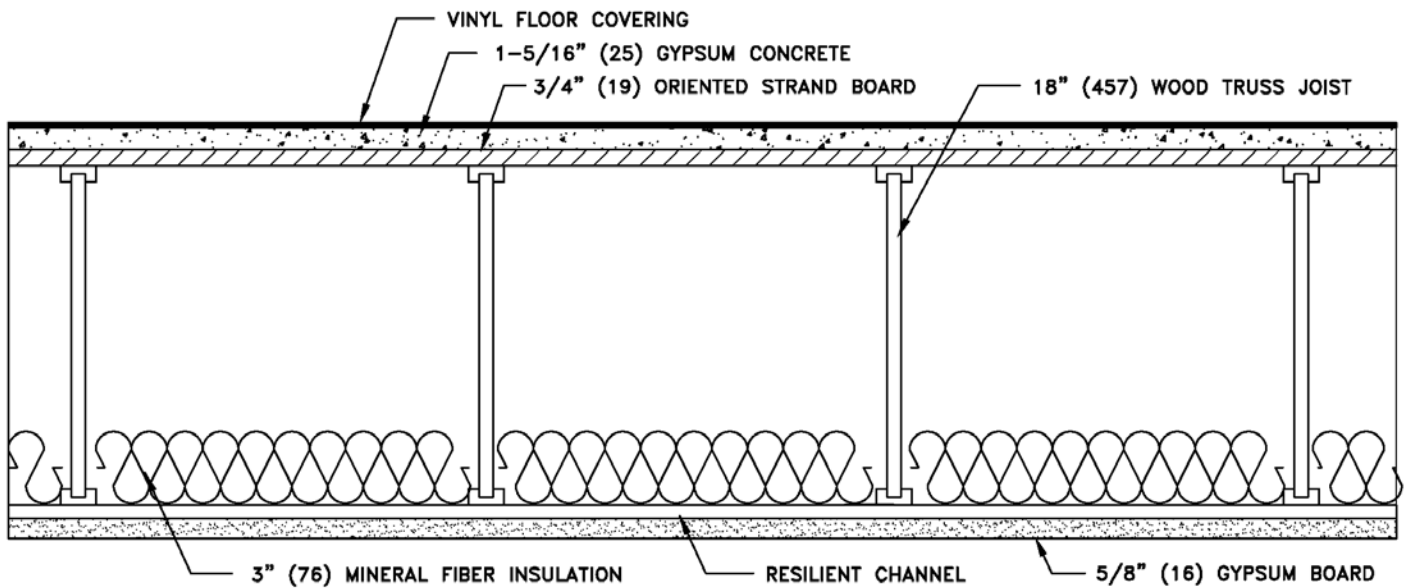


# KINETICS NOISE CONTROL TEST REPORT #AT001046

- **KINETICS NOISE CONTROL PRODUCTS:**
  - NONE
- **ACOUSTICAL RATINGS:**
  - FIIC 33
- **TESTING AGENCY & REPORT NUMBER:**
  - YERGES ACOUSTICS



