

MOISTURE BARRIERS

Adequate moisture/vapor protection below on-grade maple flooring systems is essential to insuring problem-free installations. Typical floor system constructions incorporate two moisture barriers; one placed immediately below the concrete slab and the other placed directly on the concrete surface, immediately below the floor system. All MFMA (Maple Flooring Manufacturers Association) milling members recommend a damproofing membrane (under-the-slab moisture barrier) and require a surface vapor barrier (above-the-slab vapor barrier) to insure proper protection from moisture infiltration.

Under-the-slab moisture barriers -- Concrete subfloors shall have an adequate moisture barrier beneath and at the perimeter of the slab. These barriers must be chosen on the basis of the project site, building construction, soil type, etc., and shall be selected and specified by the project architect/engineer.

Above-the-slab vapor barrier -- shall be incorporated into maple flooring systems in addition to any specific the specified under-slab moisture barrier. Commonly specified surface vapor barriers include; seam-sealed polyethylene film and/or seam-sealed closed-cell polyethylene foam underlayment. In parquet systems utilizing adhesives adhered directly to the concrete, an above-the-slab vapor barrier is not applicable.

In practice, even after recommended drying time, occasional residual moisture may remain. Surface vapor barriers may assist in preventing the ill effects of undetected moisture. The principal purpose of above-the-slab vapor barrier is for dew point condensation related to slab temperature and environmental conditions. Migration of this moisture into flooring system materials may result in various moisture related problems, e.g., cupping, compression ridging and, in more extreme situations, buckling, mold/mildew, etc., even permanent irreparable damage. These barriers are typically recommended by the specified floor system manufacturer and shall be specified by the project architect.

NOTES:

- 1. Follow MFMA milling manufacturer's guidelines for proper surface vapor protection.
- 2. MFMA does not endorse "below-grade" maple systems installations without the inclusion of adequate moisture protection.

If you have additional questions, please contact MFMA's Technical Director at 847-480-9138.

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