



<u>building</u> product design

# Building Healthy Solutions for Offsite



passivent





## Adding value to the offsite sector

As a tried and trusted offsite supply chain partner for almost 40 years, we deliver innovative, value-added solutions for every link in the specification chain.

Our comprehensive product range provides offsite manufacturers, specifiers, and developers with a range of benefits including ventilation, thermal efficiency, airtightness and condensation control.











# Your offsite partner

Innovation

**Experience** 

**Technical Expertise** 

Our blend of consultancy services and extended manufacturing capability allows us to offer a tailored product solution to support modular and volumetric construction. We understand the need for agility, budget control and for materials to be delivered on time to meet busy production schedules. Our products can support a template based design and can fit into a modular kit of parts process to facilitate a design for manufacture and assembly (DfMA) approach.

Helping offsite construction specialists to deliver projects that prioritise high build quality, cost and programme certainty, Glidevale Protect, Passivent and Kingfisher products have been used on some of the UK's leading sustainable developments and projects, with our products installed in the factory to reduce onsite time frames.

In addition to our products helping to reduce operational carbon emissions, we're also committed to reducing our own carbon footprint as well as supporting modular manufacturers with our own take-back schemes on some of our packaging.









We're here for the offsite sector, talk to us about finding your solution today:

info@buildingproductdesign.com



4

building product design





**Glidevale Protect is a respected long-standing** supplier to the offsite market with an in-depth understanding of the sector and the knowledge to create the right solution for each project.

This division specialises in thermal efficiency, airtightness, ventilation, condensation control and damp proofing across the built environment with manufactured ranges including membranes for floor, wall and ceiling as well as roof and building ventilation. Glidevale Protect offers tried and trusted offsite solutions with a fabric first approach, offering a value-added consultancy service and support on materials efficiency to offsite manufacturers and specifiers.



building product design





Passivent works closely with offsite construction contractors to deliver energy-efficient ventilation solutions.

A leading specialist in the manufacture and supply of natural and hybrid ventilation products for education, commercial and public sectors.

Passivent's range includes window/wall ventilators, roof ventilation terminals, acoustic 'room to room' air transfer units and a rooflight/ventilator. This comprehensive collection of sustainable and energy-efficient ventilation systems improve air quality, provide thermal comfort and boost daylight.

#### passivent.com



# Our solutions consultancy & manufacturing



#### Support at early design stage

Specification guidance on a holistic range of products to ensure design is future proofed to achieve the fabric first principle of 'building tight, ventilating right'.

#### Demand forecasting

Understanding customer needs and business production patterns, we undertake a projectby-project take-off facility and plot a stock usage profile, which, when programmed into our factory, ensures surety of supply.

#### Logistics efficiency

We analyse demand plans to put in place timed deliveries to service busy factory production lines, and organise bulk loads where necessary to reduce deliveries.

#### Sustainability

We work with suppliers and customers to reduce our carbon footprint. We can explore potential closed-loop recycling initiatives on product packaging to avoid materials going into factory waste streams.

#### **Tailored manufacturing options**

We can provide innovative products for a specific requirement, or optimise roll sizes to speed up processes - or even create bespoke finish and colour combinations for ventilation products.

#### **Onsite factory support**

Get extra insights with our onsite visits with toolbox talks for factory operatives, including guidance on detailing to aid installation as well as commissioning and servicing, providing reassurance in product performance.

#### Our specialist offsite technical team offers a free consultancy service to offsite manufacturers, offering support on how our membrane and ventilation products can fit into an early design approach and generate healthy solutions for building occupants.

For example, by optimising materials delivery direct into factories and supplying a combination of products as part of a closed panel system, we can enhance the pre-manufactured value (PMV) of the overall construction. With two UK manufacturing facilities, we provide a full support service to the offsite and volumetric sector, with products suited for use with various construction materials including light gauge steel frame, SIPs, CLT and timber frame.



Supporting your project

We're here for the offsite sector, talk to us about finding your solution today:

# Our assurances expertise & accreditations



#### Design for manufacture and assembly (DfMA)

#### A design approach that focuses on ease of manufacture and efficiency of assembly. Simplifying product design makes it possible to manufacture and assemble it more efficiently, reducing both time and cost.

#### How do we help to achieve this?

Not only can we ensure strict product technical performance but surety of product is crucial, enabling our customers to keep their manufacturing processes on track – all with the goal of ensuring DfMA efficiency. We support simplifying product design, making it possible to manufacture and assemble more efficiently, reducing both time and cost.

Our offsite technical team offers full collaboration for new specifications and ongoing projects, from design guidance to onsite support and everything between.

Whether it's advice on building regulations, U-value calculations, thermal modelling, or product specification details and clauses, we can help take you from page to project.

Contact us today: info@buildingproductdesign.com about our full technical support service including BIM objects, toolbox talks, commissioning and service visits, and more.

