



BUILDINGS
MADE **BETTER.**
SOLUTIONS FOR **RENOVATION.**

ENABLING ENERGY-EFFICIENT RENOVATION

Why retrofit?

The Climate Change Act of 2008 sets a legal target for the UK to reduce greenhouse gas emissions by at least 80% of the 1990 baseline by 2050. The pathway to 2050 is steered by a series of 5-year carbon budgets set with the advice of the independent Committee on Climate Change. All parts of the UK economy must contribute to reducing greenhouse gas emissions, including the built environment.

When we improve our built environment. We can improve our natural environment too.

By using innovative solutions for sustainable renovation that enable better buildings for all and make them more resilient to the impacts of climate change.

CEMEX – Building a better future

Buildings account for
over 40%
of energy consumed

More than
220m
buildings in Europe
representing approximately
85% of the building stock,
were built before 2001 and will
mostly still be standing in 2050

Currently **only 1%**
of buildings undergo energy-
efficient renovation every year

Renovation of existing
buildings can lead to
significant energy savings

BUILDINGS MADE **BETTER**

Low carbon and energy-efficient renovation for all

This guide covers **3 key areas of renovation and refurbishment**, highlighting the products and services that will help:



Housing (Residential)

- Single-family homes / multi-occupational accommodation
- Care homes
- Property / estate management



Public Buildings

- Schools, hospitals and churches
- Museums and libraries
- Hotels, offices and retail



Urban Schemes

- Neighbourhood renewal / streetscapes
- Transport hubs
- Open areas / green space





Housing (Residential)

- Single-family homes / multi-occupational accommodation
- Care homes
- Property / estate management



Asphalt driveways

- Highly durable and premium finish
- See page 26



Permeable concrete technology

- Sustainable urban drainage solution
- See page 24



Concrete block paving

- Sustainable urban drainage solutions
- See page 25

EXPERTS IN MORTAR™



Factory produced mortars

- High quality, consistent and minimal waste
- See pages 20-22



- Also available for Heritage buildings **Natural Hydraulic Lime**
- See page 28



Rugby Post Mix Professional

- Also available for fixing fence posts



Flooring/screeds

- Bagged screeds also available for domestic maintenance work
- See page 13



Flooring/screeds

- A range of flowing screed solutions
 - Ideal with underfloor heating and improved thermal efficiency
- See pages 10-12



Thermal Insulating Concrete

- Energy efficient, acoustic benefits and thermal bridge reduction
- See pages 16-17



Low Carbon Concrete

- Ideal for foundations, paving and flooring
 - Also available to offset and go CarbonNeutral®
- See pages 18-19



Dense and Lightweight concrete blocks

- For cavity and solid wall
- See page 29



Public Buildings

- Schools, hospitals and churches
- Museums and libraries
- Hotels, offices and retail



Permeable asphalt

- Manages surface water and flooding (SUDs)
 - Ideal for car parks
- See page 25



Low temperature, low carbon asphalt

- Available in a range of mixes
- Also available to offset and go CarbonNeutral®



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Mortar paving system

- High performance bedding, priming and jointing materials
- See page 23



Concrete block paving

- Sustainable urban drainage solutions
- See page 25



Cycle path asphalt

- Premium single layer solutions
- See page 27



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Dense and Lightweight concrete blocks

- For cavity and solid wall
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Foamed lightweight concrete

- Ideal for basements and voidfill to enable renovation projects
- See pages 14-15



Urban Schemes

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Permeable concrete technology

