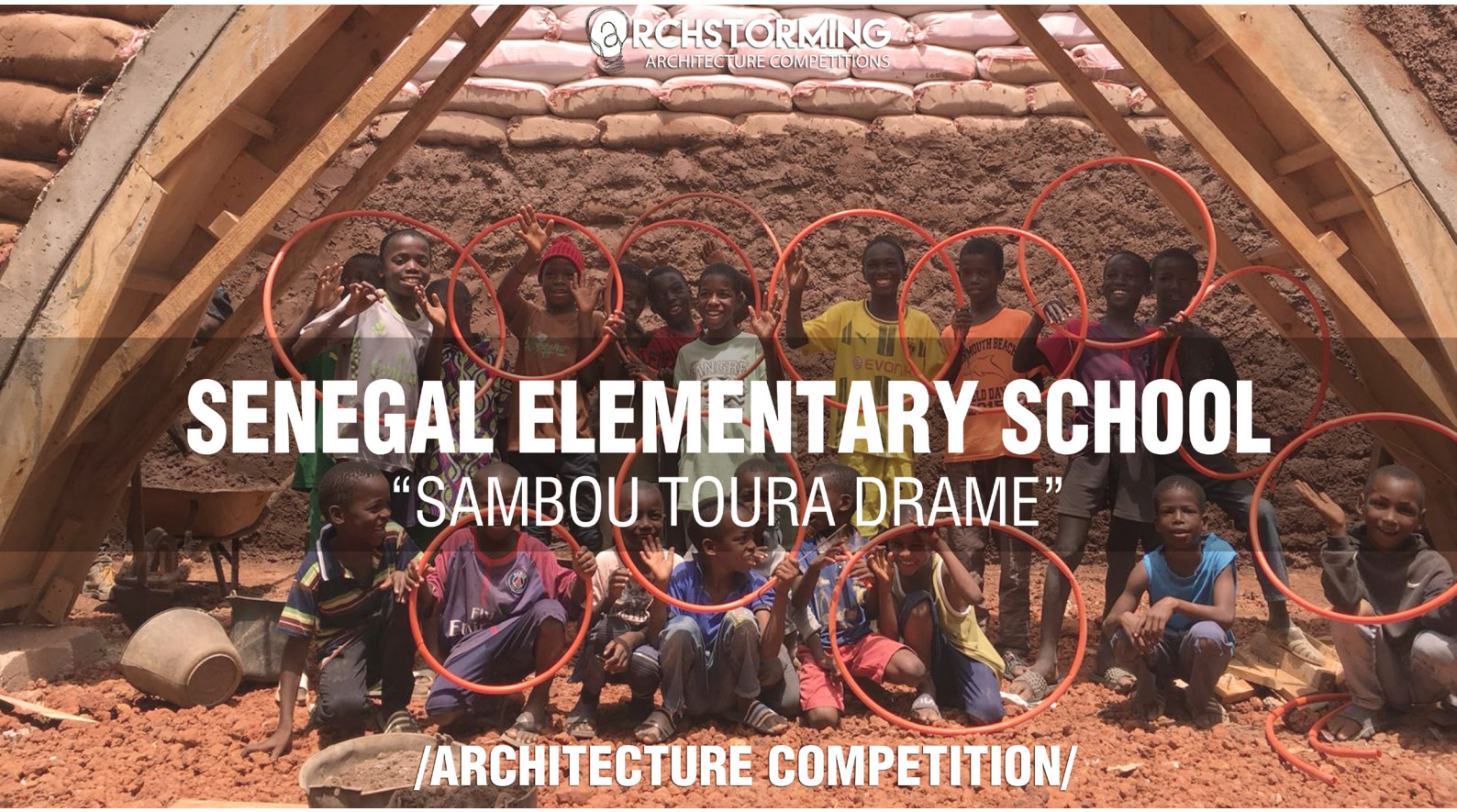


in collaboration with

lbms
let's build my school

INTRODUCTION: LET'S BUILD MY SCHOOL

Archstorming's new competition takes us to Senegal, Africa. We are collaborating in this new contest with Let's Build My School (LBMS), a UK registered charity (#1168814) which was founded in 2016 to build schools in developing countries with a particular focus on remote areas which lack educational facilities.

