

**APPLICATION PROCEDURES**  
**ALL STEEL™ NMC - INTERNAL CURING ADMIXTURE PROCESS (PART A & PART B)**

All Steel™ NMC admixtures provide the best path towards optimizing hydration in your internal curing process. Never guess again when it comes to curing.

**ALL STEEL™ NMC ADVANTAGES**

- » Improves low water-cement ratio concrete workability
- » Increases early yield strength development compressive and flexural
- » High durability and increased density
- » Reduces susceptibility to the negative effects of freeze/thaw cycles
- » Reduces water content needed for a given workability (12-40%)
- » Reduces surface bleeding and evaporation
- » Reduces cracking, crazing, curling, creep and shrinkage
- » Increases cohesiveness
- » Improves concrete finishing and workability
- » Improves concrete pumping characteristics
- » Maintains slump life during extended mixing times
- » Plasticity range of 8 to 11 inches
- » Improves bond strength to reinforcement
- » Reduces permeability and salt penetration
- » Raises productivity and with lower labor inputs
- » Removes the need for normal mid-range and high-range water reducers
- » Flowable concrete, reduced segregation
- » Replaces SCC admixtures by adjusting batching sequencing and adjusting dose
- » Reduction of vibration needs of concrete
- » Early form stripping with early strength concrete approaches
- » Reduces air entrainment dosing needs from 50-70%
- » Excellent handling characteristics - 18 months normal shelf life expectancy
- » Aids in temperature control when max temps are specified
- » Improves workability and finishing for type 1L cement

steve@allsteelconcrete.com  
 608-301-7224  
**allsteelconcrete.com**

**COMPATIBILITY**

- » Compatible with all types Portland cement, class C and F, fly ash, silica fume, fibers, and approved air entraining admixtures (call for capability questions)
- » White, integral colored, and architectural concrete
- » For best results, each admixture must be introduced separately into the concrete mix

**STORAGE**

- » May freeze at temperatures below 35 degrees F° (2 degrees C°)
- » Freezing will not harm product, however, precautions should be taken to protect
- » If frozen, thaw product at 45 degree F°, use mechanical agitation
- » If frozen DO NOT USE mechanical agitation

**USAGE INSTRUCTIONS**

1. The All Steel™ internal curing admixture process has two parts. Internal Curing Admixture - Part A and Internal Curing Admixture - Part B. These are both headwater treatments.
2. Part A and Part B are added to headwater at 1oz per hundred weight calculations.
3. Performance may be influenced by actual temperatures, and while dosage chart serves as a general guide, as with all concrete mixes, it is advisable to conduct testing before deploying in large-scale applications.

**SPECIFICATIONS**

Conforms to:

**ASTM C 494 Types A and F**

**AASHTO M 194 Types A and F**

**CRD C 87 Types A and F**

**All other Federal and State specifications**

**DOSAGE RATE**

The recommended dosage of **ALL STEEL™ NMC**

Concrete Temperature	ACI Guidelines - 90 minutes (Dosage per 100 weight)
100 - 109	6.0
90 - 99	5.5
80 - 89	4.5
70 - 79	3.5
60 - 69	3.0