



This is UK Concrete

UK concrete is essential, sustainable, protecting people, innovating, helping to tackle climate change and enabling great design

ENERGY RENEWABLES NUCLEAR POWER **UK CONCRETE IS** TRANSPORT ROADS RAILWAYS AIRPORTS **INFRASTRUCTURE** TUNNELS FACTORIES BRIDGES PIPELINES SCHOOLS SAFETY BARRIERS OFFICES **HOMES** ROOFS FLOORS WALLS **HEALTH** CLEAN WATER HOSPITALS RESERVOIRS

Concrete is the world's most versatile and sought-after man-made material, made by mixing aggregates with cement and water under strict planning and permitting conditions.

UK concrete, both ready mixed and precast, is produced from around 1,000 sites nationwide. Over 90 million tonnes is consumed in a typical year for an amazing range of uses which form the foundation and fabric of our built environment, both onshore and offshore, above ground, on the ground, and below our feet.

UK Concrete is part of the Mineral Products Association (MPA), the trade association for the aggregates, asphalt, cement, concrete, dimension stone, lime, mortar and silica, sand industries, and has been set up to represent the UK's concrete industry.

The concrete sector is a key part of a combined mineral products industry, which contributes around £18bn to the UK's GDP and directly employs 74,000 people, supporting a further 3.5m jobs.

Concrete has an outstanding story to tell. It is essential for our economy and our way of life, now and in the future. New homes, schools, hospitals, workplaces, roads and railways, as well as the infrastructure that provides us with clean water, sanitation and low-carbon energy, all depend on the industry's products and create the demand for them.

The industry takes its environmental obligations extremely seriously and is committed to being part of a net zero carbon society.

We support the ambition to decarbonise as soon as practically and economically possible and are working hard every day to achieve it.

We want to accelerate progress and call on Government to create a more effective legislative and policy framework to encourage innovation and investment to make this happen whilst maintaining competitiveness. Our members stand ready to provide the materials and solutions needed for supporting higher levels of economic growth and delivering the transition to a net zero carbon economy by 2050.

UK concrete is...

- **Essential** for our economy, homes, buildings, infrastructure and quality of life
- **Sustainable**, local and responsibly sourced
- **Protecting people** and properties against fire, flooding and other threats
- **Tackling climate change** and key to a net zero carbon economy
- **Innovating** to meet the future needs of society
- **Enabling great design** that enhances our communities



Concrete is **essential** for our economy, homes, buildings, infrastructure and quality of life

Concrete is **essential** to delivering new homes, schools, hospitals, workplaces, roads and railways, as well as the infrastructure that provides us with clean water, sanitation and energy.

Its **unique characteristics** – versatility, strength, fire resistance, durability and energy efficiency – provide us with safe, secure and comfortable homes and resilient infrastructure that can last for generations.

From the significant progress the industry is making to **lower its carbon footprint** through to the outstanding sustainable buildings being constructed, concrete is part of the solution towards creating a net zero carbon society.

Concrete is an **economically significant** and major part of the wider UK mineral products industry, which contributes approximately £18bn to the UK's GDP.

Our industry directly employs **74,000 people** nationally and underpins a further **3.5 million jobs**.

Concrete has been used for thousands of years and will continue to be essential for supporting our economy and built environment, as well as our society and **quality of life**, for generations to come.



Concrete is **sustainable**, local and responsibly sourced

Concrete is a **locally produced** material that ensures security of supply, cuts carbon and contributes to the UK's homegrown economic prosperity.

Over 95% of UK concrete is produced in the UK. By comparison, 67% of timber and 60% of steel is imported from around the world, competing with UK manufacturing jobs.

Concrete is a **local** material with an established, national supply chain that creates jobs and supports communities from Stornoway to Penzance.

The UK concrete industry sources and manufactures its products **responsibly and ethically** in line with leading national and international standards.

Concrete is 100 per cent **recyclable**. At the end of its life it can be crushed for reuse as a cost-effective material for hard core or used as a recycled aggregate in new concrete.

The concrete and mineral products industry is a responsible landowner, **working closely** with bodies including Natural England, the Wildlife Trusts and the RSPB to enhance biodiversity.



