



ARDEX Underlayments and 99% RH

As more and more finish surface materials (adhesives, floor coverings, flooring systems, etc.) are being approved for installation over concrete with high relative humidity (RH; ASTM F2170), we are writing to confirm that concrete with RH levels up to 99% may be suitable to receive most ARDEX underlayments without moisture mitigation, contingent on the following conditions:

- There should be no moisture sources other than the excess water in the concrete itself. Hydrostatic pressure, plumbing leaks, flood factors and other sources of water infiltration must be identified and corrected prior to installation.
- For installations on- or below-grade, an effective and intact vapor retarder must be directly below the concrete in conformance with ASTM E1745.
- As ARDEX underlayments allow for the free passage of concrete moisture into the flooring assembly, the moisture conditions must be within the limitations of the intended finish surface materials. In other words, if the RH is 99%, and the adhesive or the finish flooring is only suitable for use at up to 95%, moisture mitigation would be required.
- Applicable underlayments include all ARDEX self-leveling underlayments as well as ARDEX FEATHER FINISH, ARDEX FORTI FINISH and ARDEX SD-P.

ARDEX K 60 and ARDEX MRF are still suitable for up to 100% RH

ARDEX K 60 and ARDEX MRF are specifically formulated to withstand unlimited moisture, to include liquid water, post cure. ARDEX K 60 and ARDEX MRF remain the recommended underlayments for use under moisture control systems and moisture-resistant finish surface materials.

Notes

As always, and in accordance with industry standards, the minimum substrate and ambient temperature for installation is 50°F (10°C). The surface temperature of the concrete must be at least 5°F (3°C) higher than the dew point for the given temperature and relative humidity in the space and rising. For example, if the dew point temperature in the space is 60°F (16°C), the slab temperature must be 65°F (19°C) or higher and rising. The maximum ambient relative humidity for installation space is 70%. Installation areas should be well ventilated. The surface of the concrete must be completely dry at the time the ARDEX underlayments are installed. Verify concrete surface dryness by mat testing in conformance with ASTM D4263.

For ARDEX underlayments not listed herein, the maximum concrete RH is 95%. All above-listed conditions apply.

Please note that we are able to confirm this information in technical letters as needed. Should you have any questions on this information, please contact the ARDEX Technical Service Department.

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