

## عنوان مقاله:

Study of thermal performance of building roofs in the city of Tehran

## محل انتشار:

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## خلاصه مقاله:

The design of a building can provide the highest thermal comfort in the interior without any mechanical equipment and save energy to a large extent. The roof of a building is an important part for thermal loss. This research studies the thermal performance of 14 conventional roof structures in Tehran city by using designbuilder 4.5. It is found that the polystyrene block performs best compared to other structures. Despite the time and cost required to implement the beam for building roofs, the use of the polystyrene block is recommended. The results indicate that the use of 5 cm of thermal insulation in the structure of the roof results in 5.85% decrease in heat loss during winter and 5.65% decrease during summer. A reverse roof has a more favorable performance on hot days of the year. Also, the performance of .roofing with heat insulation is better than that of the reverse roof in cold days

## کلمات کلیدی:

Thermal Performance, Building Roof, City of Tehran, DesignBuilder, Block Joint

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/861932>

