

# Dammhagen, Södra Esplanaden 36

Building start: July 2013

Move-in: January 2015

Architect: Peter Torudd, Torudd Arkitekter

General contractor: Nimab Entreprenad AB
Apartments: 7 studios, 23-24 sqm

25 one-bedroom (double bed-sits) 39 sqm

49 one-bedroom (couples apartments) 30-35 sqm

14 two-bedroom 61-66 sqm

One of the greatest challenges with new housing construction is to build at a cost that allows rents students can afford. We have been able to hold rental costs per resident down at Dammhagen by optimising the apartments according to the possible building volume and optimising the use of costly kitchen and bathroom fittings. For example, the apartments on the top and bottom levels of the building have been designed as maisonettes to take maximum advantage of the permitted building height and most of the apartments have been adapted so that two or three residents can share the apartment and the rent on equal terms.

#### General

#### Structure

The building is built entirely of concrete and brick, materials that cannot be damaged by moisture or mould, and all building systems are leak-proof. The materials were chosen with care and with longevity in mind.



Concrete interior walls, sheet metal roofs and stone materials in kitchens and window sills, etc., guarantee a building that will have a long life cycle and not require much maintenance.

#### <u>Windows</u>

The windows in the building are adapted to meet the high energy and noise standards of the project. Windows in sunny locations have been fitted with glass panes that reduce radiant heat from the sun without blocking the light to make sure the apartments do not get too hot in the summer. Generally, good access to natural light through windows was the top priority. Large windows were fitted in the maisonette apartments on the top and bottom levels of the building to provide plenty of light even in the lofts.

#### Doors

The hall doors – the doors between the stairwell and the apartments – are meant to resist burglary attempts, reduce noise from the stairwell and resist fire. In order to meet these requirements, the hall doors have a lock system that everyone might not be familiar with, but which keeps the door properly closed. To lock the door, the handle first has to be turned upwards once.

#### Laundry room

The laundry room is on the bottom level of the building. Tenants may book time either via our website or on the digital booking board outside the laundry room. The washing machines dispense detergent automatically, so you do not have to buy your own detergent.

#### Bicycle parking

There are bicycle parking spaces for each resident room in every apartment. The cycle racks are in the courtyard and outside the gate leading into the courtyard.

#### **Environment**

Dammhagen meets all requirements under the local sustainable building programme, *Miljöbyggprogram Syd.* The general objectives of the programme are reduced use of resources and reduced impact on the environment in general and the climate in particular. The programme contains several measures for achieving sustainable building, which are categorised in five core areas: Energy, Moisture Resistance, Indoor Environment, Urban Biodiversity, Building Acoustics and Traffic Noise. More information (in Swedish only) is available online at <a href="https://www.miljobyggprogramsyd.se">www.miljobyggprogramsyd.se</a>

## Heating and hot water

Energy use (heat, hot water and building electricity) for the apartments at Dammhagen has been estimated at about 60 kWh/sqm and year. This is about 30% lower than the requirement for new construction and has been accomplished by means of a sealed and well-insulated building with efficient building systems.

The apartments are heated with water-filled radiators. The heat energy supplied to the radiators comes partly from district heating and partly from energy recovered from the ventilation system. The same applies to hot water. The air that is extracted from the bathroom via the building's ventilation system passes through a heat exchanger and a heat pump so that the heat content in the air can be transferred to water for heating and hot running water.

All pipes were installed using the "safe water" method. Among else, this means there is a little pipe that ends a few centimetres above the floor in the bathroom. If water drips out of the mouth of the pipe, it means a leak has occurred. If this happens, please make a fault report



#### Ventilation

Ventilation means that the air in the home is continuously exchanged for new, fresh air. This is necessary to maintain a healthy indoor environment.

Like most modern buildings, Dammhagen is a tightly sealed building and thus has no natural ventilation. Instead, the building is ventilated via a fan unit and a number of exhaust air fans that make sure fresh air is taken in from the outside and the same quantity of used air is extracted.

Fresh air is taken in through an opening behind the radiators under the windows. Due to this placement, the air is quickly heated by the radiator so that draughts are prevented. The air intake opening is fitted with a filter that keeps indoor air clean. AF Bostäder ensures that the filter is replaced at the required intervals.

Outgoing air is extracted via an exhaust air device in the WC and via the hood over the cooker.

The hood over the cooker does not have its own fan. The fan is on the roof of the building and serves several hoods. When you turn the damper on the hood, the airflow increases, even though you do not hear the fan working.

### **Electricity**

Electricity consumption in the apartment is included in the rent. This means we can ensure that all electricity used in the buildings is green. There is an electrical panel/fuse box inside the entry door to the apartment.

### Broadband, TV and telephone

There are permanent sockets for data and TV in every resident room, but there are no sockets for landline telephone service.

