



#### **OUTER WALLS**

Product binder: Träullit, flap 3

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# Träullit House

Well-insulated, homogeneous walls with short construction time



# Natural and energy efficient houses for more than 65 years

Trällit House is constructed from well-insulated, homogeneous walls with superior thermal storage capacity. This provides for excellent energy efficiency and low heating costs.





## Great interest in Trällit House at the H55 exhibition in Helsingborg, Sweden

Evy and Jan Thuné bought, dismantled and rebuilt the house in Laröd where they still live in 2009. The house has never been painted or washed and after 55 years it is still a house with fresh, rupture-walls. Skute Sigma Systems was the method / manufacturing of wall elements of Trällit, plaster and marble aggregates. The element thickness is 12 cm of which 8-9 cm is Trällit. The house is 82 m<sup>2</sup> and was called "Bo med litet" (Living with small). The decor, which most of are still original, was done by Hantverket.



## Today's Trällit House is a development of the traditional Trällit panel

The walls of the Trällit House consist of 40 cm thick Trällit complete wall sections - a rustic, natural building material made of wood wool from Swedish spruce, cement and clean water. The houses have a large capacity to store heat and save energy.

# The qualities of the heavy wall



## Träullit complete wall sections are a unique building system of cement-bound wood wool

The product is designed to provide the market with a homogeneous, well-insulated exterior wall that satisfies the increasing need for industrialized construction methods.

## A material with many features

Träullit products have proven highly resistant to fire, mold and rot. Their heat storage capacity is significantly better than other homogeneous structures. Träullit's high pH-value inhibits the growth of mold. Cement as binder provides strength and fire protection. Träullit has the best possible fire-resistance rating of REI360. The cement-bonded wood wool is also an excellent base for plaster.

## Comparison of U-value and thermal storage capacity at 400 mm wall thickness

	W/m <sup>2</sup> °C	kJ/m <sup>2</sup> °C
Mineral wool/studwork	0,14	65
Wood wool sections	0,16	250
Lightweight concrete	0,28	210
Lightw. clinker concrete	0,50	255

- Excellent heat storage
- Homogeneous, well-insulated exterior walls
- Even room temperature
- Lower heating bills
- Indoor air moisture regulation
- Resistance to mold and rot
- Strong fire-resistance
- Sound-absorbing and sound-insulating
- Environmentally friendly



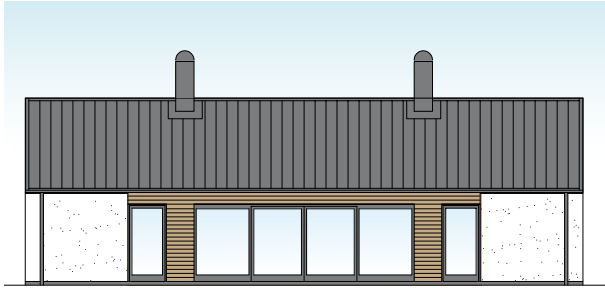
Träullit complete wall sections have the highest fire-resistance rating REI 360.



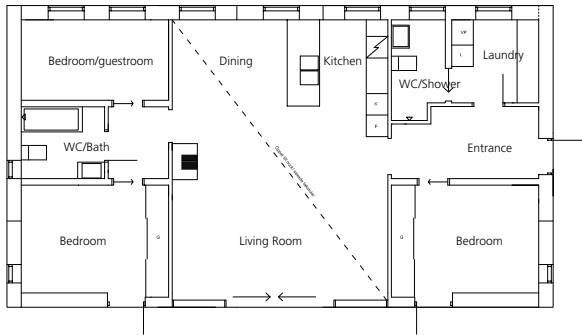
Träullit complete wall sections are included in SundaHus Miljödata, a Swedish classification for environmental impact and health and safety of building materials.

# Design examples

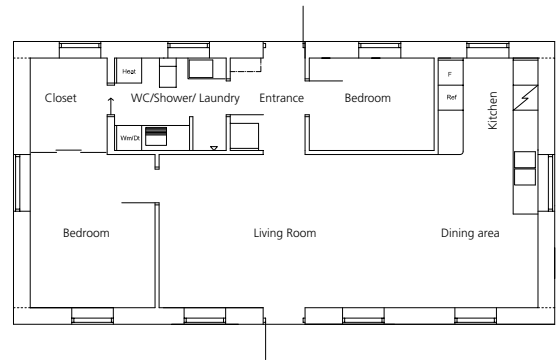
Drawings by Mattias Rückert, Nike Arkitektur AB.



