



Information Pack

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SMARTER HOMES FOR A CHANGING PLANET

With a resolve to find a better way to live within a changing climate, Habitech Systems brings a fresh approach to home design and construction.

'We were unable to find a building system that provided the comfort and energy performance our changing climate demands – so we created our own.'

OUR APPROACH

We combine energy smart designs with our super strong, highly insulated external building shells to create healthy, comfortable homes with low operating costs.

Our unique architectural approach to sustainable, modular construction offers a new way to consider the design of your home, breaking house design into two distinct phases:

- **Building shells** – designing and speedily constructing the external shell of our homes with next-generation levels of thermal and energy performance.
- **Interior fit-out** – offering a range of options in how the interior of our homes can be fitted out to varying quality and cost levels.

Operating since 2010, Habitech's modular construction system delivers in three key areas:

- **Design** – full design flexibility with modular panels being custom cut to any dimensions.
- **Sustainability** – comfortable, healthy, low energy living spaces built with a significantly reduced environmental impact.
- **Faster Construction** – proven builder training system and builder network that constructs our houses and efficiently installs our building shells to lock-up in weeks, not months.

We offer design services of various levels ranging from full architectural design, through to working collaboratively on only the external shell design with clients, other architects and builders.

'We chose Habitech because we could shape the house the way we wanted, but have it assembled onsite quickly. No-one can believe we started building in February and we're moving in - in July!'

- Luke & Kylie, Brooklyn in inner West Melbourne.

THREE REASONS TO BUILD A HABITECH HOME



COMFORTABLE, LOW ENERGY LIVING

At Habitech, we create stunning modular homes that are built to suit your site and lifestyle, while also minimising your energy use and environmental footprint. Whether you're building a new home or extending an existing dwelling, we'll take your project seamlessly from concept to completion in a fraction of the time of a conventionally built home.

Our modular system has been optimised to achieve the best architectural solution with a strong focus on passive design elements, resulting in a more sustainable home with low energy requirements.



LOW STRESS DESIGN & CONSTRUCTION

From creating the initial design and navigating the planning stage, to manufacturing and coordinating construction of your new home, we'll ensure the process is smooth, efficient and stress-free.

We utilise a modular construction system which allows us to deliver your new home faster. Each component is built offsite in our manufacturing facility in Melbourne using high quality materials, then delivered to your site for construction.

The wall and roof panels are designed with strength, quality and sustainability in mind and can be carried onto site without the need for heavy machinery. This makes our system perfect for contained sites with limited or difficult access.



FLEXIBILITY IN DESIGN

When you build with us, you have the flexibility to choose how your home is designed and built. We can work with you on a customised design to suit your requirements, or you can select one of our standard designs.

We can also work collaboratively with your own designer to adapt plans to our modular system. You can then opt for handover at lock-up stage or at final completion, where we take the hassle out of the process by designing and managing the installation of your interior fittings.

Our four levels of design services include:

- Feasibility & Concept Design
- Architectural Homes
- Pre-designed Homes
- Building Shells For Builders



HABITECH'S CONSTRUCTION SYSTEM

At Habitech we've developed a modular design and construction system that delivers the high performance building fabric (outer shell) of a home. Using SIPs (structural insulated panels) for the walls and roof, matched with high-end glazing, the system creates houses that are stronger, better insulated and more effectively air sealed than traditional timber-framed construction.

Architecturally designed specifically for you, Habitech's Australian modular design and building system creates modern, energy efficient homes that are built in weeks, not months. Our system has great design flexibility and we manufacture and supply the system to order for your design.

You'll enjoy years of ongoing comfort and value from your sustainable, high-performance Habitech home.

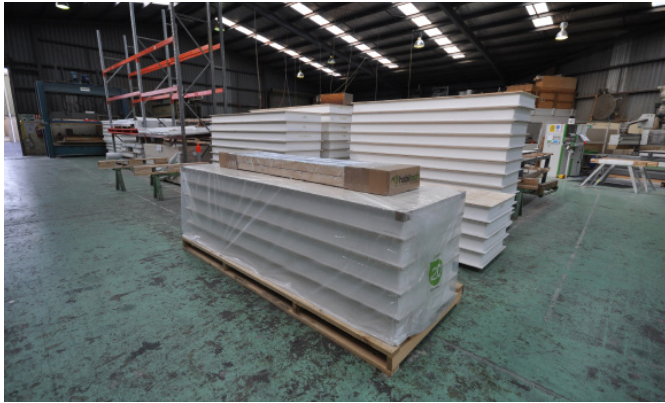
BENEFITS OF THE SYSTEM

- Effective insulation and air-sealing buffer out extreme temperatures.
- High-performance, solid insulation (walls R4.6/roof R6+) for thermal efficiency.
- Long lasting, low maintenance integrated cladding system.
- Ready for lock-up in weeks so there are less delays from inclement weather.
- Hand liftable flat-packed components allow access to any site .
- High-quality building panels are manufactured to order with precision.
- Minimal transport, air pollution and congestion outcomes .
- No large-load transport or crane costs and issues to manage and account for.
- Low carbon emissions during timber based modular construction.
- Smarter material use minimises environmental impacts.
- Stronger frames accommodate ground movement (great in cyclone and earthquake prone areas).



Construction Sequence

The images below show the construction sequence for how our panels are delivered and a two storey family home is built to Lock-Up Stage. Titled Hampton House, the outcomes of this project may be viewed in the Projects / New Homes section of our website - www.habitechsystems.com.au.



Building Shell Technology

Habitech's modular construction system is based on delivering the external shells of our houses with smarter, factory manufactured components that are stronger and better insulated than traditional construction methods.

