Concrete Admixture for Moisture Content/Vapor Emission

The root causes of a delayed or failed flooring installation is the moisture content/vapor emission rate and EPA regulations on flooring adhesives. Written in most specifications, is a value indicating what the moisture content or vapor emissions must reach before installing a floor. If they are not reached you are not allowed to install the flooring or the warranty will be voided. Even if you reach that specified value, most companies do not warranty their product failing due to moisture. In addition to delaying your project moisture may travel through the concrete slab overtime, which will cause the floor to heave, delaminate or separate itself from the concrete.

So Barrier – 1 has come up with a product which stops moisture from traveling through and out of the concrete surface. Barrier 1 is a high performance concrete admixture that proactively helps eliminate flooring failures.

But this problem can be resolved with the use of Barrier-1 high performance concrete admixture that proactively, for a much lower cost eliminates failed floors due to concrete moisture. Below are some specifications on the innovative product:

- Is manufactured in the US with over eight years of ZERO failures.
- Renders the slab NON-hygroscopic.
- Provides the most economical solution at easily 1/10th the cost of most “effective” topical remedies.
- A complex, proprietary formula unlike any other; that reacts with the “free water” and various components of the cement to form additional Calcium Silicate Hydrate (CSH) EVERY time.
- No other product has the necessary hydroxides to guarantee this…especially when other Supplementary Cementitious Materials are used.
- “By producing more CSH the paste becomes stronger…closes off more of the capillaries that allow the movement of moisture through the concrete…resulting in a stronger, more durable…less permeable concrete”
- For each and every slab properly dosed with Barrier-1 high performance admixture an Independent concrete inspector collects two cylinders (4” x 8”) per day and sends them to an Independent AASHTO/CCRL lab that conducts test to certify that the concrete is an ASTM C494 Type S Admixture, Shrink Reducing Admixture, ASR Inhibiting Admixture.
- Has a 10 year unmatched comprehensive warranty.
- Adheres to ACI 302.1 QA, testing & remediation protocol
- If needed, can go from “pour to floor” in 30 days or less.
- Requires only one (1) day of curing (as opposed to 7 days)
- NO other moisture testing is required.
- 14% average increase in concrete strength.
- Compatible with all floor covering adhesives and coatings.
- Positive impact on finishing with little bleed water: Undiluted paste, Shorter finishing times.
- Large number of ways it contributes to LEED certification points:
  - Avg. cost for a 4” slab $.62 sf
  - ADDRESSES the moisture completely.
  - “Re-wetting” of the slab is NOT an issue.
  - No Unplanned Moisture Remediation Expense.
  - Integral & Irremovable.

The initial research of Barrier-1 admixture began in 2002. Two years later, after extensive development and detailed testing, it was placed on the market. As of now it has been used in over 400 projects; a reference list of these projects is available. Just as failed floors due to concrete moisture have grown exponentially in the last 14 years, it is expected that Barrier-1 will continue to grow the same.

Now more than ever, moisture vapor transmitting or emitting from concrete can delay installation, cause flooring failures and promote the growth of mold and bacteria which causes serious erosion of a structure’s Interior Environmental Quality (IEQ). With the help of Barrier 1 the above listed items can be forgotten.
From the start: design, plan & install this on **YOUR SCHEDULE**

Without worrying about this...