

K

A WHOLE NEW KIND OF HOME



EKORU

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**A WHOLE NEW KIND
OF HOME**

EKORU



Construction has trained us to live with the unexpected: costs that change, schedules that slip, solutions improvised at the last minute directly on site.

The cause is a process that has stayed fragmented for far too long.

Ekoru was created to change all of this: managing complexity through dialogue, expertise and technology.

A design approach grounded in the **real needs of the people who will live in the home** — not only aesthetic needs, but functional and value-driven ones too. The core elements of the building are manufactured in a factory, using excellent materials, unique technologies and a level of quality control that a traditional building site simply cannot guarantee.

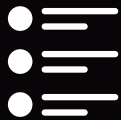
On-site construction becomes simple, predictable and faithful to the design.

The result is not just a building that is more energy-efficient and more durable over time — it is a way of building that gives clarity to the client, control to the designer, safety to the builder, and real quality to the people who live there.

**THIS IS WHY EKORU
IS A WHOLE NEW KIND OF HOME.**







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Today we have access to remarkable materials for construction; on their own, though, they are not enough to make a truly excellent home.

The construction system itself needs to be modernized, removing the problems and uncertainties of the building site.

After an in-depth study of existing techniques and possible innovations, we managed to achieve and guarantee optimal results in terms of living performance.

We designed a system that is **fast, tailor-made and unconstrained**, offering maximum safety and comfort.

Claudio Bacchi
general manager

”





OUR VISION

Today we have access to remarkable materials for construction. On their own, however, they are not enough to make a truly excellent home. That calls for a change of approach: **a new way of designing and building, one that starts by listening to real needs and moves beyond standard, preconceived logic.** First you understand what is genuinely needed, then you engineer the solution to meet that goal, and finally you build using an innovative method. This is how an advanced construction system is born – not simply replicable, but engineered to guarantee performance

that is high, tested and reliable. It is an approach that does away with one of the most deep-rooted paradigms of the industry: building a home should not mean stress, cost uncertainty or endless timelines. By integrating the most advanced technologies, the result is **a system that is fast, flexible and made to measure**, capable of delivering safety, comfort and living quality. For us, sustainability is not just an environmental choice – it is a value measured over time: durability, efficiency and the ability to adapt to the needs of the people who live in the space.



EXPLORE
THE POTENTIAL OF THE SYSTEM



THE COURAGE TO EVOLVE

We are part of a **solid corporate group that has been operating in the construction industry for over four generations.**

That experience has given us in-depth knowledge of raw materials and construction systems. But we didn't stop at the status quo. We chose to evolve, looking to the future and rethinking the way of building itself. That is how Ekoru was born: a system that adopts the **offsite-construction** paradigm, moving

the most complex phases of the building process into the factory. This approach makes it possible to work in controlled environments, where **advanced technology and specialized expertise reduce the variables typical of a building site**, improving quality, precision and construction time.

The result is a more efficient construction process, translating into a leaner, safer and more predictable building site.

**WE DESIGNED
A NEW CONSTRUCTION SYSTEM**



Ekoru represents a **revolution in the construction industry**: we deliver real-estate projects with **speed, efficiency** and **reliability**. We use genuinely eco-friendly materials that guarantee not only energy efficiency, fire resistance and seismic safety at the highest levels, but also living comfort. Our innovative system **eliminates** the need for a **traditional building site**, through the **precision** and **quality of automated in-**

dustrial processes. We produce buildings based on the concept of **off-site construction**, engineering every type of project. The industrialized construction process reduces the variables tied to the building site, ensuring a **higher level of scheduling accuracy and punctuality, certainty of results**, and **precision** at every stage of project development and execution.

**WE INDUSTRIALIZED
THE CONSTRUCTION PROCESS**







Ekoru is a company, but it is also a construction system – **it is innovation for the building industry.** The entire production cycle takes place at our main facility, thanks to the work of **70 professionals** and the use of **automated industrial processes.**



