

# STUDENTS COMPETE TO IMPROVE PERFORMANCE OF BUILDING ON SOUTH AFRICA'S MOST FAMOUS STREET

*Johannesburg. 12<sup>th</sup> Nov 2015.* A student competition has been announced that will see university teams from English-speaking Africa compete to improve the performance of a small building located on South Africa's most famous street, also home to two Nobel Laureates – Archbishop Tutu and Nelson Mandela.

The building is based on the original 1944 design that was used for houses on Vilakazi Street, Orland West, many of which are still occupied today. This house is similar to the original Mandela home.

## Background

The aim is to provide a competitive forum for student members of the Southern and East African Architectural and Engineering Community. It is expected that tutors of relevant courses in Universities in Africa could use this as part of their teaching material or as a case study in environmental and sustainability building design.

Entries will be judged by a Panel of judges headed up by Dr Dru Crawley and members of IBPSA and the CIBSE Building Simulation Groups. The results will be finalised in September 2016 and announced at the **IBPSA-England Building Simulation and Optimization Conference** ( 12 Sept 2016 ) and the awards will be made at the **SAEE Conference** ( Nov 2016 ). Details will be posted on the SAEE, IBPSA, SAIEE and CIBSE Websites.

[SAEE](#) - Southern African Association for Energy Efficiency  
[IBPSA](#) - International Building Performance Simulation Association  
[CIBSE](#) - Chartered Institute of Building Services Engineers  
[SAIEE](#) - South African Institute of Electrical Engineers

## Judging Criteria

Key factors influencing the judges' decision :-

- *accurate* and *intelligent* use of building simulation
- most important are the *thermal* and *visual comfort* of the occupants
- indoor air quality criteria *must* be met ( CO<sub>2</sub> levels or air changes per hour )
- the simultaneous demand and production of on-site energy ( load matching )

Drawings and partially completed models will be made available to teams to speed the simulation process and lighten the load. Prizes will be awarded for a range of achievements. The following Software packages will be made available for use in the competition only after consultation with the local agents :- BSIMAC, DesignBuilder, and IES VE.

## For further information or to register a team contact :-

Press Liaison – Mike Barker ( [mike@BuildingPhysics.co.za](mailto:mike@BuildingPhysics.co.za) )

For information on the modelling software contact :-

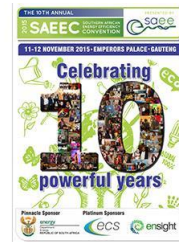
IES - Jeanne Parker-Weekes ( [jeanne.parker-weekes@iesve.com](mailto:jeanne.parker-weekes@iesve.com) )  
 DesignBuilder - Francois Joubert ( [francois@greenplan.co.za](mailto:francois@greenplan.co.za) )  
 BSIMAC - Dr Alec Johannsen ( [alecj@lantic.net](mailto:alecj@lantic.net) )

## Media Partners

### SAEE

Founded in 2002, the ***Southern African Association for Energy Efficiency*** ( SAEE ) is a non-profit coordinating body for energy efficiency in Southern Africa. Their work encompasses an umbrella focus towards the continuous efficient use of energy to support the viability and sustainability of a healthy energy mix and energy efficient businesses.

[ <http://www.sae.org.za> ]



### IBPSA

The ***International Building Performance Simulation Association*** ( IBPSA ) is a non-profit international society of building performance simulation researchers, developers and practitioners, dedicated to improving the built environment. IBPSA have 4200 members around the world.

[ <http://www.ibpsa.org> ]



### CIBSE BUILDING SIMULATION GROUP

The ***Chartered Institute of Building Services Engineers*** ( CIBSE ) *Building Simulation Group* promotes best practice in using building simulation and seeks to improve the accuracy of predicted performance in practice with the aim of designing comfortable and healthier buildings with optimum energy efficiency.



[ <http://www.cibse.org/networks/groups/building-simulation/about-the-building-simulation-group> ]

### SAIEE

The ***South African Institute of Electrical Engineers***, formed in 1909, has +6000 members. Members are professionally engaged in the full range of engineering activities, including academic research, manufacturing, electronics, telecommunications, measurement and control, mining, and power infrastructural services.



[ <http://www.saiee.org.za/> ]