

Whether you are building a new home or remodeling your current home, there is nothing more important than the concrete foundation it is built or driven upon. To assist you in selecting the right concrete in the right quantities, and insuring that it is placed in the proper manner, we have outlined below some frequently asked questions about concrete. If you have additional questions call the plant nearest you, and one of our experienced concrete professionals will assist you.

### **What type of concrete should I use in and around my home?**

Different work requires different strength concrete. Concrete strength is proportionate to the amount of cementitious material used. A sack is 94 lbs. of cementitious material: 5 1/2 sack = 517 lbs.

<b>Type of Work</b>	<b># of sacks</b>	<b>or related PSI</b>
Footings for masonry walls:	5	3,000
Basement floors:	5 1/2	3,500
Sidewalks:	6	4,000
Curbing:	7	5,000
Driveways, parking areas	7	5,000

### **What is the placement process?**

There are three phases to the placement process: preparing the site, placing the concrete and finishing.

#### **Site Preparation:**

1. Prepare sub grade - subbase should be compacted aggregate
2. Establish grades
3. Set edge forms or guides
4. Install vapor barrier (i.e. poly sheet)
5. Install reinforcement (wire mesh) 3" above base
6. Get tools and material ready

#### **Placing Concrete:**

1. Start from area furthest away from delivery/drop
2. Spread/distribute concrete
3. Work concrete / vibrate to insure removal of larger air pockets
4. Stake-off

#### **Finishing Concrete:**

1. Bull float to a smoother finish
2. Wait for bleed water to disappear
3. Edge joints
4. Float / trowel to smooth finish
5. Saw Joints
6. Cure

### **How do I take care of my new concrete?**

When a contractor is placing your exterior concrete you should make sure they are planning to cure and seal it.

### **What should I know about curing and sealing concrete?**

Concrete is typically composed of cement, water and aggregate, often with specialty chemicals added to enhance performance. For proper curing to take place, moisture must be retained within the concrete long enough to allow the cement to chemically react with the water; a process called "Hydration".

Application of a curing compound helps retain moisture by forming a film on the surface of the concrete.

By allowing proper hydration, the concrete is improved in a number of ways including:

- Increased wear resistance
- Improved surface hardness
- Improved strength and durability

### **When should concrete be cured?**

Proper curing is important whenever concrete is placed and will reduce the risk of poor results. However, curing is especially important when placing concrete in hot, dry environments, in direct sunlight, or under windy conditions. These conditions lead to an accelerated increase in moisture loss and an increase in risk of shrinkage cracking of the concrete.

The curing compound should be applied immediately after the concrete is placed and finished.

### **How are these products applied?**

Curing and sealing compounds can be spray or roller applied. Products with lower concentrations (lower solids) can be applied with a 'pump-up' hand held sprayer equipped with a standard nozzle. Higher solids materials must be applied using a larger nozzle or with an airless sprayer.

### **Does concrete need to be sealed after curing?**

Sealing concrete is important for long term durability. Film forming sealers generally impart a gloss to seal the surface and reduce staining of the underlying concrete. Penetrating sealers generally do not change the appearance of the concrete surface but provide better long-term protection against the deteriorating effects of such elements as de-icing salts, acid rain, sea water and ocean spray. Sealing products are used after the initial curing compound has worn away. Typically 30-45 days.