

PROJECT NUMBER: 3018 02 50879-5
STORK – TWIN CITY TESTING CORPORATION

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DATE: October 21, 2002
REVISED: April 24, 2003

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FIELD IMPACT INSULATION CLASS (F-IIC)
TESTING CONDUCTED AT MAINSTAY SUITES,
1275 ASSOCIATES DRIVE, DUBUQUE, IA 52002

Prepared for:

SPACEJOIST
Attention: Mr. Roger Gibbs
P.O. Box 276
Dyersville, IA 52040

Client Purchase Order Number: Contract Dated 8/26/02

Conducted and Prepared by:



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The test results contained in this report pertain only to the actual assemblies tested and not necessarily to all similar constructions.

FIELD IMPACT INSULATION CLASS (F-IIC) – ASTM E1007-97

INTRODUCTION:

This report presents the results of acoustical testing of the floor/ceiling assembly between rooms 226 and 326, at the MainStay Suites, 1275 Associates Drive, Dubuque, IA. This test was requested by Mr. Roger Gibbs of Spacejoist on September 30, 2002 and was conducted on October 10, 2002.

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TEST RESULTS SUMMARY:

<u>Test Configuration:</u>	<u>F-IIC</u>	<u>Def. (dB)</u>
<i>Floor/Ceiling</i>		
Mannington 3/8" laminate synthetic composite wooden flooring sample on QuietWalk sample on existing Maxxon Underlayment	54	30

FLOOR/CEILING DESCRIPTION:

The test was conducted between units 326 and 226. The floor ceiling assembly consisted of the following components:

- 4'x3'x3/8" Mannington laminate synthetic composite wooden flooring sample on Quietwalk padding on existing Maxxon Underlayment
- 3/4" thick Maxxon Underlayment
- 3/4" OSB sub-floor
- SpaceJoist Metal Web Truss System, 20'x16" deep – 24" O.C.
- R11 Fiberglass insulation
- 1/2" Resilient channel – 24" O.C.
- 5/8" type X gypsum board

Estimated weight of the system was 14.6 psf.

The floor ceiling description was provided by Spacejoist personnel, and was not verified by TCT.

TEST PROCEDURE AND EQUIPMENT:

ASTM Standard E1007 (97) was followed in every respect. The instrumentation was calibrated before and after testing with a B+K 4230 sound level calibrator. The F-IIC value was obtained by applying the L_N values to the standard contour of ASTM E989 (99).

<u>Manufacturer</u>	<u>Model</u>	<u>Description</u>	<u>S/N</u>
IVIE, Inc.	PC-40	Spectrum Analyzer	4587A130
Larson Davis	2541	1/2" Free Field Mic.	1150
Brüel & Kjær	4230	Sound Calibrator	282266
IVIE, Inc.	IE-20B	Noise Generator	741C853
Yorkville	E160P	Powered Loudspeaker	
Bruel & Kjaer	3204	Tapping Machine	84667

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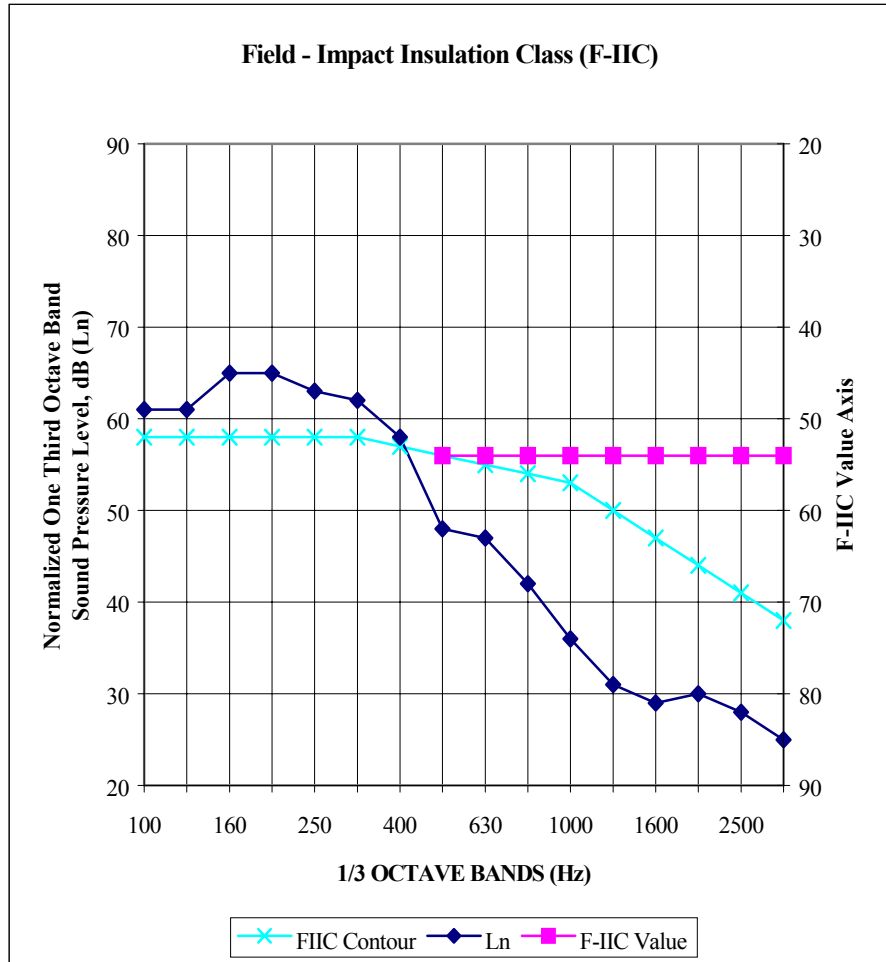
TEST RESULTS:

Client: SpaceBist

Tested by: Jason Burggraff

1/3 Oct. Band, Hz	Ln (dB)	Def (dB)
100	61	3
125	61	3
160	65	7
200	65	7
250	63	5
315	62	4
400	58	1
500	48	0
630	47	0
800	42	0
1000	36	0
1250	31	0
1600	29	0
2000	30	0
2500	28	0
3150	25	0
Total Def.		30
IIC	54	

Ln = Normalized Sound Level
 Def = Deficiencies (above IIC contour)



SPECIMEN IDENTIFICATION:

Source Room (upper) 326
 Receive Room (lower) 226

Test Date: 10-Oct-02
 Temp (F): 71.3 RH: 42%

Specimen Description:

Type: Floor/ceiling construction

Construction: 3x4x3/8" Mannington eng. wood flooring - QuietWalk - 3/4" Maxxon Underlayment - 3/4" OSB - SpaceBist MetalWeb System Truss (20' long, 16" deep, 24" O.C.) - fiberglass batting in cavities - 1/2" resilient channel (24" O.C.) - 5/8" gypsum board

Comments: None

Nominal Dimensions:

Sample Area, ft² 248

Receive Volume, ft³ 1962