

Geiger Ready-Mix Concrete Do-It-Yourself Guide



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913-281-0111

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Why Choose Concrete?

Concrete is sometimes thought of as a purely industrial product, used by construction workers to pave sidewalks and create foundations. The truth is, concrete can actually be made into beautiful and intricate designs and can be managed by homeowners.

Here are some of the other benefits to choosing concrete for your home:

- Concrete is sustainable, durable and cost-effective. Concrete reflects heat better than
 asphalt and will cost less over its lifespan than asphalt. When properly maintained, concrete
 driveways can last thirty years.
 - For more information about how to increase the durability of your driveway, we have included a **few pointers** at the end of this guide.
- Concrete can be made with recycled or reclaimed materials.
- Concrete is incredibly versatile and comes in a variety of patterns, textures and even colors. It's a true blend of function and design.
- Its high quality and longevity can increase your property value.
- Concrete is easy for homeowners to preserve with minimal maintenance.

Whether you're looking for a new driveway or a sidewalk to the backyard, concrete is an excellent option for homeowners looking to improve their home's beauty and value.

Best of all, pouring concrete can be managed yourself.

Geiger Ready-Mix's Recommendations

The recommendations contained in this guide were compiled based upon Geiger Ready-Mix's long history in the concrete industry. While Geiger Ready-Mix believes the following recommendations to be best practices, they are, by no means, the only way to pour concrete. Consultation with a concrete professional is highly recommended to answer any questions or concerns.



Pouring concrete can be quite the undertaking, both in time and effort if you have never done it before. Know that hiring a contractor is also an option. If after reading this DIY Guide, you feel that you would rather hire a local contractor, please contact Geiger Ready-Mix for a recommendation on a reputable professional in your area.

Call our dispatch line at **(913) 281-0111** or email a customer service representative at CSR@ geigerreadymix.com for assistance.

Here are a few things to look for and do if you want to hire a contractor:

- 1. Have a full list of questions prepared before you call or have a personal consultation with the contractor. This will ensure you've thought through the process and will save you both time.
- 2. Get a minimum of three quotes from different contractors. This is to be certain that you are getting competitive pricing.
- 3. Always call the city or county to see if a permit is needed for your project or if there are any regulations on hours of construction.
- 4. Tell them that the concrete must be cured immediately after it is placed, as well as sealed prior to the first winter after the project is completed.

Some good questions to ask are as follows:

- How long have you and your company been in business?
- Do you offer any financing for projects?
- Are you insured?
- What types of insurance do you carry and in what limits?
 - » Workers Compensation?
 - » General liability insurance?
- Can you provide me a copy of your certificate of insurance?
- Will you issue a full lien release once I have paid for the project?
 - » This will help ensure the contractor no longer has the ability to attach a lien, or security interest, on the property, once the labor has been completed and compensated as contracted.

- Do you have any examples (photos) of past projects that I can look at?
- Do you have any references of satisfied customers that I can contact?
- What are your curing and sealing processes?
- Will you contact the city to obtain a permit for construction?
- Are you registered with the Better Business Bureau? <u>Find out now.</u>

Hiring a contractor can save a lot of time and energy, but it will also cost more money. You want to be sure you talk to several companies to see who will provide you with the best service at the best price. Being prepared for your consultation will lessen the stress of the project and allow you to fully evaluate all of the information they give you.

Once you've met with the contractor and they have evaluated your project, it's time to ask them some more specific questions.

Regarding scheduling:

What does your schedule look like and when can this project be started and finished?

Regarding subgrade

- How much will you charge to remove and dispose of my existing driveway, sidewalk or other concrete?
- What type of subgrade do you suggest for good support and drainage, including the resistance from freezing and thawing of winter?

Regarding the project:

- What are the dimensions outlined in your proposal?
- How many square feet do you have figured?
- What is the cost per square foot, including any finishing, colors or textures you have chosen?
- How many cubic yards of concrete will your project require?
 - Feel free to use Geiger's own Concrete Calculator to verify.
- How will you reinforce the concrete? Will you add fiber, rebar or wiremesh?
- Who will call the utility companies before you dig?
 - Dig safe dial 811
- What type of aggregate will you use and will this cause any surface defects in your project?
 - Will this cost extra?

- What are my options and the costs for finishing the concrete project?
 - Please refer to Step 5: Finish the Concrete.

