

A WINDOW INTO CABLE MANAGEMENT

 REASSURINGLY
RECYCLED



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**EVERYONE KNOWS THAT
OUR PVC-U CABLE
MANAGEMENT PRODUCTS
ARE HIGH QUALITY AND
COMPETITIVELY PRICED.**

**BUT WE'D BET YOU DIDN'T
KNOW THAT THEY'RE
PRODUCED USING 80%
RECYCLED CONTENT,
WITH MATERIAL FROM
WINDOWS OTHERWISE
DESTINED FOR LANDFILL.**

We are proud to say that our PVC-U products are Reassuringly Recycled.



OUR STORY & OBJECTIVES

AT MARSHALL-TUFFLEX, WE HAVE A GREAT ENVIRONMENTAL STORY TO TELL.

Our environmental story has been evolving and enhancing within our company for over 20 years. Today, the impact of our story on the environment and across the entire construction industry is potentially huge.

It's exciting to see the way it is already shaping the quality of what we produce today, while driving our vision to see 'that all PVC-U cable management products installed in buildings are manufactured using recycled material by 2028.'

To achieve this vision, there needs to be a radical sea-change in our industry. Things are moving. Attitudes are changing. The *Blue Planet* effect we saw in late 2017 is building momentum – influencing environmental policy in government and changing manufacturing standards in industry. It's also causing many to wake up and take action personally to stop any further irreversible damage to our planet.

But we need to do much more to spread the word about the importance and benefits of using sustainable plastics in our industry.

FIRST, LET'S BE CLEAR WHAT WE MEAN BY THE TERM 'SUSTAINABLE PLASTICS'.

The British Plastics Federation states that:

'In order for a product or material to be truly described as sustainable, it must be environmentally, economically and socially sustainable'.

Put simply, by developing sustainable plastics we are able to 'move away from a linear plastics economy where we take, make and dispose of plastic, and towards a circular system where we keep plastic in the economy and out of the environment' (UK Plastics Pact, WRAP).

While this remains our ultimate goal, we have to be realistic in the short-term. As market leaders in PVC-U cable management systems, we believe we have a responsibility to speak up for the environment and set the highest possible standards for achieving sustainability across our industry. We have refined our processes over 20 years to enable us to produce high quality products with recycled material.

OUR ENVIRONMENTAL POSITION & CREDENTIALS

THE CONSTRUCTION INDUSTRY IS THE UK'S LARGEST USER OF NATURAL RESOURCES AND THE LARGEST PRODUCER OF WASTE.

Recent figures indicate the construction industry uses around 420 million tonnes of materials each year. From these materials, around 120 million tonnes are wasted (that's almost 60% of the national total). From this waste, it's estimated that 25 million tonnes ends up in landfill sites. With landfill sites in short supply (not to mention their negative impact on the environment), there's enormous pressure on the industry to reduce, reuse and recycle.*

This is where we have a powerful story to tell:

- 🔄 For more than 75 years, we have been pioneering plastic extrusion in the UK and leading the way in areas of product research, development and innovation, especially when it comes to using recycled material.
- 🔄 Last year, our PVC-U cable management products were manufactured using 80% recycled material, preventing thousands of tonnes of PVC-U windows ending up in landfill. Over the last 20 years we have developed our processing techniques, along with innovative technological advances which have enabled us to increase our use of recycled PVC-U.

But this is just the start of our story...

**THROUGH OUR
SUSTAINABLE
PLASTICS CAMPAIGN,
WE WANT TO SEE
THE ENTIRE CABLE
MANAGEMENT INDUSTRY
COMMITTING TO
RECYCLED MATERIAL
IN THEIR SYSTEMS
BY 2028.**

As well as reducing the amount of plastic that could be recycled going in to landfill, this will also decrease demand for virgin PVC-U, which is mainly comprised of oil.

OUR VISION

Our 10-year vision is that all PVC-U cable management products installed in buildings are manufactured using recycled material.

