JUST ADD SPACE:

Sustainable, prefab options for backyard offices and studios

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InOutside offers DIY flatpacked cabins in four sizes, and 'outdoor rooms' such as the Cooba (pictured here) that are available installed 'to lockup' or 'full installation'. You can also design your own custom build using their proprietary software. Double glazing and insulation are available as extras, as is a full planning and approvals package. Based in Melbourne and Adelaide. www.inoutside.com.au

A widespread pandemic requirement, working from home is likely to remain a more common arrangement for many of us even as we achieve 'Covid-normal'. While a desk in the bedroom may have been enough in the short term, a dedicated office space might be starting to look like a good idea, and there are plenty of prefab cabins, studios and office pods out there. We asked some leading suppliers what you need to consider for a 'quick and easy' installation that also ticks the energy efficiency and sustainability boxes.

Backyard offices and studios are nothing new, but the pandemic has triggered a surge in demand among homeowners keen to reinforce the boundary between home and work life. Of particular interest are prefab solutions for their quick installation. With a host of options on the market, from DIY kits to ready-to-occupy buildings delivered by crane, there is also a range of factors to consider in making the selection that's right for you.

FROM PURPOSE TO REPURPOSE

Office space might be your current priority for this new build, but before you opt for something just big enough for a desk, it's worth considering its broader potential. Does it make sense to design the space to meet more than one need,

for example as a music practice room, guest room or even a full granny flat? Do you want a kitchenette, toilet or small bathroom?

Prefab design and build practice Ecoshelta has been fielding enquiries for home offices during the pandemic, with an adaptable space a top requirement for many. "As we've moved through the design process it's become clear they have a range of needs and wants that a small pavilion building like our Small Pod can meet," says director Stephen Sainsbury. "The ancient Japanese tradition of flexible spaces is at the root of the Ecoshelta system. By including a small bathroom and kitchenette, a simple workspace can easily convert to guest accommodation or even a granny flat for longer term occupation as needed."

Anthony Fitzgerald, of Hypercuby in Melbourne, concurs. "Sometimes a room or small building can have one use now but another use later. We encourage clients to think creatively and be forward-thinking." Hypercuby offers steel-framed container-style backyard pods in six sizes, that are fully insulated and relocatable. There is even a version with a high BAL rating for fire-prone areas.

WHAT TYPE OF PREFAB?

There is a growing range of prefabricated construction types on the market, including kit style, panelised (or flatpack) and modular; for an in-depth look at the options and their pros and cons see 'Modular synthesis: A prefab buyers guide' in *Renew 153*. Many of the same considerations apply for the smaller-scale application of home offices and studios.

From DIY to fully finished

Options range from simple kit sheds to architect-designed creations, depending on your budget and eagerness to get on the tools yourself. For example, South Australian operation InOutside offers basic flatpack cabins for DIY installation, plus an 'outdoor room' range that is available installed either just to lockup or fully fitted out.

Victorian prefab home builder Ecoliv's options take the form of volumetric modules delivered to site, complete with plumbing, electrical wiring, and all fixtures and fittings. Ecoshelta offers a range of options, from factory-fabricated kits of parts for owner-builders and contract builders (even, since the pandemic, available as a non-contact online purchase), through to installation to lockup and – for larger or more complex projects – project management of full building contracts to completion.

Relocatable or fixed?

A side effect of many 'quick and easy' prefab office and studio options, particularly those delivered as modules or 'pods', is that they are relocatable. This could be an advantage if you think your need for the extra space will be temporary, or if you'd like to take it with you when you move.

Image: Coastal Snaps

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Sustainability-focused modular home designer and supplier Ecoliv's Eco Studio is 26m² and includes a bathroom and kitchenette. Based in Wonthaggi, VIC. www.ecoliv.com.au

"A relocatable building can avoid council planning regulations altogether in some contexts," says Stephen Sainsbury, "especially if it has a 'manufactured building compliance plate' and can be delivered and removed as a single unit." However, he also notes that particularly if your building has a bathroom or kitchen, the cost of providing the necessary services is a decent proportion of the overall cost, and disconnection costs are also significant.

