cool school
design for an extreme climate

building trust
international
introduction

How do you get to school if it’s minus 45 °C outside? How do you gain an education when your nearest school is 20km away?

We are asking you to help us design a ‘Cool School’ for a community in Mongolia.

how?

Submit a proposal for a school building which will act as a safe, comfortable, learning environment for 100 pupils withstanding the extreme temperatures in Mongolia.

A well-designed school environment has a huge impact on a child’s learning. It can affect a child’s academic progress over a year by as much as 25%.

We are looking for a school design which considers lighting, ventilation, environmental conditions, materials, space, comfort, accessibility, adaptability, and aesthetics. This is a chance to shape the future of school buildings across cold regions globally.

Help create classrooms which engage and inspire children, improving their education.
The aim of this design challenge is to:

- Encourage and reward design excellence at a small scale which integrates function, structure, details and the need for education.
- Research, respond to and highlight the unique aspects of designing a school in a freezing climate with the constraints of the site.
- Encourage the employment of sustainable design in all aspects of the proposal.

**Article 26 UN (CRC)**

1. Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages.
2. Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all Nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace.

Building Trust have been asked to assist the Governor of Khovd in providing a new building for an existing school in Mongolia. The current facilities offer 550 children primary school education. However, the school is very old, dilapidated and has no indoor toilets forcing children to use outdoor facilities even in the coldest months. Children go to another school for physical education in winter seasons and in warm seasons, children study outside because the primary school is overcrowded. There is a great need for a new building to support the children of Tsast Altai.

**ideas**

- Use your imagination.
- What materials could you use to create an innovative school classroom. What shapes might react best to the environment? How can a building deal with extreme temperatures in the most economical way? How accessible can the building be? How many functions can the structure have?

...Be creative!

**the school**
Extreme temperature changes from between -45°C and +20°C. 1/3 of the population are children. 35% of people in Mongolia live in poverty. 10x further walk to school than in developed countries. 60% of the country’s land is vulnerable to climate extremes. 10% of children aged 7-14 years are in employment. 35% of the population live and work in rural areas.
considerations

Submissions should consider the following factors:
- climate and weather
- affordability
- local environmental factors and contextual issues
- pupils comfort
- inclusive design
- ability to be further adapted by local community
- how design and construction of proposal can stimulate local economy
- public consultation
- safety
- multi use functionality of building i.e. library, gym and classroom

evaluation

Entries will be evaluated based on the main criteria made up of the following 8 points:
1st Sensitivity to the extreme climate
2nd Ease of construction and ability to replicate on other sites
3rd The design’s originality and aesthetics
4th Sustainable approach
5th Clarity and comprehensibility of the design
6th Cost and affordability
7th Impact and community involvement
8th Intelligent use of space & adaptability

structure

This is a single stage competition with the aim of identifying the most appropriate proposal, which best satisfies the general and specific objectives of the contest.

disclaimer

This is an open international competition hosted by Building Trust International to encourage wider appreciation of school designs in extreme climates. The goal is to generate progressive contemporary design ideas that Building Trust International and sponsors can actively work towards. Please see the terms and conditions on the Building Trust International website for full details and guidelines on the competition structure and governance.
Images: existing rundown school, Jargalant Soum, Khovd, Mongolia
The building you will be designing is to be located at:

Latitude: 48° 0’10.95”N
Longitude: 91°38’21.56”E

The building will be situated within the grounds of Tsast Altai school. The existing school facilities were established in 1950, the school is located in Jargalant soum in Khovd in the west of Mongolia.

Khovd or Hovd is the capital of the Khovd Province of Mongolia. Officially known as Jargalant soum. It is situated at the foot of the Mongol Altai Mountains, on the Buyant River.

With a population of 89,900, Khovd province is home to a diverse range of ethnic groups, including Khalkh, Zakhchin, Torgoud, Kazakh, Ould, Mingad, Durvod and Uriankhay.
special considerations

The design should have a sensitivity to the extreme climate and to the core use of education. Submissions can be the work of an individual or a group. There is no age limit. However, entrants under 18 years of age must be led or entered by someone over 18 years of age. Interdisciplinary teams are encouraged to enter the competition.

those eligible

Everyone! (Well apart from the people listed below.)
You do not have to hold a professional qualification.

those ineligible

Employees, staff, consultants, agents or family members of Building Trust International personnel.

restrictions

There are no restrictions for this competition.

Registration and participation in the competition implies an immediate acceptance by the entrants of all terms & conditions governing the competition.

awards

1st prize: 1 project will be selected as the winning design. Building Trust will seek to find funding and planning for the winning project giving it the opportunity to influence the future of school facilities in Mongolia.

Honourable mentions: 9 designs will be selected by the judges that deserve mention for honourable merit.

publication

The winning designs will receive our media package and tailored press release which in the past has resulted in TV, Radio and national/trade press. We will also feature your design on the websites of Building Trust international and our partners. Connecting you and your designs to millions of interested parties.
schedule

- 23rd January 2015
  Competition Officially Announced
- 6th March 2015
  Final Registration deadline
- 3rd April 2015
  Closing Date for Submissions
- 3rd April to 30th April 2015
  Jury Evaluation
- 1st May 2015
  Announcement of winners to be posted on www.buildingtrustinternational.org and associated sponsors websites.

registration

Early-bird: £50 (23rd Jan - 6th Feb)
Advance: £75 (7th Feb - 27th Feb)
Final: £100 (28th Feb - 6th March)
(Free to those entering from a developing country.)