OUR CREDENTIALS

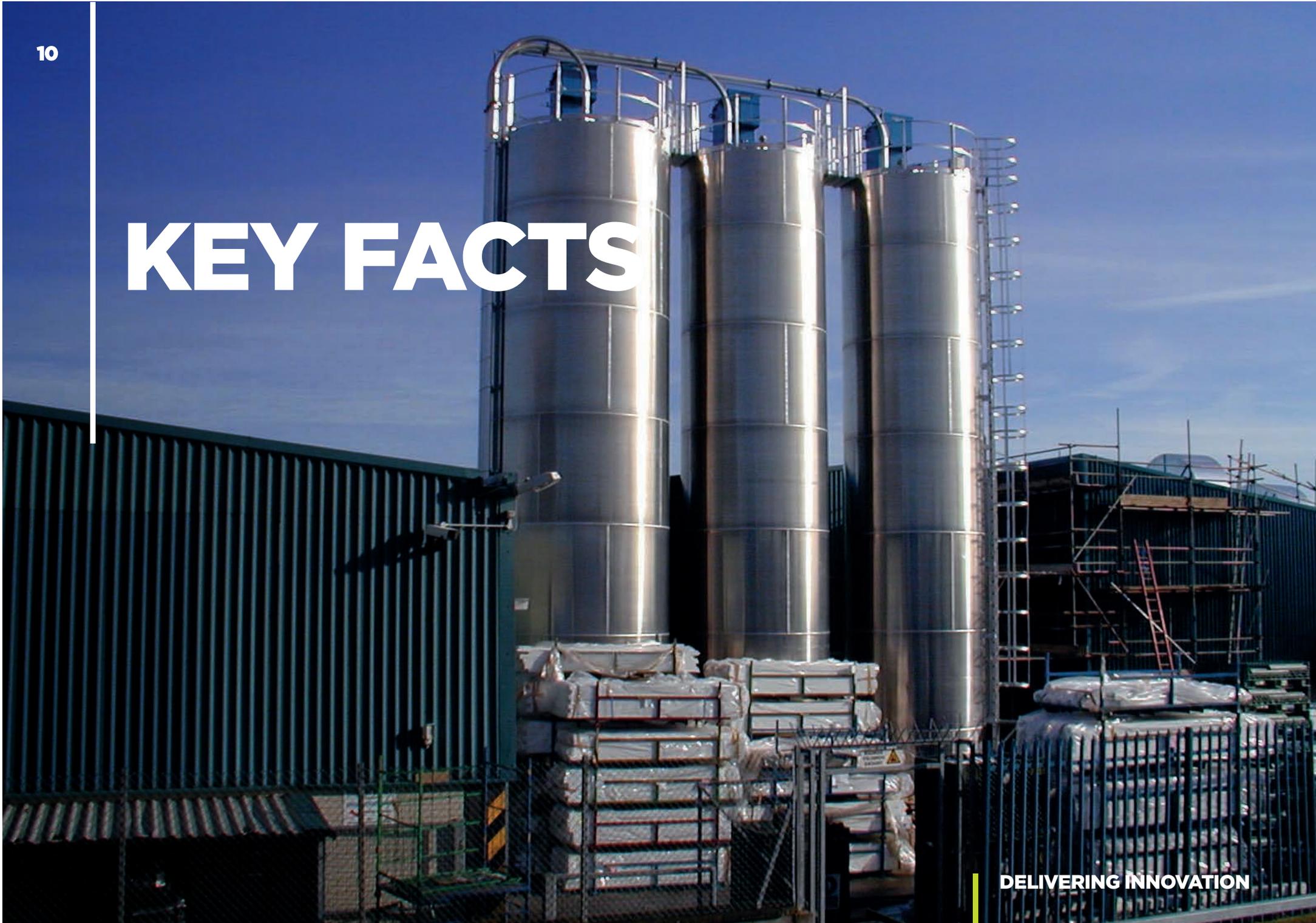
As brand leader, we believe we are best placed to spearhead this initiative and get our key specifiers and contractors onboard to ensure that specifications state a minimum of 50% recycled material in future. Our PVC-U product range is manufactured using an average of 80% recycled material, we can also proudly state that some of our extruded trunking systems are made from 100% recycled PVC-U. We will continue to innovate to preserve and protect the environment.

