

**COMPARATIVE STUDY OF REFLECTORS ON A SOLAR TYPE BOX
USES A GLASS COMBINATION COVER AND FRESNEL LENS**

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ABSTRACT

Solar stoves type of boxes with variations of reflective materials have room sizes Cook the same as 42 cm by 31 cm with a total area of 8736 cm². Variations Reflectors used aluminum foil, mirrors and Fresnel's two-millimeter thick lens. The testing is done in the lower and in the upper floors of the building Engineering. Jember state polytechnic. Testing your place Using 3 days of testing below and above starts at 10:00 to 14:00 hours. The highest water temperature was at testing 1 under the reflexive material with High temperatures at 11.10 hours for 64.20 centimeters c. For the efficiency of the highest stoves is found in mirrored reflective materials at lower test 2 at 11.40 hours 11.62 %. Efficiency value is affected by the different temperatures of early water and late water, the solar irradiation received by solar stoves and long process time. Total highest heat transfer is found on a solar stove with mirrored reflectors at lower testing 2 with a total value of moving heat by 152072 km. the value of heat moving is influenced by the value of copper chemicals conductivity The higher, the higher the heat-shift rate.

Key words: solar system types of box, absorbers, efficiency, heat moving.