

# **FLEXURAL BEHAVIOUR REINFORCED CONCRETE BEAM WITH POLYPROPYLENE UNDER DYNAMIC LOAD**

**A report submitted to MARA University Of Technology in partial fulfillment  
of the requirements for the Bachelor Of Engineering (Hons.) (Civil) in the Faculty  
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## **ABSTRACT**

A study has been carried out in reinforced concrete beams of water-cement ratios of 0.45, where polypropylene fibres (0.2% by volume of concrete) is added into the concrete. The purpose of adding the substance are to reduced the cracking, deflection and etc in structures and to study how the effects of addition of polypropylene fiber to concrete mix and adequate concrete curing. The tests were carried out Grade 30 concrete beams specimens of dimensions 125mm x 150mm x 1400 mm and 0.6kg/m<sup>3</sup> of Polypropylene is added.

The testing divided by two types of loading. One beam are testing under static load and two beams under dynamic load. The comparison has been done to a previous student to get the different value and percentages. Analysis of the test result done revealed that Polypropylene in reinforced concrete in improvement crack control and rate in deflection.

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