TREEHOUSING

INTERNATIONAL WOOD DESIGN COMPETITION
XIV WORLD FORESTRY CONGRESS
DURBAN | SOUTH AFRICA

2 GRAND PRIZES OF $6,000
2 PRIZES OF $3,000
2 STUDENT PRIZES OF $2,000

REGISTRATION DEADLINE	15 August 2015
SUBMISSION DEADLINE	31 August 2015
WINNERS ANNOUNCED	10 September 2015

WFC2015
XIV World Forestry Congress

Food and Agriculture Organization of the United Nations

DBR | DESIGN BUILD RESEARCH

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TREEHOUSING

INTERNATIONAL WOOD DESIGN COMPETITION
DURBAN | SOUTH AFRICA

THE COMPETITION

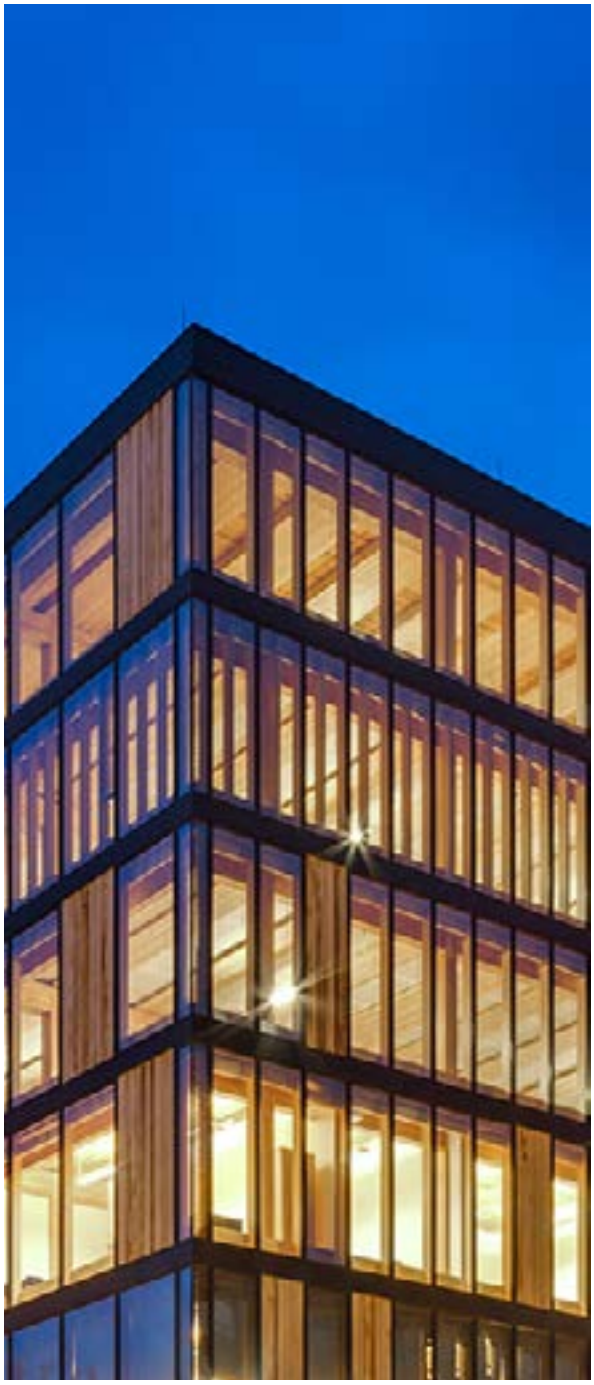
Housing for the world's growing urban population and the threat of deforestation are two of the most significant issues facing humanity today. TREEHOUSING challenges students, professional architects and engineers around the world to develop innovative wood housing and urban building solutions through two distinct open competitions:

COMPETITION 1: TREEHOUSING DURBAN
Design Challenge | Tall Wood Housing

COMPETITION 2: TREEHOUSING GLOBAL
Design Challenge | Affordable Wood Housing

The Food and Agriculture Organization (FAO) of the United Nations has sponsored this ideas competition to offer unique insights into how these two global issues intersect.

