Site Preparation

Preparation is the key to a successful and professional project

Effective site preparation is crucial to the success of your project. Before you begin construction of your fence, it is important that you first prepare your equipment and site.

Your first step should include a check of your local, city and state building codes. These codes might impact your plans. Now would also be a good time to secure your building permits.

An inspection of the job site should come next. With a general idea of the placement of your new fence in mind, inspect the property and make note of any:

Locate and identify your property markers.

- Property pins or markers
- Trees, shrubs or other plantings that fall in the fence line
- location(s) of swales, drainage ditches or areas of standing water
- Evidence of subterranean obstructions (large roots, rocks, drain pipes, etc.)
- Changes in terrain

Property pins or markers are, perhaps, the most important item in your yard to identify. If you were unable to locate any property pins or markers, you should contact a survey company. A complete survey of your property will eliminate any question as to the location of your property lines.

Prepare your job site for construction.

Now that you have identified your property lines, you can take the steps necessary to accommodate the obstructions you found, if any, during your inspection.

⇒ Pruning or removal of shrubs, trees or other plantings should be performed now.

⇒ All underground utilities must be marked. For this, you should contact your local utility companies.

⇒ Locate and mark all buried swimming pool lines and yard lighting.

Equipment Preparation

A quick review of the notes you have taken thus far will help you determine the equipment necessary to erect your fence. Having the proper equipment at hand will speed your installation.

Your minimum equipment should include the following:

Equipment List		
Vinyl Fence	**Wood Fence**	**Chain Link**
100' tape measure	100' tape measure	100' tape measure
stakes	stakes	stakes
string line	string line	string line
hammer	hammer	hammer
post hole digger	post hole digger	post hole digger
circular saw	circular saw	band saw
PVC saw	hand saw	hack saw
screwdrivers	screwdrivers	screwdrivers
level	level	level
string level	string level	string level
digging bar	digging bar	digging bar
		socket wrenches
		pull jack/come along

Other equipment specific to your job may include:

- Compressor and jackhammer
- Power auger
- Core drill or hammer drill

If this is equipment you require but do not own, there are rental agencies in your area that are well equipped to handle your needs.

With your site and equipment now prepared, you can move on to laying out your fence.

Project Layout

A simple sketch of your project makes planning easy.

In order to better facilitate the layout of your project, you should begin with a simple sketch of your job site. Graph paper makes this job easy.

Your sketch should represent a reasonable facsimile of your proposed fence line. Your sketch need not be to scale or even accurate in detail. Remember, this is just a planning tool.

Be careful not to overlook the obvious.

As you draw your sketch, include the locations of any gates, corners, buildings and other physical features. Don't overlook trees, plantings, swales or drain pipes, or utility rights-of-way. As permanent features of your property, these obstructions may appear invisible until you run into them with your fence. see figure I)

Now would be a good time to decide whether you will follow the grade with the fence line or use the step method.

This sketch will serve as your project plan.

typical job sketch

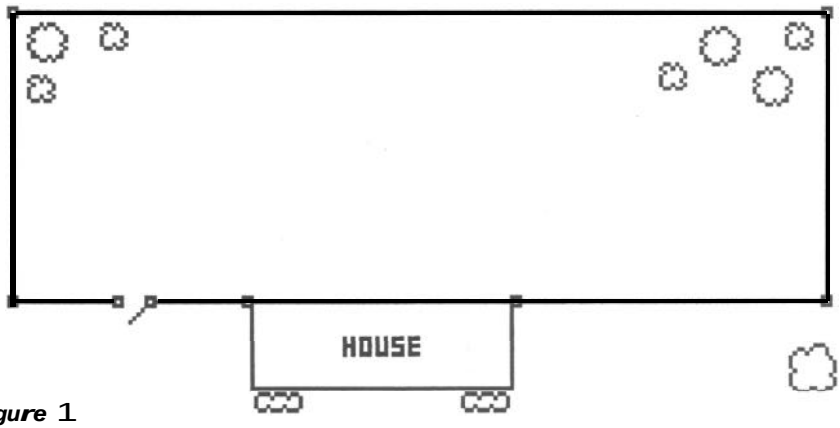


figure 1

With your project plan in hand, measure and note each stretch of proposed fence. Take your time and measure accurately.

It's time now to develop your list of materials.

Materials Calculations

Calculating your material needs can be very simple.

Developing a list of materials for your project is a fairly simple task. With a little bit of thought, you'll have exactly the right amount of material to complete your project.

Before you proceed, take a moment to verify the lengths of the individual fence sections for the style you have selected. The section length will impact not only how you calculate your needs, but also the ultimate total requirements.

In order to clearly demonstrate the steps to follow to develop your materials list, we will use a typical project plan like the one seen in figure 2.

You will notice that some footages and other notations have already been made.

