

Title:	Effect of Rubber and Leather Wastes on Concrete Properties
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Abstract There are different types of rubber and leather wastes generated as byproduct material during manufacturing processes. This research is an attempt to investigate the effect of shredded and crumb rubber from car tyres and leather wastes on the properties of fresh and hardened concrete. The variables of the research are the type and percentage of waste material and curing time of concrete. Waste percentages used were 5%, 7% and 10% by weight of cement in the concrete mixture. Several tests were conducted on the fresh and hardened concrete with rubber and leather wastes, such as workability, compressive strength, indirect tensile strength, and natural absorption. Results have shown that the compressive strength and indirect tensile strength of concrete decreased with increasing the contents of rubber and leather waste. The workability of fresh concrete increased by increasing leather waste with maximum value of 13.5 cm at 10% of leather waste. At 5% of rubber the workability was higher than concrete alone, but with increasing the percentage to 10%, the workability decreased to about the same value as of concrete alone.

Keywords: Industrial waste, rubber, leather, concrete properties