

WATER REDUCERS, AIR ENTRAINMENT, FLYASH, SLUMP & WATER TO CEMENT RATIO

1. Water reducers are not necessary with the use of MOXIE 1800 SUPER-ADMIX, however, these products are compatible when added separately. A water reducer will increase the psi at later times, however, will retard the set minimally. This typically equates to about a half-hour later set time. Some water reducers have no effect on set times. Start with half the normal dosage and adjust according.
2. Air-entrainment is not necessary as MOXIE 1800 SUPER-ADMIX provides superior freeze-thaw resistance. However, air-entrainment admixtures are compatible when added separately. The air entrainment percentage content may be reduced minimally as MOXIE 1800 SUPER-ADMIX will try to fill all the air voids, interconnecting capillary as well as non-interconnecting air entrainment voids. The total volume of concrete will be reduced proportionately and therefore must be adjusted by this factor. Start with half the normal dosage and adjust according.
3. Flyash is substantially enhanced with the use of MOXIE 1800 SUPER-ADMIX. Compressive strength is increased, less water is required, no plasticizer is required, shrinkage cracking is reduced or eliminated. Recommended slump is 2½" to 3" maximum, however do not exceed the water to cement ratio regardless of slump.
4. The recommended water to cement ratio is .52% to .54%, with a .44% to .48% minimum. A water to cement ratio of no more than .60% is usually recommended. Slump may be increased provided water to cement ratio does not exceed .60%. MOXIE 1800 SUPER-ADMIX requires approximately three additional days after the 28 day curing period time to complete its chemical process. Regardless, concrete placed with water to cement ratios greater than .55% will require longer concrete hydration times. The higher the slump/water to cement ratio the longer it will take before complete hydration can take place and impermeable flooring materials can be installed. Ultimate permeability will not be affected by higher water to cement ratios after complete hydration, however, complete hydration of the cement will be delayed, which in turn will delay the chemical process of MOXIE 1800 SUPER-ADMIX. Additionally, comply with ASTM C94 as to proper mix times when adding water at the job site.

A water to cement ratio of .55% will take approximately 100 days of hydration time before flooring can be installed. A water to cement ratio of .60% will take approximately 180 days of curing time before flooring can be installed. Water to cement ratios of .70% or higher, may void the warranty and will require curing times exceeding one year or more. Only make adjustments to the water cement ratio to maintain given slump without the presence of bleed water. The presence of bleed water will cause shrinkage cracking. Re-tempering is not allowed. Tempering in transit or at the jobsite is permitted. Do not exceed the specified water/cement ratio.