

PROJECT NUMBER: 3018 02 50879-4
STORK – TWIN CITY TESTING CORPORATION

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DATE: October 21, 2002
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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> vinyl flooring sample on existing Maxxon Underlayment	51	27

FLOOR/CEILING DESCRIPTION:

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

- 6’x8’ vinyl flooring sample on existing Maxxon Underlayment
- ¾” thick Maxxon Underlayment
- ¾” 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

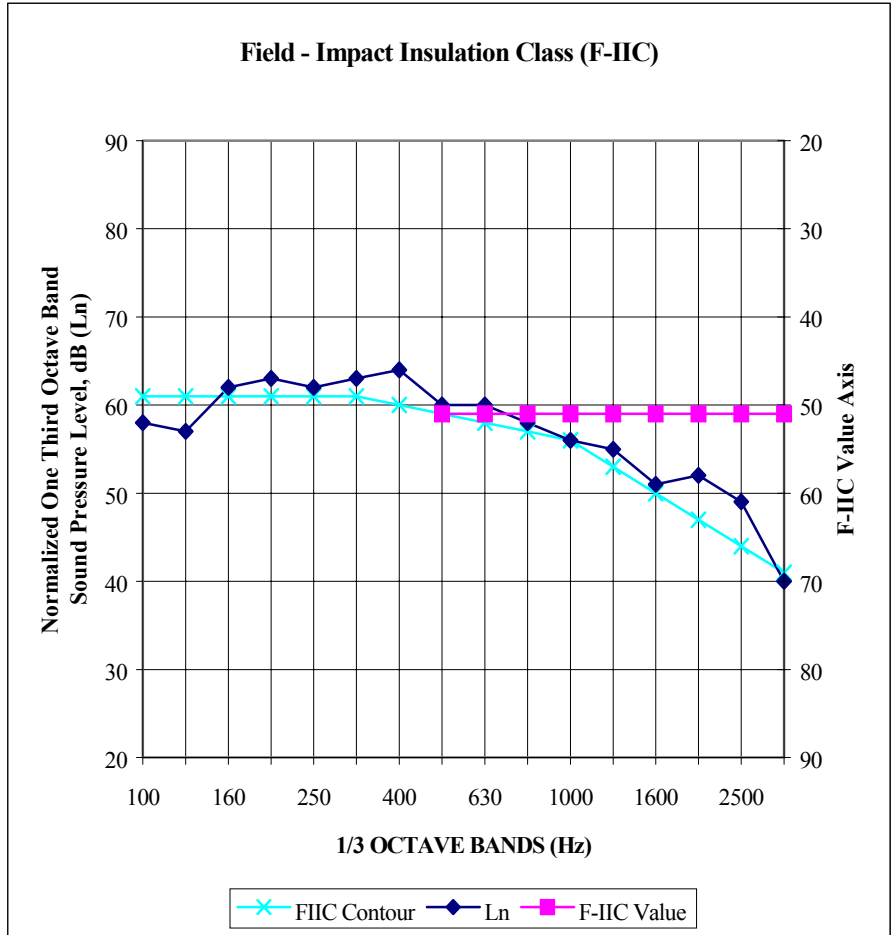
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TEST RESULTS:

Client: SpaceBist

Tested by: Jason Burggraaff

1/3 Oct. Band, Hz	Ln (dB)	Def (dB)
100	58	0
125	57	0
160	62	1
200	63	2
250	62	1
315	63	2
400	64	4
500	60	1
630	60	2
800	58	1
1000	56	0
1250	55	2
1600	51	1
2000	52	5
2500	49	5
3150	40	0
Total Def.		27
IIC	51	



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: 6x8" vinyl flooring sample - 3/4" Maxxon Underlayment - 3/4" OSB - SpaceBist Metal Web System Truss (20' long, 16" deep, 24" O.C.) fiberglass batting in cavities - 1/2" resilient channel (24" O.C.) - 5/8" gypsum board

Nominal Dimensions:

Sample Area, ft² 248
 Receive Volume, ft³ 1962

Comments: Vinyl flooring sample adhered with double-sided carpet tape