

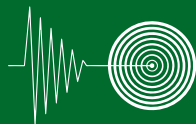


geohouse system

foundation, walls and water management



Earthquake
proof



Hurricane
proof



Fire
resistant



Water
resistant



HIGH PRODUCTIVITY SYSTEM FOR LOW COST HOUSES



Geo House System is a construction method to build
Low Cost houses of variable size

high productivity



GHS SYSTEM

advanced technology
permits the
construction of multiple houses
in a short period of time

fast construction



The simplicity of the
materials allows the fast
construction of houses with
precise deadlines

costs reduction



Thanks to the short
construction time and the
possibility to reuse the
system, it is possible to reduce
construction costs

easy to install



Thanks to the
modularity and the simple
installation of the system, the
work is easier and faster even
for not skilled workers

complete system



With **GHS SYSTEM** it
is possible to build customizable
houses, depending on the needs
of the families

healthy house



Thanks to the creation
of a ventilated foundation, the
house will be healthy and safe

TYPES OF HOUSES



The systems modularity permits the creation of any type of house, customizable for specific needs and requirements

SOME OF OUR GREAT OFFERS



50

square meters

**2 bedrooms
1 bathroom**



80

square meters

**3 bedrooms
1 bathroom**



100

square meters

**3 bedrooms
2 bathrooms**



120

square meters

**4 bedrooms
2 bathrooms**



50 sqm



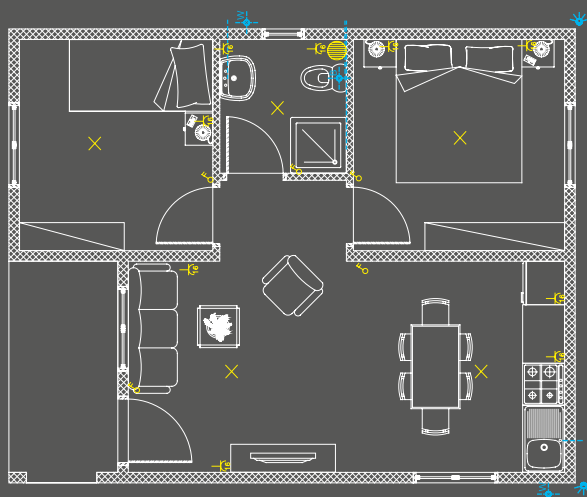
Small but spacious enough







50 sqm houses are small but at the same time they are provided with all the comforts and the necessary spaces for a family of 3/4 people. A small patio is also built in the house hallway. It can be used as relaxation area or to further enlarge one of the adjacent rooms.

50 sqm house composition



Patio (relaxation area)	5 m ²
Living + kitchen (dining and living room)	21 m ²
Bedroom (single/double)	8 m ²
Bedroom (double)	9 m ²
Bathroom (shower + sink + wc)	3 m ²



-  Switch
-  Ceiling spotlight
-  Power socket
-  Boiler
-  Blackwater disposal
-  Greywater disposal
-  Drainpipe
-  Water pipe

STANDARD

Basic equipment of the house

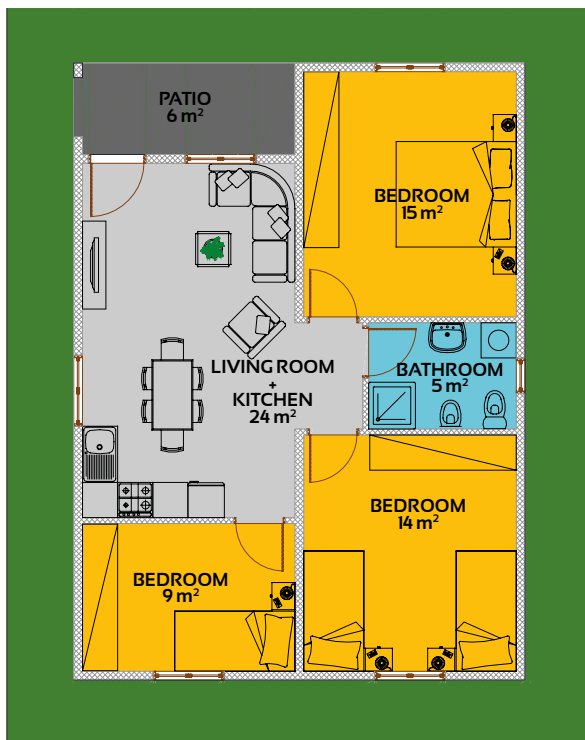
WINDOWS AND DOORS FRAMES	
/entrance door 100 x 210 cm	No.1
/internal doors 90 x 210 cm	No.3
/windows 120 x 120 cm	No.4
/windows 60 x 60 cm	No.1
ELECTRIC SYSTEM	
/light spot	No.5
/switches	No.5
/power sockets	No.9
HYDRAULIC SYSTEM	
/water connections	No.5
/blackwater disposal	No.1
/greywater disposal	No.2
/boiler	No.1
/washbasin unit with mirror	No.1
/wc with external shower	No.1
/shower hose	No.1
/glass shower cabin	No.1
FINISHING	
/internal colour	white
/external colour	plain
/smooth concrete floor	-
COVER	
/insulated panels	-
/gutters	No.2
/drainpipes	No.2