Concrete is **protecting people** and properties against fire, flooding and other threats

Concrete **protects** communities, residents and buildings against critical threats like fire, flooding and the changing climate.

Concrete's inherent **resilience** is vital to delivering homes, workplaces and infrastructure that are safer and more comfortable, now and in the future.

Concrete **does not burn**, unlike construction materials such as timber that can fuel the spread of fire and emit toxic fumes.

Using concrete to protect against fire is a **responsible design** decision, especially for multiple occupancy buildings such as flats, hotels and student accommodation and those with vulnerable occupants including schools, hospitals and care homes.

Flooding and the risk of flooding is rising. Concrete provides built-in **flood resilience** for our homes and is key to coastal and river defence systems that protect our communities and critical national infrastructure.

Concrete's **thermal benefits** can keep people safe and warm in winter but also protects from the increased risks of overheating in buildings.



Concrete is **tackling climate change** and key to a net zero economy

Concrete is playing a vital role in meeting the UK's ambition of **net zero carbon** emissions by 2050.

The concrete industry has decreased **carbon emissions** produced during manufacturing by 30 per cent since 1990 and is helping to construct buildings that have a low environmental impact across their lifetimes.

Cement, a key ingredient of concrete, produces less than 1.5 per cent of UK carbon emissions against an average of 7 per cent worldwide. The cement industry is switching from fossil fuels and actively researching net zero fuel mixes, and as a whole is **decarbonising** faster than the UK economy.

The **whole-life** performance of concrete buildings over their long lifetimes can offset the impact of their construction through superior energy efficiency and reduced maintenance requirements.

Concrete's **durability**, longevity and resilience are critical characteristics that mean concrete structures remain fit for purpose for generations.

Concrete naturally absorbs atmospheric carbon throughout its lifetime and beyond through **'carbonation'**, helping to further mitigate the CO₂ emitted during its production.



Concrete is **innovating** to meet the future needs of society

We need more homes, renewable energy and improved infrastructure to meet **the future needs** of our society. The concrete sector is meeting these challenges by developing materials that allow us to build faster, more cost effectively and with a lower carbon footprint.

Technological advances such as low carbon cement and concrete, 3D printing, offsite and automated manufacturing are unlocking new ways of using concrete to deliver critical new buildings and infrastructure.

Pollution eating, self-healing, water permeable and bio-receptive concretes are just some of the wave of innovative **new materials** being developed.

High-performance concretes that are lightweight, ultra-thin and high strength are creating structures that have better **material efficiency**, or put simply that have the ability to do more with less.

Concrete's thermal performance properties are helping architects and engineers to design and construct highly **energy efficient** buildings that are fit for the future.

The concrete industry has been working towards a clear strategy to reduce its environmental impact for over a decade, with **innovation** helping to reduce the material's carbon emissions by 30 per cent since 1990.



Concrete is **enabling great design** that enhances our communities

From the Colosseum to Crossrail, concrete has been used for thousands of years to deliver some of the most amazingly complex and **iconic** buildings and infrastructure.

Concrete possesses both the **strength and flexibility** to construct large-scale and complex projects that could not be completed in any other material.

Concrete **grand designs** go beyond architectural elegance, possessing essential characteristics including durability, fire resistance, low maintenance and energy efficiency.

Landmark projects like the V&A in Dundee show how concrete can deliver buildings that are great places to visit, while being **beautiful** and technically smart.

The high-quality, **contemporary** concrete environments also promote health and wellbeing for occupants. Buildings made better with concrete range from high-end offices using its thermal efficiency to keep buildings cool in summer to sound-dampened apartments that improve quality of life.

From super sewers and water treatment plants to long-span bridges, concrete enables the development of infrastructure that is both **visually stunning** and vital for serving the needs of our society.

UK concrete is essential,
sustainable, protecting
people, innovating, helping
to tackle climate change and
enabling great design

UK Concrete is part of the Mineral Products Association, the trade association for the aggregates, asphalt, cement, concrete, dimension stone, lime, mortar and silica sand industries.

www.mineralproducts.org

www.thisisukconcrete.co.uk

MPA UK Concrete
Gillingham House
38-44 Gillingham Street
London SW1V 1HU

Tel 020 7963 8000

 Follow us on Twitter:
[@thisisconcrete](https://twitter.com/thisisconcrete)

