



Concrete Cure Test Results

AS 3799 - 1998 Liquid membrane forming curing compounds for concrete

This Standard is short on detail as to how to prepare the test specimens. The following method is what was used in the preparation of the samples for testing. It is based on what happens in the real life scenario and the DEEP CURE application instructions.

1. Pour / place wet concrete into the trays - use Portland Cement and no additives
2. Compact it as per the Standard and then screed it off
3. Wait some 2-3 hours and then smooth it off using a steel float
4. Then about 1 hour later (which is about the time for it to be walkable) spray the surface with DEEP CURE
5. Apply enough so that the surface remains wet (as if it has a liquid on it) for 10-15 minutes. This approx 4.5 - 5 sq m / litre
6. Wait 1 hour to allow the DEEP CURE to penetrate and react with the Portland Cement
7. Now weigh the test samples and place in the oven as per AS 3799 test procedure
8. 72 hours later, take the samples out of the oven and weigh the samples as per AS 3799

After 72 hour curing, the weight loss of the test panels was determined to evaluate the effectiveness of DEEP CURE as a concrete curing compound. The results are noted on the table below:

TEST PANEL	Mass difference %	Efficiency Index
#1	- 5.36%	94.64%
#2	- 4.91%	95.09%
#3	- 4.30%	95.70%
Average	- 4.86%	95.14%

CONCLUSION

DEEP CURE qualifies as a concrete curing compound as the percentage of water retained is greater than a minimum of 90% over a 72 hour testing period. (Australian Standard AS 3799-1998. Liquid Membrane - Forming Compounds for Curing Concrete)