



The manufacture of plastics from raw materials requires less energy than for metals and glass.

Materials

We use different types of plastic for the majority of our products, PVCu, Polypropylene (PP), HDPE and ABS.

PVC is used in a wide variety of applications, including windows, flooring, packaging, healthcare (i.e. blood bags), automotive and for credit cards.

PVC's major benefit is its compatibility with many different kinds of additives, making it a highly versatile polymer. PVC can be plasticised to make it flexible for use in flooring and medical products. Rigid PVC, also known as PVCu (The U stands for "unplasticised") has good impact resistance and is used extensively in building applications such as pipes and fittings for fluid handling. Its compatibility with additives allows for the possible addition of flame retardants although PVC is intrinsically fire retardant because of the presence of chlorine in the polymer matrix. Marley use PVCu for rainwater, soil, waste and underground drainage products.

HDPE is flexible and weatherproof, it has good low temperature toughness (to -60°C) and is easy to process by most methods. It also has good chemical resistance. HDPE is used for commercial drainage systems.

Polypropylene has good chemical and fatigue resistance. It also copes well with high temperatures. Polypropylene is used in waste systems and traps and the dBlue acoustic soil system.

ABS (Acrylonitrile, Butadiene Styrene) is an ideal material wherever a superior surface quality is required. It has a good balance of toughness, strength and temperature resistance coupled with its ease of moulding. ABS is used in waste systems.



Plastic facts

- Plastics consume only four percent of the world's oil as feedstock whereas around 90% is used for heating and transport.
- PVC has a long life span and requires minimal maintenance and hence very limited additional consumption of energy, raw materials and chemicals is necessary to ensure their continued functionality.
- The BRE's Green Guide has given PVCu windows an A rating.
- Plastics are safe, allowing fresh water delivery through the use of durable pipe, and the storage of blood to save and improve people's lives.
- PVC is 100% recyclable. The manufacture of plastics from raw materials requires less energy than for metals and glass. Processing of plastic resin requires lower temperatures.
- PVCu pipelines have a proven lifespan of 50 years and a projected lifespan of 100 years.

