# **Build for Life**

Build for Living, Build for Performance, Build for the Future



Build for Life



# Welcome to Self Build with Mannok

Here at Mannok, we've developed unique solutions and products for self builders in Ireland which are designed to help achieve a comfortable, more sustainable home more easily.

We've looked at the key considerations for those taking on the challenge of self building and have built flexible solutions which combine the support and technical expertise which can be invaluable to a self builder with superior performing products and solutions to create a home which fits your lifestyle with significantly reduced environmental impact.

The added benefit is the cost savings on offer on multiple essential building materials with our tailored self build packages.



#### SUSTAINABLE SOLUTIONS

At Mannok, we take our responsibilities as a large manufacturer very seriously, and are committed to ensuring we produce and supply quality goods in a way that has minimum impact on the world we live in, whilst making a positive contribution to the local areas we operate in and the people we work with.

We have comprehensive programmes in place to achieve these goals, focusing on environment, biodiversity, community and people.

These values of sustainability and responsibility are a core part of our culture, and are ingrained in every area of our business, from our products to our people, our processes and procedures.

For self builders in Ireland, designing a more sustainable home is becoming an increasingly important consideration and our team are on hand to advise you on how our products and solutions can help you achieve this whilst maximising the comfort and performance of your home..

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SELF BUILD WITH MANNOK GIVES YOU



UNIQUE SUSTAINABLE BUILDING SOLUTIONS



PRODUCT BUNDLE



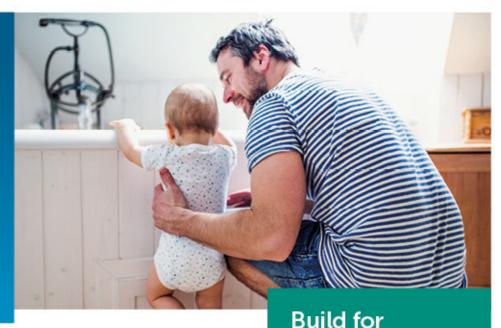
EXPERT TECHNICAL SUPPORT



### **Build for Living**

Build a home designed for comfort, with regulated temperatures and longterm energy savings.

One of the most important considerations for anyone building their own home is the experience of living in it, so we offer a selection of products and solutions to help create a home that's built to fit your lifestyle and provide superior comfort levels.



## **BUILD FOR LIFE**

Build for Living, Build for Performance, Build for the Future

## Performance Build a super insulated

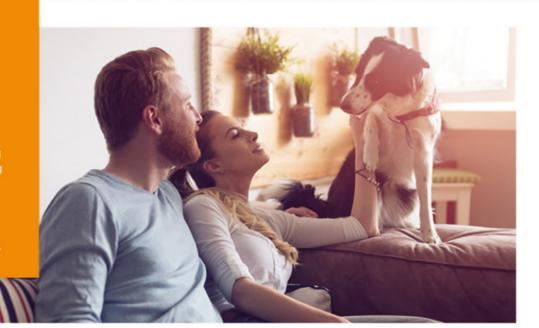
Build a super insulated home that's almost 3x stronger and 3x more fire resistant.

Unique to Mannok, SIMS by Mannok is an a ideal fit for self-builders in Ireland, offering superior performance from a modern method of construction.

## Build for the Future

Build a sustainable, more durable home, with lower environmental impact designed for long-term investment.

Every self-builder is looking to the future when building their home, seeking to build a home that's a longterm investment, which is economical and which is enviromentally sustainable.



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BUILD WITH EASE, BUILD WITH SPEED, BUILD WITH CONSCIENCE

# **Build with SIMS**

cavity wall insulation

#### Up to 60% less build A Super Insulated Home for Self Build

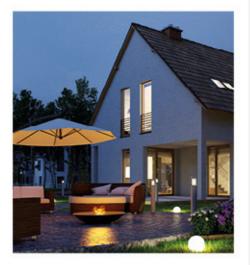
time vs traditional SIMS by Mannok, the Super Insulated Masonry Solution, is the ideal construction method for self-builders in Ireland, which delivers a home which is a step above the major alternatives on the market in terms of thermal, structural and fire performance.

> Ultimately, it is the perfect construction method for home builders to create the most comfortable, sustainable home in the quickest time, and offers the best value for money.

#### **How SIMS Compares**

Comparing SIMS by Mannok with the other main construction methods on the market shows that it is clearly the best option for self-builders.

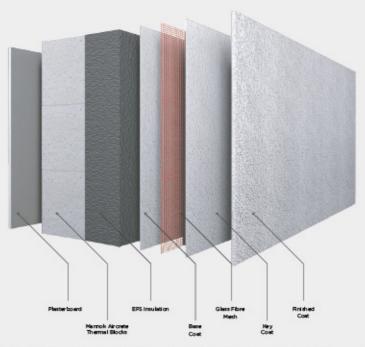
	SIMS	TIMBER FRAME	TRADITIONAL CAVITY
SPEED OF CONSTRUCTION	Rapid	Rapid	Slow
THERMAL PERFORMANCE	Excellent	Good	Fair
STRUCTURAL PERFORMANCE	Excellent	Fair	Good
FIRE PERFORMANCE	4 hrs	30 mins	2 hrs
COST	Best Value	Most Expensive	Least Expensive



Individually, each element offers a great deal of performance benefits, but combined, they provide an unparalleled superior home.

#### THE BUILDING METHOD

#### Combining high performance elements in one superior solution



SIMS by Mannok combines the benefits of each building element to work together effectively in a way that is superior to the alternative methods. The key construction elements are:

#### MANNOK AIRCRETE THERMAL BLOCKS

Build using Ireland's most superior thermal block

Mannok Aircrete thermal blocks are the best performing thermal blocks available on the market in Ireland for combined thermal and structural performance. The unique composition and technically advanced manufacturing method produces blocks which meet or exceed structural compliance standards and offer superb insulation properties, with significantly better thermal performance than any other comparable block.

This super thermal performance is perhaps the most appealing thing about a SIMS home for self-builders, which addresses the biggest causes of heat loss in typical homes, heat loss through the walls and breaks in the insulation fabric, known as thermal bridges. Thermal bridging can account for up to 35% of the entire building's heat loss, but heat loss through thermal bridges can be reduced by up to 80% using Mannok Aircrete blocks.

As a result, a SIMS house is more economical to run, with reduced energy costs for the long term.

The unique properties of Mannok Aircrete blocks also result in regulated internal temperatures with seasonal heating and cooling effects.

SIMS walls have a single leaf masonry structure, as opposed to traditional cavity walls which have two masonry leafs. This reduces the number of blocks required by half, meaning the walls can be built up much quicker.

#### **ETICS - EXTERNAL THERMAL INSULATION COMPOSITE SYSTEM** Build better protected, better performing walls

SIMS incorporates an External Thermal Insulation Composite System (ETICS) that has been used in mainland Europe since the 1960s and has become increasing popular in Ireland in recent years. ETICS refers to the multiple layers of materials and components which are fitted to the external face of the blockwork, providing robust protection against the elements whilst insulating the building. The composite system essentially wraps your home in insulation, complimenting the Mannok Aircrete thermal block and providing another high performance barrier to heat loss.













wall construction

\*when built with thin-joint mortar



timber frame



up to 20% CHEAPER than timber frame construction



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SELF BUILD WITH MANNOK PACKAGE

#### UNIQUE SUSTAINABLE BUILDING SOLUTIONS

## Choosing a Self Build with Mannok Package

Choosing a Self Build with Mannok package gives you a comprehensive building solution which can't be found anywhere else.

Our range of high-performance construction products mean you can source multiple materials in one place, simplifying the process and ensuring you get a better deal.

Our tailored packages offer design flexibility and our technical experts will work with your architect to ensure your new home is designed to perform, meets or exceeds the relevant regulatory requirements, and most importantly is designed to give you comfortable living.

The added benefit is the cost savings on offer with discounts available on multiple essential building materials with our tailored self build packages.

...cost savings on offer on multiple essential building materials with our tailored self build packages.

## Benefits with you in mind

#### SIMPLICITY

A dedicated account manager will help simplify the process, with the benefit of dealing with one company for many essential building products.

#### TAILORED SOLUTIONS

Your self build package is unique to your house. We will work with you and your architect to tailor a bespoke package for your home design.

#### COMPREHENSIVE

No other manufacturer in Ireland can offer the same range of products in one bundle deal, complete with a comprehensive support service.

#### **TECHNICAL EXPERTISE**

We have a team of industry leading technical and design experts ready to help you achieve a more efficient house, which is designed for comfort and performance.



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## A Self Build with Mannok Package gives you...



## UNIQUE SUSTAINABLE BUILDING SOLUTIONS

Using Mannok Aircrete, Ireland's best performing thermal blocks with excellent sustainability credentials, in your wall construction to design a high-performance home.

more information on pages 4-5, 12-13



#### PRODUCT BUNDLES

Build your product bundle with thermal blocks, insulation, precast concrete floors, stairs, landings and balconies and roof tiles all in one package.

more information on page 7



## EXPERT TECHNICAL SUPPORT

Our industry leading technical experts are ready to help you and your architect achieve a more energy efficient design using Mannok products.

more information on page 10



## DEDICATED ACCOUNT MANAGER

Here to help simplify the process, your Dedicated Account Manager can advise on the best solutions for your home and help you build your package to suit.

more information on page 15





#### SELF BUILD WITH MANNOK PACKAGE

## **Tailoring Your Package**

#### CHOOSE YOUR WALL CONSTRUCTION METHOD

Perhaps the most important decision to be made when tailoring your self build package is which construction method to choose for your walls. Using Mannok Aircrete thermal blocks, Self-builders in Ireland now have options which can dramatically elevate the quality, comfort and sustainability of their homes.

Mannok Aircrete blocks offer the ultimate solution for a super thermally efficient home, insulating 10x better than standard dense concrete blocks and significantly reducing heat loss to ensure the long term energy efficiency of your home.

#### SIMS BY MANNOK

The most superior wall construction method which gives you a super insulated home which outperforms the alternatives when it comes to thermal performance, structural performance and sustainability.

more information on page 4

#### MANNOK AIRCRETE INNER LEAF

A solution which combines the traditional construction method of cavity wall construction with the superior thermal properties of Mannok Aircrete blocks, elevating the thermal performance of your home.

more information on page 12



#### CHOOSE YOUR WALL, FLOOR & ROOF INSULATION

The selection of roof, wall and floor insulation products will be dependent on the building design and the thermal requirements. Our Technical by Mannok team can work directly with your architect to provide calculations and advise on the best insulation solutions to suit the design.



## CHOOSE YOUR PRECAST STAIRS, FLOORS, LANDINGS & BALCONIES OR TERRACES

Precast stairs, floors, landings and balconies or terraces can be custom made to suit the design of your house. A full in-house design team can work with your architect to create these customised products, with site delivery and installation also available.



#### CHOOSE YOUR ROOF TILES

Choosing your roof tiles can dramatically change the look of your home. We have a full range of colours and styles to choose from, giving you the opportunity to achieve a look you can be proud of, whether you want a traditional or modern style.

READY TO GET STARTED? email: selfbuild@mannokbuild.com



#### SELF BUILD WITH MANNOK PACKAGE

## **Technical Support Services**

#### PRE-DESIGN CONSULTATION

Our experts will be on hand to discuss your specific self build project, to advise on design choices and offer recommendations on which construction method, products and services are suitable for you.

#### BESPOKE PRODUCT SPECIFICATIONS

Working together with you and your architect, our technical experts will provide bespoke product specifications for your building design.

#### ① U-VALUE CALCULATIONS

U-value calculations are essential to assess the thermal performance of your building design by calculating the effectiveness of the building materials as insulators. We will provide these calculations to your architect, or advise how to achieve the best thermal performance using Mannok products.

#### THERMAL MODELLING & THERMAL BRIDGING FACTOR CALCULATIONS

Building regulations are driving the requirement for certified thermal bridging calculations, which are calculated by analysing the building fabric to assess and calculate localised heat loss through thermal bridges, or breaks in insulation.

Commissioning thermal modelling can be costly, but we can provide this service as part of your bespoke package with our in-house NSAI Accredited Thermal Modellers. We will provide certified thermal bridging calculations, which are essential to achieving the best energy rating for your building design. Psi values or Y-factor calculations are provided, dependent on requirements for your region.

#### PRECAST BESPOKE DESIGN SERVICE

Full bespoke design service to create unique precast products to meet your specification requirements, with all precast units manufactured on custom built moulds.

#### PRODUCT VOLUME ESTIMATES

One of the challenges for self builders is calculating the volume of products they will need to estimate their overall costs. Our Technical by Mannok team will help by estimating the volume of Mannok products required based on your plans and providing an overall cost estimate for your Mannok products.

#### PRECAST INSTALLATION

Our award winning Precast installation teams can ensure safe and secure fitting of all precast units. Fitting service includes initial risk assessment and reliable delivery service to ensure products are where and when you need them

### ON-SITE SUPPORT SERVICES \*SIMS PACKAGE ONLY

Our dedicated Engineer can provide on-site guidance for your builder on building with thin joint construction, including on-site training if required.

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CAVITY WALL CONSTRUCTION IS THE MOST COMMON METHOD USED IN BUILDING HOMES IN IRELAND. TRADITIONAL CAVITY WALLS CAN BE ELEVATED TO DELIVER FAR SUPERIOR COMFORT LEVELS IN YOUR HOME SIMPLY BY REPLACING STANDARD DENSE CONCRETE BLOCKS WITH MANNOK AIRCRETE THERMAL BLOCKS IN THE INNER LEAF OF THE CAVITY.

Mannok Airdietelliner

Mannok Aircrete thermal blocks are the best performing thermal blocks available on the market in Ireland for combined thermal and structural performance. The unique composition and technically advanced manufacturing method produces blocks which insulate ten times better than dense concrete blocks, whilst still meeting or exceeding all regulatory structural requirements.

The biggest area of heat loss in the home is through the walls, accounting for up to 35% of the building's heat loss.

Mannok Aircrete blocks have optimal thermal mass to ensure internal comfort, avoiding overheating in hot summer days and rapid cooling at night, whilst still providing a more rapid response to central heating during colder periods than traditional dense blocks. With these more regulated temperatures, your home becomes a more comfortable living space all year round.

The biggest area of heat loss in the home is through the walls, accounting for up to 35% of the

building's heat loss, Mannok Aircrete thermal blocks will improve the U-value of the wall, which is the measure of the rate of heat transfer through the wall. By improving the U-value of the wall, you can significantly reduce the overall heat loss from the building.

Another significant area of heat loss is through what are known as thermal bridges, or gaps in the insulation fabric. This can account for up to another 35% of heat loss from the home and can give rise to mould growth which is both unhealthy and unsightly.

Mannok Aircrete Thermal Blocks insulate 10 times better than standard

concrete blocks.

#### MANNOK AIRCRETE THERMAL BLOCKS

Insulates 10 times better than standard concrete blocks

Reduces heat loss through thermal bridging by up to 80%

Eliminates mould growth

Far superior comfort levels

Rapid heating response with more regulated internal temperatures

Long term energy savings

More economical to run with reduced heating costs

#### MANNOK AIRCRETE -**BUILD WITH CONSCIENCE**

Made from up to 80% recycled materials

Reduced environmental Impact thanks to the lower energy consumption and carbon emissions

Locally and responsibly sourced raw materials

Third party verified **Environmental Product** Declarations

A+ Green Guide Rating

Mannok Aircrete thermal blocks are known to be one of the best solutions to heat loss through thermal bridging in Ireland, reducing thermal bridging by up to 80% versus standard dense concrete blocks. By introducing Mannok Aircreteto the inner leaf of the cavity wall, thermal bridging is taken care of almost by default.

Build for Life

Introducing Mannok Aircrete blocks into the inner leaf of your cavity wall is a simple move to a better insulated home which will also offer optimum response to heating and cooling and help eliminate heat loss and mould growth to ensure comfortable living conditions.

With more regulated temperatures, your home becomes a more comfortable living space all year round.

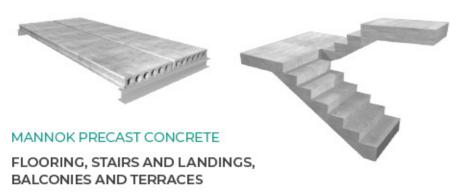
Whatever stage of designing your home you're at, Mannok Aircrete inner leaf construction could be the simplest way to improve the thermal performance of your home as the switch can be made even after your plans have been approved. Our expert technical team can advise on making the change and will work with your architect to help design your energy efficient, more sustainable home.

**READY TO GET STARTED?** email: selfbuild@mannokbuild.com

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#### PRODUCT INFORMATION

## **Self Build Products**



Exceptional quality precast elements with a full, expert design team on hand to work with you and your architect to create bespoke products to perfectly suit your home.

Your custom-built floors, stairs and landings, balconies or terraces will be extremely structurally efficient, with excellent exposure and fireproofing qualities and will also assist with sound reduction.

Take advantage of this modern method of construction which offers design flexibility and efficient offsite manufacturing. Our precast products are manufactured in a carefully controlled factory environment, creating safe, strong, reliable and long-lasting products with rigorous factory-controlled quality procedures to eliminate many common on-site issues.

Our award-winning installation crew will bring your Precast products to site and ensure efficient and safe installation with a risk assessment included before works commence.

At Mannok, our Precast products are produced to the highest quality standards and come with the reassurance that you are working with an expert team to achieve the ideal solution for your self build home.

#### MANNOK ROOF TILES

#### A CHOICE OF COLOURS, TEXTURES AND STYLES

Mannok offers a range of high quality, high performance concrete roof and ridge tiles to help achieve the right look for your new home.

The extensive range of tiles gives

The extensive range of tiles gives superb choice with a broad portfolio of colours

and textures to complement the design of your home's exterior.

With four different style ranges, you can capture the right character, whether you want a traditional or more modern style.

For a more tradition look and feel, we have the Western range which is a flat, smooth tile, or the Loch Erne range for a gentle flowing pattern that gives instant visual appeal.

If you favour a more modern style, our Rathmore range gives a smooth, sleek finish, or our Devenish tile offers a very stylish textured finish.

Whichever style you choose, we have a range of colour options available to help give the most aesthetically appealing finish to your roof.



## MANNOK PIR & EPS INSULATION

## FLOOR, WALL AND ROOF INSULATION

Mannok's extensive range of PIR and EPS insulation products boast top-performing thermal properties to help achieve a more comfortable, energy efficient home. With purposely designed products for floors, walls and roofs, our expert technical team will work with you and your architect to advise on the best products from the Mannok Insulation range for your self build home.

Creating a home to suit your lifestyle means designing for comfortable living and this starts with the very fabric of your house. Combining thermally efficient Mannok products will help achieve your high-performance home more easily by minimising heat loss and helping eliminate drafts, damp and mould.

The low thermal conductivity of Mannok PIR Insulation boards maximises the performance of their insulation properties and our boards are designed to guarantee compatibility with other essential products in your build.

The full range of Mannok PIR Insulation boards have zero Ozone Depletion Potential (ODP) and third party verified Environmental Product Declarations, making them not just thermally efficient but an ideal choice to design a more sustainable home.

#### MANNOK AIRCRETE THERMAL BLOCKS

## THE SIMPLE WAY TO ACHIEVE THERMAL EXCELLENCE

For combined thermal performance, strength and durability, Mannok Aircrete blocks are the best performing thermal blocks in Ireland. They offer exceptional thermal performance thanks to their unique composition and the highly technical manufacturing process. These aircrete blocks are noted for their superb insulation properties, which ensures your home can achieve optimum performance.

Aircrete blocks are lightweight and easy to handle, which makes lifting and manual handling significantly easier and quicker on site. It's the ease of handling and construction associated with these lightweight thermal blocks which have seen them become commonplace on sites across the UK and Europe and increasingly across Ireland.



PRODUCT INFORMATION

Aircrete blocks also have an A+ Green Guide rating and Mannok Aircrete blocks are manufactured using up to 80% recycled materials, making them an excellent choice for sustainable construction. Using Mannok Aircrete thermal blocks also significantly increases the energy efficiency of buildings, thus reducing the lifetime carbon emissions and your energy costs.

#### SELF BUILD WITH MANNOK PACKAGE

## **Dedicated Account Manager**

One of the key benefits of a Self Build with Mannok Package is the added service of a Dedicated Account Manager to ensure your bespoke package perfectly suits your home and to make the process simple and smooth for you.



#### READY TO GET STARTED? GET IN TOUCH TODAY

Tel: 08000 322 122 (NI) 1800 322 122 (ROI) Email: selfbuild@mannokbuild.com www.selfbuildwithmannok.com

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