

Allied Concrete

ecrete™



Low Carbon Concrete

Ecrete™ is engineered to reduce carbon impact without compromising on strength and durability. Our advanced formula incorporates various methods, including SCMs, lower carbon cement, and sustainable aggregate sourcing, tailored to local conditions. This reduces embodied carbon by up to 75%, making Ecrete™ an environmentally friendly option for any project.

Building towards a sustainable future

As we move towards a more sustainable Aotearoa New Zealand, Allied Concrete is proud to offer Ecrete™ - an innovative concrete mix designed to reduce carbon impact. Ecrete™ reduces CO₂ emissions by 10-75%* compared to the ISC baseline, with bespoke solutions available to further tailor to specific project needs.

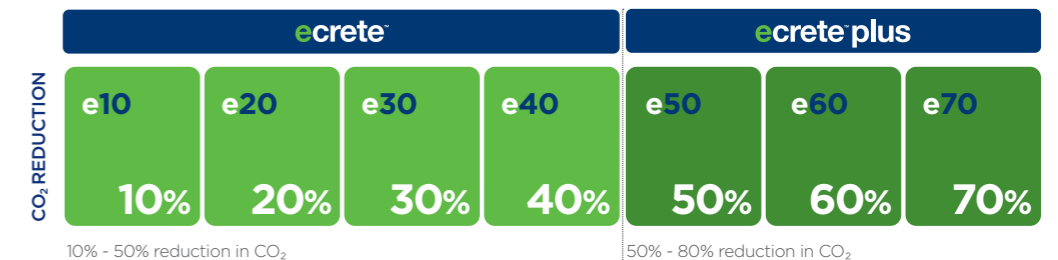
Ecrete™ is more than just low carbon concrete. It is a responsibly sourced solution that optimally meets CO₂ reduction criteria. With our innovative mix design, we tailor Ecrete™ to local conditions, utilising various methods such as supplementary cementitious materials (SCMs), lower carbon cement made in New Zealand, sustainable aggregate sourcing, and other initiatives to significantly reduce embodied carbon.

This innovative solution is designed to not only meet your project's needs but also make a positive impact on the environment. With Ecrete™, you can feel good about the concrete you use, knowing that you're making a difference in building a more sustainable future.



Ecrete™ reduces CO₂ by 10-50%*.

Ecrete™ Plus can reduce CO₂ beyond 50% and is a bespoke carbon-reduced mix that our technical team can develop based on our client's specific requirements.



Reduction in Embodied Carbon compared to 2020 Infrastructure Sustainability Council (ISC) 2020 baseline for ready mixed concrete. *CO₂ reduction for Allied mixes will alter dependent on branch location



Ecrete™ is a game-changing solution for the construction industry, offering numerous benefits that contribute to enhancing the durability and longevity of concrete structures. Ecrete™ significantly reducing the embodied carbon of the project. This makes it an excellent choice for buildings seeking green building certifications and environmental product declarations (EPDs).

Green Building Schemes

Green building certifications are becoming increasingly important for construction projects seeking to demonstrate their commitment to sustainability. The use of Ecrete™ can make a significant contribution towards achieving Green Star, Homestar or Greenroads credits related to reducing embodied carbon in the materials used for building or infrastructure projects.

