

Final Thesis Review

Student: Ema Skarecka

Topic: Numbulwar health centre – development of a sustainable building concept

Supervisor: Jan Ruzicka

Reviewer: Steve Burroughs

I. Evaluation Criteria

| Evaluation Criteria | A | B | C | D | E | F | not evaluated |
|--------------------------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Meeting the aims of the final thesis | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Vocational quality | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Relevance of used methodology | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Graphic layout | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Final thesis clarity | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Gained skills for professional life | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

II. Comments

Evaluate the quality of project outcomes, positive aspects of the project outcomes and weak points of the project outcomes ($\frac{1}{4}$ - $\frac{1}{2}$ of the page):

The initial concept behind this thesis was to determine two factors. One, how does the existing building and/or building skin perform in the current climate. Two, conceptualize an alternative building skin and compare against the existing.

The student compared the existing building skin corrugated iron walls, steel studs, insulation and plaster board external skin to Compressive Earth Block (CEB) walls in various thickness and alternatives.

The student explored the particular architectural-engineering solution showing a contribution to resilience and environmental through the use of CEB's. The theoretical thesis illustrated minimum deliverables in the case of the CEB's improving the reduction of energy and improving the well-being of staff and patients that visit the clinic. The thesis

also illustrated the improvement required in the mechanical cooling system within the building.

The student met the required deliverables for the approval of the thesis including:

- Research in the area of theory/methodology being explored in architectural-engineering,
- An annotated research bibliography,
- A clear, complete, and transparent thesis document,
- The thesis illustrated variables/parameters, criteria, logics and how the thesis contribute to the conceptual, analytical and functional aspects of the proposed work,
- Reached the set of deliverables appropriate to the subject agreed upon with the supervisors.

The thesis was only lacking in the area of additional building skins simulations. It would have been appropriate to run the monitoring data against various other building skins not to produce an outcome but to show the need for future research on various different building skins.

It is therefore, recommended that the student has added to the body of knowledge of architecture-engineering through the formation of the written thesis presented.

Dr Steve Burroughs

III. Recommendation for the Discussion

Recommendations/questions for the further discussion within the final thesis defense (¼ - ½ of the page):

- In the final outcomes from the research does the student feel using the CEB’s worthy of use or does it require additional research?
- Using the CEB's in building skin construction will they provide an environmental friendly and resilient building -Why or Why Not?
- Does the student have any suggestion on additional monitoring devices – what sort of monitoring, monitoring locations?
- Was the existing monitoring data supplied adequate or was data missing? If yes what data would have added to the research?

VI. Overall Evaluation

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Evaluation Scale:

| | | | | | |
|-----------|--------------|------|--------------|------------|--------|
| A | B | C | D | E | F |
| Excellent | very good | good | satisfactory | sufficient | failed |

V. Conclusion

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|-------------------------------------|--|
| <input checked="" type="checkbox"/> | recommended for defense |
| <input type="checkbox"/> | NOT recommended for defense (= failed) |

07/02/2019
Date:

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Final Thesis Reviewer