

*Translation from Romanian*

*\*Logo: Romanian Order of Architects*



ORDINUL  
ARHITECTILOR  
DIN ROMÂNIA  
BUCUREȘTI



# “HOME FOR HUMANITY”

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**DESIGN BRIEF**  
**ARCHITECTURE COMPETITION**



## **Design competition for the realization of an affordable housing project, respectively “EUR 20,000” housing and “EUR 30,000” housing, built on a voluntary basis.**

The promoter of the contest is **Habitat for Humanity Romania**, a non-governmental organization that works to create “*a world where everyone has the opportunity to live*”. Starting 1996 up to date, the organization has built, rehabilitated and repaired over 5,000 homes for low-income people in Romania. More than 70,000 people have benefited from disaster reduction and advocacy programs and campaigns. The work system is based on intense cooperation with local authorities and private companies, on working with volunteers and donations, both at national and international level. Internationally, the organization works in over 70 countries and has built so far about 30 million homes, being the largest non-profit builder in the world.

The organizers of the contest are **Habitat for Humanity Romania** and **Bucharest Territorial Branch of the Romanian Order of Architects**, through **Bucharest Architecture Annual 2020**. The Romanian Order of Architects is the professional organization of architects, whose mission is to increase the quality of the architectural product. The Bucharest branch supports all efforts made to increase the quality of social housing and construction designated to vulnerable families. The Bucharest Architecture Annual 2020 aims to provide opportunities for architects by getting involved in multidisciplinary projects, oriented towards social and civic architecture.

The beneficiaries of Habitat for Humanity Romania are economically vulnerable people who are offered a housing solution through the Habitat system, which means that, in most cases, *families reimburse part of the cost of the house for a period of 20 years, without interest and without profit*. The monthly tranches paid by the beneficiary are modest (they do not exceed 70-80 EUR/month), and the funds thus collected go to the Humanity Fund, which is used exclusively for the construction of other affordable housing for beneficiaries of Habitat for Humanity Romania programs. Should special situations occur, such as natural disaster response programs or in the case of serving families in conditions of extreme poverty, Habitat for Humanity Romania donates the houses.

The contest aims to find housing solutions adapted to the context, conditions and production possibilities of Habitat for Humanity Romania. Specifically, the contest aims **to identify two solutions with a budget limit of EUR 30,000 and EUR 20,000 respectively**. Through the competition, four such homes will be initially built in the commune of Poduri, in Bacău County, being intended for vulnerable families.

### **OBJECTIVES**

Habitat for Humanity Romania aims to implement a pilot project in Romania in order to build 4 affordable houses, built in a special volunteering regime, combining the creativity and quality of architectural design with functional, construction, economic and social constraints specific to living in vulnerable communities.

The phrase “affordable housing” will mean a cheap, low-cost construction, financially affordable housing for a family with limited financial means.

## STAGES

The Habitat for Humanity Romania approach will be structured in two stages, only the first representing the object of this contest.

### **Stage 1: Pilot project** – building 4 houses in the commune of Poduri.

The solutions contest aims at designing two housing solutions, the construction cost of which is EUR 30,000 and EUR 20,000, respectively. The practical goal of this contest is the construction of four houses starting with April 2021. Two houses from each type of solution will be built - two houses of EUR 30,000 and two houses of EUR 20,000 respectively - so as to serve four vulnerable families from the commune of Poduri, Bacău County.

### **Stage 2: Solutions integration in the Habitat for Humanity Romania program.**

In the event that the effective implementation of the solutions in the pilot project proves to be functionally viable and constructively and financially feasible, but also adapted to the specific work of the organization, Habitat for Humanity Romania may decide to integrate these solutions into a wider program. In this way, in the long run, more families in poor living conditions could be helped. Thus, the pilot project can provide a model of good practice at national level for addressing affordable housing, emergency situations housing and social housing.

It should be mentioned, however, that this second stage is not the object of the solutions contest, its implementation being dependent exclusively on the subsequent financing possibilities of the organisation Habitat for Humanity Romania.

## Context

Romania is the most backward country in the European Union in terms of social housing and affordable housing. It is estimated that over 3 million people need a decent home. Also, over 20% of the current housing stock is in a state of severe degradation. The social housing fund in Romania does not reach even 1% of the total housing stock, and the social housing policies undertaken by the Romanian state have been practically neglected for years. Private developers target mainly the bankable segment of the population, practically leaving an important layer of the vulnerable population without a housing solution. Some of them live legally, but in sub-standard conditions, without access to utilities and overcrowded, others are even owners, but they cannot preserve their homes, being often in danger due to severe degradation of the building, and some others live in informal situations. Under these conditions, the need for housing of people who cannot access a decent house in market conditions is increasing.

