



Hemp-based products may become more popular in the future | Photo source [Rick Proctor on Unsplash](#)

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ZERO-CARBON HOME BUILT OUT OF HEMP

 ARCHITECTURE & DESIGN

Hemp grown on the building site was used to create hempcrete – a mixture of hemp and lime that was used in the construction of the building

Spotted: London-based architecture firm, Practice Architecture, has built a zero-carbon house from an unlikely source – hemp. “Flat House” is located on Margent Farm, a 53-acre hemp farm in rural Cambridgeshire. The firm used hemp grown on the farm to create hempcrete – a mixture of hemp and lime, which was used in the construction of the building.

Practice Architecture used a pre-fabricated panel system that incorporated the hempcrete and was in-filled with hemp itself. The panels were constructed off-site, which allowed the build to continue through the colder months of the year. This is not possible with standard hemp construction methods, and it sped up the building process considerably.

Once the panels were complete, they were brought to the farm, and the shell of the house was erected in just two days. The finished house is also off-grid; heating and power are provided using a biomass boiler and a photovoltaic array on the roof. Inside the house, the panels are exposed, creating a warm, textured feel. The hemp panels are also breathable, allowing them to resist damp and mould, which affects air quality.

The development of new, low-carbon building methods and materials is very important in the fight against global warming. Other innovations we have recently seen include the use of [sustainable timber](#) and [hazardous waste](#) as construction materials.

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Takeaway:

Margent Farm is pioneering the use of hemp and other natural materials, to reduce plastic use in construction. The farm has previously helped to develop hemp-based household products such as serving trays, drink coasters and coat-check tags. Indeed, a growing number of architects and designers are also beginning to experiment with hempcrete. It has been used in the construction of a hillside home in Israel and piled around a home in Belgium to add insulation. It may not be long before hemp and hempcrete are used in a wider range of building projects, as part of the continued fight against carbon emissions.

 [Infographic: Where Hemp Production Blooms | Statista](#)

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