SEPTEMBER 2025

AT BROKER

ACOUSTIC COMPARATIVE STUDY

Over 40 assemblies tested on

GLT 157 MM

PRESENTED BY

AcoustiTECH

IN COLLABORATION WITH

FPInnovations

TABLE OF CONTENTS

TABLE OF CONTENTS

INTRODUCTION

AcoustiTECH X FPInnovations

In a context where wood construction is gaining momentum, acoustics remains a key challenge in ensuring occupant comfort and compliance with standards. With this in mind, AcoustiTECH, an expert in acoustic solutions, has partnered with FPInnovations, a leader in research and development in the wood sector, to conduct an in-depth comparative study in its laboratory facility.

Who We Are

AcoustiTECH is a broker specializing in acoustic solutions, supporting building professionals in selecting high-performance materials that meet and exceed industry standards. With 25 years of experience and unique expertise, we offer customized assemblies through a specialized brand ecosystem and reliable data. Our personalized service, backed by dedicated technical and engineering teams, ensures tailored and effective solutions that enhance the acoustic comfort of occupants.

FPInnovations is a globally recognized, private, non-profit organization specializing in research and development for the forestry sector. Its mission is to support businesses and building professionals in innovating and optimizing wood-based materials. With ISO 17025-accredited laboratories and state-of-the-art facilities, FPInnovations assesses the performance of wood structures in terms of acoustics, vibrations, fire resistance, and more.

Study Objective

At AcoustiTECH, our goal is to continuously innovate by delivering new data and acoustic solutions tailored to the specific requirements of each project. This collaboration with FPInnovations marks a significant milestone in our acoustic analysis of wood structures, as it represents our first large-scale data collection on a GLT mass-timber slab and our second mass-timber campaign overall, building on a prior study.

Through this study, we obtain precise acoustic measurements for this structural system and conduct rigorous comparisons across numerous innovative market solutions. We take into account key project criteria such as acoustic performance, budget, thickness, weight, and even design, as different acoustic solutions can also influence the choice of floor coverings.

Grounded in a scientific approach and conducted in controlled environments with FPInnovations, this research aims to evaluate various acoustic configurations optimized for mass timber construction. By combining technical expertise, innovation, and in-depth analysis, we provide architects, engineers, and developers with high-performance solutions that meet and exceed the industry standards.

TEST REPORT

GLT 157 mm + Plywood 15.8 mm

Image Source : StructureCraft

Apparent Impact Insulation Class (AIIC)	**26**
Apparent Sound Transmission Class (ASTC)	**31**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**24**

Materials	**Thickness (mm)**
GLT Panel	172
TOTAL	**172**

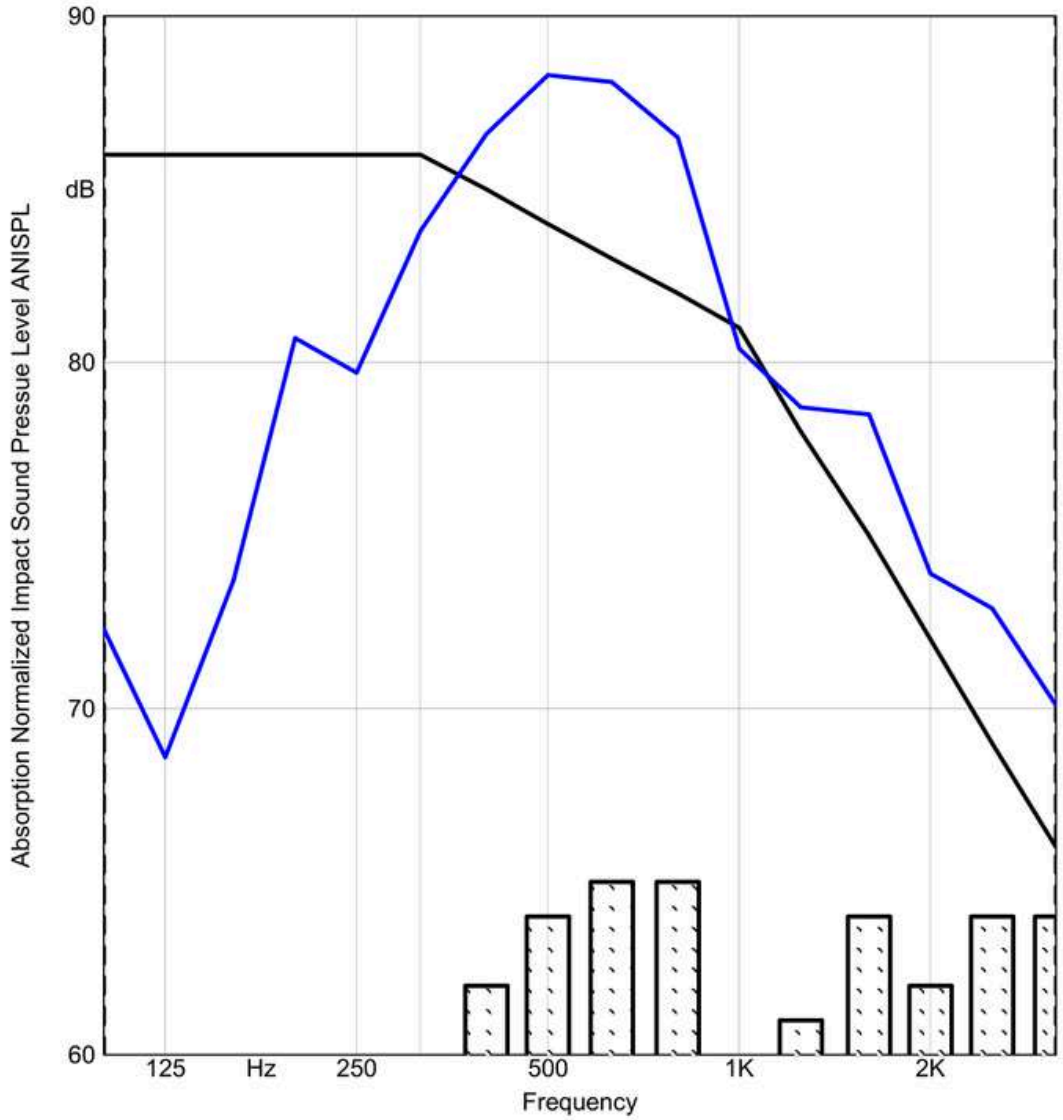
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

DESCRIPTION: Test #2 : GLT 172.5 mm FLOOR (15.8mm PLYWOOD + GLT 157 mm)

Receiving room volume: 45.0 m^3

Sum of deficiencies: 31 dB

Frequency Hz	L_n dB
100	72
125	69
160	74
200	81
250	80
315	84
400	87
500	88
630	88
800	87
1000	80
1250	79
1600	79
2000	74
2500	73
3150	70



Classification based on ASTM E989 - 06

AIIC = 26

AHIR = 24

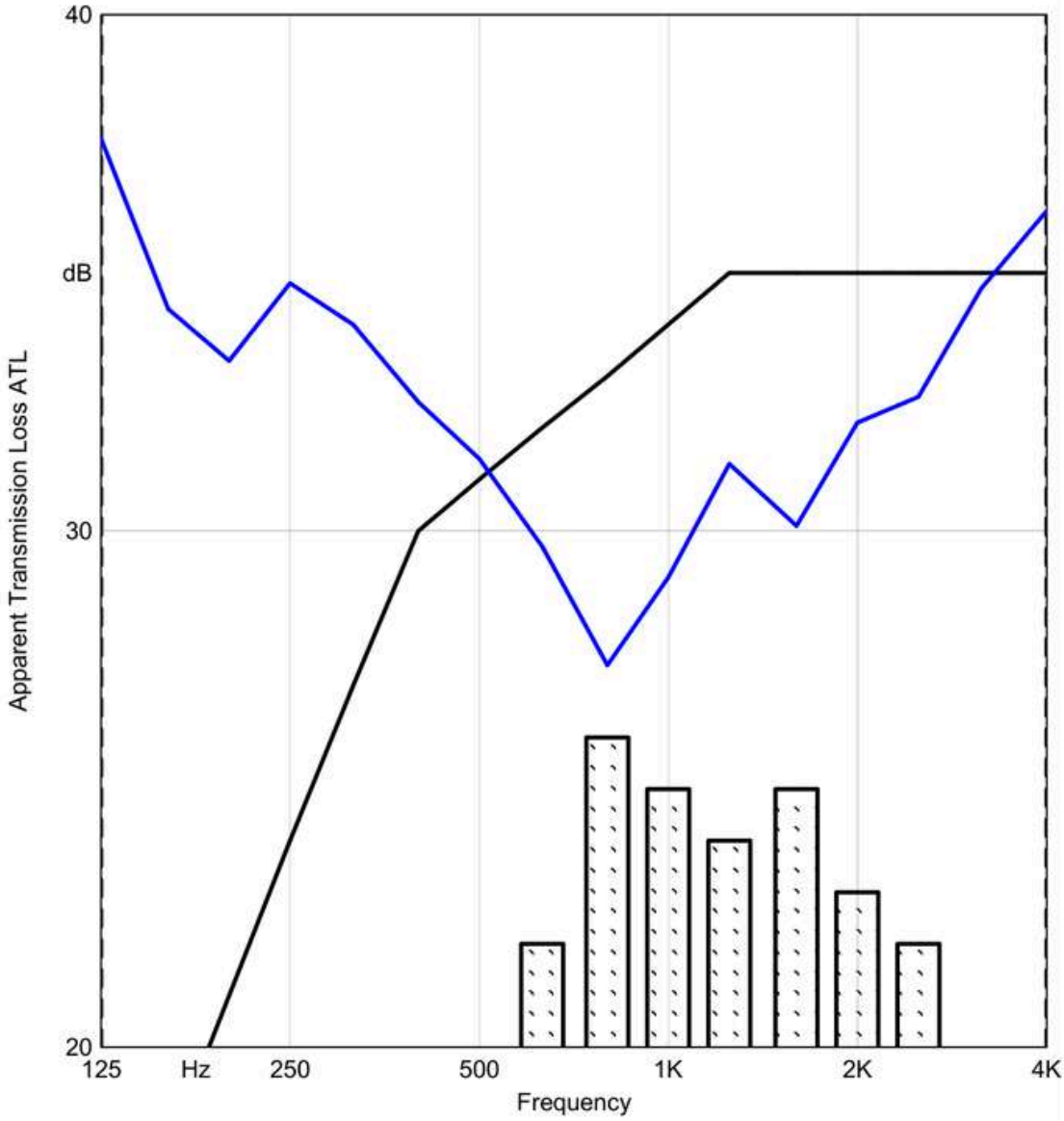
Transmission loss according to ASTM E336 - 08
Field Measurements of Airborne Sound Attenuation between Rooms in Buildings

Description:
Test #1 : GLT 172.5 mm FLOOR (15.8mm PLYWOOD + GLT 157 mm)

Test specimen area S: 16.8 m^2
Source room volume: 40.0 m^3
Receiving room volume: 46.1 m^3

Sum of deficiencies: 27 dB

Frequency Hz	ATL dB
125	38
160	34
200	33
250	35
315	34
400	33
500	31
630	30
800	27
1000	29
1250	31
1600	30
2000	32
2500	33
3150	35
4000	36



Classification based on ASTM E413 - 04
ASTC = 31

TEST REPORT

AcoustiTECH Lead 6 + AcoustiTECH Sofix

Apparent Sound Transmission Class (ASTC)	**52**

Materials	**Thickness (mm)**
Plywood 5/8”	16
Plywood 5/8”	16
AcoustiTECH Sofix	38
AcoustiTECH Lead 6	6
TOTAL	**76**

Type of Installation : Floated

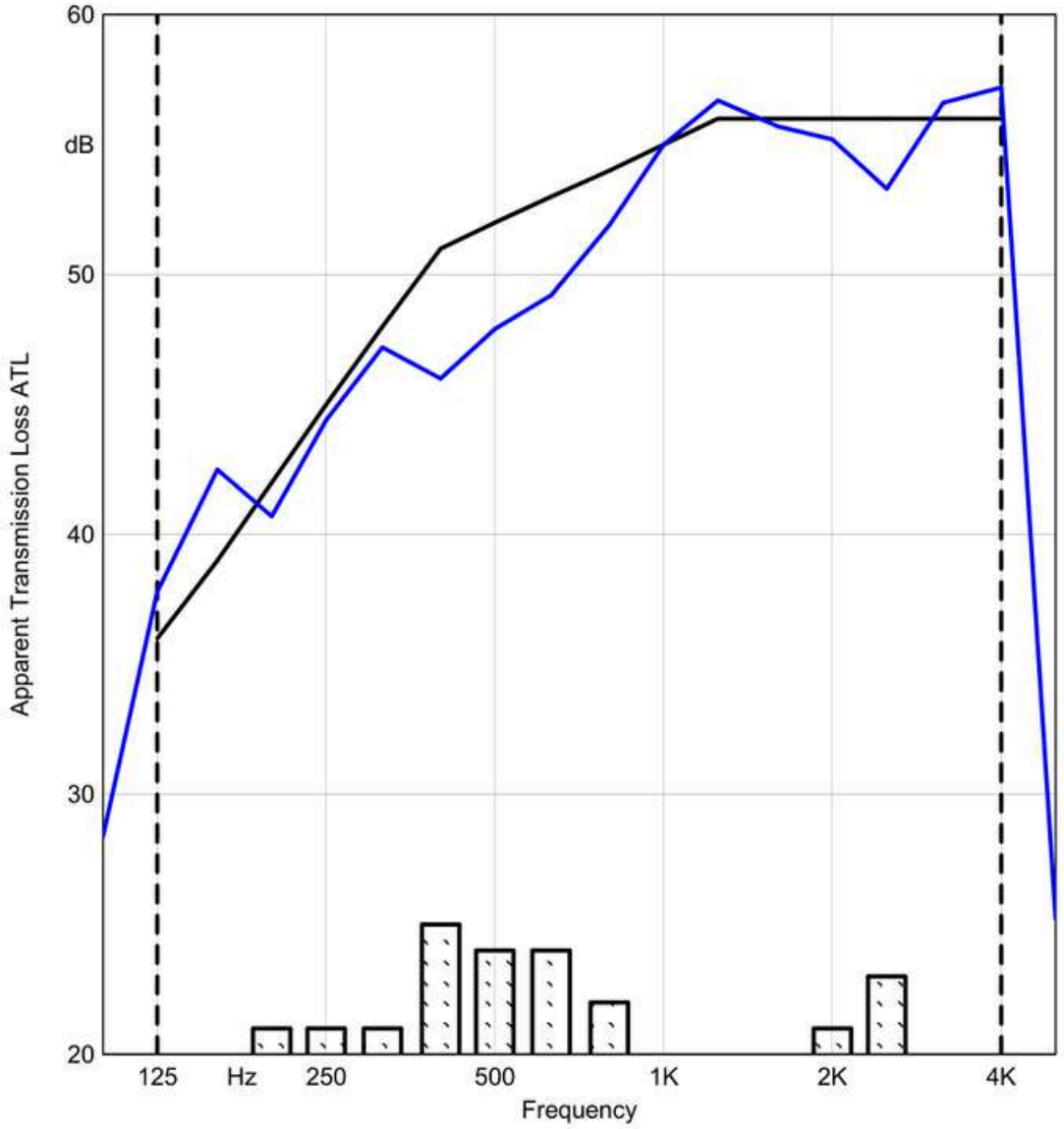
Transmission loss according to ASTM E336 - 08
Field Measurements of Airborne Sound Attenuation between Rooms in Buildings

DESCRIPTION: Test #4 : GLT 172.5 mm FLOOR (15.8mm PLYWOOD + GLT 157 mm) / AT - LEAD 6 - 6mm / AT - SOFIX - 38,1mm / 2x plywoods 5/8" - 31,8mm / NO FLOORING

Test specimen area S: 16.5 m^2
Source room volume: 40.2 m^3
Receiving room volume: 45.0 m^3

Sum of deficiencies: 22 dB

Frequency Hz	ATL dB
100	28
125	38
160	43
200	41
250	44
315	47
400	46
500	48
630	49
800	52
1000	55
1250	57
1600	56
2000	55
2500	53
3150	57
4000	57*
5000	25*



Classification based on ASTM E413 - 04

ASTC = 52

TEST REPORT

AcoustiTECH Lead 6 + AcoustiTECH Sofix + Soprema Insonofloor + Vinyl Without Cork Backing

Apparent Impact Insulation Class (AIIC)	**52**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**61**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Soprema Insonofloor	3,5
Plywood 5/8”	16
Plywood 5/8”	16
AcoustiTECH Sofix	38
AcoustiTECH Lead 6	6
TOTAL	**84**

Type of Installation : Floated

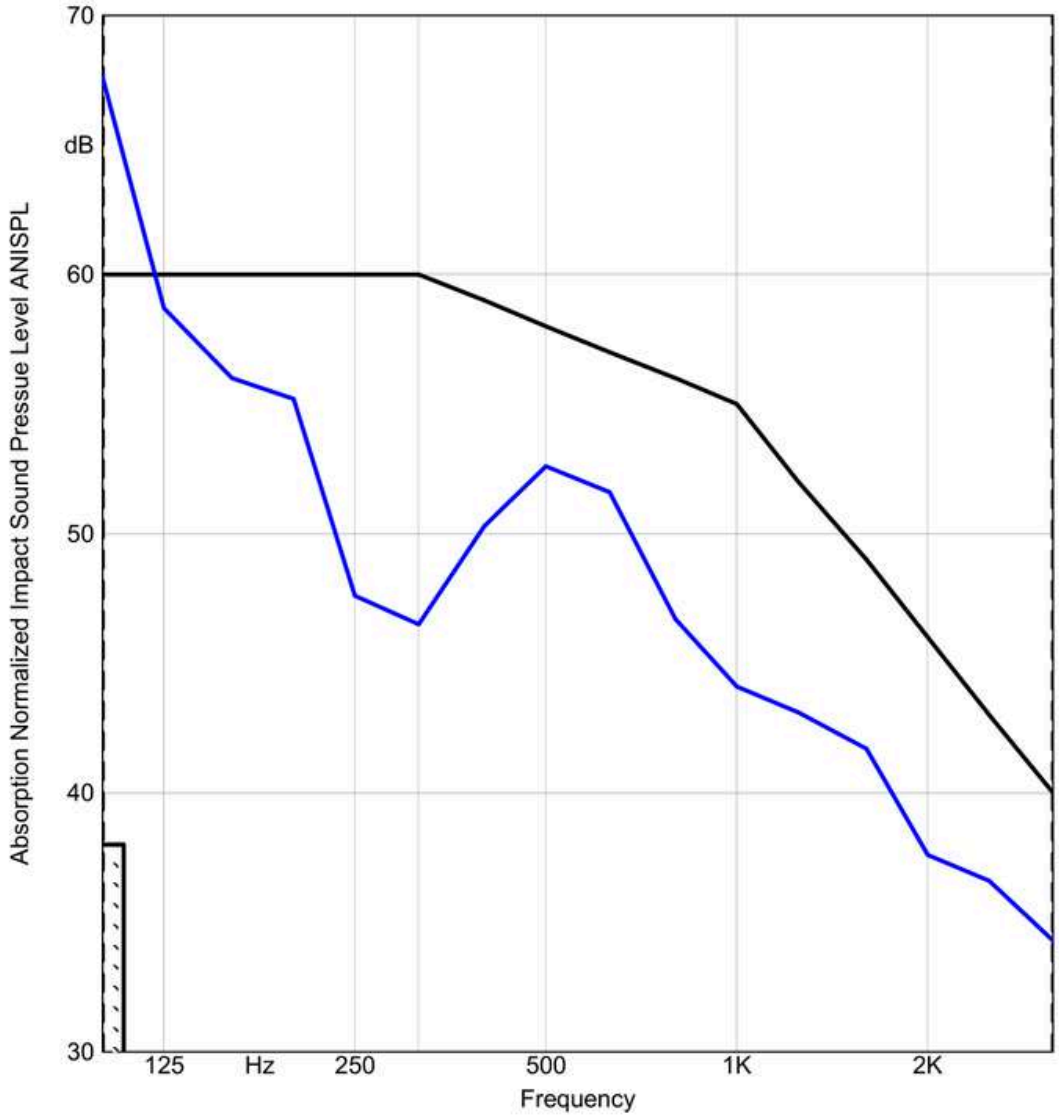
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

DESCRIPTION: Test #26 : GLT 172.5 mm FLOOR (15.8mm PLYWOOD + GLT 157 mm) / AT - LEAD 6 - 6mm / AT - SOFIX - 38,1mm / SPM - Insonobois - 3.5mm / LV (Floated) - 4,5mm

Receiving room volume: 45.0 m^3

Sum of deficiencies: 8 dB

Frequency Hz	L_n dB
100	68
125	59
160	56
200	55
250	48
315	47
400	50
500	53
630	52
800	47
1000	44
1250	43
1600	42
2000	38
2500	37
3150	34



Classification based on ASTM E989 - 06

AIIC = 52

AHIR = 61

TEST REPORT

AcoustiTECH Lead 6 + AcoustiTECH Sofix + Soprema Insonofloor + Vinyl With Cork Backing

Apparent Impact Insulation Class (AIIC)	**53**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**60**

Materials	**Thickness (mm)**
Vinyl With Cork Backing	8,3
Soprema Insonofloor	3,5
Plywood 5/8”	16
Plywood 5/8”	16
AcoustiTECH Sofix	38
AcoustiTECH Lead 6	6
TOTAL	**87,8**

