

# V5 SWEDEN'S LARGEST NEWLY CONSTRUCTED WOODEN HOUSES

BUILT IN LIMNOLOGEN

## SYNOPSIS

The private party – Midroc Property Development – has constructed 134 dwellings in four wooden buildings at the building site referred to as Limnologen in Växjö. They are Sweden's largest newly constructed wooden houses.



Credit: Henrik Johansson

## BACKGROUND

The energy used in households for heating, electricity and hot water stands for roughly one third of all the energy consumption in Växjö. In Växjö, the energy focus has been mostly directed to new constructions, but the big potential to reduce energy consumption is within the existing building stock. The important experiences learnt from the construction of the new eco-buildings can be applied when refurbishing the existing building stock.

## OBJECTIVES

- Build dwellings that have an energy consumption 35% lower than applicable national indices (in 2004):
  - Heating: 95 kWh/m<sup>2</sup>
  - Electricity: 20 kWh/m<sup>2</sup>



Wooden eco-buildings  
by Lake Trummen

Credit: Henrik Johansson

## PROJECT DESCRIPTION

The project includes the construction of 134 apartments in four eight storey high buildings with a wooden frame. The construction of the houses has been studied by many researchers and universities, and they are the largest newly constructed wooden houses in Sweden. In order to avoid moist

in the building process, large tents were covering the houses during works. This procedure turned out to be very efficient and has been used also in Portvaktens South. High insulation with good airtightness and heat recovery enables a low energy consumption in these buildings. Individual feedback system to the tenants contributes to a low energy use.

## RESULTS

The construction of the houses ended in 2008 and 2009. The energy statistics available in autumn 2010 showed that the use of district heating in the buildings was 69 kWh/m<sup>2</sup> and the use of electricity was 9 kWh/m<sup>2</sup>. This shows that the energy targets were achieved.

## NEXT STEPS

The experiences retrieved in this building project are very interesting as a reference for other constructions, and the houses are subject to extensive research.

## FURTHER INFORMATION

- Name: Anders Persson
- Position: Project manager
- Organisation: Midroc Property Development
- Tel. : +46 40 35 15 07
- e-mail: anders.persson@midroc.se