

THESIS REVIEWER'S REPORT

I. IDENTIFICATION DATA

Thesis title: Apartment building – Letňany Gardens

Author's name: Dayana Muratova

Type of thesis: master

Faculty/Institute:Faculty of Civil Engineering (FCE)Department:Department of Building StructuresThesis reviewer:Doc. Ing. Eva Burgetová, CSc.Reviewer's department:Department of Building Structures

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment ordinarily challenging

How demanding was the assigned project?

The primary goals were to design a project of residential building.

Fulfilment of assignment

fulfilled

How well does the thesis fulfil the assigned task? Have the primary goals been achieved? Which assigned tasks have been incompletely covered, and which parts of the thesis are overextended? Justify your answer.

The diploma thesis is worked and solved as a project of residential building Letňany Gardens, which most focused on building structures solution. The project consists of five parts: structural design and his technical solution, preliminary design and structural solution of concrete structures, design of foundation (combination of slab and piles) of the residential building, plan of the general solution of building services systems and last part is about fire safety including proper design of securing safety.

Methodology correct

Comment on the correctness of the approach and/or the solution methods.

The approach to the design is correct. Dayana showed very good knowledge of the methods to be used for solving the problems and identifying the risks.

Technical level A - excellent.

Is the thesis technically sound? How well did the student employ expertise in the field of his/her field of study? Does the student explain clearly what he/she has done?

Dayana proved her ability to understand the professional technical approach to design and apply it for practical solutions.

Formal and language level, scope of thesis

A - excellent.

Are formalisms and notations used properly? Is the thesis organized in a logical way? Is the thesis sufficiently extensive? Is the thesis well-presented? Is the language clear and understandable? Is the English satisfactory?

The level of language of the thesis is high, technical one, easy understandable, using correct terms. Document is well structured. The thesis is sufficiently extensive and well-presented.

Selection of sources, citation correctness

A - excellent.

Does the thesis make adequate reference to earlier work on the topic? Was the selection of sources adequate? Is the student's original work clearly distinguished from earlier work in the field? Do the bibliographic citations meet the standards?

The bibliographic citations meet the standards, citation is corrects. All structural solutions of residential building are provided in accordance with the Czech standards.

Additional commentary and evaluation (optional)

Comment on the overall quality of the thesis, its novelty and its impact on the field, its strengths and weaknesses, the utility of the solution that is presented, the theoretical/formal level, the student's skilfulness, etc.

Dayana is capable to interpret the fundamental of the problem precisely.

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III. OVERALL EVALUATION, QUESTIONS FOR THE PRESENTATION AND DEFENSE OF THE THESIS, SUGGESTED GRADE

Summarize your opinion on the thesis and explain your final grading. Pose questions that should be answered during the presentation and defence of the student's work.

All goals were reached, showed very good knowledge of giving problems. I have just the following comments on the work:

- the proposed tiling of the steps is not feasible
- the legend of the materials in the section is confused
- expansion joint is not resolved correctly, the section D-D at the dilatation site is poor
- under attic plating I recommend to install OSB (oriented strand board)
- crawl spaces are not dimensioned and not correct

During the defence of the work I recommend following questions:

- Principles of design of expansion joints
- Watertightness of underground structures

The grade that I award for the thesis is A - excellent.

Date: **17.1.2022** Signature: