

CASE STUDY: Newton Waterproofing – Newton Membrane Recycling Service

Newton Waterproofing is the UK’s leading independent supplier of structural waterproofing systems and associated pumping and drainage products.

At Newton Waterproofing, we take our responsibility to protect and preserve the environment very seriously and aim to minimise our resource consumption through the use of energy efficient solutions and preventing pollution.

Newton Membrane Recycling Service

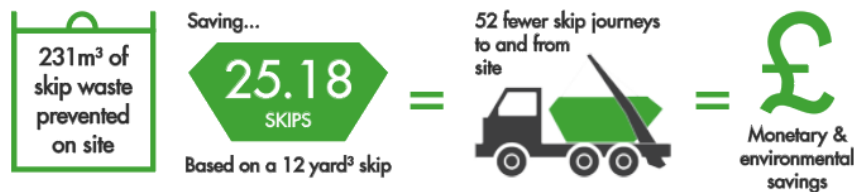
NEWTON MEMBRANE RECYCLING 2018 Recycling Report



EMISSIONS AVOIDED

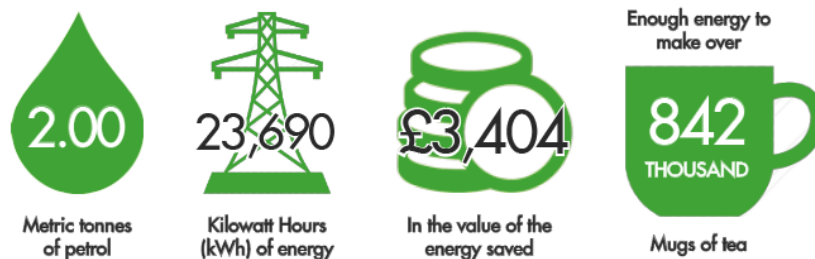


TRANSPORT SAVINGS



ENERGY SAVINGS

The 6.06 tonnes of CO₂e prevented by Newton in 2018 can also be equated to:



The Newton Membrane Recycling Service is the first and only closed loop recycling scheme in the UK waterproofing industry to actively collect and recycle off-cuts of HDPE waterproofing membrane from across the UK for re-use in the construction industry.

This service was developed as a direct response to the complete lack of any such schemes in the UK, which resulted in the waterproofing industry sending hundreds of tonnes of HDPE membrane to landfill each year, as there was no alternative solution. Since being

implemented in 2017, this service has achieved over 8.5 tonnes of HDPE recycling from active projects.

This service involves the waste membrane being shredded into HDPE pellets and collected by a national third-party recycler. The HDPE pellets are formed and extruded into pipework for the construction industry, therefore creating a closed loop recycling process.

In 2018, we recycled 5.275 tonnes of membrane which equates to 231 bags of membrane off-cuts at an average of approximately 25.18kg per bag. This has avoided the production of 6.06 tonnes of carbon dioxide emissions, which is the equivalent to over 39,960 kilowatt hours of energy which would be enough energy to make 842,328 mugs of tea!

Recycled Products

If you are looking for responsibly sourced products, then Newton Waterproofing provides two HDPE cavity drainage membranes that are 100% recycled and British Board of Agreement (BBA) certified. Alongside this, we are the only UK waterproofing suppliers who can provide specifiers with tangible data on the environmental savings that are achieved by specifying our recycled products.

Both our Newton 507 eco floor and Newton 520 eco are manufactured by 100% recycled HDPE and approved by the BBA with independent third party testing. In addition, the two key components of the Newton drainage system, Newton Basedrain and Newton Floordrain, are manufactured from 100% recycled PVC.

PRODUCT	WEIGHT (KG)	EMISSIONS AVOIDED ¹ (kgCO ₂ e)	ENERGY SAVED (kWH)	VALUE OF ENERGY	MUGS OF TEA
Newton Basedrain	36,439.16	56,444.26	220,623.15	£31,703.55	7,844,379
Newton Floordrain	11,258.60	17,439.57	68,165.89	£9,795.44	2,423,676
Newton 508 eco Floor	23,625.00	27,145.13	106,101.90	£15,246.84	3,772,512
Newton 520 eco	22,507.65	25,861.29	101,083.78	£14,525.74	3,594,090
TOTAL	93,830.41	126,890.25	495,974.71	£71,271.57	17,634,656

When the membrane recycling service figures are combined with those for recycled HDPE and PVC products, the total figures for 2018 are impressive:

- 99.11 tonnes of material recycled.
- 132.95 tonnes of CO2 emissions prevented.
- 519,665 kilowatt hours of energy saved.
- Energy with the value of £75,675,89.
- Enough energy saved for 18,476,984 mugs of tea!

Initiatives

Alongside our recycling service, we have spent a good deal of time trying to improve the energy efficiency of our office and warehouse facilities, as well as reducing the amount of plastic and packaging waste that we produce by changing our own behaviours. This included the following measures:

- Installing two new energy efficient boilers.
- Replacing all office lights with LED bulbs.
- Replacing the three warehouse heaters with energy efficient models.
- Installing roof insulation throughout the office space to improve energy efficiency.
- Carefully planning all delivery routes to ensure they are travelling the minimal distance.
- Adding three hybrid cars to the company fleet and ensuring all delivery vehicles are FORS accredited.
- Switching to a local milk delivery service that takes back food and crisp packaging for recycling.
- Collecting all plastic and cardboard packaging waste from throughout the office and warehouse for recycling, resulting in 6.6 tonnes of cardboard and 3.69 tonnes of plastic being recycled.

Future Recycling Targets

Newton Waterproofing is committed to tackling waste that is produced as a by-product of the waterproofing and construction industries, and we aim to approach this through the following strategies:

- Reducing our own plastic packaging waste by 50% by the end of 2021.
- Through continued investment in and expansion of the Newton Recycling Service, we aim to have recycled over 20 tonnes of HDPE membrane by 2021.
- In order to reduce our own plastic packaging waste, we are already recycling all waste plastic from both our warehouse and office facilities at our headquarters.
- To hit our 50% reduction target, we will be seeking to increase the number of external stakeholders. Out of the 40 member companies of the Newton Specialist Contractor network across the UK, the 2018 recycling figures were achieved via contributions from just 11 of these companies. Newton Waterproofing will be working with all NSBCs to increase this number.
- We will be actively seeking to expand the Newton Recycling Service to include the plastic containers and buckets in which Newton Waterproofing's liquid products are stored and distributed. We estimate that over 7,000 such containers, which are a mixture of polyethylene and polypropylene, are sent out by Newton Waterproofing

each year, and the company will be working with potential new reproducers to include this packaging in the recycling service.

To find out more about Newton Waterproofing, please click [here](#) to visit our website.