OPTIONAL

Custom equipment on request

PHOTOVOLTAIC SYSTEM	
/3 kW	-
/6 kW	No.3
TV SYSTEM	
/aerials terminals	-
DRAINAGE	
/greywater installation	No.1
/blackwater installation	No.1
TILES	
/stoneware bathroom	-
/stoneware floor	-
OTHER	
/mosquito nets	-

80 sqm



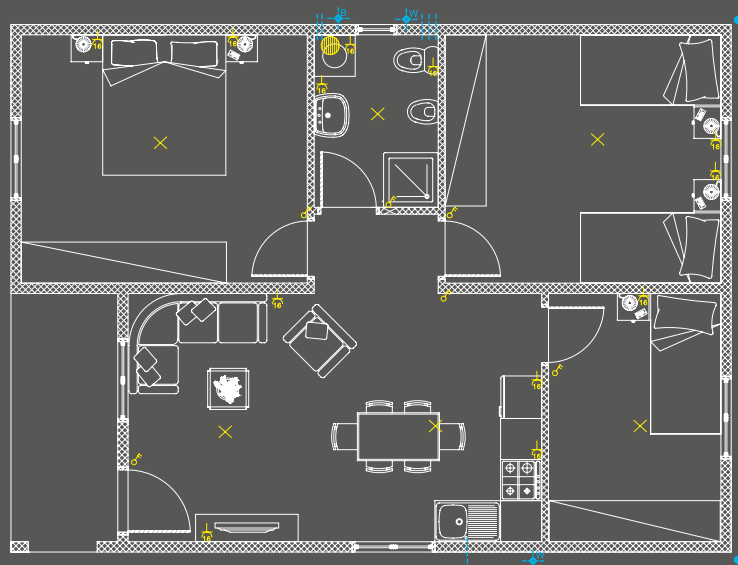
The ideal house









The ratio between rooms size and inhabitants is perfect. This **80 sqm house** has been built for 5 people with a large living room and a

bathroom provided with all the needed services. The patio in the hallway is an additional area that can be used as you prefer.

80 smq house composition

Patio (relaxation area)	6 m ²
Living + kitchen (dining and living room)	24 m ²
Bedroom (single)	9 m ²
Bedroom (double)	14 m ²
Bedroom (double)	15 m ²
Bathroom (shower + sink + wc)	5 m ²



-  Switch
-  Ceiling spotlight
-  Power socket
-  Boiler
-  Blackwater disposal
-  Greywater disposal
-  Drainpipe
-  Water pipe

STANDARD

Basic equipment of the house

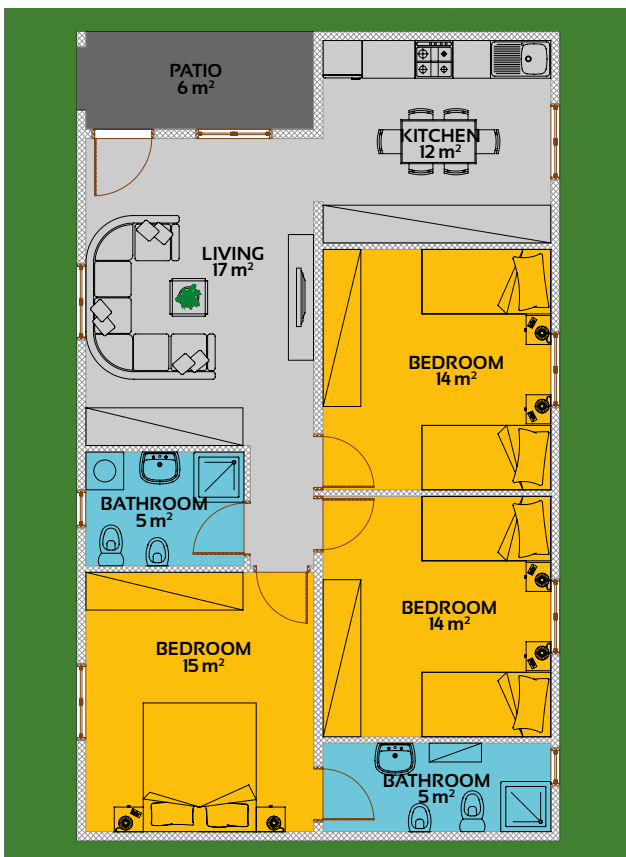
WINDOWS AND DOORS FRAMES	
/entrance door 100 x 210 cm	No.1
/internal doors 90 x 210 cm	No.4
/windows 120 x 120 cm	No.5
/windows 60 x 60 cm	No.1
ELECTRIC SYSTEM	
/light spot	No.6
/switches	No.6
/power sockets	No.12
HYDRAULIC SYSTEM	
/water connections	No.6
/blackwater disposal	No.1
/greywater disposal	No.2
/boiler	No.1
/washbasin unit with mirror	No.1
/wc with external shower	No.1
/bidet	No.1
/glass shower cabin	No.1
FINISHING	
/internal colour	white
/external colour	plain
/smooth concrete floor	-
COVER	
/insulated panels	-
/gutters	No.2
/drainpipes	No.2

OPTIONAL

Custom equipment on request

PHOTOVOLTAIC SYSTEM	
/3 kW	-
/6 kW	-
TV SYSTEM	
/aerials terminals	-
DRAINAGE	
/greywater installation	-
/blackwater installation	-
TILES	
/stoneware bathroom	-
/stoneware floor	-
OTHER	
/mosquito nets	-

100 sqm



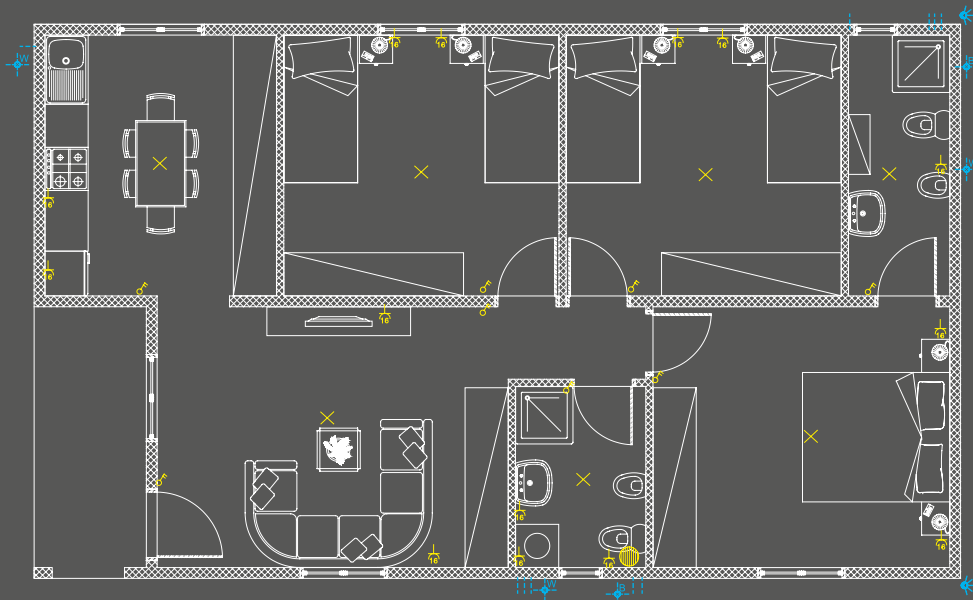
Separate kitchen and living room









Here the house size and the spaces start to become larger. A 100 sqm house can accommodate up to 6 people and the kitchen is separated from the living room in order to create two living areas during the day. There

are two bathrooms: the first is placed in the master bedroom and it is equipped with the main services, the other is for common use and is provided with all the needed equipment.

100 sqm house composition

Patio (relaxation area)	6 m ²
Living (living room)	17m ²
Kitchen (dining room)	12 m ²
Bedroom (double)	14 m ²
Bedroom (double)	14 m ²
Bedroom (double)	15m ²
Bathroom (shower + sink + wc)	5 m ²
Bathroom (shower + sink + wc)	5 m ²



-  Switch
-  Ceiling spotlight
-  Power socket
-  Boiler
-  Blackwater disposal
-  Greywater disposal
-  Drainpipe
-  Water pipe

STANDARD

Basic equipment of the house

WINDOWS AND DOORS FRAMES	
/entrance door 100 x 210 cm	No.1
/internal doors 90 x 210 cm	No.5
/windows 120 x 120 cm	No.6
/windows 60 x 60 cm	No.2
ELECTRIC SYSTEM	
/light spot	No.7
/switches	No.7
/power sockets	No.14
HYDRAULIC SYSTEM	
/water connections	No.10
/blackwater disposal	No.2
/greywater disposal	No.3
/boiler	No.1
/washbasin unit with mirror	No.2
/wc with external tank	No.2
/bidet	No.2
/glass shower cabin	No.2
FINISHING	
/internal colour	white
/external colour	plain
/smooth concrete floor	-
COVER	
/insulated panels	-
/gutters	No.2
/drainpipes	No.2

OPTIONAL

Custom equipment on request

PHOTOVOLTAIC SYSTEM	
/3 kW	-
/6 kW	No.3
TV SYSTEM	
/aerials terminals	-
DRAINAGE	
/greywater installation	No.1
/blackwater installation	No.1
TILES	
/stoneware bathroom	-
/stoneware floor	-
OTHER	
/mosquito nets	-

