# frequently asked questions

Developed by Senior Architectural Systems, one of the largest and most respected fenestration systems companies in the UK today, the PURe® window system\* is the next generation of evolved products, to exceed current and meet future legislation.





#### What is the PURe® range of windows?

A range of aluminium windows with an enhanced thermal barrier manufactured from expanded polyurethane, which gives superb thermal performances.

#### What is the thermal barrier?

Expanded polyurethane which has been tried and tested for many years and used in the construction industry typically in cladding and insulation products.

Is the PURe® thermal barrier as strong as Polyamide? Shear testing has been carried out in accordance with BS EN 14024:2004 and has consistently out performed polyamide in shear.

#### How does it give extremely low U-Values?

The thermal barriers inherent insulation properties ensure that heat loss is minimal, and overall U-Values are significantly reduced. When specified correctly the PURe® range can give U-Values as low as 0.71 W/m²K uw for commercial CEN Standard windows.

Is additional tooling needed to manufacture this product? No, normal tooling used in the construction of aluminium windows will be sufficient.

What about cutting, handling and manufacturing – is it toxic? No, the product is safe to handle and manufacture.

Will it absorb water or rot? What about fungus or mould? It will not absorb water due to its closed cell construction. It will not rot. Fungus and mould will grow on any organic and non-organic surface if the conditions are right; however, PURe® thermal break does not provide any 'food' for fungus and mould to grow, unlike wood.

#### Is it UV stable?

Carbon black UV stabiliser is added to the polyurethane resin so no UV deleterious effects will take place.

# Can PURe® be deemed as Class 'O' (fire rating)?

Yes, surface spread of flame is over the surface only which is all aluminium and therefore it is deemed as Class 'O'.

#### Is PURe® CFC free?

Yes, no Chlorofluorocarbons (CFC) or hydrochlorofluorocarbons (HCFC) are present.

In use, does it give off Volatile Organic Compounds (VOC)?

#### What is its warranty and lifecycle?

It benefits from a 25 year warranty, and can expect a lifecycle in excess of 40 years.

#### How much does it cost?

The PURe® range is priced as competitively as any other aluminium window system, which has inherent additional performance benefits.

#### What about its BREEAM rating?

As BREEAM is a whole building evaluation, it can contribute significantly. However under the generic Green Guide, it would typically be A rated in commercial use. Please contact us for assistance to maximise available credits.

#### Where can PURe® be used?

Anywhere, from commercial to domestic, education to healthcare, new build, refurbishment or retro fit.

# Does PURe® meet current legislation?

The PURe® range has been designed not only to meet current legislation but exceed it. It has also been designed to exceed future legislation.

# What about recycling at end of life?

Aluminium is a cradle to cradle product which can be recycled endlessly. The thermal barrier would typically be re-used as fillers for other products, with no requirement for landfill.

# Does the PURe® system use familiar hardware, i.e. friction hinges, handles, espags, shoot bolts etc. or are there special requirements?

The system is designed to incorporate the usual hardware and fittings, nothing special, so there is no additional training or tooling required.

#### Is the system available in all standard finishes?

Yes, all the usual finishes including anodising are available. You will enjoy the same flexibility as always from a company who are approved applicators for all major powder suppliers. All sections will have to be painted or anodised by SAS as it is not possible to do this after the thermal barrier has been formed. No surcharges will apply for dual colour.

### Has the PURe® range been tested?

Yes, to relevant UK and European Standards.

# What about acoustic performance?

The PURe® range of windows benefit from glazing options to 50mm to allow enhanced acoustic performance.