By asking each contractor these detailed questions, you will best be able to compare the cost and value of the services they will provide.

Doing it Yourself

So you've decided to take on the project yourself. What now? Follow Geiger's step-by-step DIY Guide for instructions on how to place your beautiful and versatile new concrete.

Outline of Steps

The following are the steps you will be taking to complete your new concrete project

- 1. Prepare for the Pour
- 2. Prepare the Subgrade
- Order
- 4. Pour
- 5. Finish the Concrete
- 6. Cure the concrete immediately after brooming the surface.

This guide will help you prepare for your project. Be sure to read it thoroughly at least once before you begin, and maybe even print it out and use it as a guide when you are on the job pouring concrete.

Step 1: Prepare for the Pour

The most imperative part in taking on this DIY concrete project is planning. Laying out exactly what you want to do and obtaining the materials (minus the concrete; we'll get to that later) before you begin the physical part of the project is essential to its success.

An important point to note before you begin is that while Geiger Ready-Mix delivers the concrete, you take ownership of the concrete once it is batched. Also once the truck arrives on the job, it becomes the responsibility of you, the homeowner, to place and finish it. Be sure you have created a thorough plan and stick to it. Refer back to this guide if you need any assistance.

Concrete is quite heavy and perishable. It sets within a couple of hours of being batched, so it's important to know what you're doing ahead of time. Research and prepare yourself for the undertaking before the concrete arrives. This includes contacting the city or county planning for any requirements, as far as permits or codes. They may also need to know details of the project, such as dimensions, and the city may have specific instructions and mix specifications for the approach to your driveway. You also may want to contact your utility companies to be sure you aren't interfering with any buried cables or the like (dial 811). Additionally, you must figure out where the concrete truck is going to go. You may need overhead clearance from trees and power lines and must be aware that the truck can damage your yard, driveways, sidewalks and septic tank covers.

Please visit <u>Our Trucks</u> page for the weight of our trucks. Extreme caution and planning should be taken when you take our trucks off the street.

There are certain materials you will also want to have on hand before you start your project. A scaled drawing of the area and project will come in very handy for calculations and as a visual tool for the layout of your control joints. Using the drawing as your guide, you will need 2 x 4s or other appropriately-sized lumber to set the forms and wooden or steel stakes.

You will also need to rent or purchase the following (some may be substituted):

- ☑ Rubber gloves, boots and safety goggles
- **☑** Spade
- ☑ Square-ended shovel
- ☑ Pick
- ☑ Hammer and sledge hammer

✓ Saw ☑ Tape measure ☑ Level ☑ Square ☑ String-line ☑ Nails (double-headed for forming) ☑ Large wheelbarrow ☑ Vibrating compactor (for large projects), heavy tamper or roller ☑ Come-along ✓ Screed board or plank of wood a few feet longer than width of the pour ☑ Hand-float ☑ Bull-float with a long enough handle to reach across the pour ☑ Concrete broom (same specifications as for the bull-float) ☑ Edger ☑ Jointer or groover ☑ Trowel (hard-troweling is not for exterior work such as patios, sidewalks or driveways) ✓ Water source (for cleaning up after the project is complete) ✓ Your curing and sealing materials - cure sprayer

As you can see, with such an extensive list, you're going to want to make sure you have everything before you start.

Now that you've got all of your materials, calculate the amount of ready-mix concrete that you will need by using the <u>Ready-Mix Calculator</u>.

Concrete is measured by one cubic yard, which equals 27 cubic feet.

To determine the needed amount of concrete, make sure the measurements are all in feet and then multiply the length times the width, times the depth (height), and then divide by 27 to get your total cubic yards. Be sure to add 10% for any spills that may occur, as well as the possibility of settling of the subgrade or spreading of the forms. If it rains after you initially measure, remeasure because the subgrade will be more compacted. It should also be noted, make sure it is not too muddy to pour. It's better to have a little extra than to not have enough to finish your project the way you'd like to.



Step 2: Prepare the Subgrade

The organic or native material that lies beneath your project area is known as the subgrade.

Remove all grass and plants, with their roots, as well as any rocks and loose or soft dirt from your project site. Take out enough so that the final, finished concrete will be just slightly above the ground-level. Replace this with a granular fill, like fill sand or crushed aggregate, which you will need to order and place before you lay down your Geiger Ready-Mix concrete. Be certain that the fill is at a uniform depth of at least four inches, or at the depth required by your city or county, below your anticipated finished rise, or grade.

