

# THE GROWING STEEL HOUSE



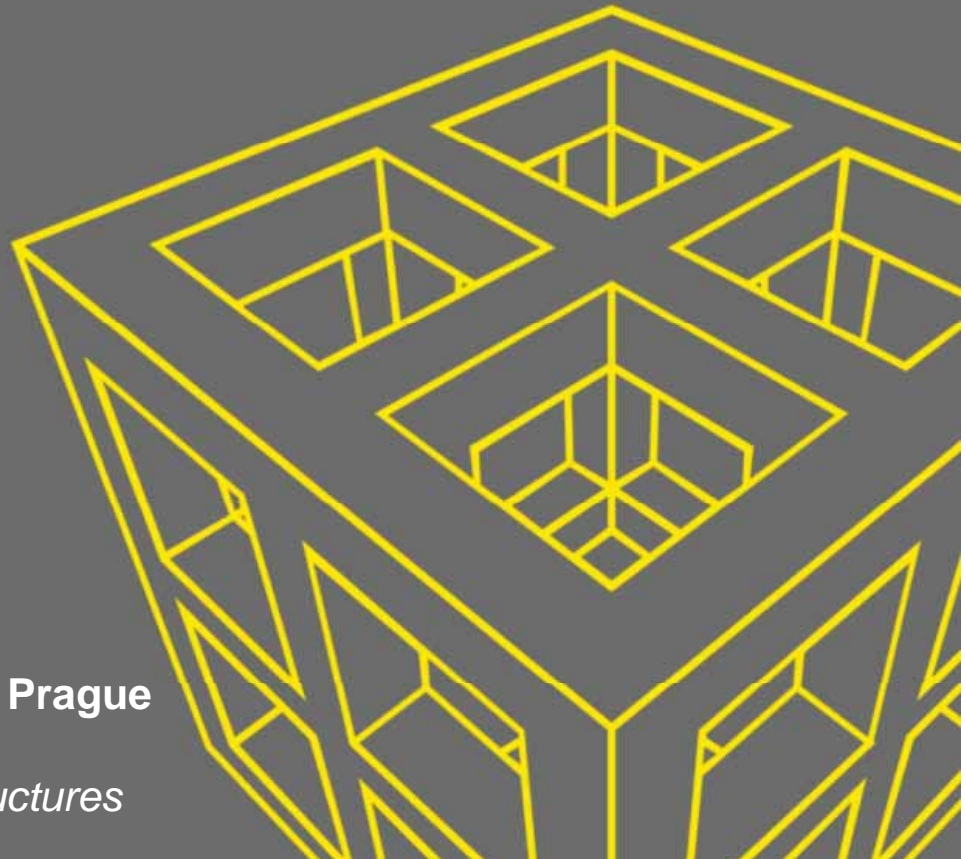
family rules

## ANSWERING THE QUESTIONS

Petr Schorsch

