SUPERPLASTICIZER GUIDELINES

I. Discharge Sequence

- Super plasticizers can be discharged with initial mixing water, but after air entrainment has discharged
- Superplasticizers can be discharged after the cement is in and damp. This method usually gives better water reduction or slump gain, but may take longer to thoroughly mix

II. Mixing Time

- Super plasticized concrete should be mixed for a minimum of 6 minutes

III. Mix Design Adjustments

- Super plasticized concrete (high slump) usually is a little rockier, so often coarse aggregate is lowered by 50-75 lbs. /yard and fine aggregate increased congruently.
- When incorporating Superflo 443, air entrainment dosage requirement usually will increase approximately by .20 ozs./cwt.
- When incorporating Superflo 2000RM, air entrainment dosage requirement usually will decrease approximately by .75 ozs./cwt.

IV. Dosage Recommendations When Combining With Retarders/Accelerators

- When combining retarders with superplasticizers, reduce dosage of retarder by approximately one third to get normal retardation
- When combining accelerators with superplasticizers, increase dosage of accelerator by approximately one half percent to get normal acceleration

V. Fogging With EVRT

- In super plasticized mixes (particularly low water/cementitious ratio mixes) incorporated in slabs, bleed water can be considerably less than a normal mix. Fogging the surface with EVRT is highly recommended to reduce the possibility of plastic shrinkage cracks on the surface.