

Master's thesis review

Thesis title: Daylighting of buildings

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Reviewer: Ing. Jan Müller, Ph.D.

Thesis overview:

This Master's thesis investigates how urban site conditions influence the daylighting performance of a standardized multi-storey residential building. The research focuses on Brno region, where surrounding obstructions significantly affect access to daylight. Using daylight simulation methods aligned with Czech standards, the study evaluates key daylight performance indicators under varying site configurations. Identical building designs are tested across multiple urban scenarios to isolate the effect of context from architectural form. The results demonstrate that site-specific factors can lead to substantial variation in daylight availability, even when regulatory requirements are formally met.

Assessment of the thesis:

	Excellent	Very good	Good	Inconvenient
1. Professional level of work	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Suitability of used methods and procedures	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Use and work with literature	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Formal, graphic and linguistic editing of the thesis	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Fulfilment of the requirements of the thesis	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Comments and questions:

First of all, it is impossible to tell whether the thesis fulfilled its assignment, because it is missing. The methodology seems sound and uses Czech standards. The language of the thesis is grammatically correct, but often uses overly long sentences, which reduces readability. The selected building sites share a lot of similarities, there are no city centre sites, no nearby tall buildings in the outskirts regions of Brno. This might have caused the results to be more variable. The Concluding remarks are very general and vague, I miss some real output of the thesis, like recommendations for future architects.

I have following questions:

- 1) Which site parameter had the greatest impact on daylight performance, and how did you determine its relative importance?
- 2) How does wall thickness impact daylighting? Is the wall thickness you chose typical for the Czech Republic?
- 3) How could an architect practically use your findings during the early design phase of a residential project?

Conclusion:

The submitted master's thesis meets the university requirements for a master's thesis in its content and elaboration. The thesis deals with an important topic, as lack of light can have a negative impact on people's health. On the other hand, selected sites are not challenging enough to be particularly important.

I recommend the thesis for defence.

ECTS classification grade: **C / 2**

Date: 23rd January 2026

Opponent's signature: