

AQURON 2000™

ULTIMATE MOISTURE CONTROL

**SPRAY APPLIED TREATMENT FOR
PERMANENT WATERPROOFING
OF NEW & EXISTING
CONCRETE**



15 YEAR GUARANTEE
FOR MOISTURE PROTECTION
OF FLOOR COVERINGS & COATINGS
APPLIED OVER AQURON TREATMENT

PROVEN WORLDWIDE SINCE 1984

AQURON 2000™

ULTIMATE MOISTURE CONTROL



When AQURON is applied to a freshly finished slab it transforms all internal moisture in a gel formation which results in maximised strength & impermeability

WHY USE AQURON 2000 ULTIMATE MOISTURE CONTROL?

AQURON 2000 is the ultimate **moisture control** to **eliminate moisture related delamination risks of floor coverings and coatings from concrete**. AQURON 2000 is the safer choice being waterborne and 100% VOC free,

and is the benchmark offering the **ultimate guarantee** of any spray applied moisture control system. AQURON 2000 ultimate **internal curing, hardening and anti-dusting, and moisture control in one application**.

WHERE CAN I USE AQURON 2000?

AQURON 2000 is a spray applied **non-toxic**, colloidal silicate with a unique reactive catalyst that results in the treatment penetrating up to 150mm into concrete. AQURON 2000 is the ultimate choice for internally controlling moisture in concrete beneath coverings & coatings.

AQURON 2000 **can be applied to new and old concrete** to control elevated moisture levels. Once applied to concrete AQURON 2000 induces a distinct chemical reaction, converting the alkalinity and moisture into a **permanent hydrogel** throughout the concrete transforming "free moisture".

Curing, durability enhancement and permanent moisture control is provided

in one application when **AQURON 2000** is applied to freshly poured concrete. AQURON 2000's hydrogel formation improves concrete curing and effectively reduces shrinkage, risk of cracking, surface crazing, delamination & slab curl.

AQURON 2000 also maximises flexural & compressive strengths and provides hardening & anti-dusting without compromising the surface key required for adhesives. **Floor coverings and coatings can be confidently installed 28 days after placing the concrete, or 72 hours after application to existing concrete.**

ULTIMATE **4 in 1** with AQURON 2000 offers multiple benefits for new and existing concrete

1

INTERNAL CURING

(equal to water curing) by internal moisture control, reducing risks of shrinkage & slabcurl, laitance, cracking, surface crazing and delamination. These common problems are overcome, because moisture is transformed into a hydrogel in the concrete, resulting in maximised hydration. AQURON complies to moisture retention requirements of ASTM C309.

2

IMPROVED HARDENING

Transforming moisture into a hydrogel ensures cement particles to completely hydrate, resulting chemical reactions being maximized - increasing strength. Instead of only hardening the top surface, AQURON 2000 works throughout the concrete hardening both the internal matrix and surface as one, improving long term durability. Both the hardened concrete and the surface provide greater resistance to abrasion.

3

ANTI-DUSTING

By forming a hydrogel throughout the concrete, AQURON 2000 stops the access of Carbon Dioxide, which causes concrete dusting. This protection eliminates the issue of dusting concrete affecting adhesion of coatings and coverings, and the harm it can cause to electronics and people's health.

4

MOISTURE PROTECTION

Regardless of Relative Humidity, AQURON 2000 treated concrete ensures floor coverings/coatings are 100% protected from moisture damage, with a Ultimate 15 year Guarantee.



Proven to be equal to WATER CURING

AQURON 2000 INTERNAL CURING has been proven to be at least equal to water/polythene curing. Eliminating the cost and hassle of water curing and allows quicker access to the surface.

AQURON 2000 provides even hydration throughout the concrete matrix, maximising flexural & compressive strengths and significantly reducing shrinkage & slab curl. Crazing and delamination risks of the surface are also reduced by AQURON 2000 curing.

AQURON 2000 is the most cost effective method of controlling moisture beneath floor coverings/coatings with the extra benefit of improved concrete.

AQURON 2000 does not need to be removed prior to flooring installation, like traditional curing compounds.

AQURON 2000 tested on concrete according to ASTM C309 CURING STANDARD, complies for moisture retention.

SAFER TO USE

AQURON 2000 is water borne and 100% VOC free, making this a more environmentally friendly and safer to use choice.

DID YOU KNOW

that as a "rule of thumb" concrete dries at a rate of approximately 1 month per 25mm depth. For example, 100mm thick slab takes 4 months to dry. This drying process starts from the last time the concrete was wet, not the day it was poured.

TILES



VINYL TILES

COMPATIBLE
Any floor preparation, adhesives formulated to be applied to untreated concrete is compatible with AQURON concrete.

SHEET VINYL

COATINGS

15 YEAR GUARANTEE

*Providing AQURON Corporation 5 rules and 8 precautions are followed.

AQURON 2000™

ULTIMATE MOISTURE CONTROL

HOW IT WORKS...

AQURON 2000 works inside the concrete to control moisture beneath floor coverings & coatings.



AQURON 2000 transforms all free moisture in the concrete into a solid hydrogel incorporating silicates and calcium hydrates within the concrete.

AQURON's hydrogel* inside the concrete can extend to 150mm and often further from the spray treated surface, and cannot be worn or abraded off like a film-forming moisture barrier coating on the surface.

ULTIMATE GUARANTEE



AQURON Corporation guarantee for 15 years that the "supplied and applied" **AQURON 2000** treatment protects adhered floor coverings from damage by moisture migration from within **AQURON 2000** treated concrete, but still with elevated moisture readings above 75% RH. AQURON Corporation's guarantee is providing that the flooring installer follows the 5 Simple Rules and 8 Precautions as detailed below.

