

# The next answer in building



**fiberweb**  
BUILDING





# Less energy, more comfort

**Not so long ago, buildings were draughty, cold and expensive to heat. Now, they can be comfortable and help keep energy bills to a minimum. Hi-tech materials can now keep the weather out but still let buildings ‘breathe’. So modern buildings can be warm, welcoming and environmentally friendly.**

It's not just that people have become accustomed to more comfortable interiors. We expect ever-higher levels of energy saving and we want to reduce our carbon footprint. Rising bills and more demanding construction standards mean buildings must be insulated against the weather, yet remain moisture-free inside.

The challenge is to create building wraps and membranes that provide this breathable protection while offering longevity, and resisting the rigours of UV and the building process itself.

In North America, Fiberweb materials like TYPAR™ are engineered to provide this performance. They far exceed the demands of building regulations in their markets and outperform competing brands in tests for breathability and water holdout. TYPAR is widely recognised to offer higher performance than competing products. SURROUND™, the smart alternative to roofing felt, is helping make homes quicker to build and more durable.

In Europe, where Fiberweb has years of experience providing private-label products, CLIMAT™ was launched in 2012 to offer premium, vapour permeable roof and wall membranes to a broader market.

We haven't achieved this alone. With their feedback, guidance and input, Fiberweb customers have helped shape our products. We've worked closely with installers to understand their present requirements and identify emerging trends. For example in the US, top homebuilder PulteGroup, Inc. chose the TYPAR Weather Protection System for all its new home-builds across 28 states.

The Linopore UV+ vapour-permeable membrane in our European CLIMAT products offers 80% superior durability performance against market benchmarks



# Protective layers

Our materials have revolutionised building. They offer lasting protection against the energy-stealing effects of air and moisture. Yet they are cost-effective and easy to apply. From breathable wraps to impermeable laminates, Fiberweb helps create new, high-performance materials.

## Introducing performance layers

Where wind or water can get in, performance layers hold them back. The special qualities of Fiberweb materials make them perfect for the job. They keep out the rain, yet where necessary let water vapour escape from the interior.

Up to five times stronger than competing brands, they stand up to extreme weather and damage during construction. And with UV resistance that far exceeds norms, they protect buildings for longer.

Fiberweb creates the right product for the right place, designing materials to suit the demands of local climates and building styles.

## North America

**Building wraps** – Vapour permeable layers that create a weatherproof yet breathable building envelope

**Roofing underlays** – Materials that offer both lighter weight and higher performance than roofing felt

**Rolls, flashings and tapes** – Accessories that seal cracks, seams, openings and roof penetrations (such as chimneys or solar panels) to create a completely sealed building envelope

A family home produces 11-22 litres of moisture vapour every day. TYPAR wraps can let it escape while keeping the rain and snow out.

TYPAR MetroWrap stands up to the rigours of commercial construction. Superior performance and toughness make it ideal for multi-family dwellings, light commercial applications and large commercial structures.

## Europe

**Breathable roof laminates** – Protects and enhances insulated roof systems by allowing moisture to escape while keeping the elements out.

CLIMAT vapour-permeable membranes are tested up to 100°C – competitor products are only tested to 70°C or 80°C. This places CLIMAT products with Linopore UV+ in an elite group of high-performance membranes for use under solar panel collectors.

Bi-component fibres mean CLIMAT can stay strong even in direct exposure to sunlight. It can reduce the amount of building materials needed for the façade by up to 10 percent.

**Vapour control layers** – Prevent moisture escaping into the insulation space.

## Building greener

Fiberweb performance layers help buildings use less energy. They reduce air infiltration and make insulation work harder. In the US, TYPAR contributes to the ENERGY STAR Qualified New Home programme as an air barrier. And our building layers are 'sustainable by design', too. They contain over 23 percent post-industrial recycled material and produce minimal VOC emissions.







# Future-proof

**The beauty of Fiberweb technology is the way it lets you experiment and innovate. In the building industry, we've been able to take advantage of this to raise the performance of buildings. Fiberweb products make them more durable, weather-resistant and eco-friendly.**

Our customer' ideas and requirements feed our research and development. With a new, 35,000 square foot R&D centre in the US and a research facility in Europe, we can test new materials and techniques to meet rising building standards. And because we control the whole manufacturing process, from granules to packaged products, we can ensure performance.

## **Linopore UV+**

It's a challenge for roof membranes to sustain their performance over time. Weather damage, in particular from UV radiation, can degrade roof materials so they lose their insulating and breathable qualities. We developed Linopore UV+ with this challenge in mind.

Our answer was to use a three-layer laminate with functional film in the middle. It's produced through a patented manufacturing process that creates the precise amount of microscopic pores needed. Three-layer CLIMAT laminates with Linopore UV+ exceed European norms by 40 percent in accelerated ageing tests.