Beyond delivering structures built using locally sourced, sustainable, recycled materials, LBMS researches and applies construction techniques which do not require any prior technical skills in construction so that the local community may be able to replicate the process and help to further develop their village long after LBMS has left. LBMS gives a high importance to have measurable and lasting outcomes both in making sure that their buildings are used for their purpose, increasing the enrolment of students and that their technique of construction empowers the community by creating more employment in the new building skill acquired.

By providing educational facilities adapted to the local climate, they invest in people and communities to alleviate poverty, creating measurable and enduring economic improvements in poor and underserved areas.

CONTEXT: SENEGAL

Let's Build My School commenced their activities in Senegal (where two of the charity's founders are from) in regions where **only 50% of school-age children have access to education** and where classrooms are often crammed with up to 80 students per class due to the limited number of structures.

Senegal is ranked 164th out of 189 countries in the most recent UN Human Development Index report.

Despite being one of the most politically and economically stable countries on the African continent, the country has a **low literacy rate of about 43% and low enrolment rates in primary and secondary schools; 38% of primary school cohorts dropout before reaching secondary education.**

As a result, many children in Senegal fall victim to child labour, begging or street selling; it is estimated that around 100,000 Senegalese children roam the streets, begging for money and food. According to SOS Children's Village, an organisation working in Senegal since 1976, although the situation is improving in the country, the challenge now is to enable girls to remain in school once they are enrolled (thousands are still being forced into domestic labour as soon as they are old enough to do work).

The fallout of the education crisis on society includes economic distress, violence and crime, civic disengagement and struggling communities.

In consequence of the issues stated, LBMS decided to focus on the educational aspect and build schools in severely lacking areas to give a chance to every child for a better future and participate in the economical development of their country.

THE APPROACH

Despite the fact that educational infrastructure is lacking, the schools recognized by the Government are often built as temporary structures. They are constructed of bamboo walls and zinc roofs.

These fragile classrooms rarely survive the rainy seasons and result in the cancellation of classes and students failing their academic year. LBMS aims to replace these temporary structures with built schools in order to provide a better environment for the children to study in.

They build using locally sourced and recycled materials, such as tyres and sandbags, and act as a research laboratory for innovative and low-cost construction techniques.

In this competition we will research innovative and low-cost construction techniques in order to replace a temporary school with built structures.

Identifying and applying low-cost construction methods is of key importance to LBMS as it allows the community to deploy the skills and techniques acquired wherever and whenever required. This transfer of skills provides them with practical and cost-effective opportunities to expand their village, build homes, and add more classrooms to a school.

LBMS has developed clear and straightforward instructional booklets which they distribute to the construction workers, students attending the school, and curious minds from the local community who happen to pass by during construction.

Their collaborative approach to construction ensures that, in the long-term, local communities benefit from newly acquired skills and practical and cost-effective building methods, which they can implement and replicate. They build ownership from the beginning of each project so that the community members can be supported when using the technique acquired for other projects in the village. They train people to become resources for their community.

