BUILDING PROGRESS FOR PEOPLE AND THE PLANET



NEW ZEALAND READY-MIX CONCRETE PHOLCIM

WHO WE ARE

Holcim (New Zealand) Ltd is a leading supplier of cement, aggregates and ready-mix concrete in Aotearoa New Zealand. Part of the Holcim group, our involvement in the local building industry dates back to 1888.

At Holcim, we're transforming into the global leader in innovative and sustainable building solutions. Our global business focuses on four key segments: cement, aggregates, ready-mix concrete and solutions & products.

With sustainability being a key part of our global strategy, we're becoming a net-zero company

with people and communities at the heart of our success. We're driving circular construction as a world leader in recycling to build more with less. Our team is made up of 60,000 people around the world who are passionate about building progress for people and the planet.

We are empowering our customers across all regions to build better with less with our broad range of low-carbon and circular solutions, including ECOPact concrete, ECOPlanet cement and ENVIROCore cement replacements.



WHAT WE BELIEVE

At Holcim, we are driven by our purpose to build progress for people and the planet, putting our expertise to work to decarbonise Aotearoa New Zealand. With our commitment to net zero by 2050, we're building progress for a low-carbon future, today.

Our passion and high-performance culture inspire us to deliver the most innovative and sustainable building solutions that can accelerate the world's decarbonisation transformation. We believe that only by working together in an inclusive environment where everyone can grow and thrive, can we build a world we all want to live in. Together we are builders of progress, with our six pillars of innovation, sustainability, diversity, growth, collaboration and performance underpinning our purpose.

GLOBAL KNOWLEDGE, LOCAL EXPERTISE

As a leading global building materials supplier, Holcim has been part of the New Zealand building and construction industry for more than 130 years.

Late in 2023 Holcim announced the conclusion of a joint venture with AML Limited under the Allied Concrete brand. As a result of this, Holcim is now operating 20 ready-mix concrete plants in the North Island and Ashby's Ready Mixed in Christchurch.

TECHNICAL EXCELLENCE AND INNOVATION

Together with our partners, customers, and academic researchers, our best-in-class Research & Development (R&D) teams develop the most innovative products, solutions, and services, as well as advanced manufacturing processes. Our Aotearoa New Zealand customers are connected to advanced technology from our experts located locally and all over the world.

Our local engineering and technical teams have decades of combined experience and have made significant contributions to some of New Zealand's most technical, awardwinning, building and construction projects.

Our concrete plants are certified and accredited, undergoing regular, rigorous, independent quality system audits by the Concrete NZ ISO 9001 certified plant audit scheme. Each one of Holcim's twenty-one concrete plants has local laboratory capabilities enabling the provision of a range of concrete and aggregate testing for our customers. The outstanding laboratories in Auckland and Hastings are accredited by International Accreditation New Zealand (IANZ) and the Bombay and Auckland laboratories are dedicated R&D facilities.



New Zealand

Dunedin

Christchurch

READY-MIX CONCRETE

Holcim New Zealand offers the most innovative range of ready-mix concrete solutions and services. Through advanced R&D, Holcim concrete is designed to address our clients' most critical challenges: embodied carbon footprint reduction and energy efficiency of buildings, cost and speed of construction, worksite productivity – as well as architectural and aesthetic performance.



STANDARD CONCRETE

At Holcim we provide a range of standard mixes that are designed for residential applications, low rise buildings, paving and driveways. Our concrete is backed by our expertise and tight quality control which brings a guarantee of strength and workability.

HIGH PERFORMANCE CONCRETE

Holcim high performance concrete provides quality solutions with the latest technology for improving the life of your concrete including high early and long-term strength concrete, high workability concrete, low shrinkage concrete, marine concrete, sulphate resistant concrete and low heat concrete.



← DECORATIVE CONCRETE

Our decorative concrete combines the strength, durability and affordability of concrete with the natural beauty of New Zealand's spectacular riverbeds. The range consists of different aggregate mixes that create their own natural look using different colour and sized pebbles.

Coloured concrete is designed for beauty and durability indoors and out. Cost-effective and flexible it provides a high-quality look and a practical alternative to paving, asphalt, marble and timber.

LOW-CARBON BUILDING SOLUTIONS

As a global leader in innovative and sustainable building solutions, we play an essential role in accelerating our world's transition towards a net zero and more inclusive future, seeking any opportunity to produce lower carbon products, to manufacture and operate in a more environmentally conscious way.

ECOPACT: THE LOW-CARBON CONCRETE

Holcim's ECOPact ready-mix concrete product is a sustainable construction solution designed to meet the demands of modern construction while reducing environmental impact. With a focus on embodied carbon reduction, environmental transparency, and emissions reduction targets, our low-carbon concrete is setting a new standard for responsible construction materials.

