

Structural and enclosure system MxM construction

Modular construction logic, a kit designed to adapt to architecture.

MxM is a lightweight modular construction system based on modular components and a simple dimensional logic capable of generating organised building configurations through the logic of a single element.



Industrial production and dry assembly, flexible in geometry and application, based on composite panels combining three functions: structural, insulation and aesthetic. Standard widths of 120 cm and variable lengths up to 6 metres. Vertical and horizontal fixing, with the possibility of curving each panel.

At launch stage, the system offers the possibility of considering circularity not as an aspect to be added, but as an integral part of the construction logic.



From the outset, one principle has guided the project:

the construction system must serve architecture, not determine it.

Modular does not necessarily mean repetitive

Industrialised construction is often associated with repetition, while current research combines lightweight structural components such as **improved GRP**, insulation and external claddings derived from **high-density rice husks** within a predominantly dry construction process, with

the possibility of assembly and disassembly for reuse and, only at the end of the life cycle, recycling.

What interests us is exploring the opposite possibility.

A limited family of components can potentially generate:

- different dimensions;
- different spatial configurations;
- different façades;
- different relationships with the landscape;
- different architectural identities.

The module thus becomes a **construction tool** rather than an aesthetic rule.

A kit able to respond to different contexts

MxM is conceived around a repeatable industrial structure.

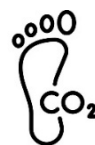
This does not mean making it rigid, but “setting rules”.

Flexibility:

Construction of buildings up to three storeys without additional structural reinforcement.

External claddings, insulation and secondary components can be selected according to:

- location;
- climate;
- local materials;
- regulations;
- architectural concept.



This makes it possible to envisage a system that is **industrially and environmentally coherent, architecturally adaptable** and continuously recoverable.



Assemble, modify, extend

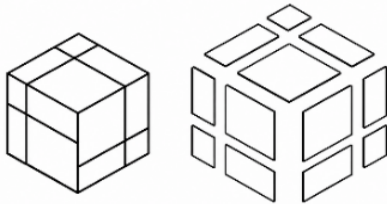
These aspects guided the definition of the system, allowing buildings to change over time.

A modular construction system should simplify certain actions:

extend a building
replace some parts
modify its configuration
remove components
reuse them elsewhere.



This is the focus of our development: **buildings as organisms that change and adapt** throughout their life and today rarely remain as they were initially designed.



The idea of a construction kit able to adapt to different places while maintaining the coherence of the system aims to move in this direction. **"Setting rules" for flexible architecture.**

We are not approaching Cobe with a finished industrial product.

We are seeking synergy with practices open to research and global innovation to identify new applications for the MxM system and allow it to evolve when integrated into high-quality projects with the highest standards.

mxm begins with questions that are relevant today:

How much freedom should a construction module allow?

Which elements should be standardised?

Which elements should instead remain completely open?

How can the system adapt without losing industrial efficiency?

Can a highly industrialised construction kit produce architecture that remains specific and connected to place?

We believe that this tension between standardisation, the use of innovative materials and architectural freedom represents one of the most interesting challenges, and MxM construction is moving precisely in this direction.