LBMS COMPLETED PROJECTS

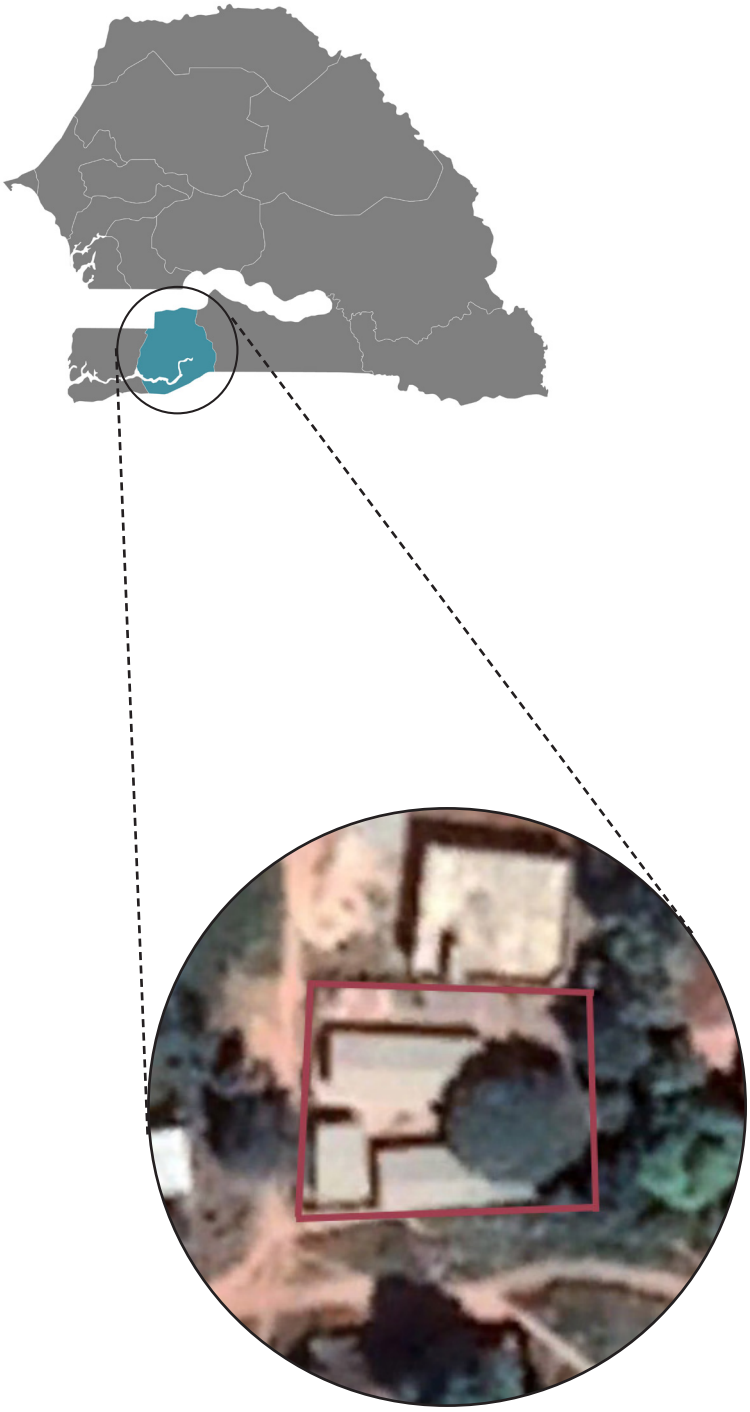
Keur Racine School

LBMS's first project is located in Thies, 72 km away from Dakar, the capital of Senegal. LBMS built a pre-school within the vicinity of the existent high school so that the secondary school students would be able to accompany their younger siblings to school.
The school was built using 196 salvaged tires for the foundation, that were compacted with clay and sand. The walls were erected using 2,000 sandbags filled with locally sourced clay, sand and water.
The roof was elevated from the walls, leaving a significant gap for air and light to pass through.

Niakoulrab School

LBMS's second project has been built in Niakoulrab, a Senegalese village located 30 km away from the capital.
Let's Build My School submitted a proposal to the local community in 2018 to build an elementary school for 420 children. Phase 1 was completed in 2019 and Phase 2 in 2020.
The school was also built using the SuperAdobe technique, developed by the Iranian architect Nader Khalili over two decades ago and involves the utilization of bags which are filled with a mix of local sand, clay and water with a slight proportion of cement as stabilizer.
The design is more complex than the first project and incorporates the use of arches for the windows and doors in order to allow ventilation and natural lighting.

