



February, 1 2021

Re: Extreme Winter Conditions

Dear Valued Ready Mix Customer,

The Mid-Atlantic Region is currently experiencing extremely frigid weather conditions. During this extended period of below average temperatures, we would like to take this opportunity to share with you Aggregate Industries Mid-Atlantic Region's cold weather policy and guidelines

Quality and Temperature – ACI 306 defines cold-weather concreting as, “a period when for more than three successive days the average daily air temperature drops below 40 degrees Fahrenheit and stays below 50 degrees Fahrenheit for more than one-half of any 24 hour period.”

Concrete can be safely placed during the winter months without damage from freezing, if certain precautions are taken.

When placing your concrete order, consideration should be given to include non-chloride accelerators to help the concrete set faster. Concrete that is exposed to outside elements should have air-entrainment admixtures to help with freeze-thaw conditions.

All concrete should be protected from freezing until it has reached a minimum strength of 500 PSI, which typically happens within the first 24 hours at normal temperatures with a water-cement ratio less than 0.6. Once concrete has attained this strength, it is generally considered to have sufficient strength to resist a SINGLE freezing cycle without damage. If concrete freezes while it is still fresh, an increase in the overall volume of concrete occurs due to the expansion of water. When thawing takes place, the concrete will set with an enlarged volume of pores, which will reduce strength and durability.

Aggregate Industries takes precautions to ensure our concrete is delivered within temperature specifications based upon plant capabilities including daily monitoring of concrete temperatures, the addition of hot water, sheltering raw materials, enclosing the plant, etc. These precautions are limited in the ability to raise the temperature of concrete and, combined with heat loss during transport to jobsites, reliable product delivery within specifications is not always possible. Generally, when we experience

sustained temperatures at or below the mid-20's, our ability to deliver concrete within specification is greatly reduced.

The quality of raw materials as they are batched are also affected by low temperatures. Many raw materials contain moisture that freezes and clumps, obstructing movement through our production facility. Passing these clumps through the production process and depositing onto jobsites may lower the quality of our products.

Safety – Our primary concern is always safety; Aggregate Industries strives to attain a zero-harm goal every year. Production of Ready Mixed concrete involves the use of water. During sustained below freezing temperatures, this causes a variety of safety concerns. Walkways on our plants and trucks become hazardous, raw materials freeze and clump up causing clogs that must be manually broken apart, or unsafe conditions on job sites as pours go throughout the day.

For the above outlined reasons, we will continue to monitor temperatures and quality of concrete being produced on a daily basis. We will notify you as to our ability to reliably and safely produce concrete.

If you have any further questions or concerns, please contact us directly.

Sincerely,

Allister Melvin

Ready Mix Technical Services Manager

Aggregate Industries

René Marais

Ready Mix Sales Manager

Aggregate Industries