Compacting the Subgrade

Now you must compact the subgrade. It is of the utmost importance that you complete this step correctly. If you do not, it can cause unwanted settling and cracks in your finished concrete project. Additionally, heavy wet concrete will compact the loose subgrade and then not fill in the original measurements, therefore causing a shortage in concrete.

Your subgrade should form a proper foundation for the concrete. Therefore, it has to be uniform, hard, free of any foreign material and not saturated (but damp), and well-drained. When you are compacting layers of material, make sure that each one is no more than four inches-thick. If your project is large, such as a driveway, you might want to rent a vibrating compactor to complete this step. If it's a smaller project, however, you should be okay with a heavy hand tamper to compact the subgrade.

Forming the Subgrade

Forming the subgrade is another very important step in the process and must not be neglected. An accurately set form will determine the final grade of your concrete, so if done improperly, you may experience unwanted results.

Geiger recommends that your grade be on a slope so that any water is able to drain. This slope can be slight, 1/8th inch per lineal foot, which is hardly noticeable.

Grab your level and string-line and set the grade at the slab's surface.

This next part can be a bit complicated, so be sure to read over it a couple of times before nailing anything.



Now that you have your string-line set, you can lay out the form boards. Starting on one end working your way around, you will line the outside of the string-line with your form lumber. Using 2 X 2 lumber or specially made steel concrete stakes, you can start putting your forms up. You should stand your form up next to your string line and square up the stakes with your forms and drive the stake into the ground. You will want your stakes no more than four feet apart to hold the forms from spreading due to the weight of the concrete. Your stakes should backup every joint between the pieces of lumber to keep your forms aligned and straight. Remember, when driving your stakes, they will need to be tall enough to nail your forms to but not too tall to become an obstacle when finishing your concrete. If the top of your stakes are flush with the top of the form board when in place, this is ideal for the finishing process.

You can start to nail the stakes to the forms. 2 x 4s are the most common types of forms used. They should be clean and straight. Raise the 2 x 4 so that the top is level with the string line and nail from the stake to the 2 x 4. To make the job easier when removing the forms, use double headed forming nails. Please note that you can also add stakes or brace the stakes for added protection against spreading.

If you are placing fresh concrete against existing hardened concrete, isolate the two from each other by placing an expansion joint in-between.

Creating Curves

If you're interested in creating curves in your concrete design, you will need to place the stakes closer together, 1-2 feet apart, depending on the size of your curve and the type of form you are using. 3/8" Masonite form material is an exceptional way to create curves and radiuses for your project and it does not need to be soaked. Another way is using your traditional lumber and soak it in water for a couple of hours until it is damp; it should help it to bend into your desired shape. You've got a couple of options as far as the lumber goes:

- Using saw cuts ½ ¾ inch in size, through a 2 x 4
- Using 1-inch lumber
- Using saw cuts ¼ ½ inch in size though a piece of plywood

Double-Checking

Let's make sure that your subgrade is now completely uniform and at the desired depth. You can do this using a straight edge, placing it across the forms and measuring down with your tape measure at random intervals throughout the subgrade. Before the concrete arrives, you should

dampen the sub-grade to help minimize the rapid moisture loss through the bottom of the plastic concrete into the subgrade. However, do not soak the subgrade or put too much water on there so it becomes muddy or has standing water in it.

Step 3: Order

Now that you've planned and prepared, it's time to order.

Here's what we'll need to know:

- 1. Your information, including your name and phone number so we can contact you if needed.
- 2. Your exact address with driving directions. Due to the perishable nature of concrete, it's important that we get to your house before it becomes unusable.
- 3. Are you ready?
 - We've got two ordering systems, a sure-go and a will-call
 - » Sure-go orders are just as they sound. You're committed and ready to go. You don't need to talk to us after you've placed the order and we've agreed upon a time.
 - » Will-call orders are tentative. You want to talk to us again before we send the concrete to you and then make the order a sure-go. We prefer a minimum of 24 hours' lead-time so we can be certain we will be there as close to your requested time as possible.
- 4. What time would you like your order to be delivered? We'll do our best to accommodate your needs.
- 5. What's your project? Driveway, patio, sidewalk, etc.?
- 6. Do you know what mix you will need?
 - We've got many different mixes, thousands in fact, so if you already know what you
 want, it will make things that much easier. However, we are more than happy to assist
 you in choosing the right mix for your project. Here are some of the more common
 recommendations we produce:
 - » 3000 psi (pound-force per square inch) is typical for footings and walls
 - » 4000 psi is the common mix for flatwork, but 3500 psi can be used
 - » 4500 psi is the strength that most cities require for driveway approaches
- 7. How many cubic yards do you need? Use our <u>calculator</u> to determine this number and don't forget to add 10% for spills and settling.