RESEARCH, INNOVATION AND CONCRETE RESULTS

OVER

9

YEARS



DEDICATED TO
**RESEARCH AND
DEVELOPMENT**

OVER

€15

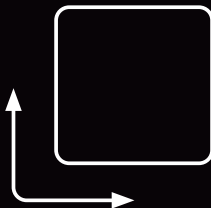
MILLION



INVESTED IN INNOVATIVE
**TECHNOLOGIES AND
EQUIPMENT**

OVER

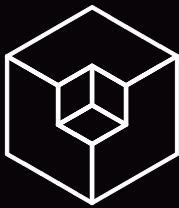
56,000 m²



OF PRODUCTION
SPACE

3

DAYS



**PRODUCTION TIME
FOR A HOME**





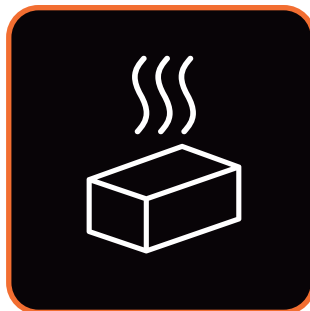
AN INTEGRATED, SUSTAINABLE SUPPLY CHAIN

1



Processing of natural raw materials

2



Production of **building materials**

3



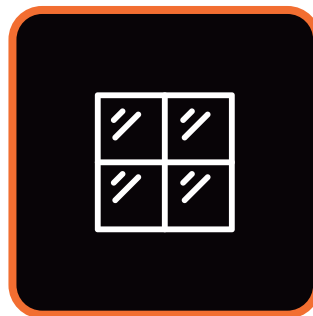
Building **design**

4



Construction of the building envelope

5



Preparation of fixtures, systems
and **finishes**

6



Transport

7



Installation







INTEGRATED-TECHNOLOGY BUILDING COMPONENTS

Industrialized components, made with patented technologies and ready to be assembled directly on site. They combine **load-bearing timber structures** with **monolithic mineral walls** that are fire-resistant and require no additional insulation, such as thermal cladding.

The technology incorporates **shock-absorbing and dissipative elements** capable of damping seismic energy, making Ekoru buildings among the safest avail-

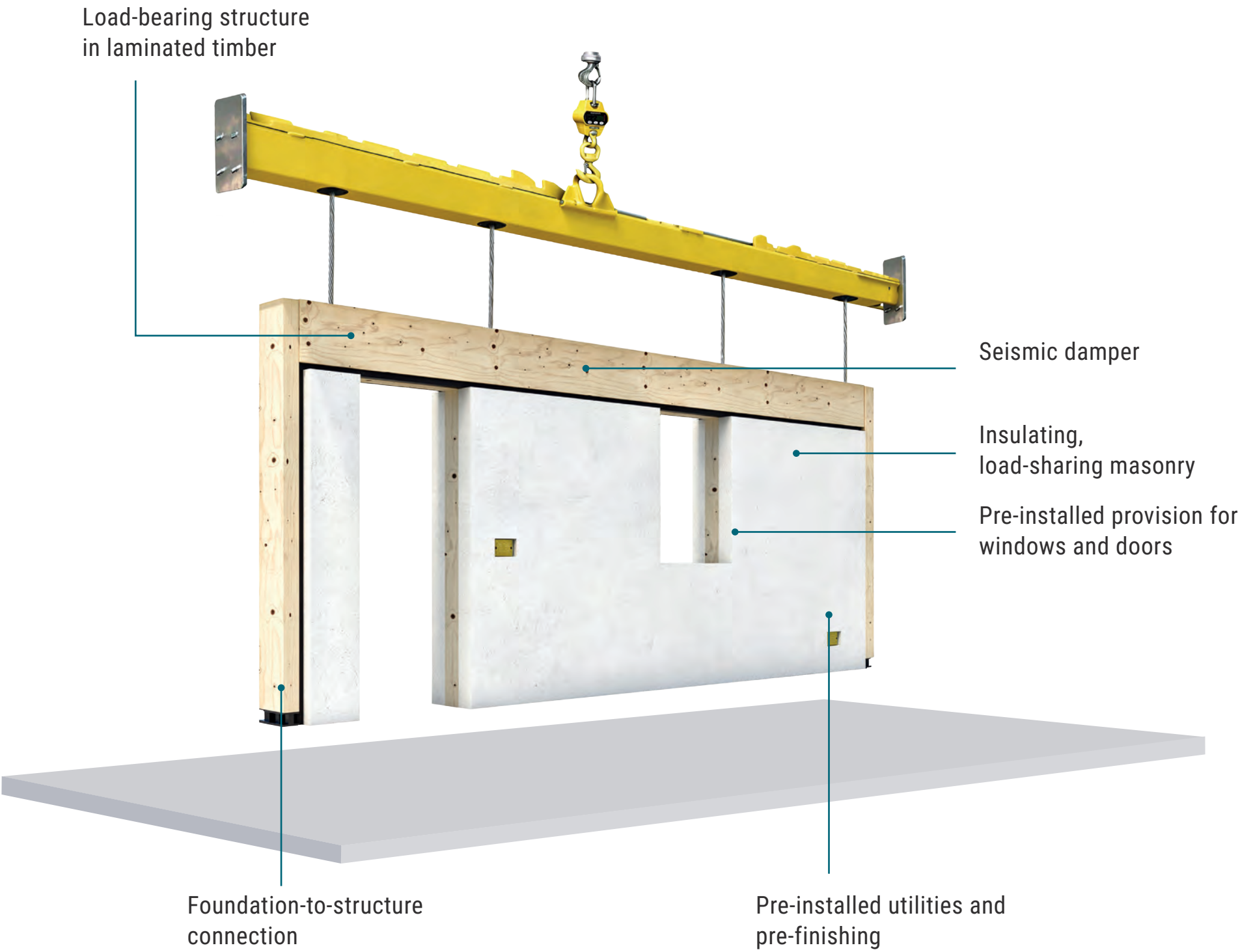
able. Tests carried out by the University of Naples Federico II certify the results achieved.

