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MECHANICAL PROPERTIES OF EXTRUDED FLEXIBLE PVC/WOOD FLOUR AND PVC-NBR/WOOD FLOUR COMPOSITES

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This study was conducted to characterize the mechanical and properties of extruded composites with various percentages of wood and NBR. A twin screw extruder machine applied to produce specimens. PVC/wood flour composites with different filler concentrations, 30%,40%,50% and 60% were applied to be investigated the effect of wood on composite properties. The tensile strength of the PVC/wood flour samples was improved by increasing wood content, while the opposite trend was observed for the elongation at break of the samples. adding NBR increase tensile strength of the samples but that this increase was not statistically significant for the composites. whereas adding NBR reduce max elongation at break of the samples.