MARSASSOUM SCHOOL: LOCATION



Archstorming is calling for proposals to design an elementary school in Marsassoum, Senegal.

Marsassoum is a town in the Sédhiou Region of Senegal. (Coordinates: 12°49'52.2"N 15°58'37.4"W). The closest city is Ziguinchor, which is located 33 km away (21 miles) from Marsassoum.

It lies on the bank of the Soungrougrou River. The easiest access to the town from Ziguinchor is through a 61km road travel and crossing the river in a ferry.

Marsassoum has an approximate population of 7,000 inhabitants, 90% of which are Mandinka, one of the largest ethnic groups in Africa.

The inhabitants of Marsassoum live mainly from agriculture, fishing and small businesses.

THE SITE

The plot extends to approximately **920 m²**. It has a rectangular shape. The longest side measures **37 m** while the shorter **25 m**.

The plot is completely flat, there is no slope to be considered.

The main entrance is located at the west side. **It can stay where it is now or it can be relocated to the south if necessary.**

There is a big tree in the middle of the plot. It is a *moraceae* and **it has to be kept**. It provides shadow to the kids and they spend a lot of time under it. It has an approximate height of 6,5m and the tree crown's diameter is around 16m.

The plot has the following constructions:

- **Classrooms**: there are two temporary buildings that function as classrooms, they are 17,5m x 6,5m and were built with woven bamboo walls and zinc roof. **These structures will be demolished**.

- **Brick building:** it is located at the South-West corner of the plot. It has two different rooms and it measures 4,4m x 8,4m. It is built with cement walls and metal roof. It is used as a small library and director's office.

- **Latrine module**: located at the South-East corner, it contains two latrines. This module will be replaced with a new one, you can choose to locate it in the same place or move it to a different one.

- **Well**: there is a well at the North-West part of the plot.

CURRENT STATE

Entrance at the right side of the picture. There's a woven bamboo fence in the perimeter.

Brick building at the right, classrooms at the left and after the brick building.

Interior of one of the two bigger classrooms.

Interior of a classroom. Walls made of woven bamboo, zinc for the roof, and a metal panel to close the window.

CURRENT STATE

Exterior of a classroom.

Classrooms and the tree.

Latrine module.

Well at the North-West corner of the plot.

THE CHALLENGE: PROGRAM

In this contest we will build the **Elementary School Sambou Toura Drame in Marsassoum, Senegal.** The goal of this competition is to create a building that can be an example for the rest of the people living in the area, learning from it and its construction techniques and applying what they have learned in future buildings.

The project program will be as follows:

- **Classrooms**: the school needs **7 classrooms**. **The size of each classroom must be 63 m²**, since this is a general requirement of the Government of Senegal. The number of classrooms is fixed and can't be modified in your proposals.

- **Library**: the students are currently using one of the rooms of the block building as a library, but the space is too small and need a larger one. The size of the new library is up to you.

