



Planning Your Storage Building

Many new-build homes and gardens are small and offer limited storage, so the need for a shed may be great. You may be an avid gardener, and want to store all your gardening tools and supplies in a convenient location, with easy access. Perhaps you need extra storage for motorcycles, bikes, or yard toys. A shed is an excellent way to add additional storage space to your home, and allow you to use your garage for its intended purpose of housing your vehicles. However, you want to make sure that your building is an attractive asset, not an unsightly necessity to be hidden. **Cardinal Building welcomes the opportunity to sit with you and offer their experience and expertise to help with your decision making.**

Determining use

Think about how much you will use your building, as well as its intended use. Do you plan on using your shed as a permanent extension of your home storage or simply as short term storage. Do you anticipate a future need for the building. You don't want to make a mistake of building a shed today, that will need to be replaced in another year.

Knowing what you plan to store in the building, should help you decide what size and style you need. Do you plan to store hand tools and need cabinets or peg boards? Do you plan to hang garden tools, and need a taller wall? Are you storing items which are seldom needed and can be kept out of the working area with the addition of a loft? Will your children be using the shed, and you need keep harmful garden chemicals away in locked cabinets or higher shelves?

If you are going to use your building frequently, as a garden shed or workshop, you may want to lay pathways to the building. You may also want to place a shed more conveniently – in a central position or even closer to the house. If you are using your shed solely for storage, it will not see much traffic, so there is less need to protect the path through the yard. Will you be riding your mower, or bikes into the shed and need a ramp? **Cardinal Buildings will add shelving, lofts, pegboards, special locks, ramps and many other options to maximize the use of your building.**

Home Owner Associations

Check with your Homeowner's Association prior to building a shed, garage or workshop on your property. Often the covenants list restrictions as to what can be placed on your lot. Many require prior approval. They may require that you match color and style, or even dictate the size, siding or foundation required. **Cardinal Buildings will provide you with an engineered drawing for your HOA, free of charge. Being custom-builders, they can meet any requirements placed upon the construction.**

Size

Don't buy a small shed just because it is the cheapest option. Look at your storage needs. Better to buy a larger shed in the first place than have to replace it later. You might want to get a lean-to as a less expensive alternative to a larger shed. You can also add shelving or lofts to maximize space. **Cardinal Buildings offers many styles, and sizes, from 6 x 8 storage barn up to a triple detached garage with lofts and dormers.**

Style

Depending on your anticipated use, your landscape and your present home, you can choose a building that will work best for you. You can get a small cottage type, a utility type, or even a barn or large workshop. If you want to add lofts, you might want to go with a higher side wall in order to maximize upper storage. If you are getting a larger building, workshop or garage, you may even want to include a full or half second story. For a garage type, you can add rollup or automatic garage doors. **Cardinal Buildings has 100s of plans to choose from and many options to make your building best fit your needs with a style that is uniquely you.**

Building Site

One of the most important aspects of building a shed — regardless of the size of your backyard — is selecting the most appropriate building site. Here are some general rules to consider when siting your shed:

- Don't make the mistake of building a storage shed into the deepest back corner of the yard. Such an out-of-the-way site might look nice, but it's not very convenient when you must traipse back and forth across the yard every time you need to retrieve a tool. Build the shed closer to the house or garage, and everyone will be more likely to return items.
- Never build a shed at the bottom of a hill or in a low-lying area that collects water. The constant moisture will rot wood, blister paint and cause mold and mildew to grow on items stored inside.
- Maintain the setback distances suggested by the building department. You typically can't build a shed within 10 feet of the rear property line, and 15 feet from a side-lot line.
- If your backyard is slightly sloping, position the front of the shed (the side with the door) on the high side, so land slopes down toward the rear. In that position, it'll be much easier to step into the shed since the door's threshold will be closer to the ground.
- If possible, keep the shed away from extremely shady areas. Exposure to direct sunlight and breezes will keep a shed dry and free of rot and mold. If you are concerned with the heat when building the shed in the sun, ask about a radiant barrier roof. **Cardinal Buildings offers LP Techshield radiant barrier, which will keep your shed 15-20 degrees cooler in the summer.**

