

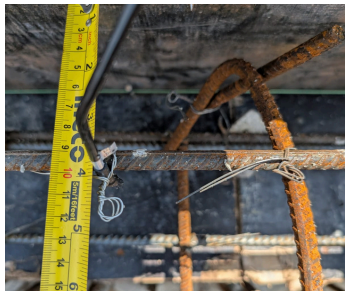
CASE STUDY

SLAB FORMWORK REMOVAL



OBJECTIVES

The project aims to shorten the typical 7-14 day slab formwork removal cycle to accelerate formwork reuse and clear space faster for other work.



SOLUTION BY CONCRETEAI

ConcreteAI tracks real-time strength at multiple points within the slab.

Once the concrete reaches the required strength for formwork removal, ConcreteAI verifies this data using concrete cubes cured under temperature-matched curing as in-situ concrete. This is done with the ConcreteAI SmartTank.

This method is referenced by BS 1881:130 and is approved by BCA for evaluating in-place concrete strength for stressing and load application.

COST BENEFITS ANALYSIS

Using validated in-situ concrete strength, the formwork cycle time is reduced from 7 to 5 days (30%). The solution helps shorten each floor cycle by 5 days, total of 20 days for a 4-storey building.

This accelerates the project schedule, increases the reuse rate of formwork, and reduces operating costs. ConcreteAI's package delivers a 10x return on investment by achieving productivity gains on a month scale.

Target strength, MPa	Traditional Cycle Time	In-Place Concrete with Temperature Matched Curing Cube
100% Design Strength	7 days	5 days