Type of Installation : Floated

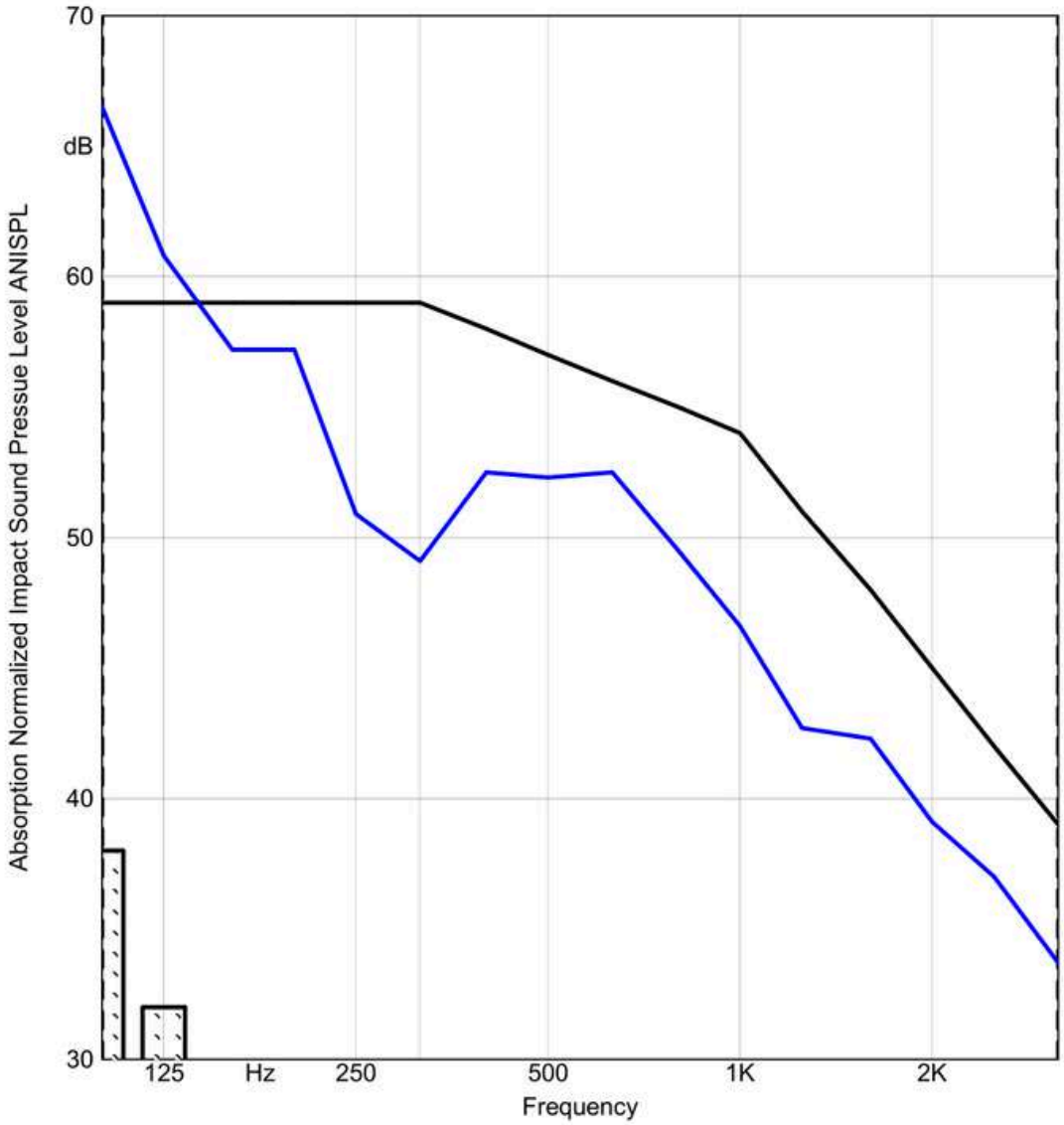
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

DESCRIPTION:
Test #27 : GLT 172.5 mm FLOOR (15.8mm PLYWOOD + GLT 157 mm) / AT - LEAD 6 - 6mm / AT - SOFIX - 38,1mm / SPM - Insonobois - 3.5mm / LV + cork backing (Floated) - 8,3mm

Receiving room volume: 45.0 m^3

Sum of deficiencies: 10 dB

Frequency Hz	L_n dB
100	67
125	61
160	57
200	57
250	51
315	49
400	53
500	52
630	53
800	50
1000	47
1250	43
1600	42
2000	39
2500	37
3150	34



Classification based on ASTM E989 - 06

AIIC = 53

AHIR = 60

TEST REPORT

AcoustiTECH Lead 6 + AcoustiTECH Sofix + Fermacell 2E22 + Vinyl Without Cork Backing

Apparent Impact Insulation Class (AIIC)	**58**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**60**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Fermacell 2E22	25
AcoustiTECH Sofix	38
AcoustiTECH Lead 6	6
TOTAL	**73,5**

Type of Installation : Floated

**To validate mechanical compatibility, please contact the AcoustiTECH team at service@acousti-tech.com.*

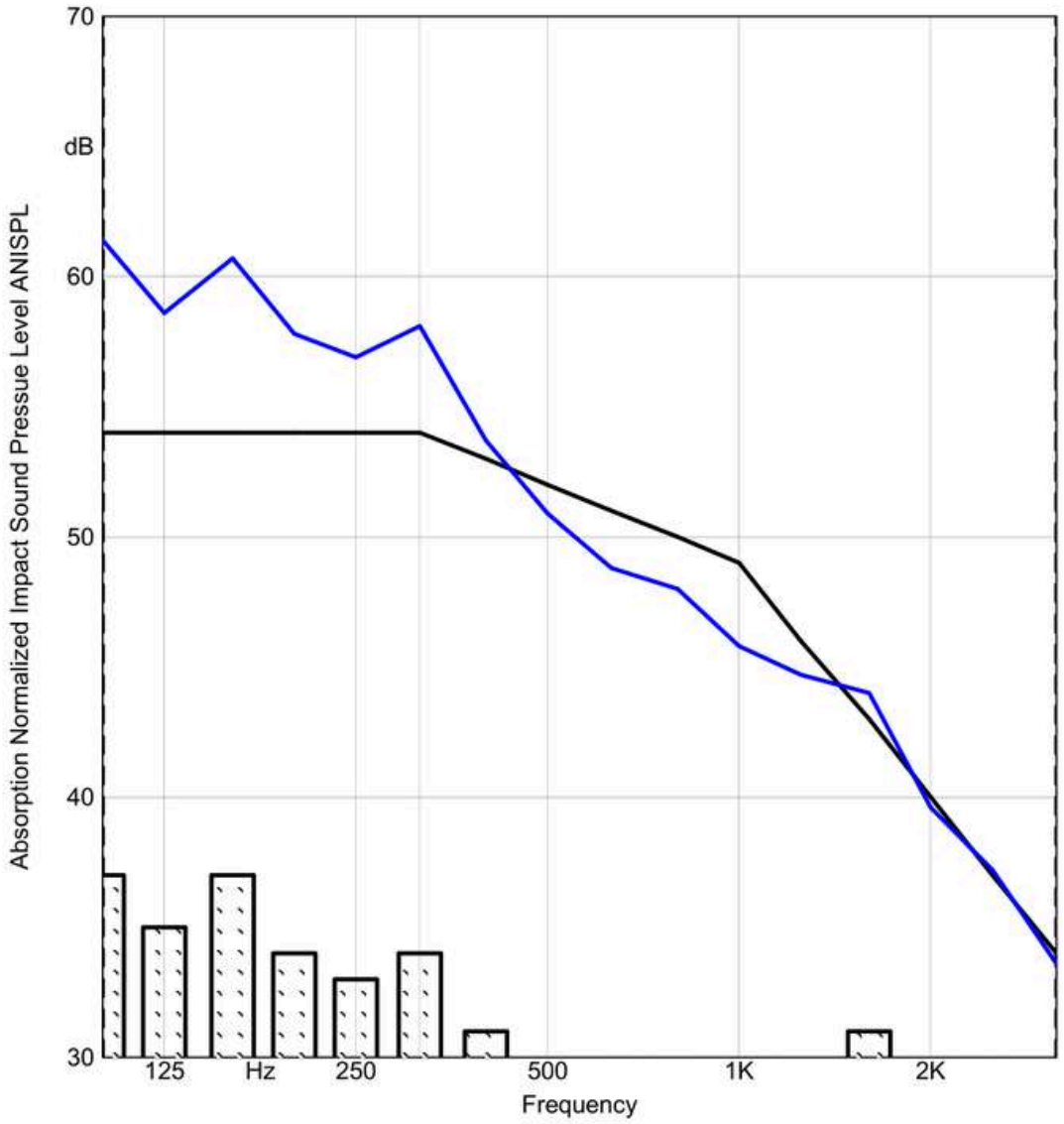
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

DESCRIPTION:
Test #28 : GLT 172.5 mm FLOOR (15.8mm PLYWOOD + GLT 157 mm) / AT - LEAD 6 - 6mmAT - SOFIX - 38mmFMC - 2E22 - 25mm / LV (Floated) - 4,5mm

Receiving room volume: 45.0 m^3

Sum of deficiencies: 32 dB

Frequency Hz	L_n dB
100	61
125	59
160	61
200	58
250	57
315	58
400	54
500	51
630	49
800	48
1000	46
1250	45
1600	44
2000	40
2500	37
3150	34



Classification based on ASTM E989 - 06

AIIC = 58

AHIR = 60

TEST REPORT

AcoustiTECH Lead 6 + AcoustiTECH Sofix + Vinyl With Cork Backing

Apparent Impact Insulation Class (AIIC)	**51**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**55**

Materials	**Thickness (mm)**
Vinyl With Cork Backing	8,3
Plywood 5/8”	16
Plywood 5/8”	16
AcoustiTECH Sofix	38
AcoustiTECH Lead 6	6
TOTAL	**84,3**

Type of Installation : Floated

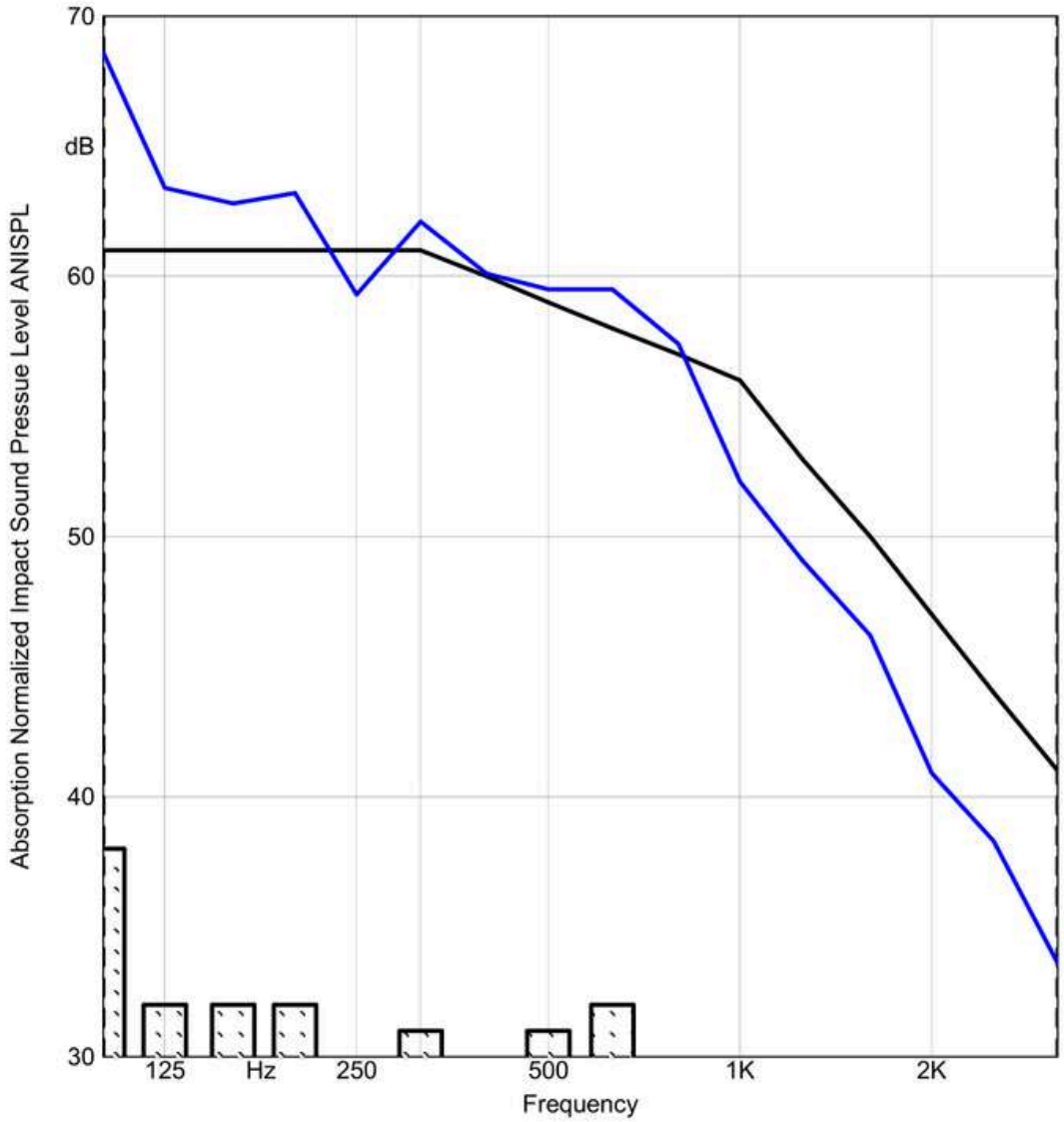
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

DESCRIPTION: Test #29 : GLT 172.5 mm FLOOR (15.8mm PLYWOOD + GLT 157 mm) / AT - LEAD 6 - 6mm / AT - SOFIX - 38,1mm / LV + cork backing (Floated) - 8,3mm

Receiving room volume: 45.0 m^3

Sum of deficiencies: 18 dB

Frequency Hz	L_n dB
100	69
125	63
160	63
200	63
250	59
315	62
400	60
500	60
630	60
800	57
1000	52
1250	49
1600	46
2000	41
2500	38
3150	34



Classification based on ASTM E989 - 06

AIIC = 51

AHIR = 55

TEST REPORT

AcoustiTECH Lead 6 + AcoustiTECH Sofix + Engineered Floor

Apparent Impact Insulation Class (AIIC)	**48**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**48**

Materials	**Thickness (mm)**
Engineered Floor	19
Plywood 5/8”	16
Plywood 5/8”	16
AcoustiTECH Sofix	38
AcoustiTECH Lead 6	6
TOTAL	**95**

Type of Installation : Nailed / Stapled

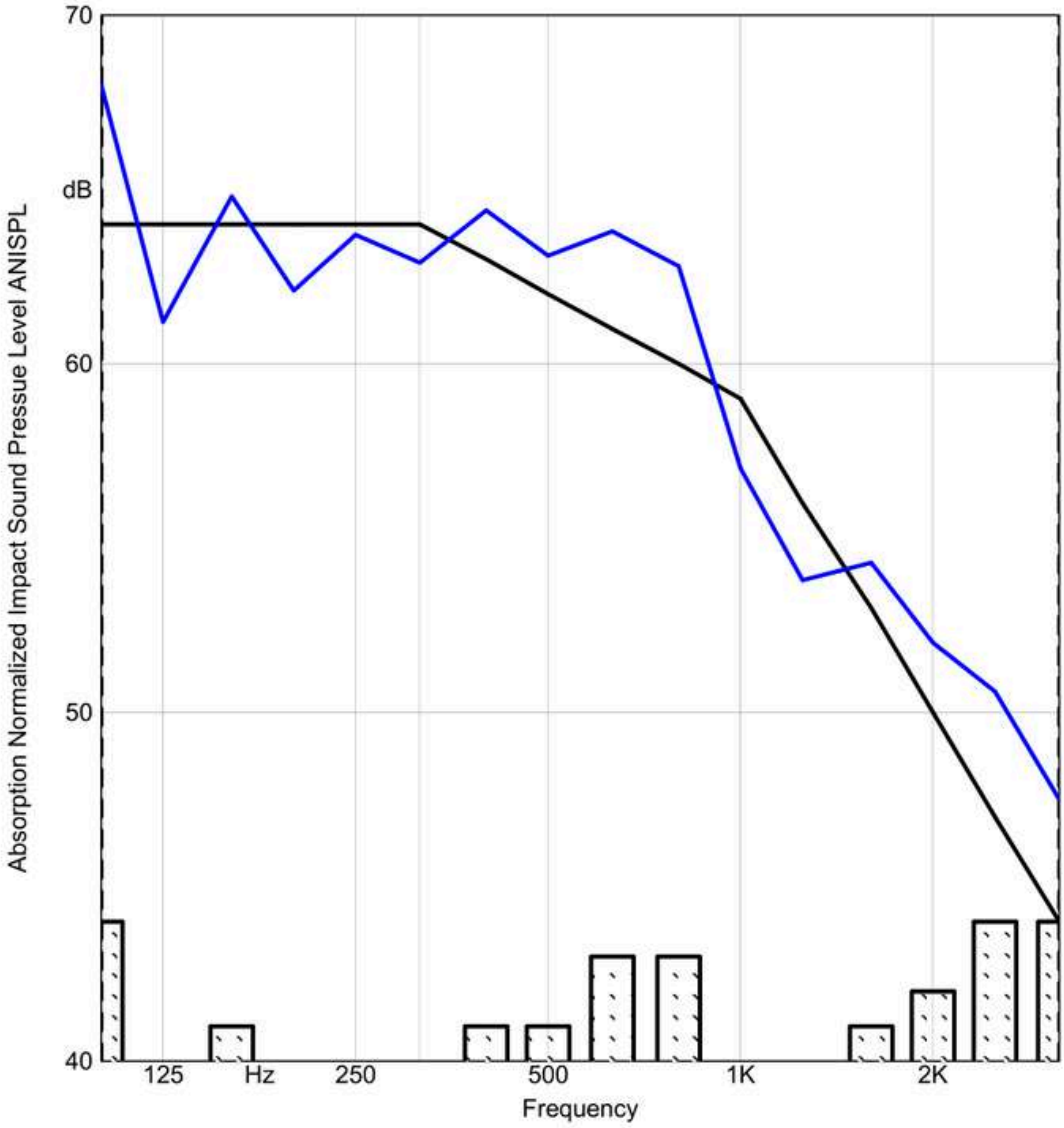
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

DESCRIPTION:
Test #30 : GLT 172.5 mm FLOOR (15.8mm PLYWOOD + GLT 157 mm) / AT - LEAD 6 - 6mm / AT - SOFIX - 38,1mm / Eng. (Nailed) - 19mm

Receiving room volume: 45.0 m^3

Sum of deficiencies: 24 dB

Frequency Hz	L_n dB
100	68
125	61
160	65
200	62
250	64
315	63
400	64
500	63
630	64
800	63
1000	57
1250	54
1600	54
2000	52
2500	51
3150	48



Classification based on ASTM E989 - 06

AIIC = 48
AHIR = 48

TEST REPORT

AcoustiTECH Sofix

Apparent Sound Transmission Class (ASTC)	**51**

Materials	**Thickness (mm)**
Plywood 5/8”	16
Plywood 5/8”	16
AcoustiTECH Sofix	38
TOTAL	**70**

Type of Installation : N/A

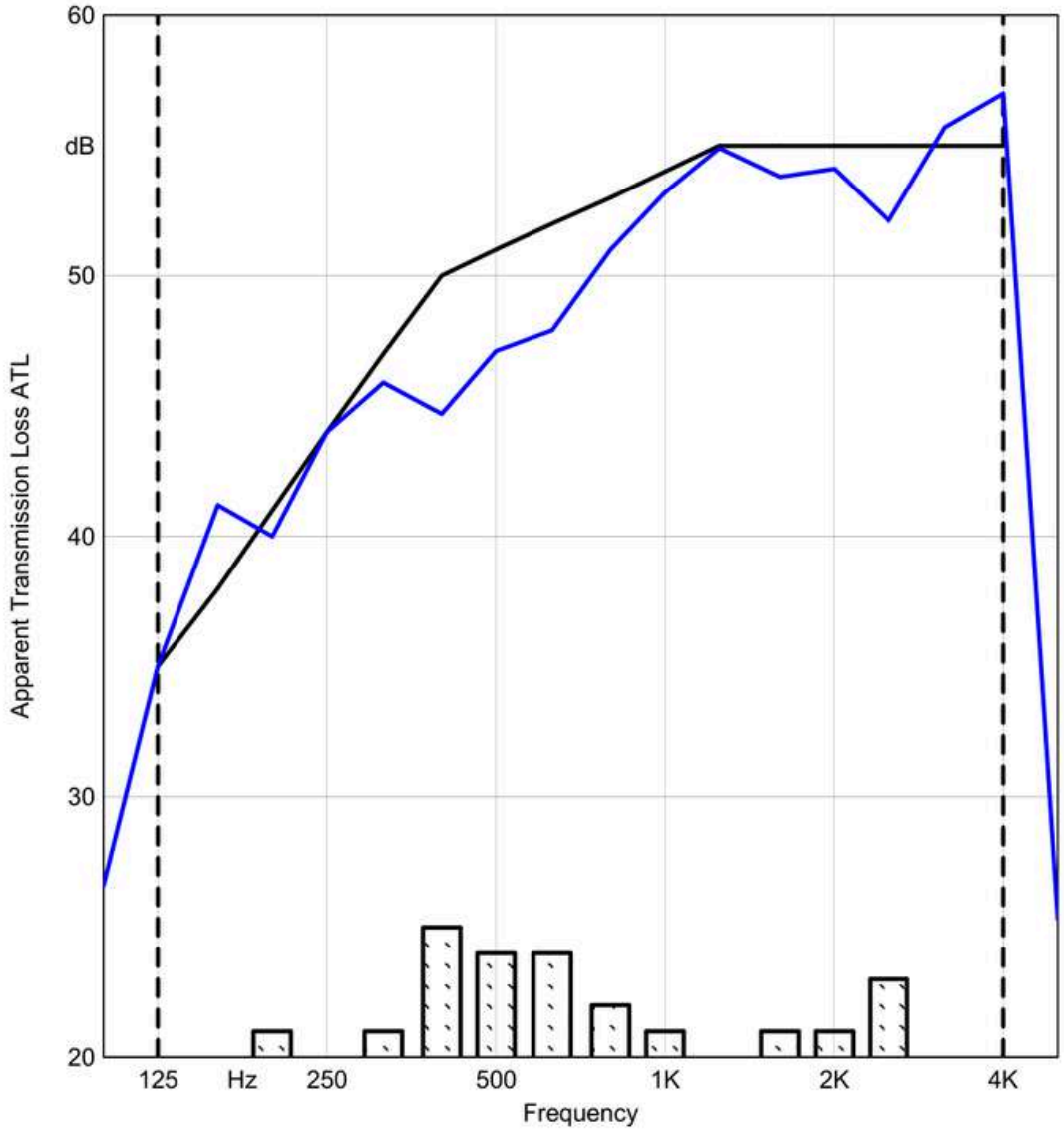
Transmission loss according to ASTM E336 - 08
Field Measurements of Airborne Sound Attenuation between Rooms in Buildings