- Sustainable urban drainage solution
- See page 24



Sudsflow aggregate

- A permeable and durable aggregate that will allow easy drainage
- See page 25



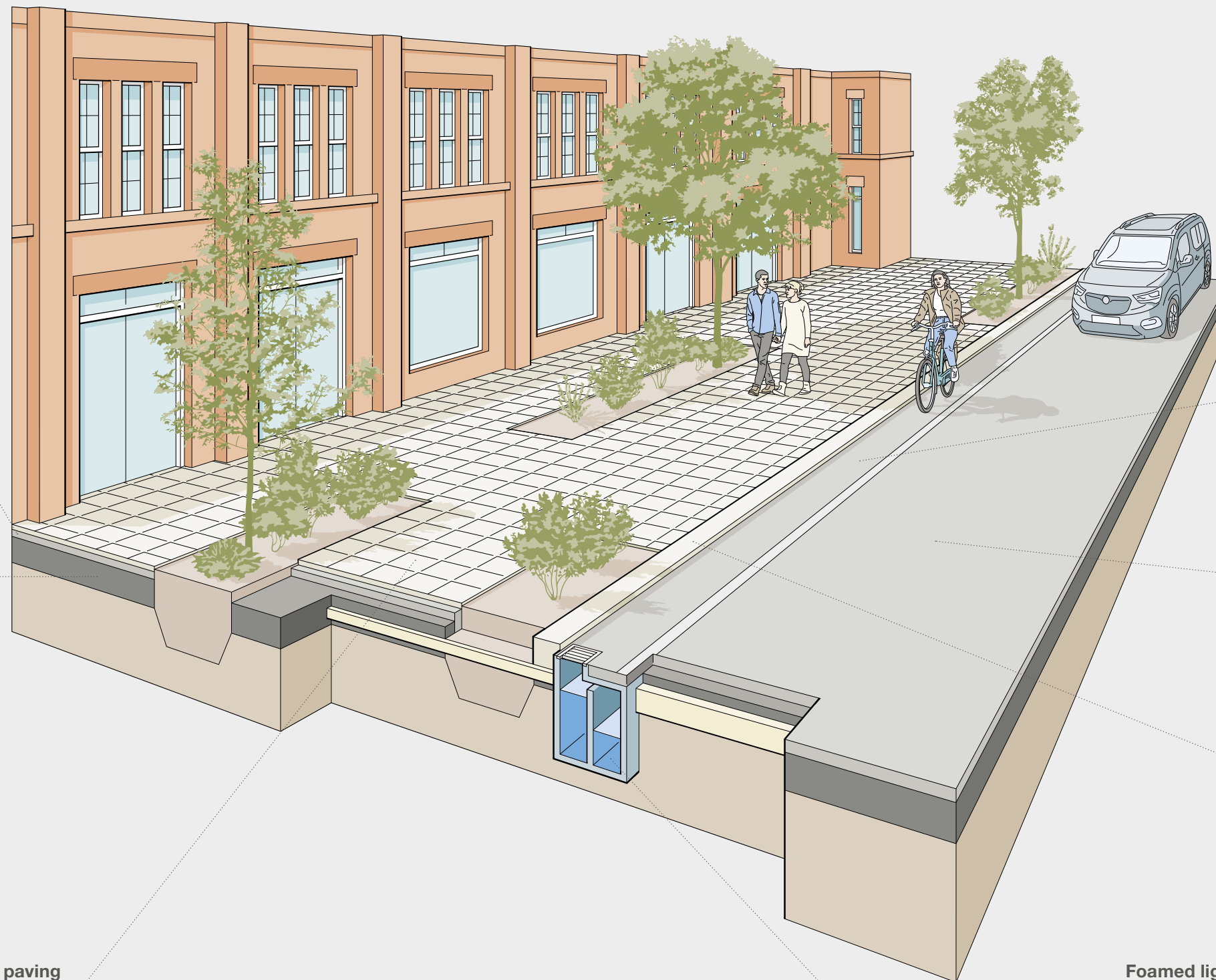
Mortar paving system

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Suitable for
renovation and
restoration of:



SELF-LEVELLING / FLOWING SCREEDS

Calcium Sulfate based flowing screed can provide significant benefits over traditional 'semi dry' site mixed screeds for the following reasons: scale of application, ease of placement, excellence of surface finish, attainable accuracy of level and the virtual elimination of cracking and curling.

As a result of these benefits over traditional screed, in some European countries over 50% of all screeds used are of this type.

Key energy-efficient benefits:

- **Improved thermal efficiency** when used with underfloor heating compared to traditional screed.
- **Reduced section thickness** due to improved flexural strength, which improves drying times, thermal insulation values and cost.
- Calcium sulfate product features **lower CO₂ properties** vs cement based screeds.

Other features

- **Speedy application** - Up to 2000m² can be installed by 3 to 4 operatives in 1 day. A typical day would see 500 to 750m² laid compared to a maximum 200m² of traditional screed.
- **Rapid early strength gain** allows early trafficking, typically within 24 to 48 hours, compared to 3 to 7 days for cement / sand screed.
- **A high degree of dimensional stability** means that cracking within the screed is vastly reduced and curling almost totally eliminated.
- **No need for stress relief** - Large areas can be laid without the need for movement joints - 1600 m².



Supaflo

Scan to find out
more about our
SUPAFLO® RANGE



THE ULTIMATE LIQUID SCREED SOLUTION

At the forefront of technology, **SUPAFLO®** has been developed over many years, and is the original flowing, Calcium Sulfate based self-levelling screed.

The range includes the following solutions for any renovation project:

Supaflo | Summit

A strong, durable levelling screed for high rise applications. Installed as a bonded, unbonded or floating screed

Applications

- Used on steel or concrete frame, lightweight steel and masonry construction
- Suitable for commercial or residential projects
- Can be used to meet Part E of building regulations acoustic performance requirements

Supaflo | TS-15 | TS-20

High quality ultra-thin screed for bonded and unbonded applications

Applications

- Refurbishment of uneven floors
- Levelling screed over floors with restricted ceiling heights
- Overlay for poorly installed / levelled screeds
- Alternative to lightweight screed, where loading is restricted
- Supaflo TS-20, Overlay to an electric underfloor heating system

Supaflo | Rapide

Pumpable self-smoothing, levelling screed based on an enhanced Calcium Sulfate binder to enable faster drying times

Applications

- Domestic and Light Commercial applications with the correct surface preparations

Supaflo | TimBRE

Self-compacting flowing screed for acoustic and non-acoustic flooring systems

Applications

- Warm water or electric underfloor heating systems
- Suitable for commercial or residential developments
- Designed to be used in conjunction with a resilient acoustic insulation layer
- Improves environmental and fire resistance characteristic

Supaflo | HTC

High thermal conductivity screed for use with underfloor heating systems on a variety of flooring materials

Applications

- Refurbishment projects. Can help improve sustainability criteria
- Installed with a minimum cover to the underfloor heating pipes of 20mm



SupaFlo

CASE STUDIES

Apartment renovations, London N1

45m³ pour with Supaflo on DPM, insulation and 500g polythene for flooring upgrades.



