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TRADITIONAL VS. PREFAB

There are two types of construction to consider for your project: traditional construction (unit is custom-built on-site) and prefabricated/ modular methods (sections of the unit or the entire unit are built off-site). Both traditional construction and prefab have pros and cons, so it's best to consider your specific needs in terms of your lot, design intention, ease of hiring contractors, etc. Traditionally, a homeowner hires a builder to construct the unit that their architect designs or a design/ build firm handles the entire process. This allows the homeowner to design a home fitted to their space and needs. Traditional construction also allows for smaller changes to the design during the process, even after construction has started. With prefab and modular methods, some or all of the home

is built in a factory and shipped to your site. These methods rely significantly less on contractors-except for on-site assembly, foundation, utility hookups, etc. Additionally, prefab often saves time because the site can be prepared while the home is being constructed in the factory. Prefab homes typically offer less customization. Prefab homes are often about the same price as traditional construction, though some companies offer lower-cost options. While prefab homes can appear to offer cost savings, it's important to consider some of the additional costs like transport, crane costs, the foundation, and sales tax when comparing costs, which can end up being 20-40% of the total cost. Also, not all banks will finance prefab construction.

Three Types of Prefab Homes



Panelized: Homes constructed from two-dimensional, prebuilt sections that are assembled on-site.



Modular: Fully constructed and finished boxes (with cabinets, plumbing, and doors already installed) that are hooked up on-site.

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Manufactured: Similar to modular in that unit is built off-site, but it's regulated by federal building code, often designed to be mobile, and usually more affordable.

Photo, top: Lanefab Design/Build Photo, middle: New Avenue Homes Photo, bottom: US Modular, Inc. Photo, right: Mighty Buildings To explore prefab home options, you will want to get in touch with prefab companies directly. Generally, they will visit and evaluate your site and make recommendations for your property, including cost and customization options. You can find prefab builders by researching online.

Shipping Container Homes

Many people are excited about shipping containers finding a second life as small homes. Typically, these heavy-duty steel boxes are 20 feet long and 8 feet wide and are repurposed by companies and do-ityourselfers into dwellings made up of just one container or multiple containers connected together. If you are interested in them, make sure they meet all legal requirements for your location. No matter the design, ADUs cannot be on wheels and must have a permanent foundation.



DESIGNER TYPE

You don't need to make extensive small talk with your architect, which can be expensive.

Most jurisdictions do not require an architect to design a residential project. However, they may require an architect or structural engineer's stamp on certain documents submitted for permits. As you start the design process, one of your first considerations is what kind of professional you want to work with. Most homeowners choose to work with some type of design professional to plan their ADU and help throughout the process. Bringing on a professional early in the process is often key to getting your ADU approved quickly and smoothly and to creating a cost-effective project. Homeowners with previous design experience can choose to manage the design themselves, but this is not recommended unless they have considerable experience. You will also need to decide how much you want your designer to take on-some homeowners hire their designers just to do design drawings, while others keep them on to do construction drawings and/or to help with construction management. No one type of design professional is inherently better than the other. Like any profession, specific relevant experience, professional interests, personal strengths, and personal fit with the client are critical. The following are the four general types of design professionals you can work with to design your ADU.

Architect An architect is a professional licensed by the state who has a degree in architecture and has passed a rigorous licensing examination. Architects take legal responsibility for their work. Architects may provide a range of services, including fullservice support from the initial concept, on as well as completion of construction, including coordinating with required consultants such as structural engineers and any related subcontractors. Ask what services an architect offers and negotiate a fee based on what services you need. The American Institute of Architects website (www.aia.org) provides helpful information to homeowners in this regard. Architects usually bill at a higher rate than designers, but some feel the additional expertise saves them money (and stress) in the end.

Designer The term designer is not regulated; anyone can call themselves a designer. Some designers have an architectural education and training but are not licensed. Others are self-taught. Most fall somewhere in between. The services designers provide are variable depending on their experience and business model. Design/build A design/build firm will do the design and construction of your ADU. Most often, a design/build firm is headed by a licensed contractor who has a designer on staff, but some are headed by or have a licensed architect on staff. Be sure to ask detailed questions about the level of design services provided. The term design/build is not regulated. Some design/build firms have experienced designers on staff who can provide spatial planning for remodels, additions, and new construction, as well as material selections. Others focus on minor changes and material selections or will hire a drafter to draw up plans based on your or their ideas.

There isn't a hard line between prefab and custombuilt. For example, you will be able to customize prefab designs. You can also have your architect start from plans that have been used and approved in other places. By compromising a little on flexibility, you might be able to save a lot of time and money. **Modular/prefab** With modular and prefab homes, some or all of the home is built in a factory and shipped to your site. Generally, the homeowner will work with the modular company to select and often customize their unit. A contractor is then required for site, utilities, and concrete work in preparation for the installation of the modular unit. This method simplifies the design process to choosing a company and then selecting a model and finish options. Modular generally takes the least time from conception to completion with a reliable level of quality control. In theory, permitting should be easier with modular homes, but because it is a relatively new and not yet widely implemented method, some jurisdictions may have additional questions that require additional finesse. Additionally, site-specific conditions on your property, such as access to utilities and where your main sewer line is or whether a prefab home can be delivered to the site, may impact your decisions on whether a modular/ prefab ADU will save time and money. See page ## for more information.