Our factory manufactured panels allow us to use materials more efficiently and engineer our buildings more effectively than traditional stick framing, reducing our houses' environmental footprint and material wastage in both manufacture and on-site.



WALL PANELS

Habitech's wall panels are Structural Insulated Panels (SIPs):

- 170 mm thick.
- Maximum panel size of 3 x 0.9 metres.

We have designed the wall system to optimize thermal performance for Australian climates and do not manufacture panels to any other dimensions. Habitech's wall panels are manufactured from:

- Australian radiata pine plywood inner face.
- Expanded polystyrene core.
- Magnesium Oxide (MgO)/Fibre Cement (FC) external cladding board.

Our wall panels are fully structural and self-bracing. In comparison to traditional stud framing, our panels have:

- 3 times the bearing capacity (ability to carry loads).
- 2.5 times the bending strength (bracing against wind).
- 2 times the bending stiffness (minimising movement).

Our vertically grooved wall panels deliver the cladding of our houses as part of their installation.

The external panel joints between our panels are caulked and the exterior of our panels painted to complete the flexible, low maintenance exteriors of our houses.

The interior faces of our panels are finished by direct or batten fixing plasterboard or alternate lining surfaces.



ROOF PANELS

We use Structurally Insulated Panels for our roofs as well, with these having Colorbond steel skins on both faces of an expanded polystyrene core.

These roof panels are able to span long distances and minimize the material use and cost of roofing structures in our homes.





DOORS & WINDOWS

We are able to detail any door and window system into our building shells, working with double glazed Australian windows as a minimum specification in our houses.

We commonly use Italian or German thermally broken, double glazed windows in our architectural projects. Providing high performance levels at reasonable prices, we are able to supply these as part of building shell kits.



WINDOW SHADE AWNINGS

We design solar efficient powder-coated steel shading awnings to windows without eave cover as part of our home design process and supply these as part of our building shell kits.

Fire Performance

Our modular system is suitable for residential housing and small scale buildings up to 3 storeys high.

Recent cladding combustibility issues experienced in the Australian apartment sector do not relate to the buildings we build in our system. Our MgO panels are clad in fire-resistant materials, we do not have cavities in our walls and we do not build multi-storey apartment buildings.



BUSHFIRE PERFORMANCE

Our MgO construction system is able to achieve a 30 minute fire rating.

The MgO cladding and air sealing of our houses makes them resistant to ember attack and our houses are able to be built on sites with all Bushfire Attack Level (BAL) ratings, including Flamezone.



OUR SERVICES

At Habitech, we are focused on delivering great family houses for now and the future. We offer our design service in three different ways to ensure our modular construction system is used appropriately to create well-designed and more sustainable homes.

Whether you choose a full architectural design service with Habitech Design or work with us from a pre-designed starting point, we strive to complete your project efficiently and to the highest quality standards. Our design team maintains a focus on solar passive design and maximising northern aspects to create bright and airy living spaces. We integrate both our building shell and service system technology into our designs, ensuring your project will be built speedily and to thermal performance levels only offered by Habitech's experience and approach.



FEASIBILITY & CONCEPT DESIGN SERVICE

A service designed to help you gain a full understanding of your specific site and your design and building options.

Family home in Melbourne - \$2,700 - 3,000 + GST

Travel to site meetings in other location can be organised

An online service with video conference meetings and & online site investigations is also possible



ARCHITECTURAL HOMES

Architectural design services, from site analysis through to handover.

Compact homes - built from \$450,000

Family homes - built from \$650,000–\$1.5M+

Full service to handover - \$3,200–\$4,500 per m²

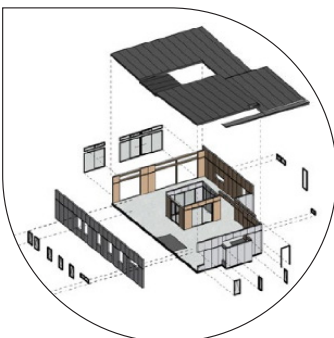


PRE-DESIGNED HOMES

Choose from our modern and high performing pre-designed homes, designed for different lot sizes.

Pre-designed homes - from \$468,000

Built to lock-up (incl. builder's margin) - \$1,300–\$1,400 per m²



BUILDING SHELLS FOR BUILDERS

Building shell design only and delivery of shell kits to builders seeking to offer sustainable homes.

External house shell and structure – built to lock-up \$128,000–\$155,000 + GST

Wall and roof panel supply kits - \$60-100,000 + GST depending on size

Labour to install - \$7-15,000 + GST depending on size

* Prices are GST inclusive unless stated as + GST

ARCHITECTURAL HOMES

When you build with Habitech, you can be confident your new home has been designed with sustainability and style front of mind and built to the highest quality standards. With each of our designs we strive to include features that inspire Australians to be innovative and build more sustainable homes.



MODERN STYLE & CONVENIENCE

Our homes are created for those looking for modern style with convenience.

- 'All electric' homes that can be powered completely by renewable energy.
- Lower power bills as less energy is required to heat and cool your home.
- Low-maintenance design means less chores and more free time.
- Modular construction allows your home to be built fast so you can move in sooner.



COMFORT & HEALTHY LIVING SPACES

Our focus on passive design elements allows you to enjoy a home that is comfortable, healthy and cheaper to run.

- Optimum thermal design maintains internal temperature year-round.
- Solar passive design elements maximise and control sunlight.
- Effective insulation and air-sealing to buffer out extreme heat and cold.
- Filtered fresh cleaner air guaranteed by heat recovery ventilation systems.
- In-built insulation for quiet spaces that maintain even temperatures.



SUSTAINABLE & ENVIRONMENTALLY FRIENDLY

Our designs are well-suited to urban, rural and coastal landscapes and demonstrate how it is possible to build stunning homes while also working towards creating a truly sustainable future.

