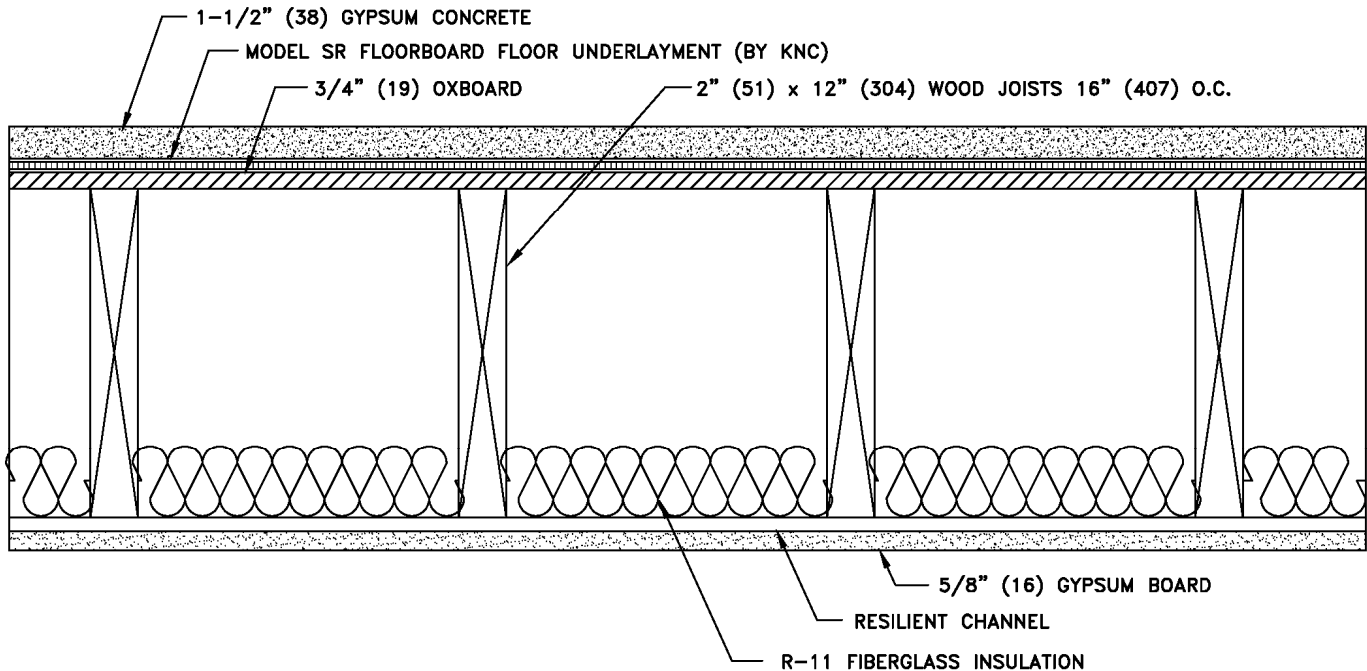


KINETICS NOISE CONTROL TEST REPORT #AT001041

- **KINETICS NOISE CONTROL PRODUCTS:**
 - SR FLOORBOARD
- **ACOUSTICAL RATINGS:**
 - FSTC 54
 - FIIC 53
- **TESTING AGENCY & REPORT NUMBER:**
 - TWIN CITY TESTING CORPORATION
 - 4143 90-0156.4



KINETICS DRAWING NUMBER: AT001041



6300 IRELAN PLACE, DUBLIN OH
PHONE: 800.959.1229
FAX: 614.889.0540
WEB: www.KINETICSNOISE.COM
EMAIL: ARCHSALES@KINETISNOISE.COM



twin city testing
corporation

662 CROMWELL AVENUE
ST. PAUL, MN 55114
PHONE 612/645-3601

REPORT OF: FIELD - IMPACT INSULATION CLASS (F-IIC)

PROJECT: ELIM SHORES

REPORTED TO: Gyp-Crete Corp.
Attn: Mr. Patrick Giles
P.O. Box 253
Hamel, MN 55340

DATE: January 9, 1990
REVISED: January 24, 1990

LABORATORY NO: 4143 90-0156.4

PURCHASE ORDER NO: n/a

INTRODUCTION:

This report documents the results of a Field - Impact Insulation Class (F-IIC) test conducted on a floor/ceiling system separating units 217 and 117 at Elim Shores, Hagman Construction - Eden Prairie, Minnesota. This test was requested by Mr. Patrick Giles of the Gyp-Crete Corp. on December 4, 1989 with the test conducted December 8, 1989.

Twin City Testing Corporation has been accredited by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST, formally NBS) under their National Voluntary Laboratory Accreditation Program (NVLAP) for conducting this test procedure.

This report may not be used to claim product endorsement by NVLAP or any agency of the US Government.

TEST RESULT SUMMARY:

The F-IIC on the floor/ceiling system described below was 53.

SPECIMEN LOCATION AND DESCRIPTION:

Construction details as furnished by Mr. Patrick Giles were as follows:

- Designer Solarium
- 1 1/2" Gyp-Crete 2000 (1/4" closed cell foam around perimeter)
- Sisal Kraft curing paper type SK-10
- Peabody Kinetics Type SR
- 3/4" Oxboard
- R11 fiberglass insulation
- nominal 2" x 10" joists
- USG RC-1 resilient channel
- 5/8" gypsum board

An approximate weight of 23 psf was calculated for this system. Field verification of the actual test specimen was not possible. The approximate termination room (unit 117) volume was 1547 cubic feet. The approximate surface area of the specimen was 193 square feet. The temperature and relative humidity during the test was 62°F and 33%, respectively.

TEST PROCEDURE:

ASTM standard E1007(84) was followed in every respect. The instrumentation was calibrated before and after testing using a Brüel and Kjær Type 4230 Sound Level Calibrator.

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REPORT OF: FIELD - IMPACT INSULATION CLASS (F-IIC)

LABORATORY NO: 4143 90-0156.4

DATE: January 9, 1990
REVISED: January 24, 1990

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TEST EQUIPMENT:

<u>Manufacturer</u>	<u>Model</u>	<u>Description</u>	<u>S/N</u>
IVIE Electronics	PC-40	Audio Spectrum Analyzer	4587A130
IVIE Electronics	IE-2P	Microphone Preamplifier	0811
IVIE Electronics	1133	Microphone	1107A103
Bruel & Kjaer	3204	Tapping Machine	84667
Bruel & Kjaer	4230	Sound Level Calibrator	282266

TEST RESULTS:

The F-IIC value was obtained by applying the L_n (Normalized Sound Pressure Level) values to the standard contour of ASTM:E989(84), "Determination of Impact Insulation Class."

All frequencies met the 95% confidence limits prescribed by ASTM E1007(84).

F(Hz)	L_n (dB)	DEF	CI	F(Hz)	L_n (dB)	DEF	CI
125	59	0	1	800	58	2	1
160	59	0	1	1000	55	0	1
200	61	2	1	1250	52	0	1
250	63	4	1	1600	47	0	0
315	62	3	1	2000	45	0	0
400	64	5	1	2500	44	0	0
500	63	5	0	3150	41	0	0
630	59	2	0	4000	34	0	0

TOTAL DEFICIENCIES : 23

Minimum F-IIC : 53

- F = Frequency - 1/3 Octave-Band Centered (Hz)
- L_n = Normalized Sound Pressure Level (dB)
- DEF = Deficiencies below IIC contour (dB)
- CI = 95% Confidence Interval (dB)