HIRING AND WORKING WITH A DESIGNER

How do I find an architect? A designer will start the process by visiting your home. They will talk about your ideas and goals. If it seems like a good match, they will prepare a proposal that details exactly what services they will provide and what they will charge. You will need to determine how involved you want your designer to be. Some designers will charge for their initial consultation or development of a proposal; it depends on the firm. There are two key considerations when evaluating a design professional: their experience and their interpersonal skills. There are unique challenges to designing small homes and you most likely will want someone who has experience with small homes. Also, designers have favorite styles (e.g., modern,

craftsman, etc.) and your designer's skills should match your goals. It is also important to find a designer who has a personality and communication style that fits with you. They should understand and respect your goals and choices. Chemistry really matters. A major portion of a designer's job is explaining the process and the design choices to you, so you want someone whose explanations make sense to you. This extends to communication mode as well. If they are an email person and you are a phone person, it might not be a good match. The American Institute of Architects recommends you meet with three to five firms before making a hiring decision. See page ## for questions to ask your designer.

Consider hiring someone you know from your community (e.g., church, work, or a neighbor). Because designers and contractors are busy, sometimes the personal connection helps. Also, if there is a problem, you have a strong incentive to find a solution that you can both live with.



Designer Considerations Exercise

- 1. Would you rather work with a licensed architect, who has more training, or a designer, who is likely to be less expensive?
- 2. Do you want to use modular/prefab construction (unit is at least partially built off-site)?
- 3. Do you want to use a design/build firm to handle both drawings and construction?
- 4. How client-centered do you want your designer to be? Some architects welcome interactions with their clients and some dread it. Some homeowners want to be actively involved and some are more hands-off.
- 5. Do you prefer to work with a larger firm or a smaller firm? Both have pros and cons. In the end it comes down to your personal preference.
- 6. Do you want your designer to just prepare drawings, or do you want them also to help with permitting, construction drawings, and/or the construction phase?

Remember: if the ADU shares a wall, sound- and odorproofing is a really good investment.

Questions to Ask Your Designer

EXPERIENCE

- Do you have experience with building ADUs?
- Where can I see pictures of similar projects you have designed?
- Can you send me a list of client references, preferably from smaller projects?
- How big is your firm? Who does which portions of the work? Who specifically will be working on my design?
- Are you licensed?
- What is your experience designing the type of ADU I would like built?
- Do you have experience working with my city and do you know city staff?

DESIGN

- How closely do you like to work with homeowners in the design process?
- Do you have a design philosophy?
- What are the steps in the design process and how are they organized?
- How do you help a homeowner establish priorities and make design decisions?
- What role do you have during construction?
- Am I expected to work with the contractor directly?

MY PROJECT

- How busy are you? What is the timing to start work?
- What is your estimated timeline once the project is moving forward?
- What challenges do you foresee?
- What do you see as important considerations for my project?
- How will you go about identifying my needs and goals and incorporating them into the design?
- Is my budget realistic?
- How will you help me to understand key milestones in the process?
- What do you expect me to provide and by when?

FEES

- What are your fees? How do you structure your fees?
- Can you provide some sense of what it might cost (with the understanding that this would be rough numbers without a formal proposal)?
- What is included in your basic services and what services would incur additional fees?
- What is the process for changes in scope?
- How do you manage a project to keep it on budget?

COSTS AND CONTRACTS

Design costs vary with every project, but a rule of thumb is that it will cost 10-20% of the total construction budget. Typically designers use one of three methods:

Fixed fee Based on your project needs, an architect gives you a maximum price. If the project takes more or less time to complete, their prices do not change.

Time and materials The architect will bill you for the hours they work. This works best if there are too many unknowns for the architect to fully understand the scope of the project.

Not to exceed The architect will only charge the hours they work, but there are agreed upon maximum amounts for each phase of the work. California requires architects to offer you a written contract. You should take advantage of this to protect yourself and to avoid miscommunications. You may want to have a lawyer review the contract to make sure all of your concerns are covered before you sign.

Sample Design Costs

	PERCENT OF TOTAL	BASIC STUDIO	HIGH-END 2-BEDROOM
CONCEPT/SCHEMATICS	15%	\$1,500	\$3,000
REFINEMENT & PERMITS CONSTRUCTION DRAWINGS	30% 40%	\$3,000 \$4,000	\$6,000 \$8,000
BIDDING, NEGOTIATION, & CONSTRUCTION	15%	\$1,500	\$3,000
TOTAL		\$10,000	\$20,000

These represent typical costs, but every project is different and costs will vary. All costs from 2019.



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