- Extremely low heating and cooling requirements to reduce carbon emissions.
- Less energy usage needed so your carbon footprint is reduced.
- Less materials and smarter engineering to minimise environmental impacts.
- Smart heating, cooling, ventilation and renewable energy systems.
- High-performance building fabric creates a stronger, more resilient home.

How Much Do Our Architectural Homes Cost?

Project example					
Brief	Compact Home	Mid-sized Home	Large Home	Multi-Generation Home	Townhouses
Approx. Area + Garage	220 m ² (180 + 40 m ²)	260 m ² (220 + 40 m ²)	300 m ² (250 + 50 m ²)	387 m ² (342 + 45 m ²)	520 m ² 2 x (225+35 m ²)
Spatial Brief	 3  2  2	 4  2  2	 5  3  2	 4/5  2.5  2	2 x  3 2 x  2.5 2 x  2
Exteriors	Simple form	Simple form	Design features	Design features + complex approval	Design features + complex approval
Interiors	Pre-designed interiors	Bespoke interiors	Bespoke interiors	Bespoke interiors	Bespoke interiors
Tech/Services	Split system, Heat Recovery Ventilation (HRV), Solar PV	Split system, HRV, Solar PV, Fireplace	Ducted A/C, HRV, Hydronic Slab, Fireplace, Solar PV	Ducted A/C, HRV, Hydronic Slab, Fireplace, Solar PV, Lift, Pool	Ducted A/C, HRV, Hydronic Slab, Fireplace, Solar PV
Construction Cost	\$ 650,000	\$ 750,000	\$ 900,000	\$ 1.5M +	\$ 1.6M
Indicative Fees	\$ 70,000	\$ 110,000	\$ 130,000	\$ 150,000	\$ 150,000

Assumptions:

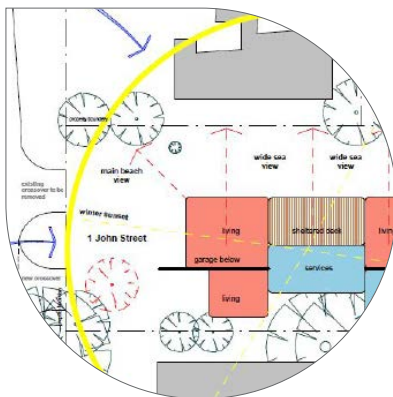
- Pricing assumes a flat site with clear street access.
- Area figures do not include decks & alfresco areas.
- Construction cost based on Melbourne inner & middle ring suburbs building cost.
- Note: Imperial real estate squares = 9.7 m².

Our 7-Stage Design Process



If you are seeking full architectural services, we coordinate our approach of shell and interiors design into a complete service taking the project through from initial design to handover of keys to you.

We work with you every step of the way using our seven-stage design process to guide the development of your design through to the handing over the keys of your new home. This process is tailored to your individual requirements.



1. FEASIBILITY & CONCEPT DESIGN

Our initial feasibility and concept design service includes clarifying your brief and performing a site analysis so we can understand your site and building envelope within which Council permits you to build.

We then create a concept design which includes the building form, external space and solar orientation for your site. A small fixed fee applies at this stage and our cost control process begins, where we define initial size, quality and budget parameters to best achieve your vision.



2. SKETCH DESIGN

Our design team develops a passive solar design that responds to your brief and site. We explore planning options based on the outcome of stage one, then produce sketch plans and a 3D design model to discuss with you in order to achieve an ideal design.

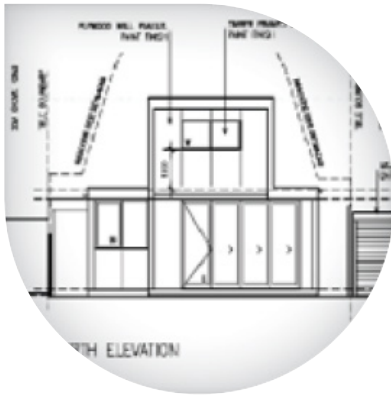
The cost plan is updated with the design outcome, checking on your budget, with interior assumptions from your brief.



3. DESIGN DEVELOPMENT

Using 3D modelling we construct a Habitech component model of your design. Once further detail of the building's construction is resolved, we prepare a more detailed costing of the design.

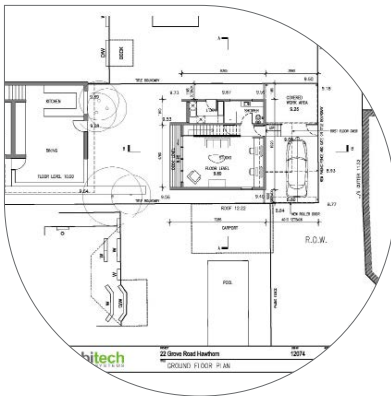
At this stage you will make quality and detail decisions on the interiors to ensure your design stays within your budget. Preliminary engineering and energy assessments are also prepared to ensure compliance with relevant building codes.



4. TOWN PLANNING

Where town planning approval is required through your local Council, Habitech will prepare the required planning permit submission including plans and elevations, shadow diagrams and a design response report.

For urban projects not requiring town planning approval (commonly for lots larger than 500m²), siting, overlooking and shadow diagram drawings are still required as part of the building permit process.



5. CONTRACT DOCUMENTATION

Based on the developed design from stage three we prepare detailed construction and interiors documents including construction drawings, fittings and finishes, schedules and specifications for preliminary then detailed costing with your chosen builder.

Full engineering and energy assessment are completed allowing production of the Habitech System wall and roof panels and glazing specification.



6. BUILDER SELECTION

Habitech works with our building partners to prepare quotes to build your house. We price our projects in an open book process with a declared builder's margin.

