



ECOHOUSE SYSTEM The construction system for total psychological well-being

Cost-effective system with structural costs below 20-50% compared to traditional systems

Contraction in construction time by up to 50% compared to traditional systems

Architectural originality and maximum design versatility in the favorite colors

House zero liters, with operating costs close to zero for isolated walls and ventilated

Operations with unskilled labor for the simplicity of the system

System only with the guarantee of durability for the colored blocks in the mass

Seismic structural safety for the dovetail joints integrated from reinforced concrete

Ecology and energy savings since the construction with reduced transport costs





ECOHOUSE SYSTEM provides:

- 1) PRODUCTION of concrete blocks with fixed or truck-plant
- 2) DESIGN in very short time
- 3) THE CONSTRUCTION with local labor very quickly
- 4) COMPONENTS of industrialized construction and easy to apply
- 5) WALLS FREE in modular panels easy pitching
- 6) CHANNEL FRAME perimeter for the passage of all plants
- 7) PLANTS total wastewater recovery
- 8) SYSTEM for energy independence.



B 12



B 24



B 24-1



B 24-2

B 24-5



B 24-10



The ECOHOUSE SYSTEM is based on only 4 blocks: B 8, B 12, B 17 and B 24 with a view of the face surfaces or switch on rough stone effect.

- 1) PRODUCTION of concrete blocks made with materials and local labor, allows the local production costs, saving on transport and logistics Km. Zero.
- 2) DESIGN based on technological innovation combined with the engineering of components, allows the simplification and customization of any construction.
- 3) THE CONSTRUCTION with local labor minimizes the costs and speed of execution.

4) COMPONENTS OF DEALING or developed system solutions allow simple and easy implementation.

4a) CONTINUOUS FOUNDATIONS with perimeter curbs to exploit a large contact surface evenly distributed, creating a totally chained construction.

4b) EXTERIOR WALLS. Only four thicknesses of blocks well allow different thicknesses of walls 15, from 8 to 64 cm, but most of the houses is built with only 1 type of coupled block. The interspaces 10 to 30 cm at the center of the walls filled with insulating material available locally increase the insulation of the walls for optimum comfort.

The walls consist of two coupled blocks present on the external facades of the 4 cm interspace which serves as VENTILATED WALL on the outside and as a passage of the installations on the inner wall.

The curved walls to allow masonry blocks with any radius of curvature of concave and convex both for construction and for fences and earth retaining walls that can be made with the same blocks, solid or pierced without the need for pillars or armor.

4c) CEILING are manufactured directly at the construction site with modular components, self-supporting and manufactured without the need for props and formwork allow the practicability and the immediate construction in a few hours.

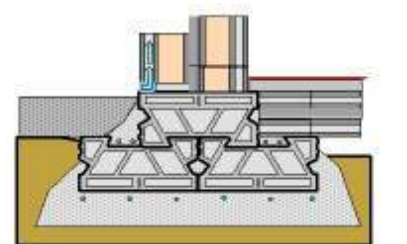
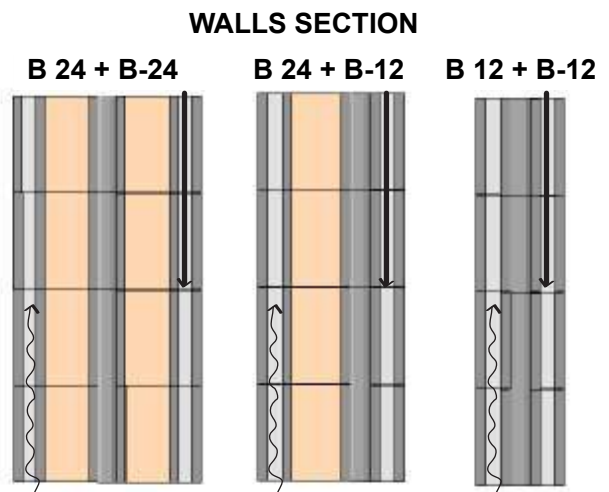
4d) FLOORS. The construction system bringing all plants in the CHANNEL FRAME inserted in the frame under the ceiling, the floor completely free from all the pipes allowing floors laid directly on the floor with insulation in pleasure.

4e) ROOFS. From the flat roof insulated with reflective resins nanotechnology to sloping roofs of all shapes and types with insulated panels, photovoltaic and thermal panels for energy self-sufficiency.

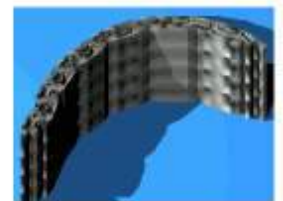
4f) OUTDOOR FRAMES knobby directly on the wall to the stop, without subframe and thermal bridges, due to the geometry of the blocks.

4g) DIVISIONS AND INTERIOR DOORS. Can be made with 8 cm thick blocks or The WALLS system FREE with insulating panels with sheets of drywall glued on Styrofoam blocks, it facilitates the use of sliding doors inside the walls without the overall dimensions of the swing doors.

4g) INDOOR PLANTS. CHANNEL FRAME included in the scope of all the rooms in addition to containing the illumination LED strips allow the passage of all electrical, plumbing, the sevcies, ventilation and air conditioning of the premises.



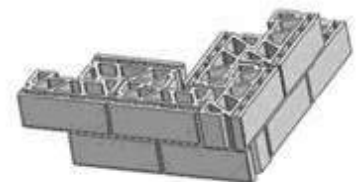
SECTIONS FOUNDATION CONTINUE



CURVE WALLS MASONRY



CURB WALL B12 + B12



4h) **CONDITIONING.** The great insulation of the building system allows you to minimize the heating and cooling of homes with simple fans or with easily integrated Centralized Mechanical Ventilation with Heat pumps powered by solar panels and combustion systems.

5) **FREE WALLS.** Are prefabricated walls that allow the open space with the placement of interior walls to taste, rapid installation and versatility of environments.

The **WALLS FREE** monoblocks are self-supporting without metallic frames, composed of sheets of plasterboard or other material on the outer sides and internally by insulating panels, with upper and lower side hooks and profiles with sealing functions and baseboards.

The **WALLS FREE** have insulation characteristics and absorbency phono superior to traditional brick walls of which retain the solidity and monolithic consistency without the vacuum and the plasterboard vibrations of the walls as well as facilitating the insertion of the sliding doors in the walls **IKONA**.

6) **CHANNEL FRAME.** Multifunction channels located between the wall and the ceiling like traditional plaster. They consist of sections that contain LED light strips for lighting that is modular and colorful host at the opening inner space to work freely, all the plant required the building, electrical, plumbing, services and the channeling of Centralised Ventilation Mechanics and air conditioning.

7) **SEWAGE TREATMENT PLANT AND RECOVERY TOTAL WASTEWATER.** Facilities that recover gray water with aerobic process and waste water with anaerobic process in independent tanks, that fully recycle and purify the house as water for the toilets and for watering gardens and orchards. The system is modular from single house to entire neighborhoods or countries greatly simplifying the sewage system and aqueduct.

8) **SYSTEMS FOR ENERGY INDEPENDENCE.** All buildings are designed in every part as "PASSIVE HOUSE" or better as buildings that tend to reduce to zero the costs of energy, with both solar thermal and photovoltaic, and where possible, with wind turbines, hydraulic, endothermic and costs maintenance over time as specified on the site.

