

# SPELVault

Modular precast detention system



**spelstormwater**  
joy in water

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# APPLICATIONS

- Residential
- Commercial
- Industrial
- Retail sites
- Subdivisions
- Urban infrastructure

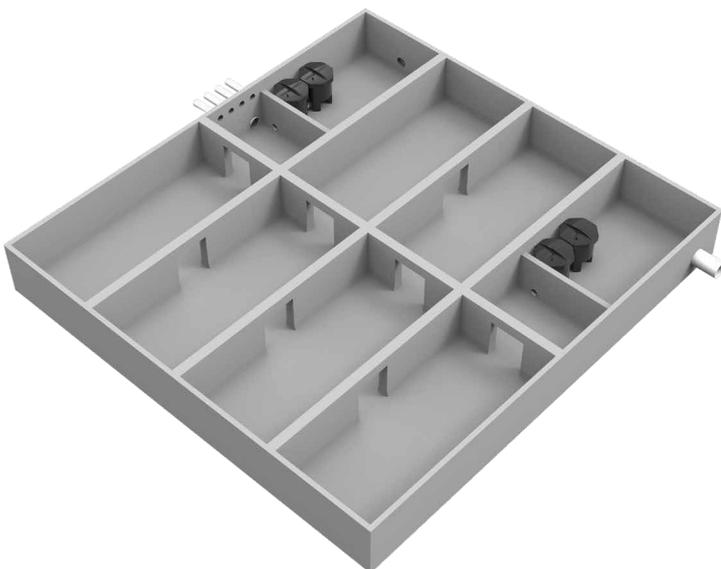
# FEATURES

A modular precast detention system that has the proven strength & durability of concrete, is simple & fast to install, and easily accessible for maintenance.

The SPEL Vault can be arranged in a modular configuration to achieve small to very large onsite detention (OSD) requirements with flexibility in footprint design.

It is a robust solution for SW detention typically installed under carparks in commercial premises, or the common driveways in multi-unit developments. The SPEL Vault is selected for its easy access for maintenance, strong traffic rating, simple installation protocol and ability for large volumes to be installed in a single day and truck trafficable immediately.

- Flexibility in footprint design for optimum layouts
- Flexible heights to suit site levels
- Truck trafficable. Delivered to site cured to 50MPa. The tanks can be installed, backfilled and trafficable immediately, maintaining sites accessibility.
- Modules do not rely on stone backfill for stormwater storage or support, so there are smaller excavations and less spoil to dispose of compared to other systems.
- Units are delivered to site to meet clients cranes and are generally installed immediately. This is no onsite storage of modules required so on-site space is optimised.
- SPEL Filter cartridges can be design into this system so water quality outcomes can be achieved without additional separate tanks.



# COMPARISON

## Stormwater Detention Tanks Comparison: SPEL Vault/Megavault Vs Block & Slab

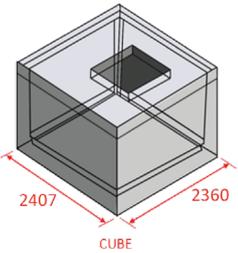


OSD SYSTEMS	SPEL VAULT / MEGAVault	BLOCK & SLAB
<b>STRUCTURALLY SOUND</b>	Yes. Engineer Certified. Truck trafficable. Form 15 provided at no cost.	Yes. Engineering design may still have to be completed and may be an additional cost with time implications.
<b>SPEED OF INSTALL FOR THE BUILDER &amp; DEVELOPER</b>	Quick. 100-150kL achievable in a day. Only really needs 1-2 persons to install not including the crane operator and dogman.	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 poor weather.
<b>ONSITE EFFICIENCY GAINS</b>	As the tank is manufactured off-site in a quick to install modular system, onsite 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.	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.
<b>SAFETY</b>	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.	Increased time with an open excavation with more sub-contractors involved, more time on safety plans and inductions and increased project manager involvement and supervision required. Reo bars sticking up. Increased construction waste to deal with. Greater risk exposure and increased cost to manage.
<b>ENVIRONMENTAL IMPACT</b>	Minimal construction waste onsite. Decreased open excavation time, decreased risk of silt release.	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.
<b>QUALITY</b>	Tanks constructed in a factory. Quality assured practices ensure tanks delivered to site meet rigorous quality standards.	Tanks constructed onsite = increased risk of defects and quality issues.



