

SAINT-GOBAIN'S GUIDE TO PREPARING FOR THE FUTURE HOMES STANDARD



WHAT'S INSIDE THIS GUIDE

This guide presents housebuilders, contractors and self-builders with an overview of the goals for the Future Homes Standard and proposed changes to domestic properties. We explore a range of Saint-Gobain building solutions to help you meet the requirements as they are defined.

WHAT IS THE FUTURE HOMES STANDARD?

In a bid to tackle the UK's climate-warming emissions, the UK Government is committed to delivering zero-carbon homes by 2025 through their Future Homes Standard, which was announced in the government's 2019 spring statement.

The aim of the Standard is to radically improve the energy performance of new homes in England to ensure they are future-proofed with low carbon heating and high levels of energy efficiency.

As part of this drive to a zero-carbon future, new homes in England will no longer be built with fossil fuel heating, such as a natural gas boiler. It is also expected that heat pumps will become the primary heating technology and significant improvements will be made to insulation and airtightness.

WHO WILL BE AFFECTED BY THE NEW STANDARD?

The Future Homes Standard currently will apply to all new build homes and self-builds in England.

What about existing homes? It's still unclear but they may be subject to higher standards if homeowners plan on making thermal upgrades or building an extension. For example, they may need to consider the installation of heat pumps, window replacement and fixed lighting.

The government has noted that a Future Buildings Standard is also due to be released that will focus on non-domestic buildings.



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We welcome the Future Homes Standard and are ready to support customers to help deliver on its goals. The Standard will improve the energy performance of buildings, which will lead to more comfortable, energy efficient homes - vital in achieving net-zero emissions by 2050 and our purpose to Make the World a Better Home.

Saint-Gobain has a wide range of solutions and services to help housebuilders, contractors and self-builders create better high performing, energy efficient buildings and we're here to support and collaborate with customers to deliver on the ambitions of this new standard.

MIKE CHALDECOTT,
CEO Saint-Gobain UK



FUTURE HOMES STANDARD TIMELINE

2023: INITIAL PROPOSAL FOR FUTURE HOMES STANDARD SPECIFICATION TO BE CONSULTED ON.

2024: LEGISLATION INTRODUCED.

2025: STANDARD TO BE IMPLEMENTED.

THE FUTURE HOME STANDARD IN NUMBERS

2021:
ANNOUNCEMENT THAT NEW HOMES WILL PRODUCE
75-80%
LESS CARBON BY 2025.

2023:
2023 TECHNICAL SPECIFICATION TO BE CONSULTED BY THE DEPARTMENT FOR LEVELLING UP, HOUSING AND COMMUNITIES (DLUHC)

2025:
STANDARD TO LAUNCH.

DID YOU KNOW:

The built environment accounts for 40% of UK greenhouse gas emissions – 20% of this comes from 28 million homes in the UK.

Source: UK Green Building Council

ROADMAP OF THE FUTURE HOMES STANDARD

Let's get to the nitty-gritty and find out more about the interim Building Regulation changes before the development of the Standard.

The Ministry of Housing, Communities and Local Government is aiming to shrink CO₂ emissions in new build homes by 80%. They launched a two-part consultation on proposed changes to Part L and Part F of the Building Regulations as interim measures on the path to developing the Future Homes Standard – this included questions on possible approaches for the Standard to deliver on its goals.

THE FIRST CONSULTATION

The first public consultation ran from October 2019 to February 2020 on proposed changes to the Building Regulations. It set out the initial plans for the Future Homes Standard and consulted on changes to Part L (conservation on fuel and power) of the Building Regulations. In short, Part L sets standards for the energy performance of new and existing buildings. Amendments have also been proposed to Part F of the Building Regulations in England for the ventilation requirements to maintain indoor air quality as a first step towards the Future Homes Standard.

THE OUTCOME

As a result of the first consultation in which 3,310 people responded, a 114-page response from government was released in January 2021 confirming that all new homes must be built with low-carbon heating and zero-carbon ready by 2025.