Desccription;
Test #3 : GLT 172.5 mm FLOOR (15.8mm PLYWOOD + GLT 157 mm) / AT - SOFIX - 38,1mm / 2x plywoods 5/8" - 31,8mm / NO FLOORING

Test specimen area S: 16.5 m^2
Source room volume: 40.2 m^3
Receiving room volume: 45.0 m^3

Sum of deficiencies: 23 dB

Frequency Hz	ATL dB
100	27
125	35
160	41
200	40
250	44
315	46
400	45
500	47
630	48
800	51
1000	53
1250	55
1600	54
2000	54
2500	52
3150	56
4000	57*
5000	25*



Classification based on ASTM E413 - 04
ASTC = 51

TEST REPORT

AcoustiTECH Sofix + Vinyl Without Cork Backing

Apparent Impact Insulation Class (AIIC)	**51**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**58**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Plywood 5/8”	16
Plywood 5/8”	16
AcoustiTECH Sofix	38
TOTAL	**74,5**

Type of Installation : Floated

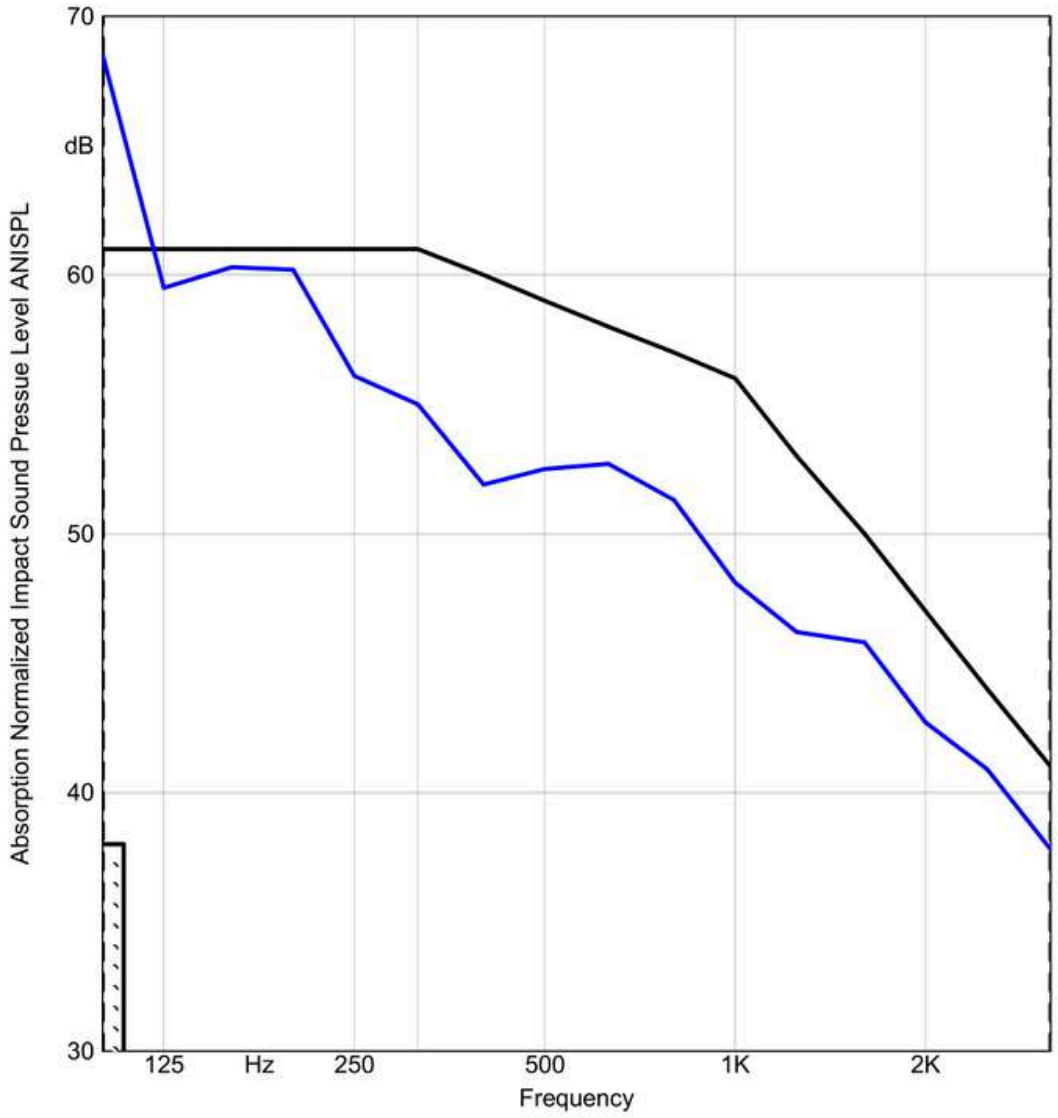
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

DESCRIPTION: Test #7 : GLT 172.5 mm FLOOR (15.8mm PLYWOOD + GLT 157 mm) / AT - SOFIX - 38,1mm / LV (Floated) - 4,5mm

Receiving room volume: 45.0 m^3

Sum of deficiencies: 8 dB

Frequency Hz	L_n dB
100	69
125	60
160	60
200	60
250	56
315	55
400	52
500	53
630	53
800	51
1000	48
1250	46
1600	46
2000	43
2500	41
3150	38



Classification based on ASTM E989 - 06

AIIC = 51

AHIR = 58

TEST REPORT

AcoustiTECH Sofix + Soprema Insonofloor + Vinyl Without Cork Backing

Apparent Impact Insulation Class (AIIC)	**51**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**59**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Soprema Insonofloor	3,5
Plywood 5/8”	16
Plywood 5/8”	16
AcoustiTECH Sofix	38
TOTAL	**78**

Type of Installation : Floated

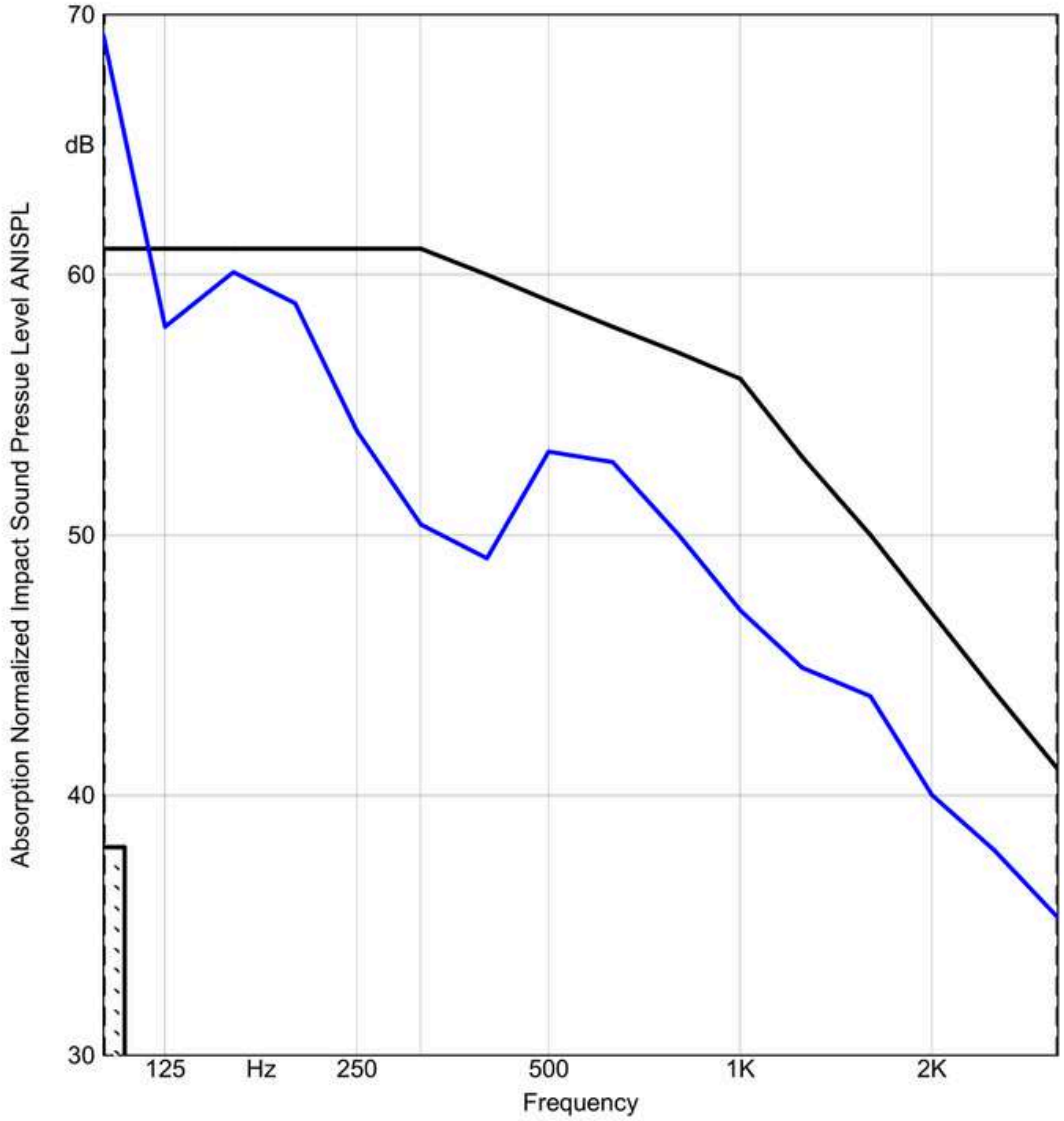
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

DESCRIPTION: Test #8 : GLT 172.5 mm FLOOR (15.8mm PLYWOOD + GLT 157 mm) / AT - SOFIX - 38,1mm / SPM - Insonobois - 3.5mm / LV (Floated) - 4,5mm

Receiving room volume: 45.0 m^3

Sum of deficiencies: 8 dB

Frequency Hz	L_n dB
100	69
125	58
160	60
200	59
250	54
315	50
400	49
500	53
630	53
800	50
1000	47
1250	45
1600	44
2000	40
2500	38
3150	35



Classification based on ASTM E989 - 06

AIIC = 51

AHIR = 59

TEST REPORT

AcoustiTECH Sofix + Soprema Insonofloor + Vinyl With Cork Backing

Apparent Impact Insulation Class (AIIC)	**50**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**58**

Materials	**Thickness (mm)**
Vinyl With Cork Backing	8,3
Soprema Insonofloor	3,5
Plywood 5/8”	16
Plywood 5/8”	16
AcoustiTECH Sofix	38
TOTAL	**81,8**

Type of Installation : Floated

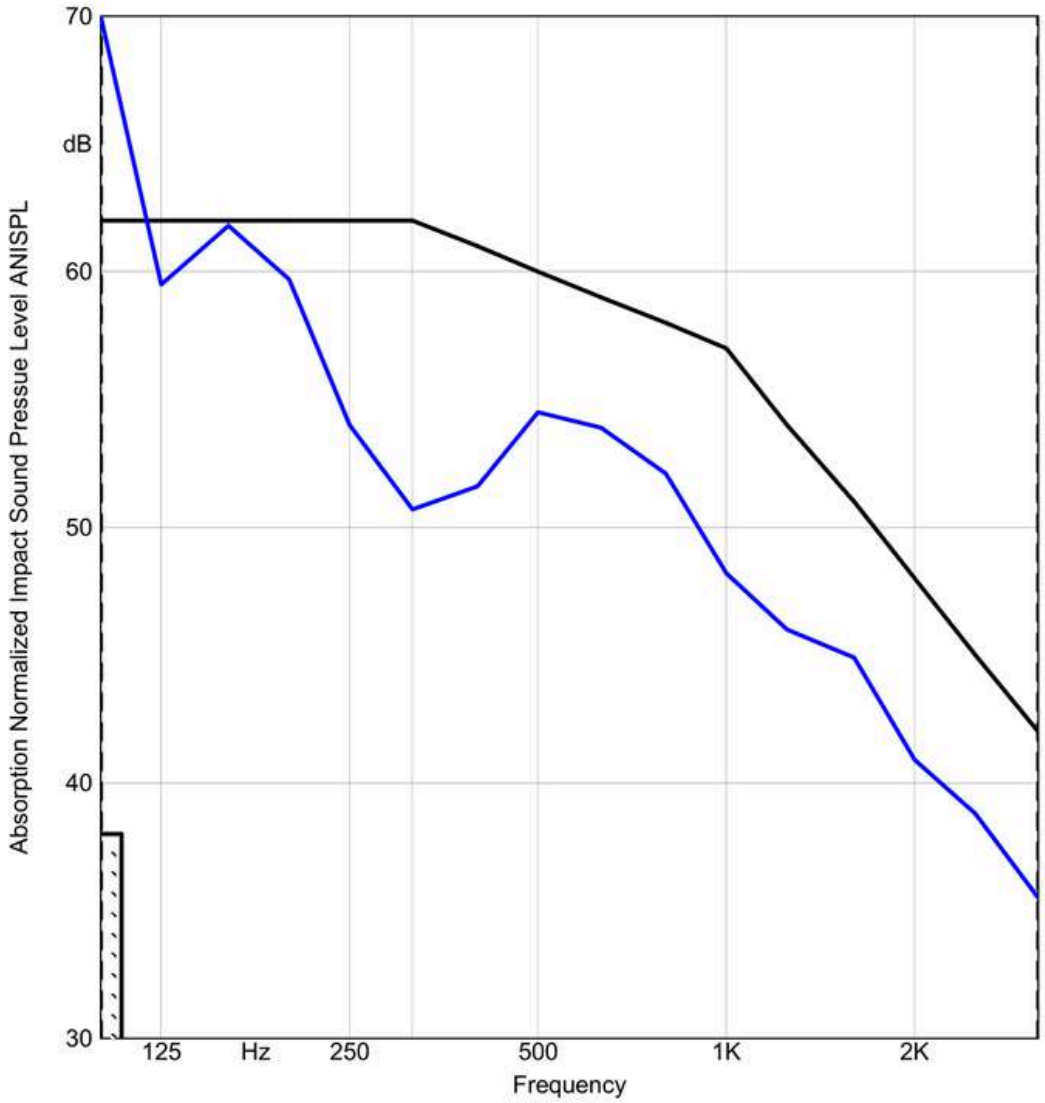
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

DESCRIPTION: Test #9 : GLT 172.5 mm FLOOR (15.8mm PLYWOOD + GLT 157 mm) / AT - SOFIX - 38,1mm / SPM - Insonobois - 3.5mm / LV + cork backing (Floated) - 8,3mm

Receiving room volume: 45.0 m^3

Sum of deficiencies: 8 dB

Frequency Hz	L_n dB
100	70
125	60
160	62
200	60
250	54
315	51
400	52
500	55
630	54
800	52
1000	48
1250	46
1600	45
2000	41
2500	39
3150	36



Classification based on ASTM E989 - 06

AIIC = 50

AHIR = 58

TEST REPORT

AcoustiTECH Sofix + Fermacell 2E22 + Vinyl Without Cork Backing

Apparent Impact Insulation Class (AIIC)	**57**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**59**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Fermacell 2E22	25
AcoustiTECH Sofix	38
TOTAL	**67,5**

Type of Installation : Floated

**To validate mechanical compatibility, please contact the AcoustiTECH team at service@acousti-tech.com.*

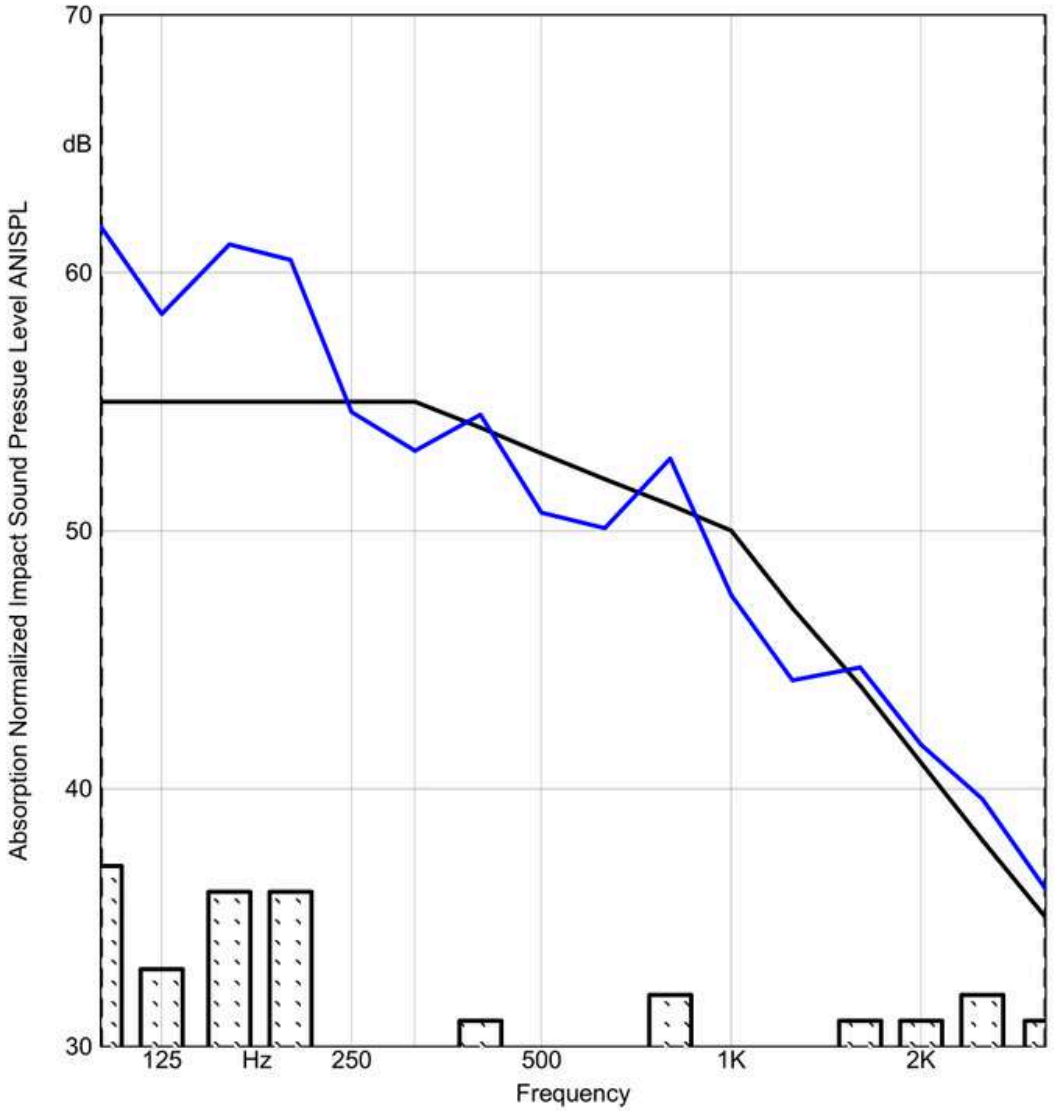
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

DESCRIPTION: Test #10 : GLT 172.5 mm FLOOR (15.8mm PLYWOOD + GLT 157 mm) / AT - SOFIX - 38,1mm / FMC - 2E22 - 25mm / LV (Floated) - 4,5mm

Receiving room volume: 45.0 m^3

Sum of deficiencies: 30 dB

Frequency Hz	L_n dB
100	62
125	58
160	61
200	61
250	55
315	53
400	55
500	51
630	50
800	53
1000	48
1250	44
1600	45
2000	42
2500	40
3150	36



Classification based on ASTM E989 - 06

AIIC = 57

AHIR = 59

TEST REPORT

AcoustiTECH Sofix + Vinyl With Cork Backing

Apparent Impact Insulation Class (AIIC)	**50**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**53**

Materials	**Thickness (mm)**
Vinyl With Cork Backing	8,3
Plywood 5/8”	16
Plywood 5/8”	16
AcoustiTECH Sofix	38
TOTAL	**78,3**

