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Most Frequently Asked Questions...

Q: Who makes Aquaflex?

A: Aquaflex is manufactured by Formulators, Inc., located in Santa Ana, CA. Formulators has been in business for over 15 years developing and manufacturing innovative solutions for the construction, automotive and textile industries.

Q: How long has Aquaflex been around?

A: The initial formulation of Aquaflex was introduced in 2006. The Aquaflex system has evolved over time to include formulations for virtually all types of resilient flooring. Formulators has also innovated waterproof patch/skim-coat materials, waterproof SLU and accessories to enhance the overall Aquaflex package. Aquaflex has been specified by many retail store clients including Bed Bath & Beyond, TJ Maxx, Marshalls, Home Goods, and Walmart. Aquaflex is also specified by several health care providers such as Fresenius Medical and DaVita Dialysis.

Q: What are the moisture limits for Aquaflex?

A: Aquaflex resists moisture as follows:

1. ASTM F 1869 - NO LIMITS
2. ASTM F 2170- NO LIMITS
3. ASTM F-710 -NO LIMITS

*Aquaflex will actually cure under water.

Q: What type of moisture testing is recommended before using Aquaflex?

A: When using Aquaflex it is NOT necessary to conduct moisture evaluations prior to installation per ASTM F1869, F710 or F2170 respectively. Aquaflex does not require you to determine a moisture vapor emission rate, pH or %RH for warranty consideration. Performing these test could however be beneficial to the overall flooring installation strategy.

Q: What if the flooring manufacturer says they will not warrant their floor without their adhesive?

A: Formulators warranty will supersede the flooring manufacturers' warranty for adhesives and floor preparation if needed *in every case*. Warranties provided by the manufacturer for the flooring material are considered "expressed" warranties per UCC. The warranty rests with the manufacturer only, not its representative. The representative can only supply an "implied" warranty. When flooring manufacturers representing a particular adhesive not of their construction, tie-in this warranty to the performance of the flooring product, they are purposefully manipulating an "expressed" warranty. It is unethical and **it may be illegal**. If a flooring manufacture ever states, "their product warranty is nullified unless their adhesive is used", then you're being deceived. Unfortunately, many flooring contractors find out the hard way what an implied warranty actually stands for in court... nothing. This is a **strong arm tactic** that runs counter to Section 2316 of the UCC and Magnuson-Moss Warranty Act of 1975. Any flooring manufacturer hoping to add to his bottom line through warranty manipulation ought to be careful.

Q: The flooring contractor says only epoxy will maintain the flooring manufacturers warranty, is this true?

A: The warranty for adhesive bond is an *implied warranty* provided by the flooring manufacturer. The adhesive is manufactured by a third party and the *expressed warranty* of construction lies solely with them. The epoxy mitigation is of no consequence and has no legal impact on warranty claim. Epoxy mitigation is simply a recommendation, never a condition of sale.

Q: I thought it was impossible to make a waterproof adhesive for flooring. Is Aquaflex too good to be true?

A: To answer, let's start first with a short review of the history of flooring: The first floor covering introduced in the US was Linoleum invented by Frederick Walton in 1863. This early flooring material was adhered with asphaltic tar. Later the tar was replaced with asbestos adhesive commonly referred to as "cut-back". VCT was introduced in the late forties and sheet vinyl in the early sixties. These materials too were adhered with "cut-back". "Cut-back" producers began removing the asbestos from formulations in the early seventies and eventually replaced the solvent-born "cut-back" adhesives altogether with water-based acrylics in the late nineties under market pressure. *That's when the trouble started.* For over **150yrs the flooring industry used a solvent based adhesive, for 150 years moisture was a "non-issue" related to adhesive performance and for 150yrs this adhesive was waterproof!** No moisture testing, no ASTM, no Calcium chloride test or insitu %RH, no moisture mitigation was ever used and yet

flooring installations performed. Sub-slab vapor barriers didn't exist either, yet floors never failed to the degree they do today. *The answer to preventing flooring failures isn't a new idea but a re-invention of an old one.* Make the glue waterproof and solve the problem.

Q: When is it time to use Aquaflex?

