

Mid-Range Water Reducer ADVA® 140(M)

Mid-range water reducers allow you to increase slump without compromising the properties of the concrete that will occur by adding water.

Impact

Finishability/Workability

- Adds surface slickness for better finishing
- Improves pumpability
- Produces creamier, fatter paste
- Reduces bleeding
- Lowers potential for premature finishing
- Surface is easier to close
- Fewer surface blemishes
- Lower labor cost to finish

Protects Against Strength Loss

- 1 gallon of added water per yard reduces strength by ~200 psi
- Lower strength increases potential for cracking
- More cracking equals more claims with client

Reduces Shrinkage

- Adding 1 gallon of water per yard increases shrinkage by 10%
- Lower shrinkage reduces potential for cracking
- Less cracking equals less complaints
- Higher customer satisfaction

Better Set Times

- Quicker setting times if slumps are increased with admixtures as compared to water
- More predictable set times verses slumps increased with water
- Less potential for spotty setting
- Reduces finishing time
- Lowers labor cost
- Allows labor to be more productive
- Reduces potential of overtime labor

Increases Durability

- Increases surface life
- Reduces potential of complaints
- Better resistance to freeze-thaw
- Higher resistance to the effects of harsh chemicals

Results:

- Lowers risk of costly callbacks
- Improves profitability
- Reduces in-place cost
- Improves customer satisfaction



Effects of Adding Additional Water to Concrete

Rule of Thumb:

Below is a list of effects from adding 1 gallon of water per cubic yard of concrete

- Increases slump by approximately 1”
- Decreases strength by ~200 psi
- Waste effect of 1/4 bag (23.5 lbs.) of cement
- Increases shrinkage by 10%
- Increases permeability by 50%
- Decreases freeze-thaw durability by 20%
- Decreases resistance to deicing salts
- Slows set
- Increases potential for cracking

