

INTERNATIONAL HOUSING INNOVATION AND SUSTAINABLE ENERGY EFFICIENCY COMPETITION - 2009



ENTRY FORM

1 PARTICIPANT DETAILS					
Company Name or Building System (If applicable):					
Contact Person:					
Postal Address:					
Tel:		Cell:			
Fax / e-mail address:					
2 COMPETITION DETAILS <i>(Mark appropriate blocks with X)</i>					
2.1 HOUSING					
Category to be entered into: <i>(Applicants may enter both housing categories)</i>	Low cost / subsidy Housing < R55000		and / or	Affordable	
Is the alternative building method new in South Africa?				Yes	No
Supply additional information, if applicable:					
Does the rational design have NHBRC approval?				Yes	No
Is there an active Agrement S.A certificate?		Registered No:			No
Is there an active WFTAO (World Federation of Technical Assessment Organizations certificate?		Registered No:			No
ISO certification numbers?					
Indicate which tests have been completed on the product:			Structural strength & stability		
			Behavior in fire		
			Water penetration		
			Condensation		
			Thermal performance		
			Hazardous material		
			Durability & maintenance		
			Acoustic performance		
Other tests:					
Has the building system undergone a social acceptance survey?				Yes	No

2.2 INNOVATIVE ENERGY EFFICIENCY		
Are you entering a new or existing energy efficiency technology?	Yes	No
Has the energy technology been tested/accredited in South Africa?	Yes	No
Indicate which housing category is suitable for the energy technology?	Low Cost < R55000	Affordable
What is the approximate cost of the energy technology?	R	
Indicate type of energy technology:	Building Materials	
	Heating, Cooling, Ventilation	
	Water Heating	
	Lighting	
	Other Equipment	
	Metering / Control of Energy	
	Water Supply / Sources	
	Water Utilization / Conservation	
Should you be chosen as a finalist, would you like the competition organizers to supply a list of energy efficient products to you, to be show cased in your house?	Yes	No

3 COMPETITION CATEGORIES

3.1 CATEGORY 1: SUBSIDY HOUSE

The design, finance and construction of a 40m² subsidy-type (BNG) house to the maximum value of the current South African Government subsidy amount for the top-structure.

3.2 CATEGORY 2: AFFORDABLE HOUSE

This will entail the design, finance and construction of a house with a total cost of up to R100 000 including energy efficiency technology.

NB: The land in both categories is readily available for top structure construction and there are no additional LAND costs to finalists)

3.3 PRIZES TO BE WON IN FINAL ROUND

Category 1: Affordable house – 1st R250000, 2nd R100000, 3rd R75000

Category 2: Subsidy type house – 1st R250000, 2nd R100000, 3rd R75000

4 STRUCTURE OF THE COMPETITION

The competition will be conducted over the following three rounds:

4.1 ROUND ONE: SCREENING

All entries must be received by registered post or hand delivered and will be screened to ensure their credibility and that they qualify for housing innovation and energy efficiency.

4.2 ROUND TWO: DETAIL TECHNICAL EVALUATION

Documentation of successful participants will be submitted to a technical team of experts for a detailed technical “desk top” evaluation. Should any additional information be required, the participant will be requested to submit such within 7 working days, failing after which he/she will be disqualified.

Finalists will be chosen on the grounds of best scores received in round two. They will be given 14 days notice of a compulsory briefing session and site visit to be held at the location in Wellington, Paarl. It is expected that the briefing session will be conducted over a two day period.

Finalists must pay their own way to attend the briefing session. Contractual agreements will be entered into with all finalists.

4.3 ROUND THREE: CONSTRUCTION AND SOCIAL ACCEPTANCE

Finalists will have a two month period in which to source materials, prepare the site and construct their innovative housing designs, all for their own account.

NB: No landscaping will be allowed before the competition has ended. Non compliance will result in disqualification.

Finished products will be inspected and scored on a technical basis by independent professionals to be appointed by the Competition Steering Committee.

Before the final scores are calculated a '**community acceptance survey**' (at no cost to the finalists) will be conducted to test the acceptability of the products in the intended market.

The completed houses will eventually be occupied by beneficiaries who have already been allocated their stands (subdivided land portions and such beneficiaries have a registered right of ownership to those portions).