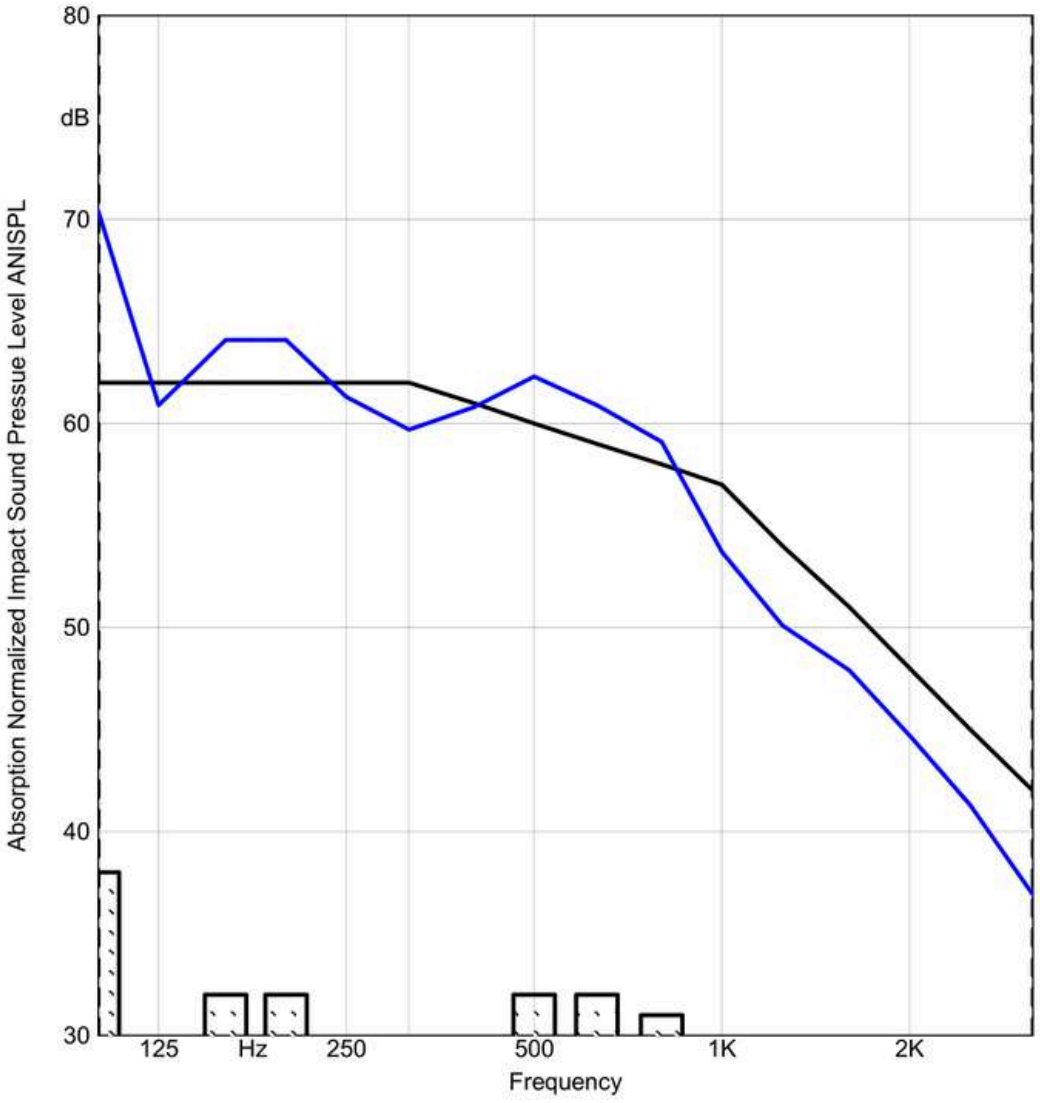
Type of Installation : Floated

Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

DESCRIPTION: Test #11 : GLT 172.5 mm FLOOR (15.8mm PLYWOOD + GLT 157 mm) / AT - SOFIX - 38,1mm / LV + cork backing (Floated) - 8.3mm

Receiving room volume: 45.0 m^3 Sum of deficiencies: 17 dB

Frequency Hz	L_n dB
100	70
125	61
160	64
200	64
250	61
315	60
400	61
500	62
630	61
800	59
1000	54
1250	50
1600	48
2000	45
2500	41
3150	37



Classification based on ASTM E989 - 06

AIIC = 50

AHIR = 53

TEST REPORT

AcoustiTECH Sofix + Engineered Floor

Apparent Impact Insulation Class (AIIC)	**47**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**45**

Materials	**Thickness (mm)**
Engineered Floor	19
Plywood 5/8”	16
Plywood 5/8”	16
AcoustiTECH Sofix	38
TOTAL	**89**

Type of Installation : Nailed / Stapled

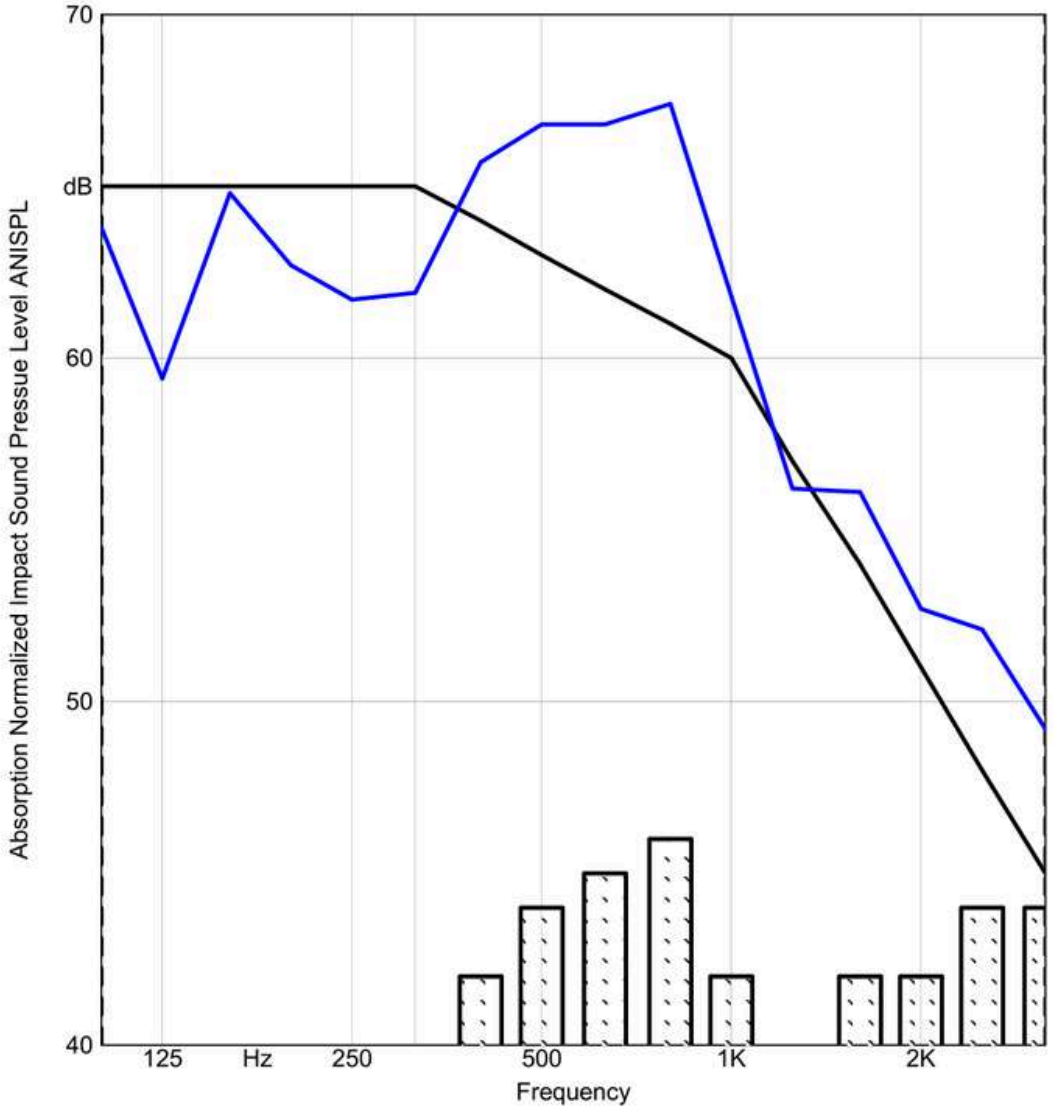
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

DESCRIPTION: Test #12 : GLT 172.5 mm FLOOR (15.8mm PLYWOOD + GLT 157 mm) / AT - SOFIX - 38,1mm / Eng. (Nailed) - 19mm

Receiving room volume: 45.0 m^3

Sum of deficiencies: 31 dB

Frequency Hz	L_n dB
100	64
125	59
160	65
200	63
250	62
315	62
400	66
500	67
630	67
800	67
1000	62
1250	56
1600	56
2000	53
2500	52
3150	49

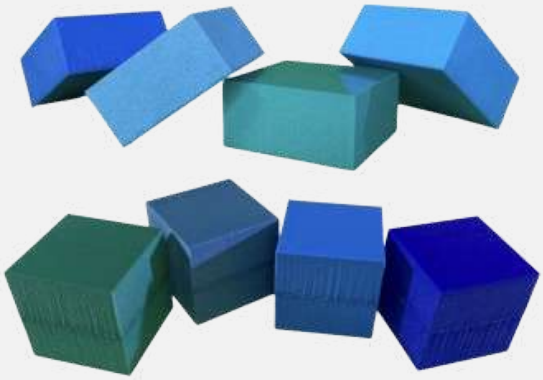


Classification based on ASTM E989 - 06

AIIC = 47
AHIR = 45

TEST REPORT

PAC_IFB1 (SD650) + Soprema Insonofloor + Vinyl Without Cork Backing



Apparent Impact Insulation Class (AIIC)	**57**
Apparent Sound Transmission Class (ASTC)	**51**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**66**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Soprema Insonofloor	3,5
Plywood 3/4"	19
Plywood 3/4"	19
PAC_IFB1 (SD650)	25
Mineral Wool	38,1
TOTAL	**109,1**

Type of Installation : Floated

Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

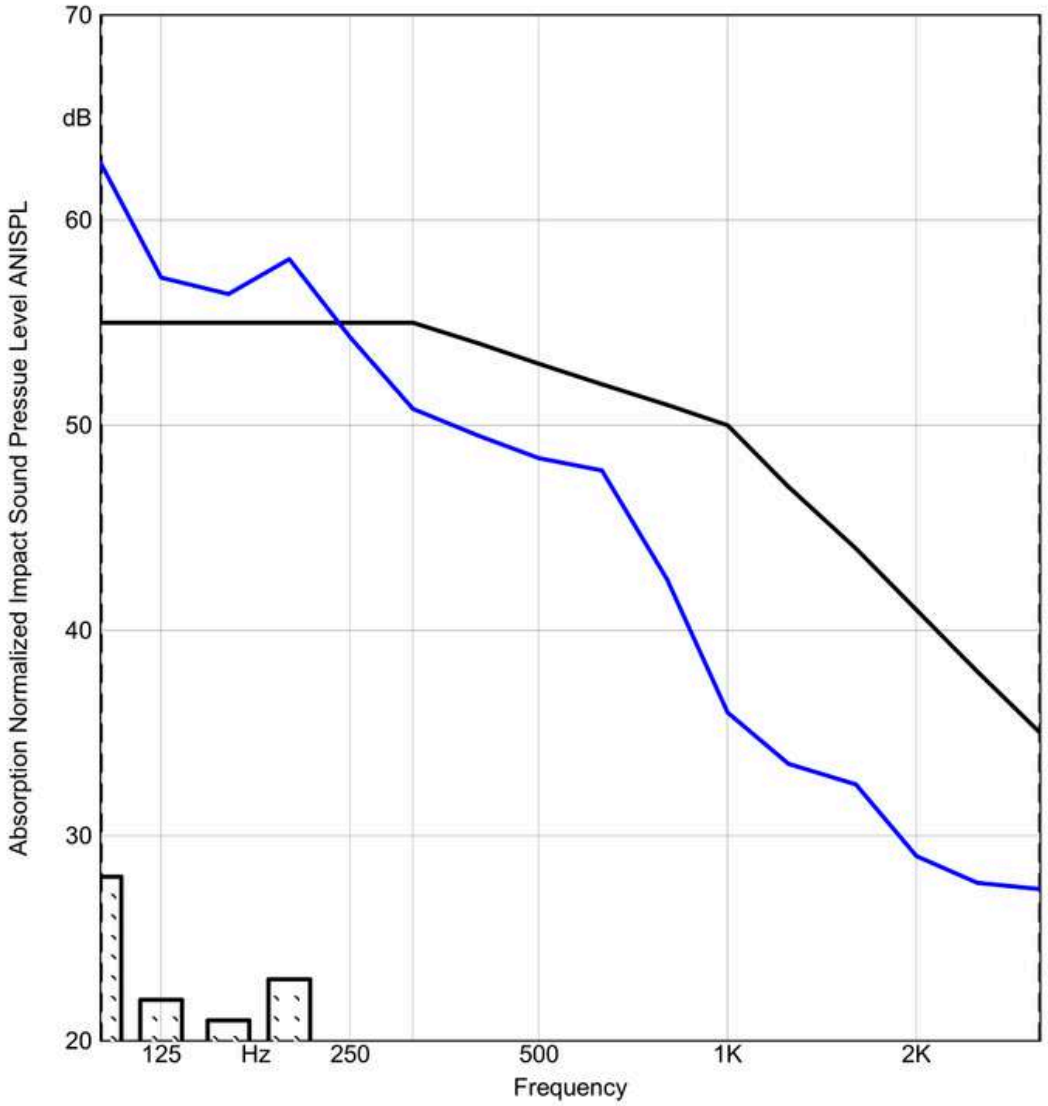
Description:

FROM TOP TO BOTTOM FULL COVERED 3.3 m X 5 m
VINYL FLOOR TORLYS VISTA 4.5 mm
INSONOBOIS 3.5 mm
2 X PLYWOOD 19 mm
PAD IFB SD-650 25.4 mm(1") X 50.8 mm(2") X 50.8 mm(2") INSTALLATION L=609.6 mm X W=609.6 mm
MINERAL WOOL R12 38.1 mm(1.5")
GLT 172.5 mm (GLT 156 mm + 15.8 mm PLYWOOD)

Receiving room volume: 45.0 m^3

Sum of deficiencies: 14 dB

Frequency Hz	L_n dB
100	63
125	57
160	56
200	58
250	54
315	51
400	50
500	48
630	48
800	43
1000	36
1250	34
1600	33
2000	29
2500	28
3150	27



Classification based on ASTM E989 - 06

AIIC = 57
AHIR = 66

Transmission loss according to ASTM E336 - 08
Field Measurements of Airborne Sound Attenuation between Rooms in Buildings

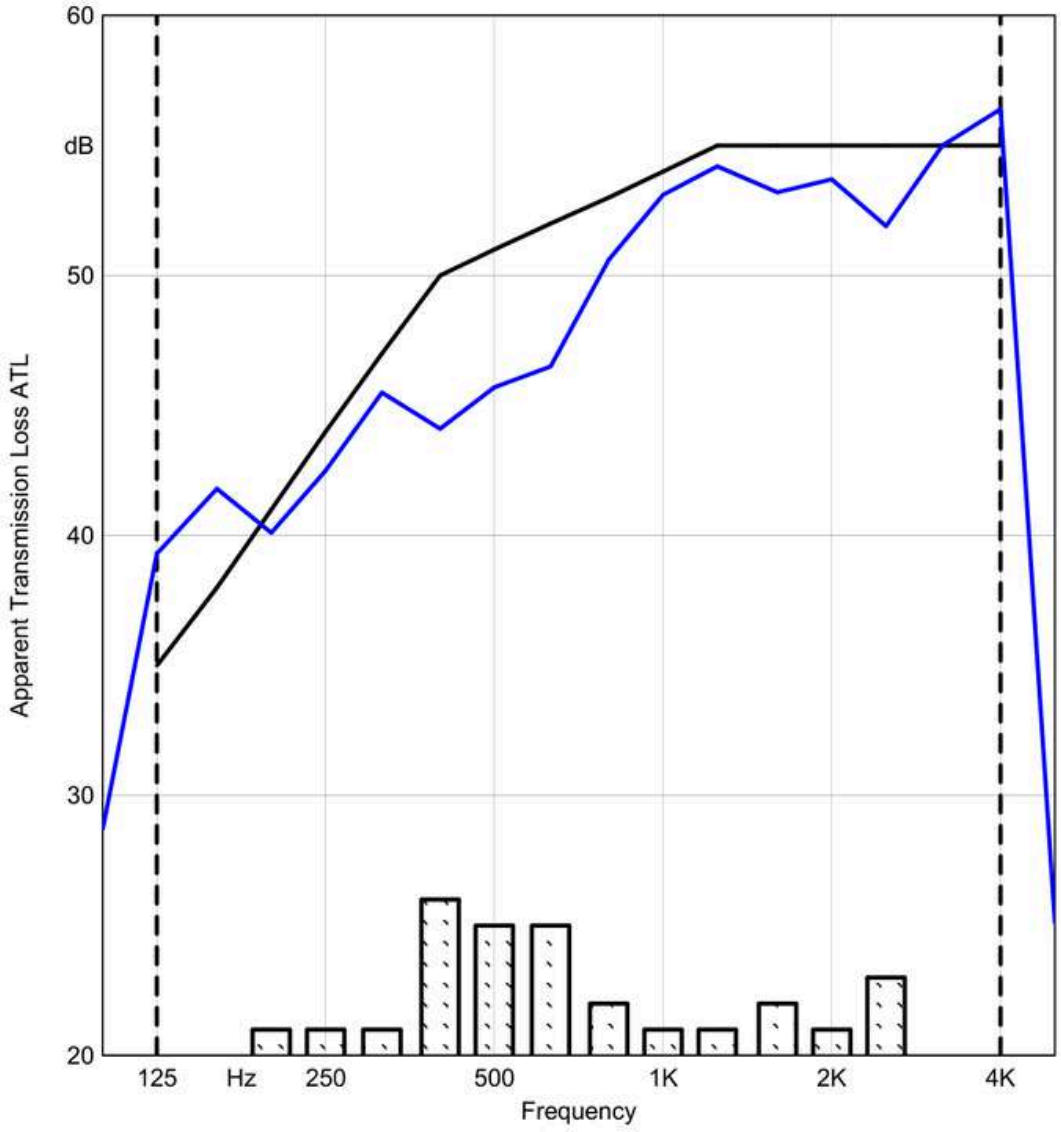
Description:

FROM TOP TO BOTTOM FULL COVERED 3.3 m X 5 m
VINYL FLOOR TORLYS VISTA 4.5 mm
INSONOBOIS 3.5 mm
2 X PLYWOOD 19 mm
PAD IFB SD-650 25.4 mm(1") X 50.8 mm(2") X 50.8 mm(2") INSTALLATION L=609.6 mm X W=609.6 mm
MINERAL WOOL R12 38.1 mm(1.5")
GLT 172.5 mm (GLT 156 mm + 15.8 mm PLYWOOD)

Test specimen area S: 16.5 m^2
Source room volume: 40.2 m^3
Receiving room volume: 45.0 m^3

Sum of deficiencies: 29 dB

Frequency Hz	ATL dB
100	29
125	39
160	42
200	40
250	43
315	46
400	44
500	46
630	47
800	51
1000	53
1250	54
1600	53
2000	54
2500	52
3150	55
4000	56*
5000	25*

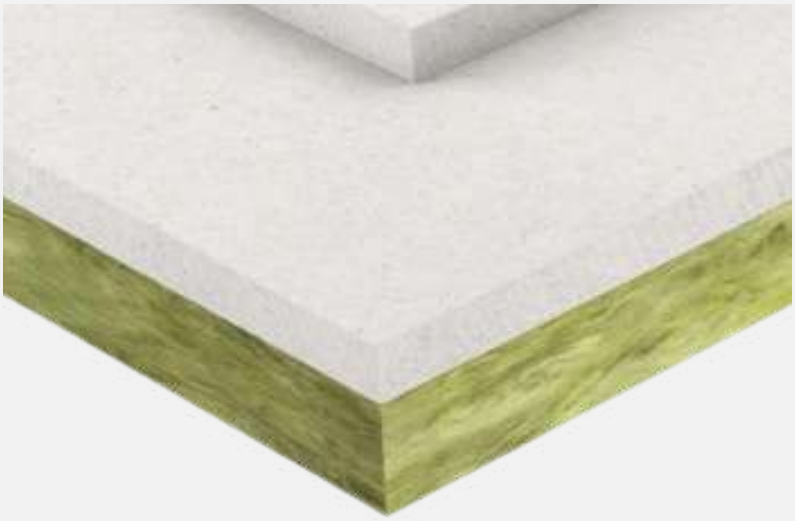


Classification based on ASTM E413 - 04

ASTC = 51

TEST REPORT

Fermacell 2E35 + Vinyl Without Cork Backing



Apparent Impact Insulation Class (AIIC)	**45**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**55**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Fermacell 2E35	45
TOTAL	**49,5**