Start With a Sound Foundation

Always start your storage building off with a strong base. Typically, sheds can be well supported by an on-grade foundation, which consists of solid concrete blocks or pressure-treated wood timbers set directly on the ground. The concrete blocks and/or (kids) must be leveled and spaced closely enough to properly support the shed's floor frame. Always use solid concrete blocks, not hollow wall blocks, which can easily crack. **Cardinal Buildings uses pressure treated floor joists, 12" on center, with 4" treated timbers set on solid 4" concrete blocks.**

Also, you should never build a shed in a wet, low-lying area, and if the site is exposed to occasional rainwater runoff, set the blocks or timbers on 2 in. to 4 in. of gravel. That'll help protect the foundation from erosion.

Larger sheds, typically those more than 200 sq. ft. in size, require permanent foundations that extend down to the frost line. They're usually constructed of poured-concrete piers or buried wooden posts. **Cardinal Buildings will build on concrete pad or brick foundation upon request.**

Allow for Air Circulation

Water is wood's worst enemy. Given the right circumstance and enough time, excessive moisture can rot framing, warp floors and doors, corrode hinges and breed mold and mildew. Fortunately, there's an easy remedy. First, be sure that the lowest wood member--the mudsill--is at least 6 in. above the ground. That's sufficient space to allow fresh air to circulate under the shed. With 4" skids and 4" concrete blocks, **Cardinal storage buildings always allow adequate ventilation underneath. They will also install optional lattice upon request, for an attractive base that allows for airflow.**

Leave at least 2 ft. to 3 ft. of space around all sides of the shed. Building it too close to trees, shrubs, fences or other structures will block out sunlight and wind that help keep a shed dry. Plus, having clearance space around a shed makes it much easier when it comes time to paint or make repairs. **When your Cardinal builder arrives, he will do a site evaluation to make sure you have chosen a good location for your shed.**

Build a Weather-Resistant Floor

Never skimp on the building materials used for the floor frame or plywood floor deck. When building the floor frame, floor joists and perimeter band joists, use lumber which has been treated to resist moisture and fungal damage. Often builders will construct sheds with untreated construction-grade lumber for the floor frame, but since a shed floor will be at some time be exposed to moisture, untreated lumber will rot. **Cardinal Buildings uses either LP Prostruct Flooring treated with zinc borate and binders or ¾" pressure treated lumber for flooring.**

Use Low-Maintenance Materials

Choose low-maintenance materials for your shed. You may have to pay a bit more, but it will save you time and trouble in the long run. **Cardinal Building offers as standard, LP Smartside siding pre-primed, which has a 5/50 warranty. They also offer LP Horizontal Siding, Vinyl or Hardi plank. If choosing vinyl, metal wrapping the eaves will lower maintenance.**

Get Smart About Door Size and Placement

Before choosing a shed, consider what you will be storing inside, and make certain that the doors allow for it. Make sure your lawn tractor, bicycles, motorcycles, furniture, or whatever you are storing will fit through the door. Door placement is also important. Often you will see doors placed on the gable end of the building, which looks nice, but may block access to items stored at the rear of the shed. Alternatives are to put the door on the long side wall, so that you'll be able to access items to the right, left and back, or to install doors on both gable-end walls, so that you'll be able to easily reach items from either end of the shed. **Cardinal Buildings does not use kits, so can put your door wherever you like. They can also install a second door, or rollup or residential garage door.**

Choosing a Builder

Remember when comparing prices, to also compare quality. When choosing a builder, cheaper can often cost you more. Choose a builder with a proven reputation for quality workmanship and materials, one who will be around down the road if you need to move your building or for repair work if problems occur. Like many people, you may feel comfortable shopping around until you find a company you can trust, that offers the highest quality building for a fair price.