OUR VALUES

Our vision is supported by our values as a family-owned, British manufacturing firm that has established a reputation for driving innovation, while remaining environmentally, community and charitably focused for over 75 years.

Our values help to shape and underpin everything we say and do at Marshall-Tufflex.

KEY FACTS



OUR PVC-U PRODUCTS HAVE BEEN MANUFACTURED USING 80% RECYCLED MATERIAL IN THE LAST YEAR. THIS EQUATES TO THOUSANDS OF TONNES OF RECYCLED MATERIAL THAT WE HAVE PREVENTED GOING TO LANDFILL.*

1 Recycled PVC-U reduces carbon emissions by 20 times versus virgin material.

Manchester University has done a study into carbon, so that companies can estimate the 'cradle to grave' carbon footprint of their products. The study shows that the use of recycled PVC offers a 20-fold reduction in greenhouse gas (GHG) emissions compared to virgin product.

2 The base of our PVC-U perimeter trunking systems is manufactured from 100% recycled material. The unseen colour of this base will vary but is usually a variation of grey.

3 Our white Mini Trunking lengths are manufactured using 95% recycled material.

4 Our white Maxi Trunking lengths are manufactured using 94% recycled material.

5 Our white Conduit lengths are manufactured using 95% recycled material.

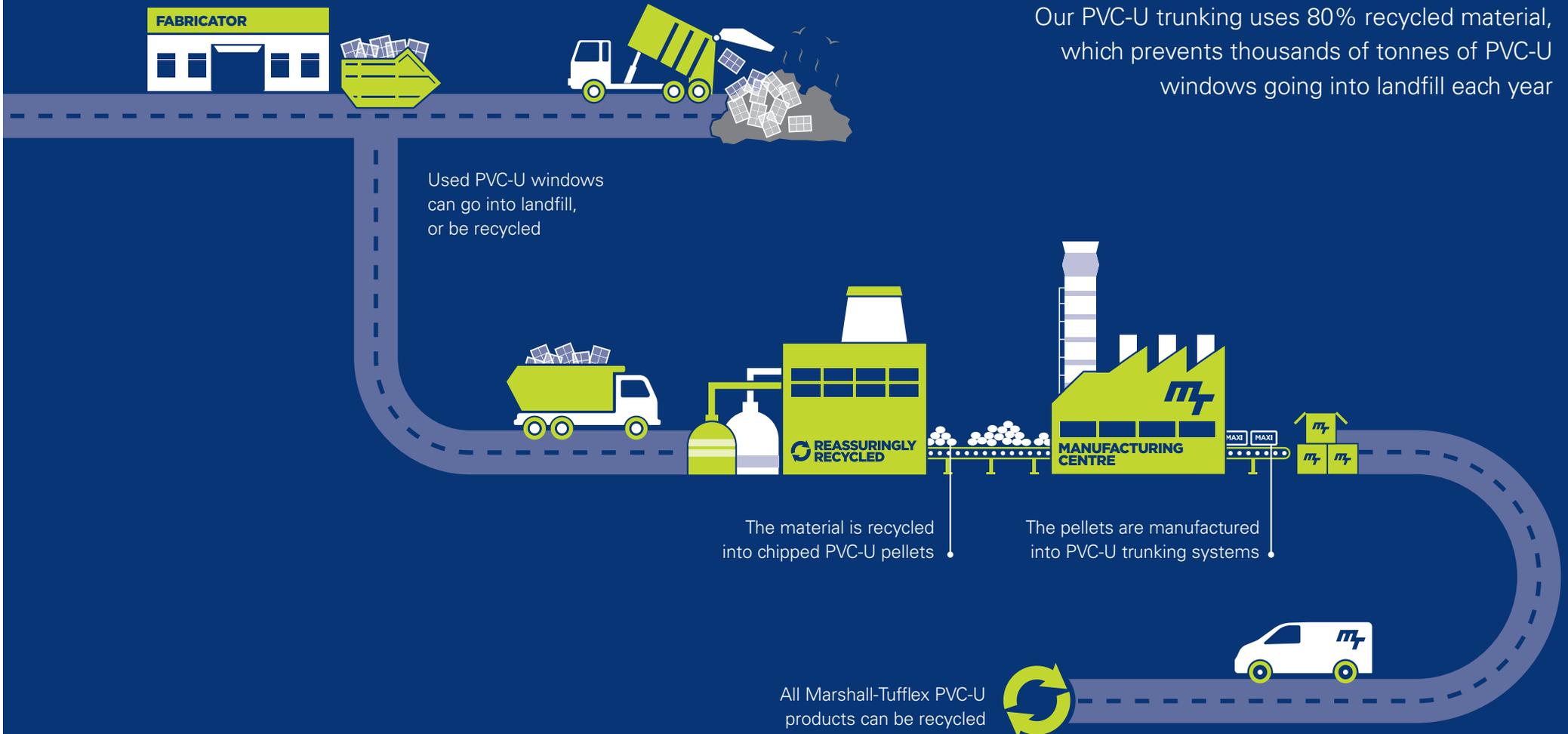
* Above figures based on our production usages from 1/1/18 to 31/12/18