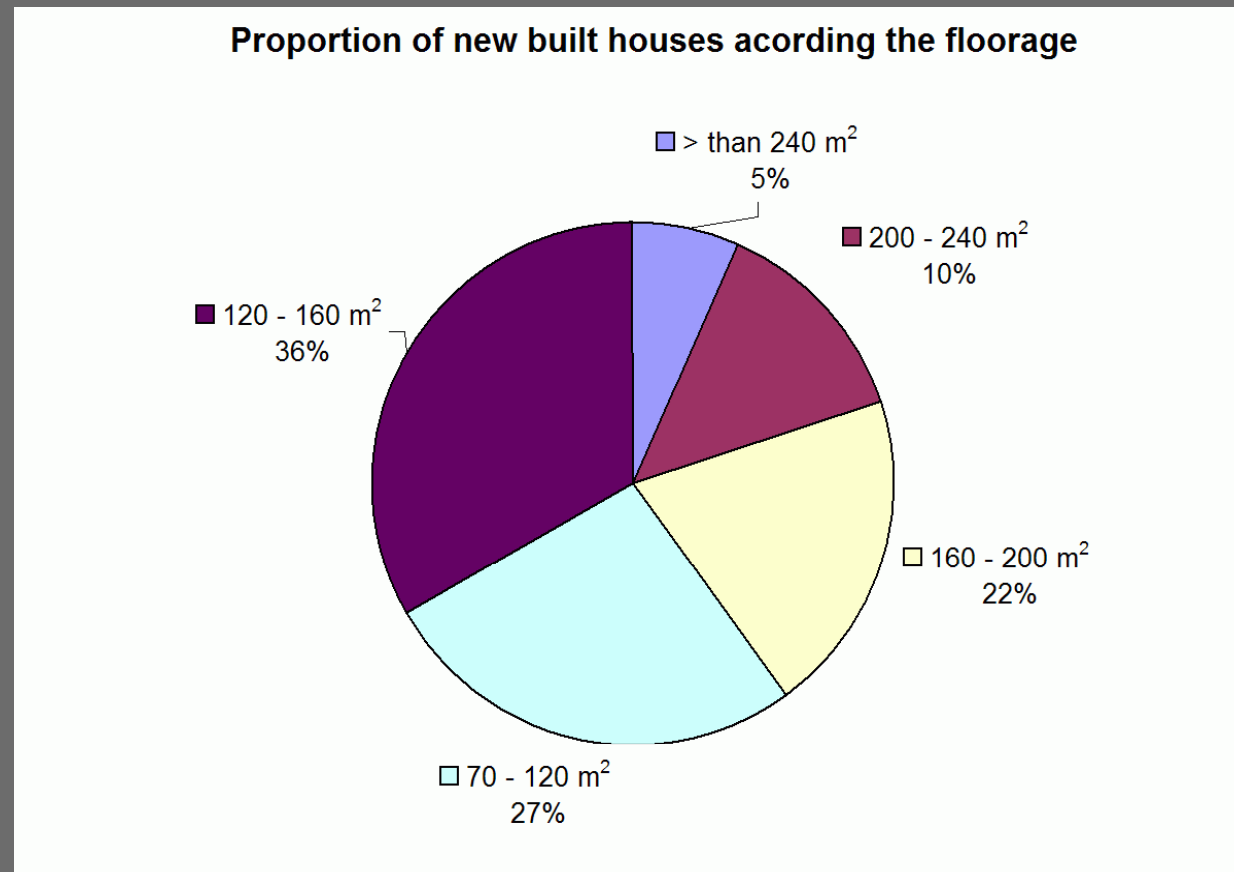



**The Czech Technical University in Prague**  
Faculty of Civil Engineering  
*Department of Steel and Timber Structures*