Depending on the specifics of the project and the requirements of the site, we supply complete wall panels with **pre-installed utility ducting** and structures ready for window and door installation. The **walls** arrive already **finished**, so there is no need to apply plaster or carry out other complex work on site.



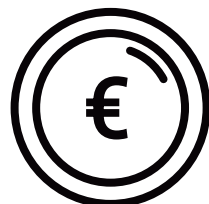
**WATCH THE ON-SITE
ASSEMBLY**

THE HEART OF THE EKORU SYSTEM





THE VALUES OF THE EKORU SYSTEM



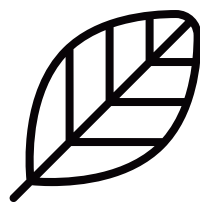
SAVINGS

The insulating capacity of our walls keeps **indoor conditions optimal with very low energy consumption**. On top of that, the insulating performance of Ekoru walls is excellent **in every season and climate**, thanks to the combined effect of low thermal conductivity and high thermal mass and time-lag values.



WELLBEING

Materials that contribute to **indoor comfort** thanks to excellent **management of temperature and humidity, structural resistance** that keeps the building safe even in the event of an earthquake, and the **health-friendliness** of certified materials that release no harmful substances. All of this forms a **solid foundation for offering peace of mind and wellbeing**.



ECOLOGY

The material our walls are made from is a **mineral stone** produced by industrially accelerating a natural geological process. Identical to natural tobermorite, it is **ecological, sustainable** and even **recyclable**. Its sustainability is certified through LCA and EPD documentation issued by recognized European bodies.



HEALTH-FRIENDLINESS

No harmful substance should pollute the air we breathe indoors, let alone substances released by the very materials used to build the home. To guarantee this, following tests carried out at independent laboratories, **we were able to verify and certify the health-friendliness of the material that makes up the walls and interior finishes**.

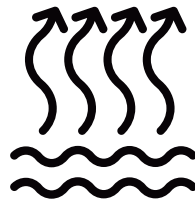
UNMATCHED SAFETY AND WELLBEING

Thanks to the combination of a unique construction system, which gives the structure an unmatched degree of solidity, and innovative walls that raise the level of indoor comfort.



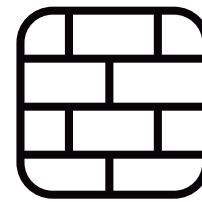
UNIQUE TECHNOLOGY

Integrated-technology wall modules that combine, in a single building component, everything needed to create efficient, comfortable and safe buildings.



BREATHABILITY

Humidity is an important factor in determining indoor comfort. **Ekoru walls are breathable**, allowing excess indoor humidity to be absorbed and released. This capability helps **maintain high comfort levels** and prevents the build-up of humidity that could lead to condensation and mold.



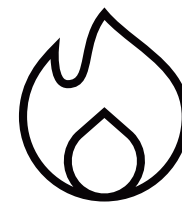
STRUCTURAL STRENGTH

Ekoru's integrated-technology walls feature a load-bearing frame in **sturdy laminated timber**, a damping layer, and a load-sharing mineral wall. This **unique structure**, tested at specialized laboratories, has shown **extraordinary resistance** thanks to its ductility and its capacity to absorb forces.