We prepare detailed pricing documentation, help negotiate the final price and prepare a building contract between the builder and yourself.



7. CONTRACT ADMINISTRATION

We administer the building contract on your behalf and attend the site throughout construction, taking the pressure of managing the building process off your shoulders.

We attend regular site meetings, advise you on decisions and selections, give site instructions to the builder, ensure the work complies with the contract, assess payment claims and arrange certificates of completion. We ensure the building process runs smoothly and the quality of detailing is achieved.

Further details of our initial Feasibility & Concept Design stage can be found near the end of this information pack.

DESIGN SERVICES

PRE-DESIGNED HOMES

Our range of standard designs include both small and large floor plans with smart features to enhance the enjoyment and sustainability of your new home. Designed and built to minimise your environmental footprint and maximise passive solar gains, our homes are low-maintenance and have low energy requirements.

Whether you are building in a coastal, rural or urban setting, we have a standard design to suit your requirements. Specifications, floor plans, pricing and highlights of our standard designs can be viewed at the end of this information pack and on our website. Some of our popular pre-designed homes:



CUMULUS 4 2 2

A compact two-storey family home. Carport and garage options available, with variable site orientation options possible due to a compact footprint.

Area - 157 m²

External lock-up shell package from \$178,000 +GST

Internal services + fit out package from \$250,000 +GST

Design fees from \$40,000 +GST

Total from \$468,000 +GST



NIMBUS 2-3 1-2 2

A north-facing compact single-storey family home, pavilion design with extendable options available (wider or longer).

Area - 129 m² (two bedroom base module)

External shell lock-up package from \$180,000 +GST

Internal services + fit out package from \$290,000 +GST

Design fees from \$40,000 +GST

Total from \$510,000 +GST



ALTO GABLE 3 2 2

A single-storey family home, gable roof pavilion design with optional garage or carport available.

Area - 139 m²

External shell lock-up package from \$200,000 +GST

Internal services + fit out package from \$285,000 +GST

Design fees from \$40,000 +GST

Total from \$525,000 +GST



STRATUS 3 2 2

A single-storey family home with a mid-century inspired skillion roof design for a single storey family home with integral carport and storage.

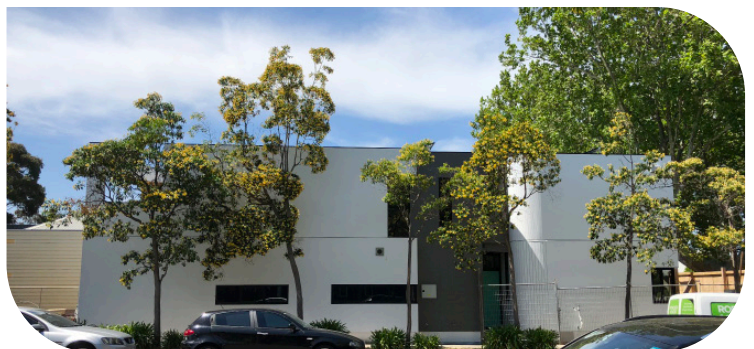
Area - 134 m²

External shell lock-up package from \$178,000 +GST

Internal services + fit out package from \$250,000 +GST

Design fees from \$40,000 +GST

Total from \$468,000 +GST



BUILDING SHELLS FOR BUILDERS - DESIGN & SUPPLY

Habitech designs and delivers fast to build, high-quality house shells to building companies interested in offering sustainable home models to their customers.

Our modular system-based approach allows us to focus on designing, costing and delivering the structural shell of a home to a weathertight and secure lock-up stage - from which point it can be fitted out as normal using our building partner's established processes.

We can deliver our pre-designed homes as shell kits, or customise a home design to your location and home buyer market.

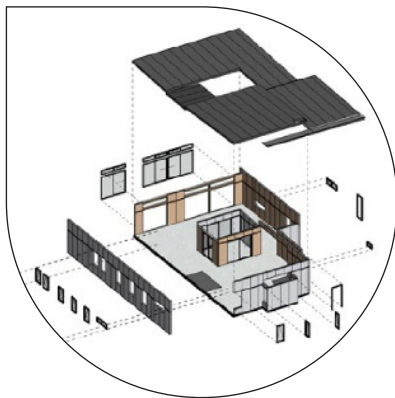
We are able to build these mid-sized family homes for approximately (excl. GST & builder's margin):

- Building Shell Kit Supply \$86,000–\$110,000.
- On-site work \$42,000–\$45,000.

Built to lock-up (refer definition next page) **\$128,000–\$155,000.**

As we guarantee the thermal performance of our building shells, this provides you with the opportunity to offer a truly more sustainable home option with market leading comfort and low energy bills.

Our single-storey designs can be built from sub-floor to lock-up in under three weeks. We can train carpentry teams to install our building shells with our proven on-site training model, or arrange for supply and install sub-contracting for specific projects.



WHAT WE DELIVER

We supply custom house kits consisting of:

- **External Walls** – structural insulated panels delivering the cladding of the house.
- **Roof** – Colorbond steel sandwich panel roof system.
- **Windows** – Italian or German thermally broken, double glazed doors and windows.
- **Window Shade Awning** – modular steel shading system.

We build on concrete slab or insulated timber floors as required and use standard stud framing with sound insulation batts for our internal walls.

ON-SITE PROCESS & WORKS

Our flat-pack delivery format allows us to organise logistics to difficult and remote sites. Our panels are generally hand-liftable and can be installed on-site with minimal craneage.

Our system can be built on concrete slab or timber sub-floors. These can be built as per our partner's standard process and checked for dimensions prior to the installation of our shell.

