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Southern Geosynthetics offers a full range of erosion control products including SuperGro®, SiltStop® silt fences, Silt Curtains and now Silt Sausage™.



### Stop Press !

SGS products are now available in Tasmania from Hudson Civil Products.

Contact Les on 0419 580 314

# BIGGER IS BETTER !



Imagine a 620,000L stormwater detention tank! Civil contractor Andy of ADH Plant Hire was faced with this challenge at a project at Ingham Chickens at Thomastown. After considering all options Andy chose the **Atlantis Matrix** system as the most economical.

The system comprises plastic modules wrapped in a geotextile filter fabric and a plastic liner. The 2562 double modules were assembled off-site by unskilled labour and trucked in for final positioning. The excavation required was 25x29m in plan area and 880mm deep. A 600mm thick pavement was compacted over the modules to allow the area to be used as a hardstand. (No problem with a crush strength over 26 tonne/sqm) A big advantage of this system is its simplicity. A double module is assembled in under 3 minutes, the modules are light-weight and so do not require any heavy lifting gear. Supply costs are around \$200/cm, and installed cost was around \$400/cm for this project.

This is the largest project of its kind and proves the **Matrix** system is the ideal low-cost choice for all stormwater detention applications.



Penetration of 750mm pipe through Damtuff liner



Completed 620 cm tank  
Note: compaction with 3 tonne roller

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# SGS NEWS

## W155 MEETS THE CHALLENGE



W155 at Gunns new Launceston site.  
Photo courtesy of Alan Powell Agencies



Why spend money unnecessarily on expensive non-woven geotextiles when a high-strength, low-cost woven geotextile is the best solution? **DUX W155** has been proven in all roading applications, from forest haul roads to hardstands. Over 50,000sqm has been used at Melbourne's new Eastlink project. Spring rains made site access difficult and **DUX W155** allowed construction equipment to operate in areas with soft, saturated subgrades.

**DUX W155** provides an effective separation layer, ensuring the pavement is not contaminated by sub-grade fines as well as strengthening the subgrade.

**DUX W155** is a tough, extremely-robust 155gsm woven polypropylene geotextile, available in 4m and wider 5m rolls.



W155 at Melbourne's Eastlink project



# FORTTRAC IN CONCRETE PANELS

## The Challenge

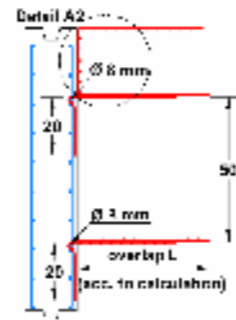
How to construct a high-strength, low-cost retaining wall system ?

## The Solution

New **Fortrac MP** geogrid is cast into the concrete retaining wall panels in the concrete casting yard. On-site the length of grid is simply rolled out and compacted within the soil backfill. New generation **Fortrac MP** is made from PVA, which has many advantages over standard PET. PVA has high strength at low strain, it develops it's maximum strength at only 6% strain. PVA also has high chemical resistivity making it suitable for casting into wet concrete.



Panels erected ready for backfilling



# DECKDRAIN IN LANDFILL RESEARCH PROJECT

Hanson are investigating the possibility of replacing expensive clay capping layers in landfills with more economical soil layers. Given that a landfill cap may settle over 5m in 10 years, it is difficult to ensure the integrity of a clay cap. A combination of soil and native plants has been proposed as an alternative. To measure percolation, and hence evapo-transpiration, test cells, or lysimeters, have been constructed at the Wollert landfill to measure water runoff through soil profiles. Earth bunds were constructed and lined with a plastic liner, then a drainage geocomposite, **Deckdrain 700S** was placed and candidate soil layers placed over this. Precipitation is collected in a sump.



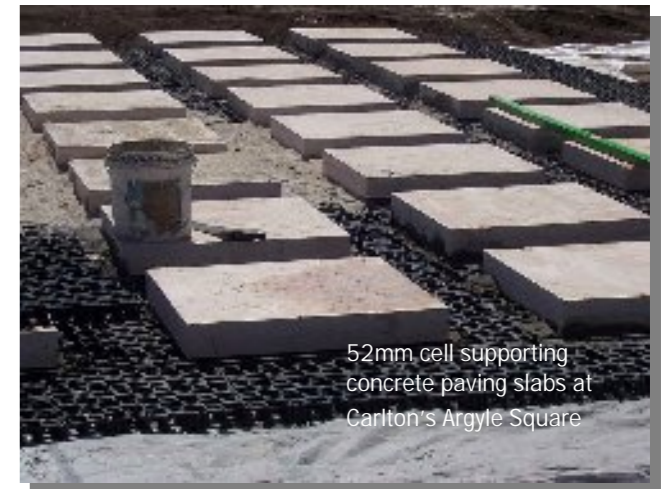
Installing Deckdrain

# ATLANTIS 52MM CELL PROJECTS

The new Atlantis 52mm cell is proving an ideal product for a range of applications. At Carlton's Argyle Square the cell is being used as a bedding and drainage layer for concrete paving slabs.

With a crush strength greater than 148 tonne/sqm the high strength 52mm cell can support the heaviest traffic loads.

Permeable paving is being recognised as an important feature of future developments. To reduce stormwater run-off from sites, local councils are requiring developers to incorporate minimum permeable areas in unit developments. Atlantis 52mm cell is widely used as a **Turfcell** for parking bays and low-volume driveways. The unique structure of Turfcell allows both horizontal and vertical root growth, whilst protecting the root zone from crushing.



52mm cell supporting concrete paving slabs at Carlton's Argyle Square



52mm cell has been used as a grass paver in many overseas projects

## Gravelpave Helps Save Fig Tree

How do you build close to a massive Morton Bay fig? Frankston City used Atlantis 52mm cell as a "**Gravelpave**" in the driveway areas to provide a permeable trafficable surface. The cell was filled with a mixture of fine and coarse aggregates to achieve a free-draining surface that will allow rainwater to percolate to the trees root zone.