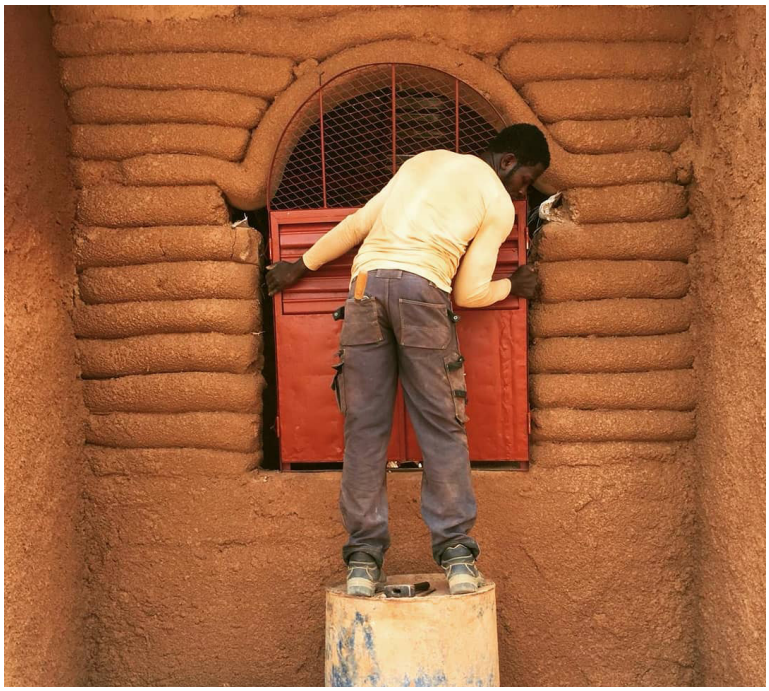
- **Offices**: two small offices are needed, one for the director and another that will be used by the teachers during class breaks or meetings.

- **Latrines**: the current latrine module can be demolished and relocated where desired. The school needs 3 cubicles: 1 for boys, 1 for girls, and 1 for adults.

- **Canteen**: if there's enough space in your design, it would be great to include a small kitchen + dining room. Since the area of the plot is very limited, this space is not compulsory, it is up to you to include it in your proposals or not.

- **Orchard + Corral**: considering that parents do not have enough money to pay the canteen for their children, a great option would be to include an orchard so the school can be self sufficient and grow its own vegetables, as well as raise chickens.

As said, the size of each space can vary depending on your proposal. The plot has an approximate area of 920 m^2 and your design will have to consider that restriction. Having exterior spaces where the kids can play and run is also important and necessary.



THE CHALLENGE: CONSIDERATIONS

In this competition the winning project is going to be built, the chosen proposal will be used as the basis of the final project. The following aspects are important things to consider in your design:

Building techniques

LBMS builds schools using innovative building techniques that are easy to learn and replicate. One of the most important aspects of this competition is to inspire people so they can build their own houses using the same technique.

In past schools, LBMS has used techniques such as walls or foundations made of tyres, or walls made of earth-bags. It is not mandatory to also use those systems, you are free to use the technique you find appropriate, always considering that it has to be **low-cost and easy to build**.

It is important to explain the system you have decided to use in your boards.

Materials

It is fundamental to use **local materials**, since importing them would be too expensive.

The most common materials in the area are **clay, bamboo, sand, tyres, wooden beams and metal sheets**. Clay bricks are fabricated locally.

We will send you a full list of available materials and their prices in the material we'll send you after you complete the registration process. You can include other materials as long as you make sure they are cheap and available in the area.

Sustainability:

In these kinds of communities, where water and food are very scarce, it is fundamental to help people through architecture.

The well drilled in the plot is not providing that much water, so they make very little use of it, mainly to clean the boards in the classrooms. Also, there's a public well which is supposed to get water to the entire community, but it doesn't function properly, cutting off the supply very often. For that reason, it will be very positively evaluated to **integrate rainwater collecting systems in your proposals**.

Regarding electricity, we can find electric supply in the town, so it's not necessary to include solar panels in the school.

Growing their own food in an orchard and having a small corral for chickens can be a great option too to teach kids some basics about agriculture and farming, as well as providing them with food.

THE CHALLENGE: CONSIDERATIONS

Climate

The new school will have to consider the climate of the area. Marsassoum has a very pronounced rainy season that lasts around 4 months, from mid-June to mid-October. During those months it can rain almost every day.

The temperature is quite constant throughout the year. The warmest months are March to May, with a maximum average daily temperature over 37ºC and a minimum of 21ºC. The cool season lasts 3 months, from July to September, with a maximum temperature of 32ºC and a minimum of 17ºC. As you can see, the temperature is quite high all year long. For that reason, it is **important to have ventilated spaces in the school.**

You can check this page to learn more about the climate.