While on-site costs will be determined by our partner's labour and supply chain rates, our building shell pricing includes estimates for on-site works based on:

- **Sub-floor options** – slab or timber – allowance based on \$180 per m2
- **Wall & Roof panel installation**
 - allowance for 3 carpenters (\$60/\$55/\$50 per hour)





- **Door, window and shade awning installation** – 2 carpenters (\$60/\$55 per hour).
- **Internal stud walls** – material & labour – \$90 per m2.
- **Structural beams** – as per specific designs.

We can install houses with simple, single-storey forms in 2–3 weeks from sub-floor through to weathertight and secure. Our delivery logistics can provide a rolling delivery schedule to installation teams, providing significant time and cost savings across development schedules.

As well as speeding up the building process and reducing on-site labour costs, our process also minimises the management, logistics and delivery time required to get houses built to lock-up. Our modular approach and delivery process ensures our building shells are correctly installed and our solid insulation and air-sealing performs as designed.



THE PERFORMANCE OUR HOUSES DELIVER

Our houses can be detailed and serviced to achieve different levels of environmental performance as may be required for different briefs and projects.

Base Level Performance

Simply built projects, local double glazed windows, trickle ventilation to ensure fresh air-flow.

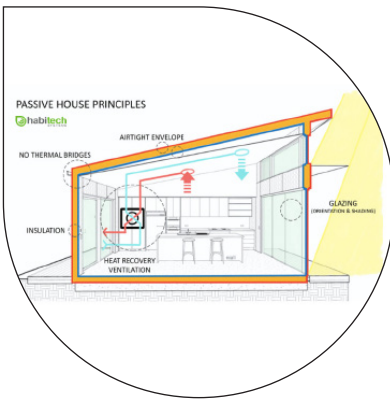
High Level Performance (our standard as priced)

Thermally broken, double glazed windows, air-sealed fabric that achieves close to Passive House performance as a standard. All electric home with Heat Recovery Ventilation – allow \$20K services package over industry base rates.

Passive House Certified Performance

Our shell designs can be optimised to achieve Passive House certification with minimal effort.

Habitech is one of the few established modular construction companies offering fully bespoke architecturally designed houses to Passivhaus standard. Our system offers complete freedom in design and is appropriate for all types of projects, sites and climate conditions.



ZERO EMISSION HOUSING

We have built a number of Zero Emission homes, with 6-8kW PV solar systems producing more electricity than the total amount used to run the house over the year.

With Habitech houses providing value to anyone owning and operating housing over time, we are also working with not-for-profit and government organisations who are looking to build future proofed houses with:

- | | |
|----------------------------------|-----------------------|
| • Proven performance | • Stable temperatures |
| • Low running costs | • Low CO2 emissions |
| • Healthier indoor environments. | • Heatwave resilience |



Habitech Lock-Up Definition



The 'Lock-up Stage' as defined in Habitech's building shell pricing is for the materials and labour to build the structure and exterior cladding of the house.

INCLUSIONS

Our lock-up definition and building shell pricing includes:

- Fully clad and air sealed exterior shell.
- Fitted and sealed aluminium thermally broken frames, double glazed doors and windows.
- Fitted external window shading.
- Internal stud frames and subfloors (not included - floor finishes, plasterboard/GIB walls linings, plasterboard/GIB ceilings).

EXCLUSIONS

Our lock-up definition and building shell pricing **does not** include:

- Carport / Garage.
- Plumbing and electrical rough-in work.

Note: Habitech houses do not significantly alter the scope or cost of wider fit-out trades involved in building our houses.

FURTHER WORK TO FULLY COMPLETE EXTERIOR

Further work completed by the builder to fully finish the exterior of our houses:

- Caulk external panel joins.
- Exterior acrylic paint.
- Roof flashings & downpipes.



Cumulus House - building shell delivery

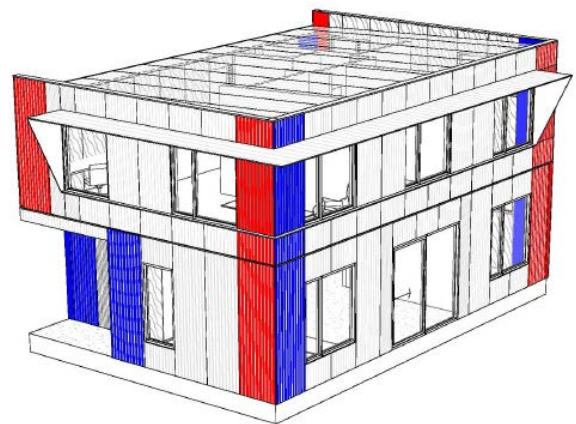


4 Bed | 2 Bath Area = 157m² + garage

This two-storey home provides for flexible family living in a light filled house with northern windows to all living and bedrooms.

The small footprint of this house enables it to fit on a wide range of sites. The simple two-storey form makes it economical and highly efficient, both thermally and in construction.

The base building shell as shown has the flexibility to fit a variety of orientations, street frontages and carport/garage options.



