



BUILD BETTER GUIDE
**SOCIAL HOUSING
RETROFIT**

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RETROFIT FOR THE FUTURE

The UK has one of the oldest housing stocks in the world, with **more than 1.6 million social homes requiring better energy efficiency**¹. We know that the urgency can't be ignored, with **1.8 houses needing retrofit works every minute**² to reach Government target to reduce greenhouse gas emissions by at least 100% of 1990 levels by 2050³. This is an incredibly challenging time for the social housing sector, with little time left to deliver improved ratings on Energy Performance Certificates (EPC) across all homes by 2030 if we are to reach net zero targets. The need to retrofit is clear, not only for the environment but also for the benefits that can be delivered for tenants, such as a reduction in energy bills, improved living conditions and better health and wellbeing.

At Saint-Gobain Interior Solutions we have a range of high-quality solutions for walls, floors and roof spaces coupled with expert services that will seamlessly meet the scope and scale of your social housing retrofit projects. We'll work collaboratively with you throughout your projects, offering a range of fabric first solutions to support you on your journey to net zero as well as additional solutions that can further improve living conditions by enhancing indoor air quality and durability and reducing the need for maintenance through wear and tear.

Visit: ¹The Social Housing Decarbonisation Fund: 10 Things you Need to Know – Retrofit Academy CIC, retrofitacademy.org

²Towns and Cities to Work Together on Home Retrofit as Calls for Green Recovery Mount – UK Green Building Council, [ukgbc.org](https://www.ukgbc.org)

³A Legal Duty to Act – Climate Change Committee, [theccc.org.uk](https://www.theccc.org.uk)



THE IMPORTANCE OF RETROFITTING CORRECTLY

Taking a fabric first approach

Whether you're completing a deep renovation or a lighter retrofit, considerations need to be given to the best approach to achieve thermally efficient, comfortable and safe homes that will stand the test of time. A holistic approach to retrofit should be taken with an emphasis on fabric first principles. Ensuring that the building is well insulated with adequate ventilation is the first step, but the design should also include careful detailing to prevent thermal bridges at junctions and penetrations. As buildings become better insulated thermal bridges become more important as any gaps in the thermal envelope will be an immediate pathway for heat loss.

Airtightness

While it's important to properly insulate and ventilate buildings, they should also be sufficiently airtight. Careful detailing of the airtightness is key in defining how 'leaky' a building is. Areas that lose heat can also lose moisture, meaning condensation is more likely to form in these spots.

Moisture management

Moisture can come from various sources such as penetrating or rising damp and condensation. If left untreated, these conditions will lead to mould growth, which can be extremely harmful to both occupants and the building.

Buildings that aren't heated sufficiently may be more prone to condensation forming on cold internal surfaces. In colder temperatures the relative humidity will automatically rise. In cold homes, occupiers are also more likely to keep windows closed to retain heat, leading to poor indoor air quality. The combination of these factors means that the colder the home, the more the relative humidity will rise, increasing the risk of condensation forming, and in turn, increasing the risk of mould growth.

Retrofitting for the future

By taking a holistic, whole-property approach - considering insulation, ventilation and airtightness - the risk of unintended consequences can be mitigated, preventing the need for expensive remedial work later down the line. Unintended consequences can arise because of issues such as poor design, the wrong choice of products or poor installation and workmanship, resulting in a building that doesn't work for owner or occupant.

PRODUCTS AND SOLUTIONS TO RETROFIT YOUR HOUSING STOCK

The type of building determines the solutions required to correctly retrofit your housing stock and transform it into a portfolio of sustainable, energy-efficient homes that improve the health and wellbeing of tenants.





Thermal performance

Buildings with walls that are moisture open, such as stone and masonry constructions will typically require systems that are also moisture open as these will continue to allow the walls to operate as they have for potentially many years. Mineral wool products such as our [Isover glass mineral wool range](#) are ideal for these walls. In other dwellings that are moisture closed, such as where the outer surface may have been rendered or clad, products such as our British Gypsum and Celotex thermal laminates may be suitable.

Our [British Gypsum GypLyner Independent Internal Wall Insulation system](#) is fully tested and covered by our [SpecSure®](#) warranty as well as a certified carded installer scheme. For properties that require a moisture open system, we have a range of Isover glass mineral wool rolls and batts that can be finished in conjunction with our plasterboard and plaster ranges.

Our range of Celotex and Isover insulation products can be used to upgrade the thermal performance of floors and roofs – whether suspended floors, traditional ceilings or pitched and flat roofs – and can be installed to fit between existing timbers with an additional layer to improve insulation and achieve current regulatory requirements. Ventilation requirements and continuity of insulation need to be maintained to prevent interstitial condensation and thermal bridging issues.



Isover Spacesaver range

Our Isover Spacesaver range comprises of glass mineral wool, thermal insulation rolls for use between timber joists. They're supplied in a choice of roll lengths and pre-cut width options to suit all projects.



Celotex range

Our Celotex range includes rigid PIR, multi-purpose, thermal insulation boards for wall, floor, and roof constructions. They're lightweight, making them easy to transport, handle and install.



GypLyner Independent

Upgrade the thermal performance and aesthetics of your space with our independent framed wall lining system.

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You need to satisfy yourself that use of products meets all relevant national Building Regulations and guidance as well as local, national and other applicable standards relevant for your construction or application, including requirements in relation to fire and applicable height restrictions. Celotex and Gyproc ThermalLine, can not be used in the external walls of buildings over 11 metres in height. Recent changes to Building Regulations mean that only non-combustible insulation or insulation of limited combustibility should be used in buildings of that height.



Acoustic performance

A range of acoustic drylining systems with varying levels of performance can be installed to reduce sound transfer and unwanted noise from adjacent properties or external sources. Noise can be reduced by incorporating products such as [Isover Acoustic Partition Roll 1200](#) and [Gyproc® SoundBloc](#) plasterboard into the design, to reduce unwanted noise.



Durability

For narrow spaces and areas that are prone to high traffic, increased durability can be achieved by finishing the construction with drylining systems using our [Gyproc DuraLine](#) and our [ThistlePro® DuraFinish](#) plasterboard.



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Isover Acoustic Partition Roll

A glass mineral wool roll that can provide high levels of acoustic performance in metal and timber internal stud walls as well as timber joist separating and internal floors. To support ease of installation, it is supplied in 600mm widths for an easy friction fit between stud centres.

Gyproc SoundBloc

Our high density 15mm acoustic plasterboards help make spaces quieter. They help occupants get the most out of their spaces by reducing noise from entering the room.

ThistlePro DuraFinish

Offers 60% more scratch resistance than standard plaster, meaning it keeps walls looking smooth and clean in busy areas. It shrugs off scratches, chips and bumps so that walls stay in tip-top condition for longer. This makes it ideal when you need to cut maintenance costs.

Gyproc DuraLine

A 15mm high density plasterboard that's ideal for lining busy areas like corridors and landings. The high density core and fire resistant additives mean that it shrugs off impact.

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Indoor air quality

Better indoor air quality is proven to benefit the building occupant's health and certain research studies show it can positively impact mood by reducing fatigue and increasing concentration. Our skim finishing plaster, **ThistlePro PureFinish** can be used to provide tenants with cleaner indoor air. **ACTIVair® technology** within the plaster absorbs formaldehyde released by items such as carpets and paints and turns it into harmless compounds so that it can't be released back into the room¹.



ThistlePro PureFinish

Improve indoor air quality and help people enjoy healthier spaces. ThistlePro PureFinish plaster helps to make indoor air healthier by absorbing one of the most common airborne pollutants¹.

Other products in our ThistlePro plaster range

Our full range of plaster finishes also includes **ThistlePro FastSet Finish**, a patching and repair skim finishing plaster for small jobs and **ThistlePro Magnetic**, a plaster that attracts magnets, meaning items can be hung on walls without damage. The range is complemented by a full suite of preparation products, tapes and accessories.



ThistlePro FastSet Finish

A plaster for small spaces or patch and repair jobs that gives a faster set time straight out of the bag, increasing efficiency and productivity for maintenance teams.



ThistlePro Magnetic

This plaster's strong magnetic attraction means tenants can hang paintings and other items without any fixings, and then move them without leaving any damage.

¹Formaldehyde reduction is based on experimental data following ISO16000-23 standards from 0.4m² to 1.4m² installed/m³ room. Lifetime has been confirmed experimentally and analytically on a commercial board sample in the frame of a collaborative work with independent certified body ULE and Pr J. Zhang, University of Syracuse, expert in Environmental Chemistry and Engineering, Mechanical ventilation and Indoor air quality.

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SERVICES THAT SUPPORT YOU

- Project Specification Managers to support with technical details, system, and product proposals, as well as direct liaison with architects and in-house design teams as required.
- Business Development Managers to support you and your appointed contractors during the project.
- Contractor training with our four Build Better academies offering a range of Internal Wall Insulation, drylining and plastering courses. [View our full training prospectus here](#)
- A Technical Support Team to provide you with a range of services such as bespoke detailing, project pack creation, U-value calculations and condensation risk analysis.

WHO WE ARE

Saint-Gobain Interior Solutions is part of the Saint-Gobain Group. Our purpose is to make the world a better home.

Our three brands British Gypsum, Celotex and Isover offer a full range of high performance drylining and insulation solutions. Our combined know-how and technical expertise enable us to support you, through the entirety of your retrofit projects.

Through our brands, we can help you create sustainable environments that support the well-being of all of us.

On the road to net zero carbon by 2050

As part of the Saint-Gobain group, we're working towards the Saint-Gobain target to achieve net zero carbon by 2050.

We'll play our part in living up to this purpose, and meeting this target through our brand mission to build better for people and the planet.

We've developed a sustainability roadmap which sets out how we'll achieve our overall target for 2050, along with meeting the interim targets set by Saint-Gobain for 2030. These are important to make sure we're on track.

We know there's a lot of work to do to achieve these. We know we must act now, and with unwavering commitment if we're to make real strides in the coming years. We must look to reduce the environmental impact of our buildings at every stage. We understand the importance and significance of this target and want to continue to help build better for people and the planet for the challenges of today and the future. We're making progress - but we know we need to do more and go quicker and further in some areas.

Our targets for 2030 are broken down into different areas of our operations. These targets include things such as -50% water withdrawal, -33% reduction in Scope 1&2 emissions, -16% reduction in Scope 3, -80% non-recovered production waste.

[Click here to read more about our strategy and view our full sustainability roadmap.](#)

We care about building better for people and the planet.





**SAINT-GOBAIN
INTERIOR SOLUTIONS**

Head Office, East Leake,
Loughborough,
Leicestershire, LE12 6HX
T: 0115 945 1000
sgis-uk.com

For more information

on how we can support you with retrofit solutions for social housing or to send us an enquiry, please [click here](#).

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