

A practical case of reusing IsoTimber

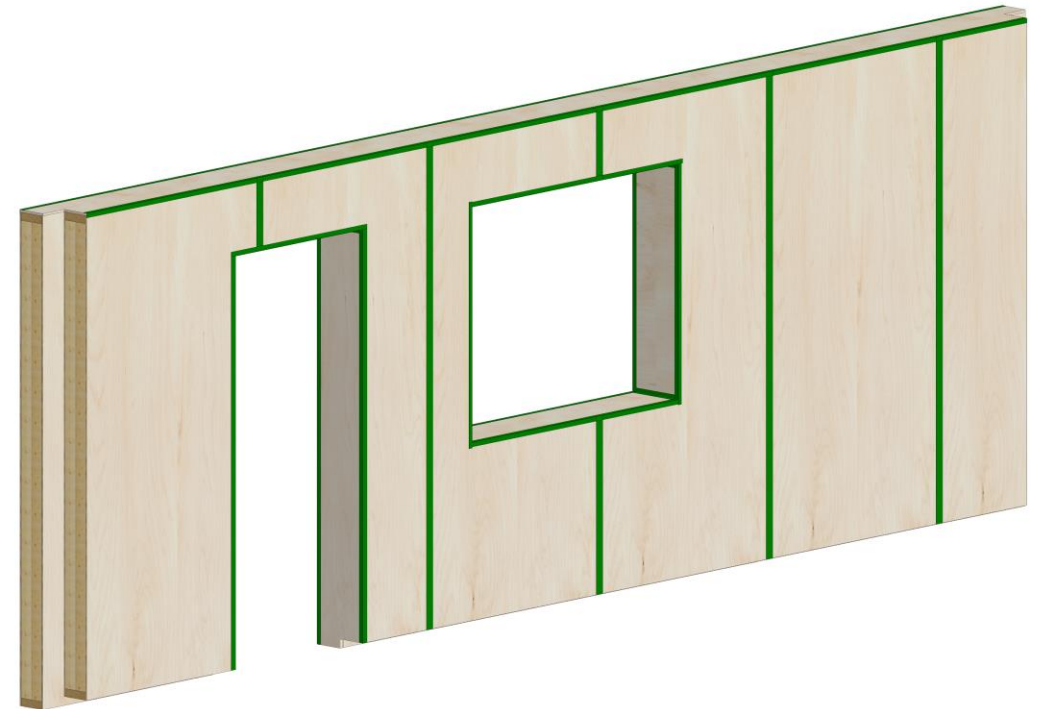
- a small house deconstructed and rebuilt with a different functionality

- IsoTimber is a unique house framework of wood – load-bearing and insulated by air ducts

Simple design – No extra insulation – No plastic foil – Good air tightness – Diffusion open – Prefabricated wall elements