- 8. What slump will you need?
 - The slump is measured in inches and is the consistency of the concrete, in terms of wetness. Understandably, the wetter the concrete or higher the slump, the more workable the concrete is. We recommend using the lowest slump possible for your project so that you can maximize the concrete's strength and durability. Remember that you can always add more water to the mix, but you can't remove it. Here are some of our customers' typical slumps:
 - » Steps and footings, 3 inches
 - » Walls, driveways, patios and other flatwork, 4-5 inches
- 9. How will you be unloading your Geiger Ready-Mix concrete?
 - Direct pour from the back of the truck
 - Construction-sized wheelbarrow
 - Motorized concrete buggy
 - Bobcat or skid loader
 - Hiring a pump company
- 10.Do you need more than one truck? If so, we need to know how to space the delivery of the concrete so that your project will not get slowed down and the concrete waiting on another truck will not get hot and start to set-up before you unload.
- 11. Are you planning on having any colors or stamps in your project? Please let us know at least 24 hours in advance so we may prepare.
- 12. Will you be need any extra products, such as expansion, cure, poly or fiber?
- 13. How do you plan on paying? Geiger Ready-Mix accepts cash, checks and credit cards (Visa, Mastercard, Discover and American Express).
 - Please note that we collect payment after the pour is complete to account for any extra charges that may have accrued.
 - If paying by cash, please have exact change as our delivery professionals do not carry any.
 - If paying by check, have your driver's license ready so our delivery professional can check it.
 - If paying by credit card, please make arrangements when placing the order as a sure-go.

It is important to remember that you are responsible for all site preparation, subgrade work, and finishing of the concrete – proper tools and the necessary manpower are a must to ensure a quality finish. Geiger Ready-Mix supplies concrete and does not set-up forms or finish concrete.

We are committed to delivering you a quality product, but it is your responsibility to make sure it is placed and finished.

Again, if you have any questions, or would like to speak with contractors in your area about preparing, placing & finishing your concrete for you, or to simply get a price quote from them, please call us – we will point you in the right direction.

There's also some information you'll want to get from us.

- 1. Confirmation of your ordered mix type and amount.
- 2. Confirmation of your order status sure-go or will-call?
- 3. The cost per yard of your project.
- 4. How long the unload time is.
 - The unload time is how long you need to unload the truck. The standard time to unload a truck is 6 minutes per yard. Please note that you will be charged for extra time if it takes an excessive amount of time past the normal unload time.

Step 4: Pour

Now, it's time to pour the concrete. You've gotten this far and it's important not to forget that this project is the responsibility of you, the homeowner, to see it from start to finish. Please understand that Geiger Ready-Mix is a supplier of ready-mix concrete and does not set-up forms or finish concrete.

Remember that this project will require hard, physical labor so be sure you are ready and able to make the commitment to finishing the job, even if you are exhausted. The more you know what you're doing, the more smoothly it will go. Geiger Ready-Mix highly recommends that you have a team of individuals to help you out, as it will make the project much easier to manage. Certain tasks will be very difficult to complete on your own and having at least one individual with concrete finishing experience can make a big difference.

Safety First

Please take safety precautions. Always know where the truck is and be sure your delivery professional knows where you are. Wear rubber gloves and boots, as well as safety glasses. Wet

concrete (known as plastic concrete) can burn and irritate exposed skin. Avoid contact with it at all costs and seek medical attention for concrete irritation.

This will be on our delivery ticket and could be a good time to become familiar with it now:

DANGER MAY CAUSE BURNS TO EYES AND SKIN. READ THIS WARNING BEFORE USING.