Specification Partners



Features and Benefits

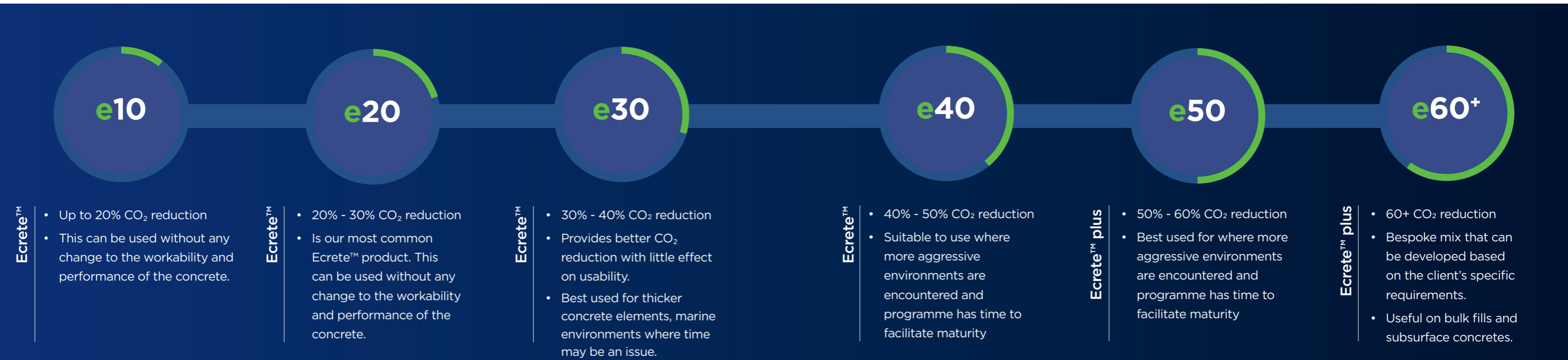
Over time, structures made with Ecrete™ can require less maintenance, have a longer service life, and are ultimately more sustainable. Its superior properties make it a smart investment for any construction project looking to reduce its carbon footprint while ensuring long-lasting and resilient structures. As a result, Ecrete™ is quickly becoming a preferred choice for builders and developers who value sustainability and environmental responsibility.

FEATURES:

- Easy to use and place
- Suitable for pumping
- Ideal for use in aggressive ground conditions
- Verified and measurable reduction in embodied carbon
- Recognised by Green Star, Homestar and Greenroad

BENEFITS:

- **Increased Durability** - leading to longer service life and lower maintenance.
- **Decreased heat generation** - can help reduce thermal cracking and improve overall durability of the concrete.
- **Decreased permeability** - reducing the likelihood of corrosion and other damage caused by exposure to water and chemicals.



CASE STUDY »

Waimea Dam

Over 30,000 tonnes of concrete was supplied to this project over the span of three years.

The design life of this concrete will exceed 100 years and meet the most stringent international safety standards.

A mixture of Ecrete™ e30 and e40 was used throughout this project.

Allied Concrete's contribution to the Waimea Dam project near Nelson, New Zealand, stands as a testament to their commitment to delivering sustainable, high-quality concrete solutions for major infrastructure projects. The dam, which began construction in September 2019, is the largest built in New Zealand in over 20 years and is expected to secure the Tasman region's water supply for the next 100 years.

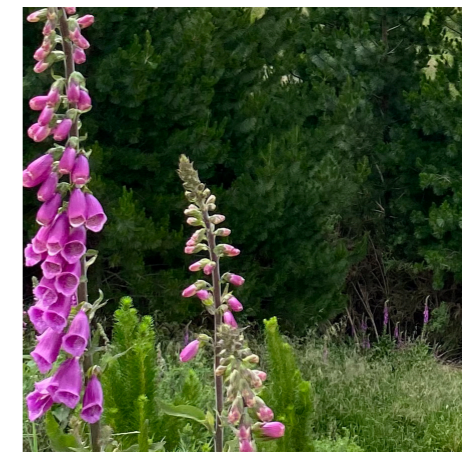
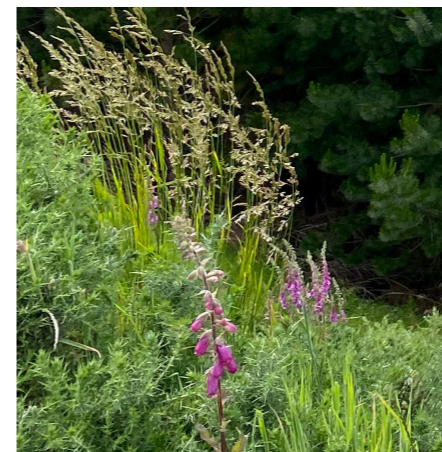
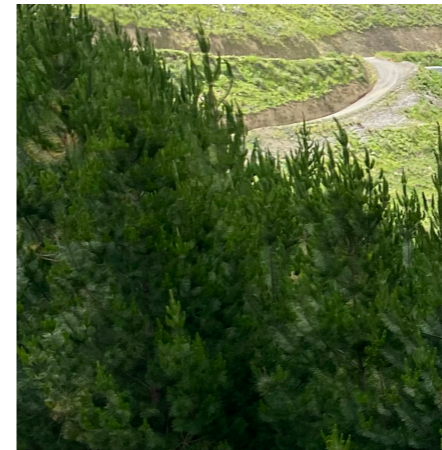
As of July 2023, the Allied Concrete team has completed around 31,000m³ of concrete. The team has adhered to 145 environmental consents, ensuring each load is slump-tested by the client and every pour is tested. Notably, there have been no rejected loads or major incidents that impacted project milestones.

