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## **A Modern Wooden Town is a Contact Town**

**Holz im Spannungsfeld zwischen  
politischen Entscheidungen und  
Umsetzungen auf Gemeindeebene**

**Il legno tra le decisioni politiche e  
l'attuazione a livello comunale**

**Document in English**



# A Modern Wooden Town is a Contact Town

## 1 Introduction

*Across Europe enormous glass and stone office buildings are being built on every corner. The spaces between the buildings are either vast, open fields or broad streets for motor traffic, where people are at the mercy of the elements, wind, sun and rain, in addition to the traffic noise. The modern cityscape presents an inhospitable environment which was not built on human comfort in mind.*

Scale is important in construction. When I arrive in a new town, I look for the finest detailed section on the map and, without fail, I find the busiest and most enjoyable part of town. In addition to human scale, theme and its variations are the basic factors in building a town. The red-bricked houses of Siena, in Italy, its vigorous street spaces, its marketplace and the cathedral rising above the town, has etched themselves on my mind. The same features can be found in the wooden towns in the north of Europe or even the grand houses of Finland's Käpylä area in Helsinki that are made completely of wood as are those that can be found in the masterpieces of urban construction in the south of Europe.



Illustration 1: Modern wood town



Illustration 2: Modern wood town

## 2 Urban living in Finnish modern wooden towns

In accordance with its nature, wood is a small-scale building material. Even if wood was used to build blocks of flats or skyscrapers, the buildings can always be divided up into log-sized components. A human scale is also adhered to in the "Modern wooden town" concept and the basic questions of building towns in a practical fashion are being debated. How does an enjoyable town come about? Is there an economic, high-quality alternative to suburban building? What will urban living be like in the future?

The modern wooden town is a new generation of high-density and efficiently built, enjoyable residential areas of wooden houses. These implement the best features of historical wooden towns in a modern format and provide an alternative to the tall housing estates full of blocks of flats that have been built in recent decades.

The aims of a modern wooden town are

- human scale
- uniform environment with variation giving identity to dwelling
- combination of the living properties chosen of both high rise living and individual dwelling in detached houses
- creating different privacy levels of exterior areas starting from private yard ending up to common urban areas
- finishing the area in building phase at one time mainly by one contractor
- scattered structure of different housing typologies from detached houses to small block of flats
- varied sizes of apartments

The environment of new wooden towns is based on wooden buildings that are no more than three storeys tall. The land is used efficiently and the ratio of total area to surface area is approximately 0.5. The area of Helsinki called Lehtovuori is as high-density as a nearby area that consists of blocks of flats. In spite of density Lehtovuori is human-oriented and urban. Careful, well done planning was a requirement for realising these areas. Every square metre of the plot of land, its buildings, its yards and even the pipes and cables running under the ground are well planned.



Illustration 3: The Lehtovuori area



*Illustration 4: Wood town of Lehtovuori*

The definition of a modern wooden town is

- the density 0,4...0,6 (build area / land area) which is very common in Finnish sub-urban areas
- the height of the buildings from 1 to 3 storeys

The challenges of a modern wooden town are:

- parking (1 car / 80 sq-m<sup>2</sup>). That is also the main difference with old Finnish wooden town
- existing fire regulation / density.
  - When ones keeps the distance of the buildings in 8 meters from wall to wall no special actions is needed in design
  - When the distance is less than 8 meters there has to structural actions to prevent fire escaping from building to another both in walls, windows, overhangs and in some cases also in roofs. With simple structural means a fire department separation is created in between two buildings
  - According to present research the first two meters from the buildings is the critical area in case of fire
  - Also the area should be divided to fire technical areas maximum 1600 sq-m<sup>2</sup> in area.
  - All these challenges can be solved easily with structural means

## 2.1 Private yard

Criticism of high-rise housing estates focuses on the lack of social contacts and of opportunities for residents to have an impact. The high-density and human-oriented environment of modern wooden towns entices residents to make contact with their neighbours, who cannot be avoided in Tuusula's wooden block in Huminakuja. A compact wooden town is a contact town. Even though the concept of modern wooden town requires the land to be used efficiently, a high-density environment means intimacy, not congestion. In addition to community, privacy is needed and every residence must have its own private yard, to which residents can withdraw to be out of sight of their neighbours.

In modern construction, residents have the possibility of having an impact on their environment. The residents of Friisilä's wooden houses have been able to select what colour scheme they would like to have for their houses, in addition to being able to arrange the rooms in their residences to their liking and to combine interior decorating materials. In spite of the variation, the result has been a continuous, harmonic environment.



Illustration 5: The Friisilä area



*Illustration 6: Wooden houses of Friisila*

## 2.2 Intimate alternative

Modern wooden towns may not be expensive. The lightness, resilience and affordability of wood structures is one of the definitive benefits of building wooden towns. The infrastructure of a high-density area can be realised efficiently and a well planned and realised building process saves money.

The modern wooden towns areas are mainly build at the outskirts of on demand of the growing cities.

The present methods of creating modern wooden town areas are

- the traditional city planning method
  - an interactive planning method and
  - a production based planning method
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- In traditional way master plan is created at first. After that the following phases (housing design and building) is done in chronological order. The process is quite slow and the earlier phases cannot be utilised as well as in the other methods.
  - In the interactive case the city and builder or land owner agree on design of the area. As partners the participants do the design in co-operation. In this case the process is quick and fluent since the design phases overlap: Since both the viewpoints of authorities and developer is present the method mainly leads to realisation that is satisfies all the participants
  - In production based method the contractor or builder does the master plan. The participation of the city is low which don't guarantee either fluent process or good quality.