ACOUSTIC INSULATION

From an acoustic-comfort standpoint as well, our walls deliver excellent insulation performance, effectively reducing noise and creating peaceful indoor environments.



FIRE RESISTANCE

The material used in Ekoru walls is also used to build firebreak walls, because it **is entirely non-combustible and provides extraordinary safety** in the event of a fire. This material is in fact classified as A1, the best fire-reaction class in existence.





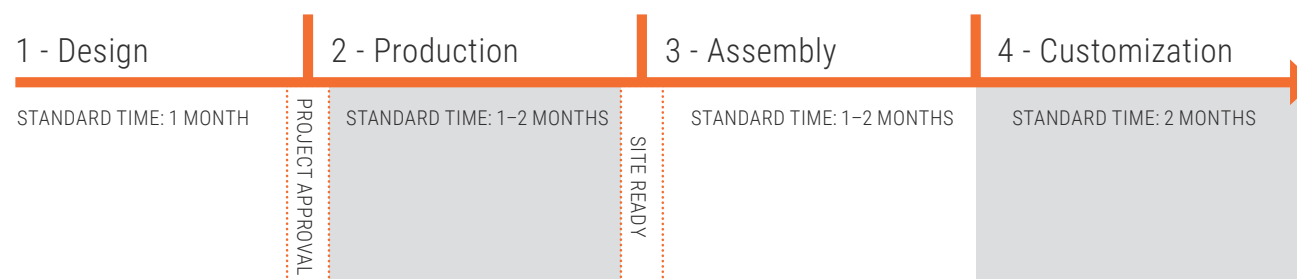


CERTAIN TIMELINES AND COSTS

What is established at the design stage will not change due to building-site variability. This is thanks to the industrialization and planning of a process that relies on advanced, **efficient machinery** with a

high degree of robotic automation — machinery that enhances the craftsmanship of building and makes it possible **to deliver components to the site ready for assembly only.**

BEYOND TIMELINES, FINAL COSTS ALSO STAY TRUE TO THE ORIGINAL ESTIMATE





ENERGY EFFICIENCY OF THE MATERIALS

Mineral, **ecological** and **health-friendly** materials that ensure a **high degree of thermal insulation**, and therefore energy efficiency and savings. The mineral structure that forms the walls contains tiny air bubbles, which provide the best thermal insulation while remaining a completely health-friendly and ecological element. This structure also guarantees **efficiency in maintaining the highest level of**

indoor humidity comfort, thanks to its breathability.

Even the load-bearing timber structures perform well in terms of insulation, avoiding the risk of thermal bridges. In addition, foundations can be insulated using ecological, extremely durable materials that prevent rising damp from the ground.

All of this comes with **the guarantee of maximum fire resistance**.

**WE GUARANTEE THE HIGHEST LEVEL
OF EFFICIENCY AND COMFORT**

SAVINGS AND COMFORT

Analyses show the excellent insulating performance of the envelope (even without plaster) and its ability to properly manage humidity, preventing condensation and mold.

EXCELLENT INSULATION CONTINUITY BETWEEN MASONRY AND LOAD-BEARING STRUCTURES

Vertical wall section

INDOOR
Temperature
20°C
Humidity
55.1%



OUTDOOR
Temperature
-3.3°C
Humidity
76.1%



Vertical section at the column node

45 cm

WALLS WITH HIGH INSULATION, BREATHABILITY AND FIRE-RESISTANCE VALUES

Base thermal conductivity λ	0.070 W/mK
Vapor-diffusion resistance factor	5-10
Airtightness and insulation for non-load-bearing separating structures	EI240

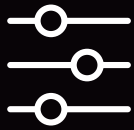




ECO-SUSTAINABILITY

The sustainability of the home, throughout its life, is **ensured by ecological materials and very low energy consumption**. Ekoru's sustainability, however, starts much earlier. It begins with the choice of **natural raw materials** and **local suppliers**, continues with a high level of internal integration that avoids inefficient movement of materials, and is realized through **production systems with no waste**. In fact, at Ekoru there is no material waste: everything is reprocessed and fed back into the production cycle. The choice to rely on few materials – mainly mineral stone and laminated timber – helps guarantee both maximum efficiency and minimal environmental impact.

