

## **Technical Alert - Water Addition**

## Effect of adding additional water to concrete mixes

Please be aware of the impact of asking the driver to add 10 litres of extra water to a cubic metre of correctly designed concrete.



- 1. You increase the slump by 20mm
- 2. You reduce the compressive strength by as 3N/mm2
- 3. You waste the effect of 15kg of cement per cubic metre
- 4. You increase the shrinkage potential by about 10%
- 5. You increase the possibility of bleeding through the concrete by up to 50%
- 6. You decrease the freeze thaw resistance by up to 20%
- 7. You decrease the resistance to attack by de-icing salts

This is why extra water should only be added as a last resort.

All additional water must be documented on the ticket and signed for by the customer.