FERNAIG COTTAGE

BY

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In Wester Ross, in the northwest highlands of Scotland, Gillian Scampton from Pedder & Scampton Architects and Andrew Barnett from Hopkins Architects set out on an architectural journey. They purchased an old hillside stone cottage that was badly in need of repair. Their goal: Refurbish the cottage and convert it into a comfortable three-bedroom home using environmentally sound technologies and a modern design.

The resulting Fernaig Cottage has provided both with a pleasant living space that blends the past, present and future. It has also provided them with a number of awards. The finished cottage was named a winner of the “Royal Incorporation of Architects in Scotland (RIAS) Awards 2017”, where it also collected a special category prize – Zero Waste Scotland’s Resource Efficiency Award. In addition, the cottage has also been named a finalist for the “RIBA House of the Year 2017” award, one of the UK’s most prestigious architectural achievements.

Originally, the Fernaig Cottage was a traditional Scottish Longhouse with a red tin roof that was considered a landmark by local residents in the area. The entire project comprised of the renovation, adaption, and extension of the cottage, where much of the original structure was repurposed and recyclable materials were used. The architects also took advantage of solar gain, an air source heat pump as well as materials with high thermal mass.

The red, corrugated steel roof of the Fernaig Cottage was another effort towards sustainable development. After assessing a number of different materials, the architects decided to use the color coated steel product GreenCoat® from SSAB. The choice came down to the material’s long-lasting aesthetics and low thermal expansion, which would easily withstand the harsh, moist climate of the Scottish Highlands.

GreenCoat® is widely known among metal roofers for its easy hand forming, long color retention and resistance to UV radiation, corrosion as well as scratches. It also features a Bio-based Technology (BT) coating with a substantial portion of Swedish rapeseed oil instead of fossil based oils, which are traditionally used. The unique, patented BT solution by SSAB reduces the environmental footprint significantly.

The “RIBA House of the Year” is awarded to the best new house designed by an architect in the UK. The shortlist and winner will be announced as part of Grand Designs: House of the Year, a special four-part UK Channel 4 TV series presented by Kevin McCloud.
What were the challenges you had to overcome while designing the Fernaig Cottage?

The red color of the roof was a very important feature in the local landscape. Everybody knew the cottage as the 'red roof cottage', so we didn’t want to lose that quality and looked around to find an equivalent red color.

Why did you choose steel for the roof and not other materials?

We didn’t want to go for corrugated iron, because we didn’t want to be painting the roof every few years. GreenCoat® steel offers long color retention and is used in harsh environments, which fits perfectly with the climate in the Scottish Highlands.

What can you tell me about the quality of GreenCoat® steel in general?

We wanted to be able to detail the cottage as a modern building, while referencing very traditional Scottish buildings. GreenCoat® steel gave us the opportunity to do that and get some very refined details going on.

Are there any unique design elements used in the construction of the roof?

If you look at modern tin roofs, generally they have very big edges, very big framing pieces at the ends of the roofs. The edges of our steel roof are very crisp and thin and have been folded to very tight tolerances, which you can do while keeping the coating intact.

What do you think about having selected sustainable steel with Swedish rapeseed oil in the paint?

It was a fantastic discovery that the coating is made with Swedish rapeseed oil instead of fossil fuel oil. It just fell into our sustainable strategy for the entire project.

Why did you choose the bright red color for the roof?

We wanted to find a color as close to the original as possible. The long color retention was really important to us. We have this roof and we don’t want it to be a pale pink roof in five years’ time.

How do you feel about winning the RIAS/RIBA Scotland Award and being nominated for RIBA House of the Year award?

We are very proud to have won the RIAS Award and be nominated for RIBA House of the Year because we didn’t set out to just make a development, we set out to make a piece of architecture. To be recognized through one’s peers is really great.
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 product 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.