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May 24, 2004

## FIELD IMPACT INSULATION CLASS (FIIC) REPORT

**TEST DATE:** May 2, 2004

**LOCATION:** Villaggio on Yarrow Bay, 4331 Lake Washington Blvd. SE, Kirkland, WA.

**TEST SPECIMEN:** Engineered Hard Wood over Redupax

**FIIC:** 55

### FLOOR/CEILING ASSEMBLY:

The floor/ceiling assembly consisted of engineered hard wood over Redupax, 1-1/2" Gyp-Crete over plywood subfloor, 2"x10" wood joists 16" on center, Resilient Channel and 5/8" gypsum board ceiling. The joist cavities was filled with 3.5" batt insulation.

### MEASUREMENT AND RESULTS PROCEDURE

The procedure used in the test was made in conformance with ASTM Designations E1007-97, "Standard Test Method for Field Measurement of Tapping Machine Impact Sound Transmission Through Floor-Ceiling Assemblies and Associated Supported Structures." The FIIC value was determined using the typical IIC contour from ASTM Designation E989-89, "Standard Classification for Determination of Impact Insulation Class (IIC)."

### TEST EQUIPMENT

- 1) Larson Davis Model 2900B Real Time Sound Level Meter S/N 0990
- 2) Larson Davis Microphone Model 2559 S/N 2757
- 3) Larson Davis Preamp Model 900C S/N 0690
- 4) Larson Davis Calibrator Model CAL200 S/N 2306
- 5) Scantek Tapping Machine Type 211 No. 20487
- 6) JBL Speaker No. 1562-01284

## MEASUREMENT RESULTS

The Field Impact Insulation Class (FIIC) of the floor/ ceiling assembly was computed in accordance with ASTM E989-89 and ASTM E492-90 and was found to be 55. A graphical and tabular presentation of the data are shown below.

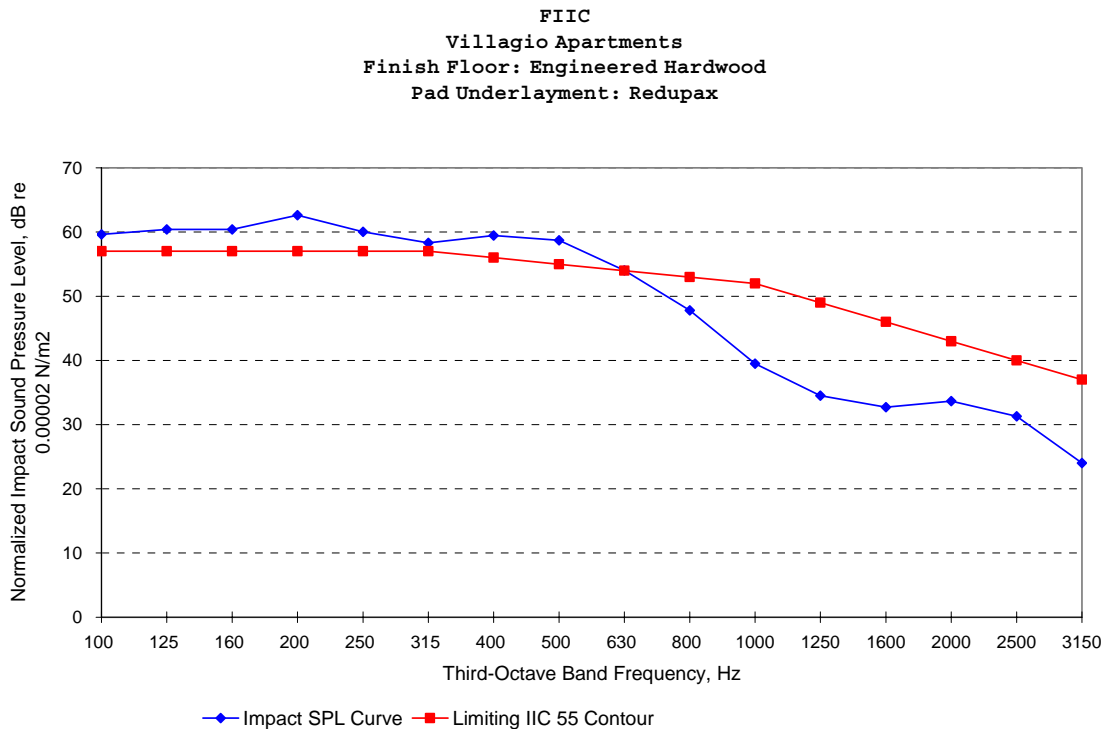
Freq. (Hz)	L <sub>n</sub> (dB)	Def. (dB)	Freq. (Hz)	L <sub>n</sub> (dB)	Def. (dB)
100	61	3	630	56	0
125	62	3	800	50	0
160	62	3	1000	41	0
200	65	6	1250	36	0
250	62	3	1600	35	0
315	60	1	2000	36	0
400	61	3	2500	33	0
500	61	4	3150	26	0

### Abbreviation Notes:

Freq. - 1/3 Octave Band Center Frequencies in hertz

L<sub>n</sub> - Normalized Impact Sound Pressure Level in decibel

Def. - Deficiencies



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