

## Good News Friday Edition 4 – From Plastic Film to Concrete



### REDCYCLE SYSTEM – RECYCLING PLASTIC FILM

Recycling is one of the simplest and most powerful ways that we can make a difference for our planet. With recycling it is the little things we do that make the difference.

Over the last five years we have made good progress with recyclable packaging for food products purchased from supermarkets. Competition between the ‘big two’ to demonstrate their environmental credentials has resulted in wins for us as consumers.

#### REDcycle System

The REDcycle System has made it possible for us to return plastic film from all types of products to the store for collection and recycling. For those new to the system and those already experienced with the system, the number and types of plastic film that can be recycled has increased greatly over this time. Here are a few examples...

- Biscuit packets (outer wrapper only)
- Bread bags (without the tie)
- Cereal box liners
- Chip and cracker packets (silver lined)
- Dry pet food bags
- Fresh produce bags

Some a little less well known...

- Large sheets of plastic that furniture comes wrapped in (cut into A3 size pieces)
- Cellophane from bunches of flowers (cut into A3 size pieces)
- Netting produce bags (any metal clips removed)
- Plastic Australia Post satchels

Here is the full list from their website: <https://redcycle.net.au/what-to-recycle/>

What I love about the system is...

- The collection of the plastic occurs at someplace I visit regularly and because it is just plastic film they can collect clean recycling with low contamination for Replas the recycler
- The collected plastic goes back in the empty truck that delivered the food to the store. The truck returns to the distribution centre where it is bulked together with heaps of other supermarket collected plastic into the back of a new truck for cost efficient transport to Replas in Melbourne for recycling.
- Diverts plastic from landfill and keeps it out of the environment. Their recycled product range has grown over time.

### **What happens to the plastic when it is recycled?**

REDcycle has been working with Replas for 10 years now. From its humble beginnings, Replas with its trademarked plastic recycling process started making simple recycled plastic products like park benches, bollards and fence posts (<https://www.replas.com.au/products/>)

Now, you will see it in any National Park as boardwalk systems, composite decking for household and commercial installations and now used in concrete for footpaths and kerb & gutter. In concrete, how so?

REDcycle and Replas needed to find an upscaled use for the recycled plastic film. Replas worked with a (young) Team from RMIT in Melbourne to develop Polyroc which replaces aggregate (small rocks) in concrete. Replas and the RMIT Team completed R&D testing with the product meeting all Australian Standards. Field testing was completed by Coles, various Councils and contractors in the Melbourne area with good success and acceptance. Now there is number of concrete plants who are making it available as an alternative to normal concrete. There is now one concrete plant in Adelaide and one in Sydney. For all the locations around Melbourne and construction team field testing videos see link below.

<https://www.replas.com.au/products/polyrok/>

Polyroc is a major game changer for Replas as it uses 95% REDcycle plastic film in the plastic stone product with possible supply of tens of thousands of tonnes of plastic stone per year for concrete. Replas are now challenging every Council in the country to get on board to be part of the solution for their plastic waste. If each Council in Australia committed to just one kilometre of footpath, 1,900 tonnes of Polyroc (approx. 470 million pieces of soft plastic material) would permanently become part of the communities' walkways.

Why don't you ask your Council to get on board!