

more insulation or living space

More with less

Eco-brick



©Wienerberger Ltd 01/23. All rights reserved. Please note, due to the limitations of the printing process and screen calibration settings when viewing the online version, you are advised to obtain product samples prior to purchase. All information contained in this book is believed to be correct at the time of going to press. Wienerberger reserve the right to add, delete or alter products without notice and ecommend you contact us to obtain the latest information.

About Wienerberger

Founded in 1819 and with headquarters in Vienna, Wienerberger Building Solutions is the world's largest producer of bricks and clay blocks, as well as being the market leader for clay roof tiles. We have 19,000 employees at 216 production sites in 28 countries. In the UK, Wienerberger has 13 production sites and 7 distribution depots, with our head office in Cheadle, Cheshire.

Wienerberger is the UK's leading provider of wall, roof and landscaping innovations. We offer one of the broadest product portfolios in the construction business, including clay facing bricks (stock and wire-cut), specialist engineering bricks, the Porotherm clay block system, façade solutions including SVK fibre cement panels, the Corium cladding system and a wide range of brick slips. We also offer a full range of Sandtoft and Koramic clay and concrete roofing products, Keymer handmade roof tiles, bespoke heritage products and a range of domestic and commercial pavers.

With excess of 1000 products across wall, roof and landscaping categories, we offer building solutions across the whole envelope. From the latest in construction innovation to traditional handmade and heritage techniques, we're able to provide our customers with a whole suite of added value systems and services.

As a company, we believe that everything we do should make a lasting contribution towards creating a better quality of life.

Find out more about our products and services at www.wienerberger.co.uk

Contents

- 04 Changes to UK Building Regulations
- 05 What is Eco-brick?
- 06 Benefits in brief
- 07 Why Eco-brick is the right choice for you
- 09 The Eco-brick range
- 12 Eco-brick accessories
- 14 Wall build solutions
- 18 On-site support and service
- 20 The colours of Eco-brick
- 22 Looking for some inspiration?





Changes to UK building regulations

What is Part L?

The introduction of changes to the Part L building regulations in June 2022 marked the first transitional step towards the Future Homes Standard.

The regulations cover the conservation of fuel and power before the introduction of the Future Homes Standard in 2025, which will then set out a framework to help the construction industry and homeowners reach the UK's net zero targets in 2050.

What does Part L cover?

All new homes must now produce a minimum of 31% (England) and 37% (Wales) 32% (Scotland) less CO₂ emissions that had been acceptable under the previous Part L of building regulations.

There are multiple changes that new housebuilders must make including increased energy performance standards.

The changes will have far-reaching implications for the way in which the construction industry designs, plans, and builds future new homes in the UK*.

What will the Future Homes Standard cover?

The Future Homes Standard will ensure that new homes built from 2025 produce 75-80% less carbon emissions. The Fabric Energy Efficiency Standard (FEES) will act as a key performance metric that new homes will be assessed against.

How will Part L impact building fabric?

Part L will have a significant impact on the future choice of building fabric. The construction industry must adopt a 'Fabric First' approach, which means opting for high-performance fabric materials that minimise energy use and, in turn, reduce a home's operational carbon footprint.

Housebuilders must opt for highperformance fabrics that reduce energy demand for heating, cooling, ventilation, hot water, and lighting.

*Note, Scotland's regulatory requirements are covered by a Technical Handbook. Scotland requires a 32% CO₂ saving over 2015 energy standard. The Scottish government has decided to defer the implementation of the December 2022 Technical Handbooks by two months to 1st February 2023.



What is Eco-brick?

A slim-line brick that offers **more** thermal capacity **with** increased insulation & **less** upfront and embodied carbon

Eco-brick is the perfect choice for environmentally aware housebuilders and specifiers who must achieve the uplift to standards in Part L of the building regulations. It enables you to achieve a reduction in upfront embodied carbon per square metre of brickwork.

The Eco-brick system offers all the performance and aesthetics of a standard format brick system, its slimline profile offers an impressive 37.5mm of additional cavity space which when used for extra insulation will result in lower U values or, will give the option to reduce the overall wall footprint to provide additional internal living space.

Eco-brick system comes with its own accessories and is available in a wide range of colours and has been used successfully in Europe for over a decade.

Having received NHBC Accepts certification, and with Wienerberger on hand to provide on-site support, Ecobrick is ready to be adopted across the UK, by housebuilders who want a competitive edge.



37.5mm

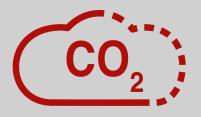




Benefits in brief



Up to 31% reduction in upfront embodied carbon.



Up to 5 tonnes of CO_2 saved through reduction in transportation.



36% slimmer profile allows increased insulation.



Up to 36% reduction in mortar and water requirements.



Recognition of an innovative system that has been extensively assessed by a third party to meet robust NHBC standards*.



Eco-brick has been tried, tested and used successfully in Europe for over a decade.



Up to 37% reduction in transport journeys.



36% lighter in weight.



On-site support and service options available.

PLEASE NOTE | All measurements are based on Eco-bricks produced in our Warnham factory compared to their equivalent in standard English size. All calculations are based on per square metre of brickwork. Modelling is based on a 3 bedroom house (8,000 bricks) and an estate comprising of 100 houses. Transportation is based on an average delivery of 114km.

All calculations used are available upon request by emailing wbukmarketing@wienerberger.com

EPDs for Warnham bricks in standard English format and Eco-brick format are in production to confirm carbon reductions.

* Pampas, Heywood Red, Pelham Antique, Langdale, Oud Romaans and Bowland have already received the NHBC Accepts certificate. The remaining products are due to receive their certificates imminently.

Why Eco-brick is the right choice for you

Eco-brick stands apart as an evolutionary alternative for innovative housebuilders.

A first of its kind in the UK, Eco-brick offers a sustainable building solution to forward thinking housebuilders who are wanting to meet the advisory target of the government's New Homes Strategy aiming to deliver 300,000 new homes a year, as well as new regulatory and legislative requirements including the Future Homes Standard.

Eco-brick offers the industry a paradigm shift towards better insulated building stock, improved energy efficiency and reduced upfront carbon emissions.

The changing face of homes

At Wienerberger, we adopt a 'Fabric First' approach across our building products and materials and are continuously investing in product development to ensure we can help housebuilders meet the changing shape of our homes and communities. The use of Eco-brick whether singularly or with our clay Porotherm blocks offers the potential to lower U values.

What are U values?

U values measure how effective a home's fabric is at preventing heat transference between the inside and outside of the home. The lower the U value the better, as this indicates more thermally resistant wall constructions.

More insulation or living space

A **36% slimmer profile** offers increased insulation. This provides the opportunity for potential savings on energy bills by adding an additional 37.5mm of insulation or allows potential increase in living space via a reduction in the wall footprint. Using this additional space for thicker insulation will help to deliver walls with better insulating performance. This in turn will improve the building's overall energy efficiency and create the opportunity for improved EPC ratings and lower operational energy demand and bills for homeowners.

Easy to build with

Eco-bricks are easier to handle as they are 36% lighter in weight. They are laid using traditional techniques with minimal awareness training required, making them easy to build with.

Eco-bricks also have the potential to reduce the risk of Repetitive Strain Injury when used long term.

Upfront embodied carbon reduced

Less raw material and energy is used in manufacturing which results in a **31% reduction in upfront embodied carbon** per square metre of brickwork.

Less mortar means less water

There are potential cost savings for housebuilders when building with Ecobrick as it requires up to **36% less mortar** due to its narrower profile. A reduction in mortar also generates a reduction in onsite water requirements.

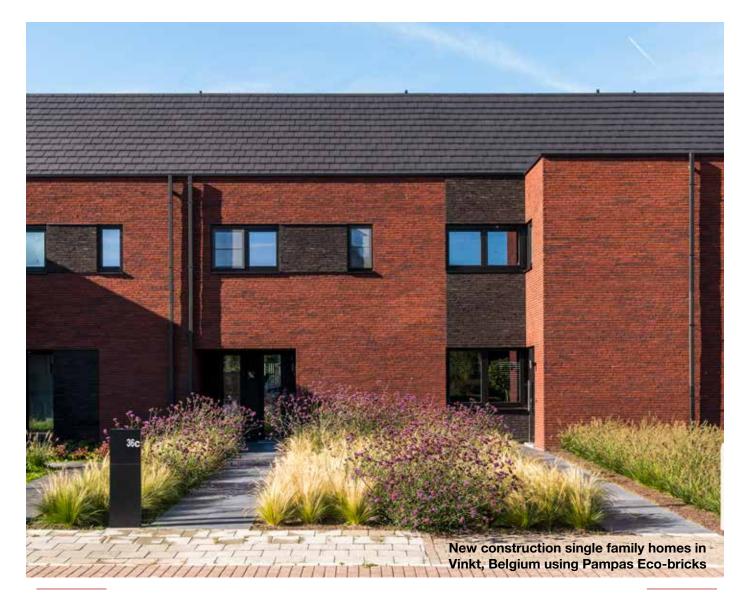
Fewer journeys = fewer emissions

Slimmer brick means more bricks per load and a this can lead to a potential **37% reduction in the number of HGV journeys** required. This reduction will have a knock on effect on emissions. Up to **5 tonnes of CO₂** could be saved, thereby reducing housebuilders' environmental impact (calculation based on a site of 100 houses).

In addition, fewer HGV deliveries has social benefits too, including reducing noise nuisance, air pollution and safety risks for communities.

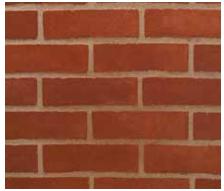
Finally, Eco-brick is sold as a system with all required accessories. This includes take off calculations and the supply of all component parts needed.

Eco-brick has all the properties of a standard clay brick including strength, durability and the ability to deliver a quality build with longevity.



The Eco-brick range

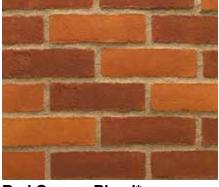
Eco-bricks are available in a number of formats, manufactured here in the UK and imported from Europe. They are available in a range of beautiful colours to meet the aesthetic needs of your projects.



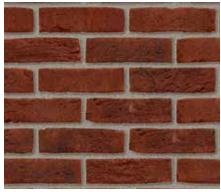
Warnham Red*



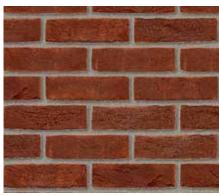
Chartham Multi*



Red Orange Blend*



Pampas



Haywood Red



Jado Red

Product name	Type	Production factory	Dispatch location	Size	tolerance	Durability	Active soluble salts	Compressive strength (N/mm ²)	Water absorption (%)	Pack quantity	Individual dry brick weight (Kg)
				Mean Range B			BS EN 771-1				
Warnham Red	S	Warnham	Warnham	T2	R1	F2	S2	12	15	800	1.53
Chartham Multi	S	Warnham	Warnham	T2	R1	F2	S2	12	15	800	1.53
Red Orange Blend	S	Warnham	Warnham	T2	R1	F2	S2	12	15	800	1.53
Pampas	S	Lanaken	Import depots	T1	R1	F2	S2	25	14	904	1.48
Haywood Red	S	Lanaken	Import depots	T1	R1	F2	S2	25	14	904	1.49
Jado Red	S	Lanaken	Import depots	T1	R1	F2	S2	25	14	904	1.49
										5	s = Stock

*The panels shown are standard facing bricks and may have slight variations in them.



Pelham Antique



Clarus Cream



Oud Romaans



Bowland



Muria Yellow



Nila Cream



Saturn Grey



Kassandra Multi



Helios White



Langdale





Olde Cheshire

Product name	Type	Production factory	Dispatch location	Size tolerance		Durability	Active soluble salts	Compressive strength (N/mm²)	Water absorption (%)	Pack quantity	Individual dry brick weight (Kg)
				Mean	Range	BS EN 771-1					
Pelham Antique	S	Lanaken	Import depots	T1	R1	F2	S2	25	14	904	1.48
Muria Yellow	S	Lanaken	Import depots	T1	R1	F2	S2	25	17	904	1.47
Helios White	S	Kortemark	Import depots	T1	R1	F2	S2	25	17	880	1.48
Clarus Cream	S	Peruwetz	Import depots	T1	R1	F2	S2	25	17	840	1.54
Nila Cream	S	Lanaken	Import depots	T1	R1	F2	S2	25	17	904	1.53
Langdale	S	Lanaken	Import depots	T1	R1	F2	S2	25	17	904	1.53
Oud Romaans	S	Lanaken	Import depots	T1	R1	F2	S2	25	14	904	1.48
Saturn Grey	S	Peruwetz	Import depots	T1	R1	F2	S2	25	14	840	1.48
Remo Grey	S	Lanaken	Import depots	T1	R1	F2	S2	25	14	904	1.47
Bowland	S	Lanaken	Import depots	T1	R1	F2	S2	25	14	904	1.47
Kassandra Multi	S	Beerse	Import depots	T1	R1	F2	S2	12	15	798	1.49
Olde Cheshire	S	Beerse	Import depots	T1	R1	F2	S2	12	15	798	1.17

S = Stock







Eco-brick accessories

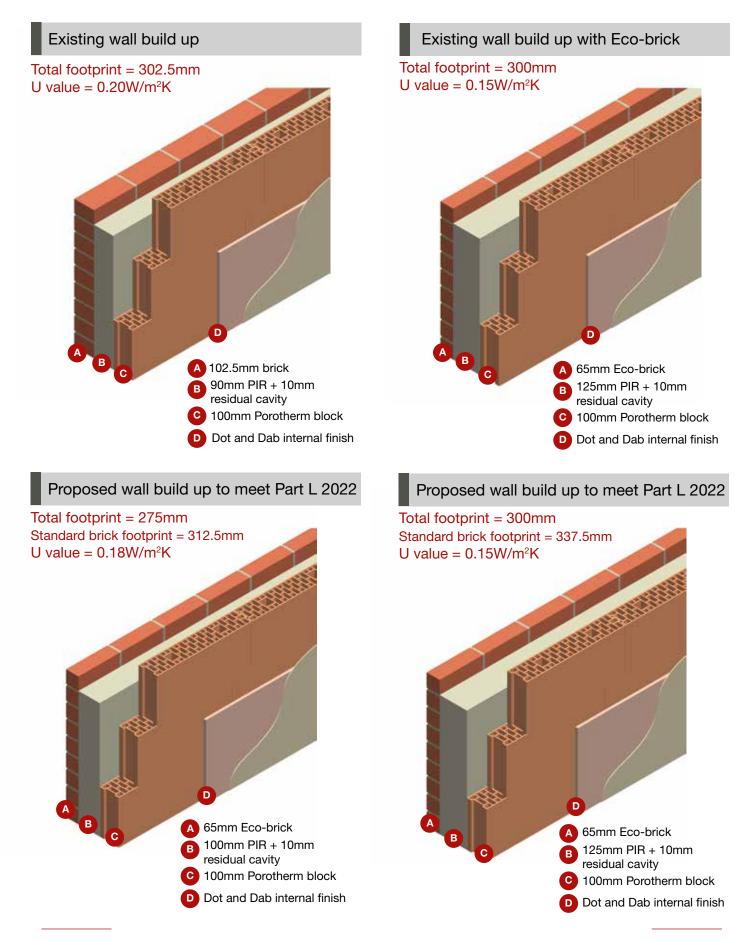
The Eco-brick system comes with a range of its own accessories specially designed to work with the reduced brick width of 65mm. All accessories will be available and supplied as part of the Eco-brick system which means we will calculate and supply the right accessories according to the requirements of your projects.

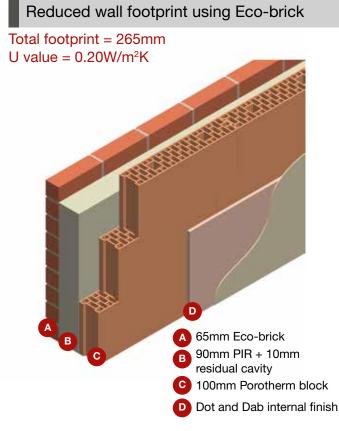


*A range of corner brick options are available.



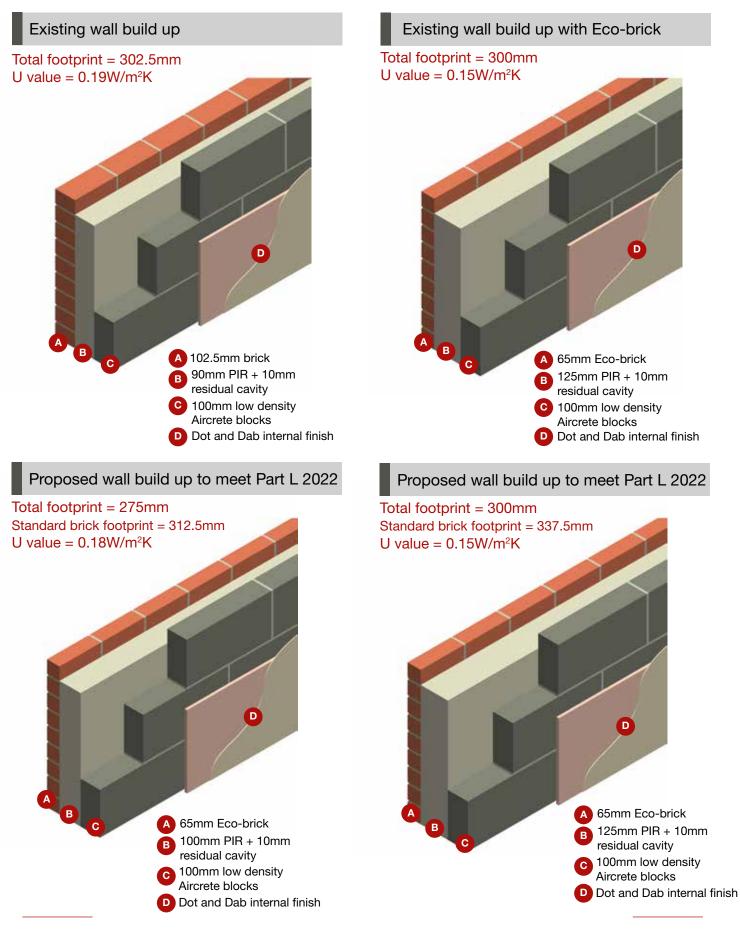
Wall build ups illustrating U values using Eco-brick with Porotherm clay blocks

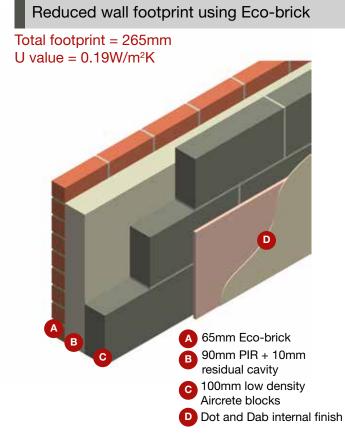




Wall build solutions

Wall build ups illustrating U values using Eco-brick with concrete blocks





Wall build solutions

On-site support and service

On-site support

We will provide all the accessories, onsite support including on-site attendance and direct contact with us for advice and assistance including:

- Free of charge service to assist bricklayers in awareness of the system;
- Pre-construction liaison with site manager and bricklayers;
- Attendance on site at brick start up and setting out;
- Continued support and ongoing monitoring on a mutually acceptable frequency;
- Advice provided throughout the build.

Request an Eco-brick sample

Eco-brick samples can be ordered by visiting our website and completing the online form at wienerberger.co.uk/sample-order

Design services

Specialist design, technical expertise. Wienerberger's Design Services Department offers specialist design and technical expertise, providing effective and helpful advice to achieve successful brickwork. The services offered range from guidance on the most appropriate product selection for particular projects and applications through to final product specification including current building standards and codes of practice, special shaped bricks, bond patterns, movement joints and brickwork detailing.

A comprehensive knowledge of special shaped bricks combined with the use of CAD software enables us to assist in detailing customer requirements where Wienerberger bricks have been specified.

For more information contact Design Services at wbukdesignservices@wienerberger.com









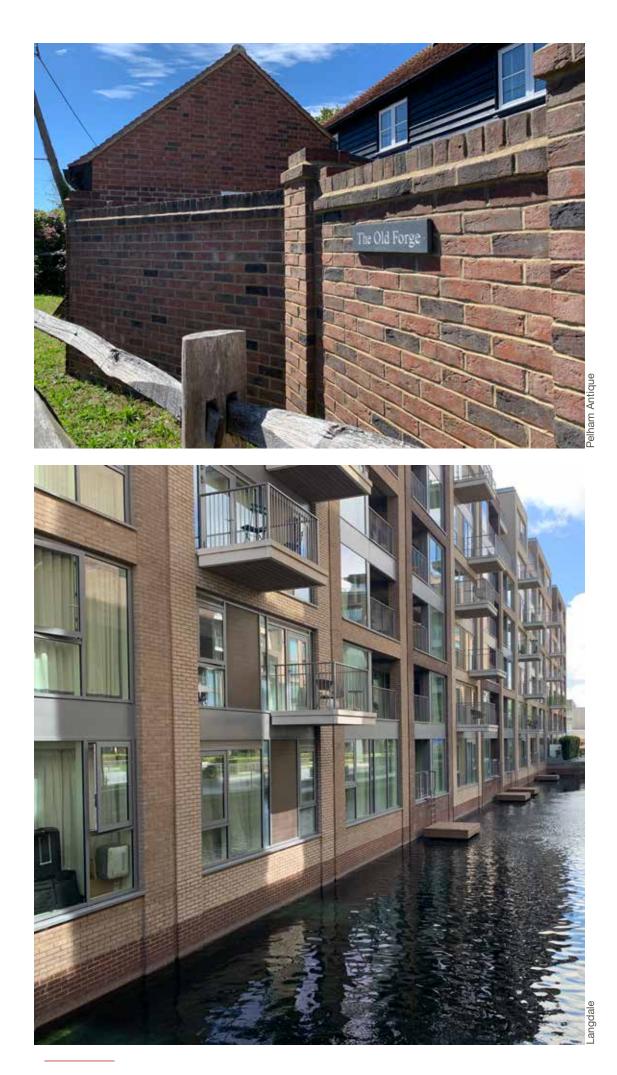
Looking for some inspiration?







de Cheshire











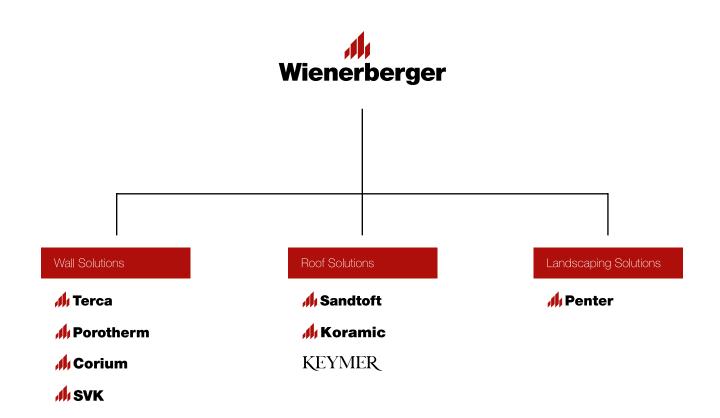








Pampas



Wienerberger Ltd Wienerberger House Brooks Drive Cheadle Royal Business Park Cheadle, Cheshire SK8 3SA

- **L** 0161 491 9450
- wbukmarketing@wienerberger.co.uk
- 𝖅 @wienerbergeruk
- www.wienerberger.co.uk/eco-brick



More with less