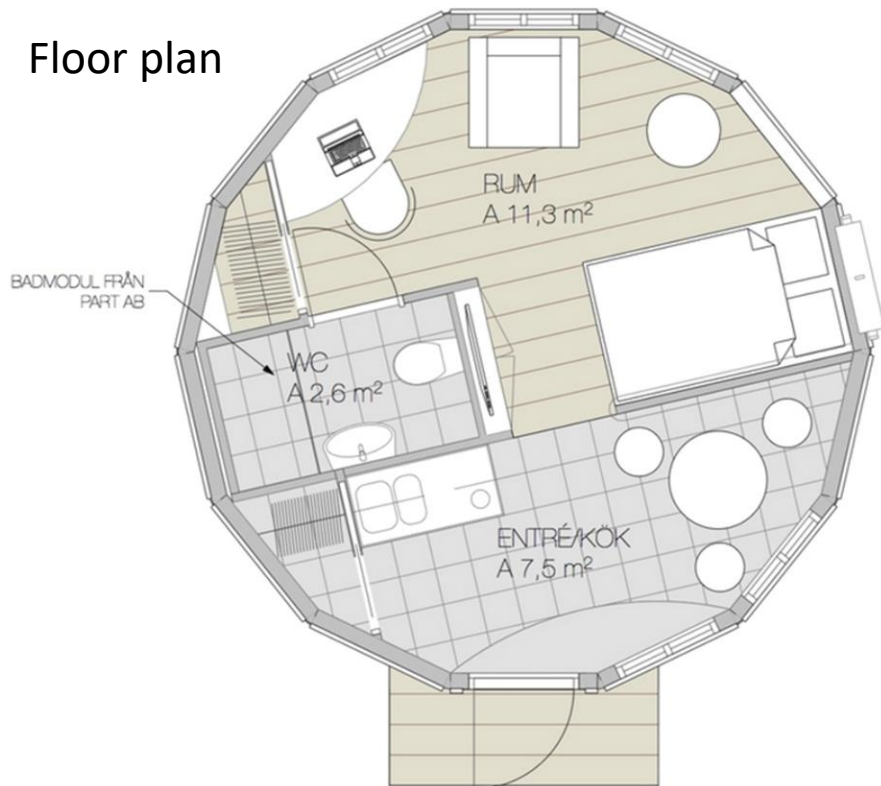
ISOTIMBER



Magnolia holiday cottage

Architect: Pål Ross (www.ross.se)

