



Patio Cover Project Basics

Check out this essential guide before you get started on a patio cover project.



Installing a new patio cover (or “pergola”—we use the terms interchangeably) can dramatically change the look of your outdoor space. Like any home improvement project, there are many important decisions to make before you pick up the first nail.

If you’re thinking of upgrading your patio with a new cover, here’s what you need to know to get started.



Where Do I Start?

1: Familiarize yourself with the space

The first step is to simply go outside to get to know the space. Measure out the area of the patio cover. Chalk the ground with the dimensions or, if the ground consists of grass, rocks, or any other non-solid surface, place stakes in each corner and tie string from one stake to the other.

Visualizing the exact size of your cover ensures that its scale matches the space. Remember, you don't have to stick with the existing footprint. While there might be some advantages to using your current design, a new patio cover installation might a good time to improve your layout.

2: Track the sun

One of the key functions of a pergola is to provide shade. Once you have the area of your cover set, check back at various times of the day to make sure that your cover is located in the best spot to shade your sitting area or block your windows from the sun. Don't hesitate to adjust your dimensions to make sure the patio cover performs the job you're designing it for.

3: Gather inspiration

Start looking online or snapping pictures at friends' houses or in public spaces when you see a pergola you love. There are lots of different materials, designs and layouts that will make an impact on the final look of your patio cover. Don't forget important details like hardware (exposed or hidden?), stain or paint color, roofing options, hanging plants, vines and lighting installation. Pull together all the pictures you can find that represent your final vision for your patio. Or, if you're interested in a completely custom pergola design unlike any others in the neighborhood or online, stop by your local lumber yard and talk to the team about your ideas.

4: DIY or hire a contractor?

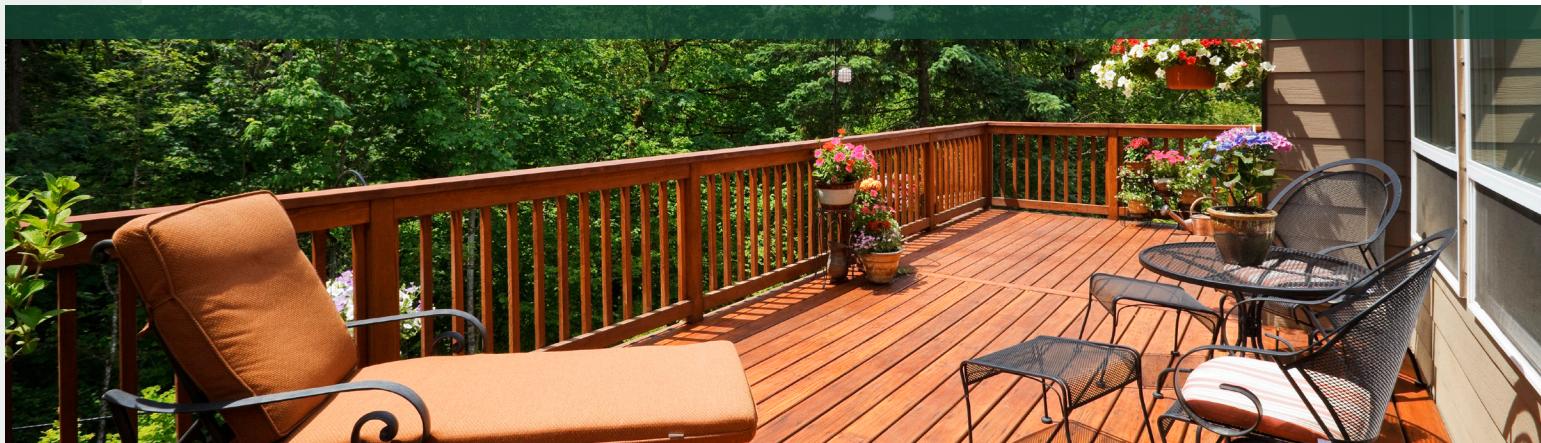
Here are some helpful guidelines to let you know if you should tackle the patio cover project on your own—or reach out to professionals.

