

Introduction to Core and Offshoot Houses

Prefiguration, Principles, and Key Questions

Inhabiting Space (on Earth) Involves the ways individuals and communities both produce and are shaped by their physical, social, and cultural environments. This dynamic and relational process not only influences societal values and power structures but also underscores the inherently political nature of inhabitation - particularly through the act of building houses and shaping the built environment.

The concept of core houses and offshoots builds on the idea of political prefiguration—the practice of embodying future-oriented actions in the present. It offers a framework for incremental, adaptable, and sustainable housing, allowing individuals and communities to actively produce their own living environments over time. Instead of constructing fully developed homes from the outset, core houses provide a basic, functional starting point, enabling expansion and adaptation based on needs, resources, and life changes.

Through transformative and inclusive spatial practices, communities can address immediate needs while simultaneously redefining ways of living collectively. Inhabitation thus becomes a process of prefiguration, co-creation, and empowerment, where spaces are not just lived in, but actively produced to shape how we imagine and construct future societies. Core houses and offshoots represent a new way of thinking about housing—one that prioritizes flexibility, community participation, and long-term resilience.

Instead of constructing a fully developed home from the outset, core houses provide a basic, functional starting point, allowing residents to expand and adapt their spaces according to their needs, resources, and life changes. By integrating social, ecological, and participatory principles, core houses represent an alternative approach to urban and rural development - one that prioritizes flexibility, affordability, sustainability, and self-determination.

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Core Principles for Core and Offshoot houses:

- 1. Healthy:** Core houses must support healthy living conditions - both for the structure itself and for the residents. This means: Good insulation and ventilation to prevent moisture and mold and materials that contribute to an optimal indoor climate
- 2. Secure:** The houses must be structurally sound and fire-safe, ensuring: A stable construction with a strong foundation and Fire-resistant materials and design
- 3. Affordable:** The concept of incremental construction allows residents to build only what is necessary at first and expand later as finances allow, avoiding debt. The houses must also be: Cheap to maintain and heat and cost-effective in both construction and long-term operation
- 4. Sustainable:** Core houses should be built with: Low-carbon materials that can be recycled and environmental integration, including rainwater collection, solar panels, and other regenerative systems
- 5. Adaptable:** The houses must be designed for easy modification, ensuring: Both the core and additional structures can evolve and Flexible layouts that allow for future expansion

Some necessary studies and key questions:

What materials ensure the healthiest house - materials that create the balance between good hygrothermal diffusion, are fireproof, cheap and sustainable?

What construction method best balances the five core principles while ensuring maximum flexibility in both the core house and its future expansions?

What room organisation provides the highest degree of flexibility? For example, could a fixed bathroom/toilet location allow for a more adaptable kitchen placement?

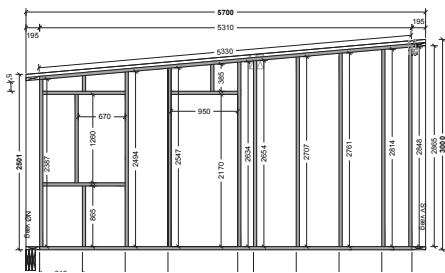
How little is enough to start? What is essential to meet the core principles? How much space is truly needed at the outset? Is it necessary to fully build the kitchen from the beginning, or can it be added later?

Core house - Building Envelope

Balloon frame construction for adaptability:

Flexibility in Openings: With fewer load-bearing walls, this construction style makes it easier to adjust or relocate windows and doors over time

