

AUSTRALIAN TANKS PROJECT CASE STUDY

Client: Beavis & Bartels Pty Ltd
Project: Aldi Distribution Centre – Truck Wash Bay
Location: Brendale, QLD



THE CHALLENGE

Project required 150,000L water storage for reuse at the Aldi Brendale distribution centre truck wash bay.

- » The water storage was to be located under the entrance to the truck wash facility, so it would incur loads from semi-trailer traffic.
- » Spatially there were footprint restrictions due to an existing retaining wall footing and large stormwater pipe.
- » The site had the potential for high ground water conditions.
- » WHS was specified to be of the utmost importance for the project.

THE SOLUTION

6 x 25,000L tanks were supplied as an inter-connectable system to fit within the available footprint.

The tanks have a 20kPa load rating, trafficable by a fully loaded semi-trailer and have the Australian Tanks signature square anti-floatation base. The tanks weight (11.2T), soil loading on the tank lid, and on the anti-floatation 'wings' provide enough ballasting to resist any hydrostatic uplift forces, even if the tanks were pumped empty and in 100% saturation.

To provide the best WHS benefits, all penetrations were completed in the Australian Tanks factory, reducing the time spent by others on-site in an excavation. Additionally, low level tank connection pipework stubs were sealed into the tanks in the factory, with a 'Gibault' style coupling provided to connect them on-site. On-site when the square anti-floatation bases came together, the connection pipework stubs aligned and the coupling was simply slid across and tightened, completing the tank connection in minutes. This efficient method of connecting the tanks reduced the time required for someone to be in the excavation providing additional WHS benefits.

THE RESULT

This 150,000L reuse system was installed within one day, allowing completion just days prior to a major wet weather event in Brisbane.

Significant on-site efficiencies were gained by using a precast solution over a built on-site tank, particularly in completion time and WHS due to having a one-day install, not having an open excavation for an extended period, and reducing the time spent that workers were required to be in the excavation.

PRODUCTS

- » Six (6) x 25,000L Australian Tanks precast anti-floatation concrete tank.
- » 20kPa load rated, trafficable by a fully loaded semi-trailer.
- » Tanks supplied with all penetrations completed in the factory, providing on-site efficiencies and WHS benefits.