120 sqm



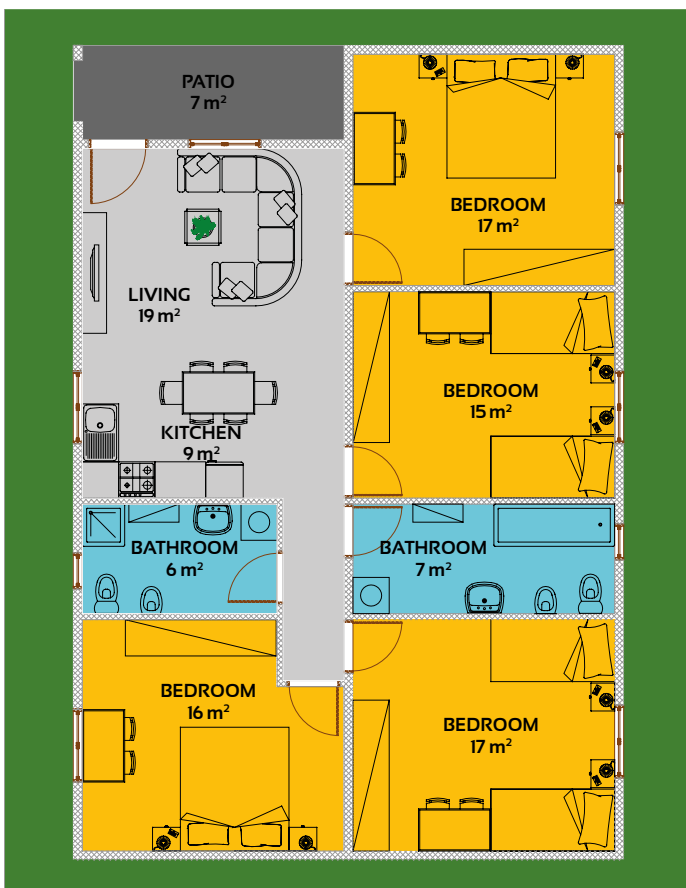
Suitable for very large families

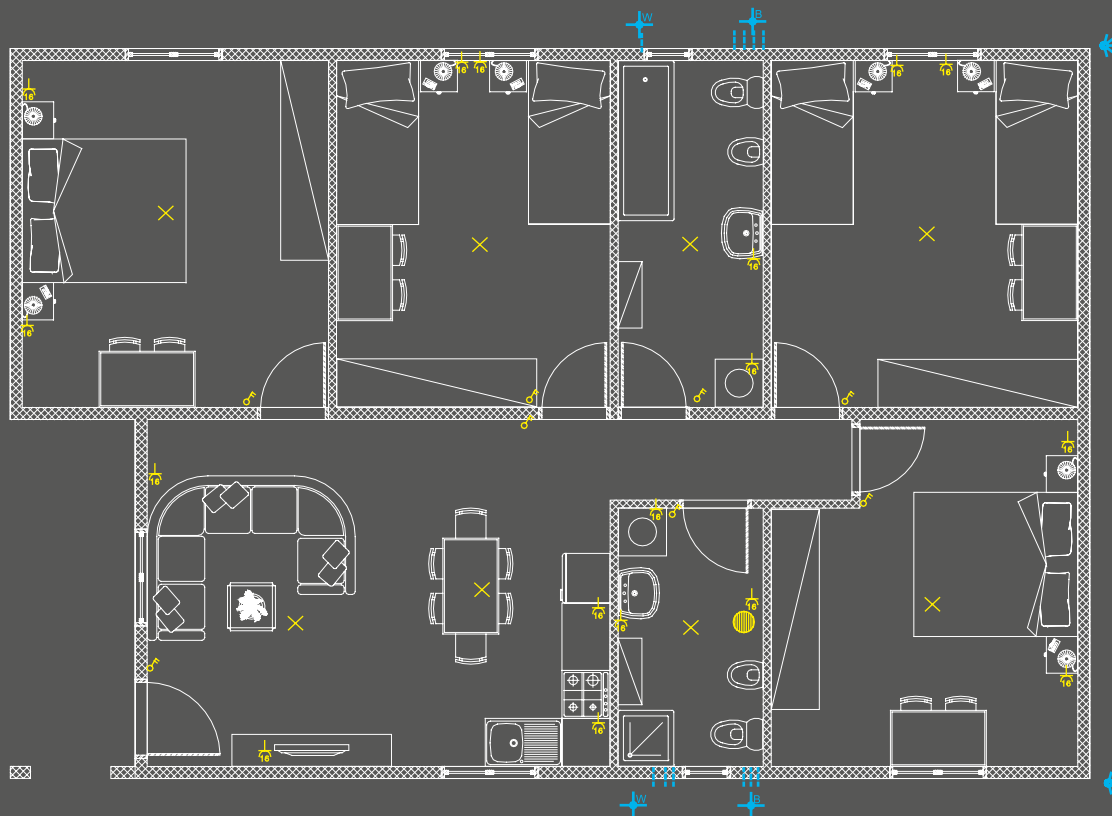
This **120 sqm house** is designed for large families. It has many rooms and a smaller living room that however can be expanded









taking advantage of the patio. Moreover, it is equipped with two bathrooms for common use, both provided with all necessary comforts.

120 sqm house composition

Patio (relaxation area)	7 m ²
Living + kitchen (dining and living room)	28 m ²
Bedroom (double)	15 m ²
Bedroom (double)	16 m ²
Bedroom (double)	17 m ²
Bedroom (double)	17 m ²
Bathroom (shower + sink + wc)	6 m ²
Bathroom (bath + sink + wc)	7 m ²





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STANDARD

Basic equipment of the house

WINDOWS AND DOORS FRAMES	
/entrance door 100 x 210 cm	No.1
/internal doors 90 x 210 cm	No.3
/windows 120 x 120 cm	No.4
/windows 60 x 60 cm	No.1
ELECTRIC SYSTEM	
/light spot	No.5
/switches	No.5
/power sockets	No.9
HYDRAULIC SYSTEM	
/water connections	No.5
/blackwater disposal	No.1
/greywater disposal	No.2
/boiler	No.1
/washbasin unit with mirror	No.1
/wc with external shower	No.1
/shower hose	No.1
/glass shower cabin	No.2
FINISHING	
/internal colour	white
/external colour	plain
/smooth concrete floor	-
COVER	
/insulated panels	-
/gutters	No.2
/drainpipes	No.2