A second consultation, which closed on 13 April 2021, proposes new energy efficiency and ventilation standards for existing homes and non-domestic buildings – in effect additional changes to Part L (conservation of fuel and power) and Part F (ventilation) of the Building Regulations, and on proposals to address overheating in residential buildings.



WHAT ARE THE PROPOSED CHANGES TO BUILDING REGULATIONS?

Let's face it, the heat is on to push the standard won't be consulted on until 2023 and is due to launch in 2025.

But there are some interim changes to Part L (conservation on fuel and power) of the building regulations. The Part L Uplift to energy efficiency requirements states that from 1 July 2022, all new homes in England must be built in line with the new regulations, unless planning permission has been submitted and approved before that date.

These homes will be expected to produce 31% less CO₂ emissions compared to current standards.

The Future Homes Standard 2019 consultation anticipates that an average semi-detached home built to meet the Standard would produce 75- 80% less carbon dioxide emissions than one built to the 2013 Part L requirements.



To achieve this, it is expected that a new home has low carbon heating, and higher levels of energy efficiency. This would typically mean that a new home built to the Future Homes Standard would have a heat pump, a waste water heat recovery system, triple glazing and minimum standards for walls, floors and roofs that significantly limit any heat loss.

The consultation also states that the Future Homes Standard will be set in performance terms, such as minimum levels of primary energy and CO₂ emissions, without prescribing the technologies to be used. This allows housebuilders the flexibility to innovate and select the most practical and cost effective solutions in particular circumstances.

WHAT ELSE DID THE GOVERNMENT SAY?

The 2019 consultation also sought views on whether or not to keep the Fabric Energy Efficiency (FEES) standards as a metric. The government's response makes it clear that it will keep FEES as a performance metric but is consulting further on whether there is scope to introduce a more stringent FEES target in Part L 2021.

MEETING ENERGY EFFICIENCY MEASURES IN 2022

What does this mean for me, and how can these measures be achieved, you may be wondering?

Well, the government has proposed that new builds should undertake a fabric first approach and a low carbon heating system should also be installed.