COMPETITION 1
TREEHOUSING DURBAN



ELIGIBLE ENTRANTS

Students of Architecture, Professional Architects and Designers

THE CHALLENGE

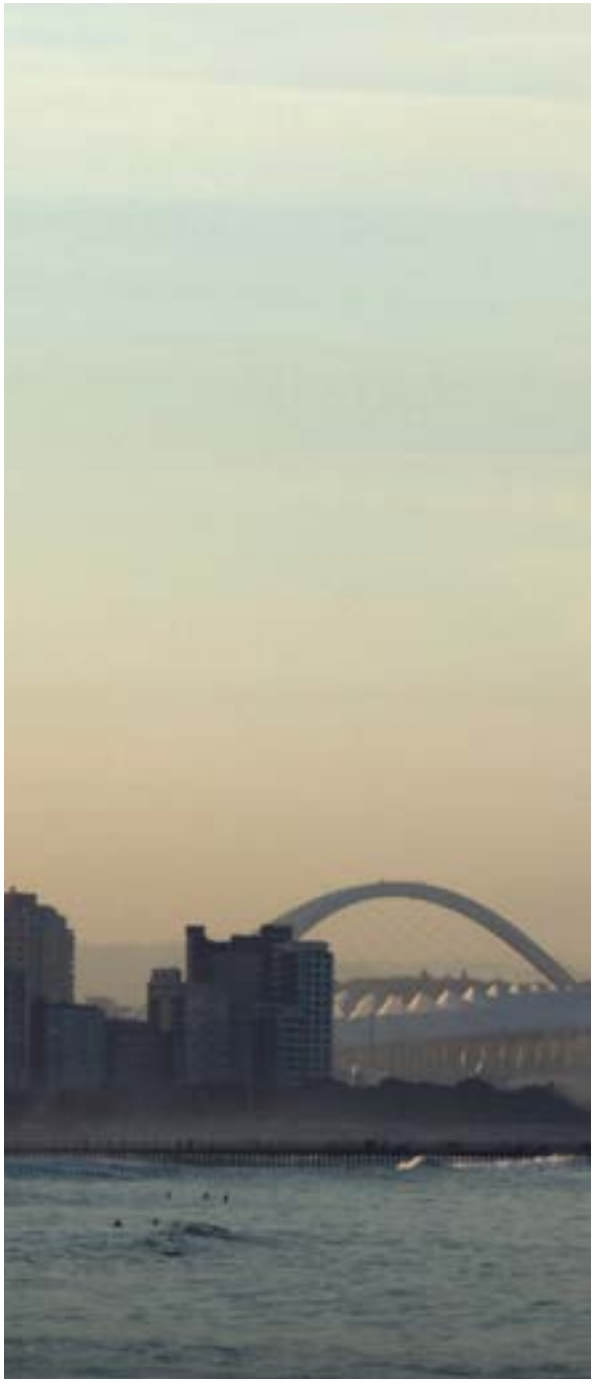
TREEHOUSING DURBAN challenges participants to design a residential and/or mixed-use complex on a site in Durban, South Africa.

The creation of affordable housing is a critical issue in Durban and throughout the world. Entrants are asked to use wood products to design a high-rise solution that addresses the housing needs of the community and integrates with the surrounding urban context. Submissions can include additional program spaces that are relevant to the location (transit, plaza, retail, etc.). Solutions that are replicable and expandable beyond the particular context of the site are encouraged.

Wood materials offer unique construction solutions to address the issue of global urban housing needs. Entrants will be challenged to propose construction systems that draw on the performance characteristics of a variety of wood technologies. Design solutions must use wood as the primary structural system. Any sustainably-harvested wood material or product is possible, even those not yet invented.

An ability to connect the wood construction system and building techniques to the local forest industry within South Africa is preferred but not mandatory. Ideas that will help enhance South African forest management and forest products are encouraged.

COMPETITION 1
TREEHOUSING DURBAN



PROGRAM

The competition does not define a strict building program. We have included a suggested program below but entrants are encouraged to tailor their submission to their perspective, skills, knowledge and experiences with housing.

SUGGESTED PROGRAM AREA

Residential	10,000 sqm
Range of unit sizes	40 sqm / 100 sqm
Public gathering	600 sqm
Commercial space	600 sqm

COMPETITION 1
TREEHOUSING DURBAN

THE CITY

Durban, KwaZulu-Natal, South Africa
(**eThekwini** - from Zulu meaning 'bay / lagoon')

Durban is one of the fastest-growing urban areas in the world. It has a rich and ethnically diverse cultural history. Its port is the busiest in South Africa and also one of the largest in the world.

DURBAN SOUTH AFRICA

COMPETITION 1
TREEHOUSING DURBAN

Corner of Ingcuce Rd and Johannes Nkosi St

THE SITE

97 Ingcuce Rd
-29.852368 E,31.018550S

Site Area — 2280 square meters

The site located at a major intersection near the centre of the city. To the south it is bound by Johannes Nkosi Street and to the east by Ingcuce Road. The north side is bound by a service road (Fountain Ln) and a 17-storey tower.

Across the road is a large taxi rank, part of South Africa's informal, but highly organised, public transport system. The main railway passes under the road adjacent to
the site.

This area of the city is uniquely located, cut off from the much more affluent suburbs to the north by the race course and botanical gardens and cut off from the city centre to the south by the railway. It is located close to the Durban University of Technology, several stadia, the convention centre and the botanical gardens.

The site maintains great views of the city and, at higher levels, the ocean.

COMPETITION 1
TREEHOUSING DURBAN

THE SITE
97 Ingcuce Rd
-29.852368 E,31.018550S
Site Area — 2280 square meters

DURBAN SOUTH AFRICA

COMPETITION 2
TREEHOUSING GLOBAL

1 Library And Community Center, YUNNAN
2 Floating School, MAKOKO
3 Garden Planters, CANADA
4 Courtyard, Essex Museum, CHINA


1


2


3


4

ELIGIBLE ENTRANTS

Students of Architecture, Professional Architects and Designers

THE CHALLENGE

TREEHOUSING GLOBAL challenges participants to design affordable housing on a site of their choosing, anywhere in the world, with a focus on improving and providing global housing solutions in wood.