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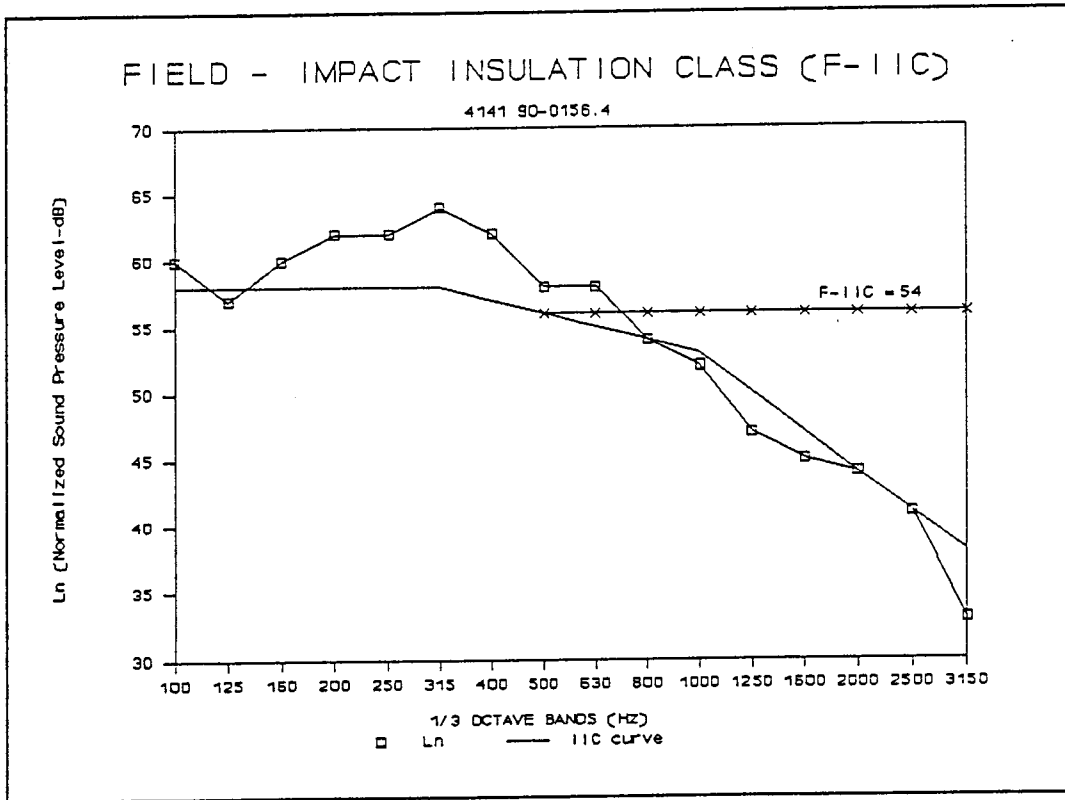
REPORT OF: FIELD - IMPACT INSULATION CLASS (F-IIC)

LABORATORY NO: 4143 90-0156.4

DATE: January 9, 1990
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TEST RESULTS: (cont)



TWIN CITY TESTING CORPORATION

reviewed by:

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Richard O. Thomalla

Richard O. Thomalla, Manager
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KWH/ROT/kw/4143 90-0156.4



twin city testing
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REPORT OF: FIELD - SOUND TRANSMISSION CLASS (F-STC)

PROJECT: ELIM SHORES

REPORTED TO: Gyp-Crete Corp.
Attn: Mr. Patrick Giles
P.O. Box 253
Hamel, MN 55340

DATE: January 9, 1990
REVISED: January 24, 1990

LABORATORY NO: 4143 90-0156.5

PURCHASE ORDER NO: n/a

INTRODUCTION:

This report documents the results of a Field - Sound Transmission Class (F-STC) test conducted on a floor/ceiling system separating rooms 117 and 217 at Elim Shores, Hagman Construction - Eden Prairie, Minnesota. This test was requested by Mr. Patrick Giles of the Gyp-Crete Corp. on December 4, 1989 with the test conducted December 8, 1989.

Twin City Testing Corporation has been accredited by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST, formally NBS) under their National Voluntary Laboratory Accreditation Program (NVLAP) for conducting this test procedure.

This report may not be used to claim product endorsement by NVLAP or any agency of the US Government.

TEST RESULT SUMMARY:

The F-STC on the floor/ceiling described below was 54.

SPECIMEN LOCATION AND DESCRIPTION:

Construction details as furnished by Mr. Patrick Giles were as follows:

- 1 1/2" Gyp-Crete 2000 (1/4" closed cell foam around perimeter)
- Sisal Kraft curing paper type SK-10
- Peabody Kinetics Type SR
- 3/4" Oxboard
- R-11 fiberglass insulation
- nominal 2" x 10" wood joists
- USG RC-1 resilient channel
- 5/8 " gypsum board

An approximate weight of 22 psf was calculated for this system. Field verification of the actual test specimen was not possible.

The approximate termination room (room 217) volume was 1547 cubic feet. The approximate surface area of the specimen was 193 square feet. The temperature and relative humidity during the test were 62°F and 33%, respectively.

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REPORT OF: FIELD - SOUND TRANSMISSION CLASS (F-STC)

LABORATORY NO: 4143 90-0156.5

DATE: January 9, 1990
REVISED: January 24, 1990

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TEST PROCEDURE:

ASTM standard E336(84), was followed in every respect. The instrumentation was calibrated before and after testing with a Bruel & Kjaer Type 4230 Sound Level Calibrator.

