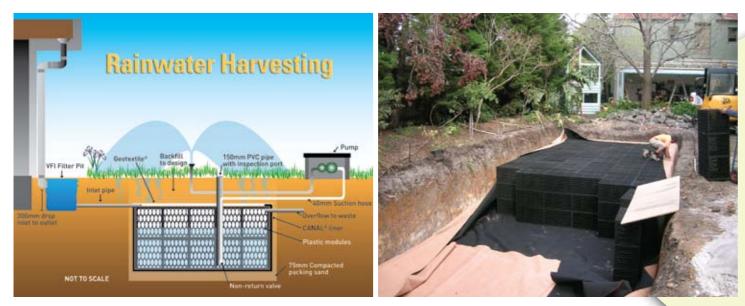
# Water Tanks



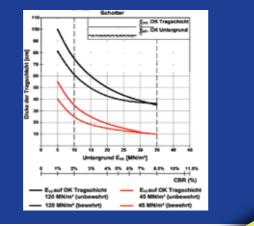
RainBox<sup>®</sup> underground water tank system; Absolutely Underground installing Rainbox<sup>®</sup> 80kL tank at Toorak.

Melbourne's water storages are once again dropping close to the trigger point for Stage 4 Water Restrictions. With no rain on the horizon it looks like we are in for another dry summer, and many gardens will suffer. What is your garden worth to you? What would it cost to replace it? A RainBox<sup>®</sup> underground rainwater tank can help see you through the dry summer.

The RainBox<sup>®</sup> underground water tank system comprises Rainsmart Stormwater Modules wrapped in tough CANAL<sup>®</sup> waterproof liner. A typical 20,000 litre tank costs around \$18,000 to supply and install. The space needed is around 5m x 4m and the tank can even be located under the driveway, so there are no unsightly tanks to look at. So save your backyard and your garden by installing a RainBox<sup>®</sup> system this season, call Wayne on 0419 478 238 for more details.

#### **Stop Press !**

Huesker has announced the release of new pavement design charts showing the significant cost savings and improved pavement performance of incorporating Fornit geogrid into pavement design. Contact SGS for full details.





### We're on the web! www.geosynthetics.com.au

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Southern

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# **Green Roof Water Retention**

One of the biggest challenges to the long-term success of green-roofs is keeping moisture in the soil profile. New TGS water retention and capillary mat helps solve the problem. Manufactured in the USA by geosynthetics specialist Huesker Inc., TGS consists of a top 250qsm non-woven post-consumer recycled polyester geotextile mechanically bonded to a 300gsm layer of synthetic hydrophilic (water absorbent) matte. The absorbent matte is designed to hold 10 to 12 times its unit weight of water. TGS is ideal for use in green-roof applications and provides the combined benefits of a filtration geotextile with a water retention mat. Placed across the NERO<sup>®</sup> Drainage Cell the mat absorbs water for continuous hydration CANAL<sup>®</sup> Geocomposite of plant roots, while excess water passes through to the NERO<sup>®</sup> drainage cell below. TGS is a more cost effective way of ensuring water supply to greenroofs than competitor products such as Fytogreen flakes.

Modules Nero<sup>®</sup> Drainage Cell

Dux<sup>®</sup> 56c geotextile at Geelong Rail project

NER0<sup>®</sup> Stormwater

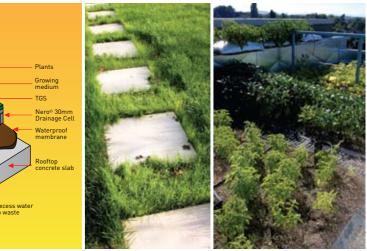
Inside:

Liner



A better way





Typical greenroof profile.

Roof top gardens.



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#### **CANAL®** Geocomposite Liner

CANAL<sup>®</sup> is proving to be an attractive alternative to HDPE and GCL liners for a range of applications. CANAL<sup>®</sup> 8202 is a laminated, or "geocomposite" liner and comprises a 0.5mm thick EVA waterproof liner sandwiched between nonwoven geotextiles. CANAL<sup>®</sup> has recently been used by Peter McDonald of Tarneit Plant Hire at the new Bunnings project in Coburg. CANAL<sup>®</sup> was used to line the pavement edge swale drains. The CANAL<sup>®</sup> proved easy to place and seam, using hotmelt glue which was simply melted in a pot and applied.

> CANAL<sup>®</sup> was used to line the sides of a steep-sided channel

by Goulburn-Murray Water (GMW) at Gunbower Creek, near Kerang. GMW has previously made extensive use of HDPE liners but were impressed by the toughness of CANAL<sup>®</sup> and the good friction properties of CANAL<sup>®</sup> mean that livestock and native animals can walk across it. unlike HDPE which is very slippery and causes the drowning of animals which are unable to get a grip on it. Engineers have noticed the disappearance of native water rats along channels lined with HDPE liners.

CANAL<sup>®</sup> is now the liner of choice for many underground water tanks. At Loreto College Toorak, CANAL<sup>®</sup> was used to line a large 350,000L Rainsmart tank. The liner was seamed above ground using a special Loctite two-part adhesive and placed as one piece by contractor, Blue Ribbon Plumbing.

#### **NERO<sup>®</sup> Stormwater Modules**

An addition to the existing Rainsmart Ellipse Stormwater Module range, the new NERO<sup>®</sup> tank is made from interlocking pieces of NERO<sup>®</sup> Drainage Cell. The NERO<sup>®</sup> tank is larger, some 500mmx600mmx560mm (LxWxH) and stronger, with an unconfined crush strength of 40 tonnes/sqm, making it the strongest module in the market. NERO<sup>®</sup> tanks are also flushable. The supply price of NERO<sup>®</sup> is similar to other tanks, but assembly time is a little longer. Specify NERO<sup>®</sup> Stormwater Modules in applications where strength is most important, ie in areas subject to heavy vehicle traffic, or in areas with limited thickness pavement cover.



Nero<sup>®</sup> cell under pressure.

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#### **NERO®** Drainage Cell

Rainsmart has introduced the new NERO® 30mm Drainage Cell for effective drainage of green roofs. The NERO<sup>®</sup> cell replaces granular drainage layers and being lightweight, reduces the load on rooftop structures. The NERO<sup>®</sup> cell is manufactured in large 500mmx600mm interlocking pieces, and is



Competitor's product crushes under the weight of a construction vehicle.

## DUX<sup>®</sup> 56c geotextile at Geelong Rail project

John Holland has just completed extension works at the North Shore Rail Yard. Soft soil conditions led to the use of 3600sqm of DUX<sup>®</sup> 56c, a heavy weight non-woven geotextile. V/Line specifications call for geotextile to be used under compacted fill or sub-ballast when the CBR of the subgrade is less than or equal to 10. DUX<sup>®</sup> 56c non-woven geotextile provides separation and stabilisation of the platform, ensuring the design life is achieved, and the lightly calandered structure of DUX provides superior abrasion resistance, which is important in applications subject to dynamic loading, such as occurs beneath rail track.



DUX<sup>®</sup> 56c installed under sub-ballast at Geelong railyard.



supplied four pieces to a panel, allowing rapid placement on site. NER0<sup>®</sup> is the strongest product in its class, with a crush strength over 150 tonne/ sqm, allowing the cell to be trafficked during installation, unlike our competitors which cannot directly support construction vehicle traffic.

Nero's cells maintain their integrity under the weight