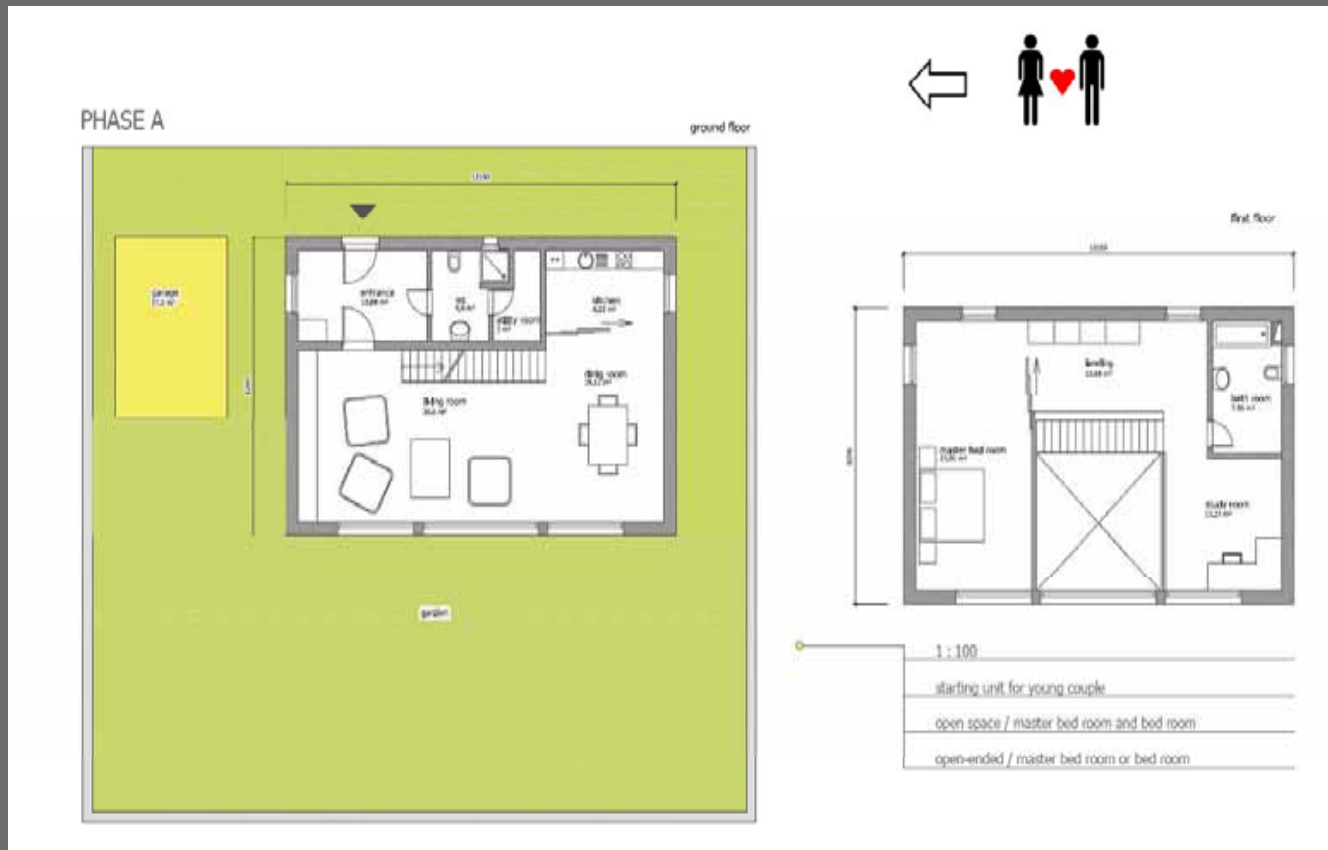
QUESTION 01: Do the dimensions of the house correspond to a “standard” in Czech Republic?

On the following graph is shown distribution of floorage of new built houses:



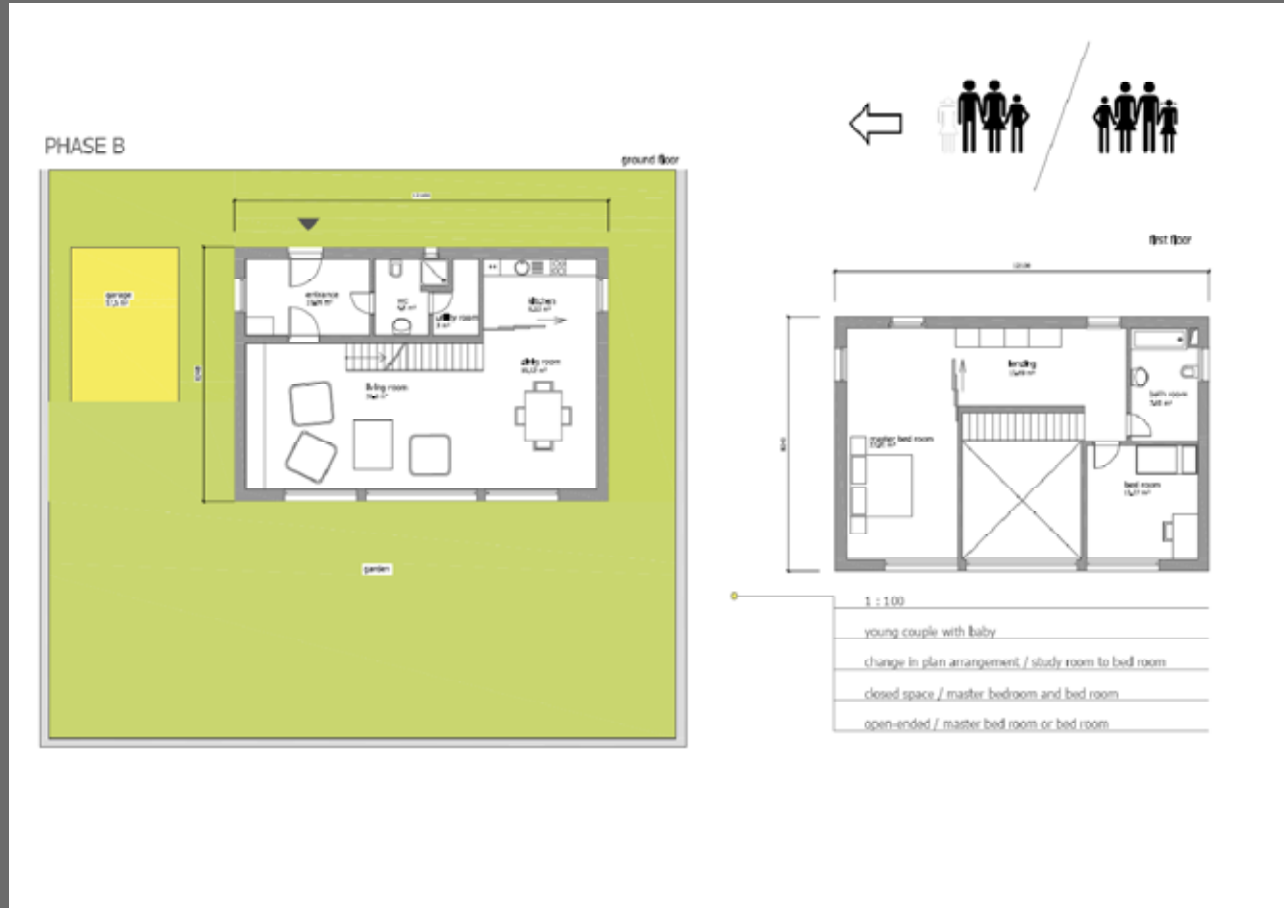
- Main group of houses (36%) has floor area between 120 and 160 m<sup>2</sup>.
  - The other big group (27%) has floor area between 70 and 120m<sup>2</sup>.
  - Our growing steel house has in the basic configuration total floor area 130m<sup>2</sup>.
  - ***It corresponds to the “low standard house” in the Czech Republic.***
- 

QUESTION 02: It is highlighted the necessity to have a house which can be adapted to modifications of the family composition. Could you clearly identify the modularity of your proposal?