# SIZES & CAPACITIES

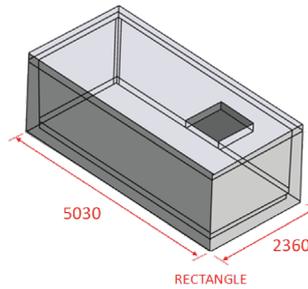
NOTE: Internal heights only provided as tank lid thickness is dependant on traffic rating & soil/slab cover. Visit our website to download plans and drawings.



## CUBE

**2407mm long x 2360mm wide**

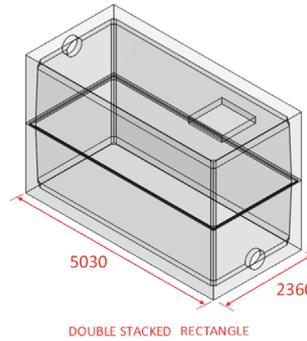
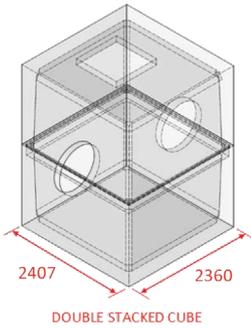
INTERNAL HEIGHT	CAPACITY kL
900	4.085
950	4.371
1000	4.550
1100	5.018
1150	5.252
1200	5.488
1250	5.723
1300	5.959
1350	6.196
1464	6.737



## RECTANGLE

**5030mm long x 2360mm wide**

INTERNAL HEIGHT	CAPACITY kL
900	9.064
950	9.577
1000	10.090
1100	11.119
1150	11.635
1200	12.152
1250	12.669
1300	13.187
1350	13.706
1464	14.892



## DOUBLE STACKED CUBE

2407mm long x 2360mm wide

BASE SECTION INTERNAL HEIGHT	TOP SECTION INTERNAL HEIGHT	INTERNAL HEIGH	CAPACITY kL
884	916	1800	8.170
934	916	1850	8.456
984	916	1900	8.635
984	966	1950	8.921
984	1016	2000	9.100
1134	916	2050	9.337
1184	916	2100	9.573
1184	966	2150	9.859
1184	1016	2200	10.038
1334	916	2250	10.281
1334	966	2300	10.567
1439	916	2355	10.703
1439	966	2405	10.989
1438	1016	2455	11.168
1334	1166	2500	11.448
1439	1116	2555	11.636
1439	1166	2605	11.870
1439	1216	2655	12.106
1439	1266	2705	12.341
1439	1316	2755	12.577
1439	1366	2805	12.814
1439	1471	2910	13.388

## DOUBLE STACKED RECTANGLE

5030mm long x 2360mm wide

BASE SECTION INTERNAL HEIGHT	TOP SECTION INTERNAL HEIGHT	INTERNAL HEIGH	CAPACITY kL
884	916	1800	18.128
934	916	1850	18.640
984	916	1900	19.154
984	966	1950	19.666
984	1016	2000	20.180
1134	916	2050	20.699
1184	916	2100	21.215
1184	966	2150	21.728
1184	1016	2200	22.241
1334	916	2250	22.770
1334	966	2300	23.283
1439	916	2355	23.858
1439	966	2405	24.372
1438	1016	2455	24.885
1334	1166	2500	25.341
1439	1116	2555	25.915
1439	1166	2605	26.431
1439	1216	2655	26.915
1439	1266	2705	27.466
1439	1316	2755	27.984
1439	1366	2805	28.493
1439	1471	2910	29.596

# SPELVault

## Modular precast detention system

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We believe clean water is a right not a privilege and we work to ensure a joy in water experience for you with your children and grandchildren.



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