Ask yourself the following questions when considering each company:

- Has the shed company been doing business in this area long? (Cardinal Buildings has been operating in the same physical location for 7 years)
- What is the Better Business Bureau ranking of shed company? (Cardinal Buildings has an A+ rating)
- Have you been offered a free site visit to determine the size and best location for a shed? (Cardinal Builders will always meet with you day construction begins to answer any concerns you have about the location. Cardinal Buildings offers free site visits if there is an issue with your property or the building you choose.)
- Is the sales person knowledgeable about sheds and able to help you get the answers you need? Cardinal Buildings owner and builders have been constructing homes, and utility buildings for over 15 years.
- Does the company have a physical location as well as a website? (Cardinal Buildings has a display lot and showroom so you can see the workmanship and materials before you purchase)
- Is set up and delivery of shed free of charge? (At Cardinal Buildings, price includes building on your lot, or delivery, set up & leveling on solid cement blocks)
- Will the shed you select be built with top grade materials? (i.e.: kiln-dried lumber)(Cardinal Buildings uses as standard, LP Smartside panels, door trim, corner boards, and Prostruct flooring. They use galvanized ring shank nails to resist pullout or rust, continuous piano hinges so the doors hang properly, felt under 25-30 year shingles. They will match your existing siding and roofing.)
- Has the sales person talked with you about permit requirements? (Cardinal Buildings offers consultation on permitting, have information on the web site, and have a permitting service, where the permit work and purchase is covered.)
- Are there structural features included on this shed that are missing (or not listed) with other sheds you are considering? (Cardinal Buildings offers as standard floor joists 12" oc, wall studs 16" oc, and upgrade to 2"x6" floor joists for buildings over twelve foot wide)
- Will every effort be made to satisfy home owners' association requirements? (Cardinal Buildings will discuss the requirements with you, meeting any requirements, and even provide free of charge an engineered drawing for your HOA)
- Can the shed be built with an appearance that will go well with existing structures on your property? (Cardinal Buildings are all custom built, so can match style, roof line, color, exterior siding and shingles)
- Should you decide to move your shed to another location, can the move be performed by the shed builder? (Cardinal Buildings regularly moves sheds regularly, and has the proper equipment to do so safely. Discounts are given to customers)
- Are you committed to paying a fair price for a shed that will be well-constructed with durability, service, and attractiveness and meet all industry standards. (You will not find a better constructed building for the price than from Cardinal Buildings. If you find a comparable building at a lesser price, they will try to match it)

Building Permits

While it may seem unnecessary or an inconvenience, a building permit actually protects the homeowner in the long-run. A building permit is needed for the structure to be inspected to make sure it is built to code. The structure site must also be approved to ensure it does not encroach on property lines, sit on septic systems or is too close to wetlands. Sheds built without a permit may be removed or taken down at the citation of local government.

With Cardinal Buildings, it is your choice, depending on your circumstances, as to whether or not you choose to acquire a permit for your building. However, Cardinal Buildings will work with you to make sure you are aware of what must be done to have your building be compliant with NC building standards. Cardinal Buildings will do it right the first time! They build numerous permitted buildings weekly, so are familiar with the permit personnel in the area and what requirements must be met. Cardinal Buildings believes that it is unfair to our customers not to make them aware of code requirements, and offer to meet them, since not doing so can mean replacement or expensive alterations down the road.

Cardinal Buildings will handle the process for you. For a slight fee, the owner will do the paperwork, acquire the building permit, & schedule inspections. All the customer needs to do is provide a property drawing. If you want to do it yourself, we will guide you through the process.

Do I Need a Permit?

If you are planning on undertaking a project that involves any kind of construction, electrical work, plumbing work, or demolition in North Carolina, chances are you will need a building permit. Building permits are issued by the county or city government and therefore the requirements for a permit depend on your project's location. These requirements help to assure that you will have a shed or garage with structural integrity. A rough rule of thumb is that any building with any dimension over 12" (height, length, width) will require a building permit. Some local municipalities are more or less strict. It is better to be safe than sorry, so check with your municipality.