At the same time, minimal living is a topic that does not have much adherence neither to the public, nor to professionals in Romania, being associated with the failures of socialist planning. The contemporary practice of minimal living, through the Tiny House movement or through co-housing, is to be taken into account and adapted to local conditions and topic requirements.

## PARTNER FAMILIES

The population segment to which this Habitat for Humanity Romania project is addressed consists of families in various degrees of housing and social vulnerability. In the selection of partner families, Habitat takes into account, cumulatively, three criteria:

1. Families in urgent need of decent and affordable housing. They are usually families who live in difficult, precarious conditions, and who, most of the time, are facing other social or medical vulnerabilities.
2. Families with low revenue, that earn a maximum of 60% of the national average income respectively, which does not allow them to buy, rent or build a house.  
The maximum revenue of 60% of the national average income is calculated at household level.
3. Families who are willing to volunteer to build their own house or to build their neighbours' houses. Habitat for Humanity has a standard ("sweat equity") through which each family will contribute with a total between 200 and 600 hours of voluntary work to build its own house or other houses within the community.

Families reimburse a small part of the housing cost, for a period of 20 years, at a cost subsidized by over 50%, without interest and without profit, always taking into account the financial possibilities of the family. The funds thus collected go to a "revolving fund", respectively the "Fund for Humanity". This fund is exclusively and 100% intended for the construction of other homes, for other vulnerable families. In some justified cases, such as post-disaster interventions or in situations of extreme poverty, homes are donated. Habitat for Humanity uses mainly the designation of "partner family" and not "beneficiary", because families served become equal partners, through their voluntary contribution to the erection of houses ("sweat equity") and also through financial contributions in helping other people in need.

Both standard homes are intended for people with very low incomes. In the case of the EUR 30,000 housing, a family with a small nucleus will be taken into account, with the possibility of enlarging in the future, and for the EUR 20,000 housing, a space will be designed for a single-parent family who is found in difficult living conditions and who needs minimum conditions.

In configuring the solutions, the competitors will take into account the following constraints, specific to the work system of the organization:

### 1. Accelerated construction using volunteers.

The specific of Habitat for Humanity is to build using volunteers, in a record time. The best example is the Big Build project. Within [Big Build 2019](#) ten houses were built in five days, and in [Big Build 2017](#) 36 houses were also built in 5 days. The concept of accelerated construction usually takes into account a group of 25 volunteers for each home. At the end of the five days, the houses are fully completed on the outside, and on the inside up to the gypsum board stage. It is worth mentioning that within the *Big Build* concept, works are carried out both before the event and completion works after the event, with qualified construction workers. Thus, before the event, all the works involving land systematization, foundations and some more complex subassemblies are carried out (for instance: roof farms). After the event, interior works (finishes, installation works) are performed using qualified personnel.

For the contest, the participants will take into account a full construction scenario, starting from the hypothesis of structuring in three series of accelerated construction with volunteers, each of 5 days. Breaks of about 10-15 working days are envisaged between the series. Competitors will present an accelerated construction process flow, according to Annex 2.6 - Accelerated construction process flow, so that the full objective is achieved, namely the “turnkey” housing.

## **2. Construction system – wood structure.**

The supporting structure (including the frame) will be made of wood, a friendly material for working with volunteers and suitable for accelerated construction processes (without wet processes that can delay execution). Also, the lower price is an important element. The height regime is ground floor. The house cannot have a basement and the partial attic conversion can be taken into account at most, taking into consideration all the complications that occur when working with volunteers at heights over five meters. The dimensions and details are left to the discretion of the competitor who will determine the degree of complexity of the solution and will correlate it with the estimate.

Houses must be designed so that they can be easily placed on several types of sites, without changing the volume of the building, facades and interior spaces, the only change being that of the foundations and the way the house is placed on the ground and connected to utilities. Therefore, the project will be designed so that everything that involves a part built above the +/- 0.00 level, must remain unchanged through repetition on other lots. Houses cannot have cellars, balconies, arches, vaults or other architectural elements with a high degree of complexity, which increase costs and make it difficult to build with volunteers.

