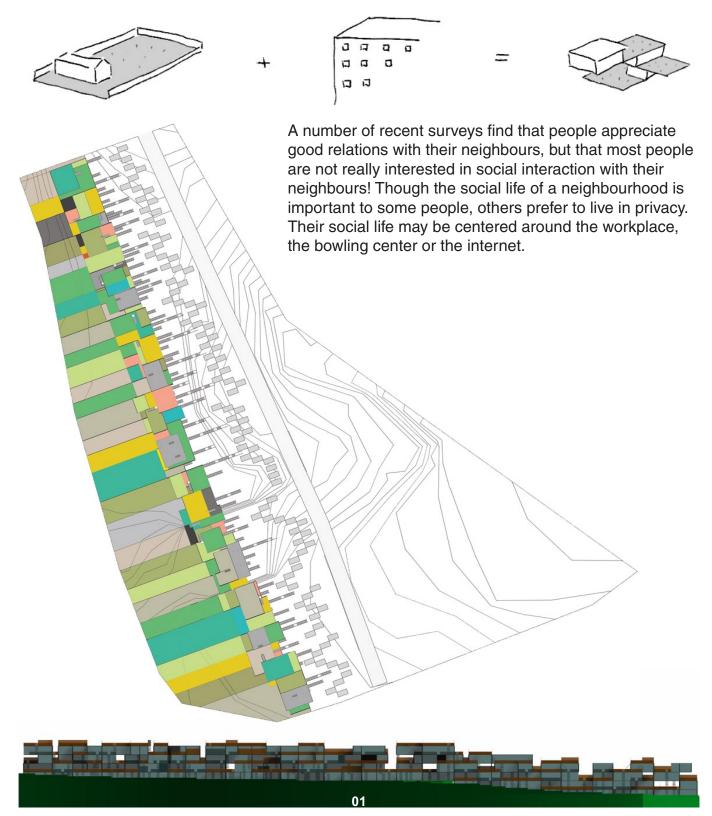
GARDEN FLATS

unfinished architecture

Part of project for the Europan competition Can Solé, Spain. Uid / Henrik Valeur, Fredrik Fritzson and Søren Christian Madsen in collaboration with consulting engineers Ole Vanggaard and Jeppe Steen Andersen, Copenhagen 2003.

The postwar housing boom in Europe was primarily carried out by two competing typologies, i.e. flats in highrise buildings and detached houses with private gardens. From society's viewpoint the highrise building is a more sustainable typology, because it potentially leaves land to be used for collective recreational facilities, agriculture or as nature reserve. The detached house -on the other hand- provide the privacy and individuality demanded by most of the population.





The aim of the garden flat concept is to enhance housing **diversity** and **flexibility**.



The garden flat is a hybrid of the high-rise flat and the detached house, designed to meet the increasing demands for privacy/individuality while at the same time addressing contemporary issues of sustainability.



Each flat is individually accessed via private stairs or ground-level entrance, within very short distance of private parking space. On the other side of the access-road are another 100 parking spaces for guests and families with two cars.



The gardens varies in size and can be equipped for individual purposes.

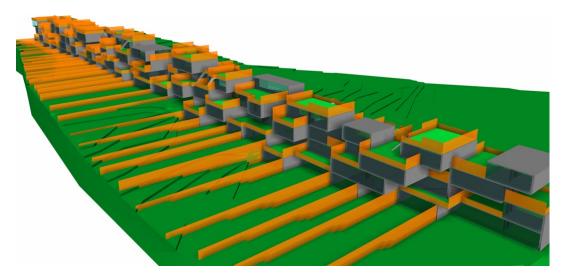
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The garden flat complex consists of 100 different flats with private gardens and possibilities to work at home. The gross floor area is 7.100 sqm and footprint is 2.142 sqm. The average size of a flat is 71 sqm, with an average 50-50 % size ratio between flat and garden.



The structural system contains of slabs and bars. The slabs are of concrete, either as a conventional in situ cast flat slab, or as a more industrialised "filligran" slab. The building is stabilized by bars, which forms a 3 dimensional special system, to stabilize the slabs and to support the slabs, from below, or hanging from above. This gives a great flexibility in the planning stage, by use of inclined columns or ties. The slabs on the different floors can in this way be hanging from bars, without having to rely upon cantilevering beams. The slab can be a simple flat slab supported as needed to distribute the forces in the slab, and the walls can all be non-load bearing, made of simple and cheap materials. The structural system acts as a spatial plate system, but the vertical structure are reduced to a minimum by the steel columns and bars. The connection between the bars and the slab can be established in a cheap and crude way by casting the members directly into the concrete slab. By placing sloping columns the organization of the rooms in the lower floor can be disengaged from the floors above. Different demands as regards to fire barrier and sound insulation, can be met

by an ordinary double wall. It is the aim that the chosen construction allows the inhabitants to choose the organization of the flat also in the long run. This structure has advances compared with conventional structural systems for housing, in that it meet demands as:

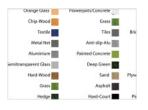
- Great flexibility in the organization of each flat
- Easy to built by common known basic construction methods.
- A freedom to choose material for facades and interior independent of the structural system.

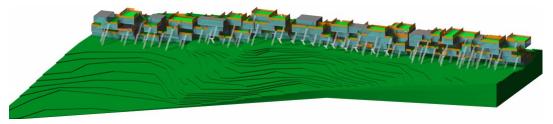


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To keep basic costs down and leave the final touch to the inhabitants, flats are sold in an unfinished construction state. A catalogue of possible materials and solutions for garden surfaces and screens, and indoor floors, ceilings and walls, enable individual choices in use, looks and price of dwellina.