

**Why frame houses?** - health reason, social impact, financial and environmental impact

Main determinants are:

- lower costs of building house and its exploitation.
- wood is an ecological material
- short construction time

4 main reasons are:

1) health causes:

- microclimate of the house, material difficult to get in other technologies, created thanks to using the natural house in the structure wood,
- thermal comfort for users, because of good and long-term holding of the appropriate temperature inside the building,
- the respective parameters of the air humidity of ceilings inside the house due to the lack of problems with the moisture evaporation from structural members, e.g. built from walls, reinforced concrete and stairs.

2) social impact:

- better knowledge of potential investors in the scope of construction of houses in the skeletal technology,
- solid knowledge of specialists of houses in the structure in the skeletal technology,
- ability of effecting balance of the pros and cons, myths and facts in case of skeletal construction with reference to other technologies applied in the construction,
- greater awareness in the influence of applying different technologies in the construction on the environment.

On the other side:

- rather unpopular technology in Poland,
- the lack of knowledge and experiences in many persons professionally connected with wooden buildings (architects, building companies, or also persons from the building inspection) what is causing problems both in the phase of the design as well as during construction,
- rise in the demand for wood not only for the construction, but as the eco-friendly fuel raw material also caused a rise in prices of wood used in the skeletal construction in the last period. In the future the continuing demand for raw materials can cause, that the skeletal construction will be less and less competitive for the traditional construction.

3) financial causes:

- time of the structure (apart from built foundations it is possible to avoid works of wet surfaces or to limit them for filling with plaster),
- possibility of carrying out work in every season, lack of weather restrictions,
- using almost exclusively dry materials for construction,
- friendliness for residents: finish in plaster lets for own, independent and simple making the modernization and repairs,
- heating up from the inside is taking place more quickly and longer a warm stays inside,
- possibility of achieving the standard of the passive house,
- alternative for typical (more expensive) of Polish built construction,
- economy of construction of the skeletal house, in comparing to the traditional construction built.

#### 4) environmental causes:

- friendliness for the environment because of using eco-friendly materials for construction of the house (wood and modern building materials: plates from wood, cladding panels, eco-friendly materials for warming),
- smaller energy consumption towards the traditional construction due to the fact that wood is a renewable raw material, the construction process and producing building materials is calling the slight carbon dioxide emission to the atmosphere.