3D Shell Model View



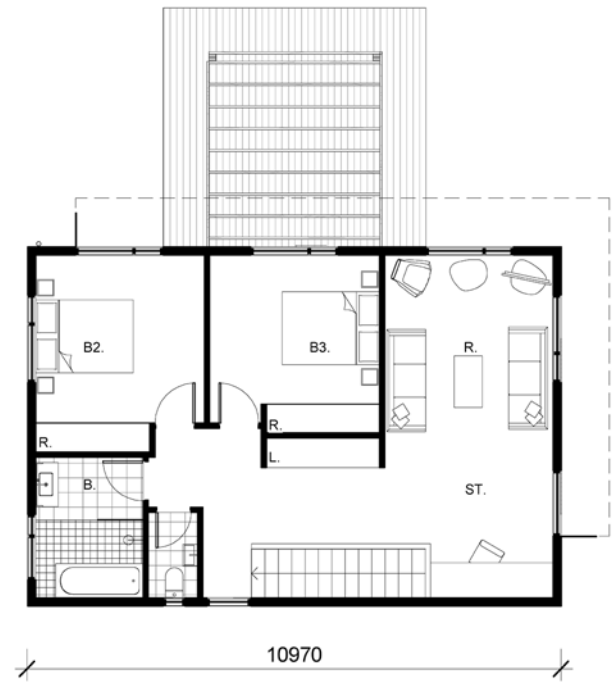
North Elevation



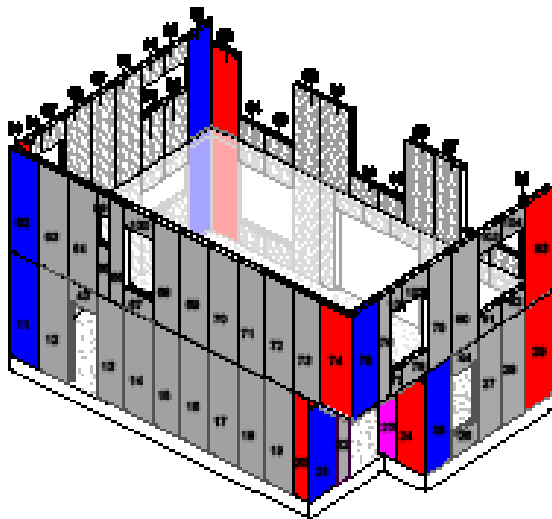
East Elevation



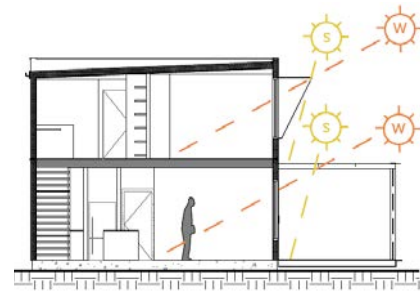
Ground Floor Plan



First Floor Plan



3D Manufacturing Model



Section



SHELL PRICING FOR BUILDERS

Cumulus House

Costs to build the shell to Lock-Up stage
- excluding GST & builders margin

Shell kit Supply Price	\$ 89,400
On-site Works	\$ 45,300
Build to Lock-Up price	= \$134,700
	= \$ 858 per m2

ORIGINS IN SUSTAINABILITY



Habitech Systems was established in 2010, growing from Chris Barnett's long held interest in ecology and sustainable design. Chris has a long running involvement in the promotion of sustainability in the design and construction industries, working collaboratively with architects and consulting as a sustainability specialist.

Chris has won numerous State and National Architecture Awards, sat on the National Sustainability Committee of the Australian Institute of Architects and currently represents the Institute on the Australian Sustainable Built Environment Council (ASBEC) Sustainable Housing Task Group.

'Having been part of Australia showing global leadership in the sustainability of the commercial and educational buildings we are constructing, the quality and sustainability of our housing remains 20 years+ behind other OECD countries.'

'With my ESD consulting and integrated design experience having given me a unique outlook on architecture, building science and services engineering, I felt compelled to come up with a solution for delivering more sustainable housing in Australia and New Zealand.'

Chris Barnett, Managing Director, Habitech Systems

START YOUR NEXT PROJECT WITH US!

We design and deliver modular homes that are modern, comfortable, low energy and more sustainable. Our complete design and management services deliver fully finished high-performance houses. We provide bespoke design solutions from full architectural services to tailored design and documentation packages for builders and developers.

RANGE OF SERVICES

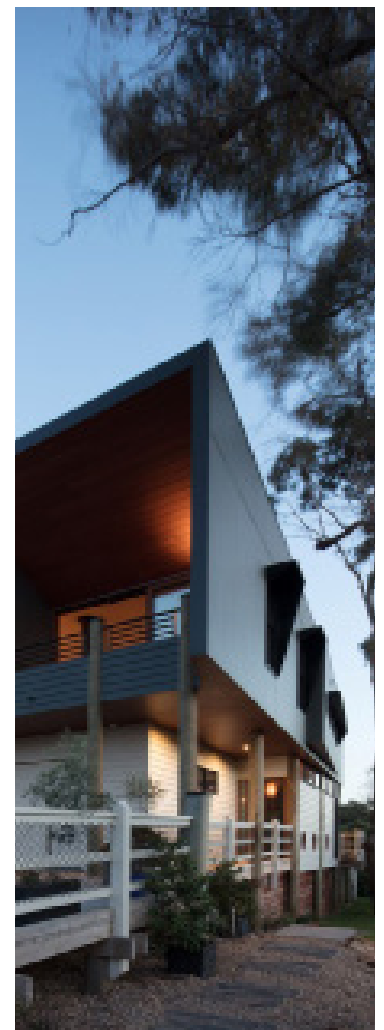
- Feasibility & Concept Design Service
- Architectural Homes
- Pre-Designed Homes
- Building Shell For Builders

BENEFITS

- Sustainable style and convenience
- Comfortable and healthy living spaces
- Environmentally friendly
- Stronger and built better
- Smart design and technology

We service all areas of Melbourne, regional Victoria, all states and territories in Australia and New Zealand.

If you'd like to discuss the specific design and site requirements for your project, please get in touch with our team on 03 9419 9436 today.