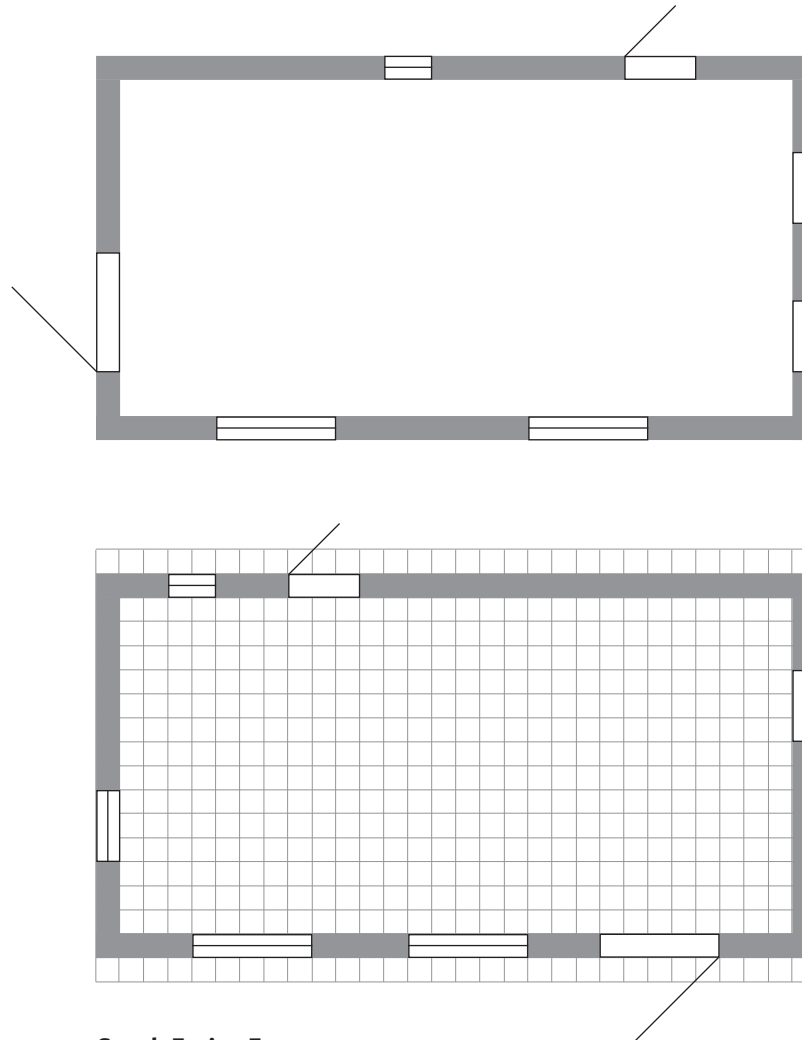
The vertical studs in wood balloon framing run continuously from the foundation to the roof, creating fewer interruptions in the structure and providing a consistent framework.



Green Sedum roof and possible terrace:

Lightweight and with a slight slope (1-2% directs water to drains without pooling) making it easier to incorporate with other uses like a roof terrace.

Green roofs improve thermal regulation, reducing heat loss in winter and heat absorption in summer. Vegetation absorbs rainwater, reducing runoff and easing strain on drainage systems. Green roofs support pollinators and birds, contributing to local ecosystems.



South-Facing Feature

Large South-Facing Windows: Maximizing glazing on the south side allows for abundant natural light and passive solar gain, enhancing comfort and reducing energy costs. This is particularly effective in colder climates or during winter months and enables a close link to a future greenhouse offshoot

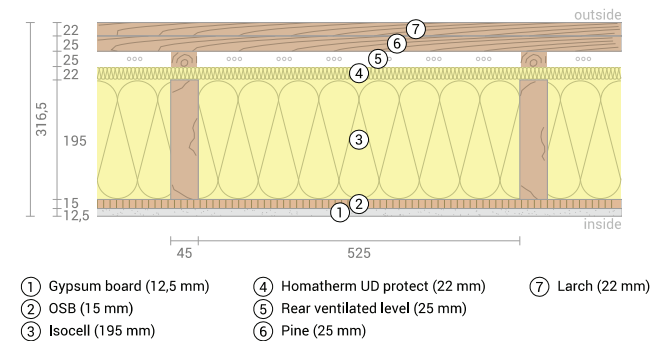
Wall construction layers:

1 & 2 Interior Cladding (OSB + Clay/Drywall): Provides interior finishes and fire protection. Clay walls create a more porous surface, improving interior air quality.

3 Insulation: Dense-pack or wet-spray cellulose filling the cavities.

4 Sheathing: Wood fiber, which is both hydrophobic and vapor-permeable, prevents moisture from penetrating the cellulose insulation.

5, 6 & 7 Exterior Cladding: Larch wood is highly durable and rot-resistant, making it ideal for outdoor use (e.g., cladding, decking, or fencing) without the need for chemical treatments.



Ground Screw Foundation:

Is a type of foundation system that uses large screw-like metal piles driven into the ground to support structures. These are commonly used for lightweight buildings, decks, or temporary structures and are known for their ease of installation and minimal environmental impact

