

PROJECT REPORT ON
“PERFORMANCE TEST ON POLYMER SOLAR FLAT PLATE
COLLECTOR”
SUBMITTED TO



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ABSTRACT

The construction of solar thermal collectors has traditionally relied on the use of materials such as copper, aluminum and glass, which are heavy or expensive, or both. Manufacturing processes require labour-intensive individual assembly of components, and because of their weight, installation is awkward, requiring specialist operators and equipment. These factors incur additional expense. With rising prices of metals, there is increasing interest in alternative materials, such as polymers. These lend themselves readily to mass-production manufacturing and assembly methods, to produce cheaper and lighter solar collectors, which would also make them more attractive to a wider market, especially in temperate climates.

This report presents a review of polymer solar flat plate collector, material used to manufacture it and salient features of it. Performance test on Polymer solar flat plate collector is done and it is compared with Copper solar flat plate collector, and obtained results are discussed.