



## EXPANSION VOIDS

Expansion voids are areas in a maple sports flooring system where no flooring or subflooring components are installed, specifically to provide space for system movement. Expansion voids are usually found at the perimeter of a floor and at all vertical obstructions (bleacher anchors, volleyball inserts, floor electrical outlets and audio box hookups, etc.) within the borders of the floor.

Maple sports flooring systems are generally designed in either "fixed" or "floating" configurations. "Fixed" flooring systems are typically specified in locations where system movement is not anticipated or desired, and "floating" floor systems are typically specified in installations where system movement is anticipated.

All MFMA manufacturers have detailed specifications which call for installation of expansion voids at the perimeter and at all vertical obstructions on certain of their flooring systems. The installation of expansion voids at the system perimeter and at all vertical obstructions is required in most "floating" floor system specifications.

As a general rule, MFMA recommends that no fixtures, equipment or bleachers be anchored through "floating" maple sports flooring systems into the concrete subfloor without first cutting surface maple and wood subfloor components away from lag bases and permanent in-floor fixtures to provide proper space for normal system movement.

"Fixed" systems such as the generic Nail-in-Channel and Channel and Clip floors are designed to hold the flooring tightly in place, restraining the system from movement. Installation of expansion voids at the perimeter and at vertical obstructions is not usually required with these system configurations.

Consistent effort must be given to keep all expansion voids clean and free of debris. Regular attention to perimeter voids and floor insert locations will ensure flooring system movement as the system was designed. Buckling, warping and rolling of flooring components can occur when expansion voids are clogged with debris — impeding the system from free movement it was designed to accommodate.

MFMA and all of its member manufacturers have published specifications that prescribe optimum temperature and humidity ranges to ensure satisfactory performance and reduce the likelihood that any bind-up of components will ever occur on a maple floor installed with proper provision for system movement.

MFMA recommends maintaining indoor temperatures between 55 and 75 degrees and indoor relative humidity level between 35 percent and 50 percent year round. If the flooring materials are properly acclimated, a 15 percent fluctuation in indoor relative humidity will not adversely affect the maple. Excessive shrinkage and/or expansion may occur with indoor relative humidity variations in excess of 15 percent, and variations of this magnitude may create difficulties with vertical obstructions in some "floating" flooring systems.

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

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