LONGHOUSE BY
ARCHITECTEN STUDIO-PLS
NETHERLANDS
In a narrow lot, between an urban and rural area of the Dutch town Amersfoort, lies a private residence featuring a modern interpretation of a historical architectural style — the Longhouse, designed by Rick Eijsbouts from Architecten Studio-pls.

The traditional longhouse, with its easily recognizable long façade, has been used throughout the world for many centuries. In the Netherlands, the style’s history is mainly agricultural, yet Eijsbouts has reinvented the iconic shape with an urban look, reminiscent of the past, and full of sustainable solutions.

The, ‘rustic modern’ style of the Longhouse is striking. It seems to balance perfectly between modern and rural and between high-tech and natural. For this reason, it has generated much attention and has even been featured on the Dutch TV show BinnensteBuiten.

The owners wanted a bold house with a slightly industrial theme. To achieve this, steel and wood were chosen as exterior materials to create a simple, modest and clear look. However, the internal design seeks the utmost complexity, to make the spatial experience as spectacular as possible.

The construction of the Longhouse is unique. The color coated steel GreenCoat® was chosen for the roof due to a number of reasons. One of them was the ability to create sharp lines for a very graphical house, where the vertical lines match that of the wooden façade with its openings in combination with the solar panels. Other reasons were proven long-lasting durability as well as sustainability.

To address modern, environmental building trends most GreenCoat® products feature a Bio-based Technology (BT) coating with a substantial portion of Swedish rapeseed oil instead of fossil based oils, which are traditionally used. Additionally, they are also strongly resistant to corrosion, UV radiation, buckling and scratches.

The easy handling and good formability of the chosen GreenCoat Pural BT product contributed to a smooth build as well as a seamless look on the roof. It was used in a pre-fabricated profiled sheet for roofing called the KlikFels system, manufactured by SCH Holland.

When it came to the choice of color, a matt black shade was used to make the shape of the house stronger. It creates a distinguished roof that combines perfectly with the wood, which will turn grey as it ages.
What is the inspiration for this project?
One side of the property faces an urban setting, the other a rural environment with a river running through. We wanted to take advantage of both. In the past, the longhouse style was used a lot in countryside locations and the long façade gives a perfect view over the river into the nature.

What challenges did you face?
The biggest challenge was syncing the vertical lines that match the wooden façade with the roofs and windows. Wherever there is something in the roof, for example the solar panels, all of the lines had to be connected, which took some work to accomplish.

Why did you use GreenCoat® steel for the roof of the Longhouse and not other materials?
GreenCoat® was chosen because we wanted sharp lines and a very graphical house. Steel allowed us to achieve this. Furthermore, we chose it due to the sustainable profile. We were not allowed to use zinc because of corrosion and ground water contamination, but that would have been a more expensive and a less sustainable solution anyway.

What do you think about having selected sustainable steel with Swedish rapeseed oil in the paint?
Utilizing sustainable solutions was a key requirement from the owners. They chose to have solar panels installed, among other things, and the use of GreenCoat® steel fits very well into this theme.

Why did you choose the Nordic Night Black color for the roof?
Nordic Night Black color was chosen to help the lines of the house stand out, creating a distinguished look. It was also chosen to match the wood of the house as it ages.

Do you have more examples in which GreenCoat® steel is being/will be used?
This is the first time using GreenCoat® color coated steel and we have received a lot of requests since the Longhouse was built. We like the material because of the graphical way we can detail a house and its sustainability. We are already designing more houses with GreenCoat® steel in mind.

The Longhouse has been recognized for:
2017 Nominated BNA Best Building of the Year Award
2018 Featured on Dutch TV program BinnensteBuiten
GreenCoat® is SSAB’s brand for innovative color coated steel solutions for the building and component industry. As the greenest product portfolio of high quality color coated steel for exterior building applications and one of the most comprehensive for the entire building industry, GreenCoat® provides many benefits including:

- High color retention and long-lasting finishes in any weather
- Environmentally conscious color coatings (most products use a substantial portion of Swedish rapeseed oil in the coating)
- Nordic top quality steel
- Easy formability — even at temperatures below zero for some products
- Low weight
- Wide color offering
- Performance guarantee

SSAB has manufactured products for the building industry for more than 50 years and is the pioneer and innovator of creating sustainable color coated products offering Swedish rapeseed oil in the coating. This unique, patented solution reduces the environmental footprint of GreenCoat® products significantly and it makes the GreenCoat® color coated steel portfolio the market’s greenest offering for roofs, façades and rainwater systems.

SSAB is a Nordic and US-based steel company offering value added products and services developed in close cooperation with its customers to create a stronger, lighter and more sustainable world. SSAB has production facilities in Sweden, Finland and the US and employees in over 50 countries.

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