

# CONCRETE COMPASS

Welcome to the latest news from the World of Concrete



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### HERE ARE THE MAIN REASONS WHY CURING MATTERS:

- Achieves design strength
- Reduces early-age cracking
- Improves surface durability
- Enhances long term performance
- Extends the services of life of the slab
- Compliance with standards

### WHAT HAPPENS WHEN CONCRETE ISN'T CURED PROPERLY?

When curing is ignored or cut short, the consequences may not always be immediate, but they are inevitable.

### EARLY MOISTURE LOSS LEADS TO:

- Shrinkage cracking
- Reduced compressive and flexural strength
- Increased permeability
- Dusting and surface weakness
- Shortened slab life

## CANUTE ON CONCRETE TO CURE OR NOT TO CURE.

Concrete does not gain strength by drying. It gains strength through cement hydration, a chemical reaction that requires moisture and time. If moisture is lost too early, hydration slows down or stops altogether and the concrete will never reach its intended strength.



### IMPORTANCE OF PROPER HYDRATION AND CURING

Proper hydration is the chemical process by which cement reacts with water to form a dense, interlocked concrete matrix. This ongoing reaction is fundamental to the development of concrete strength.

Curing is the controlled management of moisture and temperature during the critical early stages following concrete placement. Its primary purpose is to prevent premature moisture loss, ensuring cement hydration can continue uninterrupted and develop as designed. Effective curing allows the concrete to achieve its intended strength, surface integrity and durability, while reducing the risk of shrinkage, cracking, and other early-age defects that can compromise long-term performance.

# THE ULTIMATE CURE FOR CONCRETE.



## Cure from the Inside Out. Finish with Confidence.

Build confidently. Knowing your concrete will perform better, last longer and be more sustainable with E5.

E5 Internal cure is the first admixture proven to provide internal concrete curing. It is designed to control the evaporation of mix water to ensure increased hydration of cement, replacing the need for traditional wet curing and curing compounds. This results in concrete that is highly durable and easier to pump, place and finish!

Unlike conventional surface-applied curing methods, E5 Internal Cure works within the concrete matrix, supporting consistent internal hydration during the critical early stages of strength and durability

development. Moisture is retained where it matters most, supporting optimal hydration, reducing plastic shrinkage and minimising early-age microcracking. This results in a more dense, resilient slab. The outcome is not only superior concrete from day one but improved long-term reliability and performance across the entire life of the slab.

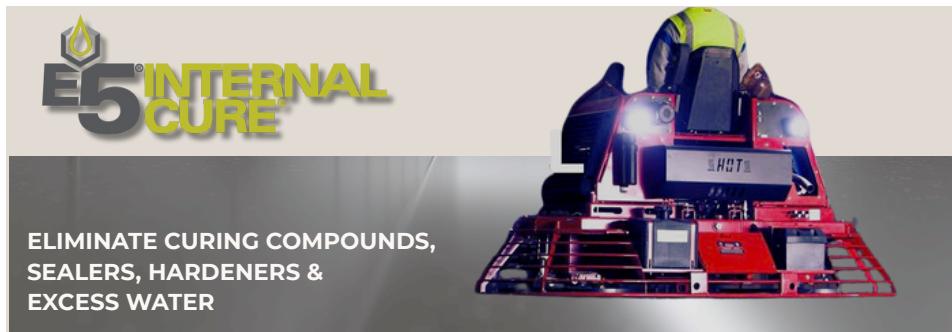
For large industrial floors, distribution centres and high-demand environments, this internal curing approach significantly reduces risk and reliance on perfect site conditions.

E5 products are colloidal silica nanotechnology based. From moisture control to finish quality, E5 builds performance into the concrete itself - simpler specs, fewer steps, and measurable results across every slab.

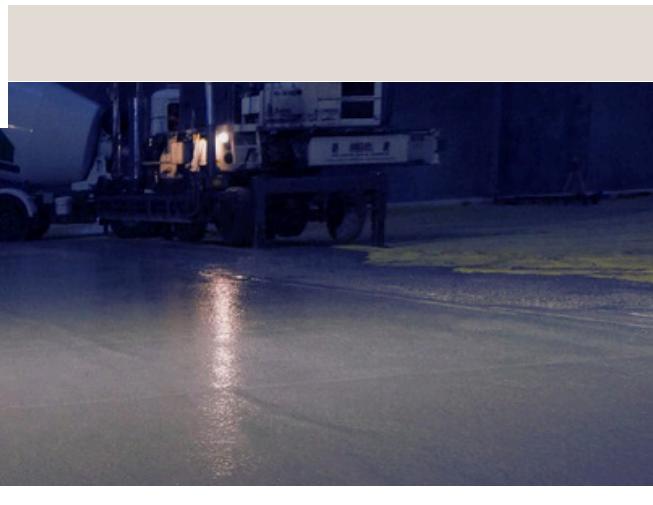
Field-tested concrete science, specs, and real-world results—written for engineers, architects, general contractors, and ready-mix producers.