OPTIONAL

Custom equipment on request

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/3 kW	-
/6 kW	No.3
TV SYSTEM	
/aerials terminals	-
DRAINAGE	
/greywater installation	No.1
/blackwater installation	No.1
TILES	
/stoneware bathroom	-
/stoneware floor	-
OTHER	
/mosquito nets	-

FOUNDATION MODULO SYSTEM



Modular non-reusable system for the construction of ventilated foundations used as a physical barrier between the ground and the building

light



As the formwork is made of plastic, it's very light and can be handled and placed manually, without need of cranes or mechanical lifting devices

fast



MODULO SYSTEM allows the creation of foundation slabs in just 7 hours

modular



The formwork have just to be placed next to one another in order to create the base for the pour of the crawl space

rising damp



To be separated from the ground means to avoid the rising damp coming from the soil through the floor

monolithic



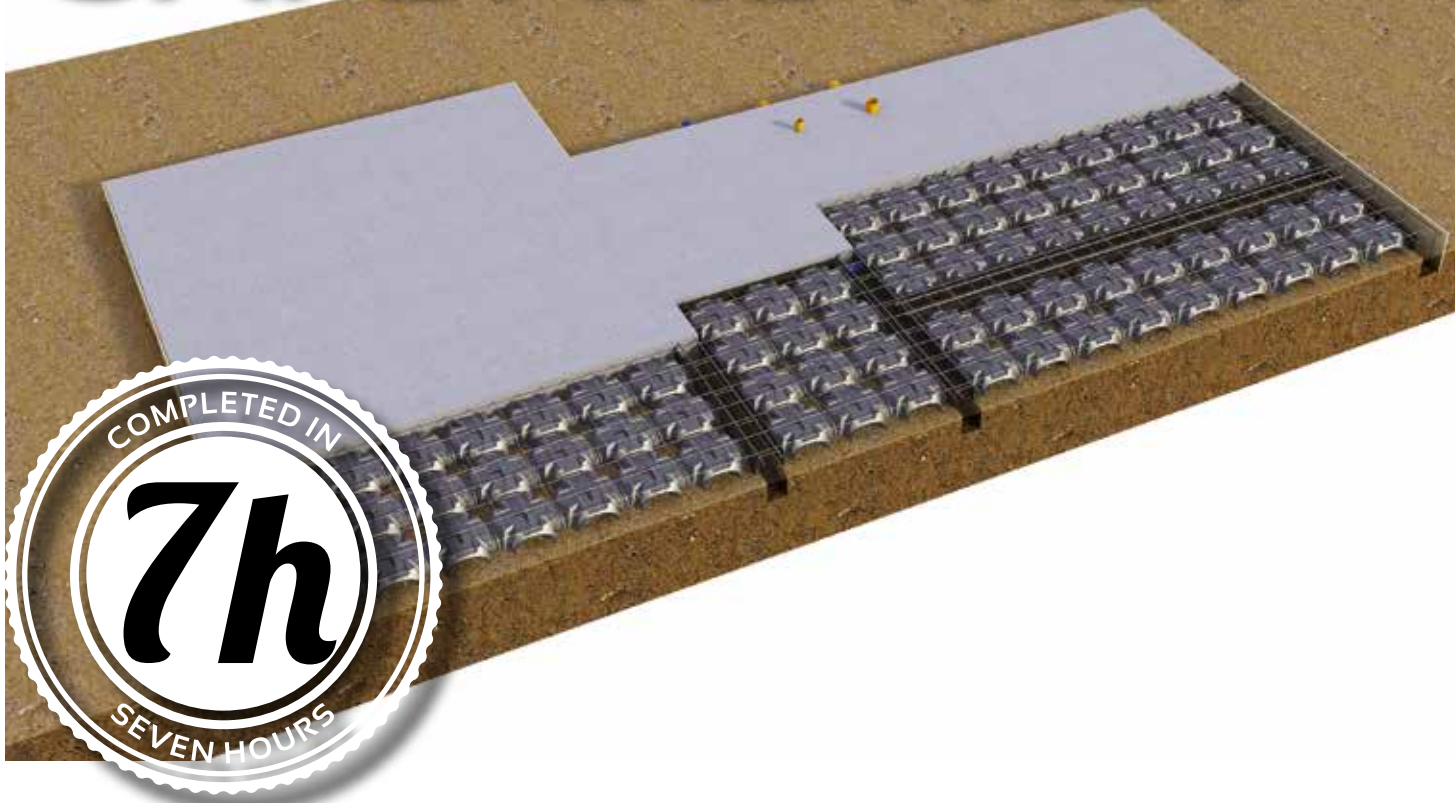
GEOBLOCK allows the construction of monolithic foundation structures with an excellent structural behaviour

health



Thanks to the creation of a ventilated foundation, the house will be healthy and safe