Simple and Straightforward? Do It Alone

Patio covers are as unique and scalable as the design itself. In most cases, a more complex design will require a professional build, but if you're comfortable with basic woodworking, using a skill saw, measuring accurately, climbing a ladder and both leveling and setting a post, you can probably install a simple patio cover on your own. Remember, a significant part of any home improvement project is confidence solving problems on the fly, because every project presents its own set of unforeseen challenges. That said, if your patio cover falls into these categories, you should be able to handle the installation yourself:

Mostly flat roof – If your patio cover features only a slight angle for rain runoff, it could be a good candidate for installing on your own. Remember, a covered porch can trap water and experience drainage problems if its pitch is too shallow, so make this decision to do it yourself carefully. The minimum pitch for a covered patio is 1/4:12. This means you'll need 1/4 inch rise for every 12 inches of run. For open-slat patio covers, pitch is less important, since water will drain through. Keep in mind, that water still tends to sit on top of flat lattice and supports, which can lead to rot and other issues down the line.

Detached from the home – Freestanding patio covers are easier to manage for the layperson than those that are attached to the home's exterior via ledger board. Self-contained pergolas are great options because they can be fitted right up against the outside of your home without needing to be attached to the house's structure.



Small covers — Patio covers that are under 200 square feet are generally easy to manage by the average person with a basic knowledge of wood working. Anything over 200 square feet becomes much heavier and requires a more thorough knowledge of supports and city codes. For small patio cover projects, we sell basic wood patio cover kits that include all the lumber and hardware materials you'll need.

Complex, Cavernous or Customized?

Leave It to the Pros

Working with a licensed contractor significantly increases your investment, but also buys you peace of mind. Their intimate understanding of materials, structural integrity, mathematics and local building codes ensures that you'll get a patio cover that not only pleases the eye but stands up to the weather and won't result in safety code infractions.

Here are the circumstances where it's better to hire a contractor:

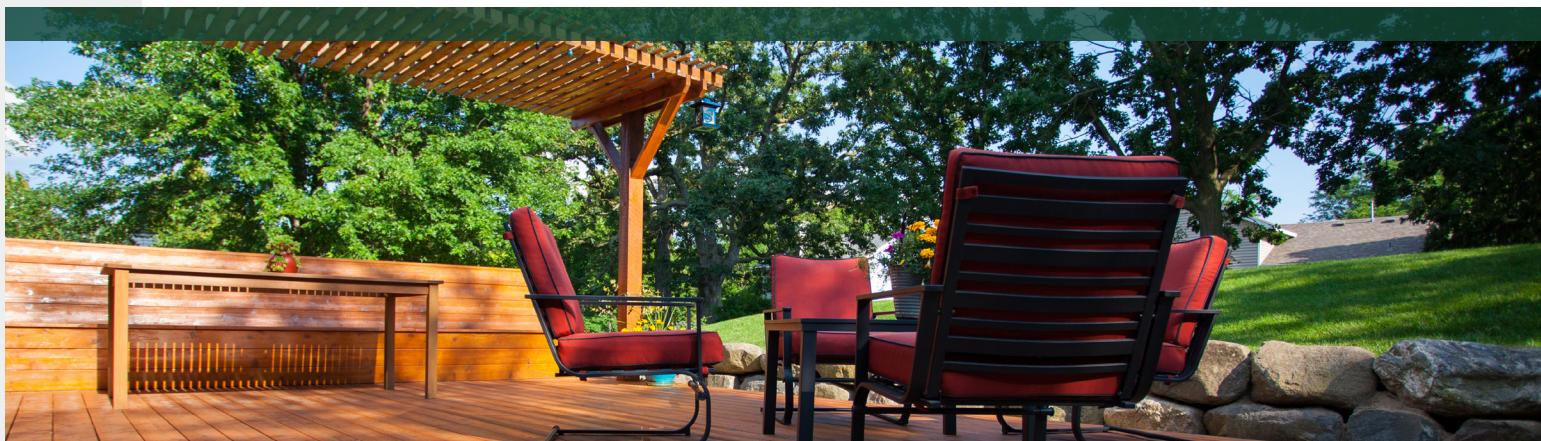
Pitched roof — The slant of your patio cover should fit aesthetically with the style of your home. For many, that means a serious pitch. If your patio cover requires an angle of any significance, design and installation will necessitate accurate mathematical calculation for safe installation. Let a professional contractor or engineer handle it.



Large areas — As the size of the patio cover grows, the design may fall under different safety guidelines. As shear load increases, accurate engineering and construction becomes critical. Increased patio cover size directly correlates with the size of your supports and beams. For example, when your patio cover starts to go over 200 square feet, then the sizing of your lumber skyrockets, quickly becoming an issue for anyone who is trying to go at things alone. Work with an engineer and/or contractor to make sure that your patio cover is not only safe in all weather conditions, but also meets all state and local building code requirements.

