of the projects or to send the project material to the developer, who may review the project from his holiday home in Southern Europe.

BESSARDS' Studio blends traditional architectural values with modern demands of the workflow. They don't wait for technology to evolve, but are constantly pushing how it can be used – just like great architects have always done.

BESSARDS' Studio

BESSARDS' Studio was funded by Charles Bessard in 2005 under the name Powerhouse Company ApS. The studio is an award winning architecture and research practice based in Copenhagen and led by Lotte and Charles Bessard. Their projects have grown over the years into a holistic approach to design and realization integrating everything from design concepts and strategic research, to the materialization and the supervision of the production processes, from cost estimates and technical details to communication and publications.

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