Type of Installation : Floated

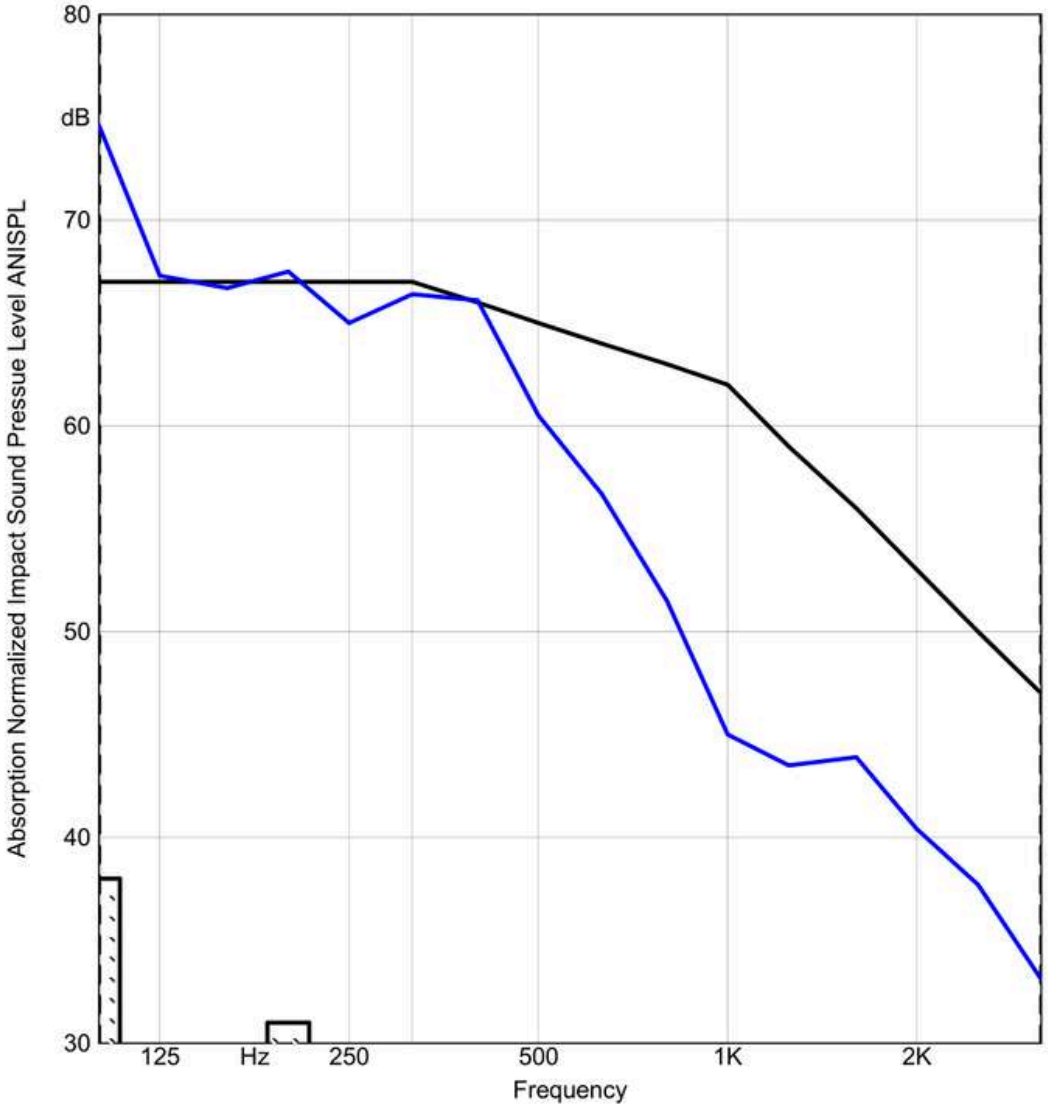
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

DESCRIPTION: Test #20 : GLT 172.5 mm FLOOR (15.8mm PLYWOOD + GLT 157 mm) / FMC - 2E35 - 45mm / LV (Floated) - 4,5mm

Receiving room volume: 45.0 m^3

Sum of deficiencies: 9 dB

Frequency Hz	L_n dB
100	75
125	67
160	67
200	68
250	65
315	66
400	66
500	61
630	57
800	52
1000	45
1250	44
1600	44
2000	40
2500	38
3150	33



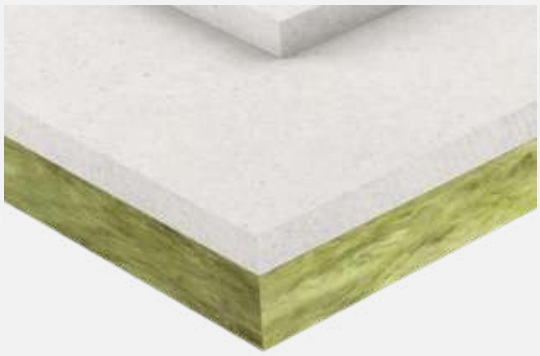
Classification based on ASTM E989 - 06

AIIC = 45

AHIR = 55

TEST REPORT

Fermacell 2E35 + Soprema Insonofloor + Vinyl With Cork Backing



Apparent Impact Insulation Class (AIIC)	**47**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**58**

Materials	Thickness (mm)
Vinyl With Cork Backing	8,3
Soprema Insonofloor	3,5
Fermacell 2E35	45
TOTAL	**56,8**

Type of Installation : Floated

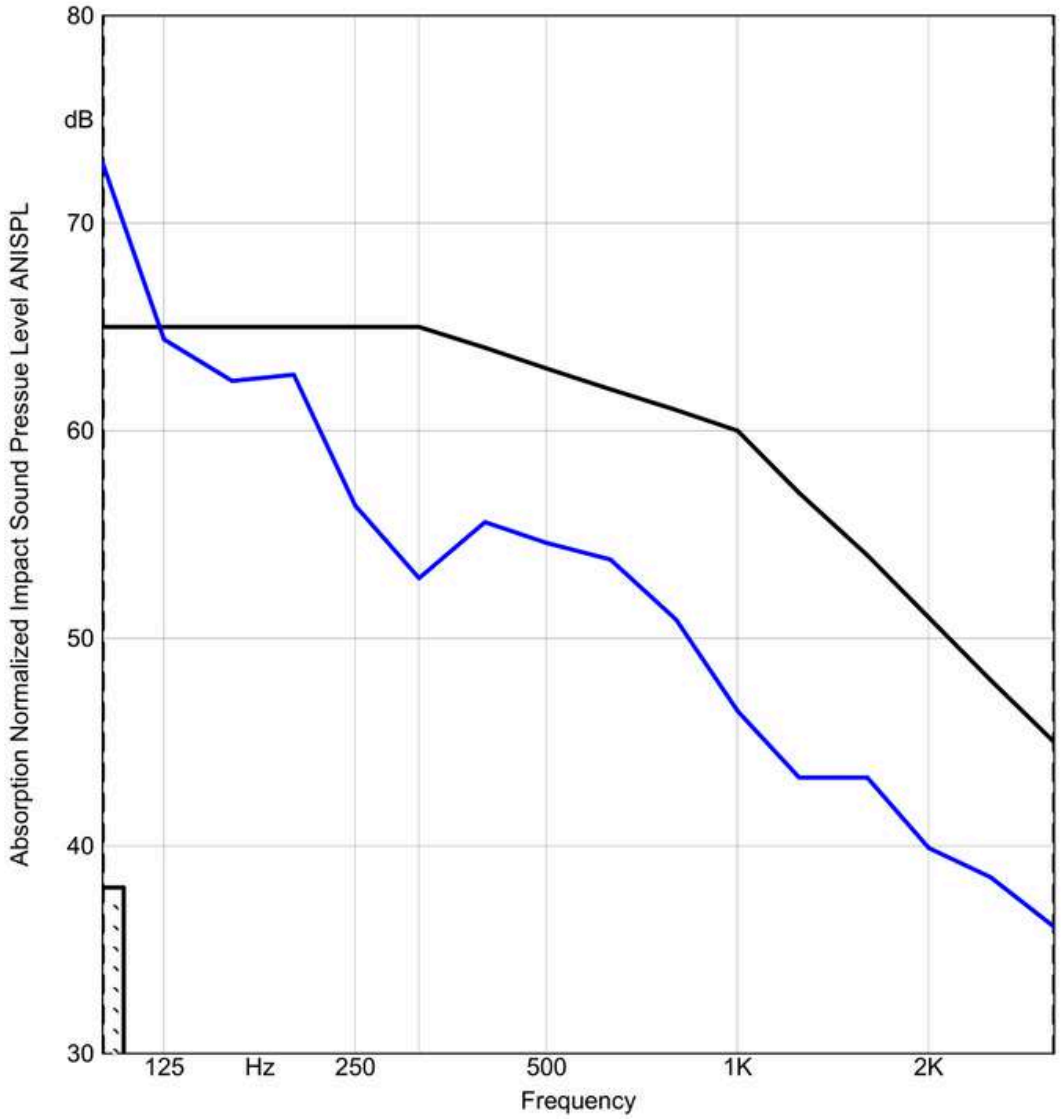
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

DESCRIPTION: Test #22 : GLT 172.5 mm FLOOR (15.8mm PLYWOOD + GLT 157 mm) / FMC - 2E35 - 45mm / SPM - Insonobois - 3.5mm / LV + cork backing (Floated) - 8,3mm

Receiving room volume: 45.0 m^3

Sum of deficiencies: 8 dB

Frequency Hz	L_n dB
100	73
125	64
160	62
200	63
250	56
315	53
400	56
500	55
630	54
800	51
1000	47
1250	43
1600	43
2000	40
2500	39
3150	36



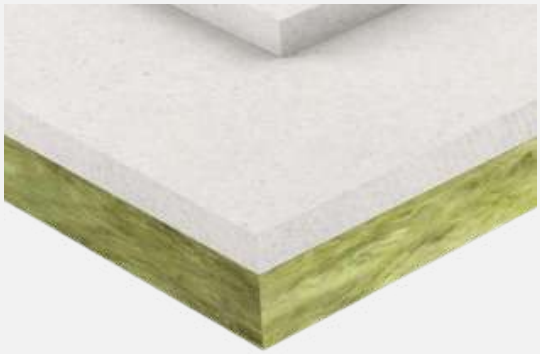
Classification based on ASTM E989 - 06

AIIC = 47

AHIR = 58

TEST REPORT

Fermacell 2E35 + Soprema Sopraway NG2 + Vinyl Without Cork Backing



Apparent Impact Insulation Class (AIIC)	**51**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**59**

Materials	Thickness (mm)
Vinyl Without Cork Backing	4,5
Soprema Sopraway NG2	4
Fermacell 2E35	45
TOTAL	**53,5**

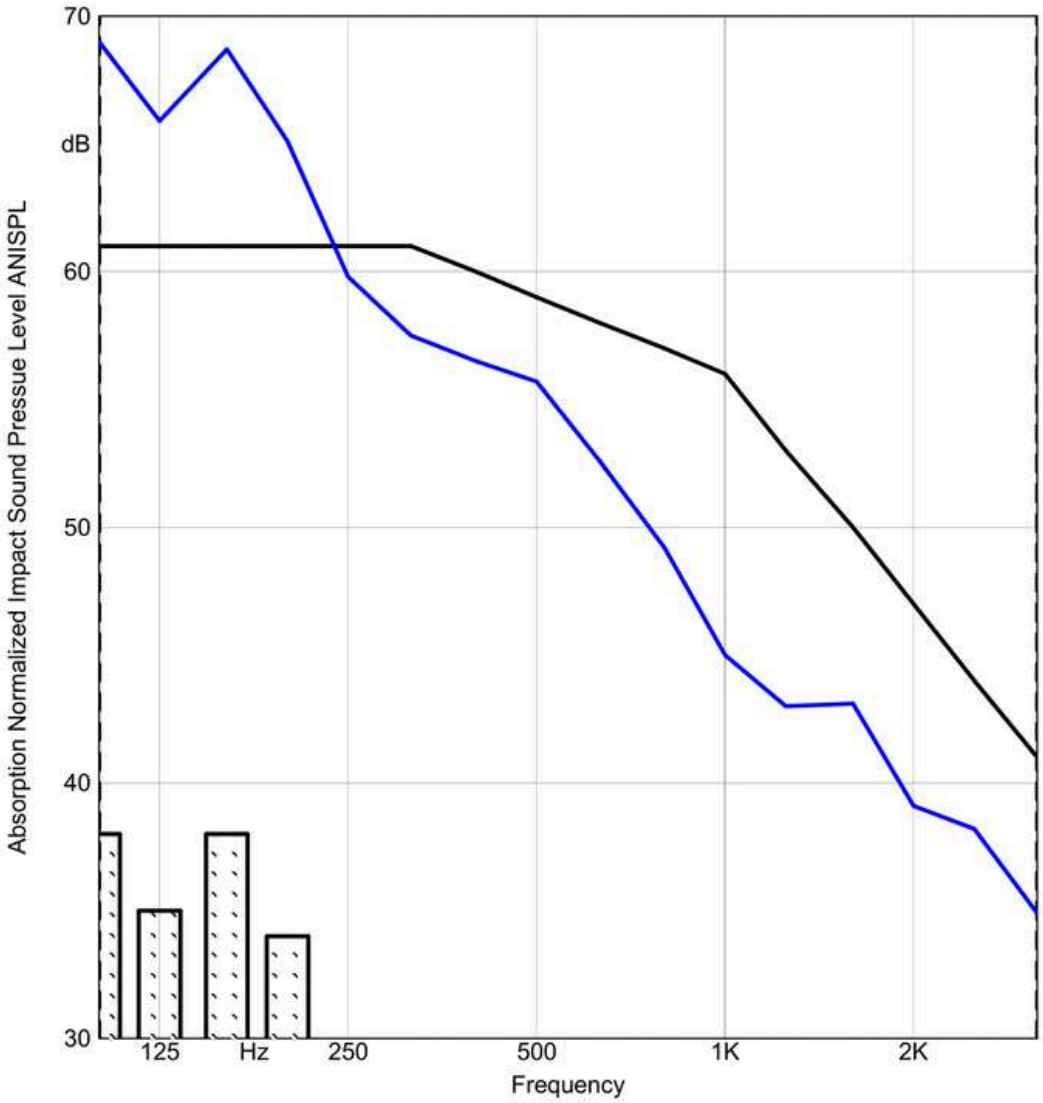
Type of Installation : Floated

Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

DESCRIPTION:
Test #44 : GLT 172.5 mm FLOOR (15.8mm PLYWOOD + GLT 157 mm) / FMC - 2E35 - 45mm / SPM - Sopraway NG2 - 4mm / LV (Floated) - 4,5mm

Receiving room volume: 45.0 m^3 Sum of deficiencies: 25 dB

Frequency Hz	L_n dB
100	69
125	66
160	69
200	65
250	60
315	58
400	57
500	56
630	53
800	49
1000	45
1250	43
1600	43
2000	39
2500	38
3150	35



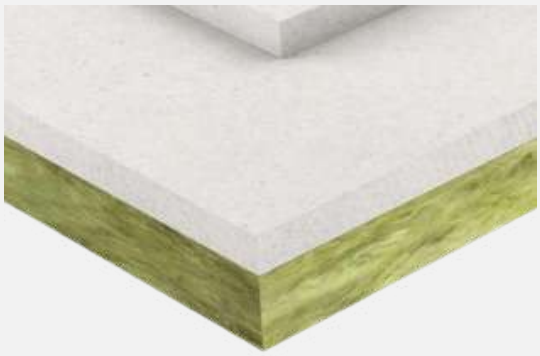
Classification based on ASTM E989 - 06

AIIC = 51

AHIR = 59

TEST REPORT

Fermacell 2E35 + Soprema Insonofloor + Vinyl Without Cork Backing



Apparent Impact Insulation Class (AIIC)	**51**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**61**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Soprema Insonofloor	3,5
Fermacell 2E35	45
TOTAL	**53**

Type of Installation : Floated

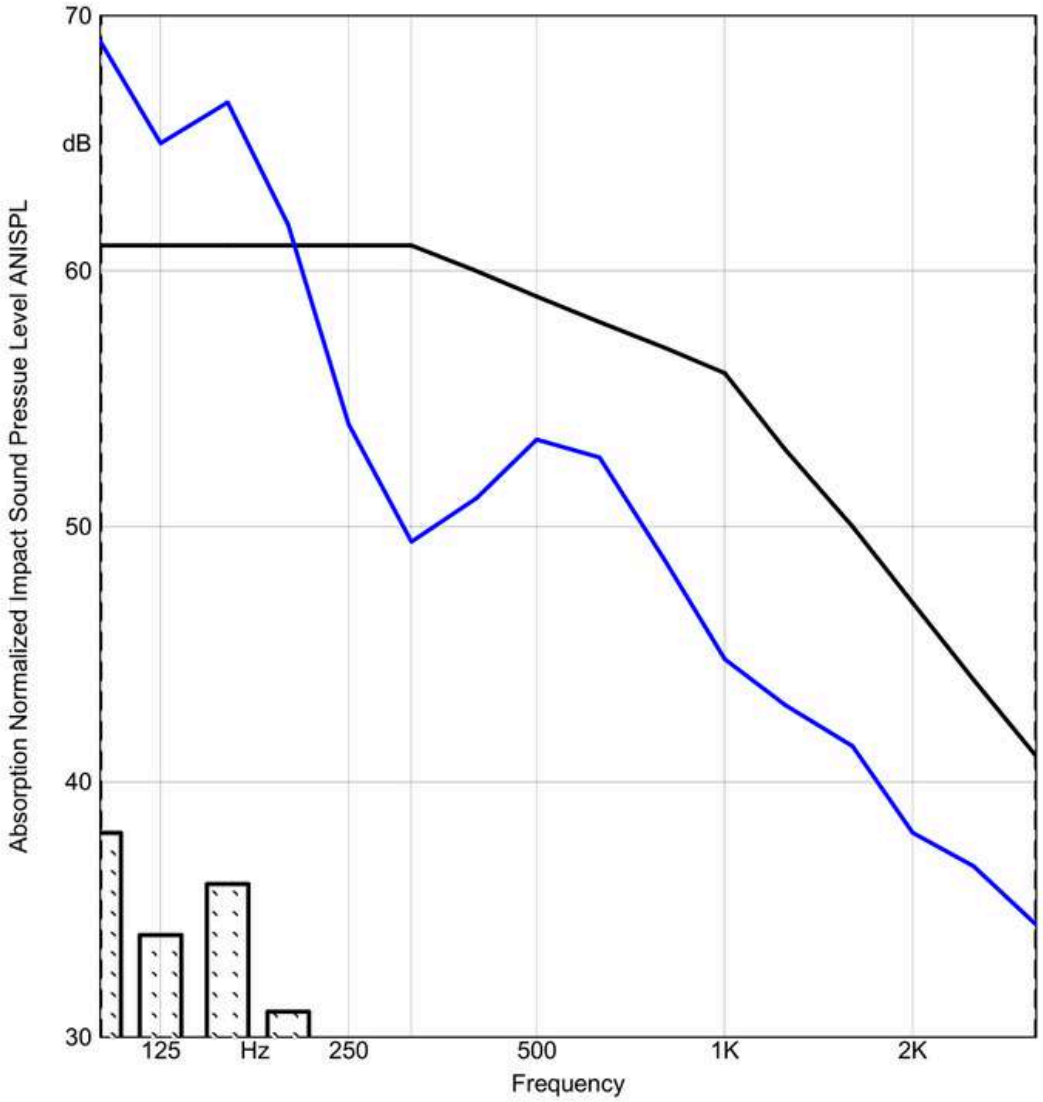
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

DESCRIPTION:
Test #45 : GLT 172.5 mm FLOOR (15.8mm PLYWOOD + GLT 157 mm) / FMC - 2E35 - 45mm / SPM - Insonobois - 3.5mm / LV (Floated) - 4,5mm

Receiving room volume: 45.0 m^3

Sum of deficiencies: 19 dB

Frequency Hz	L_n dB
100	69
125	65
160	67
200	62
250	54
315	49
400	51
500	53
630	53
800	49
1000	45
1250	43
1600	41
2000	38
2500	37
3150	34



Classification based on ASTM E989 - 06

AIIC = 51
AHIR = 61

TEST REPORT

PLITEQ - FF17 + Fermacell 2E22 + Soprema Sopraway NG2 + Vinyl Without Cork Backing

Apparent Impact Insulation Class (AIIC)	**50**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**58**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Soprema Sopraway NG2	4
Fermacell 2E22	25
Pliteq-FF17	17
TOTAL	**50,5**

Type of Installation : Floated

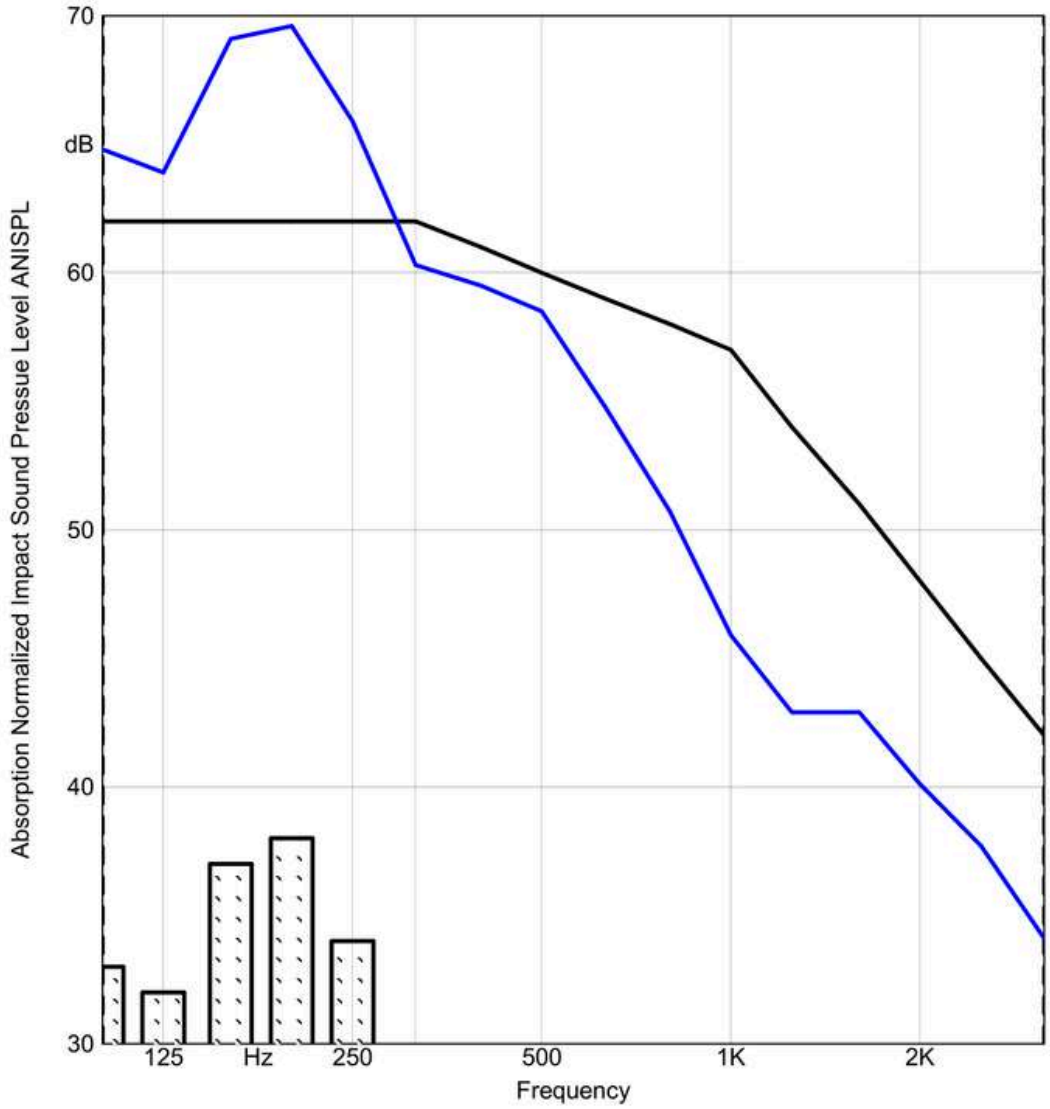
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

