



YMPÄRISTÖMINISTERIÖ  
MILJÖMINISTERIET  
MINISTRY OF THE ENVIRONMENT

# Building Act and Building Regulations in Finland Prevention of Errors in Construction

Helena Säteri

St. Petersburg, 14 September 2006

- 
- 
- # Building Administration in Finland

## Central level:

The central government authority in charge of developing and directing both land use and planning and building activities is the **Ministry of the Environment**

## Regional level:

On the regional level there are **13 Regional Environment Centres** subordinated to the Ministry. The centres steer the building activities within the area covered by a local authority

## Local level:

The **local authorities** are independently responsible for drafting and approving master plans and local detailed plans. The statutory functions regarding building control are the charge of a committee appointed by the local authority. The local authority must have a building inspector who advises in and supervises building issues

## • Legal basis

- Land Use and Building Act (132/1999),  
entered into force 1.1.2000
- Land Use and Building Decree (895/1999),  
entered into force 1.1.2000
- Act on Approval of Construction Products,  
entered into force 1.1.2004
- Ministry of the Environment's Decree on Approval  
of Construction Products (1245/2003),  
entered into force 1.1.2004
- Building Code of Finland
- Act on Energy Certificate (proposal)
- Decree on Energy Certificate (proposal)
- Other regulations within the competence of other ministries

## Objectives of building guidance

The objective of building guidance is to promote:

- creation of a good living environment that is socially functional and aesthetically harmonious, safe and pleasant and serves the needs of its users
- building based on approaches which have sustainable and economical life-cycle properties and which are socially and economically viable, and create and maintain cultural values
- continuous care and maintenance of the built environment and building stock

# • The Building Code of Finland

- Ministry of the Environment issues by decree technical regulations and instructions referring to building
- The regulations are binding
- The instructions are not binding but present acceptable solutions
- The regulations concern the construction of new buildings. The regulations are applicable to renovation and alteration works only insofar as the type and extent of the measure and a possible change in use of the building require

- 
- 
- ## The builder's duty to take care in building activities

- The basic responsibility for any building project always rests with whoever undertakes the project
- Anyone undertaking a building project must have the necessary competence to carry out the project, as required by its difficulty, and access to qualified personnel
- The builder shall ensure that the building is designed and constructed in accordance with the building provisions and regulations and the permit granted

## • Supervision by authorities

- The contribution of the authorities in a building project comes out in the permit procedure (building permit) and by inspections during construction
- The extent and type of supervision depends on the difficulty of the project, the expertise and professional skill of the permit applicants and the persons in charge of design and construction
- The control by the authorities mainly focuses on the placing and purpose of the building, the utilization of the building rights and the impact on the environment
- The building must meet the minimum requirements set out in the regulations with regard to the safety and health of the user

## ● Designing a building

- A principal designer shall be in charge of the design in its entirety and of its quality, ensuring that the building design and the special designs form a complete entity which meets the requirements
- The person in charge of each special design shall ensure that the design meets the requirements set for it
- When a special design is prepared by more than one designer, one of them must be appointed as the designer responsible for the special field concerned in its entirety

## ● Start-up meeting

- Before a building permit is granted, a start-up meeting is to be held to clarify the division of tasks between the authorities and other parties in the execution and supervision of the project
- The meeting must be attended by the principal designer, the site manager, the party undertaking the project and the local building authorities
- The meeting will specify in writing the duties and competence of the parties concerned:
  - the responsibilities of the party undertaking the project
  - the tasks of the principal designer and other possible designers
  - the person in charge of different stages of the construction and who will countersign the inspections on site

# Construction management

- In any construction work requiring a permit there must be a **site manager** responsible for carrying out the work and for the quality of the work
- The site manager directs the construction work and ensures that the work is carried out according to the building provisions, the permit granted and good building practices
- Where needed, **specialist foremen** shall be responsible for waste water arrangements, ventilation arrangements and difficult cement casting
- The site manager and the specialist foremen shall be approved by the local building authority

- 
- 
- ## Qualifications of persons working on a building project

- The demands on education and experience are directly related to the difficulty of the project
- The local building authorities decide on the difficulty of the work
- The qualifications required in **designing** are judged according to the intended use of the building and spaces within it, the structural loads and fire loads, the design, calculation and dimensioning methods and environmental requirements
- In addition to the qualification requirements above the qualifications required in **managing** construction work are judged according to the construction conditions and special methods used in carrying out the work

## ● Incidents of Major Accidents in Finland

- Roof of multi-purpose hall collapsing at Mustasaari, 17.1 2003
- Fair center roof collapsing in Jyväskylä, on 1.2.2003
- Fall of an intermediate floor structure intended as permanent at a service station site in Orivesi, 25.8.2003
- Dropped ceiling of indoor spa resort collapsing in Kuopio, 4.9.2003
- Collapse of the Roof of a Maintenance Building built by Voluntary Workers at a Slalom Centre in the Municipality of Pohja, 1.2.2004
- A Threat of Roof Collapse in a Shopping Centre in Kuopio, 18.3.2005
- Collapse of the Inner Ceiling Structures of a Local Supermarket, Sysmä, 27.4.2005

- 
- 
- Incidents of Major Accidents in Finland 2006

Beside the above presented cases nine accidents classified as major accidents have occurred in spring 2006.

These cases are for the time being under research

See [www.onnettomuustutkinta.fi](http://www.onnettomuustutkinta.fi)

- 
- 
- ## Special procedure for demanding construction projects

- New requirements entered into force 1.9.2006
- A special procedure within the building control procedure has to be followed in cases when a construction error may generate a major accident
- More rigid requirements concerning
  - demonstrating that the construction meets the requirements
  - the competence of the site manager
  - the competence of special foremen
  - quality assurance report
  - external inspections

- 
- 
- # Product Approval

- CE marking
- Type Approval
- Certified Product Declaration
- Quality Assurance of load-bearing structures

## CE marking

- CE marking is one possible way to declare product characteristics
- CE marked products corresponding to the performance level have to be accepted
- Insofar as the Building Code does not directly refer to a harmonized standard (hEN) it is in principle possible to attest fitness for use by other means
- The crucial point is that the construction work will meet the essential requirements
- CE marking has so far been enacted as compulsory only for cement used in construction

# • • • Type Approval

- Approvals since 1976
- Structures, building elements and products for which there are regulations in the Building Code
- Voluntary for the manufacturer
- Binding on the local building authorities
- More than 700 approvals in force
- Tests before acceptance (EN standards)
- Agreement on external quality control before acceptance
- Approvals valid max. 5 years - renewing

- 
- 
- For more information see:

[www.environment.fi](http://www.environment.fi) -> Land use and building