ULTIMATE COMPATIBILITY



AQURON 2000 is a colloidal silicate. Once **AQURON 2000** has penetrated and reacted with the moisture and alkalinity in the concrete, a Calcium Silicate Hydrate (CSH) is formed in a hydrogel. The main binder of untreated concrete is Calcium Silicate Hydrate (CSH). Therefore any floor preparation, adhesives or coating formulated to be applied to untreated concrete is compatible with **AQURON 2000** treated concrete.

ULTIMATE SUPPLY & INSTALLED



AQURON 2000 is strictly only available as a **SUPPLY & APPLY**. **AQURON 2000 SUPPLY & APPLY** is strictly in accordance with **AQURON CORPORATION** specifications, and accommodates varying concrete absorbencies. **AQURON 2000 SUPPLY & APPLY** means that you get the promised results and an ultimate 15 year warranty by means of a quality controlled installation carried out by experienced applicators. **AQURON 2000 SUPPLY & APPLY** method eliminates all risks for you and is your assurance.

RULES & PRECAUTIONS PRIOR TO INSTALLING FLOOR COVERINGS & COATINGS OVER AQURON 2000 TREATED CONCRETE.

5 RULES:

1. Ensure that the surface is absorbent (**if it's not absorbent, it must be made absorbent by surface preparation**) for adhesive reactions to take place.
2. Ensure that surface is clean and has profile/grip/key for the bonding of adhesives/coatings (**if it's absorbent, it will have profile/grip/key**).
3. Ensure a full spread of adhesive is applied
4. Ensure the concrete is at least 28 days old.
5. Ensure the **AQURON 2000** is applied at least 72 hours before flooring is to be installed (**Surface must be visually dry prior to any preparation taking place**).

8 PRECAUTIONS:

1. Check that the concrete has in fact been treated with **AQURON 2000** and it is filed in **AQURON CORPORATION** records.
2. Ensure the same good trade practices which need to be applied to untreated concrete **do not change** when the concrete has been treated with **AQURON 2000**.
3. Highly polished or tight concrete surfaces may require grinding to ensure profile/grip/key.
4. During installation and until adhesives have completely cured, cover windows where installed floor coverings are exposed to direct sunlight.
5. Ensure that the adhesive has fully matured before walking on floor covering.
6. Allow adhesives to properly tack-off, especially for vinyls which have a closed cell backing or a vinyl without profile and grip.
7. Ensure "wet inlay" flooring installations are applied to a completely absorbent surface or excess moisture is given time to evaporate.
8. **AQURON MVB** (moisture vapour block). For non-adhered or strip glued flooring installations, the surface of the **AQURON 2000** treated concrete must be sealed with **AQURON MVB**. This product provides the same effect as a full spread of adhesive.

RELATIVE HUMIDITY

AQURON 2000 controls moisture inside the concrete porosity. AQURON 2000 does not remove moisture. Therefore AQURON 2000 treated concrete will have measureable Relative Humidity (RH). AQURON 2000 moisture control is guaranteed regardless of measureable RH% in the concrete providing AQURON 5 rules & 8 precautions are followed.

PH LEVELS

AQURON 2000 solution in the pail has a high PH level. Applied to concrete, AQURON 2000 penetrates into the concrete porosity and chemically forms a (Calcium Silicate Hydrate) Hydrogel. Calcium Silicate Hydrate is the main binder of concrete. Providing the AQURON 2000 has completely penetrated, and the concrete surface has been made absorbent as per AQURON 5 rules & 8 Precautions prior to flooring compounds and adhesives being installed, the surface PH levels will be similar to the untreated concrete.

GRINDING

It is NOT a rule that AQURON 2000 treated concrete surface's must be diamond ground prior to installing further coatings or coverings. It is a rule, that AQURON 2000 treated concrete must be absorbent prior to installing further coatings or coverings (refer AQURON Bulletin "How to Test for Absorbency"). Some burnished finished concrete can typically be so hard that progress sanding alone is not sufficient to produce an adequately absorbent surface, and diamond grinding will be required to achieve the necessary surface profile & absorbency. Under these circumstances diamond grinding preparation is required to create absorbency whether or not AQURON 2000 was applied.



Treated
AQURON 2000™ is
inside the concrete

Untreated
Concrete porosity
and capillaries

When the **AQURON 2000** treated concrete is encapsulated under floor coverings & coatings, even though the concrete has elevated moisture levels above 75% RH, **AQURON 2000** is guaranteed to eliminate the risk of moisture migration from within or through the concrete. This is dependent on the flooring installation surface being absorbent** with good profile/grip for bonding, and the floor covering is installed using a full spread of adhesive. (See 5 rules and 8 precautions below)

'Free' moisture within the AQURON 2000 treated concrete is immobilized, it is not removed. AQURON 2000 moisture control is guaranteed, regardless of any measurable RH% in the treated concrete.

* Refer to AQURON Bulletin "How AQURON controls moisture within Concrete"

**Refer to AQURON Bulletin "How to Test for Absorbency".

AQURON MVB is a surface sealer that works in combination with AQURON 2000 for non-adhered or strip glue floor installation. AQURON 2000 Moisture Control does not require AQURON MVB, unless moisture protection is required for a non-adhered or strip glue floor installation.

AQURON SPRAY ON CONCRETE TREATMENTS - Over 100,000,000 square metres applied worldwide



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adding life to concrete

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