Attached patios — If the patio cover itself is going to be attached to your house using a ledger board, call in a contractor. Attached patio covers require clean removal of the exterior surface of the house, correctly attaching the ledger board, safely connecting the patio structure, then re-surfacing the house's exterior. In many cases, warranties on exterior finish products like stucco or siding may be voided if you attach anything to the home. Therefore, building an attached patio cover correctly means leaving it to a contractor.

Installing your own patio cover is a great project to get your feet wet in the home improvement arena. If you want a tried and true basic design, aluminum or wood patio cover kits provide you with what you need to get started right away. However, if you want a patio cover that has any feature beyond a flat, small-sized, detached structure, you're wise to reach out to professionals. The extra expense is worth it.

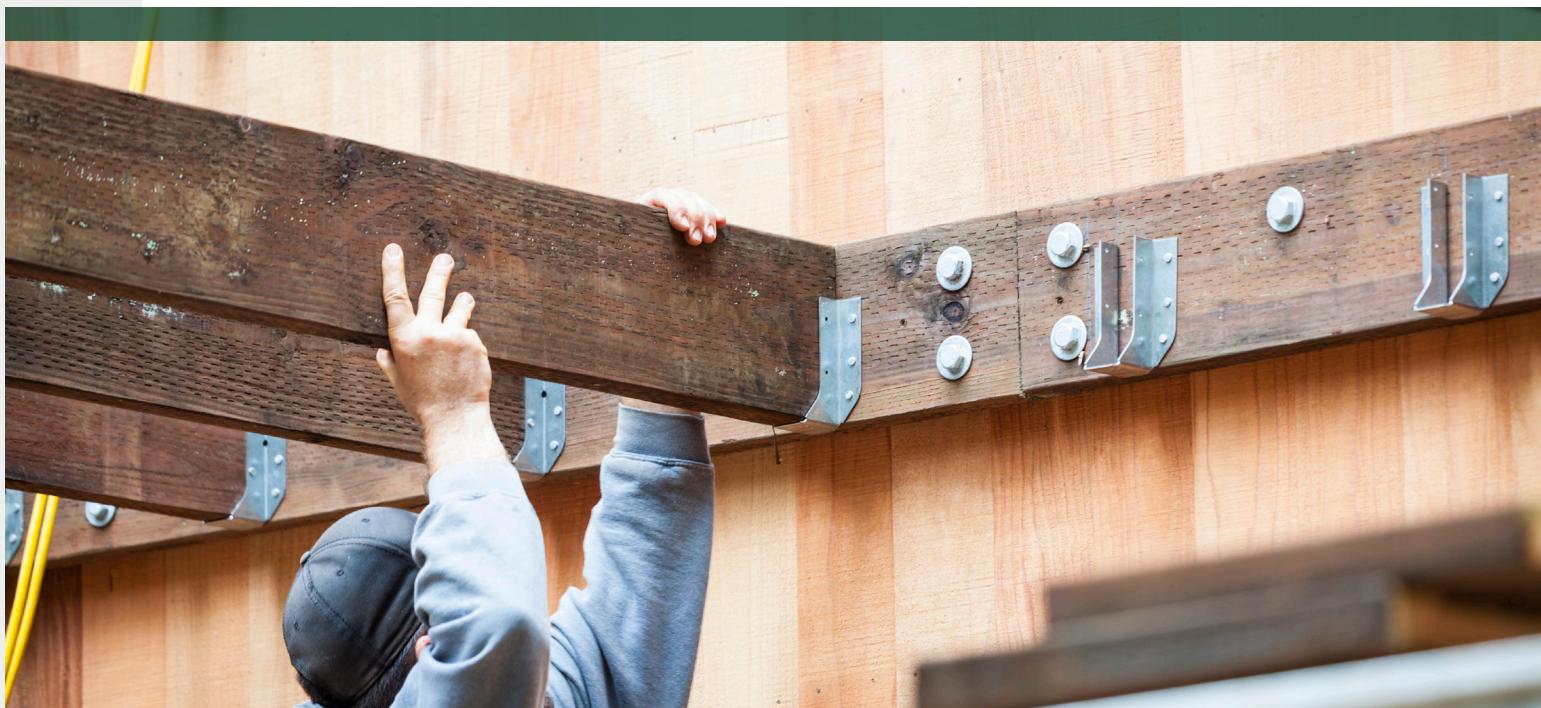


5: Set a baseline budget

You're not going to know exactly how much your project will cost until you start pricing out the complete scope, but you can establish a range that will help with decision making. If you have a sense of roughly how much you can afford to spend, share that info with the team at the lumber yard so they can provide the right options and suggestions. They'll help you manage trade-offs between size and materials to achieve a final product you love that fits your budget. Remember that the budget will change dramatically if you decide to use a contractor vs. if you choose to do it yourself.

