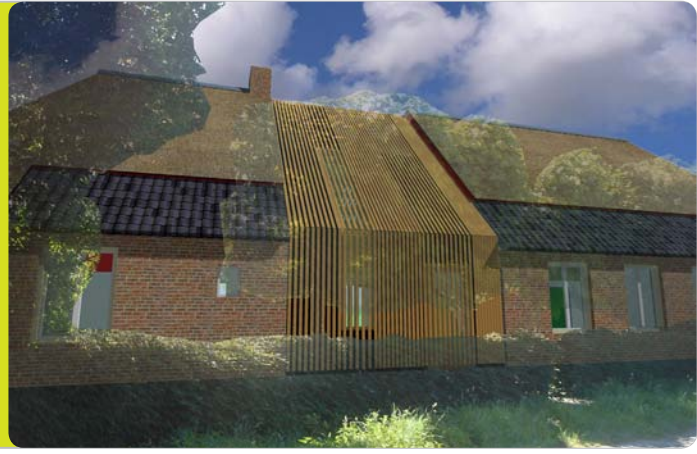


**K House** [Deurne, Netherlands, 2005-2007]

This former farmhouse last underwent dramatic reconstruction in 1968. Now, several building elements need to be renewed, the house needs insulation, and the spatial functioning needs revision.

We suggested to preserve the shape of the old farmhouse, as we think it is the building's most important characteristic. To deal with the problems of this housing type - natural lighting, climate control and spatial functioning - we proposed to remove a central part of the house and replace it with a void. This void is the new central area around which all rooms are organised. The open south facade links the internal court beautifully to the large surrounding garden. The skin of roof and facade consists of timber louvers, preventing direct sunlight to enter the house.



**Solar Towers** [Gorinchem, Netherlands, 2007]

Solar Towers is a sustainable and innovative apartment block in Gorinchem. The block offers spectacular views over the new housing district and canal.

Conservatories are orientated towards southeast and south to make optimum use of thermal solar energy in winter, and block the sun in summer. The building has a minimum envelope with maximum volume and good insulation to reduce its energy use. Solar thermal collectors on the roof produce hot water for central heating and tap water. The coloured glass facades en natural materials contrast nicely with the surrounding heavy brick architecture.



**Solar Housing** [Netherlands, 2006]

Following the successful renovation concept for apartment blocks we proposed for Lisbon Ideas Challenge, we developed a similar design for sustainable single family housing.

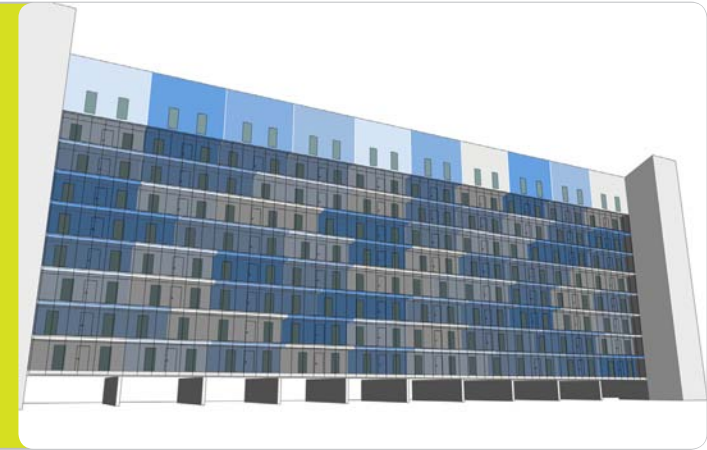
We drew inspiration from the traditional Dutch row house, to create housing that is considerably more comfortable, flexible and energy efficient. Additionally, these houses meet the requirements of Solar Housing certification, an initiative of WWF and SenterNovem. The Solar Houses utilize two types of solar energy: large windows in the south facade enable thermal solar heating, while a photovoltaic system in south facade and on the roof produces electricity. The PV cells are integrated into the building's skin, in coloured laminated glass panels.



**Sunrise Apartments** [Netherlands, 2006]

In the context of Lisbon Ideas Challenge, we presented a renovation proposal for a mass produced apartment building in the Netherlands, the gallery apartment block.

The renovation proposal converts the outdated block to comply with today's technical and environmental standards, as well as fit the special space and use requirements of elderly people. We suggested an integrally sustainable and radical intervention, aimed at reducing the block's energy consumption and installing facilities that produce electricity. We proposed to install PV cells on all available building surfaces with proper orientation towards the sun, implying PV integration in the south facade and the roof.



**Europan 8** [Tilburg, Netherlands, 2005]

Tilburg city centre still contains a few areas needing redevelopment. The main aim here is urban intensification: to reinforce the use of the city centre by increasing residential density and adding offices and retail.

We have aspired to reach maximum building density, while taking into account the sensitivities of the site's historic surroundings. We created a new ribbon fabric, a logical continuation of Tilburg's historic spatial pattern. Shortcuts run across the site, linking to primary and secondary routes in the city centre. Maximum density will be achieved by extruding the new fabric to maximum building heights, defined by an envelope that obtains its shape from the projection of viewlines over existing buildings along the site's peripheral streets.



**MAMS Staff Apartments** [Parangipettai, India, 2005]

On a long and narrow plot in Parangipettai, we designed an apartment block for Muna Australian Matriculation School staff. Inspired by the predominant local dwelling type, the beautiful South Indian courtyard house, this apartment building accommodates nine apartments.

The building is introvert - it overlooks a large central courtyard - to avoid apartments that overlook neighbouring sites. As a result apartments face east and west; verandas protect from the sun and provide private outdoor space. A smaller court inside the apartment block houses the central staircase providing access to the apartments. This court also works as a large flue, drawing air through the apartments.



**Ecole Internationale** [Pondicherry, India, 2005]

In an attempt to deal with the hazards of the local climate, we planned to house all interior and exterior spaces in one flexible structure or organism. This structure is both compact, to create an internal microclimate, and permeable, to bring in light and enable cross-ventilation.

The plan is predominantly rational; ideal classroom dimensions and shape as well as optimum sun orientation play an important role in the design. The new directions of viewlines add a certain sense of poetry and playfulness. These new directions create a dynamic structure with beautifully shaped courts.



**Power Station Village** [Ninghai, China, 2003-2005]

Situated in a beautiful bay side valley, Power Station Village houses 400 staff and visitors of a new coal burning power station. The village consists of fifteen buildings of different functions including offices, restaurants, shops, housing and hotels, forming a self-contained community.

We carefully dealt with the village's context by accentuating the contrast between the village and its beautiful, natural surroundings. The village is laid out in a square, to acknowledge its artificiality. In an attempt to house the diverse program in a compact, single gesture, the village takes the form of the traditional Chinese courtyard house. Unity is expressed in the form language of individual buildings. Every building is covered in a sharp, white concrete wrap, unfolding to the south.



**Wanda Skyscraper** [Ningbo, China, 2004]

This landmark for a new Ningbo business district originally consisted of two separate buildings. We proposed to integrate hotel and office towers into one building with a maximum height of 135 meters.

To improve the design's environmental sustainability, the hotel faces east-west and the office north-south. Cladding of facades changes with change of orientation. Retail and common facilities connect the towers in a podium at ground level and in the hinge in the top of the building. The podium acts as a windbreak and provides the city with an active street edge. Public restaurants in the top hinge offer spectacular views of the city.