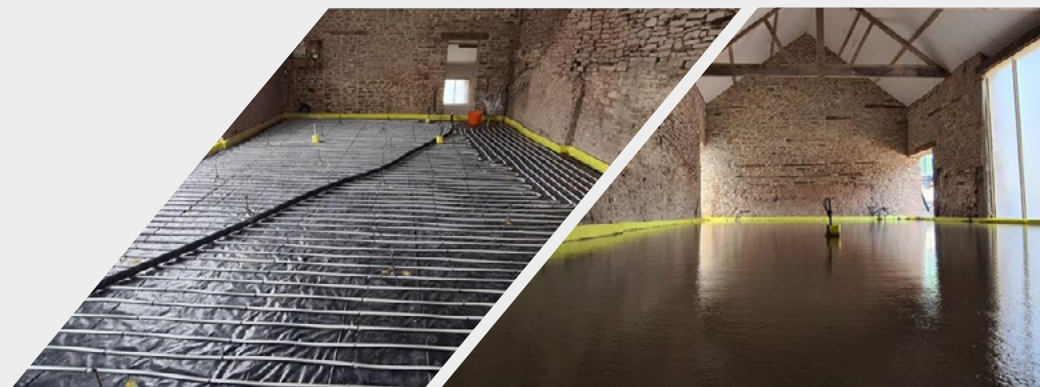
Barn conversion, Burnley

18m³ of Supaflo HTC, to a multi-level barn conversion, perimeter expansion was behind the DPC and the flowing screed was expertly placed using a pump.



Barn conversion, near Monmouth

Over 100m² of CEMEX fast drying screed laid over Underfloor Heating for a barn conversion near Monmouth.



Not compatible with Supaflo, but more relevant for smaller domestic repair and maintenance work, other bagged screed products from CEMEX include:

CEMEX LEVEL PLUS

Self-levelling cementitious screed material modified by polymer for interior screeding and levelling of floors in medium or thick layer, with normal time before trafficking. Available in grey or white.

- Build depths from 3mm up to 50mm
- For interior and exterior use (using a specific curing membrane)
- Application over new or old floors for household and commercial uses
- Execution of separating, levelling and underfloor heating screeds
- Bonded, unbonded and floating screed
- Complies with BS-EN 13813



RUGBY – DEEP FILL LEVELLER

High Strength Cementitious Underlay

CEMEX Rugby Deep Fill Leveller is a rapid setting and hardening, high strength, single part, cementitious smoothing underlayment incorporating recycled raw materials.

It can be mixed up and applied as single units and is especially suited to larger projects where it is ideal for pumping applications and can be applied up to depths of 50mm.



- Builds depth of up to 50mm
- Suitable for underfloor heating systems
- Internal subfloors
- Used on cured & dry calcium sulfate screeds

SPECIFICATION FOR RENOVATION

SCREED CPD COURSE AND A DEDICATED TEAM AVAILABLE TO HELP



Scan to find out more



Scan to find out more about our RUGBY DEEP FILL range



Suitable for
renovation and
restoration of:



FOAMED LIGHTWEIGHT CONCRETE

Foamed concrete is a highly workable, low density material incorporating up to 80% air. It is generally self-levelling, self-compacting and may be pumped. Risk of plastic shrinkage or settlement cracking is significantly lower than that of standard concrete.

Foamed concrete is a versatile and practical material which can be tailored to a variety of renovation project needs and operational conditions.

Key energy-efficient benefits:

- **Freeze / Thaw Resistant** – high air content makes it resistant to freeze/thaw and provides good thermal and acoustic insulation.
- **Insulating Properties** – can be used as a low density insulating sub-screed.
- **Lightweight concrete** with high air content and reduced cement / CO₂

Other features:

- **Pumpable Foamed concrete** – can be pumped significant distances and can be placed by conventional concrete pump or rotor stator 'worm' pump.
- **Self-compacting and self-levelling** – Making it ideal for inaccessible trenches where compaction would be difficult or impossible. It allows for controlled discharge into narrow opening, fully fills void space, including undercut pockets and entirely surrounds and protects pipes.
- **Load spreading** with negligible risk of subsidence
- **Highly fluid** – making it easy to place and finish thanks to a single process installation, simply pour and level. Controlled rates of placement to ensure suitability for any loading characteristics.



Porofoam
Lightweight Foamed Concrete

Scan to find out
more about our
POROFOAM RANGE



POROFOAM IS MANUFACTURED USING CEMEX ADMIXTURES AND IS AVAILABLE IN A WIDE RANGE OF DENSITIES AND COMPRESSIVE STRENGTHS.

The product is easily placed with no compaction required and can be produced onsite by our foam generation units or delivered in trucks premixed.

DENSITY & STRENGTH

Porofoam can achieve strengths of up to 20 N/mm² and our unique production process allows us to produce an extremely wide range of dry densities from as low as 300kg/m³ up to 2000kg/m³.

FOAM CONCRETE PLACEMENT GUIDANCE

Porofoam can be pumped, horizontally, vertically, or directly placed in layers of up to 1m single lift depth in order to maintain the required air void structure. The fluid nature of Porofoam allows the concrete to free flow into even the smallest of spaces making it highly suitable for voidfill applications.