TEST EQUIPMENT:

<u>Manufacturer</u>	<u>Model</u>	<u>Description</u>	<u>S/N</u>
IVIE Electronics	PC-40	Audio Spectrum Analyzer	4587A130
IVIE Electronics	IE-2P	Microphone Preamplifier	0811
IVIE Electronics	1133	Microphone	1107A103
Bruel & Kjaer	4230	Sound Level Calibrator	282266

TEST RESULTS:

The F-STC value was obtained by applying the TL (Transmission Loss) values to the standard contour of ASTM:E413(87), "Determination of Sound Transmission Class."

All frequencies except 125 and 315 Hz met the 95% confidence limits prescribed by ASTM E336(84).

<u>F(Hz)</u>	<u>TL(dB)</u>	<u>DEF</u>	<u>CI</u>	<u>F(Hz)</u>	<u>TL(dB)</u>	<u>DEF</u>	<u>CI</u>
125	37	1	6	800	54	2	2
160	35	6	3	1000	55	2	0
200	42	2	3	1250	59	0	1
250	45	2	2	1600	60	0	1
315	47	3	4	2000	61	0	1
400	49	4	1	2500	60	0	1
500	52	2	2	3150	64	0	1
630	52	3	2	4000	68	0	1

TOTAL DEFICIENCIES : 27

Minimum F-STC : 54

- F = Frequency - 1/3 Octave-Band Centered (Hz)
- TL = Transmission Loss (dB)
- DEF = Deficiencies below STC contour (dB)
- CI = 95% Confidence Interval (dB)

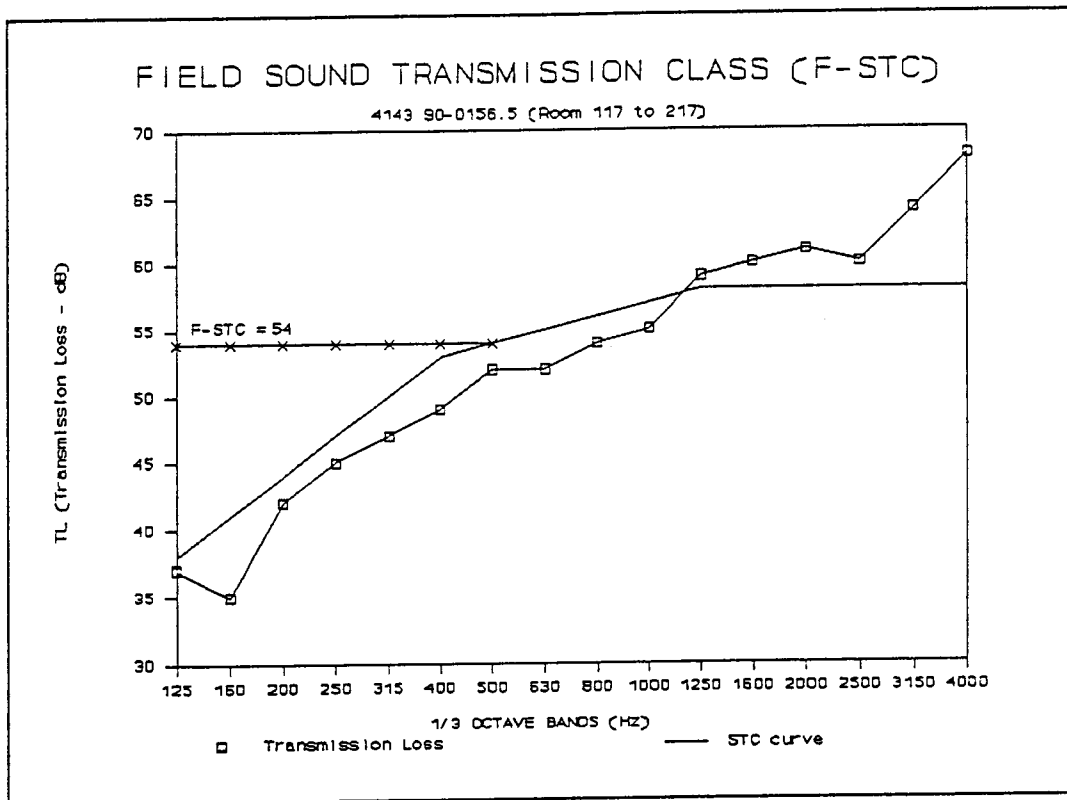
REPORT OF: FIELD - SOUND TRANSMISSION CLASS (F-STC)

LABORATORY NO: 4143 90-0156.5

DATE: January 9, 1990
REVISED: January 24, 1990

PAGE: 3

TEST RESULTS: (cont)



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