

Energy Matters

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A Cartoon from Franciscus Henri

.. DIY double glazing

An information session covering materials and where to get them, costs, construction method, and tips on what works and what doesn't.

Saturday 19 March;
10am-12noon
\$15

Alan Cuthbertson;
Eltham

DIY Double Glaze

Just a couple of notes to keep you up with how my new company is going. Our website is now pretty much complete and we are open for business!

www.diydoubleglaze.com.au

And a couple of events:
Sustainable living Festival—
Fri 18-Sun 20 Feb—Fed square

2 hour session on DIY Double glazing at Eltham Learning centre, Sat 19th March.

www.nillumbik.vic.gov.au and follow the link to the Living & Learning Centre



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A waste water system 1

A Waste Water System-Provided by Don Nicholson

We're great believers in reusing & conserving water where & when possible. With our three systems in place our average daily water usage/person is 88 l/day without skimping on showers or letting the garden die.

First system described this month; the others later.

We distribute our outflow from the washing machine onto the back garden which is slightly downhill from the house. To do this I've fitted a rotating diverter into the drain from the washing machine. One of the

rubber funnels with three branches would do the job too. The biggest problem with washing machine grey water is the amount of fluff in it. This we filter out by using the lower part of a pantyhose leg tied over the end of the washing machine outlet hose which is hooked over the edge of the wash trough!! The amount of fluff collected is depressing - it needs to be changed every 3-4 washes! The pantyhose can even be turned inside out & washed (but in a bucket of course,

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A Waste Water System-Don Nicholson (cont)

you don't want all those fibers going down the drain) Make sure the pantyhose can't stretch to the trough outlet or it may block it! From the drain diverter valve I've made up a three outlet manifold & run 3 lengths of 20mm dripper hose through the garden. At each plant I've drilled a 3mm hole right through the hose. The end of each hose run has an elbow & a 40cm length of hose sticking up vertically to provide a little pressure in the distribution network. This open end also provides an outlet for excess water when some of the drill holes get blocked. Even with the pantyhose in place it is advisable to check the outlets every so often while the washing machine is emptying to make sure none are blocked. If any are simply re-drill them!

The manifold is made up from plastic pipe fittings selected from the bins at Bunnings for "irrigation" & the "plumbing" section. (like building a jigsaw puzzle but with a purpose). I didn't glue the manifold adaptor into the diverter valve but have held it in with a PVC tape binding so I can take it out again if needed. Stretched PVC tape wound on neatly, with at least 50%



The diverter manifold

overlap & several layers makes quite a good joint with practice.

The three green handled valves on the manifold are not really necessary but if fitted a minor modification needs to be made to them. There is a sort of internal strainer built into these valves that needs to be removed. The easiest way to do this is, with the valve in the open position use a suitable size screw driver to break these bars out. If this isn't done the valve will eventually clog up with fibers that slip through the pantyhose.

The beauty of this system is that the parts are cheap, the throw away filter is an already thrown away item, it's adaptable to any setup where the laundry or bathroom is above the garden & it's easily modified if necessary. The 20mm black poly tubing will not stand up to heavy traffic but can be run across foot paths OK & at about \$7/ 30m plus a few elbows at less than a dollar each it's cheap & effective. Due to the lack of pressure involved there is no need to use hose clips on the joiners either.

If you've installed the rotary diverter, pull it apart & put some O ring grease or similar on the rotating part & when reassembling it don't tighten up the external locking ring or you'll find that you can't turn it! (I broke the handle off mine & have had to fit a wooden replacement which is actually easier to use)



The pantyhose strainer