DESCRIPTION:
Test #50 : GLT 172.5 mm FLOOR (15.8mm PLYWOOD + GLT 157 mm) / PLTQ - FF17 - 17mmFMC - 2E22 - 25mm / SPM - Sopraway NG2 - 4mm / LV (Floated) - 4,5mm

Receiving room volume: 45.0 m^3

Sum of deficiencies: 24 dB

Frequency Hz	L_n dB
100	65
125	64
160	69
200	70
250	66
315	60
400	60
500	59
630	55
800	51
1000	46
1250	43
1600	43
2000	40
2500	38
3150	34



Classification based on ASTM E989 - 06

AIIC = 50

AHIR = 58

TEST REPORT

PLITEQ - FF17 + Fermacell 2E22 + Soprema Insonofloor + Vinyl Without Cork Backing

Apparent Impact Insulation Class (AIIC)	**53**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**59**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Sopraway Insonofloor	3,5
Fermacell 2E22	25
Pliteq-FF17	17
TOTAL	**50**

Type of Installation : Floated

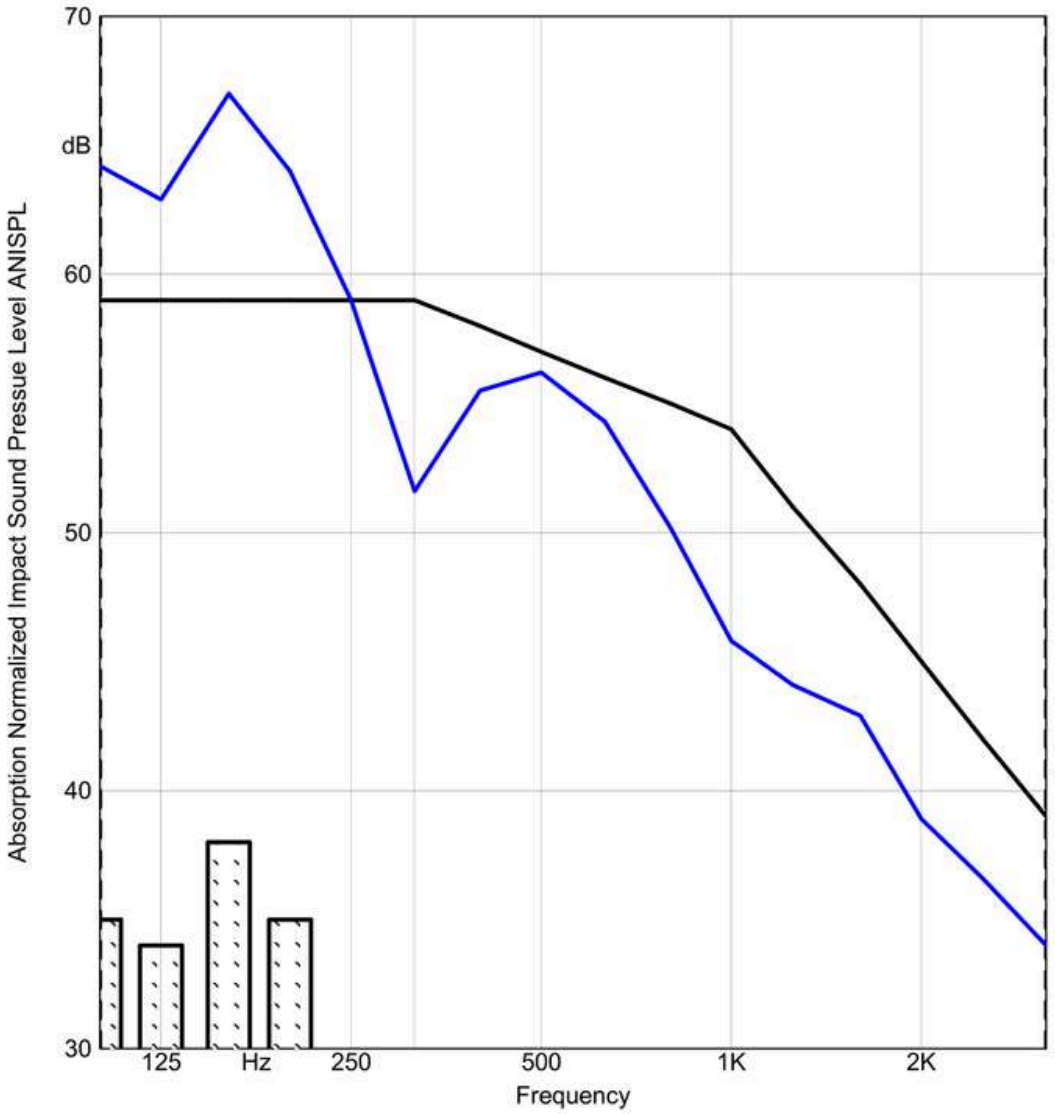
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

DESCRIPTION:
Test #51 : GLT 172.5 mm FLOOR (15.8mm PLYWOOD + GLT 157 mm) / PLTQ - FF17 - 17mmFMC - 2E22 - 25mm / SPM - Insonobois - 3.5mm / LV (Floated) - 4,5mm

Receiving room volume: 45.0 m^3

Sum of deficiencies: 22 dB

Frequency Hz	L_n dB
100	64
125	63
160	67
200	64
250	59
315	52
400	56
500	56
630	54
800	50
1000	46
1250	44
1600	43
2000	39
2500	37
3150	34



Classification based on ASTM E989 - 06

AIIC = 53

AHIR = 59

TEST REPORT

Soprema Insonomat + Fermacell 2E22 + Soprema Sopraway NG2 + Vinyl Without Cork Backing

Apparent Impact Insulation Class (AIIC)	**48**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**55**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Soprema Sopraway NG2	4
Fermacell 2E22	25
Soprema Insonomat	15
TOTAL	**48,5**

Type of Installation : Floated

**To validate mechanical compatibility, please contact the AcoustiTECH team at service@acousti-tech.com.*

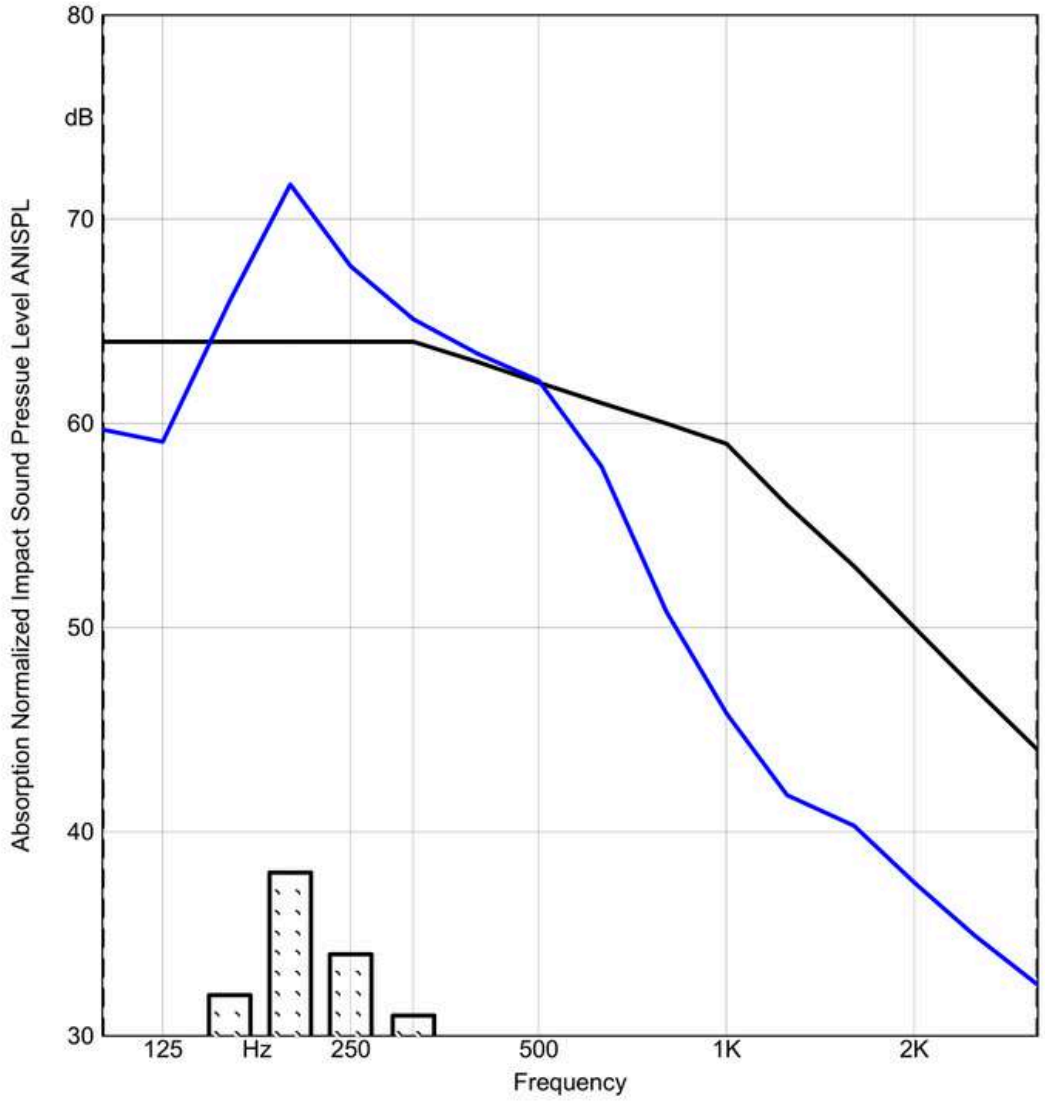
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

DESCRIPTION:
Test #46 : GLT 172.5 mm FLOOR (15.8mm PLYWOOD + GLT 157 mm) / SPM - Insonomat - 15mm / FMC - 2E22 - 25mm / SPM - Sopraway NG2 - 4mm / LV (Floated) - 4,5mm

Receiving room volume: 45.0 m^3

Sum of deficiencies: 15 dB

Frequency Hz	L_n dB
100	60
125	59
160	66
200	72
250	68
315	65
400	63
500	62
630	58
800	51
1000	46
1250	42
1600	40
2000	38
2500	35
3150	33



Classification based on ASTM E989 - 06

AIIC = 48

AHIR = 55

TEST REPORT

Soprema Insonomat + Fermacell 2E22 + Soprema Insonofloor + Vinyl Without Cork Backing

Apparent Impact Insulation Class (AIIC)	**52**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**57**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Soprema Insonofloor	3,5
Fermacell 2E22	25
Soprema Insonomat	15
TOTAL	**48**

Type of Installation : Floated

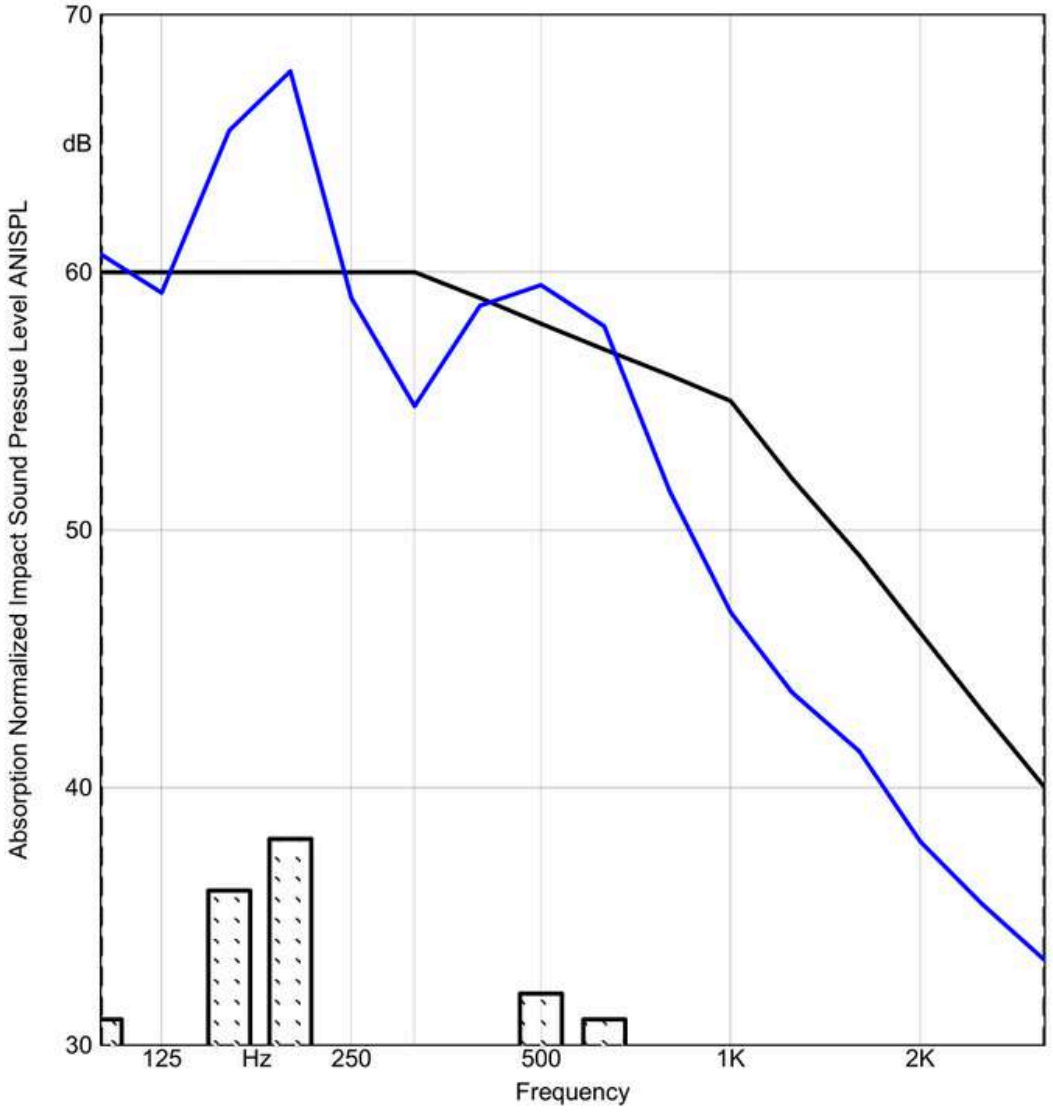
**To validate mechanical compatibility, please contact the AcoustiTECH team at service@acousti-tech.com.*

Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

DESCRIPTION:
Test #47 : GLT 172.5 mm FLOOR (15.8mm PLYWOOD + GLT 157 mm) / SPM - Insonomat - 15mm / FMC - 2E22 - 25mmSPM - Insonobois - 3.5mm / LV (Floated) - 4,5mm

Receiving room volume: 45.0 m^3 Sum of deficiencies: 18 dB

Frequency Hz	L_n dB
100	61
125	59
160	66
200	68
250	59
315	55
400	59
500	60
630	58
800	52
1000	47
1250	44
1600	41
2000	38
2500	36
3150	33



Classification based on ASTM E989 - 06

AIIC = 52
AHIR = 57

TEST REPORT

2 x Soprema Insonomat + Fermacell 2E22 + Soprema Sopraway NG2 + Vinyl Without Cork Backing

Apparent Impact Insulation Class (AIIC)	**52**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**57**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Soprema Sopraway NG2	4
Fermacell 2E22	25
2 x Soprema Insonomat	30
TOTAL	**63,5**

Type of Installation : Floated

**To validate mechanical compatibility, please contact the AcoustiTECH team at service@acousti-tech.com.*

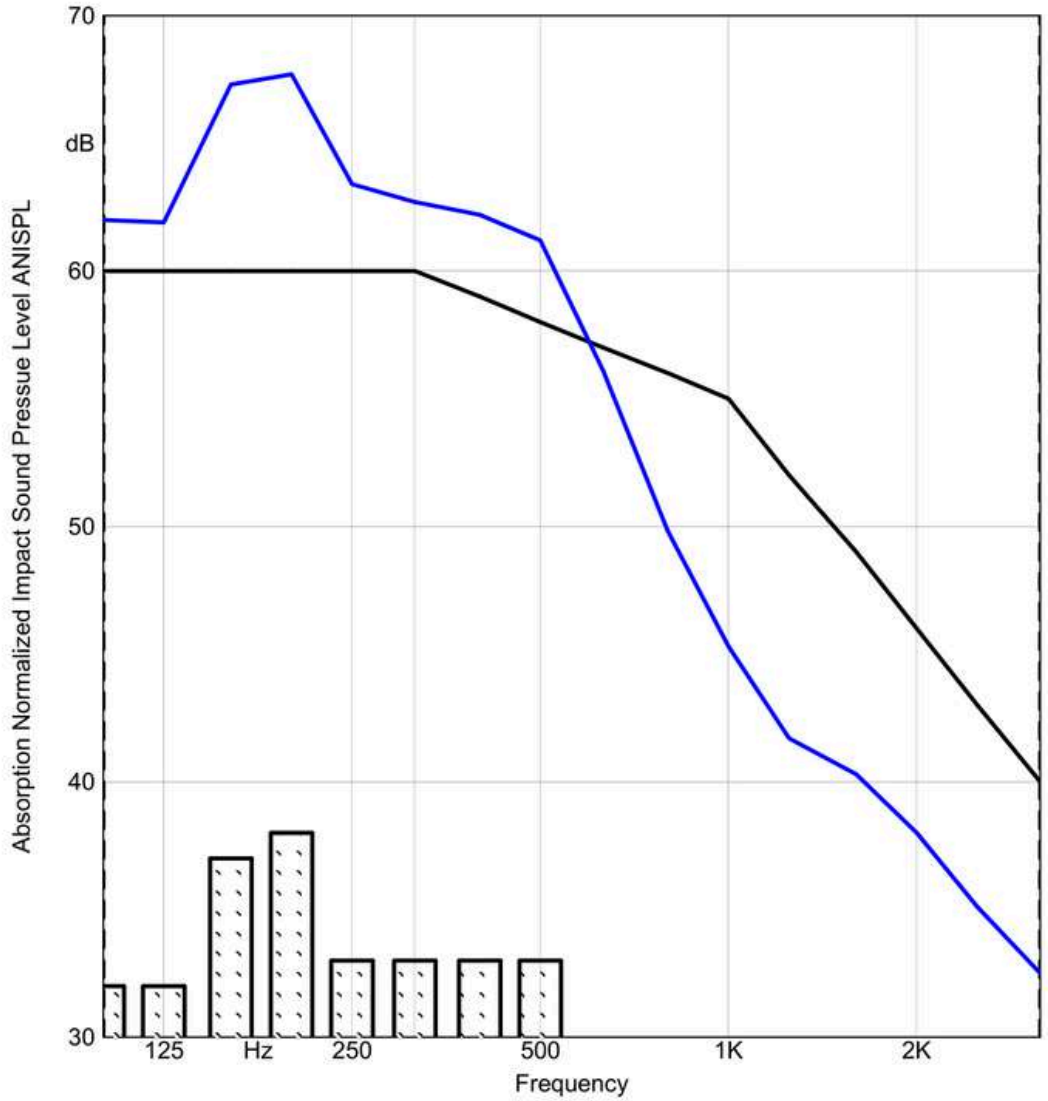
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

DESCRIPTION:
Test #48 : GLT 172.5 mm FLOOR (15.8mm PLYWOOD + GLT 157 mm) / SPM - (2x) Insonomat - 30mm / FMC - 2E22 - 25mm / SPM - Sopraway NG2 - 4mm / LV (Floated) - 4,5mm

Receiving room volume: 45.0 m^3

Sum of deficiencies: 31 dB

Frequency Hz	L_n dB
100	62
125	62
160	67
200	68
250	63
315	63
400	62
500	61
630	56
800	50
1000	45
1250	42
1600	40
2000	38
2500	35
3150	33



Classification based on ASTM E989 - 06

AIIC = 52

AHIR = 57

TEST REPORT

2 x Soprema Insonomat + Fermacell 2E22 + Soprema Insonofloor + Vinyl Without Cork Backing



Apparent Impact Insulation Class (AIIC)	**55**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**59**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Soprema Insonofloor	3,5
Fermacell 2E22	25
2 x Soprema Insonomat	30
TOTAL	**63**