A: Aquaflex should be recommended whenever moisture measurements per ASTM F2170 exceed 90%RH. *(Keep in mind that ASTM F 2170 has a margin of error of +/- 2%, it would be mathematically prudent to consider using Aquaflex at actual measurements above 88% RH).* 90%RH is a good line or demarcation of adhesive performance based upon field experience. It represents the performance threshold for water based flooring adhesive. Also, anytime the flooring may be subject to heavy maintenance or flooding.

Q: What flooring products can I install using Aquaflex?

A: Aquaflex has been tested with virtually all flooring materials. Aquaflex is available in several formulations for resilient flooring, such as: VCT, sheet vinyl (VSF) and LVT. The VCT version has proven successful with homogeneous VCT, as well as rubber and linoleum tiles. The LVT product has been successful with luxury vinyl tiles. VSF is designed for sheet vinyl and lino installations.

Q: What size trowel do I use to apply Aquaflex?

A: Formulators supplies a Gundlach Versablade WHA trowel with each unit used to install resilient flooring.

Q: What else is included in a unit of Aquaflex?

A: Each unit of Aquaflex includes:

1. Aquaflex adhesive in a bladder bag supplied inside a 4.25 gallon poly bucket.
2. A trowel specifically designed for the flooring being installed.
3. Waterproof floor patch for concrete repair that will cover at least 5% of the total job.
4. Adhesive remover sponge that can be used to clean any adhesive off flooring or tools.
6. For VSF we include our patent pending D-GAS primer to reduce bubble formation.
7. Applicator brush for D-Gas.

* also available are waterproof Skim-Fast and a waterproof SLU with PRIMER.

Q: What is the shelf life of Aquaflex?

A: Shelf life is limited to 6mos from the *date of manufacture*. Aquaflex must be stored in an unopened container at 70°F. However Aquaflex is freeze-thaw stable and stable to temperature exposures prior to cure of over 130°F.

Q: How much does Aquaflex cost?

A: The Aquaflex system is sold by the square-foot and delivered by the "unit". Aquaflex is more expensive than traditional moisture resistant adhesives; however traditional adhesives simply do not measure up to the "unlimited" level of moisture performance and speed of cure offered by Aquaflex.

Q: Aquaflex is an adhesive. Why's it so expensive?

A: Aquaflex is NOT just adhesive, but a unique **waterproof minstallation system** that has **no MVER, %RH or pH limit**. Aquaflex is supplied as a package that also includes waterproof skim-coat and SLU. There is no other installation system in flooring that offers this unique level of performance. The Aquaflex adhesive is applied like many other adhesives, so certification is not necessary.

Aquaflex is patented with 4 domestic submissions and over 15 international submissions.

Aquaflex is fully warranted and offers the only warranty in the flooring industry against failure due to moisture from topical sources.

In comparison to 2-part epoxy mitigation systems, Aquaflex delivers a *performance equivalent* result, exceeding the highest moisture limits of any 2-part epoxy mitigation system. When comparing the overall value of Aquaflex to various 2-part epoxy systems, Aquaflex will typically cost about 50% less installed, but most importantly, **Aquaflex saves time! Aquaflex will take one day for installation versus up to 3 days for a given section of floor using the epoxy systems.**

Q: Is there anything a flooring contractor should know before they use Aquaflex for the first time?

A: Formulators takes great care to ensure that flooring contractors understand how to use Aquaflex, especially if they have never used it before. Formulators has experienced industry professionals who are available to consult with flooring contractors on the proper application of Aquaflex and what to do if they might experience any problems. For larger projects, training and installation startup services are available.

Aquaflex is a high solids, moisture cured adhesive that is easy to install as long as the directions are followed. Troweling Aquaflex does not require any special techniques. It uses the same trowel techniques as any other resilient flooring adhesives.

Q: What do I need to do to prep the concrete before application?

A: Floor preparation is very simple, just remove the existing floor and sand the concrete to porosity using a 20grit sanding disk. Afterwards, vacuum and give the area a light mop. In some cases additional measures are necessary if the concrete surface requires repair, (i.e., cracks, unstable patching compounds, etc).

