

SKUDO ENHANCES CONCRETE'S STRENGTH



Initially the Skudo Floor system started life with the soul objective of providing temporary protection for floors of various types, including concrete. It was during this time that the notion of the Skudo coating having the ability to enhance the compressive strength of concrete was first identified.

THE TEST:

Hanson Technical Services division – a NATA accredited Laboratory was employed to test the benefits of concrete coated with the Skudo Floor System versus standard cured concrete. Hanson began the test by casting three groups of six cylinders all from the same batch of concrete that was manufactured at a specification of 32MPa (4640 psi).

As an additional indicator, one of the groups of six was immediately submersed in water in order to articulate the maximum MPa (psi) possible from the batch. The second group of six cylinders was left natural to 'air' cure, and the third group of six were coated on top with the Skudo Floor system.

At three intervals two samples from each group was pulled and tested based on their compressive strength. The three intervals were 4 days, 7 days, and 28 days. What was very surprising was the rate of increase the Skudo coated samples received versus the 'air' cured samples.



THE RESULTS:

<i>Type of sample</i>	<i>Original Strength</i>	<i>4 days</i>	<i>7 days</i>	<i>28 days</i>
Samples from 'water' cured	32MPa (4640 psi)	21MPa (3045 psi)	26MPa (3770 psi)	38MPa (5510 psi)
Samples from 'air' cured	32MPa (4640 psi)	21MPa (3045 psi)	23MPa (3335 psi)	27MPa (3915 psi)
Samples coated with Skudo	32MPa (4640 psi)	22MPa (3190 psi)	26MPa (3770 psi)	36MPa (5220 psi)

THE CONCLUSION:

As indicated, the Skudo coated samples nearly performed as well as completely submersed concrete, which is remarkable. We are talking an **increase** of 9 MPa (1305 psi) in compressive strength between the Skudo coated concrete versus 'air' cured concrete.

The true benefits of these results are yet to be determined but it is fair to say they will have a significant impact on the option of whether to protect or not to protect.