## **TYPAR MetroWrap**

Commercial applications need a commercial-grade wrap. TYPAR MetroWrap offers all the breathability and water holdout benefits of our TYPAR HouseWrap, but with several important advantages. Enhanced UV resistance means it can keep buildings protected during the longer commercial build cycle, while extra surfactant resistance guards against harsh chemicals and cleaning techniques on commercial sites.

Suited to a range of applications from multi-family dwellings to large commercial structures, TYPAR MetroWrap also offers exceptional mould resistance.

**Three-layer CLIMAT laminates with Linopore UV+ exceed European norms by 40 percent in accelerated ageing tests**

# Our building range

## North America



**TYPAR HouseWrap** – With exceptional air and water holdout, this material provides comfort and energy efficiency while controlling moisture intrusion. TYPAR Weather Resistant Barriers hold back air and moisture from the outside while allowing moisture vapour to escape from inside.



**TYPAR MetroWrap** – Developed for multi-family dwellings, light commercial applications and large commercial structures, MetroWrap features enhanced UV resistance for longer construction cycles. We designed MetroWrap with high surfactant resistance to counter commercial chemicals and cleaning products.



**TYPAR Accessories** – To ensure a tight building envelope, TYPAR Flashing and Construction Tape seals cracks and seams while maintaining TYPAR performance.



**SURROUND SR Roof Underlayment** – The smart alternative to felt, SURROUND is lighter and quicker to install than roofing felt. Despite this, its waterproof polymer is strong, tear-resistant and offers a safe, slip-resistant surface. One roll offers the same coverage as five rolls of standard roofing felt.

TYPAR offers tear strength up to five times greater than leading polymeric brands

## Europe



**CLIMAT** – Manufactured in Europe, this premium range of vapour-permeable roof and wall laminates uses Fiberweb's patented Linopore UV+ technology. Its exceptional heat and UV resistance makes CLIMAT ideal for use under solar panels and for building styles that might expose it to direct sunlight.



**CLIMAT X-Series** – Vapour-permeable roof underlays with Linopore UV+ and integrated adhesive strips to seal against water and wind.

**CLIMAT SD series** – Vapour control layers to prevent condensation build-up and provide moisture control to prevent water moisture from entering into the insulation space

**CLIMAT F Series** – Vapour-permeable façade laminates for both open-spaced and covered façade applications.



### CLIMAT Accessories:

- **CLIMAT Flex Series** – Durable, flexible adhesive abutments and flashing rolls
- **CLIMAT Roll Series** – Ventilated ridge and hip rolls to provide protection from water ingress, while also enabling the sub-roof structure to ventilate.
- **CLIMAT Seal Series** – A range of adhesives for sealing edges and penetrations of building membranes caused by nails and fasteners, roof outlets, chimneys, antennas, solar panels etc.

Ideal for roofs that increasingly incorporate solar panels, CLIMAT is tested to 100°C



# The next answer

**What could high-tech materials do next? That's the question we focus on at Fiberweb. It's what our customers are asking too. So we make it our mission to realise the potential of materials technology. This way, Fiberweb and its customers are always innovating together.**

## **Intelligent application**

We're an industrial company. But that doesn't mean we think only in terms of production and polymers. At Fiberweb, we like to think of potential. Because the real value in our materials lies in the infinite variety of ways we can apply them. And the process for making nonwovens is so flexible that there is always room for more ideas. We call this "intelligent application". And it's led to some truly remarkable materials.

## **Materials that make the world better**

We've made flood defences that can be easily transported and rapidly installed where they're needed. Stretchable crop fleeces up to 1.5km long. Waterproof, breathable material that cocoons and protects buildings.

Our nonwovens have changed the world and become part of everyday life. Since it was founded, over 30 years ago, Fiberweb has been at the forefront of innovations like these, and we have grown to become a global force in materials. Our materials are used in a huge range of applications across seven industry sectors: filtration, technical nonwovens, medical, building, agriculture, geosynthetics and industrial consumable products.

## **Finding the next answer**

We're investing heavily to find new applications for our materials. We have new, multi-million dollar innovation centres in the US and UK. They feature pilot lines and analytical labs that provide solutions as and when our customers demand them. At the same time, the facility gives our scientists the tools they need to carry out their own exploration and pioneer new technologies.

**Eight global manufacturing bases in six countries**

**Over 30 years experience in the materials industry**

**1200 employees**

**R&D centres in Europe and the US**

## **A leader in material technology application**

By intelligently applying our high-performance fibre technology, we are helping industry solve its most complex material challenges, and providing our customers with the answers they will need tomorrow.

**fiberweb**

THE NEXT ANSWER

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Typar is a brand name for a specific family of fabrics sold primarily in North America.

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