Housing designs that fail to meet the required structural integrity/method of application or do not meet the specific construction time frame will be demolished at the expense of the entrant and result in disqualification.

Six successful Affordable Housing finalists will be sponsored for an amount of (R45000) being the difference between the Affordable housing construction cost of R100000.

The overall competition score will be based on **Social Acceptance (60%)** and **Technical evaluation (40%)**

NB: The judges' decision is final and no further correspondence will be entertained.

5 COMPETITION CRITERIA

Innovative housing designs entries must include energy efficient solutions that will improve the thermal efficiency and reduce the total energy consumption. Participants must ensure that their entries take the relevant weather conditions into account.

The 12 finalists that obtain the highest score during will be provided with the opportunity to showcase their innovative housing designs whilst undergoing a technical, social and Bank acceptance process to enable finance for an energy efficient innovative housing design and energy product.

Furthermore, all alternative building methods (rational designs) materials and products will be evaluated with the South African National Building Regulations and SABS standards.

The competition will be finalized on the 31st October 2009.

Rounds one and two of the competition will be done on a "points received" basis using the following criteria:

- Quality of design
- Utilisation of space
- Environmental factors
- Fitness for purpose
- Quality of finishes
- Level of maintenance
- Energy efficiency
- Thermal efficiency

- Acoustics
- Kerb appeal / appearance
- Value for money
- Use of material
- Secondary market
- Upgradeability
- Creativity / innovation
- Job creation opportunity
- Product acceptability
- Product popularity

The finished product will be scored as follows:

- Engineering
- Architectural
- Energy
- Quantities
- Value for Money
- Social Acceptability
- Bank acceptance

NB: Conventional brick/block and mortar construction will not be permitted in the competition, so as to stimulate housing innovation, creativity and the use of thermal efficiency and energy efficiency products.

6 DESIGN BRIEF

6.1 SITE LOCATION

As the context of a building is of great significance when addressing innovative housing which is also energy efficient and since the ultimate aim of this competition is to construct an innovative housing design which demonstrates energy efficiency, a real life site location was assigned for the project.

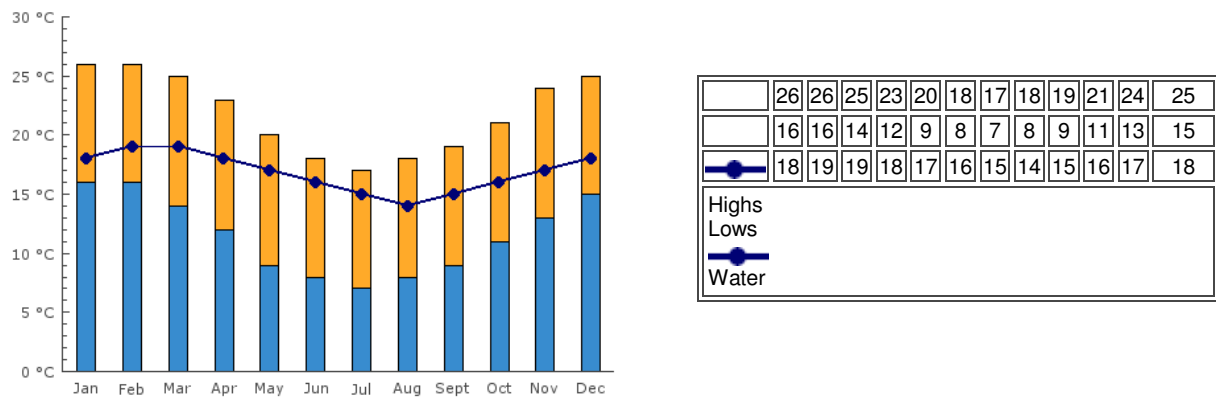
The site, Erf 2220, Wellington is located 60 kilometres from Cape Town It lies at latitude 26° 18' South and longitude 28.00° East.