Embodied Carbon Reduction:

ECOPact concrete offers a minimum 30% reduction in embodied carbon compared to Ordinary Portland concrete¹. This can help reduce the carbon footprint of building and infrastructure construction projects.

Environmental Product Declaration (EPD):

ECOPact concrete comes with a product-specific EPD registered with EPD Australasia. This third party verified declaration provides transparent information about the environmental impact of the concrete, enabling informed decision-making during project planning and design stages.

Science-Based Emissions Reduction Targets:

Holcim has committed to science-based emissions reduction targets for 2030 and 2050, validated by the Science Based Targets initiative (SBTi). These targets ensure that Holcim's operations align with international efforts to mitigate climate change, contributing to a more sustainable future.

Carbon Offsetting Option:

Holcim offers an option to opt-in for a Carbon Offsetting service, allowing projects to offset the remaining carbon while also supporting investment in carbon offsetting projects. ECOPact concrete is an innovatively designed range of concrete, combined with extensive research and development. It contains a unique mix of supplementary cementitious materials and admixtures technology. As one of the broadest range of low-carbon concrete in the industry, ECOPact delivers high-performing, sustainable and circular benefits with no compromise on performance.

With ECOPact low-carbon concrete you can:

- Easily reduce the environmental impact of your project
- Achieve an embodied carbon reduction of up to 70%¹ without the use of offsets
- Contribute to a circular economy by diverting waste from landfill and closing material cycles
- Support a green building certification
- Maintain product strength and quality
- Have a wide range of mixes available for different strengths and applications
- Place, pump, and finish like conventional concrete

The ECOPact range can be used in a variety of structural components: from foundations, columns and beams, to walls, driveways and walkways.



¹Reduction in embodied carbon in comparison to Australian Life Cycle Inventory (AusLCI) database value for an ordinary portland cement ready-mix concrete (i.e. no innovation or use of supplementary cementitious materials). Link to AusLCI data https://alcas.asn.au/auslci and AusLCI concrete background report https://auslci.com.au/)

STABILISING CRITICAL INFRASTRUCTURE FOR AUCKLAND TRANSPORT

THE CHALLENGE	Auckland Transport required stabilisation of an active landslip in the Oakley Creek Esplanade Reserve which was undermining the shared path and critical infrastructure near Great North Road, Auckland. Failure of a section of the road would cause major traffic congestion. The aim was to construct an in-ground concrete lattice structure using the diaphragm-wall technique with low strength flowable fill whilst meeting demanding
	concrete performance and embodied carbon targets.

THE APPROACH

The required project targets included early age strength, concrete bleed under pressure, workability, spread retention, and embodied carbon reductions. Lab and production trials were conducted on several low-carbon concrete mixes utilising 50% to 70% cement replacement with ground granulated blast-furnace slag (GGBFS).

THE IMPACT

Approximately 500m3 of concrete was supplied utilising 70% replacement of cement with GGBFS (reducing embodied carbon by 50%), and supplying approximately 2,500m3 of concrete utilising 50% replacement of cement with GGBFS reducing embodied carbon by 35%.

The result was a 38% embodied carbon reduction within the project.

Image: Auckland Council





PROVIDING A SOLID BASE FOR AUCKLAND DATA CENTRE

THE CHALLENGE

Canberra Data Centres (CDC) is the largest provider of data centre services across Oceania. As an expansion to its existing Hobsonville, Auckland data centre campus, CDC planned to construct a hyperscale data centre. The new data centre was to be certified to Toitū net carbonzero and Toitū enviromark diamond, aligning with the company's sustainable practices. The construction required a low-carbon concrete slab-on-grade with a meticulously burnished finish for a post-tensioned (PT) slab design and aspiring embodied carbon targets.

THE APPROACH

In close collaboration with the contractor, suitable mixes with lower embodied carbon were evaluated, utilising a combination of ground granulated blast-furnace slag (GGBFS) and flyash to replace a portion of the cement. Concrete set time, finishability, and early age strength allowing timely slab post-tensioning operations were important parameters to consider for the PT-slab properties.

THE IMPACT

Across three separate pours, 930m3 of 40 MPa low-carbon concrete was supplied. Utilising a combination of GGBFS and flyash the embodied carbon of the concrete was reduced by 25% compared to a standard PT-slab mix design, whilst still maintaining suitable concrete set time, finishability for burnishing, and early age strength with no concrete post-tensioning issues.



WANT TO BUILD PROGRESS WITH US?

Find out more about how Holcim is building a sustainable future.

Contact our specialist team today on 0800 READY MIX (732 396) or visit our website **www.holcim.co.nz**

