

**THE INFLUENCE OF MASS PERCENTAGE OF GYPSUM AND FIBERS
TO COMPRESSIVE AND FLEXURAL STRENGTH OF GYPSUM-
CEMENT BOARD WITH WATER HYACINTH FIBER HAS BEEN
CONDUCTED**

ABSTRACT

The research about the influence of mass percentage of gypsum and fibers to compressive and flexural strength of gypsum-cement board with water hyacinth fiber has been conducted. The compressive and flexural strength were measured using universal testing machine (UTM). The result shows that the board with constant mass percentage of water hyacinth fiber of 2.5% have maximum value of compressive strength (14.52 kg/cm^2) and of flexural strength (1.265 kg/cm^2) both at 30 % of gypsum mass percentage. The board with constant mass percentage of gypsum mass of 30% have maximum value of compressive strength (24.99 kg/cm^2) at 30% of water hyacinth fiber percentage 7.5% and of flexural strength (1.575 kg/cm^2) at water hyacinth fiber percentage of 5%.

Keywords: Gypsum-cement board, hyacinth fiber, compressive strength, flexural strength.

