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## Most Frequently Asked Questions...

**Q: Who makes Aquaflex Patch Mix?**

**A:** Aquaflex Patch Mix was developed by Formulators located in Santa Ana, CA. All cementitious materials are produced in Henderson, NV. Formulators has been in business for over 15 years developing and manufacturing innovative solutions for building & construction, coatings, automotive and textile industries.

**Q: How long has Aquaflex Patch Mix been around?**

**A:** Aquaflex Patch Mix was introduced in 2011. When Formulators began introducing its waterproof adhesive chemistry it became immediately apparent that a water proof cementitious line was necessary. Conventional skim-coat and self leveling materials are moisture sensitive just like the adhesives. It is estimated that 1/3 of the flooring failures in the US are attributable to the cementitious product. The Aquaflex system has evolved over time to include formulations for virtually all types of resilient flooring. Aquaflex has been specified by many retail store clients including; Bed, Bath & Beyond, Rite Aid, TJ Maxx, Marshalls, Best Buy, BuyBuy Baby and Walmart. Aquaflex is also specified by several health care providers such as Fresenius Medical and DaVita Dialysis.

**Q: Does Aquaflex contain silica?**

**A:** All Aquaflex Concrete Repair products are formulated "silica-free". Silica dust from preparing concrete and sanding traditional concrete skim/patch contains silica which can contribute to harmful silica dust. The Occupational Safety and Health Administration (OSHA) has issued a final rule to curb lung cancer, silicosis, chronic obstructive pulmonary disease and kidney disease in America's workers by limiting their exposure to respirable crystalline silica (RCS). OSHA estimates that the rule will save over 600 lives and prevent more than 900 new cases of silicosis each year, once its effects are fully realized. The Final Rule is projected to provide net benefits of about \$7.7 billion, annually.

**Key Provisions**

- Reduce the permissible exposure limit (PEL) for RCS to 50 micrograms per cubic meter of air, averaged over an 8hr period.
- Requires employers to use controls (such as ventilation) to limit worker exposure. Provide respirators and a written exposure plan.
- Provide medical exams to monitor highly exposed workers.
- Provide some flexibility to help employers comply.

**Q: What are the moisture limits for Aquaflex Patch Mix?**

**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 cure under water.

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

**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 assessment for risk.

**Q: What if the flooring manufacturer says they will not warrant their floor without their private-labeled adhesive/skim-coat?**

**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 this warranty to the

performance of the flooring product, they are purposefully manipulating an “expressed” warranty. It isn’t ethical and **it may be illegal**. If a flooring manufacture ever states, “their product warranty is nullified unless their adhesive is used”, then your being deceived. Unfortunately, many flooring contractors find out the hard way what an implied tie-in warranty actually stands for in court.

**Q: When is it time to use Aquaflex Patch Mix?**

**A:** When ever a high moisture installation is required or an are prone to topside flooding. Formulators offers the only solution in the world for areas that receive liquid water penetration. 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.

**Q: What concrete surface profile is required for Aquaflex Patch Mix?**

**A:** The surface should be prepared to meet ASTM F710 standard. Aquaflex Patch Mix is typically used for repair of minor cracks that are 1/4” or less. Aquaflex Patch Mix can also be used to fill and smooth transitions and crack suppression joints. Aquaflex Patch Mix should never be used for complete coverage unless the installation calls for sheet vinyl and then purely upon esthetic appeal.

**Q: Can I use Aquaflex Patch Mix over the old adhesive instead of grind?**

**A:** No, old adhesive should never be encapsulated under skim-coat... **EVER**.

**Q: When is it appropriate to skim 100% of the concrete surface with Aquaflex Patch Mix?**

**A:** When installing sheet vinyl it’s best practice to skim-coat the entire surface. Sheet vinyl materials are often less than 1.5mm thick and can telegraph many surface defects that may exists. Tile products of heavier gauge are more forgiving.

**Q: How soon can I apply Aquaflex adhesive over is Aquaflex Patch Mix?**

**A:** Aquaflex adhesive can be applied over Patch Mix as soon as the surface is suitable for foot traffic. Typically, this is within 60min after spread. Heavier applications over 1/16” may require more time.