**CURRENTLY WE ARE SAVING
THE EQUIVALENT IN WEIGHT
OF 300 DOUBLE DECKER BUSES
GOING INTO LANDFILL EACH
YEAR BY USING RECYCLED
PVC-U IN OUR MANUFACTURING**



THE LIFE CYCLE OF A PVC-U WINDOW

Our PVC-U trunking uses 80% recycled material, which prevents thousands of tonnes of PVC-U windows going into landfill each year



THE ONLY THING WE ARE CHANGING IS THE ENVIRONMENT.

Last year (Jan to Dec 18) by using an average of 80% recycled material in our PVC-U products, we prevented thousands of tonnes of PVC-U windows going into landfill.

WE WANT TO INSPIRE OTHER MANUFACTURERS TO FOLLOW OUR LEAD AND REDOUBLE THEIR COMMITMENT TO USING RECYCLED MATERIAL.

Currently we are saving the equivalent in weight of 300 double-decker buses going to landfill each year. If more cable management producers joined us this figure could easily double or treble, which would significantly improve environmental standards and performance within our sector.

WE TAKE OUR IMPACT ON THE ENVIRONMENT VERY SERIOUSLY.

The construction industry is the UK's largest producer of waste. At Marshall-Tufflex, we are driving change by motivating the entire cable management industry to commit to using recycled material in their products by 2028.

WE ARE EXPERTS IN THE USE OF RECYCLED PVC-U.

We have been using recycled material in our products for over 20 years. Drawing on our knowledge and expertise, we continue to innovate and develop new ways to produce superior products that retain their high quality while remaining competitively priced.

FAQS



OUR AIMS FOR 2028

Why are we campaigning for all PVC-U products installed in buildings to be manufactured using recycled material by 2028?

Recent research has shown that specifiers are often disinclined or reluctant to take risks when it comes to specifying products with a high percentage of recycled content. This indicates a widespread lack of awareness of the benefits of using recycled material both for our industry and the wider environment.

Our sustainable plastics campaign will play an important part in addressing concerns and common misconceptions regarding surface finish, strength, gloss and colour. Once we have addressed these objections, we believe that by adding a requirement on specifications for PVC-U systems to be manufactured from 50% recycled material we will get the industry on side. Eventually we'd like recycled cable management to be the industry norm, rather than the exception.