Current constructions

As it is mentioned in previous pages of this briefing, the school already has some constructions on site.

The **current classrooms will be demolished** since they are built as temporary structures.

The **brick building can be kept as it is now, rehabilitate it and integrate it into your new project, or demolish it**. It is up to you.

The **latrines can also be demolished or kept**. If you decide to keep the current building, make sure it is restructured into three different spaces (one for boys, one for girls, and one for adults).

The big tree located in the middle of the plot must be preserved.

Construction phases

The school will be built in **two phases**. That allows the NGO to fundraise for the first part and start building while they fundraise for the second part. Ideally both constructions will take place with a difference of no more than a year between them. It is up to you to decide which part of the program belongs to phase 1 and which one to phase 2.

Budget

The budget for the school is 80.000€ (52 million CFA Franc). That is the total price for the construction, including construction materials, construction tools, labor and other expenses.

It is not necessary to reach to maximum budget, if your design manages to be cheaper, that will be positively evaluated.

A list of price references, along with a site plan, will be sent after registration.

COMPETITION DETAILS

ELEGIBLITY

Any architecture student or professional architect can participate in SENEGAL ELEMENTARY SCHOOL: Sambou Toura Drame, regardless of their nationality. Likewise, people from other disciplines can also participate, such as engineers, philosophers, sociologists, photographers, etc. It is not necessary to have an architect on the team, although it is recommended.

Teams may be formed by a maximum of four (4) members and a minimum of one (1).

All team members must be 18 years of age or older.

The registration fee must be paid per team, regardless of the number of members (1-4 people).

In the event that a team or participant wants to participate with more than one proposal, it will be necessary to register twice (or as many times as proposals will be submitted), paying the full price corresponding to each registration.

Under no circumstances may jurors, the organization or persons directly related to the jury participate in this competition.

AWARDS

Prizes totaling 10.000€ + CONSTRUCTION, broken down as follows:

1st PRIZE
6.000 €
+
PROJECT CONSTRUCTION

2nd PRIZE
2.000 €

3rd PRIZE
1.000 €

SPECIAL HONORABLE MENTION
500 €

SPECIAL HONORABLE MENTION
500 €

+10 HONORABLE MENTIONS

In addition, the winning projects or finalists will be published in magazines, blogs or architecture web pages, social networks or the Archstorming website.

*Depending on the country of residence of the winners, the prize may be subject to the withholding or payment of taxes foreseen in the law of that country.

COMPETITION DETAILS

CALENDAR

AUGUST 5, 2020	EARLY REGISTRATION BEGINS
SEPTEMBER 2, 2020	EARLY REGISTRATION CLOSES
SEPTEMBER 3, 2020	REGULAR REGISTRATION BEGINS
SEPTEMBER 30, 2020	REGULAR REGISTRATION CLOSES
OCTOBER 1, 2020	ADVANCED REGISTRATON BEGINS
OCTOBER 28, 2020	ADVANCED REGISTRATON CLOSES
OCTOBER 29, 2020	LATE REGISTRATON BEGINS
NOVEMBER 25, 2020	**SUBMISSION DEADLINE**
NOVEMBER 25 - DECEMBER 21, 2020	JURY DECISION
DECEMBER 22, 2020	WINNERS ANNOUNCED

*No submissions will be accepted after the general deadline indicated above: 23:59:59 Los Angeles time (UCT / GMT-7) or PDT.

PAYMENT
Registration fees will depend on the registration date, and will evolve as follows:

EARLY REGISTRATION: **60€ + VAT**
REGULAR REGISTRATION: **80€ + VAT**
ADVANCED REGISTRATION: **100€ + VAT**
LATE REGISTRATION: **120€ + VAT**

VAT: 21%

Registration process must be completed on the official Archstorming website. In order for the registration to be successful, the team must pay the fee corresponding to the registration date. Once the registration and payment process have been completed, there will be no refunds.

