STORK \ TWIN CITY TESTING CORPORATION
662 Cromwell Avenue
St. Paul, Minnesota 55114-1776
Phone: (651) 645-3601 Fax: (651) 659-7348

FIELD SOUND TRANSMISSION CLASS (F-STC) 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:

Jason M. Burggraff
Engineering Technician
Product Testing Department
Phone: (651) 659-7319

Reviewed by:

For: Richard O. Thomalla
Senior Acoustic Project Manager
Product Testing Department
Phone: (651) 659-7310

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

FIELD SOUND TRANSMISSION CLASS (F-STC) – ASTM E366-97

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:

Test Configuration:	F-STC	Def. (dB)
Floor/Ceiling		
Rooms 326 --> 226	52	27

FLOOR/CEILING DESCRIPTION:

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

- Existing room (carpet and tile) with carpet/pad partially rolled up.
- 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 E336 (97) was followed in every respect. The instrumentation was calibrated before and after testing with a B+K 4230 sound level calibrator. The F-STC value was obtained by applying the FTL (Field Transmission Loss) values to the standard contour of ASTM E413-99.

Manufacturer	Model	Description	S/N
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 Generator741C853	
Yorkville	E160P	Powered Loudspeaker	

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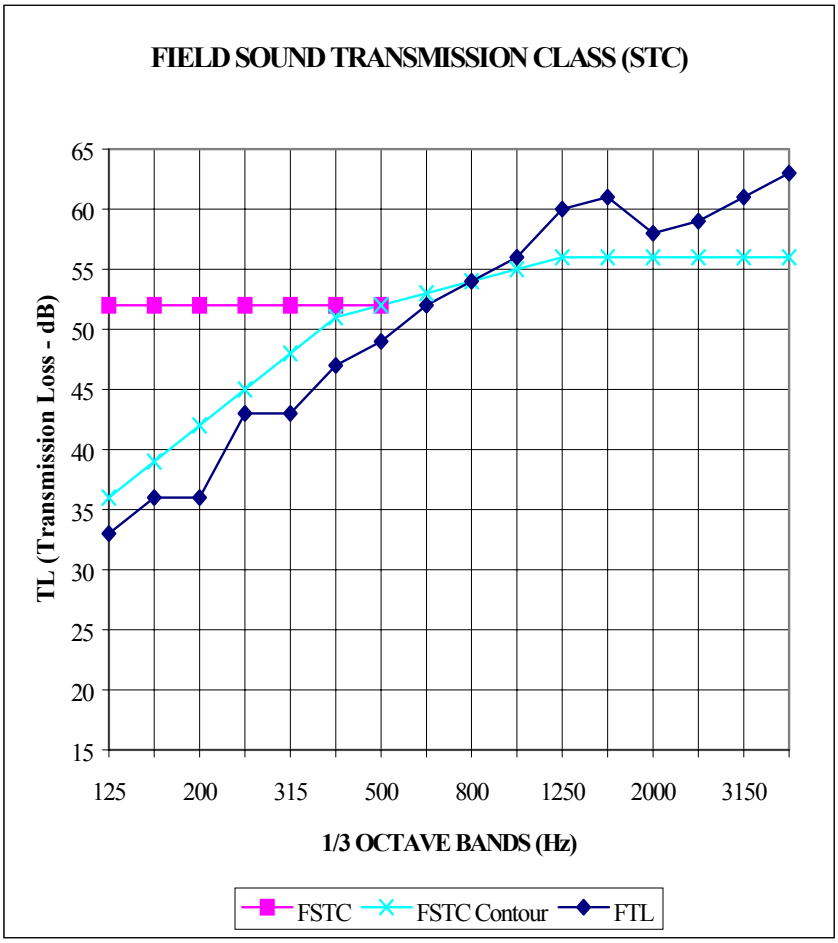
TEST RESULTS:

Client: SpaceJoist Tested by: Jason Burggraff

1/3 Oct. Band, Hz	FTL (dB)	Def (dB)
125	33	3
160	36	3
200	36	6
250	43	2
315	43	5
400	47	4
500	49	3
630	52	1
800	54	0
1000	56	0
1250	60	0
1600	61	0
2000	58	0
2500	59	0
3150	61	0
4000	63	0
Total Def.		27
STC	52	

FTL = Field Transmission Loss (dB)
Def = Deficiencies (below STC contour)



SPECIMEN IDENTIFICATION:

Source Room 326 Test Date: 10-Oct-02
Receive Room 226 Temp (F): 71.3 RH: 42%

Specimen Description:

Type: Floor/ceiling construction

Construction: [12"x12" ceramic tile - thinset mortar/30oz, 8 gauge carpet with 3/8", 6 lb. urethane foam pad] - 3/4" Maxxon Underlayment - 3/4" osb - SpaceJoist Metal Web System Truss (20' long, 16" deep, 24" O.C.) - fiberglass batting in cavities - 1/2" res. Chan. (24" O.C.) - 5/8" gyp. bd.

Nominal Dimensions:

Sample Area, ft2 248.0
Receive Volume, ft3 1962

Comments: Floor Area included both ceramic tile and carpet/pad over Maxxon Underlayment. For testing purposes, 1/3 of the carpet/pad was rolled up to the middle of the room, exposing the Underlayment.