

# noiseletter

Published by Kinetics Noise Control, Inc.  
Problem-solvers in vibration isolation,  
noise control and seismic restraint.

## Kinetics Resilient Dance Floors

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 (See Fig. 2).

Each dance floor, as shown in Fig. 1, consists of Kinetics Insolation 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" (406 mm) on centers. The nailers, in turn support sheets of  $\frac{3}{4}$  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  $\frac{25}{32}$  in (20 mm) maple wood flooring, is nailed and glued to the  $\frac{3}{4}$  in (19 mm) plywood underlayment, then finished to complete the installation.

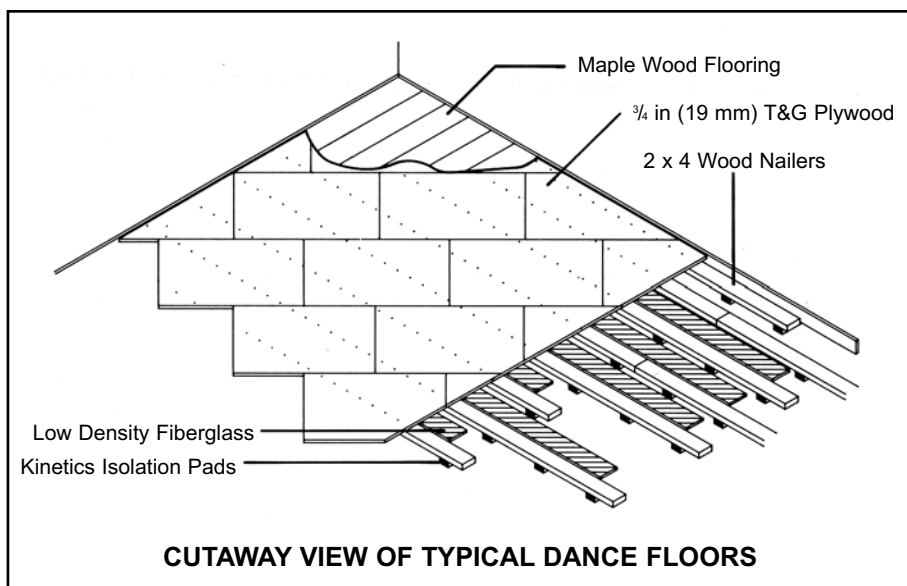


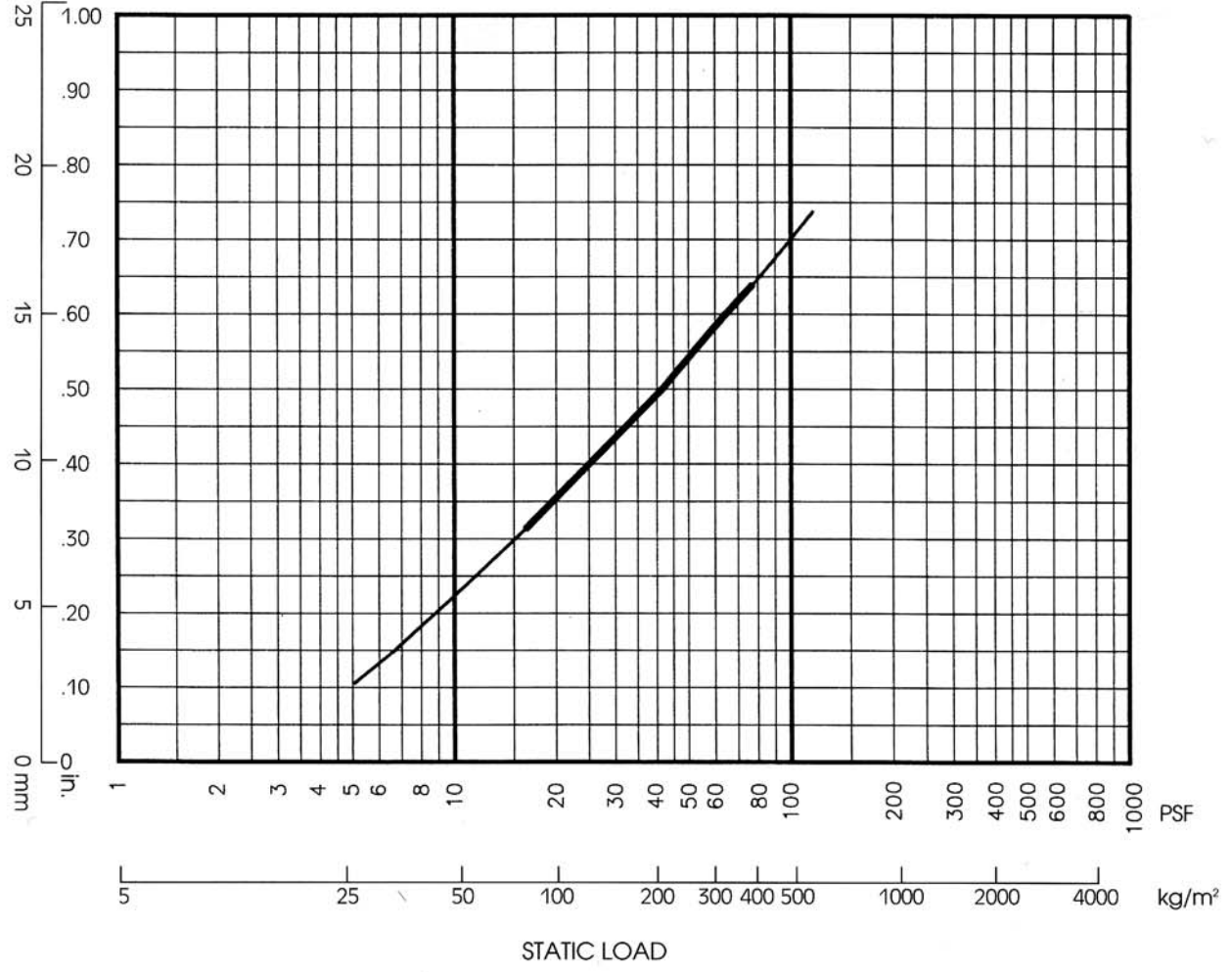
Fig. 1

### KINETICS DANCE FLOORS

Bennington College - Vermont  
Garden State Ballet - New Jersey  
Houston Ballet - Texas  
Julliard School Of Music - New York  
Mary Knoll College - New York  
Park Hotel Ballroom - California  
Purchase Theatre For The Performing Arts - New York  
San Francisco Ballet - California  
Sewickley Academy - Pennsylvania  
State University, Binghamton - New York  
State University, Brockport - New York  
State University, New Paltz - New York  
Wright State University - Ohio

Fig. 2

INITIAL STATIC DEFLECTION - (FOR 2" (51 MM) UNLOADED THICKNESS)



NATURAL FREQ., CYCLES/SEC. (FOR 2" (51 MM) UNLOADED THICKNESS)

