

10 Easy Steps To Pouring Your Own Concrete Project!

This was written to assist you in planning, completing and enjoying your own do-it-yourself concrete project! By following these steps, **you** can have a finished concrete project to be proud of!



Step One - Plan Ahead

Laying out your project is an important first step! Stake out your project area. Remove grass, tree roots, etc. Check the grade to ensure proper drainage. Also, be sure to use graph paper and sketch out your project by using the one square equals one foot approach.



Step Two - Forming the Area

The most common forming materials are either 2 x 4's or 2' x 6's. These are placed on the edge to surround the area to be poured. In general, concrete should not be poured at a thickness of less than the width of a 2 x 4. Use stakes on the outside of the form to hold it in place. **Note: The stakes must not extend above the form or they will interfere with the "screeding" procedure.** Check the grade of the area by moving the "screed" board across the forms and measuring the distance from the board to the grade of the area.

Step Three - Determine Quality

Concrete is sold by the cubic yard. A cubic yard is the amount of concrete required to fill a 3' x 3' x 3' box (or 27 cubic feet). Of course you are going to be placing the concrete in a form 4" thick and not in a box! Here's how to figure out how much to order.

Thickness of Concrete:	3"	4"	5"	6"
Sq. Ft. Covered by 1 cu. yd.	108	81	64	54

Add 5-10% to allow for spillage, uneven grade, etc. We will be happy to figure the amount of concrete you will need. Just call us with the dimensions of your area including the thickness.

Note: To determine square feet of surface area, multiply length in feet by width in feet.
Example: An 8' x 10' patio. Answer: $8 \times 10 = 80$

Step Four - Tools

You may need tools like edgers, floats, trowels, bull floats, shovels, etc.

Step Five - Get the Concrete!

Once you have determined the quantity of concrete that you need, [contact Concrete Express](#) to arrange for a delivery. Our mobile units will mix the exact amount of concrete that you need. Because **Concrete Express** mixes on-site, you pay for only the amount that you actually use! Our on-site mixed concrete is always fresh and always of the highest quality.



Step Six - Place the Concrete in Forms

Place the concrete in the forms either directly from the truck or by using a wheelbarrow. Use a 2' x 4' board to "screed" the concrete. This is accomplished by using a "sawing" action on the screed board as it rests upon the forms. Be sure to move it in the direction of the pour.



Step Seven - Float the Concrete

This process involves working with the surface of the concrete with a wood or metal float to smooth out irregularities left by the screeding process. It is important not to **overwork** the concrete during this operation. Use the minimum floating possible to complete this phase. Be sure to pay particular attention to edges such as concrete poured against a foundation.



Step Eight - Edge the Concrete

An edging tool is a small trowel with a rounded edge. It is used to give the concrete a small radius on the outside edge. It adds a professional look to the finish. Do this step early so any interfering rocks can be pushed into the concrete.



Step Nine - Final Finish

Allow any water that "bleeds" to the surface to evaporate before beginning the final finishing operation. Once the water has evaporated, it is time to steel trowel the surface. Note: A very smooth steel troweled surface is usually desirable on only garage and basement floors. For outside work such as patios, sidewalks, driveways, etc, it is recommended that a light broom finish be given to the concrete. After lightly steel troweling, pull a soft bristle push broom in a straight line across the concrete surface.



Step Ten - Curing the Concrete

Concrete reaches its maximum strength in a gradual manner. In 7 days it will be approximately 1/2 to 2/3 the strength it will be in 28 days. To reach proper strengths, the concrete must be kept moist for 5-7 days. This is especially important in very hot weather. **Note: During the first few days, concrete is very fragile. Leave the forms on for 3 days in hot weather and longer in cool weather. Cool weather extends the curing time of concrete.** The application of a good concrete sealer a few hours after finishing keeps the concrete moist and prevents "drying out".

The process of "setting up" is a chemical reaction, not a "drying out" of the mixture. Water is one of the chemical ingredients in the reaction. This is the reason it is so important to "cure" the concrete by keeping it moist. Without water, the reaction stops and the concrete becomes weak. Concrete not properly cured has poor strength in the surface which leads to scaling, peeling, dusting, etc.

The use of de-icing salts should be avoided on concrete. This is especially true for the first winter of newly placed concrete. If you have done a section of your driveway, remember that your automobile will deposit salt picked up from the highways. This should be avoided during the first winter.

WARNING: Some people experience a severe reaction to concrete. Never go bare-footed in concrete. Always wear rubber boots and gloves when working with concrete. Thoroughly wash off with clean water any concrete that contacts skin or eyes.