Applications

- Pipelines
- Service ducts and shafts
- Culverts
- Redundant sewers
- Cellars and basements
- Tunnel stabilisation

Features & benefits

- Easy to place and finish
- Self-compacting and self-levelling
- Single operation trench reinstatement
- Good cohesion

CASE STUDIES

Tottenham House, Somerset

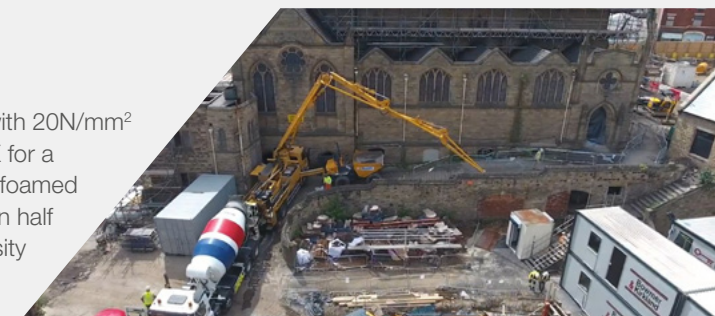
160m³ of Porofoam 600 as part of a large renovation project to fill existing basements.



St Vincent's Church, Sheffield

St Vincents Church in Sheffield was to be transformed into a new student accommodation complex.

The renovation project required a mass filling of the existing basement with 20N/mm² concrete. When contractor Paul John Construction approached CEMEX for a suitable voidfill solution, we proposed to use Porofoam, our low-density foamed concrete. Using Porofoam enabled the pour to be completed in less than half the time than using a standard concrete. Due to its reduced plastic density Porofoam could be placed in much thicker layers reducing lateral pressures exerted on the 165-year-old internal walls of the basement.



SPECIFICATION FOR RENOVATION

**FOAMED CONCRETE CPD COURSE AND
A DEDICATED TEAM AVAILABLE TO HELP**

Porofoam
Lightweight Foamed Concrete



Scan to find
out more



Suitable for
renovation and
restoration of:



THERMAL INSULATING CONCRETES

Concrete plays a major role in the thermal regulation of buildings, contributing to important savings in energy, improving the quality of life, and creating more comfortable structures for any exterior climatic condition.

Due to its high density, concrete is characterised by a high degree of inertia: in this way, it plays a role in the thermal regulation of buildings. Heating and air conditioning requirements are therefore lower than in buildings made from other construction materials.

Moreover, a concrete wall has the advantage of being able to be insulated both externally (render over insulation, double wall, etc.) and internally (affixed or studded lining, inner wall, etc.).

Key energy-efficient benefits:

- **Insulating structural concretes** – this construction system insulates the building by eliminating thermal bridge breaks; both structural and insulating, it reduces the use of other internal and external insulation materials traditionally added to structures. These concretes have a thermal conductivity (λ) of 0.45 watts per metre-Kelvin.

CEMEX
ADMIXTURES
Building Chemistry

Scan to find
out more



CONCRETES ENABLED WITH
CEMEX ADMIXTURES

Insularis
Comfort by design

Scan to find out
more about our
INSULARIS® range.



INTRODUCING INSULARIS® A CONCRETE SOLUTION FOR ENERGY-EFFICIENT CONSTRUCTION AND RENOVATION

Energy saving

Insularis concrete can deliver energy savings of up to 20% in housing projects.

Thermal bridge reduction

Thermal bridge reduction up to 95% – helping to reduce heat loss in colder weather.

Time saving

A 100% concrete solution consisting of a composite design that satisfies structural and thermal insulation performance requirements.

Acoustic insulation

Acoustic insulator – giving sound proofing benefits to any build using Insularis readymix concrete.

Applications

- Houses
- Office blocks
- Flats/apartments
- Other construction/renovation projects



CASE STUDY

Single story concrete 'bunker' family home created over 8 different levels in a larger central living space.

Featured over 700m³ of concrete, of which 15m³ was Insularis; used specifically for kickers at external walls.

The targeted and specific use of Insularis, through a full thermal analysis, increased the thermal efficiency of the house, by allowing the outer walls to act as a full thermal envelope, reducing the effects of thermal bridges by up to 95% when compared with traditional methods. This allows the latent temperature of the house to remain relatively constant despite the outside temperature, reducing the number of inputs required

to change the temperature, increasing the long-term sustainability of the house.

Insularis was developed to provide a thermal break in concrete structures. With a much lower thermal conductivity value than traditional concretes, Insularis gave designers the option of continuing the concrete through the junction without compromising on strength or adding in other materials.



Suitable for
renovation and
restoration of:



LOW CARBON CONCRETE IMPROVEMENT WORK

FOUNDATIONS, FLOORING & DRIVEWAYS

With increased focus on home working, improvement and renovation of existing properties has also seen demand. Concrete plays a vital part in the following areas:

- Extensions
- Conservatories
- Driveway improvements
- Garages
- Shed/out building bases

CEMEX offers a range of core mixes to professional builders, self-builders and homeowners to support the above areas, all can be improved with the addition of fibres to further enhance the performance properties of concrete and meet NHBC and local authority requirements.

Vertua PAVING

A strong and durable concrete that's perfect for use in outdoor paved areas such as driveways, paths, patios, and pavements.

Vertua FLOORING

An economical, durable and versatile readymix concrete that is designed specifically for use in floors and bases. Ideal for conservatory or garage bases.

Vertua FOUNDATION

Designed with foundations and groundwork in mind that require reinforcement - specifically houses, conservatory extensions and more.

Go CarbonNeutral®

Also available, **Vertua classic zero** to offset the remaining carbon percentage (c.50-70%) through our accredited offset provider. Where these products are used you will receive certification to demonstrate meeting the requirements of The CarbonNeutral Protocol.



Vertua
Low carbon by design
classic zero

Vertua
Low carbon by design

VERTUA® IS OUR NEW RANGE OF LOW CARBON CONCRETE

Scan to find out
more about our
VERTUA® range.



The **Vertua** range is available in bespoke designs enabling embodied carbon reductions greater than 70% versus standard concretes (CEM I).

The range can also provide additional benefits including increased durability and aesthetic finishes.

Vertua Classic residential range is a low carbon concrete that has a 30 - 50% CO₂ reduction versus a standard concrete mix.

Available in a range of compressive strengths from C16/20 to C40/50 and meets the requirement of DC-2.

Applications

- Foundations, including piling
- Suspended slabs
- Structural elements
- House & garage ground floor slabs
- External concrete for pavements and hard standing
- Driveways
- Trafficked areas

Features

- Easy to use and place
- Suitable for pumping
- Complies with Design Chemical Class DC-2 to BRE Special Digest 1



CASE STUDY

House extension, Warwickshire Builds

Our Midlands team supplied our low carbon concrete Vertua Plus to a regular customer, Warwickshire Builds, for a house extension floor base. Vertua Plus has a circa 60% CO₂ reduction versus a standard concrete (CEM I).



CEMEX
ADMIXTURES
Building Chemistry

CONCRETES ENABLED
WITH CEMEX ADMIXTURES

Scan to find
out more



Suitable for
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restoration of:



FACTORY PRODUCED MORTARS

Factory produced mortars offer clean, efficient production with reduced wastage and increased productivity on site. The dry silo systems also reduce manual handling and the risk of injury in production, for improved health and safety.

CEMEX - Experts in Mortar™ offer a range of flexible solutions suitable for any site requirements.

Request your
FREE colour
swatch book now!

To create stunning visual effects, contact us to receive your coloured mortar specifier guide and discuss your specific requirements.



DRY MORTAR – SILO

Manufactured under a third-party accredited factory production control system, the **CEMEX Dry Silo Mortar** system uses the latest technology to provide you with a convenient mortar batching facility, with appropriate colour and consistency.

Primary benefits & advantages:

- Reduced delivery and storage of other materials to site
- Clean efficient production – ready instantly to use and with reduced wastage
- Consistent mortar quality
- Full range of mixes, strength classes and colours



WET MORTAR – READY-TO-USE

From a small domestic extension to a major multi-storey development, **CEMEX Wet Mortar – Ready-To-Use** is ideally suited to every application. With a proven track record of delivering consistently high-quality factory produced mortar and excellent support, **CEMEX Wet Mortar – Ready-To-Use** is the flexible option.

Wet Mortar – Ready-To-Use is guaranteed to last two working days and as little as one cubic metre can be ordered with only 24 hours' notice. It can also be delivered direct to site, avoiding interruption to work schedules, either ready to discharge into site containers or disposable containers for smaller applications.



DRY BAGGED MORTAR

Dry Mortar Bags are the ideal solution for smaller sites that do not have the scale for a silo but are still looking for a factory produced mortar that is easy to mix on-site and produces a consistent and durable material.



SPECIFICATION FOR RENOVATION

**MORTAR CPD COURSE AND A
DEDICATED TEAM AVAILABLE TO HELP**

Visit our dedicated Architect and Engineer section today



Scan to find
out more



CASE STUDIES

Packington Estate redevelopment

CEMEX was approached to be the sole supplier of 5,000 tonnes of **Dry Silo Mortar** for this redevelopment. CEMEX was able to provide a durable, high-quality and consistent mortar. DSM was used for 90% of the job to maintain productivity as well as bagged products. This solution meant there was no noise pollution caused by heavy machinery early in the morning resulting in minimal impact on the community.



Royal Academy of Arts

The Royal Academy of Arts in Piccadilly, London was looking for a bespoke mortar to match the existing within brickwork that was over 100 years old. New walls and repairs to the original brickwork had to match what already existed.

To match the texture of the mortar, a coarse sand had to be added which would make the mortar less workable when laying bricks. Experimenting with blends and sands at The National Technical Centre ensured a **Dry Silo Mortar** that remained workable, whilst giving the right textured appearance, was created to solve the problem.

The project won best brickwork refurbishment at the 2019 Brick Awards.



M12

CEMEX M12 Natural Mortar is suitable for brick laying, block laying, repointing, general masonry repairs and for laying patio and paving slabs. It is available in both natural and a wide range of colours. **M12 Natural Mortar** is specifically designed for below ground & DPC environments where increased durability is required.

It's the ideal option for projects where a dry pre-blended solution is required and where flexibility of supply is required.



- ✓ For general purpose mortar use
- ✓ Compatible with a wide range of bricks & blocks
- ✓ No need for additional plasticiser
- ✓ Range of strength contents for use above and below ground



Scan to find out more about
EXPERTS IN MORTAR™.

Suitable for
renovation and
restoration of:

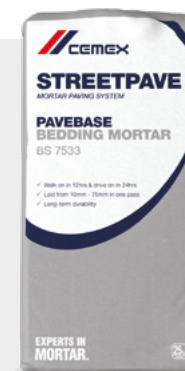


Scan to find
out more about
STREETPAVE RANGE.



ALL OF OUR **STREETPAVE** MORTARS CONFORM TO BRITISH STANDARDS AND ARE FACTORY PRODUCED FOR CONSISTENCY AND RELIABILITY.

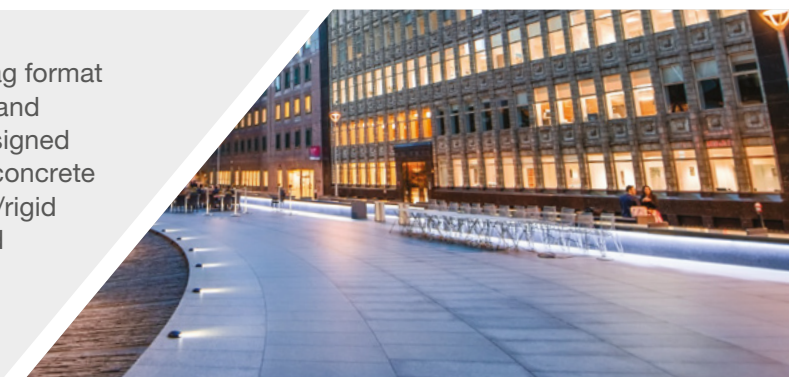
STREETPAVE mortar paving system consists of a range of high-performance, rapid strength bedding, priming and jointing materials that meet and exceed the strict demands of BS 7533.



StreetPave PaveBase silo, bulk and 25kg bag bedding materials are designed for use with clay, natural stone, or concrete pavers.



StreetPave PaveGrip, 25kg bag format is a high-performance priming and bonding mortar specifically designed for natural stone and pre-cast concrete paving units, for use in bonded/rigid construction in commercial and public area projects.



StreetPave PaveFill 25kg bag format is a high-performance, fast-setting and flowing jointing grout.



Also suitable for block paving for sustainable urban drainage schemes – **see next section.**

Suitable for
renovation and
restoration of:



SUSTAINABLE URBAN DRAINAGE SCHEMES (SUDs)

CEMEX offers several permeable and pervious building solutions that complement one another to create domestic or commercial landscapes or urban renovation schemes.



PERMAFLOW IS A PERVIOUS CONCRETE MIXTURE, CAREFULLY DESIGNED TO HAVE A NETWORK OF INTERCONNECTING VOIDS WHICH ALLOW THE MOVEMENT OF WATER.

Permeable concrete technology provides the optimal solution for surface and storm water management. It naturally improves drainage through the unique design of the water management system.

Applications

- Pavements, pathways, driveways & swimming pool decks
- Car parks and minor road strips
- Green walls and patio areas
- Beneath permeable blocks such as CEMEX Readyflow

Features & benefits

- Improves drainage through unique design of water management system
- Limits storm impact - reduces storm water run-off and risk of flash flooding
- Cost effective solution for use as part of a Sustainable Urban Drainage System (SUDS)
- Increases water infiltration to preserve soil natural conditions

Scan to find out more
about **PERMAFLOW**



CASE STUDY

Bromsgrove Station re-development

600m³ of **Permaflow concrete** was supplied to Buckingham Group as part of a wider solution for a sustainable car parking area, with a wrapped drainage system. This urban renewal scheme created 350 new parking spaces, whilst enabling an efficient way to collect water.



neogem SUDSFLOW

An eco-friendly solution as an effective water management system.

neogem SudsFlow is a carefully graded crushed angular material to ensure the necessary interlock to provide stability in the construction layers, whilst still providing the adequate void to allow the free movement and storage of water.

Ideal for sports pitches, pavement, athletics areas, car parks and more.

Features & benefits

- A permeable and durable aggregate that will allow easy drainage
- Naturally reduces the risk of flash flooding
- Cost-effective, affordable drainage solution that will last
- An easy-to-install and maintain drainage aggregate
- Meets Requirements BS 7533-13 of published design guidance
- Naturally sourced – no synthetic components

Scan to find out more
about **SUDSFLOW**



VIAFLOW®

A permeable asphalt from CEMEX - designed to help manage surface water and flooding.

A highly durable, free draining surface, allowing water to pass through to the underlying structure or drainage system. The open graded structure of **VIAFLOW®** removes the problems associated with surface water flooding and improves traction in icy conditions.

Features & benefits

- Durable surface, resistant to surface scuffing
- Excellent drainage characteristics
- Eliminates surface water and ice
- Reduces direct surface water run-off
- Recharges ground water supplies
- Excellent noise reducing properties

Scan to find out more
about **VIAFLOW®**



With increasing problems such as changing climate, overloading of sewers and river flooding, our permeable paving range provides an attractive, effective and economical alternative to traditional hard landscaping when used in conjunction with **Sustainable Urban Drainage Systems (SUDS)**.

The design functions by dispersing surface water into either a **SUDS (Sustainable Urban Drainage System)** or into the subgrade which increases water distribution to local vegetation and reduces the amount of rainfall passed into the sewers.

Featured products

- Chelsea ReadyFlow™ 60
- Barbican ReadyFlow™ 60
- ReadyFlow™ 80
- Ready EcoFlow

Scan to find out more
about **READYPAVE®**



Suitable for
renovation and
restoration of:



ADDITIONAL BUILDING AND URBAN REGENERATION SOLUTIONS

VIAPATH®

Scan here to find out more
about asphalt products



VIAPATH® is our premium single layer solution and has been developed with speed of construction in mind. For when time is of the essence.

In today's ever-changing world, the wider development of cycle and footpaths is critical for the development of cleaner, more sustainable urban schemes and neighbourhood regeneration.

Features & benefits

- Rapid replacement of surface and binder course layers with single layer construction
- Lower jobsite costs through labour and material savings
- Limited disruption to road users, pedestrians and cyclists
- Reduced carbon footprint through reduced on-site fuel usage during the paving process
- Sustainable development with the use of crumb rubber during the manufacturing process



VIALOW™

Scan here to find out
more about VIALOW™



CARBON NEUTRAL ASPHALT

Introducing **VIALOW™** – our low temperature, low carbon range of asphalts.

Available in a range of mixes, it enables embodied carbon reductions of up to 20% with the option to offset all the residual CO₂ and go carbon neutral with **VIALOW™ zero**.



Go CarbonNeutral®

Our **VIALOW zero** asphalts are CarbonNeutral products in accordance with the CarbonNeutral Protocol, the leading global framework for carbon neutrality.



VIADRIE®

VIADRIE® has been designed to provide a durable and aesthetically pleasing surface which resists the effects of power assisted steering and deformation, keeping a high-end premium finish on domestic driveways for years to come.

Features & benefits

- Highly resistant to surface scuffing
- Resistant to softening in hot weather
- Excellent noise reduction properties
- VIADRIE asphalt is highly resistant to deformation

Features & benefits



INCREASED PRODUCTIVITY
in restricted working windows



IMPROVED LONG-TERM
durability



AVAILABLE ALL YEAR ROUND
in most mix types including PMB



FASTER COOLING
resulting in earlier
opening times



IMPROVED SAFETY
less risk of burns and
lower fumes/steam



SUPERIOR QUALITY
less hardening of bitumen
during manufacture



FASTER OVERLAY
of lower layers



SIGNIFICANT REDUCTION
in CO₂

Suitable for
renovation and
restoration of:



ADDITIONAL BUILDING SOLUTIONS



RUGBY HYDRAULIC LIME

Rugby® Hydraulic lime (HL) is a term for varieties of lime (calcium oxide), or slaked lime (calcium hydroxide), used to make lime mortar which set through hydration.

Generally hydraulic lime provides a faster initial set and higher compressive strength than standard air lime. It is suitable for general-purpose use for mortar/pointing or rendering and is quality assured to EN 459-1.

Features & benefits

- Used to produce durable mortar, render and plaster
- Ideal for historic restoration, heritage, and Grade II listed buildings

Scan here to
find out more



READYBLOCK

Scan here to
find out more



Dense and lightweight concrete blocks for a variety of internal & external applications, including above and below the ground or where strength and durability are prime considerations. Typically used in cavity or solid wall constructions, also for use in internal load bearing walls. Ideal for any extension or building improvement work.

Features & benefits

- Heat storage - have inherent thermal mass that acts as a heat store
- Sound insulation - excellent sound insulation and air permeability properties
- Ideal for use in internal load bearing walls and ReadyFloor Beam & Block Floor System



LOW CARBON BAGGED CEMENTS



The Vertua® low carbon cement collection forms an integral element of CEMEX's broader Future in Action strategy. The relevant products will carry the seal based on direct emissions reduction vs industry standard. The range can also provide additional benefits including increased durability and workability.



PREMIUM & SULFATE BAGGED CEMENTS

Scan here to
find out more



The Rugby brand signals a refreshed, range for the future. It reinforces our commitment to sustainable development and stands for improved reliability. Available via all leading builders' merchants throughout the UK. Quality bagged cement since 1862.

Features & benefits

PREMIUM CEMENT

- Easy to place*
- Ideal bricklaying mortar – lays bricks faster
- More workable – consistent mix
- Also perfect for concrete, screeds and renders
- 100% waterproof bags

SULFATE CEMENT

- Resists sulphate attack** (i.e. clay soil)
- Ideal for work below ground
- High early strength
- 42,5N
- Also perfect for mortar – damp proof course and concrete – sulphate soil conditions

* Includes additives. ** Carries a +SR designation in accordance with BS8500, therefore suitable for use in concrete exposed to sulphate conditions up to DC-4.



RENOVATION BY INNOVATION

CEMEX VENTURES

CEMEX Ventures is CEMEX's Corporate Venture Capital.

With a global focus, we invest in innovative construction start-ups to drive the construction industry revolution.

We seek a better future through the construction industry, by bringing together the main ecosystem players, such as start-ups, entrepreneurs, universities, and other stakeholders.

To bring new, innovative, and engaging solutions to the construction industry we have identified six market-driven opportunity areas:

- Smart cities and buildings
- Supply chain management
- Innovative building materials and construction methods
- Project design & engineering
- Project and jobsite management
- Investment & financing

With renovation in mind there could be future solutions and opportunities to discover.

To discover more visit: www.cemexventures.com



GLOBAL R&D

CEMEX Global Research & Development aims to ensure industry leadership and a strong market position through continuous innovation.

Market-driven research and development, driving global innovation initiatives and providing full expert support for all the areas and functions of CEMEX businesses are the main focus of the R&D activities, including:

- Assessment of opportunities, trends, and challenges in the building materials industry to carry out advanced and innovative product development up to pre-commercialisation
- R&D in the fields of building materials and construction systems development, manufacturing technology and processes optimisation
- Business performance improvement
- Software solutions, know-how development and their application in the fields of enterprise integration and management
- Design and deployment of novel collaboration practices and knowledge management tools across CEMEX
- Generation and promotion of innovative concepts in the areas of energy efficiency, CO₂ emissions reduction, environmental impact reduction and sustainability



CEMEX CIRCLE

A response to the challenges of sustainable construction for our customers.

At our plants, we apply a local circular economy model to our industrial activities, to limit the extraction of natural resources and to contribute to the sustainable social and economic development of local areas.

This approach – initially launched in France – encapsulates both our production sites and our building solutions offer.

Thus, in practice, **CEMEX CIRCLE** is based on the application of three principles that promote more sustainable construction:

- Green management of production activities and recycling of materials
- Eco-design of our products, solutions, and services
- Optimisation of our logistics, whether by road, rail, or water



Scan here to find out more about LabExperts



QUALITY TESTING. RELIABLY DELIVERED.

All specialist technical support and laboratory testing is undertaken by expert technical personnel at our UKAS accredited National Technical Centre Laboratories.

Our site testing is managed from the same central facility, ideally located to service a wide geography in the field of specialist aggregates, asphalt, concrete, mortar, screed and paving. **CEMEX LabExperts** benefits from the wider resource and technical expertise of global CEMEX.



TESTING: 1,2,3 These three objectives set **CEMEX LabExperts** apart in the industry through the ability to deliver a bespoke and consistently high-quality service.

1

QUALITY

High-quality and availability of test reports providing clear and concise test information.

2

RELIABILITY

Consistent standards and reporting based on customer requirements – we will be upfront with turnaround time commitments.

3

RESPONSE

We will develop and agree a bespoke customer experience based on your needs, and all client enquiries will be responded to in a timely manner.



For pre-site investigations prior to major renovation programmes this is the ideal service for materials testing and solutions.

SPECIFICATION FOR RENOVATION

CPD COURSES AND A DEDICATED TEAM AVAILABLE TO HELP

Visit our dedicated Architect and Engineer section today



Scan to find out more



FUTURE IN ACTION

COMMITTED TO NET-ZERO CO₂

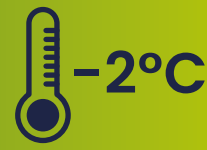
CEMEX GLOBAL POSITION



Signed the **Paris Pledge for Action**, committed to support the objectives of the Paris Agreement (COP21)



CEMEX supports the urgency of enhanced ambitions to limit global warming to under 2°C



Supports the urgency of enhanced ambitions to ensure the fulfillment of the UN Sustainable Development Goal on Climate Action

**NET
ZERO CO₂
CONCRETE
BY 2050**

Concrete has a critical role to play in the transition to a Low-Carbon Economy. We have the aspiration to deliver net zero CO₂ concrete globally by 2050, which will contribute to the development of climate-smart urban projects, sustainable buildings and climate resilient infrastructures.

The technology to reach this goal is currently still under development, and we are proactively working with the industry, governments and multilateral agencies to develop the means to achieve this important goal of net zero CO₂ concrete globally.

UK PERFORMANCE – 2020



55%

Alternative Fuel Substitution Rate in 2020



228x

More waste consumed than sent to landfill



100%

Of our energy supply came from Renewable Energy



10+

Year partnership with the RSPB to protect and enhance biodiversity at our sites



100%

Of our products are Responsibly Sourced to a Very Good level or above



ISO 14001

Standard for Environmental Management Systems certified operations



37%

Reduction in net CO₂ emissions/tonne cementitious (2020 v 1990)



1000

Hectares of priority habitat for wildlife created at our sites

CEMEX ACTIONS



New Types of Clinker

Clinkers with higher reactivities and lower energy demands



Clinker Substitutes

Replace clinker in cement with blast furnace slag, fly ash, steel granulator slag, etc



Energy Efficiency

Replace outdated equipment with new, energy efficient one



Natural Carbon Sinks

Reforestation projects which store CO₂ from the atmosphere



Alternative Fuels

Use of waste to replace fossil fuels in cement-making process



Carbon Capture, Utilisation & Storage

Technology to capture CO₂ in our process, store it and utilize it



Renewable Energy

Transition to wind, solar and other clean energies to power our plants



Product Innovation

Innovation in fast recarbonation, admixtures and binders to deliver low CO₂ concrete products

ENERGY EFFICIENCY, A PRIORITY IN THE EVOLUTION OF THE BUILDINGS OF TOMORROW

Towards energy neutrality

The residential and tertiary building sector is the biggest energy user of all the economic sectors: it accounts for 40% of all energy used in Europe.

The energy performance of buildings is therefore a major area for improvement in public policies, in respect of both of new build and renovation of the existing stock. This challenge is the subject of many environmental requirements, especially with regards to thermal regulations that deal with:

- Reduction of energy use at the construction phase of the structure
- Energy use throughout the life of the building.

These changes to the regulations have an ambitious objective: **to achieve energy autonomy or neutrality over the building's entire lifecycle.**

Aligning the interest of all stakeholders

From design to use of structures, these objectives affect all:

- Public authorities define the conditions necessary to the achievement of energy neutrality in 2050
- Contract owners are increasingly encouraged to submit projects with optimised energy performances
- Contractors must find efficient solutions to meet specifications that include energy reduction objectives
- Developers wish to invest in the construction of energy-efficient buildings that create value on the markets
- Property owners – from public housing landlords to householders – have a direct interest in reducing their energy bills.

CEMEX commitment

At the heart of technical progress for buildings, CEMEX offers solutions that perform well in terms of energy efficiency and reduced CO₂ emissions. From structure design to implementation, CEMEX provides its customers with a dedicated team with the backing of technical experts.

Technical services & product support helpline

For further information or advice on any of the products or services detailed in this guide, contact Product Support.

We are here to help:

0800 667 827

GB-enquiries@cemex.com

@CEMEX_UK

www.cemex.co.uk

Scan to find
out more



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