


adbri MASONRY



**Vertica wall installed
using innovative
mechanical laying
system**

The mechanical laying system reduced the amount of labour required and overcame limited site access.

Project requirements

- Construction of a retaining wall with varying heights from 1m to 4.5m.
- A retaining wall system that can support a commercial parking area of a new industrial building, and be constructed adjacent to a creek.
- The area around the creek was in the process of being rehabilitated and could not be disturbed as significant planting within a metre of the proposed wall was already in place.
- The wall had to bridge an existing storm water drain and be designed to accommodate a new manhole within 700mm of the rear of the wall.
- Pipe work for drainage of the carpark needed to be placed behind the wall.
- The retaining wall needed to marry into concrete tilt slabs which would be retaining soil at the rear of the building as well join to an existing retaining wall.

Solutions provided

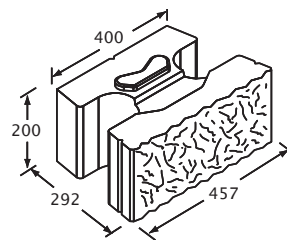
- 4.5 metre high Vertica segmental retaining wall installed using Geogrid reinforcement.
- Two one metre high Vertica walls were installed, running perpendicular to the large reinforced wall, to tie the existing retaining wall and the new Vertica wall together.
- Utilisation of a mechanical laying system to place the blocks. The mechanised laying process consisted of a grab, which can pick up three blocks at a time, connected to the arm of the excavator.
- The mechanised laying system minimised the number of workers required, overcame limited access at the base of the wall and excluded the need for scaffolding or other fall protection.
- A concrete column was included into the end of the last tilt panel to allow for the Vertica wall to

- marry into the vertical tilt panel wall.
- Input into the design of a carpark crash barriers at the top of the wall to ensure additional loads were accommodated.



Fact file

Project:	Acacia Links
Project usage:	Industrial subdivision
Client:	Walker Corporation QLD Pty Ltd
Construction type:	Segmental Retaining Wall System
Contractor:	Walker Corporation QLD Pty Ltd
Design Engineers:	Sheehy and Partners Pty Ltd
Manufacturer:	Adbri Masonry
Supplier:	Adbri Masonry
Installer:	Smartstone Group



Featured product

Vertica

Colour: Sandstone