Initial Design Engagement



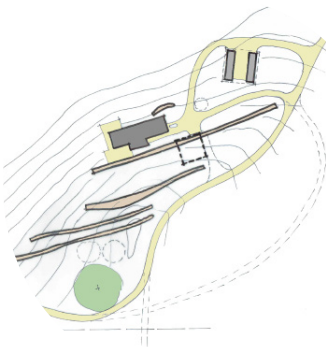
FEASIBILITY & CONCEPT DESIGN STAGE

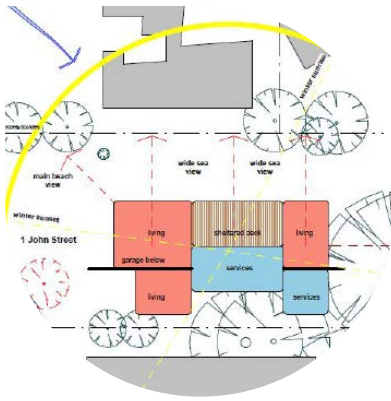
Our Feasibility and Concept Design stage is the first step towards building your home. Before you commit to our full architectural services, this will establish the project's viability and provide a clear basis on which to proceed with the design and construction process. At this stage you'll discover what you can build to meet your lifestyle, site specifics, timeline and budget.



WHAT WE DO FOR YOU

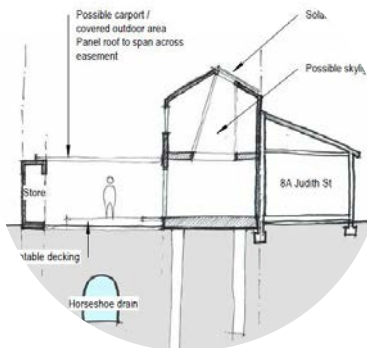
- **Site Visit:** we will visit to gather and analyse information that will determine the possibilities and limitations of your project.
- **Site Survey:** we'll commission a land surveyor for boundary and site levels if necessary.
- **The Brief:** we work with you to get a thorough understanding of your requirements, so we know what's important in your new home.
- **Town Planning Analysis:** we look at applicable Planning Policy and Overlays to determine Town Planning constraints and issues. We have further discussion with Council if required.
- **Site Analysis:** we consider your site in terms of solar access, overshadowing, overlooking, desirable views, winds, sound sources, vegetation, flood constraints to determine available and cost effective building forms.
- **Conceptual Design Response:** Area and functional planning analysis. We find the best location, layout and orientation for your home. This will be developed further with you during the later design stages but provides a great starting point for your design .
- **Project Budget Estimate:** conceptual area planning allows us to produce the project budget cost estimate, including construction cost and design and approvals cost.
- **Structural Concept:** if your site has unusual ground conditions, we will commission a Geotechnical report to determine the appropriate structural ground work approach for the suggested concept design and established soil conditions. This avoids any budget surprises at a later stage.





YOU WILL RECEIVE

- **Return of Brief:** the document outlining your requirements for accommodation, finishes and any services, systems, outbuildings or external landscaping as resolved with you at the site meeting.
- **Site Development Authority Information:** planning report and services information for your site.
- **Concept Drawings:** 1:200 scale sketches including 3 site concept plans and a site section showing site conditions, functional planning and building form analysis and a concept perspective of a primary space or view of the concept.
- **Project Budget Estimate:** estimates of likely construction cost and design and approvals budgets based on conceptual floor areas and the project brief.
- **Design Program:** provisional timeline of design and construction process, including monthly financial design fee commitments.
- **Design Services Summary:** outline of a design and building process proposal resolved to suit your requirements. We provide a detailed summary of applicable architecture, sub-consultant and authority scope of work and fees.
- **Structural Engineering Approach:** for unusual sites we will recommend a Geotechnical report detailing ground conditions and preliminary footing concept. This is also required for your project at a later stage for structural design.



START YOUR PROJECT WITH US

Habitech's fixed fee for the Feasibility Study varies depending on the scale of the project. If you wish to come in to discuss your project with us, a fee proposal for this initial design stage can be provided within a few business days.

Our fee to undertake these services for a typical family house is \$2,700-3,000 + GST.

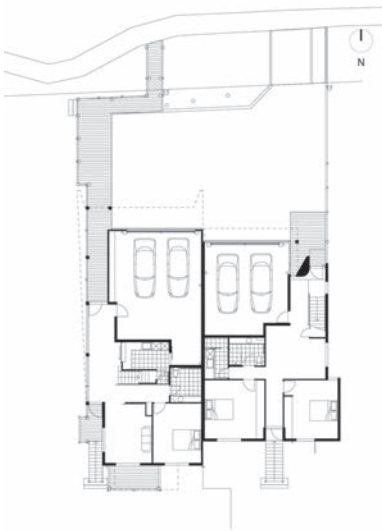
This initial work doesn't obligate you to any further stages and will be useful for you in understanding what you can build on your property and current building rates.





Architectural Project Examples

MORNINGTON BEACH HOUSES



Ground Level Plan



Upper Level Plan

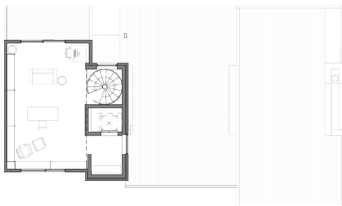
Situated on the Mornington foreshore in Victoria, this project saw the creation of two double-storey houses on a lot facing Mills Beach and bordering the mouth of Tanti Creek.

The brief to design two beach houses was primarily driven by the opportunity to create living spaces with extensive northern views over Port Phillip Bay, and incorporate both the opportunities and limitations of its creek-side location. One house was designed for our clients to live in, while the second house was offered for sale upon completion.

Featuring a palette of materials appropriate to its coastal location, the design seamlessly integrates the indigenous coastal landscape, creating a building with a sensitivity to its surrounds. The design also brings foreshore pier proportions and detailing across the road, contributing to the public realm in the way it interacts with the creek.