Core house - inside - 35 m2 excluding walls

1. Hallway + storage

2,25 m2 - 25 units



2. Bathroom + technical core

2,75 m2 - 30 units



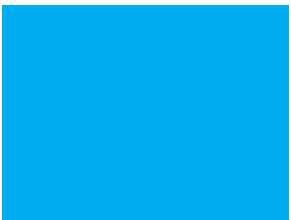
3. Kitchen + dining

10 m2 - 110 units



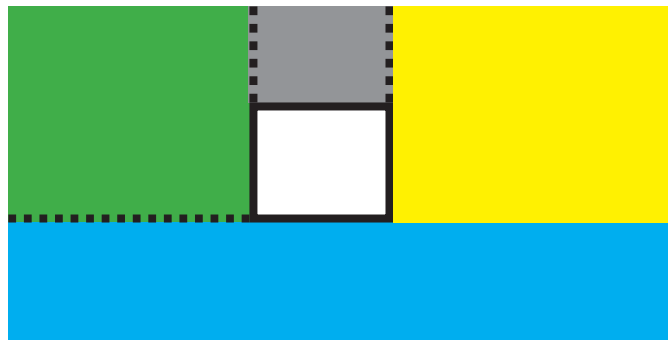
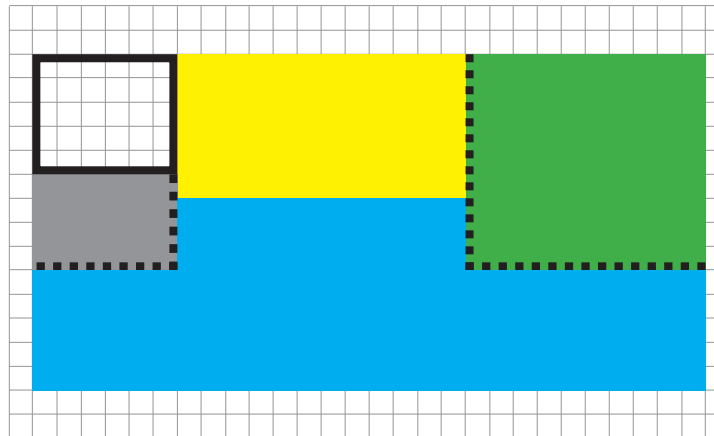
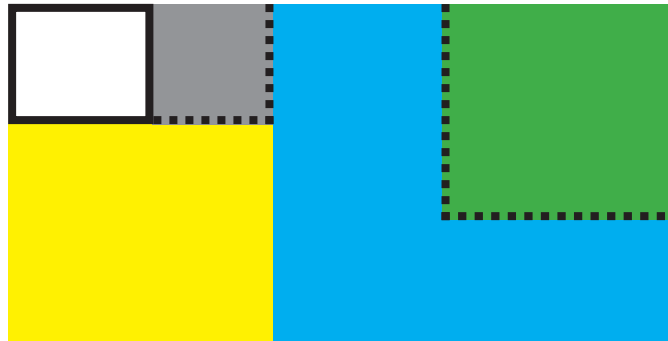
5. Living area

10 m2 - 110 units



6. Bedroom - double

10 m2 - 110 units



Core House Concept:

The interior layout is based on minimal key areas, such as the kitchen, while ensuring maximum flexibility for both the core house and future offshoots. A simple 30 cm grid helps non-professionals design their spaces by guiding the placement of windows, doors, and furniture, while also representing wall and roof thickness.

The system is intentionally LEGO-like, focusing on the spatial requirements of essential functions but serving as a foundation for more imaginative—and less orthogonal—creations.

Strategic Bathroom Placement:

The bathroom is centrally located to streamline plumbing infrastructure, simplifying kitchen reconfiguration by keeping water supply and drainage accessible for layout changes.

Adaptable Core Interior:

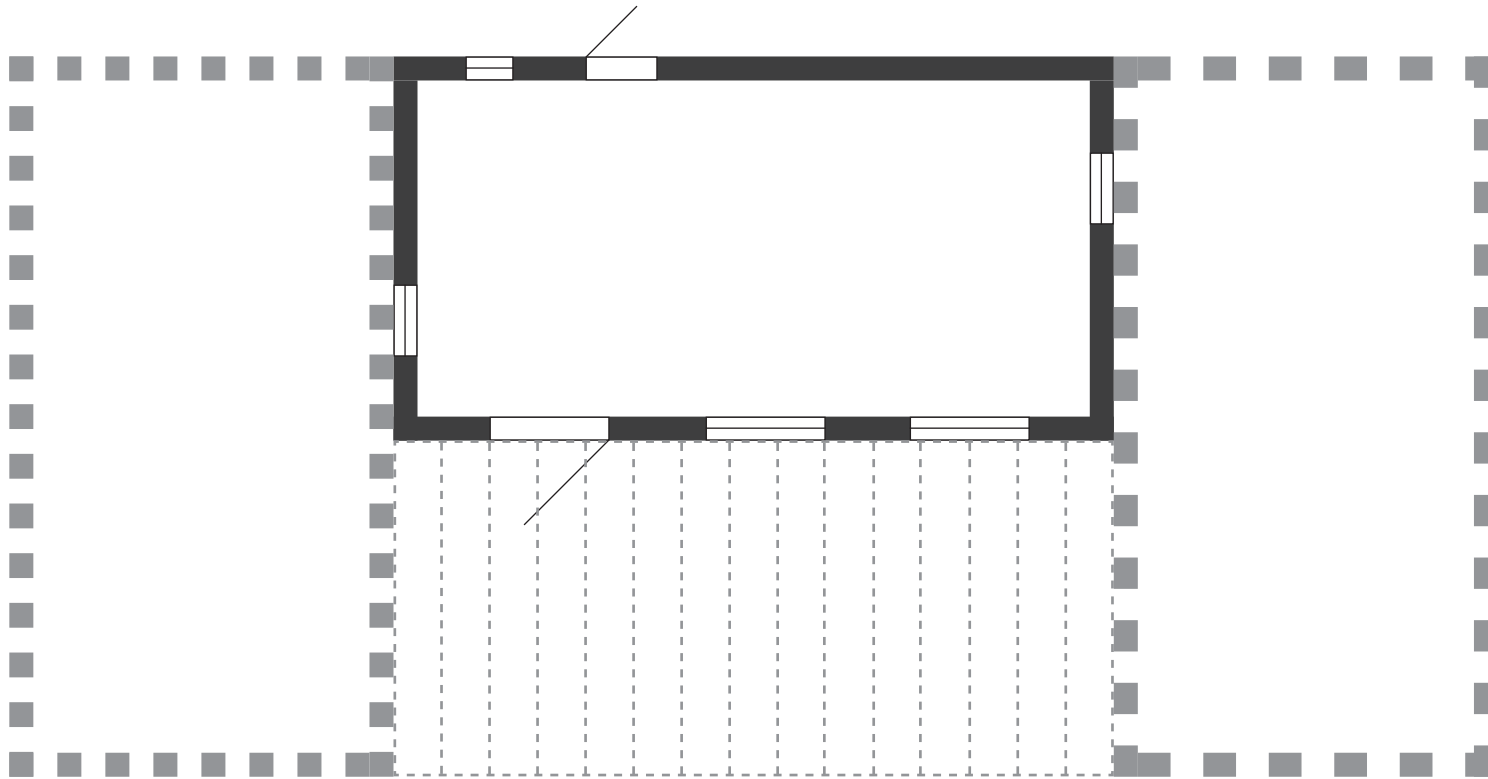
Except for the bathroom, a floor-first design provides a foundation for maximum flexibility. By installing walls after the floor, interior layouts can be easily modified or customized in the future without disrupting the structure. Movable interior walls could consist of lightweight, modular panels or partitions that can be reconfigured as needed.

North-South Functionality:

Placing low-light-sensitive rooms (bathroom, bedroom) on the north side maximizes natural light for living spaces. This reduces heat loss in colder climates and keeps the south-facing side free for passive solar heating or potential greenhouse extensions.

Layouts can be mirrored, enabling flexible placement of bathrooms and bedrooms on either eastern or western sides while maintaining north-south functionality.

Core house - horizontal offshoots



Offshoots to the South:

A greenhouse or winter garden as a southern extension can serve multiple purposes:

It acts as a buffer zone, reducing heat loss from the house.

It provides space for growing plants year-round, creating a connection to nature.

It can function as an additional living space, warmed naturally by sunlight.

Offshoots to the East and West:

The east and west sides can include additional offshoots or extensions, such as:

Morning Light Rooms (East): Ideal for bedrooms, breakfast nooks, or workspaces that benefit from morning sunlight.

Evening Light Rooms (West): Great for living rooms or spaces used in the evening, where the setting sun can create a cozy ambiance.

Core house - vertical offshoots

Vertical offshoots:

The core house and its horizontal offshoots—whether east/west extensions or a greenhouse—can be combined with a vertical offshoot. This vertical structure integrates a staircase, providing direct access to the core house roof, which can be transformed into a functional terrace.

The vertical offshoot can be designed to accommodate private spaces, such as bedrooms or a work space, on the upper floor

Area of core house and off shoots

The areas provided serve as a starting point and are only indicative, allowing flexibility in adapting the design to functional, aesthetic, or spatial needs.

Core house: 35 m²

Green house: 35 m²

Horisontal offshoot: 35 m²

Vertical offshoot: 35 m²

Terrace - max: 30 m²

This means that with a maximum horisontal offshoots and greenhouse shown above the total area would be 140 m²

With two vertical offshoots as shown to the left the maximum area would be 140 m² plus the roof terrace.

