



OUT OF THE CHUTE . . .

Smart Kick Start™



CHLORIDE BASED AND NON-CHLORIDE BASED VERSIONS AVAILABLE

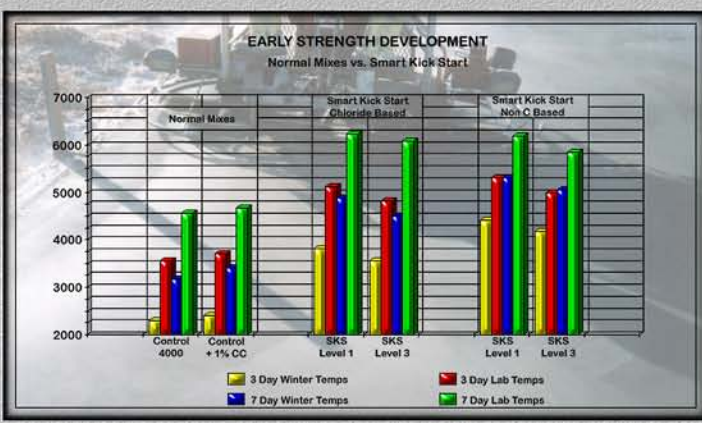
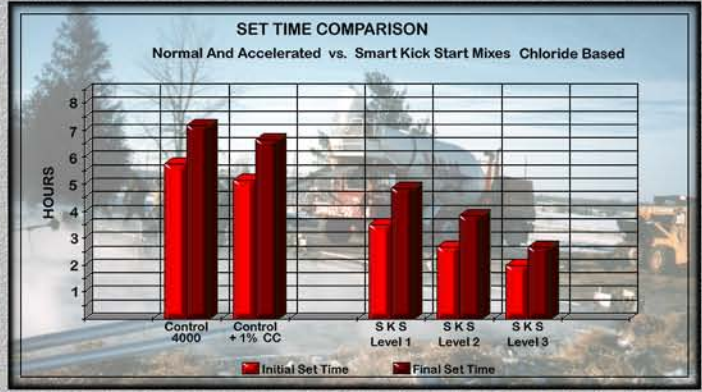
What is Smart Kick Start™ and what can it do for my business? Smart Kick Start™ is a proprietary combination of materials and chemical admixtures developed by MCC, Inc., and The Euclid Chemical Company. These components, in combination with specialized manufacturing, produce a concrete which sets and gains strength at a much faster rate than conventional concrete.

As with any concrete set accelerator, we realized there would be a need for adjustment in the rate of intensity. To accomplish this, we have created "levels" of set acceleration which are associated with the product performance. Five separate adjustment levels have been developed to insure flexibility and maximize the cost effective use of this new product.

We all know calcium chloride is the most economical and cost effective concrete set accelerator. Our Smart Kick Start CB does contain some calcium chloride. We also realize not all concrete applications can allow for chloride, due to it's link in the corrosion process. For those demanding jobs when chloride is not allowed, we have developed Smart Kick Start NCAB, which is chloride free.

- * ADD TO ANY CONCRETE MIX
- * 6" PLACEMENT SLUMP
- * FASTER SET
- * HIGH EARLY STRENGTH
- * COLD WEATHER PLACEMENT
- * LATE DAY PLACEMENT
- * LOWER LABOR COSTS

- LEVEL 1**
 - LEVEL 1.5**
 - LEVEL 2**
 - LEVEL 2.5**
 - LEVEL 3**
- SKS = Smart Kick Start™
 CB or NCAB = Chloride or Non-Chloride Based
 Level 1 thru Level 3 = Product Intensity



Concrete Mix	Initial Set Time	3 Day Strength	7 Day Strength
Control 4000	Control	Control	Control
Control + 1% CC	- 10 %	+ 4 %	+ 2 %
SKS CB Level 1	- 40 %	+ 44 %	+ 36 %
SKS CB Level 3	- 65 %	+ 35 %	+ 33 %
SKS NCAB Level 1	- 30 %	+ 48 %	+ 36 %
SKS NCAB Level 3	- 44 %	+ 40 %	+ 30 %

Setting time and strength test data shown has been compiled from actual MCC, Inc., lab testing. Reasonable variations from the results shown here may be experienced as a result of differences in materials and jobsite conditions.

Perhaps You've Forgotten...

A FEW COLD WEATHER CONCRETE TIPS

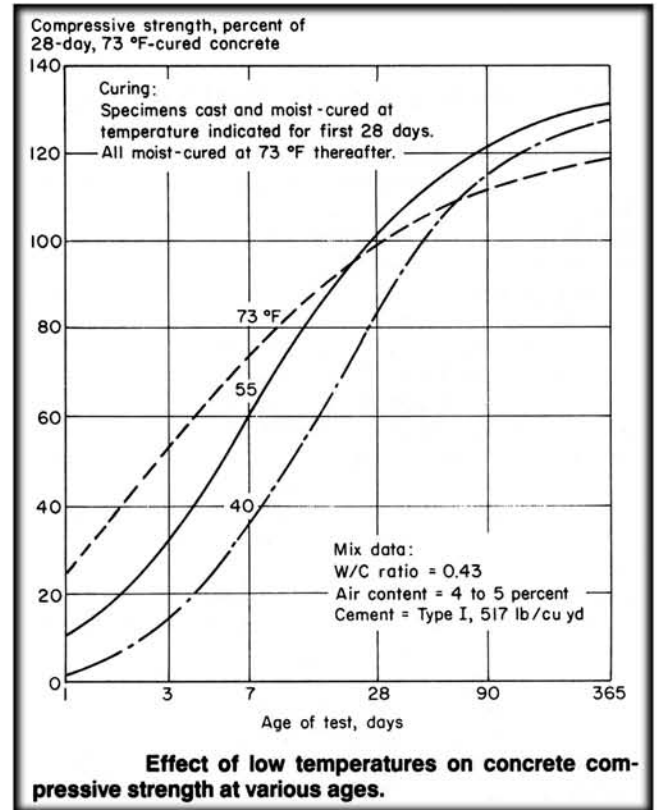


Adverse weather conditions do not mean the end of a building project, nor do they mean the end of placing concrete. However, it does force contractors to make additional decisions based upon the working environment.

If the temperature of the fresh concrete is 55°F., or greater - and if the concrete is maintained at a temperature of 55°F. or higher - then winter concreting should be trouble free. Approximate set time for concrete at 70°F. is 6 hours. Set time jumps to over 14 hours if the concrete temperature drops to 40°F.

The key is to start with warm concrete and keep it warm. The internal heat, or the heat of hydration produced by the concrete itself can be elevated with extra cement, accelerators, or special additives such as MCC Smart Kick Start™. The environment may also be altered by using enclosures and moist heat, insulating blankets or polyethelene sheeting and straw, and leaving the forms in place.

Strength development of concrete is very temperature dependant, especially at early ages. The heat of hydration which is produced by the concrete itself can be very useful if captured and maintained by insulating. Proper insulation also insures a consistent temperature throughout the mass. Do keep in mind to cool the concrete slowly to prevent thermal gradients which can cause cracking.



What if ...

The grade has been kept covered and is not frozen, but the temperature has dropped enough to cause you to hold off placement with normal concrete.

It's 1:30 p.m. and your foreman just called because he has the garage floor ready earlier than expected. You would like to place it today, but you don't want your men working late finishing and disrupting tomorrow's schedule, not to mention the overtime labor costs.

Let us show you how these types of placements can still be made and many others, using MCC Smart Kick Start™ and conventional cold weather concreting practices. Contact your local MCC concrete sales representative or our main office for pricing and further information on this exciting new product.

