

A DIY Guide to Types of Concrete

Choosing the Right Blend of Cement, Aggregates, and Additives

Deciding which premixed concrete blend to use? There are differences between general purpose premixed, fibre-reinforced, countertop concrete, and fast-setting concrete.

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Concrete is one of the building materials that revolutionized the construction industry. Yet it is so common that it doesn't get the respect it deserves. This is understandable – it's everywhere! It's underfoot in homes and offices; it permits vast highway systems. Even concrete countertops are showing up in upscale homes! What most people don't know is how many types of concrete formulations there are. This article will examine some of the most common ones.

Concrete VS Cement

Many people confuse the two terms "concrete" and "cement". The two terms are used interchangeably. The fact is that cement is an ingredient of concrete. Most commonly, concrete is a mixture of Portland cement, water, and the aggregates sand and gravel. Fortunately for the DIY types out there, manufacturers have mixed and bagged formulations of concrete (minus the water) for specific types of home improvement projects.

Concrete is available for larger projects by renting portable cement mixers from home improvement stores and tool rental outlets. DIY projects such as porches and patios are good candidates for portable mixers. The wet concrete is poured into a concrete form and then finished.

Which Type of Concrete to Use for which DIY Project?

A DIY homeowner isn't going to use a concrete contractor so it's important to know which type of concrete to use. The following list will explain which type is right for the weekend project.

- General purpose premixed concrete – This mix of Portland cement, gravel, and sand is generally rated at 4000 psi for compressive strength. This premixed concrete is ideal for curbs, floors, sidewalks, patios, setting posts, and steps.
- fibre-reinforced concrete mix – This blend adds reinforcing fibres to the sand and gravel aggregates. Where is this handy? In places where impact is expected. Places such as steps, walkways, and garage or shed floors are good examples of this concrete blend.
- Countertop concrete mix – This concrete mix is made especially for pouring concrete countertops for kitchen counters. The concrete countertop has been rising in popularity and makes a fine DIY kitchen project. Since countertop concrete is a low moisture mix, a special proprietary additive has been added to it. It is also formulated to reduce shrinkage to minimize surface cracking while the concrete dries. It finishes off at about 5000 psi after a month.
- Fast-setting concrete mix – As the name implies, this product is quick to set! Does that mean working like a maniac? Absolutely not. This is for DIY projects that don't require a form, such as setting posts for decks, fence posts, mailboxes, and swing sets. Simply dig the hole in the ground, pour in the concrete and fill it with water. It sets in about half an hour. It's a good choice when the weather is questionable.

These are some of the excellent choices of concrete mixes available to the DIY world. Manufacturers have responded to consumer needs. The concrete countertop is a great example of this. DIY concrete projects are not only fun, they're easier than ever!