Pool/Spa Building Guide

Here's How To Do It Right From The Start!

Working with Pool Engineering, Inc.

If you're new to the pool and spa construction business, Pool Engineering Inc. can help you get started.

Each year, we provide a multitude of proven and reliable structural plans for those new to the swimming pool/spa construction business.

The structural designs we provide are based on engineering details we've developed and standardized through years of extensive experience in the structural design of thousands of swimming pools throughout California and across the U.S.

Here's how it works:

In order to provide you with a detailed set of structural plans that accurately reflects the proposed pool site and the special features of the proposed swimming pool and/or spa, we'll need to receive some important information from you in the form of a simple site plan and a handful of key details. Once the job information and site plan described below are received (either by e-mail, fax, mail or a visit to our office), we'll contact you, generally within the same working day, and quote a price for the appropriate structural plans. Our basic set of structural plans is very reasonably priced. Additional structural details may be obtained for an additional cost per detail (see “Conditions that Require Additional Structural Details”).

If you decide to purchase the structural plans, payment can be made by credit card, check or cash. After payment has been finalized, we can mail the plans to you, or you can visit our office in Anaheim to pick them up in person.

Site Plan

Your site plan should be a simple drawing of the overhead view of the proposed pool location (what a bird would see flying over the proposed
pool site); showing the basic dimensions of the yard and the dimensions and location of the pool. (There's a sample plan at the end of this document.)

Your site plan should be drawn to scale (usually 1/8 inch = 1 ft.) and include:

- Location and dimensions of the property lines.
- The pool and pool equipment location relative to the property lines and main structures including the residence on the site.
- Basic dimensions and shape of the pool, including depth.
- Special features such as waterfalls, streams, slides or grottos.
- Location in the pool/spa of skimmer(s), lights, access steps, benches, main drains and any other relevant features.
- Location of utility meters such as gas and electric.
- Lot conditions including the location of slopes, and how close the pool/spa will be to either the top of a descending slope or the "toe" or bottom of an ascending slope. Lot conditions should also include the location of any retaining walls, fences or walls and other structures such as patio covers including their footings and their proximity to the pool structure.
- Contact information: Occasionally, we receive site plans without a phone number or mailing address where the client can be reached. Please provide us with your mailing address and a daytime phone number you'd like us to use if we have questions.

Please note: to create a more professional looking site plan, construction-plan base sheets on vellum are available from Pool Engineering Inc. for $1.00 each.

**Contact the Local Building Department**

Early in the planning process, we recommend that you contact the local building department for site-plan, fencing and any other local regulatory agency requirements. Cities and counties have slightly different requirements for site plans and, if a plan is missing any required information, the permitting process can be delayed. Also, many cities and counties require pool fences and other safety features. Knowing the local building department's requirements ahead of time will smooth the planning, permitting and construction process.
Conditions that Require Additional Structural Details:

Some examples of conditions that would require additional structural details include:

- Pools located on or near slopes (both ascending and descending)
- Pools located adjacent to retaining walls
- Pools located less than three feet from adjacent structures (including patio covers)
- Other special features such as waterfalls, artificial rockwork, slides, grottos, vanishing edges, etc.

For a multitude of reasons, frequently a soil report may be required for construction of a swimming pool. The soil report may require additional structural details due to the unique soil conditions at the proposed swimming pool/spa site.

Recommendations on Subcontractors Specializing In Swimming Pool Construction

We are frequently asked for guidance in locating subcontractors specializing in swimming pool construction. Don't forget the local yellow pages phone directory! Look under "Swimming Pool Construction." Many subcontractors specializing in the swimming pool construction sub-trades will have listings there. Each subcontractor you contact will know at least 10 more in other swimming pool sub-trades. All you have to do is ask each subcontractor you talk to for other recommendations and in no time you will have an extensive list of subcontractors specializing in swimming pool construction to choose from.
SAMPLE SITE PLAN

1. DRAW CROSS-SECTIONS AS SHOWN IN BELOW.
2. SHOW DIMENSION FROM POOL/SPA DECK TO TOP OR TOE OF SLOPE.
3. SHOW COMPLETION DATE OF ALL EXISTING STRUCTURES AND ENCLOSURES.
4. OUT THE HEIGHT OF SLOPES, WALLS, SLOPES AND OTHER STRUCTURES.
5. OUT THE DIMENSIONS OF THE POOL AND SPA, LENGTH AND WIDTH.
6. SHOW LOCATION OF POOL EQUIPMENT.
7. DISTANCE FROM POOL/SPA TO PROPERTY LINES.
8. DISTANCE FROM POOL/SPA TO EXISTING HOUSE.
9. INDICATE DEPTHS OF POOL/SPA AND LOCATION OF ANY OTHER WATER FEATURES (SAMPLE: ROCK WATERFALL, SLIDE, GROTTO).
10. INDICATE ANY OTHER ITEMS REQUIRED BY YOUR CITY AND/OR COUNTY.
11. PROVIDE A TITLE BLOCK AS SHOWN.

property line

existing house

existing patio cover

pool

spa

patio post

upslope section

downslope section