

STORMWATER DETENTION TANKS

Modular Precast and Block & Slab tanks compared



spelstormwater
joy in water

OSD SYSTEMS	STRUCTURALLY SOUND	SPEED OF INSTALL FOR THE BUILDER & DEVELOPER	ONSITE EFFICIENCY GAINS	SAFETY	ENVIRONMENTAL IMPACT	Cost	QUALITY
Spel Precast Concrete Tanks	Yes Engineer Certified. Truck Trafficable. Form15 provided at no cost.	Quick 100-150kL achievable in a day. Only really needs 1-2 persons to install not including the Crane operator & dogman.	As the tank is manufactured off-site in a quick to install modular system, on-site efficiencies are gained as there is not an open excavation for extended periods and project management of multiple trades over an extended period is not required.	Less trades, less people involved onsite with the build, and less time with an open excavation. Capacities up to 240kL have the potential to be achieved in a day = Increased Safety Benefits	Minimal construction waste onsite. Decreased open excavation time, decreases risk of silt release.	Depends on the size of the tank & location, but generally once all costs are considered (engineering design, materials, labour, safety, and time), tanks less than 150,000L are generally cheaper overall using precast.	Tanks constructed in a factory. Quality assured practices ensure tanks delivered to site meet rigorous quality standards.
Block & Slab	Yes Engineering Design may still have to be completed and may be an additional cost with time implications?	Slower. As the build involves more trades (base Concreter, Blockworker, Bondek installation, Tanking, FSL pour) there is a greater chance of blow outs on the build schedule. The increased construction time compared to a fast precast install also increases the exposure to delays from foul weather.	No Benefit. Project Management of multiple trades over an extended period is required. Increased safety risk management, and increased risk to delays to construction. Spacial impacts of a large excavation also impeded productivity negatively especially critical on tight sites.	Increased time with an open excavation with more sub-contractors involved, more time on safety plans and inductions, and increased Project Manager involvement & supervision required. Reo bars sticking up. Increased construction waste to deal with. Greater risk exposure & Increased cost to manage.	Increased construction waste onsite to deal with. Pallets from blocks. Pallets from steel. Increased risk of silt release with extended open excavation times. Concrete truck wash-outs.	Tank constructed on site = increased risk of defects / quality issues	