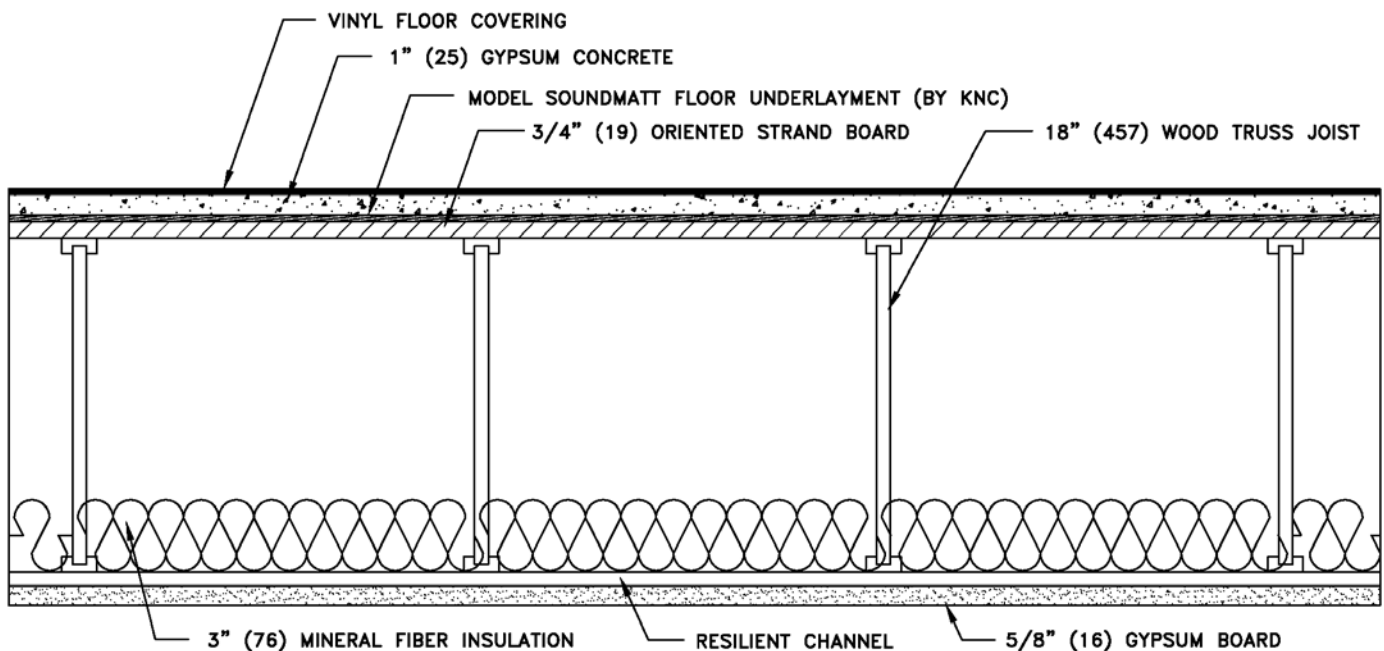
KINETICS DRAWING NUMBER: AT001046A



6300 IRELAN PLACE, DUBLIN OH  
PHONE: 800.959.1229  
FAX: 614.889.0540  
WEB: [WWW.KINETISNOISE.COM](http://WWW.KINETISNOISE.COM)  
EMAIL: [ARCHSALES@KINETISNOISE.COM](mailto:ARCHSALES@KINETISNOISE.COM)

# KINETICS NOISE CONTROL TEST REPORT #AT001046

- **KINETICS NOISE CONTROL PRODUCTS:**
  - SOUNDMATT
- **ACOUSTICAL RATINGS:**
  - FIIC 51
- **TESTING AGENCY & REPORT NUMBER:**
  - YERGES ACOUSTICS



KINETICS DRAWING NUMBER: AT001046B



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## **Yerges Acoustics**

5209 Lee Avenue, Downers Grove, IL 60515

Phone: 708/969-7153

Fax: 708/969-7304

May 31, 1996

Kinetics Noise Control  
6300 Irelan Place  
P.O. Box 655  
Dublin, OH 43017-0655

Attn: Mr. Matt Swysgood  
Architectural Products Specialist

Subject: Field Impact Insulation Class Testing  
*(Project specific information is  
confidential, per Owner's request.)*

Dear Mr. Swysgood:

On May 1st, 1996, we conducted two FIIC measurements on the floor separating Unit 622 from Unit 612 in the Apartments in . The measurements were conducted in accordance with ASTM E 1007-90, with the exceptions to 7.1.1 noted in the description of the test specimens. This was a field test, and we had no control over the dimensions of the specimens.

The receiving room for both tests was the kitchen/dining/living room of Unit 612. The walls and ceiling were drywall. The living room area was carpeted. Except for major appliances and cabinetry, the room was unfurnished.

The receiving room volume was 3977 cubic feet.

