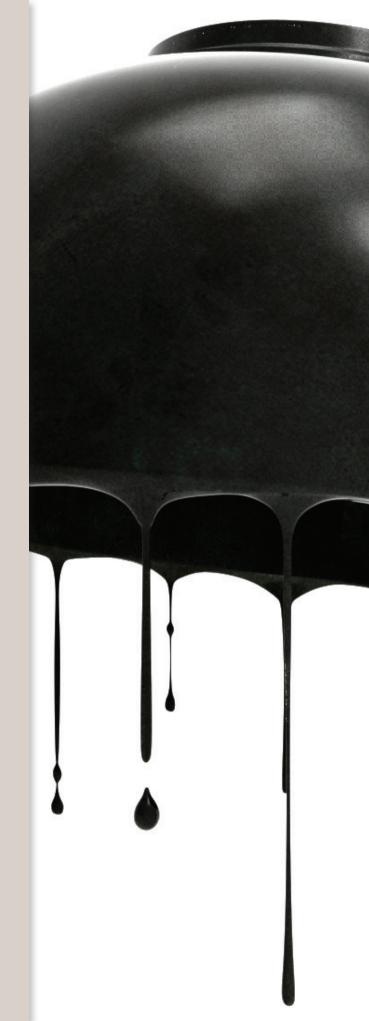


Fluid™ Concrete Technology

Concrete is a coveted material in the building and design industries due to its durable composition, natural appearance, and simple construction. However, when it comes to creating beautiful, long-lasting finishes for functional concrete surfaces, there's more than meets the eye.

From sourcing quality ingredients and mixing raw materials through to polishing and packaging, our Fluid™ Concrete Technology delivers a streamlined yet sophisticated system that delivers exceptionally robust, handcrafted products.

Our manufacturing facility prides itself on delivering a professional service that is focused on best practice procedures, incorporates multiple quality control touchpoints, and is executed with an environmentally friendly mindset.



the concrete

Fluid™ Concrete Technology use a custom composition of green cement combined with 95% recycled natural materials.

Our special molding process incorporates multiple layers of structural meshing combined with a carefully mixed slurry to produce a high-quality and dimensionally stable concrete that is relatively lightweight and incredibly strong.

With a curing process that allows each piece to rest and set in controlled conditions, we are able to produce consistently beautifully products that are built to last.

The Benefits of Fluid™ Concrete Construction

SEAMLESS CONSTRUCTION

We generate and work with molds capable of producing unibody products which are seamless, free from join lines, half the weight and twice the strength of common Portland concrete.





ENVIRONMENT RESISTANT Fluid™ concrete is resistant to water, fire, insects, termites, mold, and mildew.

NON-TOXIC

Free from asbestos, formaldehyde, silica and carcinogenic materials, Fluid™ does not contain organic solvents, oils, toxic ingredients, heavy metal salts, or radiation.



LIGHTWEIGHT
Sturdy yet lightweight
composition means that
relocation is achievable.



QUALITY CONTROL
Every piece is
marked with a unique
serial number for
quality control and
traceability purposes,
is dimensionally stable
with low expansion
and contraction rates.

IMPACT RESISTANT
Our composite is so strong that dropping a 2.5lb [1.1kg] steel ball on to it from five feet above doesn't cause any damage to the concrete such as fractures, cracks or breakages.





ENERGY EFFICIENT PRODUCTION
Since no heat or pressure is used in the manufacturing process, 20-40% less energy is required to produce Fluid™ products compared to Portland cement-based products.



DURABLE
Our strong,
robust concrete
structures last longer
than traditional
composites, creating
less waste and
reduced need to
repair or replace
investment pieces.



FREEZE AND THAW RESISTANT Fully cured, nonhydraulic concrete does not retain water, meaning it is resistant to freezing and thawing. It also withstands extreme temperature fluctuations (air and liquid).

LOW CARBON EMISSIONS

Our green concrete composite produces 90% less pollutants compared to traditional Portland cement-based products, and uses minimal energy during the manufacturing process.



ENVIRONMENTALLY FRIENDLY

Made from a combination of green cement and 95% recycled natural materials that absorb CO2 during the curing process, our composites are 100% recyclable and release minimal greenhouse gas emissions.





the coating



Developed in-house by our research and development team and a highly experienced German coating supplier, FluidTM products are coated with a water-resistant barrier to ensure the green concrete composite shell becomes totally inert and isn't subject to temperature fluctuations or moisture saturation.

Each product is fully enveloped in a specially formulated solvent-based solution that protects the raw materials from environmental weathering. This enables us to deliver perfection from the base raw materials right through to the finished product – working from the inside out, to achieve an exceptionally robust product that is purpose built.







the coating

The Benefits of Fluid™ Concrete Coating

STAIN RESISTANT

Rigorous testing confirms the surface is impervious to ethanol, wine, vinegar, oil, mustard, tomato ketchup, salt, soy, bleach, espresso coffee, window cleaner, and more.