WHAT DO WE MEAN BY VIRGIN GRADE MATERIAL AND WHY ARE WE TRYING TO REDUCE ITS USE?

Virgin grade material is produced directly from natural gas or crude oil. As it has never been used or processed before, we are trying to reduce its use to conserve natural resources and prevent the irreversible damage that processing can cause to the environment.

WHERE DOES OUR RECYCLED MATERIAL COME FROM?

It mainly comes from 'post industrial waste' – i.e. waste windows from window fabricators or processors. Other recycled material comes from what we categorise as 'post consumer waste' – i.e. any windows that have come out of either domestic or commercial buildings. Finally, during the production process we collect our own waste material which is sent off to be rechipped and then returned to us for reuse.

IS RECYCLED CONTENT CHEAPER THAN VIRGIN MATERIAL?

With prices continuing to rise, recycled material is now on a par with the cost of virgin material. Using recycled material is not a cheaper option, the material is also much tougher on our tools and machinery. However, we believe that using recycled content is the right thing to do.

ARE PRODUCTS CONTAINING RECYCLED MATERIAL A LOWER QUALITY THAN THOSE MANUFACTURED FROM VIRGIN MATERIAL?

By using recycled PVC-U material made from windows, we end up with a raw material that is more robust and higher quality than a conduit or trunking virgin grade extrusion PVC-U. This is because the material used to make windows is designed to withstand external elements and is generally considered the best standard PVC-U available.

DOES RECYCLED PVC-U CONTAIN LEAD?

It can do yes – in extremely small amounts. 0.1% is the current acceptable level of lead allowed within the REACH regulations. We have vigorous quality control systems in place to ensure that we are completely REACH compliant.

WHAT ARE THE OTHER ALTERNATIVES TO DISPOSE OF USED PVC-U, IF IT IS NOT RECYCLED?

1. The material goes into landfill
2. The material goes into an incinerator
3. The materials are shipped off to a waste management company overseas

Accepting recycled material means that the lead is safely embedded into products, which we believe is a better alternative than releasing it into the ground, air or sea.

WHAT ARE THE COMMON OBJECTIONS FOR SPECIFYING RECYCLED PVC-U MATERIAL OVER VIRGIN GRADE PVC-U?

Currently there are four common concerns from across the industry regarding the suitability and durability of using recycled PVC-U material. These include 'surface finish', 'strength', 'gloss' and 'colour'.

OUR RESPONSE TO EACH OF THESE CONCERNS IS AS FOLLOWS:

SURFACE FINISH We have a rigorous quality control process at both our recycling partner and in our own manufacturing process which maintains a quality finish at all times.

STRENGTH By using recycled material from PVC-U windows, we benefit from their higher grade material which was used initially to withstand storms and external elements. This makes our recycled PVC-U an even more robust and durable raw material than virgin extrusion grade raw material.

GLOSS We are not currently able to use 100% recycled material on our covers as the market demands we achieve a high level of gloss finish that is only possible using virgin material in the formulation. If customers accept a lower gloss finish, then we can use more recycled material in our products.

COLOUR The amount of recycled material we use in a product is dependent on the finished colour required. All of our white extruded products include a % of recycled material. **Please see key fact 3** with regards to our perimeter trunking base. Black products are manufactured from dark colour windows with the addition of carbon black to maintain colour consistency. All other coloured products do not currently use recycled material.

PRODUCTS

HOW MUCH RECYCLED CONTENT DO WE USE IN OUR PRODUCTS?

From 1st January to 31st December 2018 we used 80% recycled material across our PVC-U product range. Where the aesthetic finish of products is not so important – for example our white Mini and Maxi Trunking ranges and white Conduit products can be manufactured from 94 - 95% recycled material.

WHY DO WE NOT ALWAYS USE 100% RECYCLED CONTENT IN ALL OUR PRODUCTS?