Floor plan

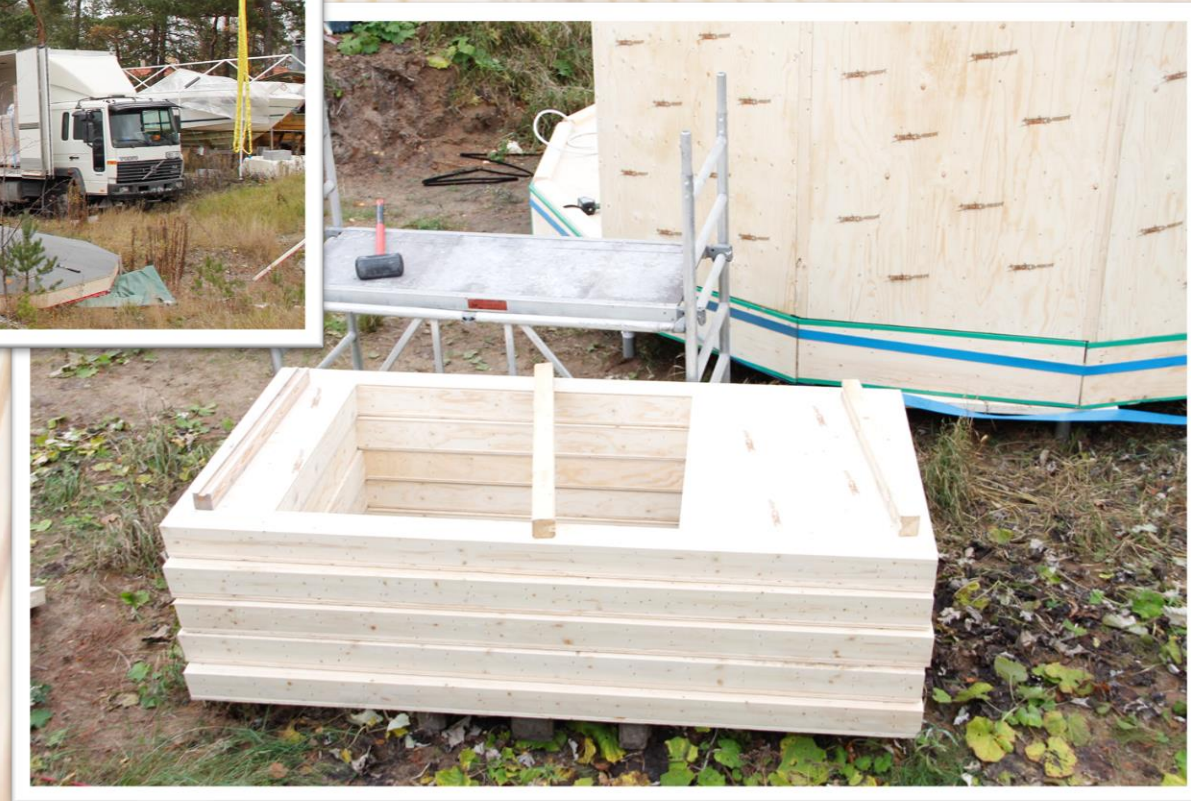


Manufactured at the IsoTimber factory

Factory in Östersund

The prefabricated wall elements were produced with millimeter precision at the factory of IsoTimber and delivered to the building site in Tyresö.

Roof and floor cassettes were produced at the same factory, though not being standard products.



Assembly of first house

House framework

Foundation by ground screw.

Prefabricated floor cassettes (3 pcs) lifted in place by crane.

Wall elements (14 pcs) manually placed and fastened by screws at an angle.



Assembly of first house

Bathroom module

Prefabricated and placed at a dedicated and prepared position in the house.



Assembly of first house

Roof cassettes, windows and surface layers

Prefabricated roofing cassettes (2 pcs) were lifted in place. Roofing felt from factory + one layer over junction at site.

Junctions at wall elements are taped (in/outdoor) for airtightness.

Indoor wooden wall panel and floor mounted.

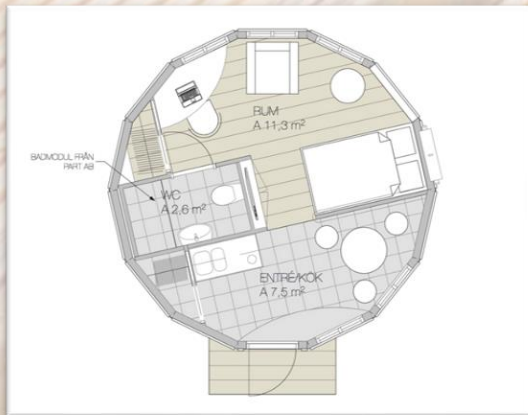
Windows, a door and outer wooden panel mounted.



First house finished (on national television)

Functionality

Small holiday cottage/
student living with
kitchenett, table for two,
bathroom, bed space, work
space, wardrobe/ storage
space.



ISO-TIMBER

First house finished (on national television)



Disassembly of first house

Deconstruction by reversed assembly

Urgent time schedule → did use tiger saw instead of unscrew.

House parts:

- 2 x roof cassettes
- 1 x bathroom module
- 14 x wall elements
- 3 x floor cassettes



Disassembly of first house

Deconstruction from top down

A suitable lifting/ transportation vehicle was in place.



In/outdoor wooden panels remained. Only strips at junction of elements were removed carefully.



Windows and door remained mounted in the elements.



Disassembly of first house

Without a trace

There was no need of the bathroom module or inner walls in the second house. They were disassembled and reused elsewhere.

No sewer/water/electricity had been installed due to the temporary location, though would normally having to be restored.

After disassembly of the framework and finally the ground screws, the place is left for the grass to grow back with no trace of a building.