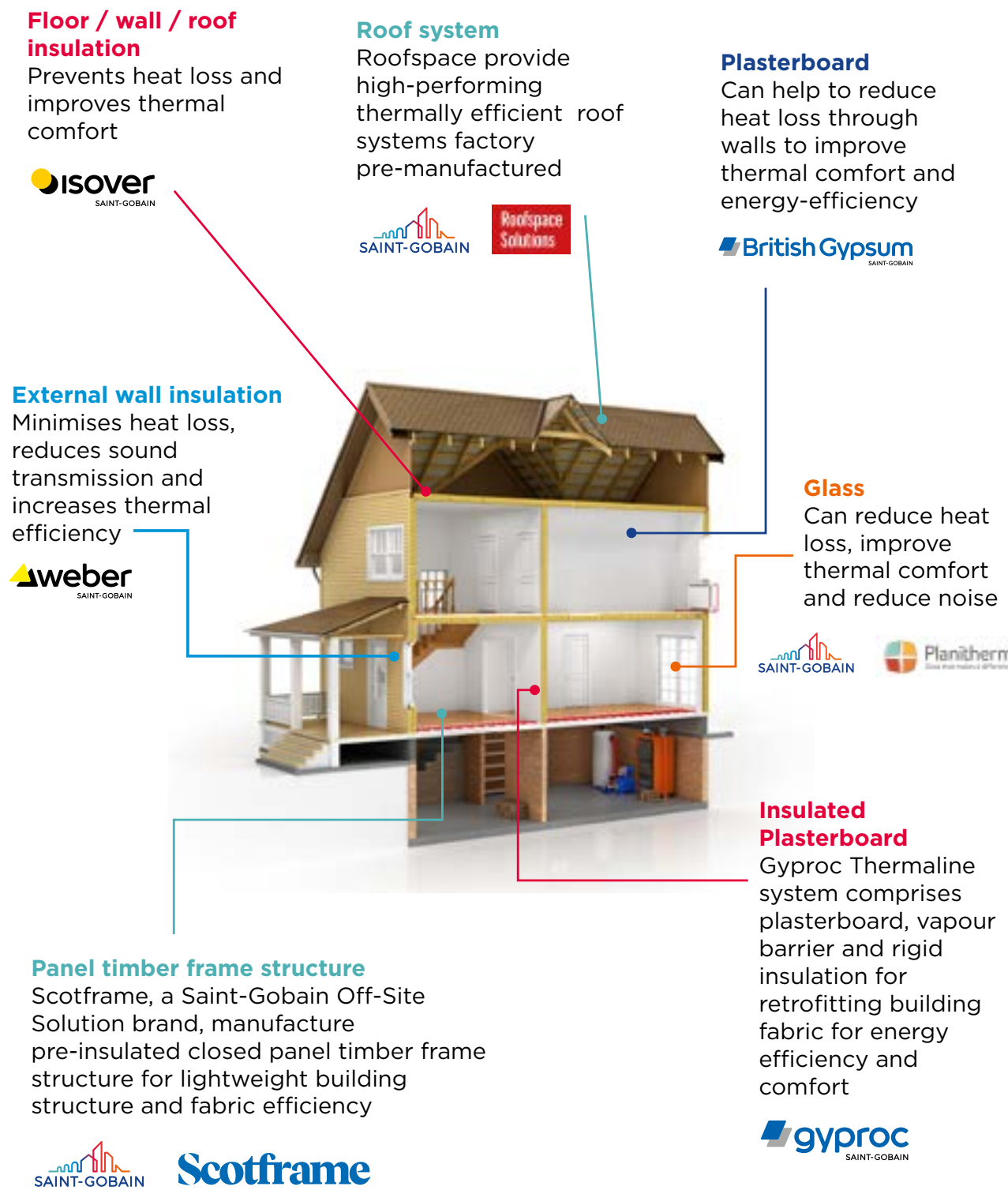
Put simply, careful consideration must be taken when it comes to the design and construction of your building. Choosing high performing materials and adapting the principles of air tightness and ventilation can minimise the energy needed to heat and cool the home. Ultimately, it will be cheaper and easier to install energy efficiency and low carbon heating measures when homes are being built, rather than facing the hassle of retrofitting them later on.



SAINT-GOBAIN GLASS: PLANITHERM GLASS

SAINT-GOBAIN'S ENERGY-EFFICIENCY SOLUTIONS

When it comes to taking an energy-efficient approach, Saint-Gobain has a range of solutions for housebuilders, contractors and self-builders all under one roof. By choosing materials that conserve energy you can reduce the environmental impact of a building throughout its lifetime.



HOW CAN SAINT-GOBAIN HELP YOU?



With 350 years of manufacturing and distribution expertise, coupled with unrivalled access to high performing materials and supply chain solutions, we are well placed to develop bespoke solutions for the UK's major new build development projects.

Working in partnership with our customers, we are committed to delivering a Saint-Gobain solution led approach, while meeting Saint-Gobain's purpose to Make the World a Better Home and reach our net-zero carbon commitment by 2050.



SAINT-GOBAIN SOLUTIONS

Saint-Gobain has plenty of expertise when it comes to fabric-first solutions and can help you prepare for the journey ahead.

Why not get ahead and start browsing a range of high performing solutions on offer to help you to prepare for the 2025 Future Homes Standard.

GLASS

Saint-Gobain Glass manufactures some of the UK’s most energy efficient glass.



Planitherm is a range of modern, high-performance glazing for the home made by Saint-Gobain Glass. Planitherm glass doesn’t just meet UK energy standards and Building Regulations, it exceeds them: offering better efficiency than traditional double glazing. Planitherm glass can be used to achieve the best possible U-values and Window Energy Ratings.

 [Find out more](#)



SAINT-GOBAIN GLASS: PLANITHERM GLASS

INSULATION FROM SAINT-GOBAIN INTERIOR SOLUTIONS



Saint-Gobain Interior Solutions offers a comprehensive range of thermal insulation solutions, from loft or flat roof insulation, to room in the roof, floor and wall insulation. The range of PIR, glass mineral wool and stone wool products are marketed under the Celotex and ISOVER brands.

