

Review of: "The Effects of Polypropylene Wastes on the Compressive Strength of Grade 25 Concrete"

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Potential competing interests: No potential competing interests to declare.

Review for the paper that titled “The Effects of Polypropylene Wastes on the Compressive

Strength of Grade 25 Concrete”

The paper examined the influence of utilizing polypropylene as a sand replacement at percentages of 5 %, 10 %, 15 %, and 20 % by weight. Water absorption and compressive strength were examined in this study. As a result of the revision, the following points have been drawn:

Key Words

- Compressive strength: no need to repeat what was already mentioned in the topic.
- Better to add sand replacement

Introduction

- Highlight the problem of polypropylene (PP) wastes supported by statistics.
- Mention what the main current fields are to recycle these wastes and why it's important to use them in the construction sector
- In the fourth paragraph, the studies mentioned used the PP as cement or sand replacements.
- Use more recent studies.

Materials and methods

- Split the methods under a separated section.
- Under the materials section:

- Add a picture of the grounded PP
- Move the sieve analysis under this section
- Move the specific gravity results to under this section
- Under the method section
 - List the percentages of the materials used (mixture percentages)
 - Explain the mixing and casting steps
 - Explain the test methods and standards

Results

- Under the water absorption section:
 - Add a more detailed discussion about the reduction or increase in water absorption.
 - Add justification to your results and compare your findings with previous studies
 - The water absorption reflects the porosity of the concrete, so it is better to connect these findings with the density of the concrete
- Under compressive strength:
 - Add a more detailed discussion about the reduction or increase in water absorption.
 - More discussion is needed

CONCLUSION

- The conclusion must be written as facts, not using the past form
- Delete point no. 2
- In point no. 4, not to mention the compressive strength. However, use the increase or reduction percentage.