Starting unit for a young couple without children

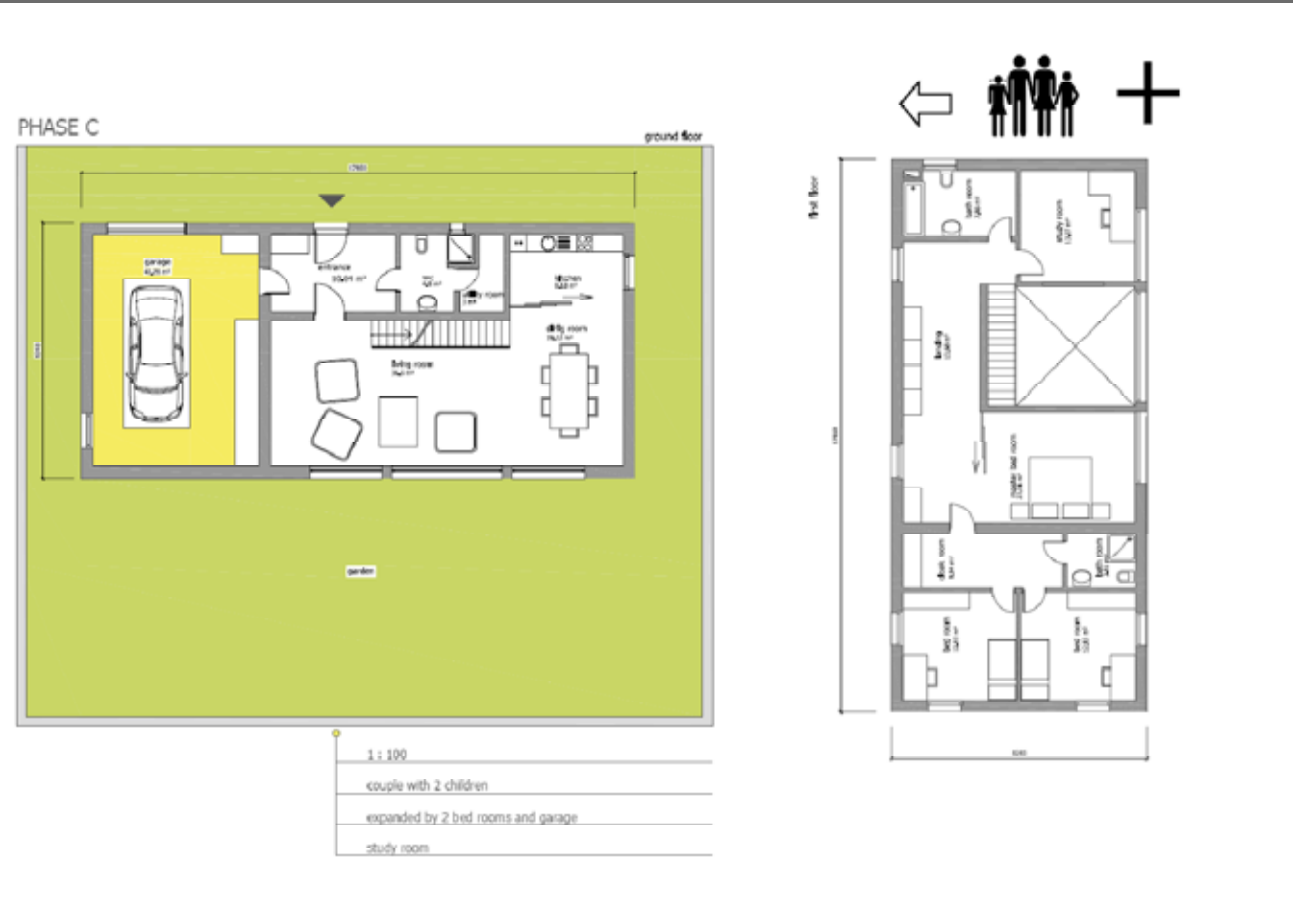
Young couple with baby  
Open space, changed disposition  
Open-ended / master bed room or bed room



Couple with two children + car

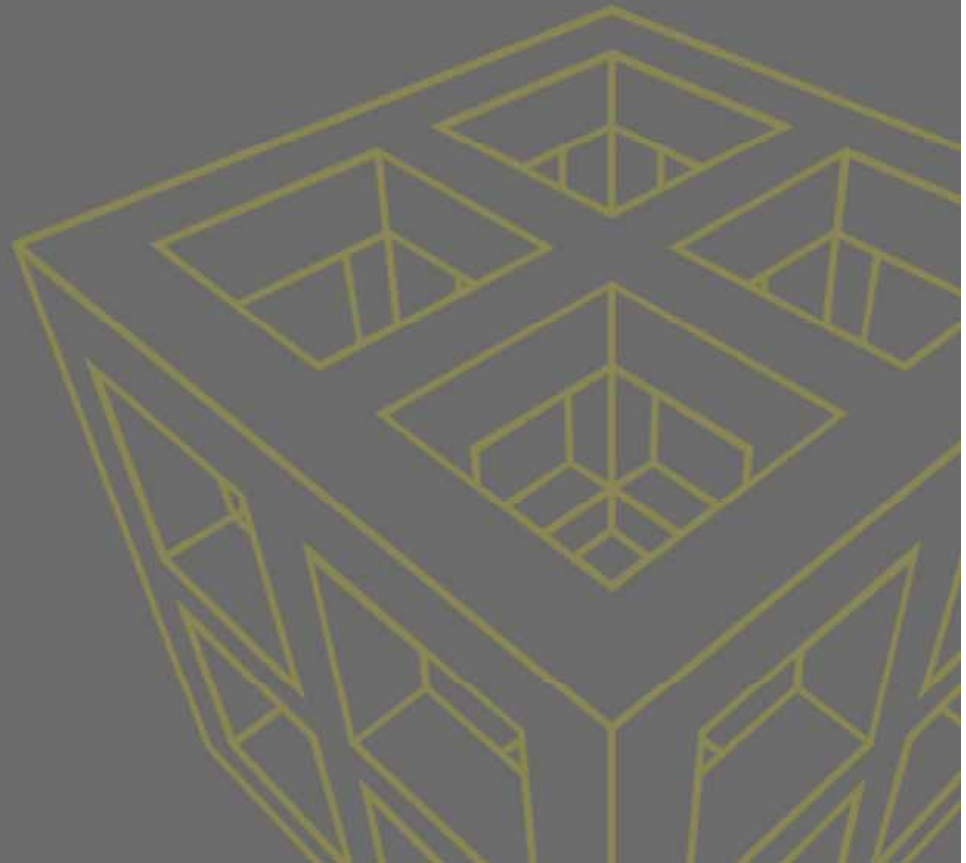
Open space / possibility to have study room or to have third bedroom

Open-ended / master bed room or study room




QUESTION 03: In your document, you are talking about family “4+1”. What does it mean?

- The expression “Family house 4+1” means that the flat or house consists of 4 rooms plus kitchen. (similar to 3+1; 2+1...)



QUESTION 04: Could you clearly identify what are the “innovative” aspects of your project?

- Functionality and variability of the building
  - The house changes and grows according to the social and financial needs of the family
  - Low energetic 25 kWh/m<sup>2</sup>/year
  - Or passive house concept 16 kWh/m<sup>2</sup>/year
  - Applied materials are recyclable
- 



QUESTION 05: Some photos or illustrations of “classical” houses in Czech Republic

HISTORY (ROOTS):



break of 19 and 20th century



break of 19 and 20th century





the 1960's (socialist production)



present architecture  
- Catalogue house

present architecture  
- Individual house



# THANK YOU FOR YOUR ATTENTION

[fire.fsv.cvut.cz/affordable\\_houses](http://fire.fsv.cvut.cz/affordable_houses)

Students / design: tereza pavlů - structural design; petr schorsch - structural design; lukáš turek - architectural concept and solution;

Students /collaboration on the text part : tomáš horálek - socio-economical evaluation; jakub holeček - socio-economical evaluation; pavel jenýš - traditional housing concept; rostislav mazáč - socio-economical evaluation; zdeňka staňková - traditional housing concept; oldřich švec - socio-economical evaluation; kristina trnková - traditional housing concept; zuzana šulcová - web Page

Teachers / consultations: františek wald - head; karel mikesš – manager; petr hájek - sustainability building concept; jan tywoniak - building energy concept