Design solutions must use wood as the primary structural system. Any sustainably harvested wood material or product is possible, even those not yet invented. Every culture and region of the world has a unique perspective and relationship to the forest that may bring value to the entrants proposed design for this challenge.

Because of the location of the XIV World Forestry Congress in Durban, South Africa, solutions that address issues specific to the African continent are highly sought after.

PROGRAM

The building must provide affordable housing. Permanent housing typologies are encouraged. Solutions may also explore the use of wood in transitional/temporary/ mobile/refugee housing where deemed appropriate. The scale can range from a single home to dense urban structures.

THE SITE

TREEHOUSING GLOBAL is not limited to any particular site or region of the world. Applicants should choose sites appropriate to their individual rural or urban contexts, as well as their unique forests and ecosystems.

SUBMISSION FORMAT

The entrant is required to submit the final project. It must be uploaded through the TREEHOUSING competition website at (www.treehousing-competition.com) by 5:00 pm, CET, on August 31, 2015.

Submissions must be designed on no more than four A2 (portrait format) digital boards.

The names of participants must NOT appear on the boards. All boards are required to be uploaded through the website in Portable Document Format (PDF) or image (JPEG) files.

CRITERIA FOR JUDGING

Criteria for the judging of submissions will include:

- Wood as the primary structural material.
- Creative and innovative use of wood in the design solution
- Successful response of the design to its surrounding context, and successful response to basic architectural concepts such as human activity needs, structural integrity, and coherence of architectural vocabulary.
- Demonstration of the overall environmental benefits including carbon sequestration using wood in the design, plus any other strategies to reduce the design's carbon footprint.

MGA Wood Innovation and Design Centre

REQUIRED DRAWINGS

Each presentation must directly address the criteria outlined in the Design Challenge and Criteria for Judging sections and must include (but are not limited to) the following required drawings. All drawings should be presented at a scale appropriate to the design solution and include a graphic scale and north arrow.

• SITE PLAN showing the surrounding buildings, topography, and circulation patterns

• FLOOR PLANS

• VERTICAL SECTION of the whole building/site sufficient to show site context and major program elements

• DETAILS of the building, clearly showing the wood structural system.

• 3-DIMENSIONAL REPRESENTATION(S), either in the form of axonometric, perspective, or model photographs – one of which should illustrate the character of the project. At least one of these views must be of a significant interior space, and one view must be of the building shown within the neighborhood context.

REQUIRED WRITING

A brief essay (500 words maximum, in English) is required as part of the submission that describes the most important concepts of the design. Keep in mind that the presentation should graphically convey the design solution and context as much as possible, and not rely on the design essay to convey a basic understanding of the project. This abstract is included in the final online submission, completed by the entrant(s) in a simple copy/paste text box.

Image provided by Pinterest "workshop"

THE FUTURE OF WOOD

For thousands of years, solid wood has been used as a building material. Today wood takes on a new role in our built environment as we begin to understand the effects of non-renewable, high energy and greenhouse gas footprint building materials such as steel and concrete. Grown by the sun, wood products are renewable, use relatively low energy to process and sequester carbon dioxide for the lifetime of the product. When sourced from sustainably managed forests, and well-engineered and designed, wood products provide us with safe, healthy, beautiful and durable buildings. With the advent of new advanced wood products and engineering and design approaches, wood is now being re-envisioned in urban environments where larger building scales require new sustainable building solutions. Innovation in sustainable forest management and wood processing combined with advancements in wood design practices can contribute to addressing the needs of the world's growing population. The use of new wood products and materials provides a unique opportunity to not only address the needs of growing urban populations, but also, through improved forest practices and growing markets, to begin to counteract the spreading effects of deforestation. Deforestation represents a significant challenge to the planet as both a large contributor to anthropogenic climate change and as an influence in driving populations to move from rural regions to overpopulated urban areas.

A new vision of safe and efficient advanced wood buildings may help communities revitalize their forest economies, protecting jobs in rural communities throughout the world. Successful wood building solutions and forest management strategies can significantly counteract deforestation and encourage afforestation in many regions around the world.

INFORMATION

SCHEDULE

Competition Announced	May 4, 2015
Registration Deadline	August 15, 2015
Submission Deadline	August 31, 2015, 5pm CET
Jury Deliberations	September 7-8, 2015 (Durban ZA)
Winners Announced	September 10, 2015

CATEGORIES

COMPETITION 1: TREEHOUSING DURBAN
Design Challenge | Tall Wood Housing

COMPETITION 2: TREEHOUSING GLOBAL
Design Challenge | Affordable Wood Housing

AWARDS

First Prize in each category - $6,000 USD
Second Prize in each category - $3,000 USD
Two *additional* student prizes of $2,000 USD will be awarded.
Publication of the top 5 entries in each category.

FAO CONTACT

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CONTACT

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