

6

The performance of a flat plate solar collector with thin absorber is studied. The temperature of the absorber and its variation along the local day time is obtained by solving a heat balance equation. The temperature of the working fluid is also estimated.

The five absorber of different materials: Copper, Aluminum, stainless steel, Glass & Mica are treated. Two cooling conditions at the absorber front irradiated surface are also taken into consideration. Factors its efficiency are revealed.

• Various material used for solar flat plate collector are given below -

- * Copper
- * stainless steel
- * plastic
- * Glass
- * Mica