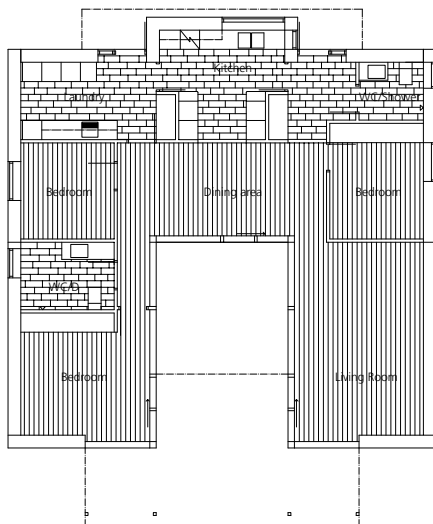
One-storey house, 109 m<sup>2</sup>



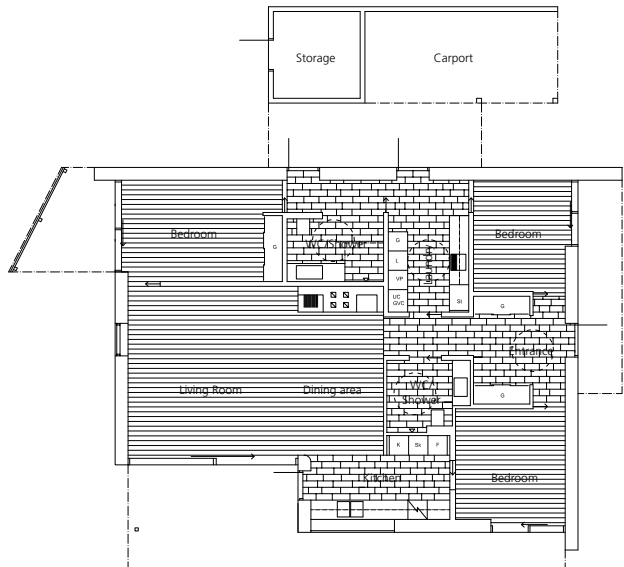
One-storey house, 73 m<sup>2</sup>



One-storey house, 121 m<sup>2</sup>

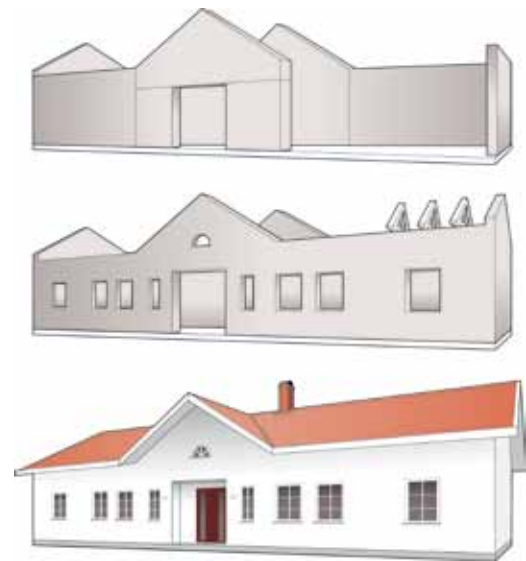
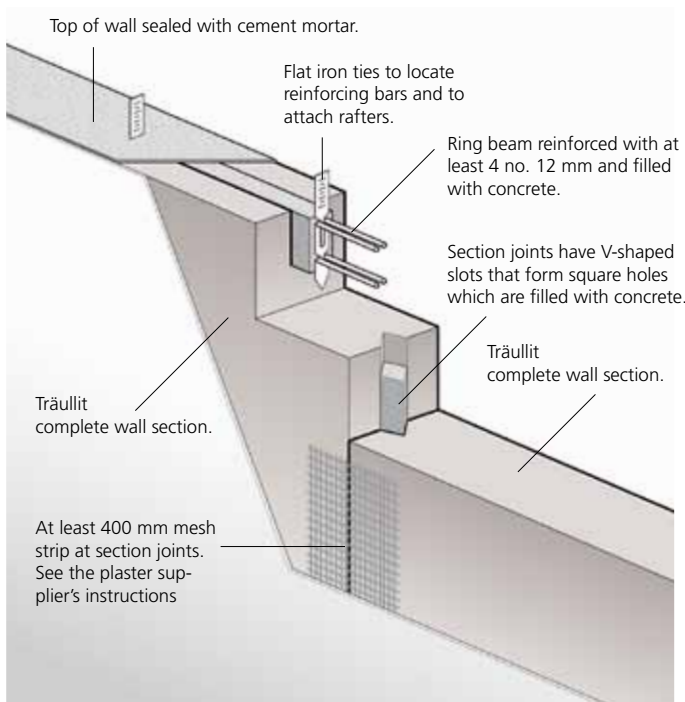


One-storey house, 133 m<sup>2</sup>



# Custom-made elements with short construction time

**Träullit complete wall sections are custom-made to match the project and cast at the factory according to customer specifications.** The building is assembled on site and the final casting is done in less than a day. Träullit complete wall sections provide a unique combination of thermally insulated and heat-conserving external walls at a low total cost.



*A normal detached house can be assembled in less than a day.*



# Dimensions, handling

### Dimensions

We manufacture complete wall sections in two standard sizes (see below). We can also supply special project-specific sizes, up to 2600 x 6000 mm.

<b>Height</b>	2600 mm
<b>Thickness</b>	400 mm
<b>Length</b>	2400 and 6000 mm

### Handling, storage and working

The elements are delivered upright on an open lorry. Lifting straps are cast into the top edge of the elements. A mobile crane or alternative lifting gear is required for handling the elements on site.

The elements must be stored in a dry place on a flat surface. They must be protected against rain and snow and handled in such a way that their surfaces and edges are not damaged. The elements are marked in accordance with the element and assembly drawings.

Window openings can easily be cut into the elements by using a chainsaw.



# We help you all the way - from design to a finished house

Trällit House is a complete solution. This means we will help you all the way - from design, planning and costing to procurement and delivery. Trällit House is designed by the architect Matthias Rückert, and can be built in several styles and sizes. Contact us to find out more.



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Trällit began manufacturing wood wool slabs in 1946 and is currently the market leader in Sweden. The company is family-owned and the products are manufactured in Österbymo, in southern Östergötland.