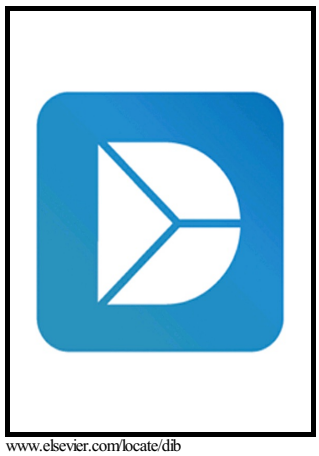
Dataset On The Energy Performance Of Atrium Type Hotel Buildings

Milica Vujosevic, Aleksandra Krstic-Furundzic



www.elsevier.com/locate/dib

PII: S2352-3409(18)30043-XS0378-7788(17)31613-4
DOI: https://doi.org/10.1016/j.dib.2018.01.040
Reference: DIB2107

To appear in: *Data in Brief*

Received date: 29 September 2017
Revised date: 5 January 2018
Accepted date: 16 January 2018

Cite this article as: Milica Vujosevic and Aleksandra Krstic-Furundzic, Dataset On The Energy Performance Of Atrium Type Hotel Buildings, *Data in Brief,* https://doi.org/10.1016/j.dib.2018.01.040

Data in Brief

Data article

Title: DATASET ON THE ENERGY PERFORMANCE OF ATRIUM TYPE HOTEL BUILDINGS

Authors:

Milica VUJOSEVIC
Aleksandra KRSTIC-FURUNDZIC

Affiliations:
Milica VUJOSEVIC, Institute of Architecture and Urban & Spatial Planning of Serbia, Bulevar kralja Aleksandra 73/II, 11000 Belgrade, Serbia

Aleksandra KRSTIC-FURUNDZIC, Faculty of Architecture, University of Belgrade, Bulevar kralja Aleksandra 73/II, 11000 Belgrade, Serbia, Serbia

Contact email:

Milica VUJOSEVIC, milicavujosevic@yahoo.com
Aleksandra KRSTIC-FURUNDZIC, akrstic@arh.bg.ac.rs

Abstract
The data presented in this article are related to the research article entitled "The Influence of Atrium on Energy Performance of Hotel Building" (Vujosevic, M., Krstic-Furundzic, A., 2017) [1], which describes the annual energy performance of atrium type hotel building in Belgrade climate conditions, with the objective to present the impact of the atrium on the hotel building's energy demands for space heating and cooling. This dataset is made publicly available to show energy performance of selected hotel design alternatives, in order to enable extended analyzes of these data for other researchers.
Keywords: Hotel, Atrium, Energy performance, Numerical simulation, Heating and Cooling demands

Specifications Table

Subject area	*Architecture, Energy Efficiency*
More specific subject area	*Heating and cooling demands of atrium type hotel buildings*
Type of data	*Tables, figures, text file*
How data was acquired	*Building energy modeling in OpenStudio software* *Computer simulation using EnergyPlus software*
Data format	*Raw*
Experimental factors	*The four hypothetical model alternatives of atrium type hotel building, and four orientations of one model alternative, were examined and compared in order to find the most energy efficient solution*
Experimental features	*The optimal hotel design alternative were determined*
Data source location	*Belgrade, Serbia, 44.7866° N, 20.4489° E*
Data accessibility	*Data are available with this article*