

#### عنوان مقاله:

COOLING LOAD REDUCTION OF BUILDINGS USING WATER POND ON ITS ROOF AND SIDE INSULATION

### محل انتشار:

پنجمین همایش بهینه سازی مصرف سوخت در ساختمان (سال: 1385)

تعداد صفحات اصل مقاله: 9

## نویسندگان:

MANSOOR TAHERI - Chemical Engineering Department, College of Engineering, Shiraz University, Shiraz, Iran

MOJTABA BINAZADEH ALI NAFEZI KAVE GHODS

#### خلاصه مقاله:

computer program was developed and applied to an enclosure in Shiraz, Iran. The enclosure data were fed into the computer program and calculated hourly inside temperature was compared with experimental taken from this enclosure. Ensuring that the developed software represents the main characteristic of the enclosure, the effect of window orientation and using pond roof and side insulation on reduction of cooling load was examined quantitatively. The cooling load corresponding to the bare enclosure was compared with pond roof and side insulation that has the minimum radiation through the walls. It wasfound that a cooling load reduction of 43.1%, 47.5% and 82.2% may be obtained by using side insulation, pond roof and pond roof with sideinsulation respectively for a good orientation of the .window

# کلمات کلیدی:

Solar Energy, Cooling Load, and Pond Roof

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/5354