There were two test floor specimens, the kitchen and the dining area. The kitchen was trapezoidal, with a width of 5.6 feet and an average length of 7.8 feet. The dining area was polygonal, with a minimum width of 9.4 feet and a minimum length of 8.7 feet.

The kitchen floor consisted of:

Standard vinyl floorcovering.  
1" (nominal) gypsum concrete.

**James F. Yerges**

May 31, 1996  
Mr. Matt Swysgood  
Page two

5/16" Kinetics Soundmatt fiberglass underlayment.  
3/8" thick Kinetics Model SRP closed cell polyurethane foam isolation material at the perimeter of the concrete pour.  
3/4" oriented strand board.  
18" deep wood truss joists.  
3" R11 insulation in the joist cavity.  
5/8" drywall on resilient channels.

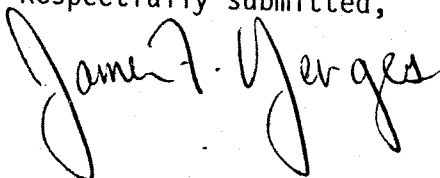
The dining area floor was specified to have been the same construction. However, an eyewitness to the installation stated that the installer had not correctly interpreted which areas were to receive carpet and which areas were to receive vinyl floor covering. The dining area had actually not received the Soundmatt underlayment and SRP perimeter isolation. Instead, an additional 5/16" of gypsum concrete was poured. This provided a unique opportunity to assess the effect of the underlayment.

A construction supervisor was summoned. Using a power saw, he carefully made parallel cuts through the topping concrete and the vinyl flooring, along the line the eyewitness had observed the end of the underlayment. A strip of concrete approximately 1-1/2" wide was carefully chiseled away, permitting inspection of the actual conditions. Underlayment and perimeter isolation had indeed been provided in the kitchen, but not in the dining area. All remaining concrete debris connecting the two areas of the floor was chiseled out to separate them. (The OSB was *not* cut.) The debris was removed and the floors were swept before the testing commenced.

The dining room floor, which did not have underlayment and perimeter isolation, achieved a test value of FIIC 33. The kitchen floor, which did have Soundmatt and SRP perimeter isolation, achieved a test value of FIIC 51. The accompanying summary table lists the normalized impact sound levels for the two tests, along with the measured absorption in the receiving area.

The reader is cautioned not to infer too much - or too little - from these field measurements. The fact that one small kitchenette floor fitted with Kinetics Soundmatt underlayment and SRP perimeter isolation achieved FIIC 51 does not assure that dissimilar installations would achieve identical results. However, simply moving the B&K tapping machine a few feet, to a portion of the same floor without underlayment and perimeter isolation, dropped the test value to FIIC 33. This indicates that the underlayment and perimeter isolation can be very effective in reducing impact noise transmission in real world applications.