#### Knowledge of the sector and decades of experience at your service.

#### Sectors

- Private, social, and affordable housing
- Education facilities
- Commercial buildings
- Public sector buildings, including healthcare
- Student accommodation
- Self build projects

#### **Product benefits**

- · Thermal efficiency
- Airtightness
- Ventilation and air quality
- Condensation control
- Moisture removal
- Natural daylight
- Damp proofing

Our products are designed and developed specifically for UK and Irish requirements under the ISO 9001 quality standard, and we are accredited to the international health and safety standard ISO 45001 and environmental standard ISO 14001.

As well as our quality hallmarks, management systems, and external product performance certification, we have achieved STA Assure Gold Level status, so we can ensure complete customer assurance.

With a number of our product ranges being independently certified by BM TRADA, this provides verification of product performance to guarantee compliance to appropriate standards. This ensures our products are approved by a notified UKAS accreditation body, giving you peace of mind with a 'right first time' specification that ticks every box.









#### Raising the standards of the offsite sector.

We understand the importance of keeping up to date with changes to UK and Irish building regulations and Building Bulletins, and we ensure our products are fully compliant with all current and forecasted changes. We are committed to helping our customers achieve net zero in line with the UK government's plans to significantly reduce greenhouse gas emissions by 2050.



For more information on how we can help your project achieve full compliance, contact our offsite technical team: info@buildingproductdesign.com, +44 (0)161 905 5700

## One Manchester Low carbon housing

Glidevale Protect construction membranes installed throughout helped this innovative new build social housing project to meet stringent airtightness and energy efficiency targets.

One Manchester's Blackrock Street development presented a unique challenge to all involved: to create a future proofed low carbon and Passivhaus social housing scheme, with selected properties required to hit the net zero carbon mark and thus help in the reduction of running costs for the tenants.

Collaboration between suppliers was key, with construction membranes from Glidevale Protect integral to the success of the closed timber frame wall panelised system, which was designed and manufactured offsite by timber frame manufacturer Kingspan Timber Solutions.

Our products helped to reduce operational carbon by retaining heat within the homes, notably by the use of an external reflective wall membrane within an unventilated cavity and an internal airtightness membrane with vapour control properties.



By using a fabric first approach, we combined Glidevale Protect's high performance, reflective membrane for external walls with an internal airtightness and vapour control layer. This helped to improve thermal efficiency and ensure low U-values, contributing to a low ecological footprint on each home and putting One Manchester at the forefront of sustainability. **17** 

Victoria Young, project manager One Manchester



### Victoria Views New build apartments

Three low emissivity, insulating and reflective membranes used together in a closed panel timber frame system helped achieve the target U-value at this 24-apartment new build scheme in Plymouth.

Our ability to think creatively and work collaboratively meant that the structures retained their thermal efficiency whilst also reducing the thickness of insulation material required, saving costs and also ensuring that the target U-value of 0.19W/m<sup>2</sup>K for the wall was achieved.



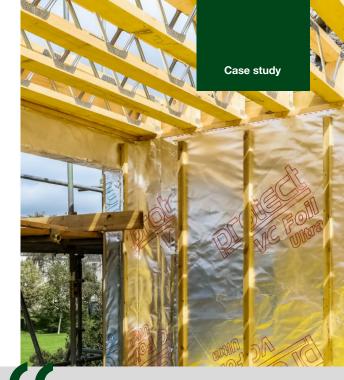
## TG Escapes eco buildings

## Passivent has worked with TG Escapes to provide hybrid ventilation systems for the company's modular buildings since 2019.

Used throughout education buildings, commercial spaces, sport and leisure facilities and garden rooms, TG Escapes eco buildings require a ventilation system that draws in and circulates fresh air, removes stale polluted air, optimises indoor air quality and enhances occupant wellbeing.

Passivent's Hybrid Aircool<sup>®</sup> ventilator and *i*C8000 multi-zone controller provide the perfect solution. The system is quiet, energy efficient, has three modes of ventilation and can be ducted and installed within a ceiling void or ceiling mounted.





The innovative idea to use TF InterFoil within a cavity designed into the closed panel allowed us to not only achieve our target U-value but also save money on insulation material – a win-win! "

Ron Luker, director Timber PAK (SW) Ltd



TG Escapes Ltd first engaged with Passivent in early 2019 and the company has since become a valued part of our supply chain, working closely with our design, procurement and operations teams. "

**Darren Kelly**, operations manager TG Escapes

> Image courtesy of TG Escapes eco buildings



#### **Building healthy solutions**

+44 (0)161 905 5700 | info@buildingproductdesign.com 2 Brooklands Road, Sale, Cheshire M33 3SS



Speed, efficiency, sustainability: we know what keeps the offsite market moving at pace.

Our vision is to be the UK's specialist supply chain partner in enabling the creation of quality living and working spaces that are healthy and sustainable.

Ben Gerry, commercial director







910226 | Issue 2 November 2022