The proposed direction of the Future Homes Standard to focus on a fabric first approach directly aligns with our Saint-Gobain purpose and the move to building better with a holistic approach, and is supported by a range of solutions and services from Saint-Gobain Interior Solutions that can already be used to meet the relevant potential thermal targets.

ROOF INSULATION BY SAINT-GOBAIN INTERIOR SOLUTIONS



Saint-Gobain Weber can help with upgrades with the thermal properties and the aesthetics of your home with an external wall insulation system.

This type of system is attached to the outside of your home, and is built up in several layers including insulation board and an adhesive render coat. Each system will be designed to fit the requirements of the project, and there are plenty of choices when it comes to colours and finishes for the final look. Ultimately, this type of system can increase thermal efficiency and minimise heat loss and therefore energy consumption.

 [Find out more](#)

PLASTERBOARD FROM SAINT-GOBAIN INTERIOR SOLUTIONS



Saint-Gobain’s plasterboard products take into account different building requirements: energy performance, thermal regulations, fire protection and protection of interior air quality.

There is an appropriate solution for each living space and a high performance thermal laminate plasterboard, for example, British Gypsum’s ThermoLine PIR, is designed to be used in new builds for walls, ceiling, room in the roof and window reveals where a high level of cost effective thermal insulation is required to reduce heat loss from buildings as part of the British Gypsum BBA approved systems.



BRITISH GYPSUM PLASTERBOARD

The Future Homes Standard includes a requirement for additional ventilation and indoor air quality monitoring.

INDOOR AIR QUALITY

British Gypsum's ACTIVair products can help to remove harmful compounds in the air. Pollutants found in both our working and living spaces, called VOCs (volatile organic compounds), can cause health problems and a reduction in our general wellbeing. They are naturally emitted into rooms by people, pets, cleaning products as well as furniture, carpets and paints. The most common VOC found within our living and working spaces is formaldehyde, and this is what ACTIVair technology absorbs and breaks down.

ACTIVair technology is added to a number of British Gypsum products and systems including ThistlePro PureFinish plaster, Rigidur plasterboards, Rigitone and Gyptone ceilings. When installed, the ACTIVair technology within each of these products works to decompose formaldehyde emissions into non-harmful inert compounds, improving the air quality within buildings.

 [Find out more](#)

OFF-SITE SOLUTIONS

Looking for a speedy solution that meets energy efficiency requirements?

The Saint-Gobain Off-Site Solutions division offers expertise in design, logistics, supply chain and sourcing, delivered through a partnership approach with its five specialist brands - International Timber, Pasquill, Roofspace Solutions, Scotframe and Intrastack.

Off-Site Solutions is dedicated to providing off-site construction solutions designed to make on-site easier; helping our customers to save time, reduce costs and improve safety.

ROOFSPACE SOLUTIONS - I-HOUSE AND I-ROOF



i-House Solution

With Roofspace Solutions homes can be watertight in under a week and, compared with traditional methods, the i-House and i-Roof solutions can reduce the health and safety risks of your on-site teams and contractors, decreasing the fall-from-height risk. The speed of build is increased, levels of quality remain high and these solutions also offer cost certainty.

i-House is a fast construction programme for those housebuilders seeking a speedy delivery and excellent thermal performance, reducing the amount of heat lost at thermal bridges.

ROOFSPACE I-HOUSE



The i-House is manufactured off-site using a bigger and lighter variant of the aircrete block, which is lifted by crane and assembled in a similar sequence to a timber frame build. This results in a much faster construction process than a traditional build. Intended for domestic

property construction of up to three storeys, i-House consists of inner leaves of external cavity walls, separating walls, floors, lintels, cavity closures, insulation and roof trusses, with the inclusion of soffit and fascia for the internal skin of the property.

Roofspace Solutions is working alongside supplier H+H to design and produce the large-scale Celcon Elements, which are manufactured from the same material as the aircrete blocks. This gives them the same advantages, such as outstanding thermal performance and reduced heat loss at thermal bridges.

Manufactured with a width of 600mm and a thickness of 100mm, elements are designed to be craned into place onto a bed of mortar on standard foundations. Blocks are joined using thin-joint mortar with 2mm (3mm) joints, providing an extremely airtight finish.

i-Roof solution

Usable space on the top floor is often a way of future proofing homes. This room-in-roof solution is ideal for 2.5 storey homes. Roofspace Solutions supply fully manufactured walls, floors and roofs complete with insulation and plasterboard. The i-Roof product allows for a quick and easy on-site install, all managed from start to finish by a knowledgeable team.

ROOFSPACE I-ROOF





SCOTFRAME Timber-frame homes

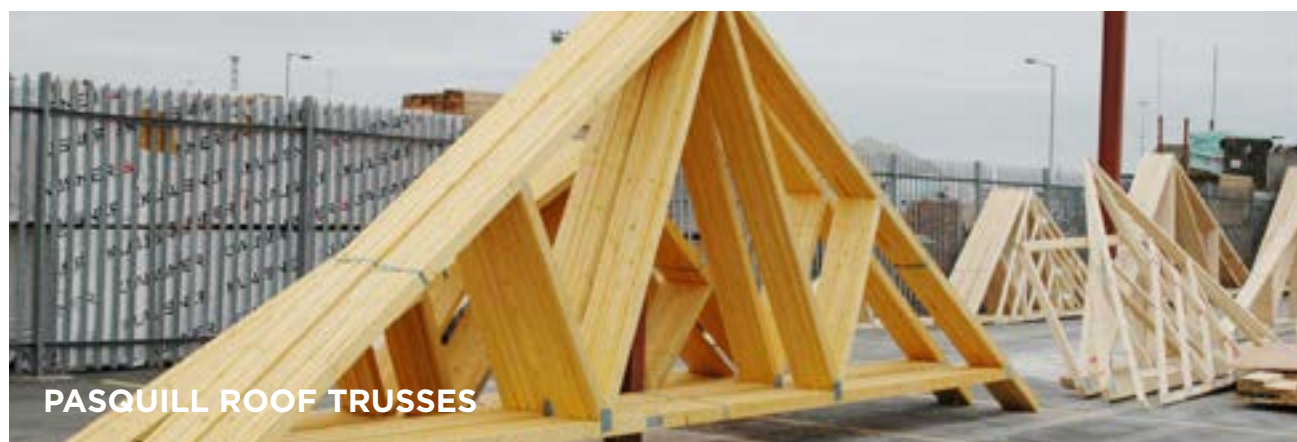
Scotframe

Timber frame is the most versatile and sustainable form of construction. It ensures high quality, reduces overall build costs and considerably shortens the build programme.

Scotframe has pioneered the development of closed panel insulation systems – their Valutherm+ panels are precision factory injected to provide airtight, maintenance free, and long-lasting insulation; cutting energy bills to virtually zero.

Scotframe timber comes from sustainable sources and is transported to manufacturing centres in bulk to reduce their carbon footprint.

[Find out more](#)



PASQUILL
Supplier and manufacturer of roof trusses, floor joists and timber frame extension kits.



Engineered roof solutions provide many benefits including speed of installation and construction with high levels of accuracy. With nationwide coverage, Pasquill offers a variety of high-quality roof trusses.

Roof trusses, also known as trussed rafters, greatly reduce the amount of time spent installing the roof structure. The vast majority of cutting-in and lining associated with traditional roof construction is eliminated.

Pasquill is able to offer a full range of panelised roof solutions. Panelised roofs can be installed in hours and provide a thermally insulated envelope, cutting heat-loss and therefore carbon emissions, boosting the home's energy-efficiency. Pasquill offers a just-in-time delivery service, so that a large amount of storage space on-site is not required. Their expert local teams are on hand to develop design plans and create quotes specific to each project.

Pasquill's expertise in manufacturing timber floor solutions with quick and easy installation offers outstanding benefits, resulting in efficient design systems with I-joists, posi-joists and floor cassettes.

[Discover more about our timber solutions](#)



HOW CAN SAINT-GOBAIN HELP SELF-BUILDERS?

If you're a first-time self-builder looking for support, Saint-Gobain UK and Ireland can support you through the journey from planning and design stages through to the materials and build.

Check out Saint-Gobain's dedicated self-build website, which features a range of inspirational content to help self-builders to plan, design and build the best, most comfortable, high-performing and inspiring homes.

How do I find land? What do I need to budget for? Saint-Gobain's self-build website has plenty of answers and is packed with blogs, real-life case studies, product solutions, downloadable guides and a free Self-Build Manager to help you stay on track.

 Visit Saint-Gobain's self-build website

Scotframe

BUILD YOUR DREAM HOME WITH SCOTFRAME

Scotframe provides whole timber kit packages, supporting you from start to finish in building your forever home. Scotframe has pioneered the development of closed panel insulation systems, which many self-builders opt for as they are faster to erect and can achieve excellent airtightness levels.

Scotframe can provide a wide range of different designs to suit budgets, tastes and space requirements as well as a range of design and architecture services to help create exactly what you need.

VISUALISE YOUR SELF-BUILD

It can be hard to imagine your dream house but Scotframe's Home Designer can help to bring this to life through 3D models of nine house styles – complete with windows, doors, external render, roof materials and internal features. You can take the reins and build your own home online. Scotframe also offers an in-house service to provide 3D images and visualisation including complete walkthroughs to provide the complete feel for the conceptual design of the building and illustrate and convey, ideas and environments.

Scotframe's in-house architectural team can support self-builders with obtaining the necessary approvals to get a project started from supplying basic planning drawings for the local authority planning office through to producing sap calculations and elemental u values to ensure your property is thermally efficient.

 Visit Scotframe's Home Designer



SCOTFRAME TIMBER FRAME HOME

CUSTOMER TRAINING

With so many specialist products on offer, Saint-Gobain has dedicated training to support its customers to create high performing buildings of the future.

Saint-Gobain brands British Gypsum, Celotex, Ecophon, Gyproc, Isover, PAM and Weber present flexible training options including online videos and classroom courses to suit a variety of learners.



**CUSTOMER TRAINING AT THE SAINT-GOBAIN
WEBER TECHNICAL ACADEMY**

For example, each Internal Wall Insulation system is supported by British Gypsum specialist installer training courses to ensure that products are installed to meet standards.

Saint-Gobain Insulation UK offer a comprehensive loft insulation online training course, which is designed to give contractors and installers an understanding of building physics including why insulation is required, condensation issues and the importance of ventilation.



Customers can also book Continuing Professional Development (CPD) at their workplace or location of choice to support their development and knowledge. These include Weber and Ecophon's RIBA (Royal Institute of British Architects) approved CPD seminars and presentations.

 Find out more about Saint-Gobain's training offer

GET IN TOUCH WITH SAINT-GOBAIN TODAY

Saint-Gobain designs, manufactures and distributes materials and solutions for the construction, mobility, healthcare and other industrial application markets. Developed through a continuous innovation process, they can be found everywhere in our living places and daily life, providing wellbeing, performance and safety, while addressing the challenges of sustainable construction, resource efficiency and the fight against climate change.

This strategy of responsible growth is guided by the Saint-Gobain purpose, "MAKING THE WORLD A BETTER HOME", which responds to the shared ambition of all the women and men in the Group to act every day to make the world a more beautiful and sustainable place to live in.

Saint-Gobain in the UK and Ireland includes some of the best-known and respected companies in the construction sector including: British Gypsum, Saint-Gobain Glass, Weber, Isover, Glassolutions, Saint-Gobain PAM and Ecophon. Together they offer a range of high performance energy-saving products and solutions to help create great living places and improve daily life.

For more information visit: www.saint-gobain.co.uk

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