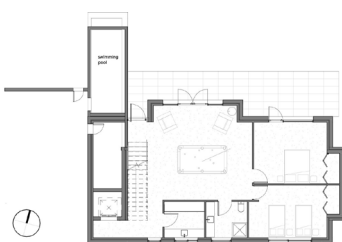
WARRANDYTE OUTLOOK HOUSE



Upper Level Plan



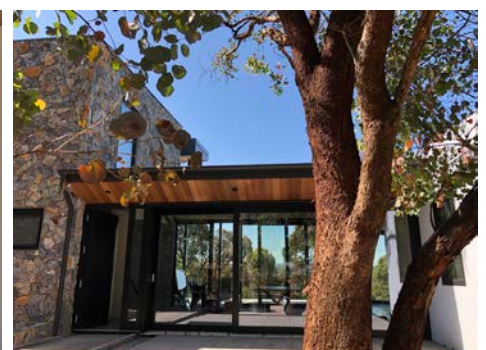
Ground Level Plan



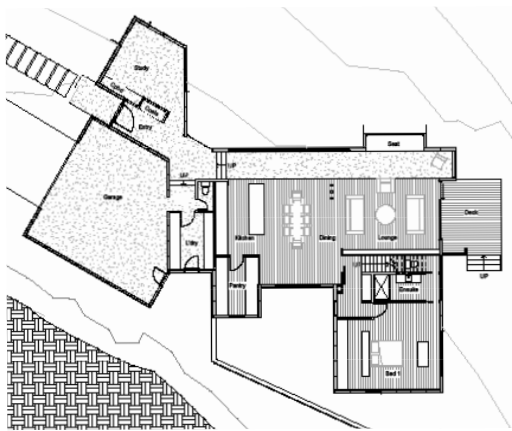
Lower Level Plan

This semi-rural property in Warrandyte was purchased to construct a new home for the owner, father and grandfather to his neighbouring family. The new house provides space in which to enjoy bringing all generations of the family together under a new roof facing the long northern views over Warrandyte State Park. The widely spaced eucalypt trees of the area provide the backdrop to the outlook, while the immediate garden has been landscaped to balance a native planting scheme with space for younger family antics.

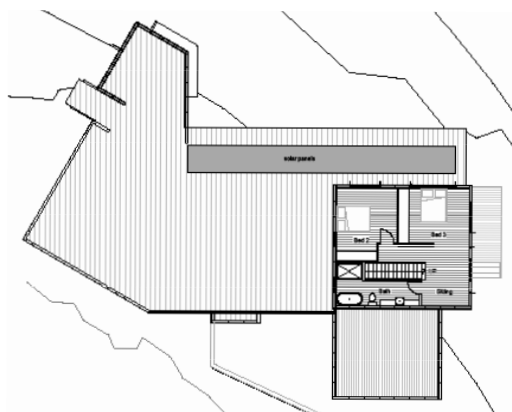
The organising central terrace begins in the forecourt arrival, surrounding two key trees, becoming a dining area then extending out to the view as the communal external space. Alongside this fully glazed breezeway is the masonry vertical circulation and plunge pool separating the private owner's suite from the family living and kitchen, both in Habitech Systems SIPs construction. The recessed dark masonry lower level offers the guest family area sunken into the sloped site, minimising the height of the house within its natural context. All main spaces receive northern winter sun and cross ventilation from the cool southern garden in summer.



MULLUM CREEK HOUSE



Ground Level Plan



Upper Level Plan

Mullum Creek is a new residential sub-division of an old orchard in Donvale. The development has a strong environmental focus with all houses required to reach a minimum 7.5 stars energy rating and have a minimum of 4kW of solar panels.

Our client was a builder with a keen interest in producing a highly insulated and sealed house approaching Passivhaus standards. They selected Habitech for our proven thermal performance.

The house is entered between two simple boxes which define a strong circulation path through the building. This path cranks to the north to maximise passive solar performance before terminating in a large east facing window which looks across Mullum Creek. As you move along the circulation path the floor level steps down whilst the ceiling remains high, which opens up the rear of the house to the sky and garden.



LAWES STREET EXTENSION



Floor Plan

The project brief for this extension was to rejuvenate an original Victorian cottage in the Melbourne suburb of Hawthorn and bring it up to modern, high performing standards.

The street façade was re-finished and the rear addition replaced with a modern and efficient open living space. The property had been brown brick-clad in the eighties with an ineffective addition to the rear.

The new living and master-suite areas were constructed with great northern orientation being a key driver of this design. The 'wedge' shape of the living and sleeping areas towards the rear of the property ensure that full optimisation of the site's solar potential is achieved. The open plan living spaces are divided by the kitchen, sitting beneath a single roof entity, gently rising to maximise bright winter sun and providing adequate shading during the summer heat.

The Lawes Street Extension received a fresh new street façade, with naturally oiled Cyprus timber battening over the existing brick frontage. The front veranda was also modernised with a sharp new porch entry, and the kids bedrooms feature metal clad box-bay window seats from which to enjoy the large front garden.



HAWTHORN SOLAR EXTENSION



Floor Plan
Existing House & New extension

In the Solar Extension project, 21st century building brings a new life to an elegant 1890s house, renovating the existing double brick house and extending to the rear.

Our clients were looking to build an 'all electric' house that can be fully powered by renewable energy. Much of this energy will come from an onsite array of PV solar panels that we have designed to form an integrated roof plane in the rear extension form of the house.

The design makes the most of a wonderful north facing orientation to the rear of the property, maximising solar passive performance and forming a connection between the new living, dining and kitchen areas in the extension with the garden.

The design includes showers in both the bathroom and ensuite breaking out of the original house, with glazed walls facing into a private courtyard created by retaining a section of the 120-year-old brickwork of the original house.





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