Contains Portland Cement. Contact with wet (unhardened) concrete, mortar, cement or cement mixtures can cause skin irritation, severe chemical burns, or serious eye damage. Avoid contact with eyes and skin. Wear waterproof gloves, a fully-buttoned long-sleeved shirt, full-length trousers, and tight fitting eye protection when working with these materials. If you have to stand in wet concrete, use waterproofing boots that are tight at tops and high enough to keep concrete from flowing into them. If you are finishing concrete, wear knee pads to protect knees. Wash wet concrete, mortar, cement, or cement mixtures from your skin with fresh, clean water immediately after contact. Indirect contact through clothing can be as serious as direct contact, so promptly rinse out wet concrete, mortar, cement or cement mixtures from clothing. Seek immediate medical attention if you have persistent or severe discomfort. In case of eye contact, flush with plenty of water for at least 15 minutes. Consult a physician immediately. KEEP OUT OF REACH OF CHILDREN.

In addition to your safety tools, double-check to make sure you have everything you need before the truck arrives. Gather them together at the project site for time and efficiency.

What to do When the Truck Arrives

Once the delivery professional shows up at your scheduled delivery time, they will do their best to put the truck and concrete where you would like it, so be sure to talk to them before the pour. In fact, we recommend you walk the area of the pour with the delivery professional to look for low-lying trees and wires to make sure we have enough clearance. We will not pull off the street until you grant us permission and then be aware that our trucks weigh a lot and could leave ruts in the grass. Plus, it is not recommended to drive over existing driveways, sidewalks, patios, and septic tanks.

It is your responsibility to scout this out before we arrive to make sure we can unload the concrete you ordered.

Click here to check our truck measurements.

It is also good to help guide your delivery professional as they are moving the truck into place.

Finding Your Slump

Your delivery professional will release a small amount of concrete so that you can visually test the slump. If you feel it needs to be able to flow more (higher slump), add a little bit of water at a time until you are satisfied with the consistency. Adding water to the concrete works as follows:

• 1 gallon of water per 1 cubic yard adds 1 inch of slump

For example, you ordered 4 yards of concrete and it arrived at a 4" slump – you want to pour it at a 5" slump, so you should add 4 gallons of water.

Placing the Concrete

For the sake of the quality of your project, be ready to go as soon as the truck carrying your concrete arrives. Using the chutes if you can, start with the area of the slab that is farthest away from you, unless you are creating stairs or a steep incline. In that case, you'll want to start at the bottom stair using your concrete with a low slump and work your way back up.

Your concrete should fill the depths of the form completely. To consolidate your edges and eliminate ugly honeycombing, either use your shovel to spade along the edges or lightly tamp your concrete with a hand-float next to your form. Make certain that your concrete is placed properly in the form using your shovel or come-along to keep it from being placed over the form. As you work your way down the forms, it is a good idea to leave a small portion at the end of the forms empty until the very end to avoid messy overflow.

Also remember to use all of the concrete that is in the chute as you get closer to the end. Part of the messy overflow is you do not want to have any concrete left in our chute when you get to the end.

Perhaps the most important detail to protect the durability of your concrete is to strike-off and bull-float the concrete before the bleed water has the opportunity to collect on the surface. It is a good idea to strike-off and bull-float as you go.

• To strike-off, or screed, take a straight piece of a 2 x 4, which will be longer than your form is wide. You will be facing the beginning of the pour, working backwards. As you start to move backwards, be sure to tilt the board slightly away from you and move it back and forth along the project with a sawing motion, while tilting it forward.

If your grade is high prior to screeding, the board will rise. You will have to hold it firmly against the forms to keep this from happening. When the areas are low, you will have to shovel concrete in the low area and then re-screed. Screeding not only helps level your slab, it also helps to consolidate the fresh concrete. Screeding is best done with two people – one at either end.

Float (bull-float or hand-float) the concrete as soon as it has been struck-off and before the bleed water accumulates on the surface. One or two passes with a float should be enough to smooth and level the surface without sealing the concrete.

Rinse Down

Please provide your delivery professional with an area to rinse the truck down once you have completed the pour. He or she will need to clean out the hopper and chutes before leaving, so try to get as much of the concrete out of the chutes as possible as you finish the pour.

Once again, please be kind and help guide your delivery professional off of the property.

Step 5: Finish the Concrete

By finishing the concrete, you are sealing the top of the concrete.