*Turmeric should be avoided.



UV RESISTANT

Even when our products were exposed for 144 hours in 12-hour cycles to water spray, UV rays, and water condensation, colors retained their depth and luster.





COLOR
CONSISTENCY
Fluid processing
delivers consistent
color matching,
which can be
reproduced with
minimal variation
between batches.

SCRATCH RESISTANT An industrial strength surface with a protective barrier for everyday use. ASTM Pencil Hardness Tests show 3H-4H results for our hard wearing surface.



CUSTOM FINISH
Custom finishing process
incorporating German
technology delivers a
smooth, natural satin surface.



VALUE FOR MONEY

Timeless designs coupled with robust construction produce quality indoor and outdoor pieces that reduce the need for frequent replacement.



DURABLE SURFACE

An exceptionally strong adhesion creates a coating that does not flake, peel or crack, and can withstand extreme weather variations and long UV exposure.





combined expertise

Concrete Artisans

Starting with the selection of raw materials and continuing through to the final step of the manufacturing process, our concrete specialists carefully control every touch point. By creating products in unibody pieces with no seams, we are able to produce amazing shapes and designs in a range of finishes including metallic, patinas, and textured surfaces.

Focused on Finish

From small to large-scale pieces, our expertise is in delivering concrete products that are free of mold lines or joins, retain their shape without distortion (don't sag with the weight of themselves), and produce a final product that remains loyal to the design dimensions and radius finishes of the original drawings.

We've engineered a robust material that features extraordinary performance characteristics which provide resistance to fading, and degradation from sunlight and chemical exposure.

Concrete and Chemistry

As a raw material, concrete is extremely sensitive to environmental conditions, which is why we reproduce the exact same chemical equation to achieve a consistent finish. While the recipe for the slurry that goes into the mold can be measured to perfection, temperature, humidity, curing time and material activity also impacts the final product.

German Engineered

By partnering with a world leader in coating systems, we have customized a multi-layered approach of color correcting and coating for our innovative concrete products. Our coating process is engineered to the composition of our concrete for a complete and seamless integration of the concrete and coating materials.

Maintenance

Using a car wax polish twice a year will nourish and protect your concrete investment. This adds depth to the finish and brightens surface pigments, keeping your product looking like new for years to come.

Warranty

We proudly stand behind our surface coating and offer a one year warranty on manufacturing defects.

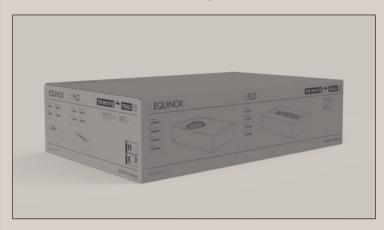
Research and Development

Our R&D department is continually improving, innovating, and refining the durability characteristics of our concrete surface coating. It also develops solutions for new designs, constructions, and applications to fit specific needs in the marketplace.

made for moving

The Packaging Solution: From Us to You!

To complement the experience we deliver our products in custom packaging solutions that are designed to safely and successfully transport concrete between multiple contact points, from international to domestic transit via road or air transport.



Our rigorous transit packaging tests follow the International Safe Transit Association (ISTA) Test Protocol 1 and 2. ISTA is a leading industry developer of testing protocols that define how packages should perform to ensure protection of their contents during shipping.

STACK LOADING

1,102lb (500kg) load is placed on top of the packaged product for 60 minutes.



Result: No visible damage to the packaging or the product inside.

STABILITY

Packaged product is tipped 22° on each bottom edge, and released.



Result: Packaged product falls back to the ground and does not tip backwards.

VIBRATION

Packaged product is placed on vibrating platform that shifts horizontally 230 times/minute with a max shift of 1" (25mm).



Result: No visible damage to the packaging or the product inside.

FLAT DROP

Each bottom edge is raised 8" (205mm) and allowed to fall freely back to the floor.



Result: No visible damage to the packaging or the product inside.



working together

As a design group, we offer the complete package from concept to creation under one roof.

Our team of innovative designers and skilled artisans combine nearly two decades of expertise and experience to bring your designs to life by focusing on solutions and exceeding expectations.

If you've got a project that would benefit from Fluid™ Concrete Technology then we'd love to hear from you.

contact details

EcoSmart Inc.

5875 Green Valley Circle, Suite 100 Culver City, CA 90230 T + 1 (888) 590.3335 E info@ecosmartfire.com

Reproduction of this brochure in any manner, in any language, in whole or in part without prior written permission is prohibited. MAD Design Australia reserves the right to correct any errors or misprints. We also reserve the right to alter information without notification. The information provided herein is believed to be correct but is not guaranteed. Trademarks Pending – All Designs Registered. V0617