HOT ARCHITECTURE

The Playbook

PREFABRICATION PROCESS FRAMEWORK

FOR ARCHITECTURE FIRMS
OCTOBER 2025

HOT ARCHITECTURE

HOT Architecture is a design-build practice dedicated to advancing prefabrication as a precise, sustainable, and architecturally rigorous mode of construction. The studio operates at the intersection of design and manufacturing, developing compact, high-performance dwellings produced in controlled conditions and assembled with minimal environmental impact. Its approach unites architectural clarity with industrial efficiency, each project conceived as both a building and a product system. HOT Architecture's work prioritizes reduction, adaptability, and material honesty, seeking to redefine housing as an accessible, elegant, and enduring infrastructure for contemporary life.

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02 APPROACH

Prefabrication is an architectural discipline before it is a construction method. It demands clarity of form, precision of detail, and restraint in decision-making. At HOT, we see prefabrication as a design tool : a framework that brings structure to creativity and consistency to execution.

We approach every project with a single objective: to preserve the integrity of the architect's design while giving it the technical foundation to be built intelligently, efficiently, and with respect for resources.

03 PROCESS

031 Inquiry & Alignment

Objective: Establish the project's scope, intent, and level of prefabrication.

Inputs:
+ Architectural plans or concept drawings
+ Project brief (size, location, timeline)
+ Preferred level of involvement (consultant, builder, and/or full delivery)

HOT Responsibilities:
+ Review the project for compatibility with off-site fabrication
+ Clarify possible delivery models and timeline
+ Provide an initial cost and schedule range

Deliverable:
+ Proposal outlining approach, scope, and estimated budget

032 Technical Review & Feasibility

Objective: Confirm that the design can be executed efficiently through prefabrication.

Inputs:
+ Architectural design package
+ Structural concept (if available)
+ Preliminary mechanical and electrical layouts

HOT Responsibilities:
+ Analyze the project for modular optimization and assembly logic
+ Identify key fabrication constraints (spans, module dimensions, crane access)
+ Advise on potential design adjustments if applicable

Deliverable:
+ Feasibility Summary with technical observations and recommendations

033 Prefabrication Coordination

Objective: Translate the design into a prefabrication system without altering its architectural intent.

Inputs:
+ Final or near-final architectural drawings
+ Agreed project scope and materials

HOT Responsibilities:
+ Define prefabrication strategy (panelized, volumetric, or hybrid)
+ Develop module breakdown and junction logic
+ Specify prefabrication-only structural layers, connections, and membranes
+ Prepare the technical set for fabrication coordination

Deliverables:
+ Prefabrication Coordination Drawings
+ Material specifications and details relevant to off-site construction

034 Production Planning & Quotation

Objective: Establish the fabrication strategy, schedule, and cost.

Inputs:
+ Prefabrication Coordination Drawings
+ Material and finish selections

HOT Responsibilities:
+ Prepare the final technical set for production
+ Define production timeline and transport sequence
+ Prepare the detailed quotation
+ Coordinate with suppliers for material lead times

Deliverables:
+ Final Technical Set for Production
+ Quotation and Schedule

035 Fabrication

Objective: Manufacture all components in a controlled environment.

HOT Responsibilities:
+ Fabricate wall, floor, and roof assemblies under controlled conditions
+ Conduct quality checks at every stage (structure, sealing, dimensions, finish)
+ Prepare modules or panels for transport
+ Document fabrication through internal quality records

Deliverables:
+ Completed prefabricated components ready for shipment
+ Fabrication Report and Quality Summary

036 Assembly on Site

Objective: Deliver, install, and secure the prefabricated structure.

HOT Responsibilities:
+ Coordinate transport and crane logistics
+ Oversee assembly and alignment of panels or modules
+ Seal junctions, membranes, and critical interfaces
+ Manage site power, safety, and temporary facilities

Optional Services:
+ Site preparation and foundation subcontracting
+ Coordination of other trades and on-site finishing

Deliverables:
+ Completed structure ready for finishing or occupancy, depending on scope

037 Completion & Documentation

Objective: Ensure final quality and deliver project documentation.

HOT Responsibilities:
+ Conduct final inspection and quality verification
+ Provide as-built drawings and material documentation
+ Deliver maintenance and warranty information (when applicable)

Deliverables:
+ Completion Report and As-Built Package

04 FLEXIBILITY OF ENGAGEMENT

HOT Architecture adapts to each project's context and the needs of its architect.

We can engage in several ways:
+ Consulting Partner: advising during design to optimize modular coordination.
+ Prefabrication Builder: fabricating and assembling the project based on drawings.
+ Full General Contractor: managing the entire process, from site preparation to handover.

Each engagement is defined collaboratively to ensure that scope and responsibility are clearly aligned.

05 PREFABRICATION STANDARDS

All fabrication is executed in controlled indoor environments to ensure precision, minimize waste, and improve build quality.

Key principles:
+ Consistent quality control through defined checkpoints.
+ Verified dimensional tolerances between plant and site.
+ Moisture, air, and thermal continuity ensured through layered assemblies.
+ Logistics and handling integrated into design from the outset.
+ Documentation and traceability maintained at every phase.

These standards form the foundation of HOT's reliability, ensuring every project is executed with accuracy and consistency.

06 COMMUNICATION

Clarity of communication is central to the process.

Coordination occurs before each major design or production phase, with clear documentation of decisions and updates.

Each project has a single point of contact responsible for correspondence and approvals.

Response time for design queries or clarifications to be agreed on before the project starts.

Architecture deserves to be built with the same precision it was designed with. At HOT, prefabrication is the means by which we protect that precision, translating design intent into controlled, verifiable construction.

Our role is not to alter architecture, but to realize it faithfully, efficiently, and with care for both material and process. Each collaboration is an exercise in discipline: fewer variables, clearer outcomes, stronger buildings.

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