Respectfully submitted,

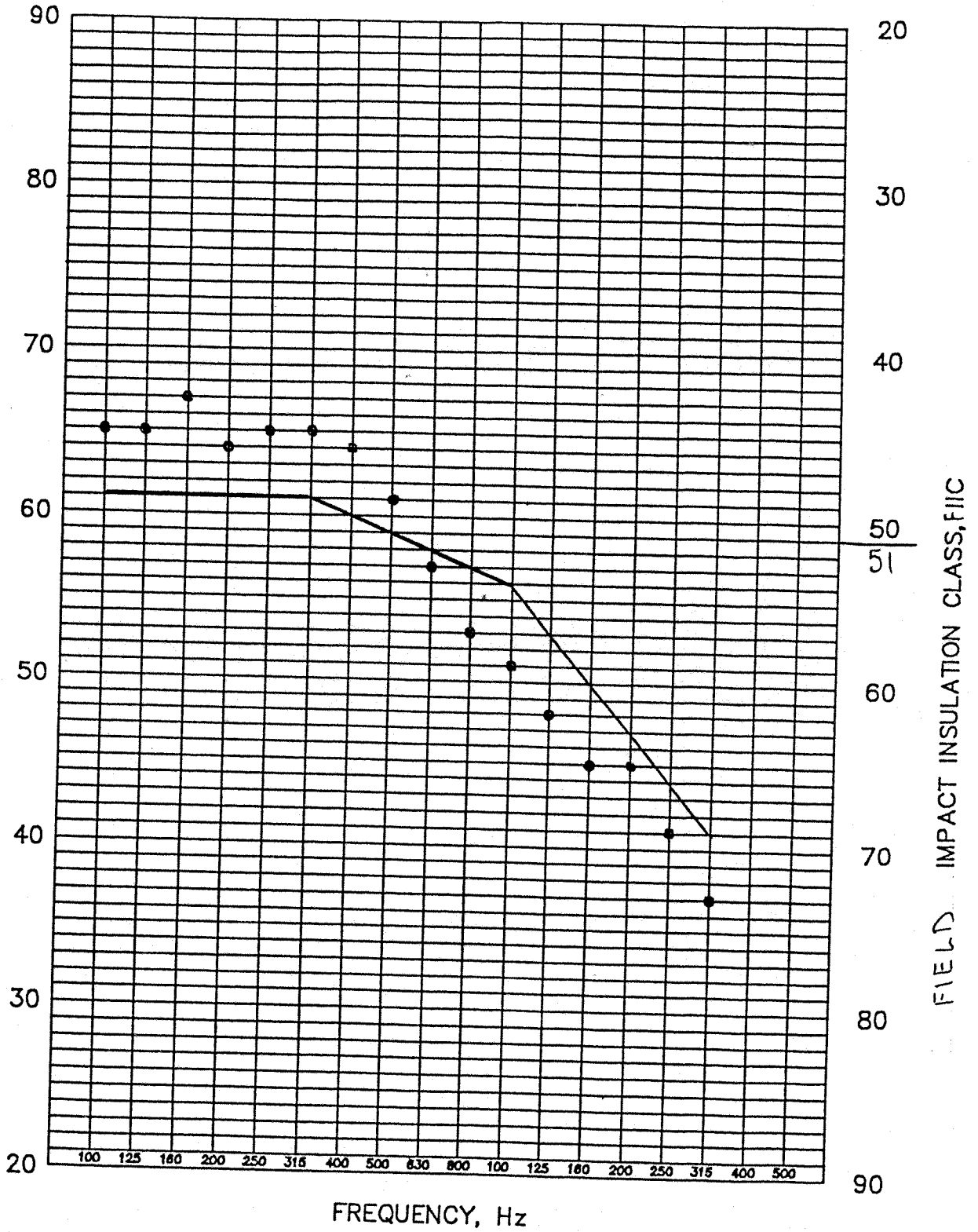


James F. Yerges

Frequency Band (Hz)	Normalized Level Ln		Absorption (sabins)
	Kitchen	Dining	
100	65	64	282 *
125	65	67	217
160	67	69	271 *
200	64	72	207
250	65	71	247 *
315	65	71	263 *
400	64	73	250 *
500	61	72	219
630	57	71	229
800	53	71	221
1000	51	71	224
1250	48	71	224
1600	45	70	214
2000	45	73	267 *
2500	41	69	244 *
3150	37	64	247 *
	FIIC = 51	FIIC = 33	

