

Watch your slump

It is recommended that you use a mix of 3,000 PSI concrete with 3/8" Aggregate at a 5-inch slump for placement into Reward Wall Forms. Concrete delivered to projects generally has a slump of between 3 and 5 inches. If you (or the driver) request the addition of excessive amounts of water to the concrete, you risk three problems:

1. You will reduce the strength and durability of the concrete.
2. You will increase the cracking potential of the concrete.
3. You increase the risk of bulges and blowouts during placement.

If only one gallon of water is added to a yard of 3,000 PSI concrete mix:

- The **slump is increased by about one inch.**
- The **compressive strength is reduced by as much as 200 PSI.**
- The effect of about 1/4 bag of cement is lost.
- The shrinkage potential (cracking) of the concrete is increased.
- The possibility of seepage through the cracked concrete is increased.
- The freeze-thaw resistance is reduced and scaling increased.
- The resistance to attack by de-icing salt and commercial fertilizer is decreased and the possibility of scaling is increased.

Below is a table that illustrates the risks involved in adding water to your delivered concrete:

<u>Water added</u> <u>Gallons/cu.Yd</u>	<u>Slump increase</u> <u>In Inches</u>	<u>Strength Reduction</u> <u>in PSI</u>	<u>Strength Reduction</u> <u>in %</u>
1	1	200	7%
2	2	400	13%
3	3	600	20%
4	4	800	27%
5	5	1,000	33%
6	6	1,200	40%

In conclusion, **if your concrete does not come as you ordered it, send it back.** If you don't, the customer must assume all responsibility for water added at the job site.

If you have any questions, please call Rich at 413-218-5471