Originally, Europe was built of wood. Along with clay and rock, wood is one of the original building materials; thousands of years of tradition and the possibilities of the future are inter-linked in wooden construction. Fire safety, economy and other practical challenges can be solved by good planning and new technical innovations enrich wooden construction with new possibilities. Wood will be one of the more significant building materials of the future, which is illustrated by the dozens of "Modern wooden town" projects that are currently ongoing in the Nordic Countries. People are clearly fed up with living in flats in housing estates and want a intimate alternative that is close to nature.

### 3 Captions

The residents of Friisilä's wooden houses have been able to select what colour scheme they would like to have for their houses, in addition to being able to arrange the rooms in their residences to their liking and to combine interior decorating materials. This housing group received the Wood Award 2004. Architects Juha and Pauliina Kronlöf, photo by Jussi Tiainen.

Every residence must have its own private yard, to which residents can withdraw to be out of sight of their neighbours. Friisilä's detached wooden house block, Espoo. Architects Juha and Pauliina Kronlöf, photo by Jussi Tiainen.

Theme and its variations are the basic factors in building a town. The Länsiranta area in Porvoo. Architect Mari Matomäki, photo by Kimmo Räisänen.

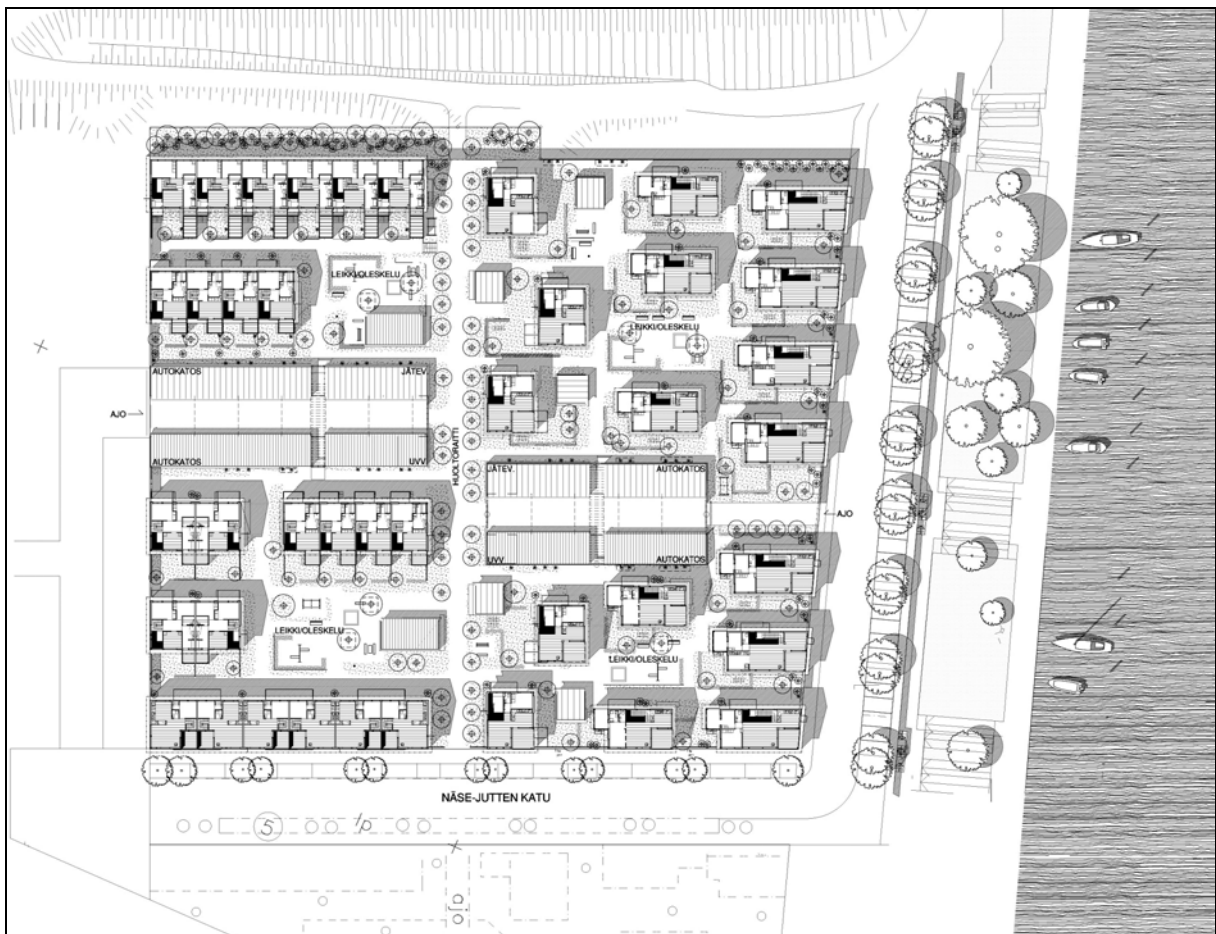


Illustration 7: The Länsiranta area



Porvoo's Länsiranta area implements the best features of historical wooden towns in a modern format. Architect Mari Matomäki, photo by Kimmo Räisänen.

Modern city wall. Kannelniitty, Helsinki. Architects Markku Erholz and Pekka Heikkinen.

The area of Helsinki called Lehtovuori is a high-density area that is built to be human-oriented and urban. Architects Eric Adlercreutz and Jyrki Iso-Aho, photo by Arno de la Chapelle.

The goal for Kuopio's Niiralankulma residential block is a continuous, harmonic environment and variation. Architect Jarmo Pulkkinen, photo by Jussi Tiainen.

In the Tuusula's wooden block in Huminakuja, it is impossible to avoid contact with your neighbours. Architect Mikko Kaira, photo by Jussi Tiainen.



*Illustration 8: Laajasalo*



*Illustration 9: Irranta*