eco examples on show

A round-up of exciting local eco-conscious projects.

Future proof renovation

Including good insulation, passive solar principles and healthy products into a brand new home is easy. But a renovation? That's a little trickier, although not enough to deter Future-Proof Building and Certified Renovations from renovating a house in Ellerslie, Auckland, and using it as a show home to demonstrate an alternative approach that will create a healthy, efficient home for its inhabitants.

The typical early-1900s weatherboard home was extended to include a second storey. Re-wired throughout, it had insulation added, and rotting timber and old joinery replaced. It was then finished in the latest colours, textures and furnishings, including Environmental Choice approved Resene Zylone Sheen VOC Free paint. (The kitchen, right, is Resene SpaceCote Low Sheen Kitchen & Bathroom tinted to Half Fossil.) The home showcases some of the newest innovations for home automation, energy-efficient heating, rain water harvesting, efficient lighting design, outdoor living, landscaping and more.

Future-Proof Building (FPB) is a group of innovative building companies including Resene, that have a shared vision of building better homes. The show home is on the corner of Tecoma Street (off the southern motorway) and Roberts Road, Ellerslie, and is open Wednesdays to Fridays from 11am – 4pm and on Saturday and Sunday, from 10am to 4pm. Visit www.fpb.co.nz for more information.

did you know...

That Resene introduced the first waterbased paint in Australasia in 1951. People couldn't believe it wouldn't just wash off the walls. Today, most decorative paint sold by Resene is waterborne and Environmental Choice approved.

Resene Barely There

Resene Half Fossil

Resene Double Ash

Green in a group

There's a preconception that developers of multi-unit sites are going to be as cost-conscious as possible, to the detriment of high quality or eco-friendly products. Not so with this development in Lane Cove, New South Wales.

Developed by Evergreen Living and designed by Sanctum Group, sustainability was the main focus on this project, with each of the six townhouses being completed with the smallest possible ecological footprint. Resene products were used to achieve a 'healthy home' result with a variety of low and no-VOC finishes. Colours were kept to a neutral palette.

The eco-townhouses were built with passive solar principles using thermal masses to store the sun's warmth and cross-ventilation, double glazing, high-quality insulation, plantation timbers, rain-water tanks and at-source water heating. The aim was to combine luxury and eco-friendliness, along with a village-like atmosphere – there is a communal orchard, herb garden and recycling system on site.

This project is the recent winner of the BPN Award for Sustainability in the Multi-density division, and three time winner of BDA sustainability and design awards. See www.evergreenliving.com.au for more information. >

pictures Simon Wood

All that glistens

When you come to Catalina Cafe in Hobsonville near Auckland on a sunny day you might notice the pavement around it glistening in the sun. Welcome to GlassCrete™.

The exciting new substance not only uses waste paint from Resene's PaintWise paint recovery programme, but also recycled glass. Stage one in its development saw waste paint used for its latex and acrylic polymers to create a high-quality concrete called PaintCrete™, used in blockfill or grout. This work led onto the creation of GlassCrete™. The development of GlassCrete™ and PaintCrete™ is a joint venture between Resene, 3R and Fletcher Concrete & Infrastructure (Golden Bay Cement, Firth and latterly Winstone Aggregates).

Early on, the partners identified that alongside using paint in footpaths, they could also incorporate waste bottle glass as a possible answer to the leftover glass problem. The combination of the waste paint with the waste glass stops the silica-rich glass and alkali-rich cement paste problem that normally occurs where they produce a gel, which expands and causes cracking.

While not perfected yet (a programme of lab and field trials and testing is underway) the signs that GlassCrete™ works are very encouraging. Being able to trial GlassCrete™ in a real-life situation is a bonus, thanks to Hobsonville Land Co.

The ultimate aim is to produce a durable surface which re-uses wastes, lowering the carbon footprint of the concrete and making it truly more sustainable.

Resene
Green Room

Right: The home's interior was finished in Resene Zylone Sheen VOC Free for better indoor air quality.

Resene
Double Buffalo

Shining light

Another show home is creating a stir for its sustainability and design. The apartment and office building in Surfdale, Waiheke Island, is home to sustainable building company Lite-House and won last year's Registered Master Builders Meridian Sustainable Homes $500,000-$1million award. It also won the Architectural Designers NZ award for a Residential New Home up to 250sqm.

Designed by architectural designer Bruce Ardern, the building has three office spaces and a one-bedroom apartment, with some stand-out features: Australasia's first vertical axis wind turbine (standing about 8m tall) which puts power back into the national grid; an array of photovoltaic panels on the roof; and a huge trombe wall. Automated lighting, heating, ventilation, windows, music, louvred walls and roofs are all controlled from a portable touch screen panel – a great combination of basic sustainability design principles and high-tech wizardry.

The designing and specifying process took a year and included thermal modelling to ensure maximum energy efficiency. Every product used in the build was carefully researched for its sustainability credentials, including Resene paint which is used on the interior and on the exterior with Resene CoolColour technology.

Founded by Ardern and construction partner Clive Matthews, Lite-House takes a proactive stance towards sustainable construction methods and materials. The building at 14 Hamilton Road, Surfdale, Waiheke Island is available for viewing. Visit www.lite-house.co.nz for details. H