Q: Can the installer shot blast or bead blast the concrete to prepare it for Aquaflex?

A: Absolutely not! Shot blasting/bead blasting is difficult to control, can be very destructive, contribute to respirable silica (see OSHA Final Ruling, <https://www.osha.gov/silica/>) and actual micro-fracture the concrete surface. Unfortunately, this question is asked quite frequently because most of the epoxy-based moisture mitigation systems require shot blasting to a CSP 3 profile. No manufacturer of adhesive or coating in the US allows direct application to this surface. In every case an application of self-leveling underlayment or floor patch is necessary to smooth out a rough CSP 3 surface. Essentially, shot-blasting wrecks the floor, necessitating repair. Aquaflex simply doesn't require this level of surface preparation due to its tenacious reactive bonding mechanism. Aquaflex can be used to install flooring cleanly and safely in occupied areas. This creates a great advantage when working in facilities that are open 24/7. Down time created by epoxy mitigation can cost a retailer over \$1.00/sf/day and a health care facility more than 5 times this cost.

Q: What if years later I need to remodel and change the flooring?

A: In contrast to epoxy mitigation, Aquaflex adhesive allows for a typical remodel with flooring removal and scraping of old adhesive. If a carpet tile needs replacing simply lift the old tile, razor scrape the floor and apply new adhesive over the Aquaflex residue. Aquaflex bonds exceptionally well to itself. Since Aquaflex allows the concrete to breathe, it will allow continued cure and drying. For installations that may have been placed over "green" concrete; this means that at a later date moisture testing may show that the replacement floor may not require additional procedures. Epoxy mitigation seals the moisture within the concrete slab. If a remodel is required 5 years down the road, the moisture that was found upon the initial testing of the concrete will still be present and still very high. Epoxy mitigation terminates the ability of the concrete slab to vent any free moisture (water of convenience). This means that with epoxy mitigation the building owner will most likely face additional mitigation costs at a later date. **Once epoxy is placed the concrete surface is forever altered.** Epoxy manufacturers can never be certain that damage of the epoxy membrane was avoided in future remodels. Replacement flooring may or may not even be covered under the original warranty. An additional cost to assure warranty compliance is unavoidable.

Q: What type of warranty does Aquaflex have?

A: Formulators warrants Aquaflex to be free from defects in material and workmanship for a period of ten (10) years when properly installed, and not to delaminate due to ANY sub-slab moisture level. This warranty also applies to adhesive failure due to *topical moisture*. In the event of an adhesive bond failure judged to be so, solely by a qualified independent testing agency of Formulators choosing, Formulators will repair or replace at its discretion, that section of floor judged to have failed, including standard labor costs. Formulators also supports the Aquaflex warranty with a product liability policy.

Q: Does Formulators manufacture all of the Aquaflex system components?

A: Formulators develops all its own products. All of our liquid products are produced in our Santa Ana, CA facility. Our cementitious materials are produced in Henderson, NV. *Formulators is the only manufacturer of high moisture installation products to provide a complete package of materials.* Our competitors may produce epoxy coatings or cementitious materials or both. However, only Formulators manufactures the entire system necessary for installation, which of course includes adhesive. Formulators, therefore is in a unique position to be **the only manufacturer in the US to offer one warranty, covering all installation products, from one manufacturer.**



Q: What's my lead time and do you ship direct or through distribution?

A: We grew our business as a completely independent manufacturer/distributor. We ship direct all over the continental US, Hawaii, Canada, Puerto Rico and Latin America. We have contracted with several national carriers to offer freight guaranteed deliveries. Our competitive rates can place 10,000sf of material in Boston, MA from Santa Ana, CA in 4 days, guaranteed. If it doesn't arrive on time we credit the freight cost. Also, Aquaflex is "0" VOC and freeze thaw stable, which allows for us to airship over night any material which may be required for emergency purposes. Repair kits are available for material testing and repair of failing floors.

Formulators takes pride in the fact we can out perform any distributor in the US when it comes to order turnover and logistics. Our retail clients often order and expect shipment the same day. Usually for thousands of square feet. Typically, orders placed are ready for shipment in less than 4hrs.