INSTALLATION TIME SAFE AND FAST



**FOUNDATION TRACING
AND SOIL COMPACTION**



EXCAVATION & PLACE OF FOUNDATION BEAMS FORMWORK & REINFORCEMENT CAGES



PLACE OF MODULO SYSTEM FORMWORK AND OF THE UPPER REINFORCEMENT MESH



SINGLE POUR OF CRAWL SPACE AND FOUNDATION BEAMS



FINISHED FOUNDATION



FINAL RESULT - GEOHOUSE

GEOPANEL SYSTEM WALLS FORMWORK



The only light, reusable and modular formwork system for concrete wall production

light



Weighting just 11 kg, **GEOPANEL** can be handled quickly on-site without having to use cranes or mechanical lifting devices

fast



Light and easy to assemble, it can be installed by a single person

modular



All elements are 60 cm long and only the elements needed for the pour are assembled and used

reusable



GEOPANEL is cost effective as it can be used more than **100 times**

dismantling



Concrete doesn't stick to plastic, thus dismantling is extremely easy, and the form can be cleaned using just a little water, avoiding other detergents

storage



GEOPANEL can be completely dismantled and stored even in damp places

CONSTRUCTION TIME CONCRETE WALLS



PANELS INSTALLATION



GROUND ANCHORING



SHORING BEFORE PLUMBING



CONCRETE POUR



COMPLETE DISMANTLING



FINAL RESULT

HOUSE FINISHED IN 7 DAYS



CREATION OF THE FOUNDATION SLAB

7 hours

lean concrete / reinforcement cages / MODULO installation / upper reinforcement mesh / concrete pour



WALLS FORMWORK INSTALLATION

3 days

installation of GEOPANEL / walls reinforcement, ground anchoring and shoring / creation of doors and windows box-outs



POUR OF CONCRETE WALLS

4 hours

walls concrete pour / vibration



WALLS FORMWORK DISMANTLING

8 hours

GEOPANEL formwork removal / cleaning with water and storage



ROOF AND FRAMES INSTALLATION

12 hours

roof installation / windows and doors installation

*time calculated for a team of 6 workers

WATER DISPOSAL SYSTEM DRENING



High resistance modular system for the creation of draining basins of high storage capability

excavation



DRENING permits a reduction of the excavation depth up to the 50%. It guarantees a more compact installation, ideal for limited surfaces

leakage



DRENING has a more permeable surface compared with micro-perforated pipes, so that it guarantees a more uniform leakage in the subsoil

inspectionable



DRENING is very easy to inspect and clean

ventilation



DRENING wide section allows a great air circulation from the outside, so that the biological process of purification is improved