(The Wellington Town Planning Scheme will apply)

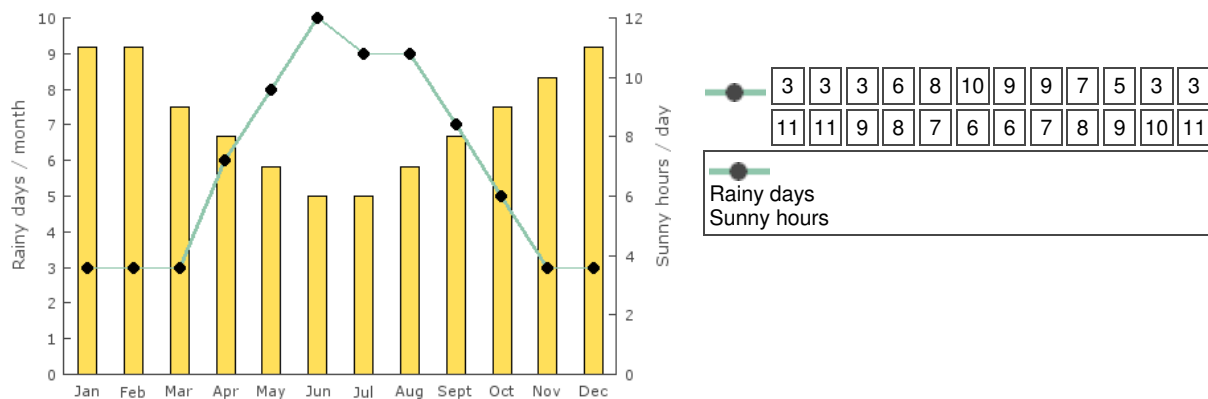
- Single Residential
- No Floor Area Ratio
- 50% Coverage
- Two (2) Storey Height
- 4,5m Street Building Line & 3m regarding all other boundaries
- Number of subdivide portions: 34
- Average size of the subdivided portions is approximately: 150m²
- Gradient of the plot: Level site.
- Geotechnical conditions: Engineer designed foundations.
- 2 Site services: All services available, with tarred road surfaces.
- Perimeter security: The site is fenced with 24 hour security.
- No other applicable parameters

6.2 LOCAL CLIMATE & WEATHER CONDITIONS

Below is an overview of the year's climate and weather data for Welington. It contains the average highest, lowest, and water temperatures



Average rainy days and sunny hours



7 CONSTRUCTION COSTS

7.1 LOW COST (SUBSIDY HOUSING)

Construction cost is limited to the current South African Government subsidy amount of R55000 including engineer designed foundations.

The size of the house must be **40m²** or greater but remain within the construction cost criteria.

7.2 AFFORDABLE HOUSING

Finalists that are allocated an Affordable site must not exceed a construction cost of R100000, including engineer designed foundations

The size of the house must be **50m²** or greater but remain within the construction cost criteria.

8 SUBMISSION OF INFORMATION

Please submit the following information:

- A typical layout drawing
- Detailed design drawing
- One cross-section drawing
- Two elevations drawings
- Typical finishing schedules
- Previous design/construction experience, if applicable
- A description of services with emphases on energy efficiency
- A table of energy end-use savings and thermal efficiency

- Supporting documentation of alternative building method
- Relevant test results (local/international)
- Rational design plan submissions must be prepared by a Professional Engineer.
- Time schedule for construction / erection of alternative building method
- Detailed finishing schedules and specifications
- Proof of calculated construction costs of the proposed house. (QS or architectural estimate)

9 ENERGY PRODUCTS

Applicants will be required to complete the University of Pretoria Energy Ideas application form which can be obtained together with the Competition entry form on the Absa, NHBC and NHFC websites.

NB: Full details of the energy product or material must be submitted together with the entry form.

10 SUBMISSION OF ENTRIES

All entries must reach the Competition Project Manager by no later than Friday 17 April 2009 at 14h00 and can be delivered or posted to:

**The Competition Project Manager
International Housing Innovation & Sustainable Energy Efficiency Competition
Building Technologies
Absa
Ground Floor Block E
Flora Office Park
Cnr Ontdekkers Road & Conrad Street
Florida North
1709**

NB: DELIVERIES MUST BE PLACED IN THE TENDER BOX IN FRONT OF THE RECEPTION DESK INSIDE THE ENTRANCE OF BLOCK E GROUND FLOOR, FLORA OFFICE PARK. (NO LATE ENTRIES WILL BE ACCEPTED).

For more information please contact:

Ms Merryl Benjamin
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