Type of Installation : Floated

**To validate mechanical compatibility, please contact the AcoustiTECH team at service@acousti-tech.com.*

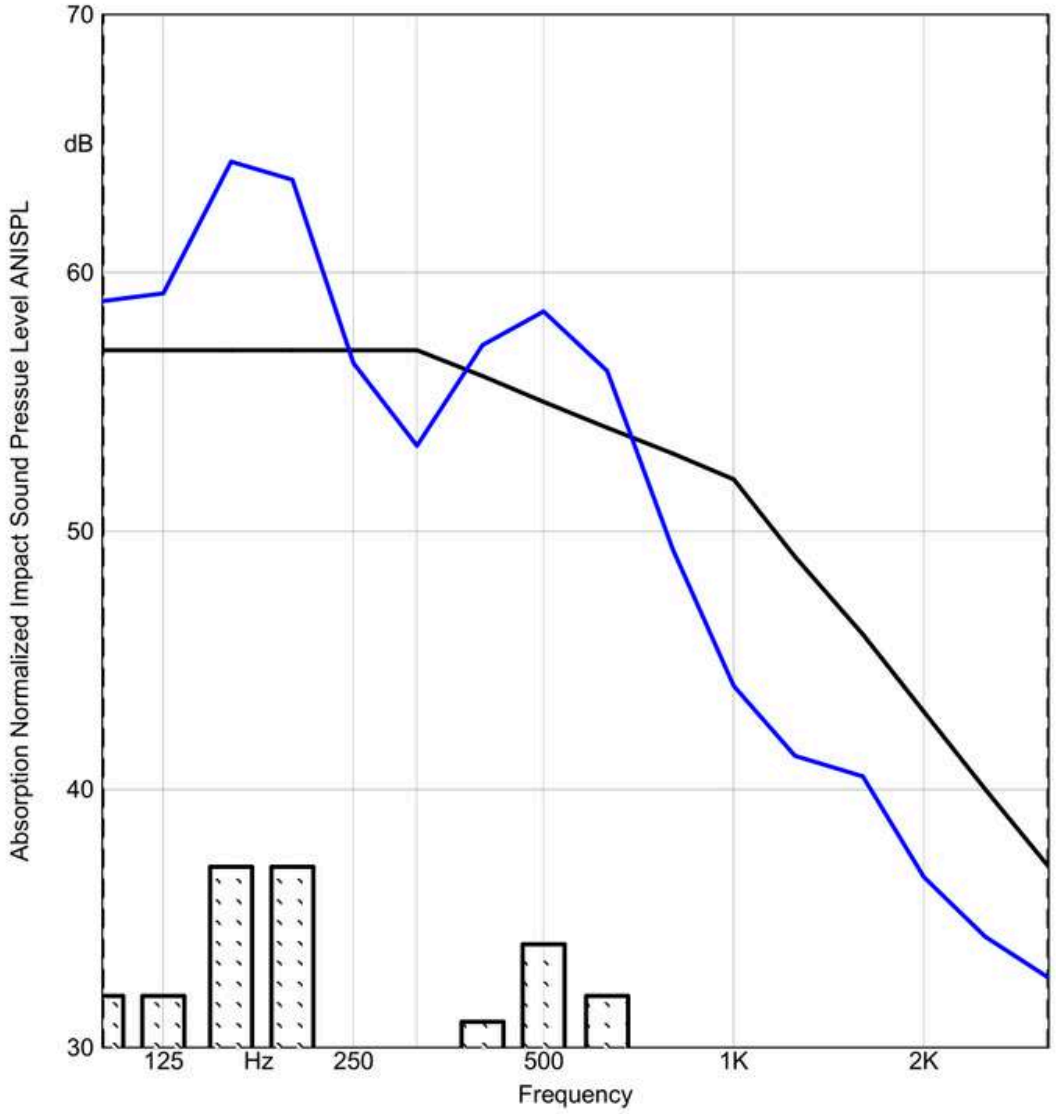
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

DESCRIPTION:
Test #49 : GLT 172.5 mm FLOOR (15.8mm PLYWOOD + GLT 157 mm) / SPM - (2x) Insonomat - 30mm / FMC - 2E22 - 25mm / SPM - Insonobois - 3.5mm / LV (Floated) - 4,5mm

Receiving room volume: 45.0 m^3

Sum of deficiencies: 25 dB

Frequency Hz	L_n dB
100	59
125	59
160	64
200	64
250	57
315	53
400	57
500	59
630	56
800	49
1000	44
1250	41
1600	41
2000	37
2500	34
3150	33



Classification based on ASTM E989 - 06

AIIC = 55
AHIR = 59

TEST REPORT

Rothoblaas Silent Floor Net 3D (8 mm) + Fermacell 2E22 + Soprema Insonofloor + Vinyl Without Cork Backing

Apparent Impact Insulation Class (AIIC)	**47**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**55**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Soprema Insonofloor	3,5
Fermacell 2E22	25
Rothoblaas Silent Floor Net 3D	8
TOTAL	41

Type of Installation : Floated

**To validate mechanical compatibility, please contact the AcoustiTECH team at service@acousti-tech.com.*

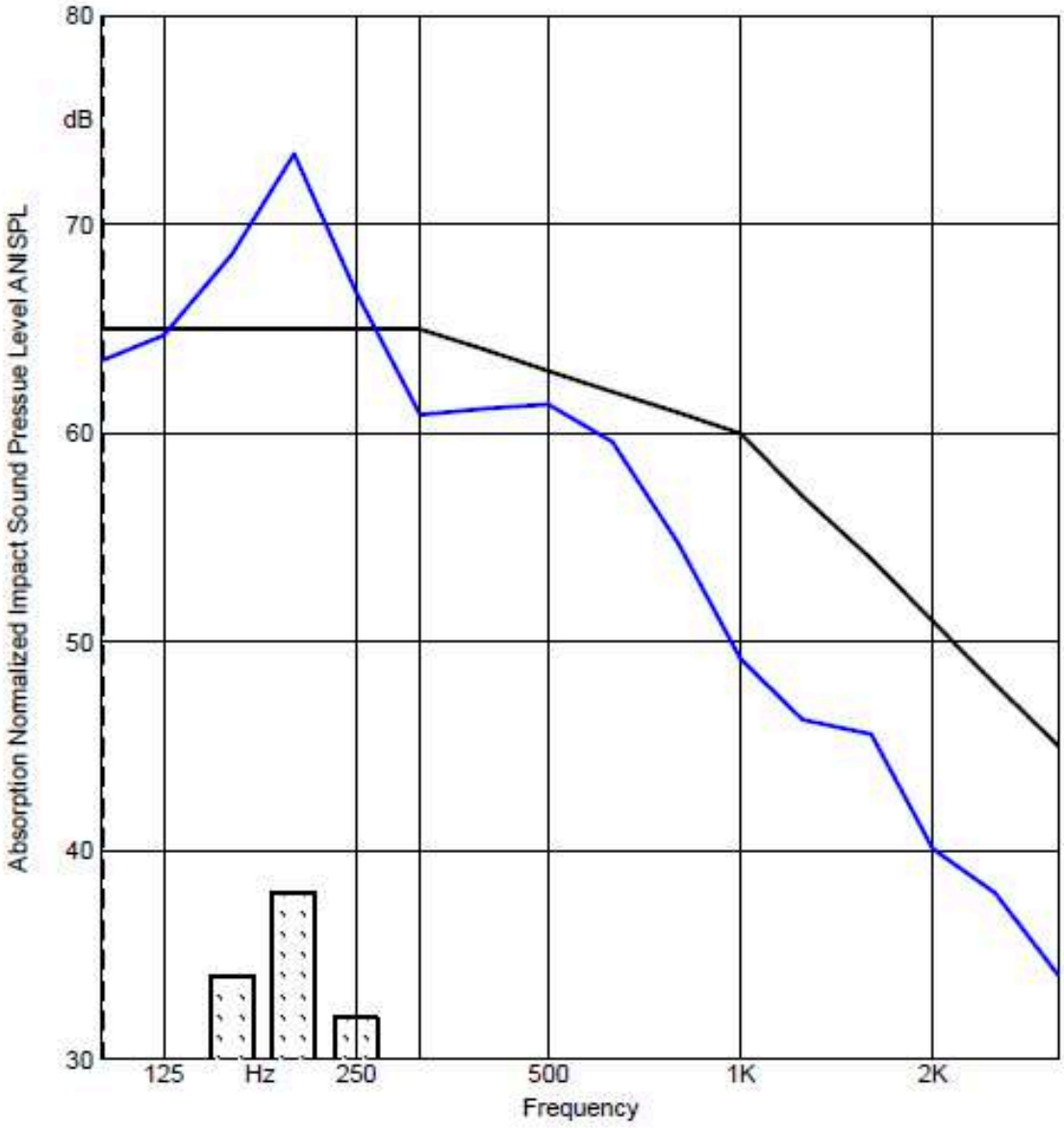
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

Description: GLT - 172mm
Rothoblaas : Silent Floor Net 3D - 8mm
Fermacell : 2E22 - 25mm
Soprema - Insonofloor - 3.5mm
LV (Floated)
Bare Slab
AIIC = 47
A-HIIC = 55

Receiving room volume: 45.0 m^3

Sum of deficiencies: 14 dB

Frequency Hz	L_n dB
100	64
125	65
160	69
200	73
250	67
315	61
400	61
500	61
630	60
800	55
1000	49
1250	46
1600	46
2000	40
2500	38
3150	34



Classification based on ASTM E989 - 06

AIIC = 47
AHIR = 55

TEST REPORT

Rothoblaas Silent Floor Net 3D (20 mm) + Fermacell 2E22 + Soprema Insonofloor + Vinyl Without Cork Backing

Apparent Impact Insulation Class (AIIC)	**52**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**59**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Soprema Insonofloor	3,5
Fermacell 2E22	25
Rothoblaas Silent Floor Net 3D	20
TOTAL	**53**

Type of Installation : Floated

**To validate mechanical compatibility, please contact the AcoustiTECH team at service@acousti-tech.com.*

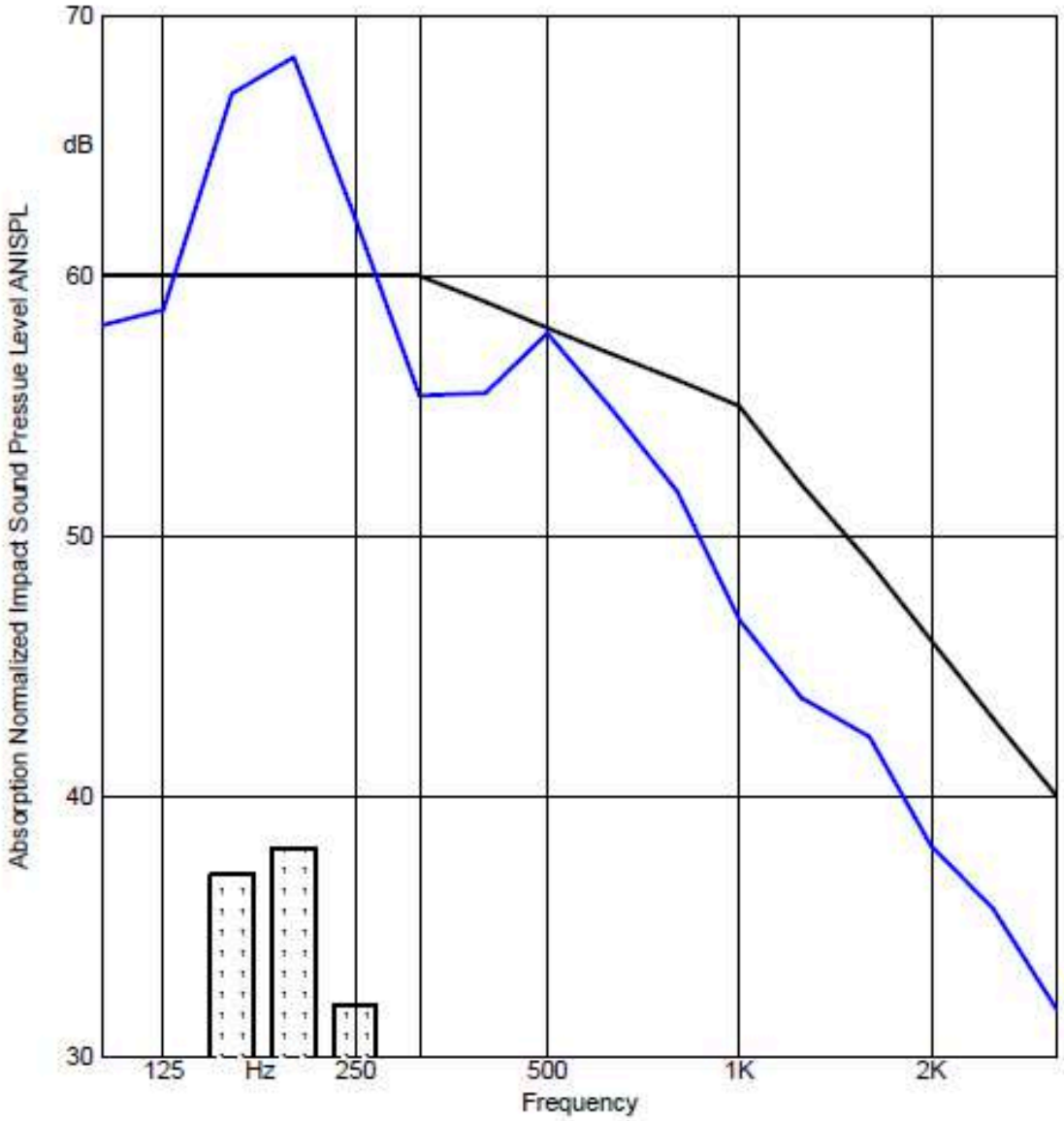
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

Description: GLT - 172mm
Rothoblaas : Silent Floor Net 3D - 20mm
Fermacell : 2E22 - 25mm
Soprema - Insonofloor - 3.5mm
LV (Floated)
Bare Slab
AIIC = 52
A-HIIC = 59

Receiving room volume: 45.0 m^3

Sum of deficiencies: 17 dB

Frequency Hz	L_n dB
100	58
125	59
160	67
200	68
250	62
315	55
400	56
500	58
630	55
800	52
1000	47
1250	44
1600	42
2000	38
2500	36
3150	32



Classification based on ASTM E989 - 06

AIIC = 52
AHIR = 59

TEST REPORT

Rothoblaas Silent Floor Pur (10 mm) + Fermacell 2E22 + Soprema Insonofloor + Vinyl Without Cork Backing

Apparent Impact Insulation Class (AIIC)	**50**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**60**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Soprema Insonofloor	3,5
Fermacell 2E22	25
Rothoblaas Silent Floor Pur	10
TOTAL	**43**

Type of Installation : Floated

**To validate mechanical compatibility, please contact the AcoustiTECH team at service@acousti-tech.com.*

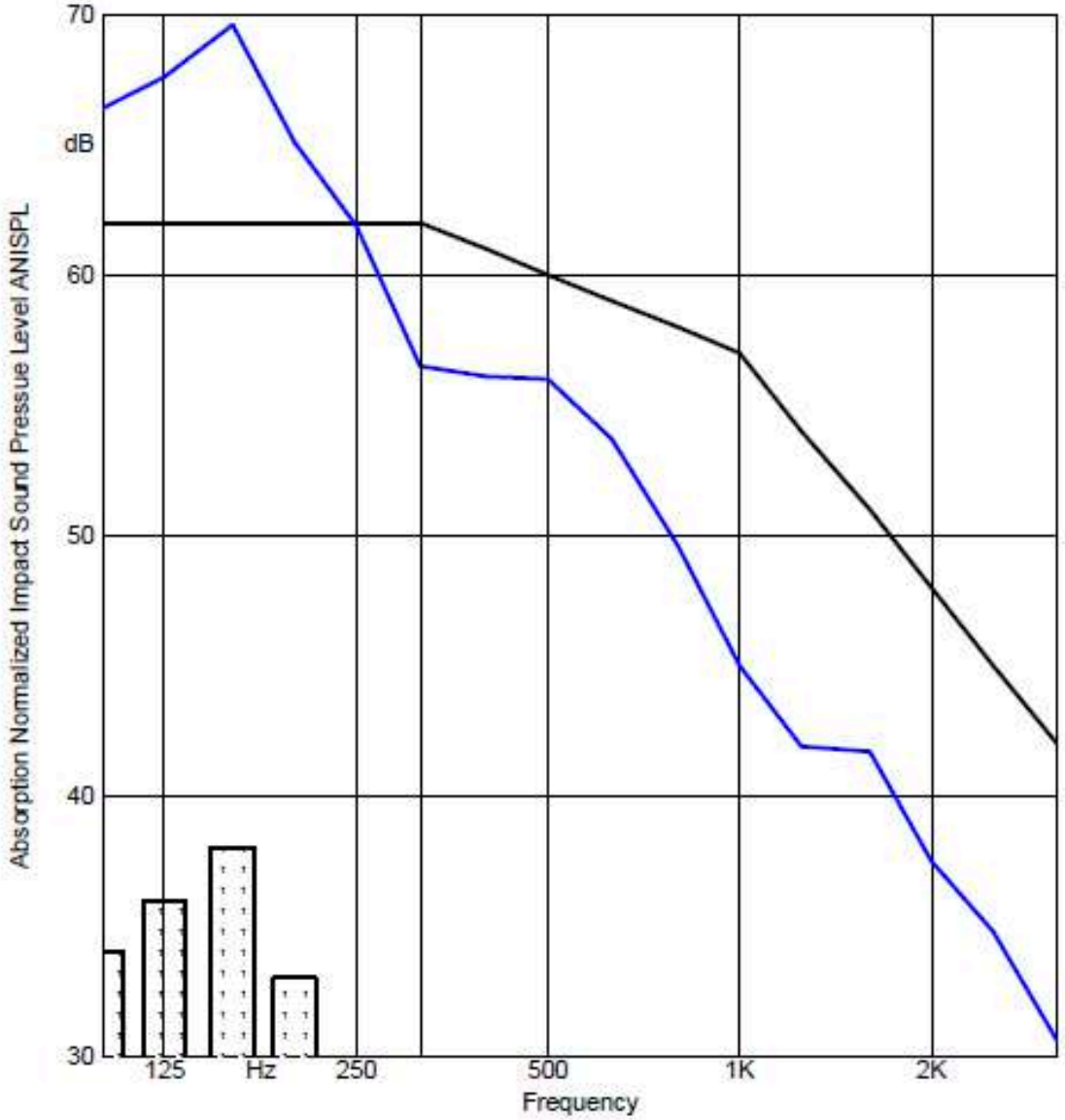
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

Description: GLT - 172mm
Rothoblaas : Silent Floor Pur - 10mm
Fermacell : 2E22 - 25mm
Soprema - Insonofloor - 3.5mm
LV (Floated)
Bare Slab
AIIC = 50
A-HIIC = 60

Receiving room volume: 45.0 m^3

Sum of deficiencies: 21 dB

Frequency Hz	L_n dB
100	66
125	68
160	70
200	65
250	62
315	57
400	56
500	56
630	54
800	50
1000	45
1250	42
1600	42
2000	38
2500	35
3150	31



Classification based on ASTM E989 - 06

AIIC = 50
AHIR = 60

TEST REPORT

Rothoblaas Xylofon 35 (6 mm) + AcoustiTECH Sofix + Soprema Insonofloor + Vinyl Without Cork Backing



Apparent Impact Insulation Class (AIIC)	**56**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**59**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Plywood 5/8”	16
Plywood 5/8”	16
Soprema Insonofloor	3,5
AcoustiTECH Sofix	38
Rothoblaas Xylofon 35	6
TOTAL	**84**

Type of Installation : Floated

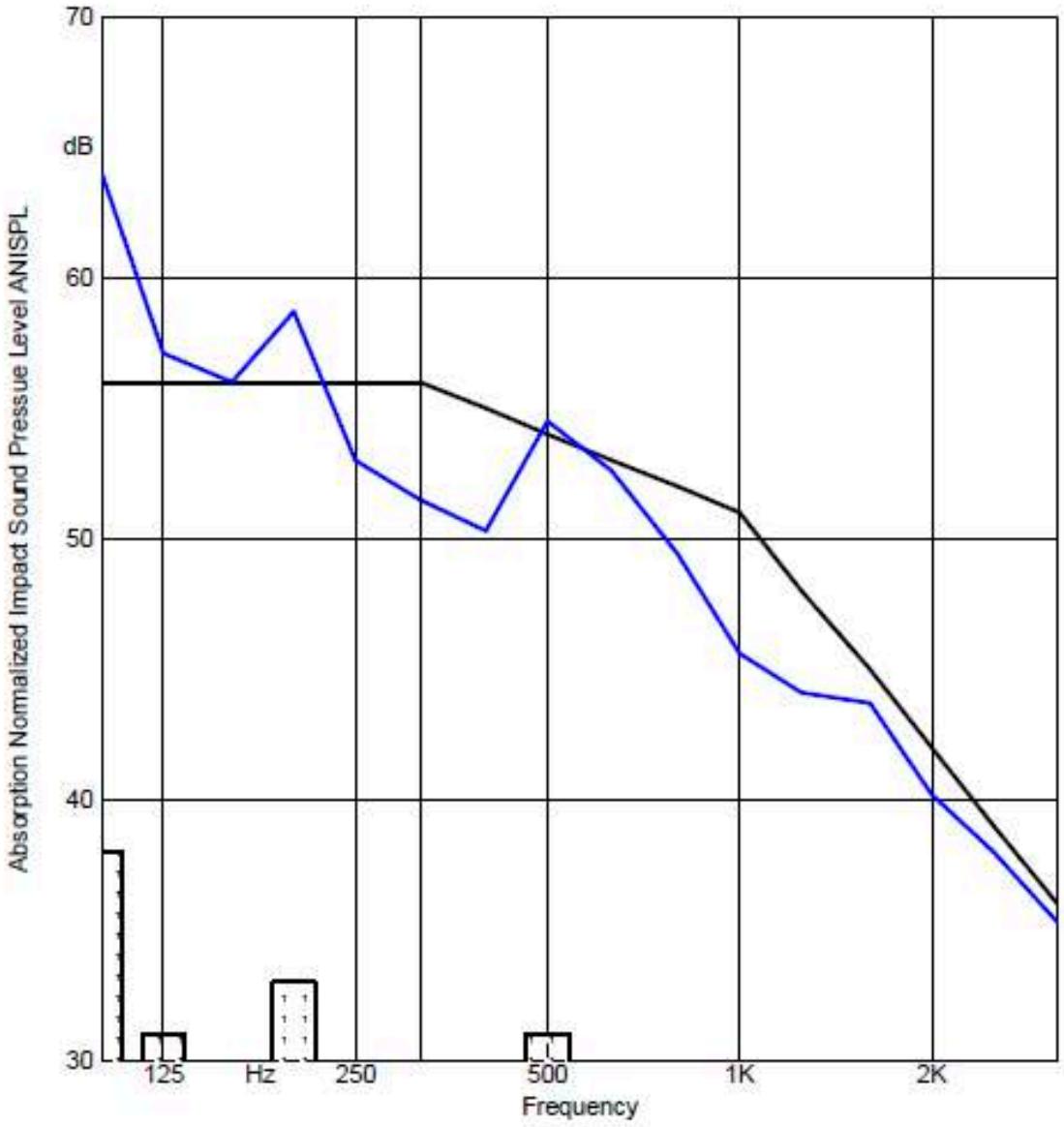
Absorption normalized impact sound pressure level according to ASTM E1007-11
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