We define developing countries as one of the World Bank’s lower middle or low-income countries, a full list can be found at: http://www.buildingtrustinternational.org/faq.html

Entrants may register by emailing Building Trust International at: competitions@buildingtrustinternational.org receiving a unique entry number and then proceeding with appropriate payment. All proceeds will go directly to funding this and other Building Trust International humanitarian architecture projects.

payment

Payments can be made by bank transfer with your unique reference number once you have contacted us.

Name of account: BUILDING TRUST
Sort Code: 20-49-76
Account Number: 63659070
ISBN: IBAN GB78 BARC 2049 7663 6590 70
Swift code: BARCGB22

You can also pay securely through mydonate:

https://mydonate.bt.com/charities/buildingtrustinternational
(if you are based in the UK please remember to tick the gift aid box. Thank you!)

deadlines

All entry submissions must be sent via email to competitions@buildingtrustinternational.org by 3rd April 2015 at midnight (11:59 pm-00:00 GMT). Competitors are responsible for the arrival of their proposals within the corresponding deadlines & no proposal will be received 1 day after the date previously stated.
requirements

Submission of entries must be in one PDF document in A2 format. All images contained should be 300dpi and a maximum of four (4) pages can be used to explain your proposal. This file along with text file (detailed below) should be sent to: competitions@buildingtrustinternational.org

**Subject of email:** Subject of the email must be your unique registration number.

**Presentation panels:** You may use up to 4 sheets at A2 format these should be horizontal (landscape.) You must create a PDF of all the sheets as one document (this will ensure that your sheets don’t get separated or lost.)

**Dimensions:** (1 A2 board = 594x420mm ) x4

**File Name:** The zipped image file name must correspond to your unique registration number. (Example: CS3333.jpg where CS3333 represents your unique registration number assigned and sent to you by Building Trust International after a successful registration.)

**Text file:** Any text contained on the boards should also be sent as a separate text file in word format and saved with same name as PDF i.e. CS3333

Please note entries that do not follow the submission guidelines may not be fully entered.
submission info

The presentation technique is open and at the discretion of the entrant. However, it is recommended that your submission includes the following information which reflect the main concept of the design:

- Sketches, perspectives or renders representing your design in use,
- Plans,
- Sections,
- Elevations,
- Any additional diagrams showing how the elements are arranged or materials are used.

The presentation should clearly document the proposed design as well as the approach to the project. Ideas regarding organisation, materials, treatment of the location and the design should be included when considered relevant. This will be used to make rough cost estimates and test the ‘buildability’ of any winning design chosen.

The total area of the project should be included in a part of the image. Any other textual or numerical description should be expressed in English only and it should be incorporated into the graphical presentation of the project.

note:

The entrant’s unique registration number should appear on the upper right side of the image. Do not place your name or company name on any of the competition panels.

Entrants are advised to send their submissions from the email address used for the registration, as submissions from a different or unrecognisable e-mail account might be treated as spam and also prevent us from tracing you in the event we have to contact you.
The Jury for this International competition will be comprised of both professionals and interested parties. Full jury yet to be announced, but will include:

- Members of the Tsast Altai School Committee
- Governor of Khovd, Mongolia
- Jon Hiebert, World Vision Mongolia
- Anna Kleinschroth, GIZ
- Batjargal Batkhuyag, Mongolian Education Alliance
- Batnasan Nyamsuren, UNICEF
- David Cole, Building Trust International
- Toby Maclean, Tall Engineers

The Jury will review the submitted entries based on the competition objectives and from the short-listed entries select the competition winners with a Building Trust International representative overseeing each stage of the process.

The Jury’s decision will be final as stated in the competition’s terms and conditions.
contact

All communications should be through Building Trust International and not any of the other interested parties.

queries

All queries regarding the registration, process, fees or payment should be emailed to: competitions@buildingtrustinternational.org

ownership

All material submitted to this design competition will become part of the public domain. Entrants acknowledge that Building Trust International may exhibit all entries in an online gallery and a selection of entries may be chosen for physical exhibition and/or public display. Building Trust International will make reasonable effort to notify entrants of any public exhibitions of their work through correspondence with the registered contact.

In entering the design competition entrants grant Building Trust International unrestricted license to exercise the entrants' rights regarding their design submissions, including, but not limited to, reproduction, preparation of derivative works, distribution of copies of the design submission and the right to authorise such use by others.

In entering the competition, the registrant and all team members recognise the competition’s program as the intellectual property of Building Trust International and agree to credit the organisation by name in any subsequent exhibition or publication of materials. Entrants will be credited on all online and print material published by the organisers of the competition.

t+c’s

Please see the terms and conditions section at; www.buildingtrustinternational.org/terms.html