Cardinal Buildings has been brought in after the fact for customers who purchased buildings elsewhere not built to code, who now need to bring their building up to code, or worse yet, to replace their shed when it was not compliant.

What is Required for a Permit Application?

You must go to their office and complete an application, and submit the necessary documents. The land use or zoning department will review the site plans for compliance with the local land use ordinance to make sure the structure is being built in a properly zoned area, that it meets the minimum height requirements and setbacks (the minimal distances between structures and the property line), and lot coverage ratios. Some of these requirements are listed below:

- A fee
- Site plan with setbacks, zoning specifications and grading, drainage and access
- A set of building plans or specifications
- A description of the project, including its location
- The general contractor for the job and their license number
- Other items which may be required depending on the building :
 - Floor plans for the structure
 - Proof of insurance or bond
 - Structural drawings, with dimensions and elevations
 - Soil tests, structural engineer analysis, or environmental assessments
 - Anticipated costs of the project and how it will be financed
 - Electrical, Plumbing and HVAC plans where necessary
 - Landscaping plan where required

What Is Required to Pass Inspection?

All buildings must pass minimum building specifications, including:

- All flooring materials within certain height off of the ground must be treated.
- All exterior sections of the building, including eaves, must be primed or painted
- Hurricane augured disc anchors must be attached to the four corners
- Headers over doors & windows
- Collar & rafter ties
- Hurricane clips
- Building needs either a ramp or steps for safe access

Links to local permitting office web sites:

- [North Carolina Building Codes](#)
- [Wake County \(Accessory Structures\)](#)
- [Cary](#)
- [Raleigh](#)
- [Garner](#)

Organizing Your Garage or Shed Space

Have an idea of:

- What items you have to store
- What space is available
- How you want things organized
- What is used frequently or seldom

That last point might be the key. If the item is something you'll reach for often, then put it in a place that's easy to get to. Right?

Cleaning

You'll need to clean out your shed or garage, of course. That means taking everything out. Not only do you need to see what space is available, you'll also end up tossing out all sorts of items, which will make the whole process of organizing more effective. And, as they point out, this is your chance to sort your storage shed items into categories. That will make them easier to put back into the shed.

Organizing

Organizing your shed or garage:

- Prevents repurchase of items and materials you already have
- Makes finding items that much quicker
- Means you're getting the maximum usage out of the available space

Make sure that the items you use most are within easy reach. Use hooks or pegboards, or drawers & cabinets so that everything has its proper place and keep clutter away so that you do not waste time moving items from place to place.

Keep extension cords and hoses neatly coiled and out of the way. Lining the back wall of the shed with pegboard made it easy for to hang smaller tools like trowels, hammers, and drills — all within reach. This also made the workbench in the rear of the shed much more useful.

Use back of shelves and higher shelves and lofts for items which are not frequently used. You want to spend your time using your tools, not looking for them!

Cardinal Buildings will build lofts, shelving, pegboards, hooks, etc, to make organizing your belongings easy. We will reinforce your floor to support heavy tools and cabinets.

Security

Security is an important issue to consider. Sometimes home insurance will not cover equipment stored in a garden shed, as most locks are easily broken or removed by thieves. It is wise not to store good quality tools or expensive equipment in the shed, especially if there is easy access to the shed. Consider the security of your neighborhood when deciding what to put into your shed. If you live in a high crime area, you may want to have stronger locks, and either no windows, small windows, or windows placed where thieves cannot use for access to your belongings. You may also consider lighting the area of the yard where the shed is located. **Cardinal Buildings uses T-Lock & keys as standard, and also offer hasp locks, steel doors, or rollup metal doors for more security. We also can install decorative windows above climb in height to give light while offering no access to thieves.**