Some companies such as ComfyPod, established in Geelong, Victoria, in response to the pandemic, have a hybrid approach, with builds that are permanently fixed but designed to be relatively easily disassembled and rebuilt at another site.

Location, access and site preparation

Your choice of solution will also be influenced by the site you have in mind and the access to it. When choosing a location, think about privacy from the main house and neighbours, outlook, orientation for passive solar gain and proximity to any services you'll need to have connected.

A level, cleared site is preferable for most prefab office or studio installations, though some companies have developed footing systems to suit sloped, rocky or otherwise more difficult sites. You can generally prepare the site yourself or have the company do it for an extra fee. ComfyPod's required site preparation depends on the area in question, says director Tim Clark. "If we have a level area to work with, we will generally use a crushed rock base with concrete stumps, but sometimes a concrete slab or bigger stumps may be required."

Ecoshelta uses telescopic marine-grade structural alloy footings on small concrete pads or fixed directly to rock if available. The footings can be tailored to most slopes and allow the building to sit well clear of the ground, minimising site impact and allowing underfloor access for services. Hypercuby's Flatcuby is lightweight, meaning foundations

Image: Jacob Collings

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Architect-designed, prefab house supplier Ecoshelta has a strong focus on sustainability, and has a basic cabin and a Small Pod at the smaller end of their range. Construction is aluminium alloy frame with SIPs (structural insulated panels) and sustainable materials. Based in Sydney and Tasmania. www.ecoshelta.com

are not complicated or expensive. "You do not require a slab, although it's fine if you already have one. The building can sit on concrete blocks, piers, whatever is appropriate given usage, drainage and soil," says Anthony Fitzgerald.

Access for delivery is also important, with flatpack solutions more suitable for tight backyards and difficult-to-access sites than modular options; all suppliers will be able to advise on access needs for trucks and cranes if they are required.

Ecoshelta and Hypercuby both have panelised products designed to mitigate any site access hitches. "Lightweight parts and a manual assembly system avoid the need for heavy machinery and cranes on site, allowing for straightforward installation of our pods on difficult, delicate and remote sites," says Stephen Sainsbury. Anthony Fitzgerald notes that their flatpacks can be delivered almost anywhere: "If you can't get our flatpack there, you probably can't get there yourself."

SUSTAINABLE DESIGN AND MATERIALS

Even for a small building, if you're going to spend many hours working in it it's worth ensuring it will perform well thermally and be energy efficient. Look for suppliers and products with good insulation, double-glazed windows and cross ventilation. Don't forget to think about shading; small spaces can heat up quickly so it's worth considering shading northern and western walls as well as windows, and in tropical climates, all-around shading is sensible. Some suppliers offer these features as an upgrade to their regular products; some focus on more sustainable and even Passive House offerings. And as with all building and renovation projects, try to choose materials that will be durable, are fit for purpose, have low embodied energy, and are recycled if possible or otherwise sustainably sourced.

Hypercuby has responded to the demand for home offices with the recent release of its energy-efficient Flatcuby with high-performing PIR insulation. "So many people need a place to work from home and they need it soon," says Anthony. "But that's not enough; they need it to be good. Our designs are based around energy efficiency and comfort."

Ecoliv's sustainable buildings all incorporate passive solar design principles including orientation, double-glazed windows, insulation and shading – even their smallest offering, the 26-square-metre Eco Studio, which could fit the bill for a backyard home office. "With a large proportion of home energy typically used for heating and cooling, our designs aim to reduce this dramatically," says director Ashley Beaumont, noting that all Ecoliv buildings achieve a minimum 7-Star energy rating. [*Ed note:* read about an Ecoliv modular home in Jindabyne, NSW, in our prefab & modular special on p40.]

InOutside supplies its cabins and 'outdoor rooms' to most of Australia. It offers options for increased energy efficiency including a choice of glazing and high levels of ceiling and wall insulation, as well as LED lighting, solar PV systems and rainwater tanks. ComfyPod is committed to sustainable design and materials; its office pods come with wall, ceiling and underfloor insulation as standard, and double-glazed windows are an optional upgrade.

