Review of: "Shear performance of polypropylene fiber reinforced high-strength self-compacting concrete beams"

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Potential competing interests: No potential competing interests to declare.

Polypropylene fiber-reinforced high-strength self-compacting concrete (PFRC) is a type of concrete that incorporates polypropylene fibers to enhance its mechanical properties, particularly in terms of shear performance. The addition of polypropylene fibers can improve the concrete's toughness, ductility, and resistance to cracking. The present paper supports these findings in a very detailed and comprehensive manner along with sufficient experimental work. The paper covers required aspects thoroughly with sufficient background and relevant references. The experimental results are clearly presented. The conclusions drawn from the study are very specific and relevant. Author(s) are advised to look into design codal compliance, as it is important to ensure that the use of PFRC complies with relevant building codes and standards. Codes may provide guidelines or specifications for the use of fiber-reinforced concrete in different structural elements, including beams.

It should also be noted that the overall mix design of high-strength self-compacting concrete is critical. The proportions of cement, aggregates, water, and any additional admixtures must be carefully balanced to achieve the desired properties, including shear strength.

Minor revisions to the language are recommended.