To meet customer demand for a high level of gloss and a choice of colours, we have to include virgin material in some of our formulations. Extruded products contain a higher level of recycled content, whereas moulded products contain lower levels due to the requirements of the moulding process. We strive to be as environmentally friendly as we can be and we have refined our moulding process to ensure we can use the optimum amount of recycled content possible.

CAN OUR OWN PRODUCTS BE RECYCLED?

Yes, all our PVC-U products can be recycled when they reach the end of their useful life. We are committed to carrying out research into reducing our carbon footprint even further and exploring new ways to enable end users to recycle our products in future.

IS OUR PACKAGING RECYCLED?

Some of our packaging is made from recycled material, and is recyclable. We want all of our packaging to be this way. We aren't quite there yet, but we're working on it.

WHAT ABOUT PRODUCTS MANUFACTURED FROM ABS AND POLYCARBONATE? WHAT ARE THE RECYCLED PROPERTIES OF PRODUCTS MANUFACTURED USING THESE MATERIALS?

Products that are manufactured from ABS and polycarbonate are fully recyclable. Our range of fittings that are manufactured using ABS and Polycarbonate do not contain recycled material.

QUALITY CONTROL PROCESSES AND COMPLIANCE

HOW DO WE ENSURE CONSISTENT QUALITY WHEN USING RECYCLED CONTENT?

Our recycling partner has the facility to trace all the feedstock and formulations contained in the recycled content we receive. During the production process, material samples are taken from our recycling partners' production line every 10 to 20 minutes. The samples are run through a lab extruder to produce a flat strip which is used to check for consistency in colour and surface finish.

This information is sent to us with every delivery of recycled material, which means we can always assure our customers that we are complying with REACH's stringent regulations.

WHAT IS REACH?

REACH is an EU regulation (dating from 18.12.06) that stands for Registration, Evaluation, Authorisation and Restriction of Chemicals. It addresses the production and use of chemical substances and assesses their potential impact on both human health and the environment.

WHAT OTHER ACCREDITATIONS DO WE HOLD?

We hold the BSI ISO 14001 Environmental Management Accreditation, the world's most recognized environmental management system. ISO 14001 accreditation means that we have proved that we look at all areas of our business; procurement, storage, distribution, product development, manufacturing, etc. so that we reduce our impact on the environment.



GLOSSARY OF TERMS

CIRCULAR ECONOMY

Keeping resources in use for as long as possible, extracting the maximum value from them whilst in use, then recovering and regenerating products when the resources have reached the end of their serviceable life.

CLOSED LOOP RECYCLING SYSTEM

Process where the waste part (Sprue) of each mould cycle is conveyed to a chipper on each moulding machine allowing the rechip material to be fed back through the production process.

COMPOUND

This is the recycled material delivered in pellet form from our recycling partner.

EXTRUSION GRADE COMPOUND

This is a blend of both virgin and recycled material, mixed to different levels during the extrusion process for specific products that require a higher quality aesthetic finish.

PERCENTAGE OF RECYCLED CONTENT

The percentage of recycled material used in our products varies up to 100% in our white extruded products, depending on the type of product being manufactured and the availability of recycled material at that time.

POST CONSUMER WASTE

Material recycled from any windows that come out of a building, whether domestic or commercial.

POST INDUSTRIAL WASTE

Material recycled from waste windows supplied by window fabricators or processors.

PRODUCTION WASTE MATERIAL

Any waste produced in our testing and production process that can be sent off to be rechipped and returned for reuse.

PULVERISED RECYCLED MATERIAL

Pulverised PVC-U waste in powder form.

RECHIP RECYCLED MATERIAL

Rechip our own waste material into 6-8mm chips.

RECYCLED MATERIAL

Raw or processed material that can be recovered from waste for reuse.

VIRGIN GRADE

Material that has not been previously used or consumed, or undergone processing other than for its original production.



**REASSURINGLY
RECYCLED**

www.marshall-tufflex.com/reassuringlyrecycled