## **3. Functions and areas**

They can be included in those of a studio (EUR 20,000 house) and a standard apartment (EUR 30,000), according to the Housing Act no. 114/1996, taking into account also the provision of 10% discount mentioned in table 1.a, according to the law. It can also be taken into account that, in the case of the minimal home, the living room is a multifunctional room and the kitchen takes over many of the current activities of the family. In fact, minimal living means that most spaces are multifunctional and that each area is usable for basic needs.

## **4. Estimate**

We recommend that, for the contest, the project to be designed in collaboration with structural and installation engineers in order to reach a realistic solution from an economic point of view. The estimate will represent an important judging criterion in the selection of the winner, and for the contest it is recommended to submit an **estimate** made in collaboration with a specialist in the field. In fact, the estimate will be the means of verification for compliance with the ceilings of EUR 30,000, respectively EUR 20,000/house. A margin of exceeding the maximum limits of up to 10% is accepted, without downgrade.

For a unitary approach to the estimate, the organizer has prepared *Annex 2.5 - Consolidated estimate*, in the form of an **Itemised estimate of works and expenses**, which complies with Decision no. 907/2016 on the stages of elaboration and the framework content of the technical-economic documentation related to the investment objectives. Only the expenditure related to chapter 4.1 Constructions and installations will be considered in the ceiling imposed by the budget. This consolidated estimate contains the structure of the works and expenses included in the budget limit. The lack of a consolidated itemised estimate of works and expenses is a reason for exclusion from the competition. The cost ceiling is considered **VAT included**. Expenditure related to “profit” and “financial overhead” will not be included in this cost ceiling.

## 5. Architectural quality

The current perspective on architecture for social situations and vulnerable people, made in difficult conditions, is that it has a poor quality of architectural design. This contest seeks to obtain projects that fight against this mentality. The winning solutions will have to creatively and sustainably combine the functional, constructive, budgetary and social constraints with a good quality of architectural design and housing in general. The inscription in the particular rural context of our theme can offer a distinct touch to the solutions, however the project must be designed so that in the future it can be easily inscribed in relatively different contexts from other rural or periurban areas in southern and eastern parts of Romania.

The contest is built on the idea that a difficult framework needs a creative response in order to deal with very particular situations and to achieve its humanitarian goal. Prestigious examples can be found in our profession at least starting with Hassan Fathy and Christopher Alexander, going through the Rural Studio experiments and up to the latest Pritzker Prize winner, Alejandro Aravena.

## 6. Coupled housing

Competitors are encouraged to submit coupled housing solutions, this being, from the experience of Habitat for Humanity Romania, an optimal measure of cost efficiency. The recommended coupling is in the formula: large dwelling coupled with small dwelling. If competitors consider other coupling options or a formula by which sequencing is possible, they can be illustrated by a diagram.

## 7. Special requirements

It is necessary to adapt the solution in such a way that it approaches the [Nzeb](#) standard, which will be implemented starting next year. Special attention will be paid to the aspects related to the long-term maintenance of the building. The finishes must allow the performance of maintenance works by oneself and with low costs.

## 8. Parcellation and urbanistic context:

The competitors have at their disposal: the geotechnical study, topographic study, cadastre, orthophoto map, town planning certificate and land parcellation related to the land from Poduri commune, Bacău county.

In view of the stage 2 consideration, we specify that, in general, the standard lots on which Habitat for Humanity builds houses are similar to those in the pilot stage.

## 9. Utilities

For the contest, the competitors will consider the following technical-urban public equipment: electricity, running water and sewage connection. At the site proposed for the pilot, as in most Habitat for Humanity Romania sites, there is no gas supply network. All the utilities listed above will be available at the property boundary, being provided by the local public authority free of charge. The completed work, at the time of implementation, must include:

- electricity network at the property boundary. It is necessary to build the use network from the meter to the house, with all the elements included: meter, wiring, etc;
- running water network at the property boundary. It is necessary to build the network between the property boundary and the house, with all the elements included: manhole for individual water meters, pipes, etc.;
- wastewater disposal network at the property boundary. It is necessary to create the use network between the house and the septic tank common to the modules provided in the town planning certificate, with all the elements included: manholes, pipes, etc.

For the heating of the house, the assembly of a centralized installation with a solid fuel heat generator (wood-burning fireplace) and an electric domestic hot water boiler will be considered. Other innovative solutions are also accepted. We recommend that the heating system to be individual, so that each home is independent.