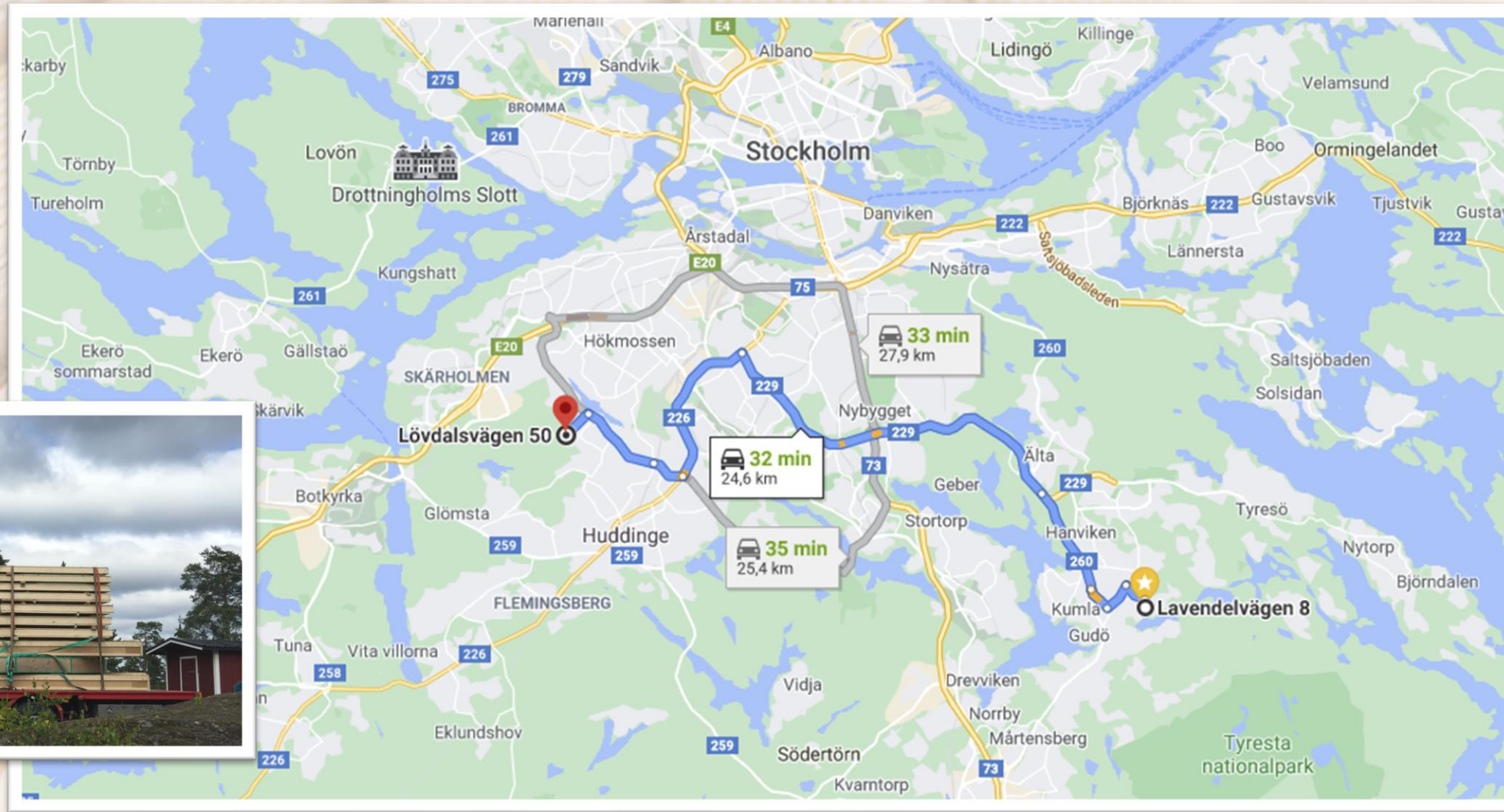


Transported to a new location

Transport

Truck with crane used.

Transported from Tyresö to Segeltorp.



Assembly of second house

Foundation prepared beforehand

The foundation of concrete columns was ready at arrival.

The floor cassettes were lifted in place by the truck crane and screwed together.



Assembly of second house

Reused with flexibility

The house framework was reused, however with a new function.

The order of placement of the wall elements was switched with no problem, with the windows in a different direction.

Elements were fastened by screws at an angle as before.



Assembly of second house

Minor adaptations for the new functionality

The roof cassettes were lifted in place by the truck crane.

Part of the wooden floor was destroyed in the deconstruction and had to be changed.

Sound absorbing panels were mounted due to the acoustic requirements of the new functionality.





Second house finished



Second house finished

New functionality

The house was transformed to a music studio.



'Rockstar'



To be continued... in another hundred years or so...



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