**Q: What if my area receives standing water on top of the Patch Mix overnight?**

**A:** Aquaflex Patch Mix, Skim Fast and SLU are waterproof and will remain firm after months of immersion in water. In case an area is flooded by accident prior to flooring application, simply shop-vac the water and allow to dry. This will not affect warranty.

**Q: Is Aquaflex Patch Mix included in the Aquaflex Performance Warranty?**

**A:** Aquaflex Patch Mix is part of Formulators waterproof installation system and covered by our Aquaflex Performance Warranty. Formulators provides the only warranty in the flooring business to be 100% backed by a \$4 million dollar product liability policy underwritten by AIG.

**Q: Can I use ARDEX Feather Finish and still receive a warranty for the installation?**

**A:** No... Not ever.

**Q: How is Aquaflex Patch Mix different than other concrete repair products?**

**A:** Aquaflex Patch Mix is 100% Portland cement based and silica-free. Other more noted brands mentioned is the fact that they are “formulated from a blend of Portland cement and other hydraulic cements”. The significance is placed upon “other” which is typically gypcrete (Calcium sulfate) and moisture sensitive. Nearly 1/3 of the flooring failures that Formulators encounters is due to failure not of the adhesive material, but instead a failure of the cementitious repair. Ever taken up a tile and the skim-coat comes up with it? Cementitious FAILURE and NO they will not pay any claims.

**Q: Can Aquaflex Patch Mix be over mixed?**

**A:** Yes, just like regular cement, Aquaflex Patch Mix can be over mixed. When regular cement is kept moving it will not harden but stay in a fluid state. Often, concrete contractors will conduct temperature and slump tests to insure the mix is fresh. If Aquaflex Patch Mix is kept agitated for more than 15min, the mix will generate heat (exothermic), the temperature of the mix will rise and when temperatures exceed 85 90F cure will begin. When this cure starts and the material is kept agitated the cement will form small concrete micro-nodules that may not appear problematic. The appearance of the mix will be similar and application of this material to the concrete surface will flow appropriately. However, upon final cure the material will crack severely and need to be replaced.

**Q: What does “pot life” mean?**

**A:** Pot life is then time the cement dry mix is in contact with the liquid. For Aquaflex Patch Mix this is approximately 15-20min. After that the material should not be applied to the concrete due to the possibility for cracking (see previous question).

**Q: Can I mix several bags of Aquaflex Patch Mix in a mobile onsite mixer?**

**A:** NO, this is never a good idea. Aquaflex Patch Mix is accelerated and even the best concrete contractor will have trouble mixing the material and conveying it to the area of application before set-up or creating a “hot batch” (see above). Always mix in a 5gal bucket and apply immediately.

**Q: Can I add additional water to Aquaflex Patch Mix?**

**A:** No, not ever. The polymer has been separated conveniently for you in a bottle that upon dilution provides an exact water addition.

**Q: Can I skip the polymer and just add water?**

**A:** No, not ever. The polymer is essential for adequate strength and replacing it with straight water will give a weakened and cracked finished cure.

**Q: How thick can I apply?**

**A:** Aquaflex Patch Mix can be applied at a skim or 1/32” up to 1/2” in small areas roughly 12-14” wide.

**Q: What is the coverage for one bag of Aquaflex Patch Mix?**

**A:** Aquaflex Patch Mix has an approximate coverage of 100sf at a 1/32” skim. If the thickness is doubled to 1/16” then the coverage is halved to 50sf and so on.

**Q: How much does Aquaflex Patch Mix cost?**

**A:** With every shipment of our Aquaflex adhesive, approximately 5% of the total square footage is supplied with Aquaflex Patch Mix. This is whether the project requires it or not. Additional material is available at a competitive price.

**Q: Why is Aquaflex Patch Mix so white?**

**A:** Aquaflex Patch Mix is formulated with the highest grade of Portland cement which is pure white in color. This is the type of cement used for swimming pool construction.

**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 hires 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.

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

**A:** Formulators develops all its own products. All 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 moisture mitigation products to provide a complete package of materials necessary for installation.* 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 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 rate 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.

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.