The team completed 14 embankment face slipform pours, averaging 350m³ per pour, taking anywhere between 60 and 70 hours continuously. Despite challenging conditions and terrain, the Allied Concrete team consistently delivered high-quality work and service, improving water quality, supporting primary industries, and providing significant economic benefits to the region.

In 2023, this project was awarded the Excellence in Concrete Infrastructure award at the Concrete NZ Nauhria Awards. Allied Concrete was a crucial member of the project team, which consisted of Waimea Water, Damwatch Engineering, and Fulton Hogan Taylors Joint Venture.



1,176,444 kg
reduction
of CO₂
emissions



Leading the Way in EPD Innovation

Every project specifying Ecrete™ benefits from a third-party verified Environmental Product Declaration (EPD), ensuring accurate CO₂ reduction numbers. Our commitment to transparency and sustainability is evidenced by our EPDs, making Ecrete™ the responsible choice for your construction needs.

Allied Concrete has a strong history of leading the way in Environmental Product Declarations. We were the first in Australasia to introduce an EPD in 2014, and we updated it in 2019 to stay at the forefront of sustainability. Now, we are taking the next step forward by offering EPDs On-Demand, tailored to your specific project needs. This capability not only underscores our commitment to innovation and sustainability but also ensures that our clients receive the most accurate and relevant environmental data.

Benefits of Our EPD On-Demand:

- **Project-Specific Tailoring:** Each Ecrete™ project receives a customised EPD, reflecting the specific environmental impacts and benefits of the concrete used in your project.
- **Third-Party Verification:** Our EPDs are third-party verified, ensuring the accuracy and reliability of the data provided.
- **Transparency:** Our EPDs offer full transparency regarding the sustainability of our Ecrete products, providing you with the data needed for green building certifications and sustainability reporting.
- **Optimised Sustainability Performance:** By integrating our EPD On-Demand system, we continue to lead the industry in sustainable concrete solutions, offering our clients the latest in environmental performance documentation.

Visit alliedconcrete.co.nz to request an EPD for your Ecrete™ Project.

CO₂ Savings Calculator

Discover the carbon reduction potential and the recommended Ecrete™ mix for your project.



*Calculation figures are an example only and should not be used as an accurate measure

SUSTAINABLE FOUNDATIONS »

SuperSlab+

Allied Concrete's SuperSlab+ is a game-changing solution that delivers edge-insulated concrete foundations designed to make new homes and buildings warmer, drier, and healthier

Allied Concrete's SuperSlab+ is a groundbreaking solution that not only delivers exceptional performance, but also embodies our unwavering commitment to the environment. By combining the collective strength of Allied Concrete and QuickSet, we have engineered a solution that goes beyond the ordinary, ensuring our customers receive a superior product that exceeds minimum performance standards.

