

## Objektbericht *Project Report*

### Project Three Square House, Finland

#### **A place of tranquillity**

The "Three Square House" residence in Finland blends discreetly into its natural surroundings.

*The residential building on the shore of Lake Saimaa, one of the largest lakes in the country, could easily be overlooked from a distance. Yet those who might think this is an unobtrusive, conventional cottage in a lonely location would be mistaken. Embedded in a spruce forest landscape, extraordinary structures in form, material and colour are presented, which in their entirety merge into a unity. Three interlocking structures boast a façade of black-oiled wood and graphite-grey titanium zinc. The architects have reinterpreted the classic monopitch roof in a playful and contemporary approach and designed it as an asymmetrical, multi-folded roofscape. Studio Puisto Architects from Helsinki is responsible for the expressive, modern look of the residential building.*

No streets, no cars, no direct neighbours. The first question that comes to mind when looking at this natural plot of land is: "What do you really need to live when nature is all around you?" This play of ideas initially led to long discussions between the architect and the client about fundamental issues such as atmosphere, experience and light. The extraordinarily long design and execution phase finally led to a result with which both are very satisfied. It is the first building in which it feels as if there were some spiritual elements at play, the client said.

#### **The landscape as an elementary component in daily life**

Given the befitting name "Three Square House", the residence is a clever example of both building with nature and creating an intimate home at the same time. The three interlocking square cubes define the exterior appearance; the living and life centre is the central structure, which is flanked by two smaller buildings. On the one side are a garage and storage, on the other a sauna and an adjoining raised wooden terrace with a sunken bathtub. From there, narrow wooden steps lead its residents further down to the lake. While the annexes are kept closed as far as possible and only allow sparse glimpses of the outside, the main building opens up towards the lake and the spruce forest. The entire floor plan is dedicated to the landscape and the wide views. Floor-to-ceiling windows allow the interiors to be completely connected to nature. On the lake side, the living level is significantly higher than the adjacent terrain to give the impression of being suspended above the lake. The other side gently leans against the rising terrain with the effect of being closer to the more hazy feel of the spruce forest in this part of the house. The changing times of the day and the seasons turn the interior into a lively place that provides a constantly changing living experience.

#### **Wood and titanium zinc – discreetly coordinated with each other**

The calm and natural appearance of the residence can be predominantly attributed to the choice of materials that match the surroundings and the clear layout. The doors and floor-to-ceiling windows are built to a uniform height of 2.30 m; the height is consistently carried

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around the building and is composed of an interplay of glass and black-painted wooden slats. The surfaces above and below this horizontal façade are panelling with RHEINZINK titanium zinc in RHEINZINK-prePATINA graphite-grey surface finish. The pre-weathering process is already applied in the factory to ensure that the desired appearance with uniform colouring can be achieved right from the start. A vertical line was used in the classic installation method: the 200 m<sup>2</sup> façade area was executed as an angled standing seam system, the 400 m<sup>2</sup> roof area as a double standing seam system. With their decision to combine wood and titanium zinc, the architects also show just how well the two materials go together. The smooth surfaces of the titanium zinc panels are given a clear and unadorned texture by the seams and blend in with the dark wood battens in a discreet dark grey shimmer without overpowering them.

### **Concise design language**

The concise design language of the building envelope is consistently carried over into the interior design. The square floor plan is strictly structured, but the different room heights are combined into one unit and reflect the striking roof geometry, which is impressively experienced inside. Unnecessary corridors have been completely dispensed with. The open effect is supported by the clear and functional room structure: WC, bathroom and ancillary rooms are arranged in the central core. From there, sliding doors can be pulled out, dividing the open space into living room, dining room, bedroom, retreat area and study. The walls themselves are created by projections and recesses as refined built-in units, in which, for example, the kitchenette, cupboards, seating and a fold-out bed have been precisely incorporated.

The wood material continues throughout the interiors, precisely integrating the construction and furniture into the overall architecture. The core with all its surfaces and fixtures was finished in oiled walnut. The remaining walls and ceilings as well as the vertical structures are made of black pine slats. The floor is made of black oak parquet. The sauna and washrooms, with their entire surfaces panelling in light alder wood, provide a striking contrast. Ceramic tiling to match the wood was chosen for the shower.

### **Materiality and light**

The special spatial experience is mainly achieved by the use of natural light and the different degrees of gloss of the wooden surfaces. One very important aspect was at the centre of the architect's and client's planning: the design of the rooms should not shy away from darkness, instead darkness should become a strength. Depending on the situation and mood, the residents can visit and experience different room scenarios. Artificial lighting thus concentrates on the core of the residential and living area. Sensibly positioned lighting on ceilings and in furniture accentuates surfaces and pathways and, at the same time, allows the core piece of furniture to shine from the outside as a warm element.

The residence is topped off with an individual energy and sustainability concept. Geothermal energy is used for heating and cooling; underfloor heating and electrically heated windows provide a sense of comfort. The entire house, except for the garage and wet rooms, which

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are built on a load-bearing concrete slab, is a timber-frame construction with wood-fibre insulation. No plastics were used in the construction.

### **Harmony**

The house achieves its very own unique atmosphere by virtue of its materiality and the precision of the workmanship, which is maintained down to the very finest detail in the handcrafted finishing processes. The crowning glory: the home's desired appearance will be preserved for many years to come. Just as the colour of the dark wood lathing on the façade is oriented to the surrounding nature from the very beginning, the dark shimmering RHEINZINK titanium zinc elements blend in just as appropriately. Due to the pre-weathered surface, the roof and façade will only change slightly. The positive characteristics of the natural material RHEINZINK, such as durability and robustness, are combined here with the aspects of design and aesthetics in a truly unique and interesting approach. Without overpowering, the clear, modern design language ensures that the exterior and interior design function within themselves and at the same time harmonise as a whole.

### **Construction panel**

Client: Teemu Helppolainen, Finland

Planning architect: Studio Puisto Architects, Helsinki Finland

Execution of the Rheinzink work: Peltipeite OY, Kari Kuisma, Naarajärvi, Finland

Technical data:

Roof – 400 m<sup>2</sup>, 2 to, RHEINZINK- prePATINA graphite-grey, double standing seam system

Façade - 200 m<sup>2</sup>, 1 to, RHEINZINK-prePATINA graphite-grey, angled standing seam system

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### Captions



The "Three Square House" in Finland is situated right in the midst of a beautiful natural setting on the shores of Lake Saimaa. Photo: Marc Goodwin



Just as the colour of the dark wood lathing on the façade is oriented to the surroundings, the dark shimmering RHEINZINK titanium zinc elements blend in just as appropriately.

Photo: Marc Goodwin



The surfaces above and below this horizontal façade coil are panelling with RHEINZINK titanium zinc in RHEINZINK-prePATINA graphite-grey surface finish.

Photo: Marc Goodwin

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