\* indicates measured absorption exceeded  $V^{(2/3)}$  value of 238 sabins

NORMALIZED ONE THIRD OCTAVE BAND  
SOUND PRESSURE LEVEL, dB  
RE. 20 MICROPASCAL



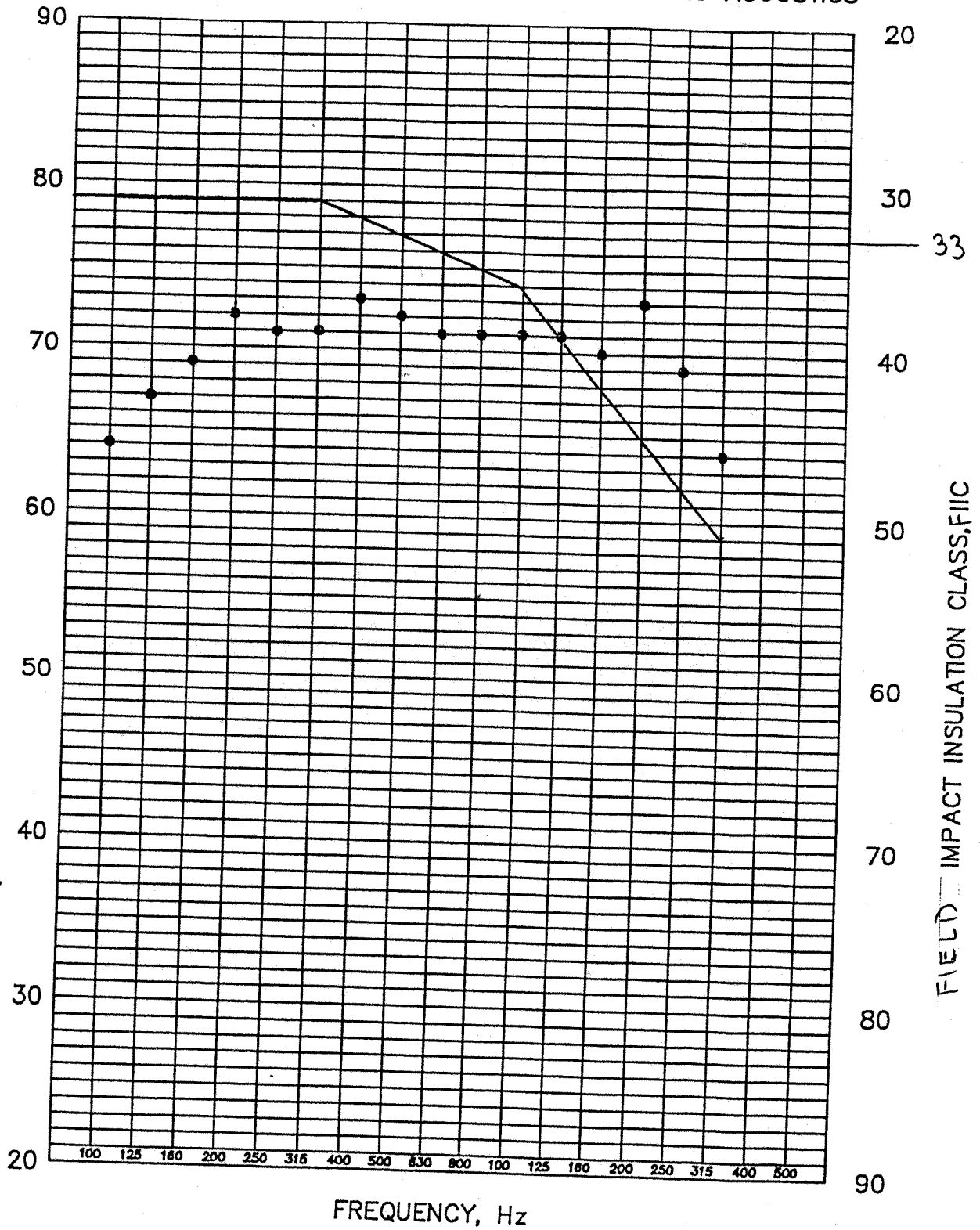
SITE: \_\_\_\_\_

TEST FLOOR: 622 / 612 KITCHEN

DATE: 05.01.96

ENGINEER: JFY

NORMALIZED ONE THIRD OCTAVE BAND  
SOUND PRESSURE LEVEL, dB  
RE. 20 MICROPASCAL



SITE: \_\_\_\_\_

TEST FLOOR: 622 / 612 DINING

DATE: 05.01.96

ENGINEER: JFY