As Jack Canute explains: E5 Internal Cure is a genuine step forward, raising concrete performance standards, reducing construction risk, delivering better outcomes across New Zealand's concrete construction industry.

- Improved workability
- Enhanced durability
- Shrinkage & curling reduction
- Environmentally friendly
- Versatile application



# FIBRE DESIGN ENGINEERING SERVICE.



CANZAC offers a complementary fibre slab engineering and design service. Provided with a geotechnical report and static/dynamic loadings - we will provide a project specific design including slab thickness, fibre dosage, reinforcement detailing, joint type and layouts along with all standard details required.

We can also issue a PS1 design documentation and a PS4 construction sign off.

## TECHNICAL AND USER BENEFITS

- Enhanced crack control
- Increased flexural and tensile strength
- Higher impact resistance
- Greater fatigue endurance
- Faster construction speed
- Lower maintenance costs
- Improved safety on-site

**We design  
We supply  
We support**

At CANZAC we understand that the true measure of a concrete slab's value is not just the upfront cost of construction, but its performance, durability and service life. We focus on delivering solutions that provide optimal lifetime value. Offering steel fibre jointless (saw cut free) slab designs and macro synthetic fibre designs with our 100% recycled, clean and green Re-Poly RF47 fibre.

Our fibre slabs are trusted across industrial, logistics, warehousing and heavy-duty applications throughout New Zealand, Australasia and the Pacific Rim.



## Unparalleled Technical Expertise and Innovative Engineering Solutions.

### Reduced Reinforcement Complexity.

Canzac's fibre slabs can eliminate reinforcing mesh in many applications, improving safety, speed and consistency during construction.

We offer a complete fibre slab solution. Fibre design and supply, supported by the correct joint types and load transfer systems to suit your specific project, along with the appropriate curing and sealing products, joint fillers and technical support. We ensure the slab is constructed correctly and performs as designed in service.

### The Canzac advantage

When you engage with Canzac, you gain a partner who understands the commercial realities of constructing a slab on grade, the engineering behind slab performance and the long-term costs owners care about.

The results of a Canzac slab are simple. stronger, fewer defects, faster to construct, lower maintenance and superior whole of life performance

# INTRODUCING: SPEED BRACKET



**"We're not just launching a product.  
We're building the future of construction."**

The SPEED BRACKET simplifies the process of formwork installation, cuts down install time, and keeps your projects running up to SPEED. It's a clever, dependable method to back your formwork, keeping your business running smoothly, steadily, and confidently with every project.

The SPEED BRACKET is the strongest formwork bracket system in the industry. With two extendable insert arms and formwork fixture plates strategically placed, you can support formwork/boxing for slabs from 100mm through to 600mm thick with one system.

The SPEED BRACKET allows contractors to increase their productivity in multiple applications, the formwork fixture plates can be mounted to wood, steel or plastic formwork, using duplex screws. You can pin our system down to your subbase with Canzac Dura-Pins, the most durable steel forming pins/stakes on the market, or you can fix the

bracket to site concrete with our masonry anchor bolts.

This system is a real time money saver, your return on investment is great and our product stands the test of time. We're well aware of how tough contractors can be on the job with equipment that is used repeatedly in the field. That is exactly why we've created a solution that not only makes on-site work faster but it is also super durable and built to last for years to come.

## THE ULTIMATE ADJUSTABLE FORMWORK BRACKET SOLUTION HAS LAUNCHED

- Simple installation
- Efficient process
- Built to last for years
- Speeds up your project
- Reduces costs

**A product that truly stands the test of time.**

**Contact CANZAC today for expert advice, pricing, and detailed product information on the Speed Bracket system.**

Our experienced team is available to discuss your project requirements, provide tailored quotations, and ensure you have the right solution to achieve efficient, accurate, and reliable formwork installation.