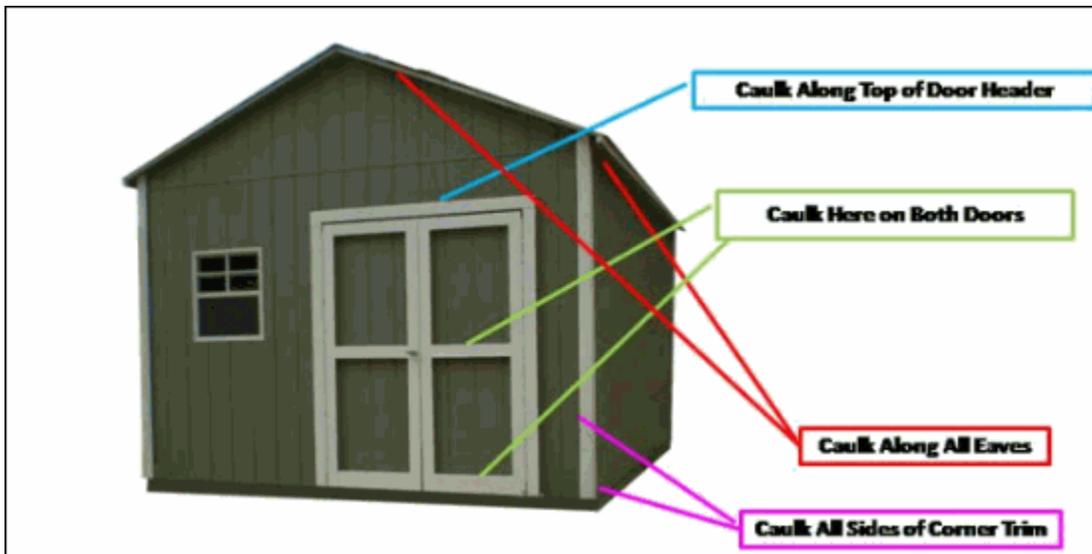
Building Care

Buildings today are an extension of your home, and should be given the same level of care and upkeep. Modern materials will last indefinitely if treated properly. If the exterior is constructed with LP Smartside, it is treated with zinc borate and binders to resist termite and moisture damage, and comes factory primed. Hardi-plank construction is also ready to paint. It is highly recommended that you paint your shed as soon as it is completed. An acrylic Latex Exterior house paint is the best choice. As with any exterior painting, two coats are better than one. A better quality of paint will give better coverage and will last longer. Exterior Latex Semi-Gloss house paint will endure severe weather conditions better, and will repel dirt, and stains far better than a flat finish. ALWAYS PAINT THE TOP, BOTTOM, AND INSIDE OF DOORS to prevent warping, and give extra protection from damaging weather elements. All exterior trim will need to be primed before painting. Prior to any painting, please be sure to caulk with a paintable caulk. Butyl and silicone caulks repel paint and are NOT RECOMMENDED. Caulking should be done on all seams, including door trim, eaves, and corner trim. If you have a vinyl-sided building, make sure to routinely power-wash it to keep the colors clean and bright. Choose a building company who will be there for you if panels become damaged and can replace them with the same product.

Make sure that you maintain airflow around the building. Leaves, and other debris can accumulate around the building and block the air flow beneath the building. Trash surrounding the building also make it more vulnerable to fire, and unwanted varmints.

If damage occurs from storms, vandalism, or equipment, repair sooner, rather than later. Repair of an existing building is often more practical than having to purchase a newer one. If you do need to replace the shed, ask about trade-ins.

Cardinal Buildings uses LP zinc-borate treated panels, corner boards and door trim, factory-primed. Our 25-30 year shingles come standard with a felt underlay. Our sheds come with a 1 year warranty against settling issues and a limited life-time service warranty. Cardinal Buildings also accepts trade-ins as an allowance against a new purchase.



Cardinal Buildings has more than ten years experience in home, garage and storage building construction. Let us handle the details for you. Call us today!

(919) 771-2833

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www.cardinalbuildingsllc.com