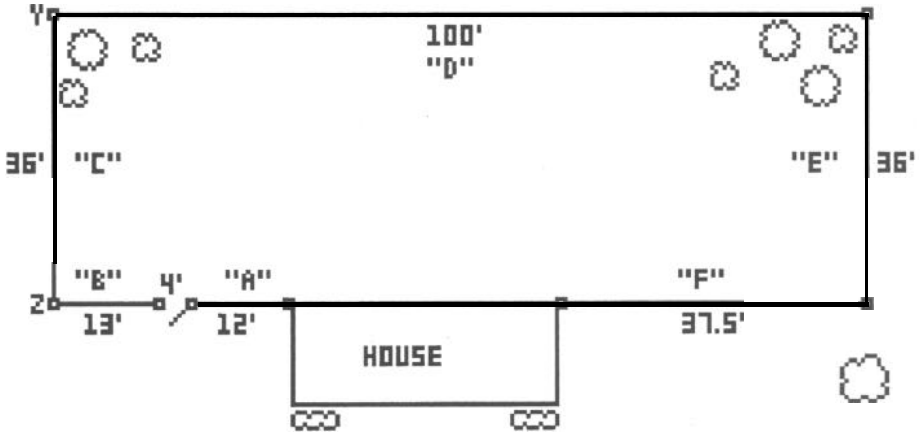


figure 2

Step 1:

Divide each stretch of fence by the section length to arrive at the number of sections needed.

Start with Side "C" To calculate the number of sections necessary to complete this stretch of fence, simply divide the footage by the length of each section. (36 feet + 6 feet (the section length) - Six (6) sections of fence are required to complete the stretch of fence labeled "C"

Using six foot centers, continue calculating the needed sections for the remaining stretches of fence.

When developing your material list, it is better to round-up to the next full section of fence.

Where the footage does not divide by the section length equally, you must round up to the next full section. Stretch **"D"** for example, requires 17 sections of fence to complete.

Step 2:

Now you can calculate the number and type of posts required.' Refer again to figure 2.

Except where posts are shared, as is the case with a corner post, there should be one post more than the number of sections required in a given stretch of fence. Specifically, if there are six sections required to complete stretch "C" then we know that seven posts are needed. The final post is necessary to complete the last section of fence. Your post count for stretch "C" should include two corner posts and five line posts. Take a minute to complete the remaining post calculations.

Calculate your post needs taking care not to double count shared posts.

As you complete your post counts, make sure you don't double count shared posts. For instance, corner post "Z" should be included either in your count for stretch "B" or stretch "C" but not both.

Step 3:

The final step in developing your materials list is adding in your gates.

In figure 2, we show one walk gate. Your individual requirements may demand a greater number of gates. Don't forget, gates will be your primary or perhaps only method of access to the fenced in area. Consider your traffic patterns and possibly a double gate for vehicle access.

Don't forget to note the hinge direction of your gates. You will need this information to assure proper bracing .

Aside from the gate count, it is important to note the hinge direction (the side the gate is hinged upon) for each gate. Our example shows one gate with a right hand hinge swing. Hinge direction is specified as you are outside the fence line looking in.

If you performed all of your calculations correctly, your materials list for our typical "project plan" should look like this:

For the typical job sketch we provided, your material list should look like this.

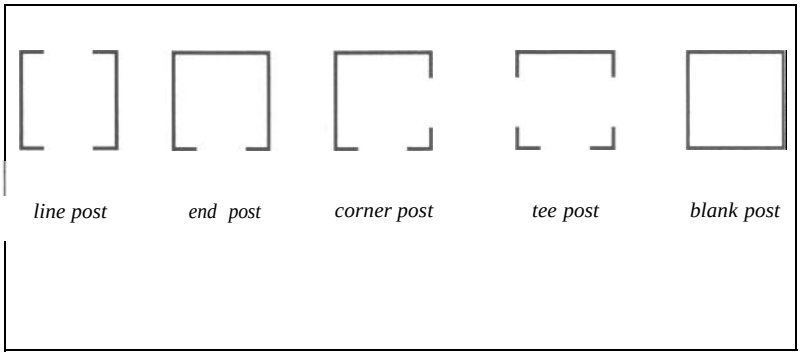
4 End Posts
4 Corner Posts
32 Line Posts
38 Sections of Fence
1 Walk Gate (Outside Looking In (OSLI) hinge right)

Note: concrete, hardware, etc. is not given here.

To avoid confusion later, we will explain the differences in post configuration for each type of fence here.

Vinyl and Ornamental Fencing:

Posts for these types of fencing include line, end, corner, tee and blank. Each post has cut-outs to accept the fence rails in the needed fashion. For illustration of this, see figure 3.