PAYMENT METHODS
Visa, Mastercard, Discover and American Express credit or debit cards may be used. The Archstorming team will not have access to credit card details. Please provide the information on the card as it appears on it.
Likewise, payments are accepted through Paypal.

REGISTRATION
Inmediately after registration and payment, the Archstorming Team will send a confirmation email to the email entered in the payment form. It will include the work material (pictures, site plans, etc.), as well as the registration number. This number must be placed in a visible spot on the team's competition board, preferably the lower right corner.
At the time of submission of the proposals, the registration number will be required to identify the team.

http://www.archstorming.com/register.html

COMPETITION DETAILS

SUBMISSION MATERIALS

Participants must submit **two (2) A1 format boards** (594x841 mm or 23.4x33.1 inches) oriented either landscape or portrait with the registration number in the lower right corner.

The content of the boards is open, as long as the idea that the participants want to communicate is clearly expressed. However, it is **important to detail the proposal with the materials and constructive systems thought**. The boards must be delivered in JPEG or JPG format and the file name must be the registration number provided by the Archstorming Team (eg 432465423-1.jpg and 432465423-2.jpg for the two boards)

In addition, **one (1) description of the project no longer than 400 words** must be submitted. The buget for the building has to be included in this document and doesn't count in the 400 words. It must be submitted in PDF format and the file name must be the registration number provided by the Archstorming Team (eg 432465423.pdf)

All the materials must be submitted in the Submit section on the Archstorming's website.

http://www.archstorming.com/submit.html

EVALUATION CRITERIA

The jury will evaluate the projects based on the objectives stated in the pages 11, 12 and 13 of this briefing. Specifically, it will be evaluated if the project meets the requirements in program, building techniques, materials and sustainability. Also, if it considers the climate of the region, if it is possible to build it in two phases, and if it doesn't exceed the budget.

The jury is free to add other criteria that they consider important for the creation of the house.

A total of 50 proposals will be selected for the final round. Among the 50 finalists, the jury will choose the winner, the second and third place, the 2 special honorable mentions, and the 10 honorable mentions.

FAQ

You can check the most common questions in the corresponding section on the Archstorming website:

http://www.archstorming.com/faq.html

Also, during the competition, all questions sent by email will be answered individually and uploaded to the section of the website mentioned above.

COMPETITION DETAILS

INTELLECTUAL PROPERTY AND COPYRIGHT

All the projects that win a monetary prize will become property of Archstorming, and therefore give Archstorming all rights to the materials from that moment on. Archstorming reserves the rights to use any of the participating projects for exhibitions and publications, digital or paper catalogues and dossiers.

Archstorming will publish all materials given appropriate attributes to the authors.

Archstorming reserves the right to modify the proposals and text in order to better adapt them to any publication format, without changing the essence of the proposal itself.

The participant is responsible for using copyright-free images. Archstorming is not responsible for the use of protected images by the participants.

NOTES

Archstorming reserves the right to make any changes in the rules of the competition (dates, requirements, etc.). It is the obligation of the participants to check on a regular basis the website of Archstorming to verify if the Terms and Conditions or the competition information have been modified.

Let's Build My School is in charge of the project construction. Archstorming is collaborating with the project but not responsible of the school construction. If for any reason they finally cannot build it, Archstorming will not be responsible of the fact.

Archstorming is not responsible for any research done by participants in the area.

The breach of the norms and terms defined in this briefing or in the Terms and Conditions of the website of Archstorming will result in the immediate disqualification of the team without any refund of the payments made.

Archstorming reserves the right to cancel this contest in case it does not reach a minimum number of participants, defined in the Terms and Conditions. In that case, Archstorming will return the full amount of registration fees to the participants enrolled at the time of cancellation.

http://www.archstorming.com/terms.html