
Deflection

The Enkasonic floating floor system is designed to function as an acoustical impact isolation unit. It is normal for all Enkasonic floor systems to have some subtle deflection. Typically, on plywood floating floors with hardwood, the only perceived deflection is along the room perimeter at the walls and adjacent to door openings. Door openings sometimes have a rigid threshold, which makes the sense of deflection more noticeable.

Causes of Deflection

Occasionally, in structures that use wood floor joists, deflection may be perceived in parts of the room other than the perimeter for some of these reasons:

- The subfloor or floor joists are warped, bowed or not level
- One, or both layers, used for the plywood floating floor are warped
- The hardwood flooring planks are warped or improperly attached to the plywood floating floor
- Insufficient deadload has been applied to the entire floor system

Solving Deflection Problems

When feasible, warped wood material should be removed, and straight and true material should be installed.

If the upper plywood layer is not pulled snug against the bottom layer, removing screws or staples and reinstalling with additional weight on the floor will help pull the layers together.

When the floating floor and finish material do not have sufficient mass to properly load the system, slippage occurs between the Enkasonic filaments (which vary in height) and create a “crunching” sound. Under normal conditions, this sound will not occur if product installation instructions are followed completely. This includes the laying down of a 15# roofing felt on the subfloor prior to the installation of the Enkasonic and properly loading the Enkasonic with a minimum of 2 layers of ½ inch thick APA rated plywood sheets. The floor system is rather forgiving in that even if the instructions are not strictly adhered to, the dead-load from the finished flooring and the furniture usually eliminates any previously detectable deflection or “crunching” sound.

Movement in a properly installed Enkasonic floor system is completely undetectable by anyone other than a well-schooled expert in the field — with the possible exception of some perimeter conditions. Since Enkasonic was introduced in 1984, there have been no complaints of movement being detectable, let alone annoying or unbearable, unless it was the result of the four reasons previously listed. Over time, experience has shown that dead-load from furniture tends to eliminate or reduce warping, and thereby diminishes deflection. Subtle movement of an Enkasonic floor system is normal and necessary to provide acoustical isolation and has no effect on the structural integrity of the Enkasonic Floating Floor System.

* Different subfloors and floor coverings require different underlayments. Refer to Enkasonic Installation Bulletins specific to the floor underlayment for your project. *For additional technical assistance please contact: Colbond Inc., P.O. Box 1057, Enka, North Carolina 28728; TOLL FREE: 800-365-7391; PHONE: 828-665-5050; FAX: 828-665-5009; EMAIL: enka-engineered@colbond.com or INTERNET: www.colbond-usa.com.