At this point, you must wait until the concrete stops bleeding and the sheen of the water is gone from the surface. The heaviest particles in the mix will settle to the bottom, meaning the water will rise to the top so it can evaporate - this is called the bleeding process. It is very important that you wait until the concrete stops bleeding because it will cause damage, such as blisters, dusting, scaling, and crazing to your finished project (Refer to our CIP pages).

There is not an exact time when you can start – the waiting period will have many factors such as ambient temperature, concrete temperature, cement content, and the amount of water that was put in the mix.

You must also wait until the sheen dulls to edge the concrete, a process that will cut back on any potential chips once you remove your forms.

Cold and Hot Weather Concrete

It is very important to keep concrete from freezing until it reaches 500 psi. This may take two days to achieve in colder temperatures. Wet concrete will freeze when the temperature of the concrete falls below 25 degrees and then will dramatically decreases its final strength. You may need thermal blankets to help protect concrete from freezing in cold temperatures.

It's important to protect the concrete from hot weather days, as well. High temperatures (and strong wind) can cause a rapid rate of evaporation from the surface and cause a much faster set time. When that happens, a higher demand for water comes into play and then that usually raises the water-to-cement ratio, which in turn weakens the strength of the concrete.

Please refer to our CIPs for hot and cold weather concrete pouring.

Dealing with Cracks

Cracks in your concrete are inevitable. The mix shrinks as it dries due to increased internal pressure and cracks occur when the water is leaving the concrete at its highest rate, during those first 2-3 days.

However, you can control the cracks with proper jointing. Joints are the grooves you see on finished projects, effectively creating evenly-spaced and equally-sized panels.

Here are some rules to follow for jointing:

- Your groove should have a minimum depth of ¼ the project depth. Say your concrete is 4 inches deep. Your joint is then 1 ¼" inch deep.
- Your spacing should be 24-30 times the project's depth. So if that same concrete is 4 inches, your joints should be spaced 8-10 feet apart.
- Square-shaped panels are what you are looking for. Avoid long, thin panel shapes that are rectangular.

Dealing with Existing Concrete

You'll need a different kind of joint, called an isolation or expansion joint, for projects that will be in contact with existing concrete. For example, you may be pouring a patio next to your foundation wall or a sidewalk next to your driveway. These joints will prevent your latest project from bonding to your existing concrete so it can properly dry without restriction.



The final step before curing and sealing is broom texturing. Take a dampened broom of your chosen bristle size and lightly rake it across the concrete. This will give your project a nice, non-slip texture. The timing point when to apply this texture is important. Do not broom the surface with bleed water still present on the surface.

Curing & Sealing Concrete

Curing

Curing is the maintaining of a satisfactory moisture content and temperature in concrete during its early stages so that the desired strength and durability may develop. It is important to start curing slabs on grade immediately after finishing because the large area of slab surface can lose moisture or change temperature very rapidly. In severe weather – whether windy, hot, or cold – some measures to protect the slab may be needed even before the finishing is complete.

As concrete hardens, it becomes stronger, resists damage, and becomes more durable. The statement "start curing immediately" cannot be overemphasized. Curing should start as soon as placing and finishing are completed. The surface will not be damaged by the curing method, i.e. applied as soon after the broom as is practicable.

If the surface is allowed to dry prematurely it can severely compromise the durability of the surface of the slab. To be effective, liquid curing compounds must form a film soon after they are applied. To form a continuous film, they must be applied thick enough; generally one gallon covers $150 - 200 \, \text{sq}$ ft.

Sealing

Sealing is done after the concrete is cured out and dry and will allow the sealer to penetrate the concrete and seal it from within, (about 30 days of air drying after the concrete is placed and finished). Resealing your concrete before winter will help protect it from deicers that drip off your car.

- 1. Clean the surface (either a good sweeping, a leaf blower or by power washing).
- 2. Allow adequate time to dry thoroughly.
- 3. Apply sealer -We strongly recommend using TK-290 Tri Siloxane Sealer manufactured by TK Products, or Price Salt Sentry manufactured by Price Research, LTD.

