HIGH MOISTURE CONDITIONS AND ARDEX UNDERLAYMENTS

When considering the moisture content of a concrete slab and its resulting suitability to receive ARDEX underlayments without moisture mitigation, we currently defer to the manufacturers of the finishing materials (adhesives and floor coverings) being used. But now, with manufacturers offering resilient floor covering adhesives that are approved for installation at relative humidity levels above 80%, we are adjusting our position, as follows.

1. For relative humidity levels of 80-90%, it is acceptable to install our underlayments without moisture mitigation, dependent on the conditions below. If these conditions cannot be met, slab moisture must be remediated to acceptable levels in accordance with ASTM F710, *Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring.*
   a. If the slab is on or below grade, there must be an effective and intact vapor retarder, in conformance with ASTM E1745, placed directly below the concrete.
   b. The pH of the concrete must not exceed 11.
   c. The installation conditions must comply with any limitations imposed by the manufacturers of the finishing materials, including maximum RH levels.
      i. Please note that when both the flooring and the adhesive manufacturer’s moisture limitations are being considered, the lower of the two should be the deciding factor. For example, if the flooring is approved for installation up to 75% RH, the adhesive is approved for installation up to 90% RH, and the concrete has a top RH of 85%, moisture remediation is required prior to installing the ARDEX underlayment.

2. For relative humidity levels above 90%, please consult the ARDEX Technical Department prior to making a recommendation.

Should you have any questions on this information, or if we can be of further assistance, please contact the Technical Service Department here at our Home Office in Pittsburgh.

Seth Pevarnik
Director of Technical Services