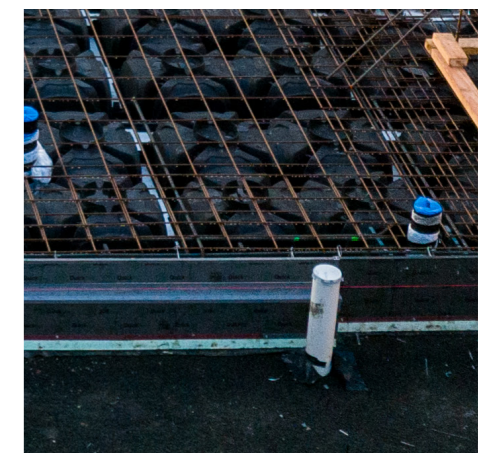
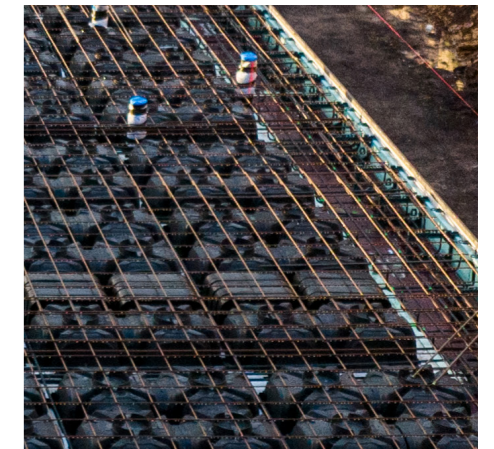
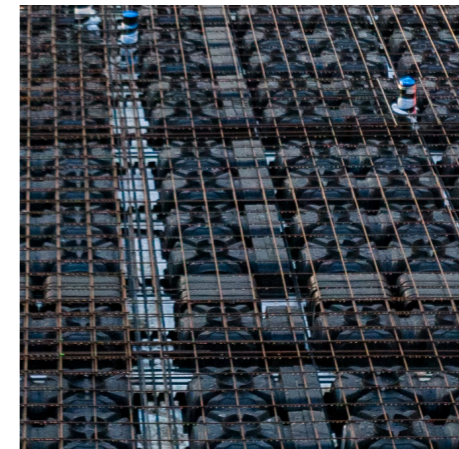
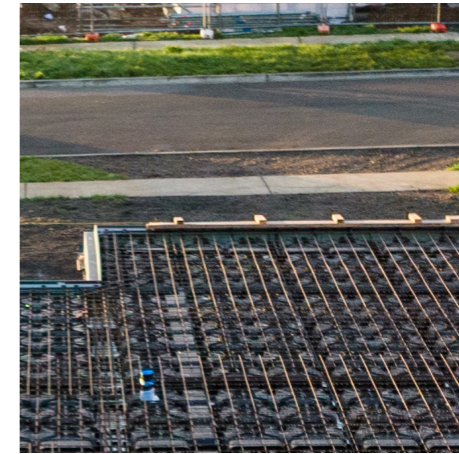
Previously recognised as the leading choice for raft foundations, our Ready SuperSlab has now evolved into SuperSlab+, an innovative edge-insulated concrete foundation solution. With CodeMark certification and BRANZ appraisal, SuperSlab+ is specifically designed to meet the latest R-value requirements outlined in the H1 building code, offering unparalleled thermal performance while reducing energy consumption.

SuperSlab+ takes its environmental commitment to the next level when combined with our eco-conscious technologies like Ecrete™ and QPOD, a sustainable alternative to traditional polystyrene pod void made with recycled materials. By integrating these sustainable components, SuperSlab+ becomes the epitome of eco-friendly flooring solutions in the market.

Through our extensive expertise and collaborations with industry leaders, we have developed a solution that addresses the ever-growing demand for environmentally friendly products in the construction industry. Whether you seek a high-performance solution for your upcoming project or desire a flooring option that aligns with your sustainability goals, SuperSlab+ is the definitive answer you've been searching for.

By choosing SuperSlab+, you not only secure a superior product but also contribute to building a more sustainable future. Join us in our mission to create a greener world, one foundation at a time.

Your SuperSlab+ foundation will not only deliver superior performance, but also be an environmentally sustainable solution.



#1

**Sustainable
Flooring Solution
in New Zealand**

Find Ecrete™ Near You!

Ecrete™ is now available from all Allied Concrete plants across New Zealand. For specific mix availability at your nearest branch, please contact us. Our team is committed to providing sustainable concrete solutions tailored to your project's unique needs, ensuring you receive the right Ecrete™ product for your location.



AlliedConcrete

Consult your Allied Concrete representative
for specialised information.

0800 4 ALLIED

0800 4 255 433

www.alliedconcrete.co.nz