6: Obtain the right permits

Even though a pergola is a relatively minor construction project, it still requires a permit. And for good reason: any structure built over a certain size must adhere to strict building requirements pertaining to the size of beams, the span of distance between posts, hardware requirements and stability issues in the event of high wind or extreme weather. Southern California-area patio covers must also be able to safely withstand the demands of sun, rain and salt air for maximum longevity.



Here's what you should know to make sure your new patio cover meets code requirements.

A permit is required for patio covers exceeding 200 square feet

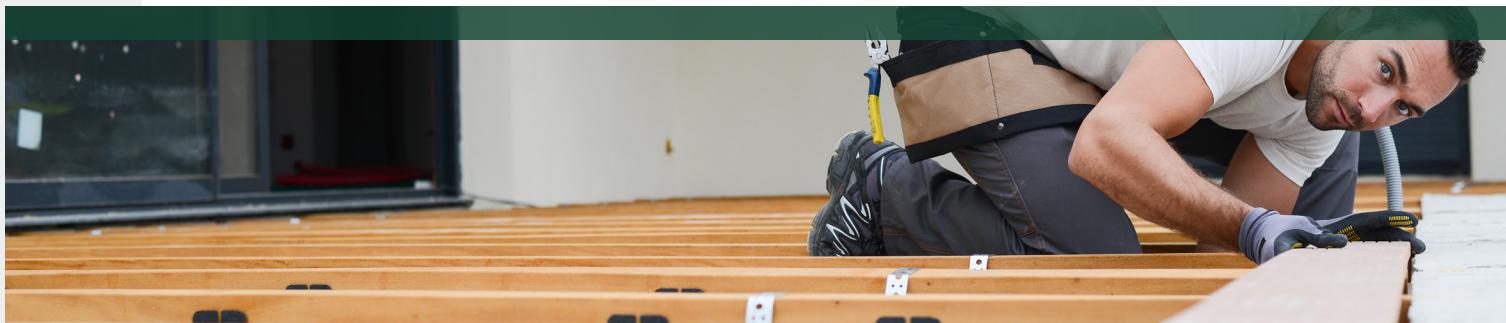
First and foremost, consider the size of your new pergola and find out if the structure needs to be permitted. If it's over 200 square feet, you do need a permit to install a new pergola in your yard. Like all home improvement projects, the permitting process aims make sure that construction is safe and stable. It might be tempting to try to get away with not obtaining the correct permit, but you should never cut corners. Lack of a permit will come back to haunt you in serious ways when you're ready to sell your house or, worse, if your pergola's structure fails.

State vs. county vs. city requirements

One of the most common areas of confusion when it comes to patio cover permits relates to managing multiple jurisdictions. There are state codes, county codes and city codes—which one do you follow? The short answer: the most local requirement. State building codes are usually the most general. They set the standard for minimum safety requirements.

Cities and counties often establish their own permitting rules, but those requirements can only be more stringent than state code; local municipalities are never allowed to loosen the rules. If you're within a city that has its own permit standard, you must follow your city-specific rules. If your city has no specific code, then you must adhere to county permitting requirements.

A good rule of thumb is to look for city requirements. If you find none, then review your county's rules. If again you come up with nothing, default to the state requirements.



What's in a code?

The majority of permit requirements are in place to ensure safety, so you should never skimp on permit obligations. Here are some of the most common aspects of pergolas that are covered in city/county/state codes:

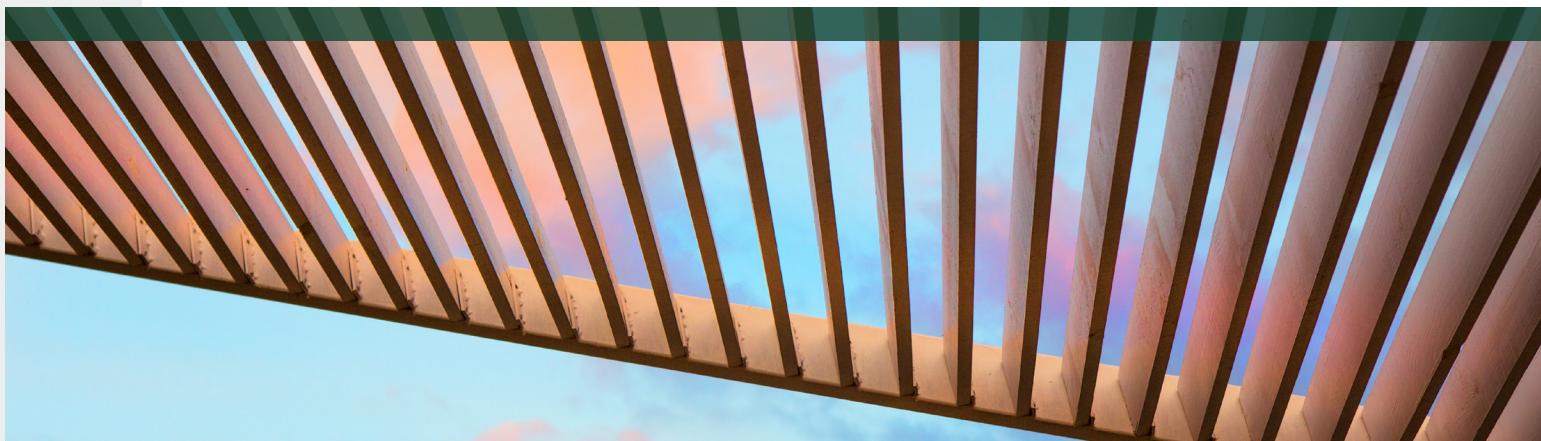
Height – The highest point of your patio cover cannot be more than 12 feet from the ground. To ensure easy access under the patio, you must allow a 6-foot-8-inch clearance between the ground and the lowest part of the cover.

Span chart – The majority of most permit regulations for patio covers are dedicated to the span chart, which is a grid that helps you determine correct wood dimensions. Depending on the span of your cover, you'll need either larger or smaller dimensions of wood to carry the added or lesser load.

Distances, depths & diameters – Additional information in the permit requirements will usually include distance between beams, distance between posts, depth of posts, depth of foundation slab, and diameter of posts.

Attached or freestanding: different requirements for each

If your patio cover is attached to a house or structure, in most cases, you can often attach posts to existing concrete footings. However, if you plan to install a freestanding pergola, the code requires you to dig concrete footings to ensure stable support. You won't be able to attach your posts directly to an existing concrete slab.