**CHOOSING EKORU MEANS BUILDING
WITH AWARENESS AND RESPECT**



CUSTOMIZATION COMES STANDARD

WE CAN GUARANTEE YOU **MAXIMUM FREEDOM**
AT THE DESIGN STAGE

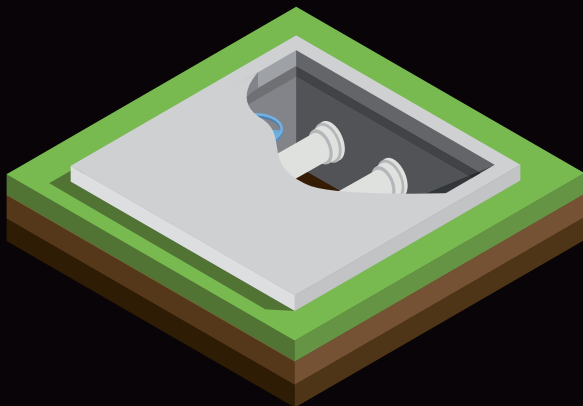
You can choose every detail of the home of your dreams, based on your style and your needs. Using **state-of-the-art digital technologies**, such as BIM, we can build every single part of the building exactly as it was designed, integrating different areas of expertise — architectural, structural and MEP design — within the same project.



CONSTRUCTION SEQUENCE

Once the foundation slab has been built, construction of the building envelope takes place entirely using dry-assembly methods, through mechanical connections between the building components specifically integrated into the load-bearing structures and the walls.

1



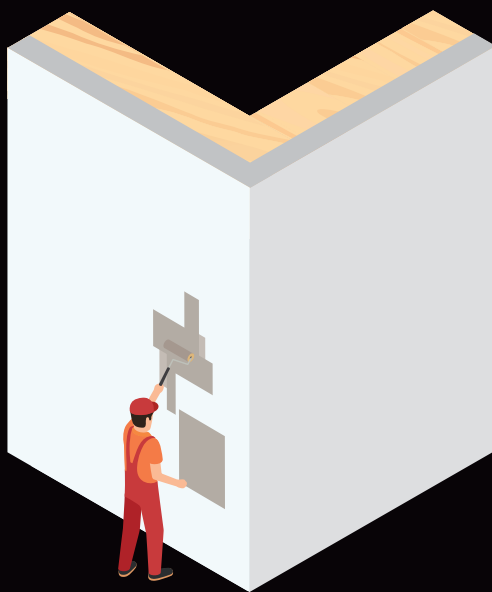
Foundation work

2



Wall installation

5



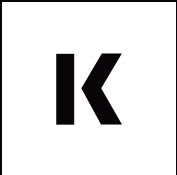
Insulation of load-bearing structures, finishing work and custom decoration

6



Completion of systems and finishes

THE BENEFITS OF THE EKORU SYSTEM FOR YOUR PROJECT



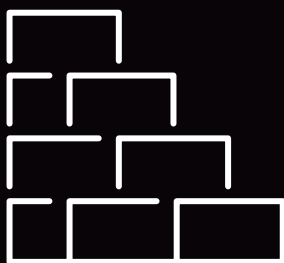
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**The Ekoru factory handles the complex work,
thanks to unique expertise and technology**



**The building site becomes simpler and leaner,
giving you more time and more safety**



**High-value materials and tested
systems provide guarantees**



**You stay on budget and meet expectations
thanks to certain costs and timelines**



**ARE YOU A CONSTRUCTION PROFESSIONAL?
EKORU SIMPLIFIES YOUR WORK**

THE BUILDING SITE BECOMES SIMPLER AND LEANER, GIVING YOU MORE TIME AND SAFETY

Offering a **unique product**, with superior characteristics that let you stand out in the market while better meeting demand. Combined with the **speed** and **reliability of the system**, this means **multiplying your productivity** and improving the **profitability of your business**.



Certain timelines and costs



Budget and cost adherence



Safer building sites



Greater profitability

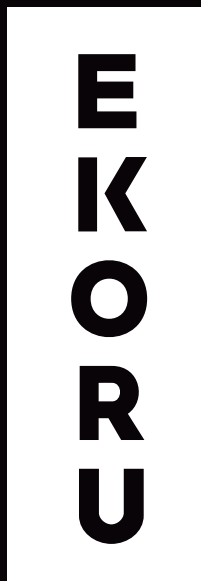


More satisfied clients



Multiplies your productivity

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