FRITZ-PAK

# SET ACCELERATION TEST FOR NCA

## 1. Purpose of the Lab Test

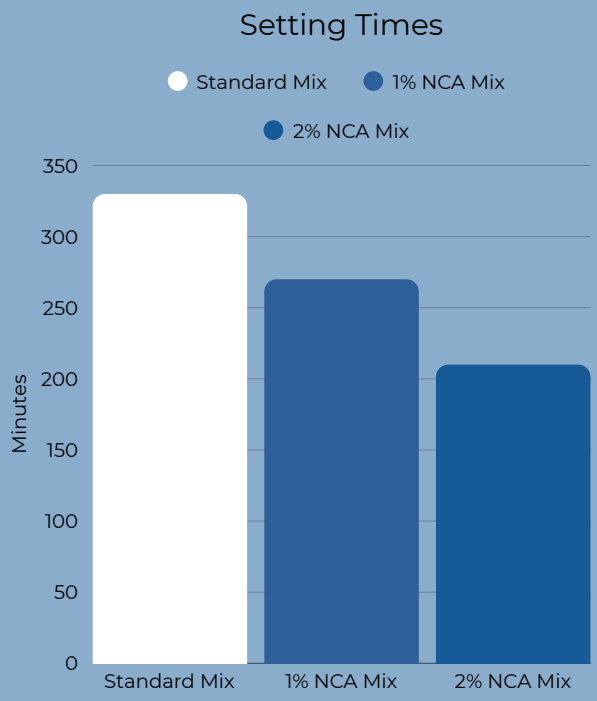
The following lab test evaluates the rate at which Fritz-Pak's Non-Chloride Accelerator (NCA) speeds up the setting time of cement-based building materials in cold temperatures.

## 2. Lab Test Procedure

The test monitored the development of initial set in three concrete mixes:

- Mix 1: A standard mix design with Portland cement, sand, and water.
- Mix 2: Identical to Mix 1, with a 1% (by weight of cement) dose of Fritz-Pak's NCA.
- Mix 3: Identical to Mix 1, with a 2% (by weight of cement) dose of Fritz-Pak's NCA.

The mixes were poured into molds and placed outside in 40°F weather.
The setting of each mix was measured every 30 minutes with a Vicat needle to determine when each mix achieved initial set.




## 3. Results

The results showed that the mix containing 2% NCA set 40% faster than the standard concrete mix.

- The 2% NCA mix achieved initial set after three and a half hours.
- The 1% NCA mix achieved initial set after four and a half hours.
- The standard mix achieved initial set after five and a half hours.

## 4. Product Overview

Fritz-Pak NCA is a non-chloride accelerator, packaged in water-soluble bags for easy addition to the concrete at the job site. NCA does not promote steel corrosion or efflorescence. It approved by the DOT in several states across the country and meets ASTM C 494 Type C standards.

## 5. Learn More

If you're ready to speed up the setting time of your concrete - without the risk of corrosion, scan to the QR to order a case of NCA today. Don't forget to follow us online for more information about how our products can improve your concrete.

fritzpak.com