Professional and amateur dance groups have determined that some degree of “give” in dance floors enhances the performer’s abilities, and it also reduces leg injuries.

Through cooperation with the office of Lawrence Kirkegaard and Associates, a prominent acoustical consulting firm in Downers Grove, IL, Kinetics Noise Control developed a very successful floating dance floor system, which is now in use at a number of dance facilities (Fig. 2).

Each dance floor, as shown in Fig. 1, consists of Kinetics Isolation Pads, type KIP-22 I2, spaced 16 in (406 mm) on centers each way with low density fiberglass between the pads. The pads are bonded to the underside of 2x4 continuous wood nailers, laid flat, also 16 in (406 mm) on centers. The nailers, in turn support sheets of 3/4 in (19 mm) T&G plywood which are laid diagonally, and are stapled or screwed to the 2x4 nailers.

The dance surface, which is typically 25/32 in (20 mm) maple wood flooring, is nailed and glued to the 3/4 in (19 mm) plywood underlayment, then finished to complete the installation.