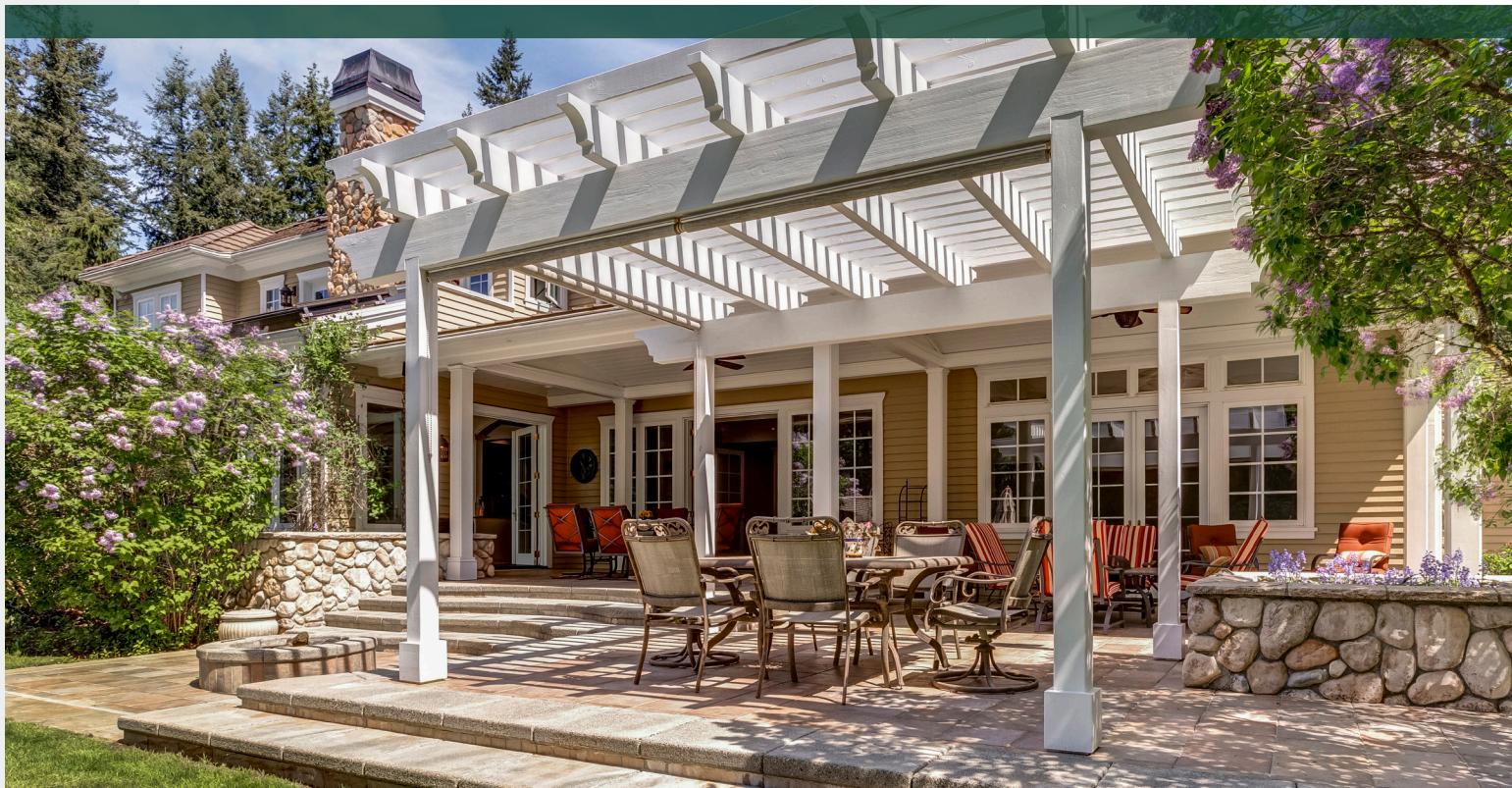


Materials & structural differences

Most pergolas are made from wood, but aluminum is an attractive, cost-effective alternative. Aluminum patio covers often have their own code requirements that differ from wooden structures, so be sure to check permit rules closely. Also, look for differences between requirements for enclosed roof patio covers and those with open air beams. Closed-roof pergolas essentially act as giant umbrellas, so they must be strong enough to withstand powerful upward wind drafts.

Obtaining the correct permit for your patio cover is not a difficult process, if done correctly. Save time and money by reviewing the code requirements for patio covers in your area before you begin planning or investing in materials.

If you're unsure where to look or unclear about specifics, don't be afraid to ask. The staff at your local lumber store will be able to answer many of your questions. Or, reach out to the permit department of your city or county. They deal with this stuff every day and are usually happy to answer all of your questions.



7: Chat with the specialists

The team at the lumber yard has seen every type of patio cover out there and they're more than happy to share their experience. Use this to your advantage.

- Learn about the differences between common patio cover materials like redwood, western red cedar, rough Douglas fir, and aluminum.
- Check out hardware types, stains and paints.
- Find out if wood patio cover kits are a more cost-effective choice for the design you want.
- Ask questions about post requirements, installing footings, and any other concerns you have.

Lumber stores are usually a better bet than big box stores for this type of consultation because they have the specialty knowledge to help, and usually better prices and selection for the wood itself.





Setting your patio cover project up correctly from the start is your best shot at a smooth building process. Learning everything you can about patio covers before you begin will help you make smarter use of your time, energy, and money.

Stop into your local J&W Lumber store to speak to our patio cover specialists.

El Cajon

430 S. Marshall Ave.
El Cajon, CA 92020
Phone: 619-442-0658
Fax: 619-442-8749

Murrieta

25217 Jefferson Ave
Murrieta, CA 92562
Phone: 951-698-0215
Fax: 951-677-7687

Sorrento Valley

11135 Sorrento Valley Rd.
San Diego, CA 92121
Phone: 858-452-0520
Fax: 858-452-0506

Chula Vista

3817 Main St.
Chula Vista, CA 91911
Phone: 619-585-3620
Fax: 619-585-4746

San Marcos

2709 S. Santa Fe Ave.
San Marcos, CA 92069
Phone: 760-727-1510
Fax: 760-727-3557

Escondido/Corporate

1179 W. Washington Ave
Escondido, CA 92025
Phone: 760-745-6800
Fax: 760-747-1787

Toll Free: 800-959-WOOD (9663)

www.jwlumber.com