Your concrete driveway will provide many years of service with very little care if you take the following precautions. Sealing is only a part of the care and maintenance of your exterior concrete:

- Do not use de-icers of any kind during the first two winters. Sand can be used for traction.
- Do not allow snow or ice to accumulate on the driveway during the first two winters. Keep it cleaned off.
- Keep fertilizer washed off the driveway, as it will chemically attack the cement paste ultimately destroying the driveway.
- Apply a quality sealer to the driveway in the fall of each year for the first two years then
 every third year after that. Sealers should be applied to dry concrete preferably when the air
 temperature is above 70°F.

Contact us at your convenience if you have any questions at 913-281-0111.



Tips and Tricks for a Successful Project

Here is an overview of some of the most important points to remember before and during your project:

- Research and prepare. This is a very physical and technical undertaking so be sure that you are able to handle it. There is no shame in hiring a contractor.
- We've said this before, but it's worth reminding. Once we batch the concrete, it becomes your responsibility to unload and finish the project.
- Get help. Have at least two other people assisting you; it will make your job much easier.
- Gather your supplies in advance. You don't want to be left with settling concrete and no bullfloat.
- Check with your city or county for any restrictions or regulations on construction.
- Be sure the subgrade is compacted, damp but not wet and free from foreign or organic material.
- Brace your stakes to account for the weight of the concrete.
- Order at least 1-2 days in advance so we can be sure to fit you into our schedule.
- Order extra to account for any spillage or uneven subgrades.
- Before your delivery professional arrives, check for any low-hanging items that the truck could run into or get caught on. Our trucks are approximately 13 feet tall.
- Talk to your delivery professional. Don't be afraid to seek advice from him or her and be sure to establish a way of communicating while they are in the truck.
- Remember that your delivery professional will not take the truck off of the road without your explicit instructions, as the weight can damage driveways, lawns and septic tank covers.
- Wet concrete hurts. It can irritate and burn the skin, so take the necessary safety
 precautions including, but not necessarily limited to, wearing proper footwear, gloves and
 eye protection.
- Please provide an area for your delivery professional to rinse down the truck.
- Don't finish the concrete until the bleed water has completely evaporated.
- Don't forget to add joints to control your cracking.
- Have a sprayer ready to cure and seal your project to protect it and give it longevity.



An Owner's Guide to Care and Maintenance of Exterior Concrete.

The Kansas City area is considered to be one of the toughest freeze-thaw areas in the country. Sealing your concrete driveway is one of the methods used to combat the effects of the multiple freeze-thaw cycles. By properly sealing the surface of the concrete driveway you help stop the penetration of water into (or just under) the surface of the concrete. Water penetrating the surface and freezing is one of the causes of scaling and popouts, especially in concrete less than two years old. Sealing is the last step in ensuring a good-looking durable driveway that will last for years.

Your concrete driveway will provide many years of service with very little care if you take the following precautions:

- 1. After your driveway is poured it should be sealed before the first two winter seasons and then every third year. (Contact your builder, your finisher or your ready-mix supplier for recommendations of a good quality sealer.)
- 2. Do not use de-icers of any kind during the first two winters. Sand can be used for traction.
- 3. Do not allow snow or ice to accumulate on the driveway during the first two winters. Keep it cleaned off.
- 4. Keep fertilizer washed off the driveway, as it will chemically attack the cement paste ultimately destroying the driveway.
- Apply a quality sealer to the driveway in the fall of each year for the first two years then
 every third year after that. Sealers should be applied to dry concrete preferably when the
 air temperature is above 700 F.
 - The surface of the driveway must be cleaned and dry prior to sealing.
 - Contact your builder or ready-mix supplier for additional information and for reccomendation of a good quality sealer.

Geiger Ready-Mix Recommendations:

- 1. Clean the surface (either a good sweeping, a leaf blower or by power washing).
- 2. Allow adequate time to dry thoroughly.
- 3. Apply sealer -We strongly recommend using TK-290 Tri Siloxane Sealer manufactured by TK Products, or Price Salt Sentry manufactured by Price Research, LTD.

A 5 gallon can of either brand of sealer will cover approximately 750 square feet. The sealer can be applied with a paint roller or by using a garden type sprayer.

We recommend that you seal your exterior concrete before the first two winters and then every 3rd year to increase the durability of your driveways, sidewalks and patios.

Concrete that is maintained properly, unlike most building materials, will gain strength and durability with age. The two most common problems associated with concrete driveways and sidewalks are scaling and shale popouts. Both can be minimized if you follow the suggestions listed above.

With proper care your driveway will provide you with many years of service.