## HYPOTHESES SPECIFIC TO HABITAT FOR HUMANITY ROMANIA

In designing the housing solution, the following working principles, resulting from the previous experience of Habitat for Humanity Romania and the nature of the program, will be taken into account. These hypotheses are indicative, the competitors being free to come up with other ideas in this regard.

### Cost efficiency

Habitat for Humanity is currently counting on several functional models of affordable housing construction. However, the current model reaches a cost that exceeds the ceilings set by this contest. Some of the cost-effective methods which can be considered are the following:

- identifying the optimal model of the foundation solution (isolated foundations, continuous foundations, piled foundations, etc.). We believe that one of the best solutions for reducing costs is to think of an efficient foundation solution.
- the houses do not have cellars, balconies, arches, vaults or other architectural elements with high complexity, that increase the costs and make it difficult to build with volunteers.
- optimizations can be made to the structure part.

## **Incremental approach and “Core house”**

The Core House concept is that of a home that can be later expanded by the family as it grows. The technical project considers the whole from the very beginning. The incremental approach involves the completion of a set of basic works (for instance: 75-85%) and the beneficiary will subsequently complete and finance the difference of works/subdivisions by oneself.

## **SOCIAL PROGRAM AND COPYRIGHT**

The “Home for Humanity” project is a social-humanitarian program that has no commercial dimension. It is based on the fundamental and voluntary contribution of volunteers, and the constructions are made by involving some beneficiaries with whom the organization develops a long-term relationship. Also, in many cases, part of the construction materials is provided by sponsors. At international level, the practice for projects of this nature is that the copyright of the designer be assigned by mutual agreement, with the obligation to comply with the project by the organization. It is considered that the “Home for Humanity” project is a participatory one that does not involve profit. Moreover, it brings civic input to vulnerable communities and individuals, observing the similar practices worldwide, which is why the copyright will be assigned under the conditions set out in **Annex 2.4 - Design contract**. Thus, a humanitarian initiative will be taken into account to support the construction of housing for vulnerable people.

## **MATERIALS REQUESTED**

**Drawings** - The projects will be paginated horizontally on two A0 drawing sheets, with white background, saved in ‘.pdf’ format, 300 dpi resolution. These will include the following:

1. a site plan at a scale of 1:200.
2. plans of all levels 1:50, furnished in two variants.
3. coverage plan at a scale of 1: 100.
4. two specific sections and all facades at a scale of 1:50, as well as specific details, at choice, which describe the technical solutions considered by the project.
5. four to six perspective and axonometric images of the objective.
6. a diagram and a short descriptive text of maximum 300 words that will describe how the houses will be built by the volunteers, as a brief assembly scenario for the proposed solution.

**Written materials** - Each project will include the following, in ‘.doc’ format:

1. Two consolidated estimates (EUR 20,000 housing and EUR 30,000 housing) according to the model in Annex 2.5;
2. Accelerated construction process flow, according to the model in Annex 2.6;
3. Explanatory text on the drawing sheets, saved separately.

The lack of estimate will automatically lead to disqualification.

## Assessment criteria

### A Compliance with the functional, technical needs and coherence of the architectural proposal

- A1 The quality of the architectural concept - maximum 30 points
- The creative and functional concept of the proposal - maximum 20 points
  - Solutions for adapting to the accelerated construction regime - maximum 10 points
- A2 The quality of the technical solution and its compliance with the requirements of the theme - 25 points
- quality of the proposed structural system (ease of execution, possibility of building with volunteers) - maximum 15 points
  - quality of detailed solutions, quality of elements of sustainability and compliance with Nzeb standards - maximum 10 points
- A3 General estimate - 20 points
- presence and detailing of all estimate elements - 10 points
  - the realism of the proposal - 10 points

### B Added artistic value of the proposal

- B1 Architectural quality of the proposal - 25 points
- the quality of the architectural image of the object, but also the possibility to make groups of houses - 10 points
  - the degree of innovation of the proposal - 15 points

Total: 100 points

## Additional references

Material	Details
RECORDER Documentary on the Habitat for Humanity impact in Romania	<a href="#">Follow link</a>
Documentary about Habitat for Humanity Romania partner families	<a href="#">Follow link</a>
Big Build 2017 movie: 36 de case in 5 zile ( <i>36 houses in 5 days</i> )	<a href="#">Follow link</a>
Big Build 2019 movie: 10 case in 5 zile ( <i>10 houses in 5 days</i> )	<a href="#">Follow link</a>
Photographic documentary from Habitat for Humanity Romania projects	See the specialized section from the contest website page
Nzeb	<a href="#">Follow link</a>

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