Constructed with prefabricated marine-grade structural aluminium alloy frames and flatpacked, heavily insulated floor, wall and roof panels, and with double glazing and low-e glass options available, Ecoshelta's pods are designed for passive solar performance and natural stack ventilation. "We use environmental evaluation system EcoCost to determine the most appropriate materials to incorporate into our buildings at the base level, and we apply the same rigour to their design,

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Our FabHaus offers prefab homes designed to Passive House standards. The smallest option is the Fab Mini, a 59m² unit with separate bedroom, kitchen and bathroom – good for those looking for a more fully-fitted 'granny flat' style addition with superior thermal comfort and energy efficiency. Based in Byron Bay, NSW, and Melbourne. www.ourfabhaus.com

manufacture and deployment," says Stephen. "This allows confidence that the outcome is as environmentally benign as possible for any given brief and site."

REGULATIONS AND PLANNING REQUIREMENTS

The rules and regulations relating to small backyard buildings are complex and vary according to your location as well as the size and nature of your project – such as whether it is relocatable or fixed, and whether it includes a kitchen or bathroom and is thus classified as a 'dwelling' – so it pays to check carefully.

Stephen Sainsbury points out: "In most states, 'granny flats' or secondary dwellings up to 55 or 60 square metres in floor area are allowed to be built on a residential lot with an existing house, without all the delay and hassle of council development approval. There are pretty tight rules on what can be built but if those can be met, the construction approval process is very quick, simple and low cost."

Tim Clark says some smaller structures do avoid the need for permits. "Our product range focuses on structures under 10 square metres as these generally don't require a council permit." ComfyPod is also able to work with clients on bigger projects and to assist with engineering drawings for them to submit an owner-builder application to their council.

COST INDICATION

A prefabricated extra room is not necessarily a low-cost investment; the price can vary a lot depending on the project specifications, size, finishes and other factors. But judging by the range of suppliers we spoke to, it seems there's something for everyone.

Aptly for a solution born of the challenges of the coronavirus pandemic, Hypercuby's Flatcuby starts at just $8,500 for an 18-square-metre flatpack home office. InOutside prices start from $9,400 for a kit-form office.

At a higher price point, a ComfyPod will come in at $15,000 to $25,000, depending on the choice of timber cladding, site preparation, foundations, windows and doors, internal fitout and electrical requirements.

Stephen Sainsbury says: "Ecoshelta can offer a basic one-room kit for around $45,000, or a cabin with bathroom and kitchenette, supplied and fully assembled for around $115,000, depending on the customer's requirements."

IN SUMMARY: THE VALUE/COST EQUATION

With predictions indicating that even post-pandemic, work practices may never be quite the same again, there's never been a more opportune time to think about expanding your home with a dedicated workspace. While low cost is not always a given with prefab, the payoff of a carefully chosen backyard haven lies in designed-in sustainability, speed of construction and a quality end result. And investment in a prefab backyard office also has the potential to offer serious value over the longer term as your requirements evolve.

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IMBY offers architect-designed, kit-style backyard cabins made from plantation timber, that are easily constructed with no nails or glue. Various cladding and window choices are available, and insulation as an optional extra. Based in Sydney. www.imby.com.au

Image: Adriano Pupilli

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(Top) ModnPods offers fitted-out modular office/studio pods in three sizes from 14m², with the option to add a kitchen and bathroom. They are Australian made with a focus on locally sourced, recycled and zero-VOC materials, and services include council approvals and installation. Based on the Gold Coast, QLD. www.modnpods.com.au (Bottom left) Hypercuby produces steel-framed container-style relocatable backyard pods in six sizes, including the Flatcuby flatpack home office. Based in Melbourne. www.hypercuby.com.au (Bottom right) Comfypod offers two sizes – both under 10m² – of prefab office pods with good eco specifications. Based in Geelong, VIC. www.comfypod.com.au