Post types and their uses are specific to the type of fence.

figure 3

Chain Link Fencing:

Posts for this type of fencing include line, terminal and gate posts. A line post is defined as any post that falls within or along the fence line. Terminal posts are used wherever the fence line terminates or makes a change in direction or grade. The terminal post is usually one size larger than that of the line posts and should be utilized as corner posts, end posts and except in cases where there is a large gate, for gate posts as well. For large gates or for a double gate, a pipe size one step larger than the terminal posts might be necessary.

Wood Fencing:

Posts for a wood fence are generally 4” x 4" or 6" x 6" wood posts and are used universally throughout the fence line with the exception of mortised post and rail fences. In the case of mortised posts, the post types will be the same as those pictured in figure 3. In some cases, round posts may be used. Generally, round posts are reserved for post and rail fence.

Step 4:

The list of hardware necessary to complete a project is often overlooked.

Most every fence project requires hardware of one sort or another in order to finish construction, Whether you need a complete list of tension bars, brace bands, etc. for a chain link fence, or simply a set of hinges and a latch for a wood fence, it is important that your list be thorough.

There is nothing quite so annoying as to find yourself short a few fittings as you near the completion of your project. Take the time to develop an accurate list of hardware.

Basic Installation Techniques

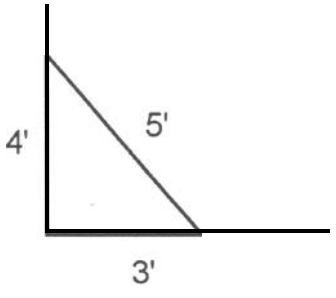
Stake out your fence line.....

Using stakes and a string line, establish the area to be fenced.

When staking out the fence line, remember these simple guidelines:

- ✓ Keep your stakes approximately two feet beyond, but in line with the fence line.
- ✓ Keep your string line taught and clear of obstructions.
- ✓ Where appropriate, maintain square corners.
- ✓ When setting your posts, stay 1/8" away from the string line so as not to disrupt the line.
- ✓ During the digging process, drop your lines and replace them prior to setting your posts.

One simple method to assure square corners is the 3-4-5 rule. See below



Mark your post locations.....

Using a visible method of marking, (powdered chalk or lime or marking paint) mark your end, corner and gate posts first. These are your fixed “targets” and generally offer little or no flexibility in location.

Next, use a reel type measuring tape,, preferably 50’ or 100’ long, to layout and mark your line post centers. (Refer to the section specifications for exact post centers.) If your stretch of fence doesn’t divide equally by the section length and allow for full sections, take the last two or three sections and shorten them equally to provide a balanced appearance.

<u>Note:</u> Shifting your gate location or moving your end or corner posts may eliminate the need for short sections.

Dig the post holes..

With all post locations marked, it is now safe to drop your string line. Loosen your line from the stakes and lay it clear of the digging area. Leave the stakes in place as you will be replacing the string line later.

Using a post hole digger or power auger, dig a 9” diameter hole to the depth specified for your particular style of fence. Of course, you want to exercise caution when digging near marked utility lines. To help prevent movement or heaving of the posts, “bell-out” or make wide the bottom of each hole.

Most of the dirt removed from each hole will not be needed. To better facilitate clean up, consider excavating to a tarp or burlap bag. This simple step will save you hours of raking and clean up and will help prevent damage to your lawn.

Setting your ***posts*****.....**

Replace your string line. Again, make certain it is taught and clear of obstructions.

While there are a number of methods to set posts,, setting each post in concrete will provide a strong and stable fence.

Working your way around the fence line, place the appropriate post (line, end, corner, etc.) in the corresponding hole. Keep your posts away from the string line so as not to deflect your line. Next, plumb each post and fill the hole with concrete. Stop short of filling the hole completely by approximately 3”. This will allow you to backfill with topsoil later and re-seed your lawn.

As you move from post to post, double check your post centers.

Important! ***Some fence styles require assembly as you set the posts. Check the style specification sheets for the recommended procedures.***

If you have chosen to follow the grade with your fence line, you will want to periodically check the line of your fence visually to assure a clean, fluid line. Sight your posts and raise or tap down your posts as necessary.

If you have chosen to step your fence through grade change, check for proper alignment of your posts and be certain to level your fence sections.

You must make your changes to post alignment while the concrete is still wet. Remember to check for plumb whenever you adjust a post.

Constructing the fence . .

As was noted previously, fence styles vary greatly. Subsequently, the methods of construction are just as varied. It is, therefore, impractical to note generic construction methods appropriate to all styles of fence.

Methods of construction for individual styles can be found on the style specifications sheets. If you do not. already have a copy of the specification sheet for the style of fence you have elected to install, contact your local Summit Vinyl Industries dealer.

If you have elected to install a chain link fence, ask your dealer for the assembly guidelines for chain link.

Remember.....

Your Summit Vinyl Industries Dealer is ready to help with any questions you may have