resistant



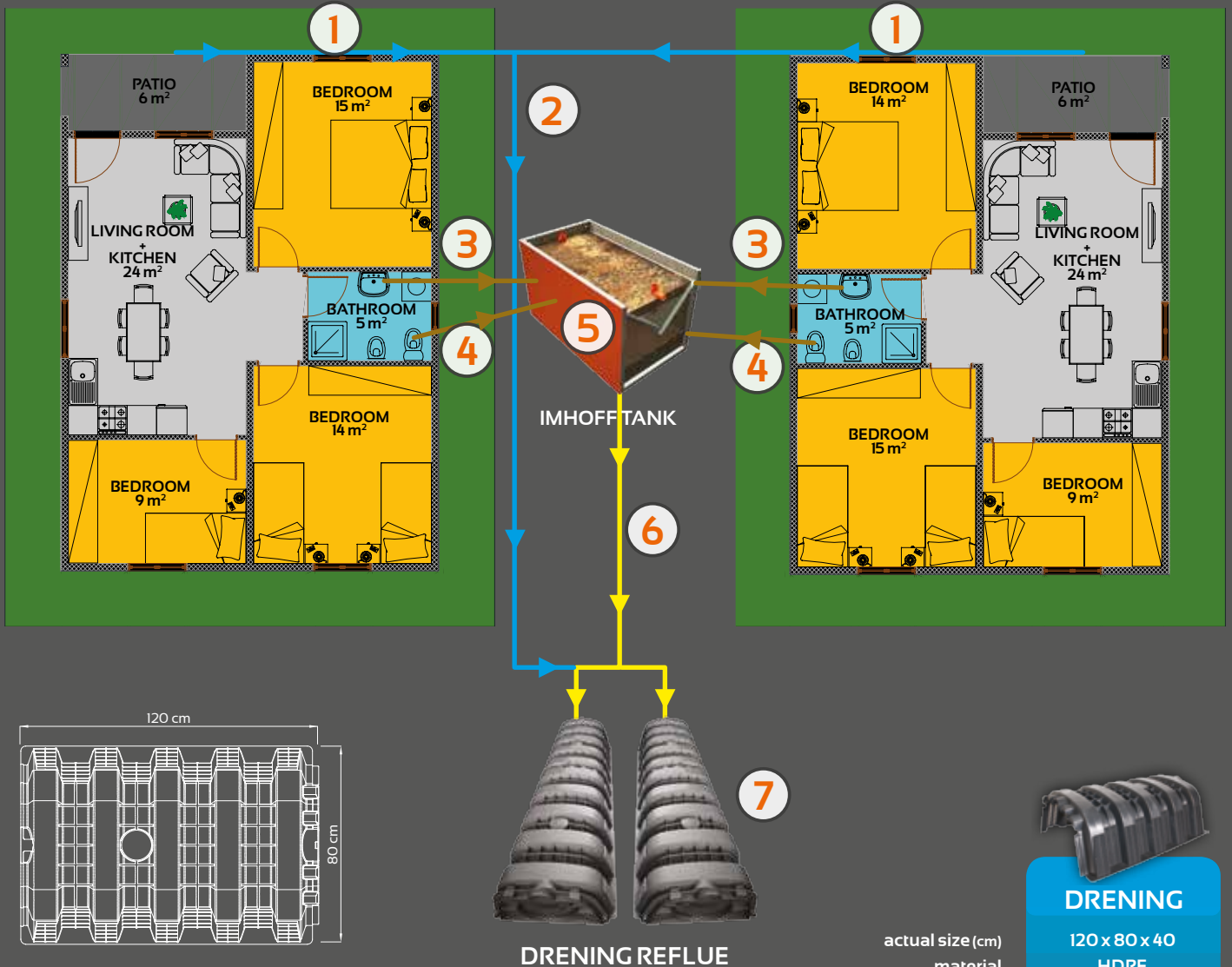
DRENING is less subjected to obstruction problems. In fact, a high efficiency over time is guaranteed

eco-friendly



DRENING is a low impact system both for the environment and the living comfort

WASTEWATER DRENING



LEGEND

- 1** Rainwater storage through the gutters
- 2** Channeling of rainwater towards DRENING
- 3** Blackwater disposal in the biological tank
- 4** Greywater disposal in the biological tank
- 5** Clarification of sewage by settling and sedimentation
- 6** Purified water channeled towards DRENING
- 7** Drainage of the purified water through DRENING system

	DRENING
actual size (cm)	120 x 80 x 40
material	HDPE
weight (kg)	11
storage capability (l)	310
side infiltration surface (cm²)	2.800
package size (cm)	120 x 80 x 230
no. items per pallet	40

	CAP
actual size (cm)	70 x 40
material	HDPE
weight (g)	1.810
package size (cm)	depending on the needs
no. items per pallet	depending on the needs



Domestic sewage disposal respecting the environment

DRENING can be used to dispose domestic sewage through sub-irrigation. A previous clarification process should however be considered (through an Imhoff tank). This is the ideal solution for residential areas which are not connected to the drainage system. Thanks to its high slotted surface, DRENING guar-

antees a fast and efficient leakage in the subsoil. Moreover, it is possible to install ventilation stacks in the system to prevent the formation of bad smells and to return a cleaner water to the environment. DRENING is also easier to clean and inspect in comparison with the traditionally used micro-perforated pipes.



LEGEND

- 1** Biological tank
- 2** Ventilation
- 3** DRENING
- 4** Infiltration
- 5** Excavation



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