Description: GLT - 172mm
Rothoblaas : Xylofon 35 - 6mm
AcoustiTECH : SOFIX - 38mm
Soprema - Insonofloor - 3.5mm
LV (Floated)
Bare Slab
AIIC = 56
A-HIIC = 59

Receiving room volume: 45.0 m^3

Sum of deficiencies: 13 dB

Frequency Hz	L_n dB
100	64
125	57
160	56
200	59
250	53
315	52
400	50
500	55
630	53
800	49
1000	46
1250	44
1600	44
2000	40
2500	38
3150	35



Classification based on ASTM E989 - 06

AIIC = 56

AHIR = 59

TEST REPORT

Rothoblaas Piano A (6 mm) + AcoustiTECH Sofix + Soprema Insonofloor + Vinyl Without Cork Backing

Apparent Impact Insulation Class (AIIC)	**57**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**60**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Plywood 5/8”	16
Plywood 5/8”	16
Soprema Insonofloor	3,5
AcoustiTECH Sofix	38
Rothoblaas Piano A	6
TOTAL	**84**

Type of Installation : Floated

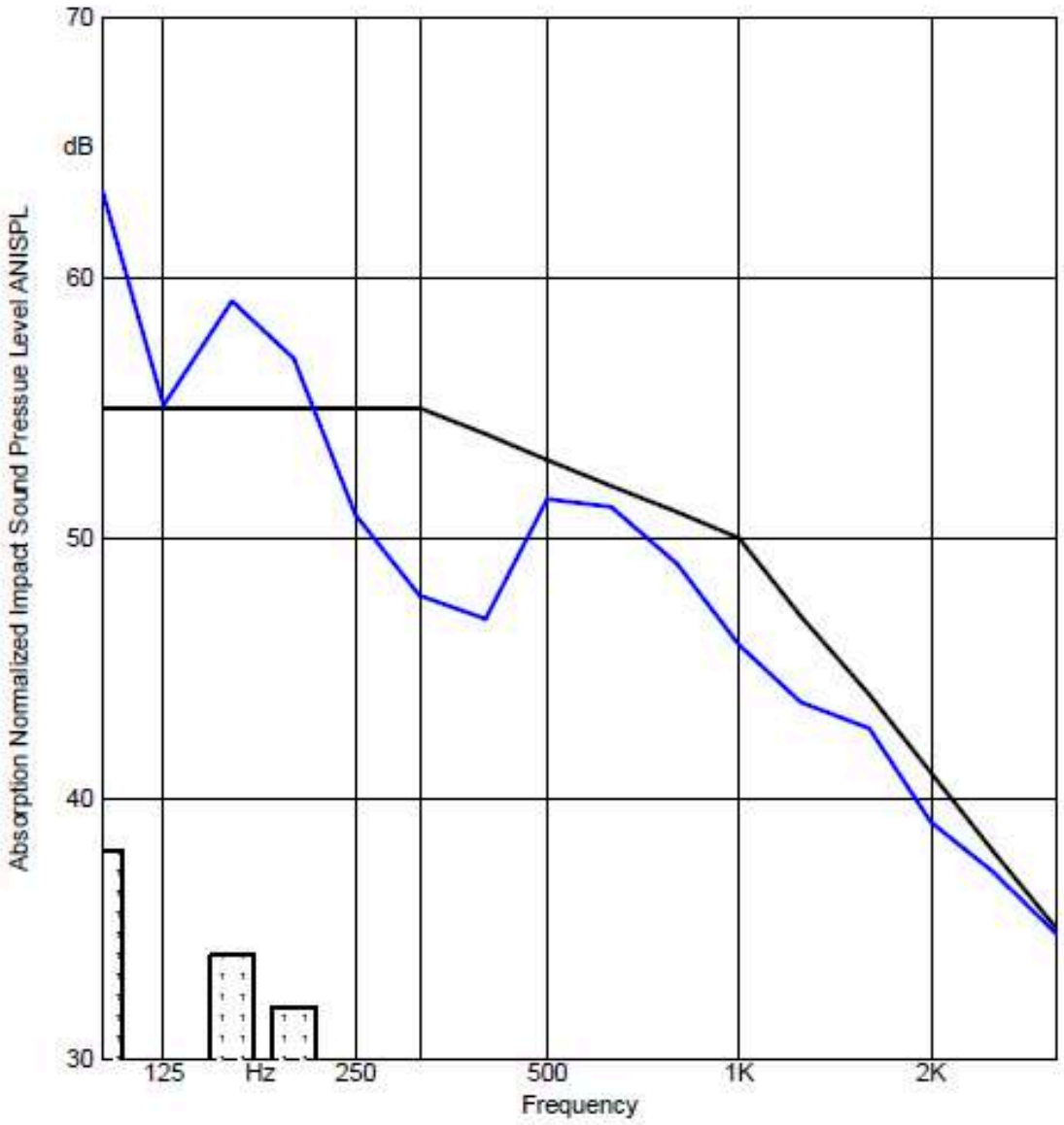
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

Description: GLT - 172mm
Rothoblaas : Piano A - 6mm
AcoustiTECH : SOFIX - 38mm
Soprema - Insonofloor - 3.5mm
LV (Floated)
Bare Slab
AIIC = 57
A-HIIC = 60

Receiving room volume: 45.0 m^3

Sum of deficiencies: 14 dB

Frequency Hz	L_n dB
100	63
125	55
160	59
200	57
250	51
315	48
400	47
500	52
630	51
800	49
1000	46
1250	44
1600	43
2000	39
2500	37
3150	35



Classification based on ASTM E989 - 06

AIIC = 57
AHIR = 60

TEST REPORT

Rothoblaas Silent Floor Pur (20 mm) + Fermacell 2E22 + Vinyl Without Cork Backing

Apparent Impact Insulation Class (AIIC)	**52**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**58**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Fermacell 2E22	25
Rothoblaas Silent Floor Pur	20
TOTAL	**49,5**

Type of Installation : Floated

**To validate mechanical compatibility, please contact the AcoustiTECH team at service@acousti-tech.com.*

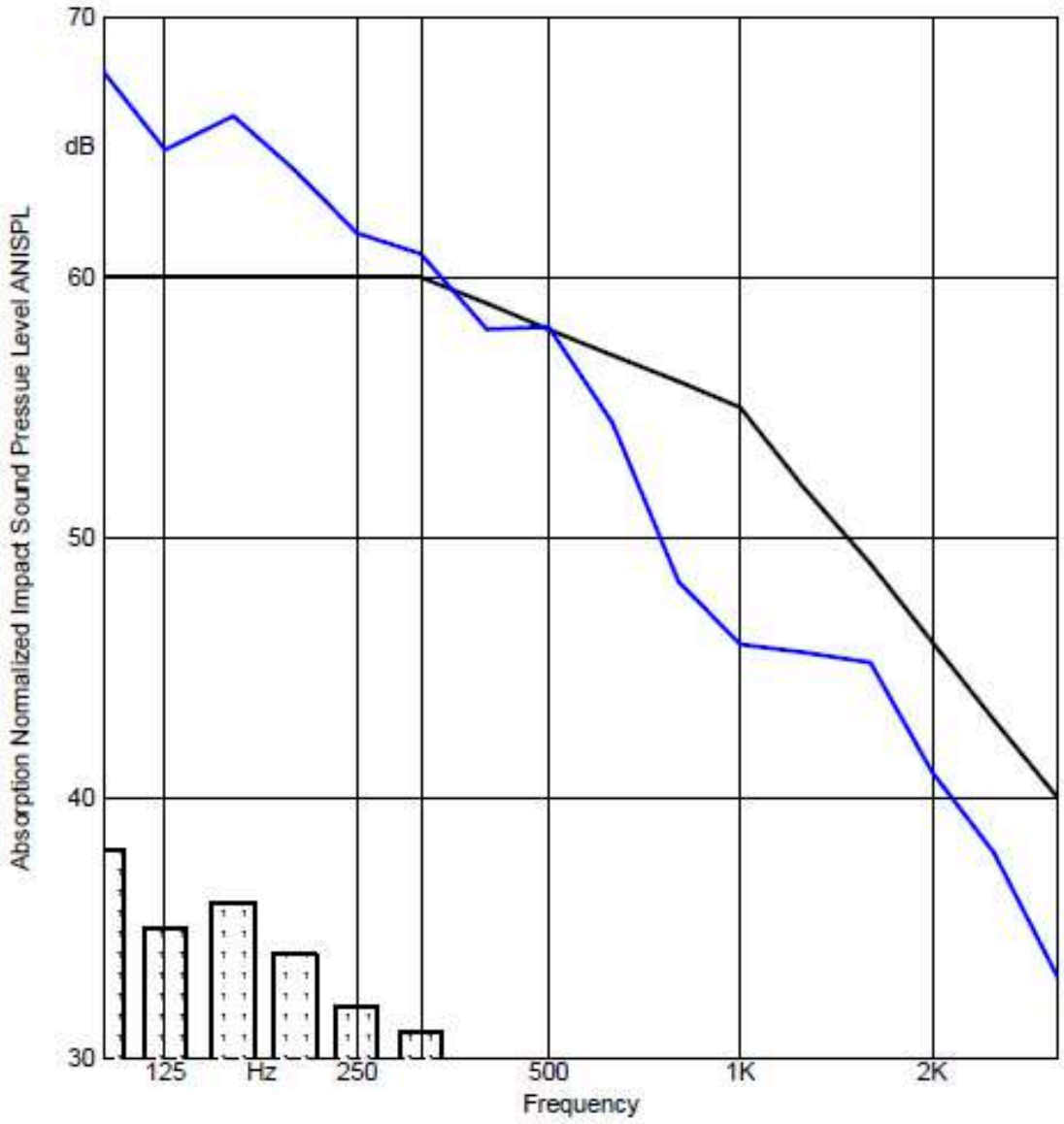
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

Descrption: GLT - 172mm
Rothoblaas : Silent Floor Pur - 20mm
Fermacell : 2E22 - 25mm
LV (Floated)
Bare Slab
AIIC = 52
A-HIIC = 58

Receiving room volume: 45.0 m^3

Sum of deficiencies: 26 dB

Frequency Hz	L_n dB
100	68
125	65
160	66
200	64
250	62
315	61
400	58
500	58
630	54
800	48
1000	46
1250	46
1600	45
2000	41
2500	38
3150	33



Classification based on ASTM E989 - 06

AIIC = 52

AHIR = 58

TEST REPORT

Rothoblaas Silent Floor Pur (20 mm) + Fermacell 2E22 + Soprema Insonofloor + Vinyl Without Cork Backing

Apparent Impact Insulation Class (AIIC)	**54**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**59**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Soprema Insonofloor	3,5
Fermacell 2E22	25
Rothoblaas Silent Floor Pur	20
TOTAL	**53**

Type of Installation : Floated

**To validate mechanical compatibility, please contact the AcoustiTECH team at service@acousti-tech.com.*

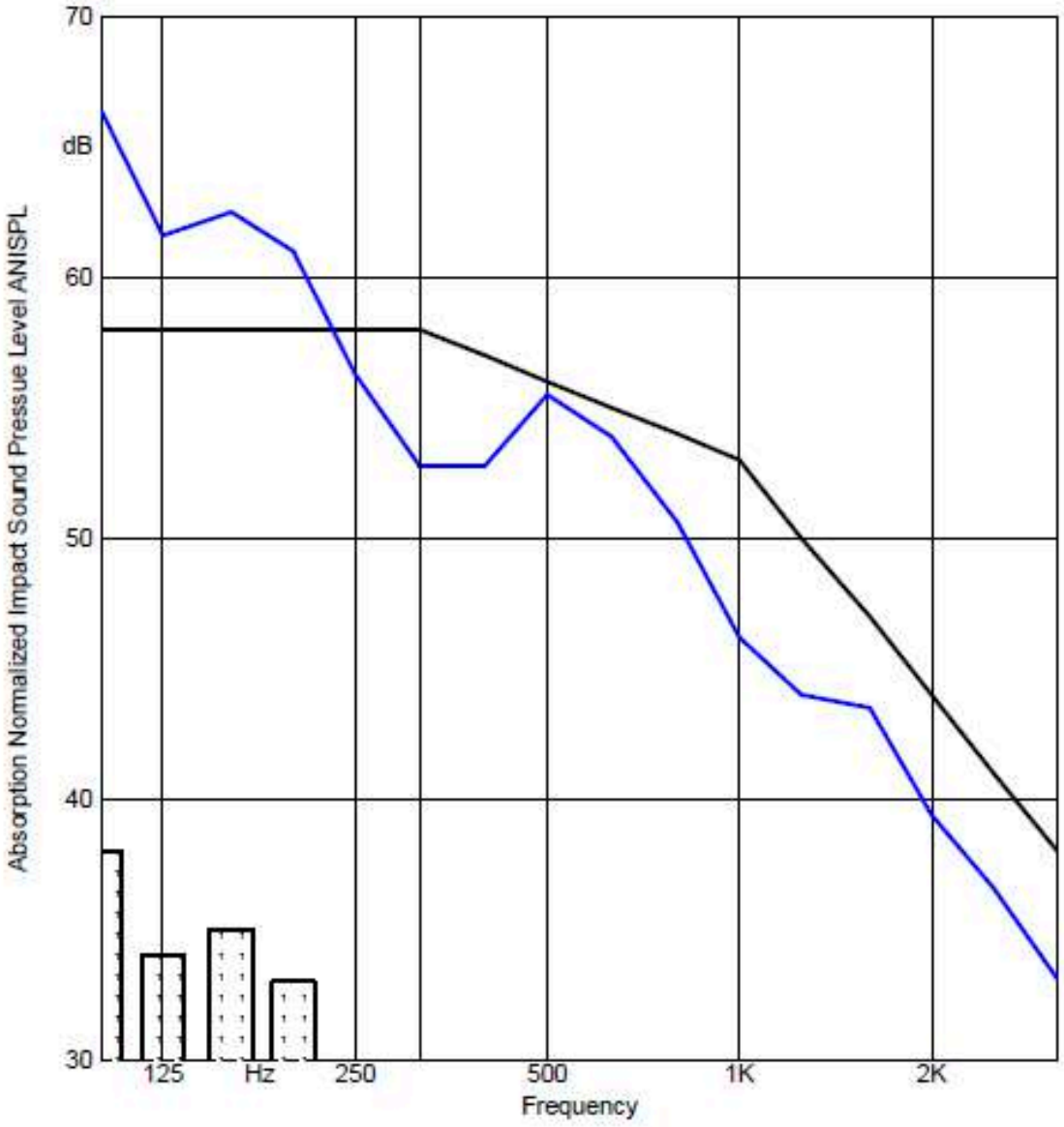
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

Description: GLT - 172mm
Rothoblaas : Silent Floor Pur - 20mm
Fermacell : 2E22 - 25mm
Soprema - Insonofloor - 3.5mm
LV (Floated)
Bare Slab
AIIC = 54
A-HIIC = 59

Receiving room volume: 45.0 m^3

Sum of deficiencies: 20 dB

Frequency Hz	L_n dB
100	66
125	62
160	63
200	61
250	56
315	53
400	53
500	56
630	54
800	51
1000	46
1250	44
1600	44
2000	39
2500	37
3150	33



Classification based on ASTM E989 - 06

AIIC = 54
AHIR = 59

TEST REPORT

Rothoblaas Silent Floor Pur (20 mm) + Fermacell 2E22 + Vinyl With Cork Backing

Apparent Impact Insulation Class (AIIC)	**51**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**53**

Materials	**Thickness (mm)**
Vinyl With Cork Backing	8,3
Fermacell 2E22	25
Rothoblaas Silent Floor Pur	20
TOTAL	**53,3**

Type of Installation : Floated

**To validate mechanical compatibility, please contact the AcoustiTECH team at service@acousti-tech.com.*

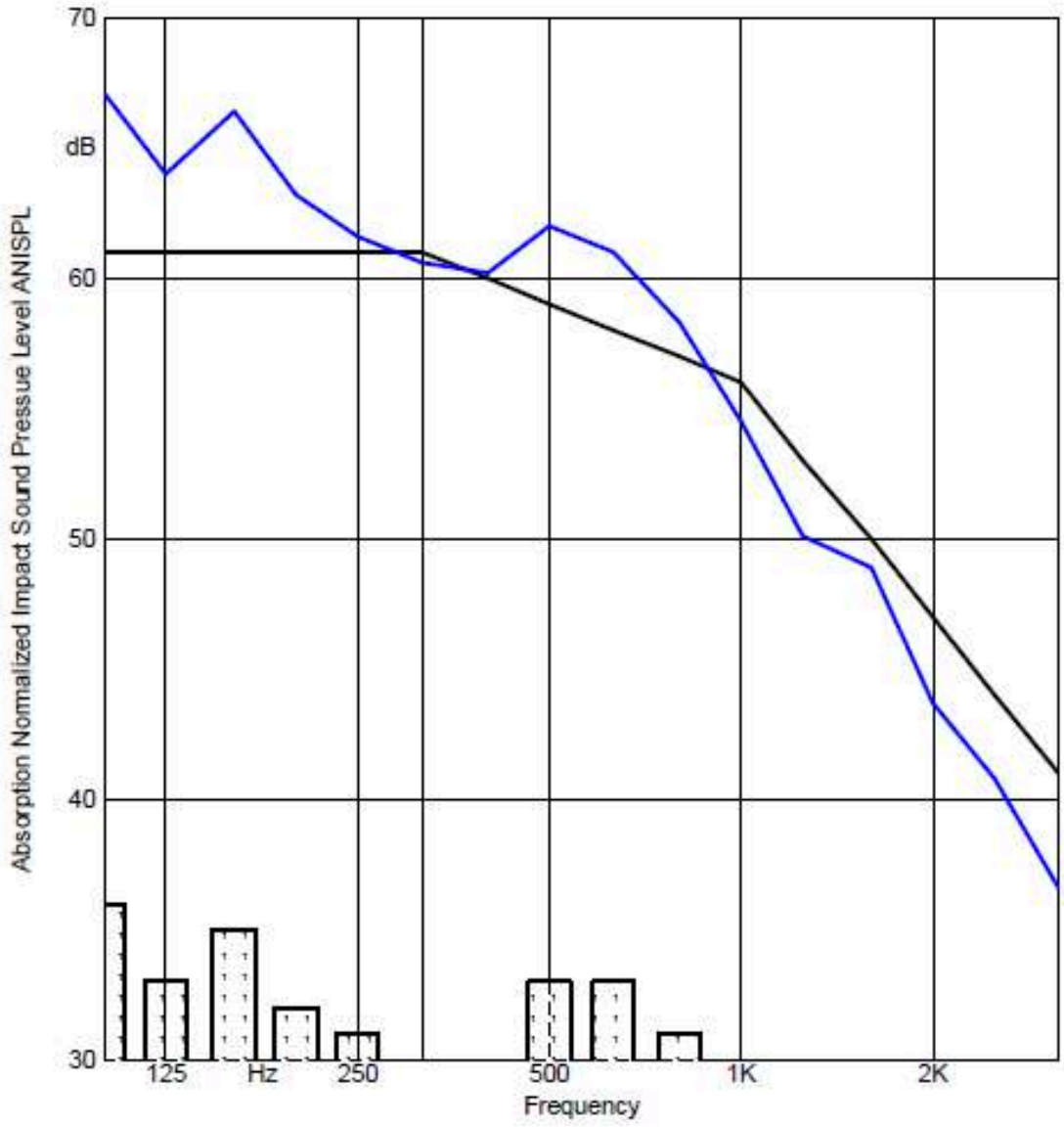
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

Description: GLT - 172mm
Rothoblaas : Silent Floor Pur - 20mm
Fermacell : 2E22 - 25mm
LV w/ cork backing (Floated)
Bare Slab
AIIC = 51
A-HIIC = 53

Receiving room volume: 45.0 m^3

Sum of deficiencies: 24 dB

Frequency Hz	L_n dB
100	67
125	64
160	66
200	63
250	62
315	61
400	60
500	62
630	61
800	58
1000	55
1250	50
1600	49
2000	44
2500	41
3150	37



Classification based on ASTM E989 - 06

AIIC = 51

AHIR = 53

TEST REPORT

Rothoblaas Piano B (6 mm) + AcoustiTECH Sofix + Vinyl Without Cork Backing

Apparent Impact Insulation Class (AIIC)	**54**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**59**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Plywood 5/8”	16
Plywood 5/8”	16
AcoustiTECH Sofix	38
Rothoblaas Piano B	6
TOTAL	**80,5**

Type of Installation : Floated

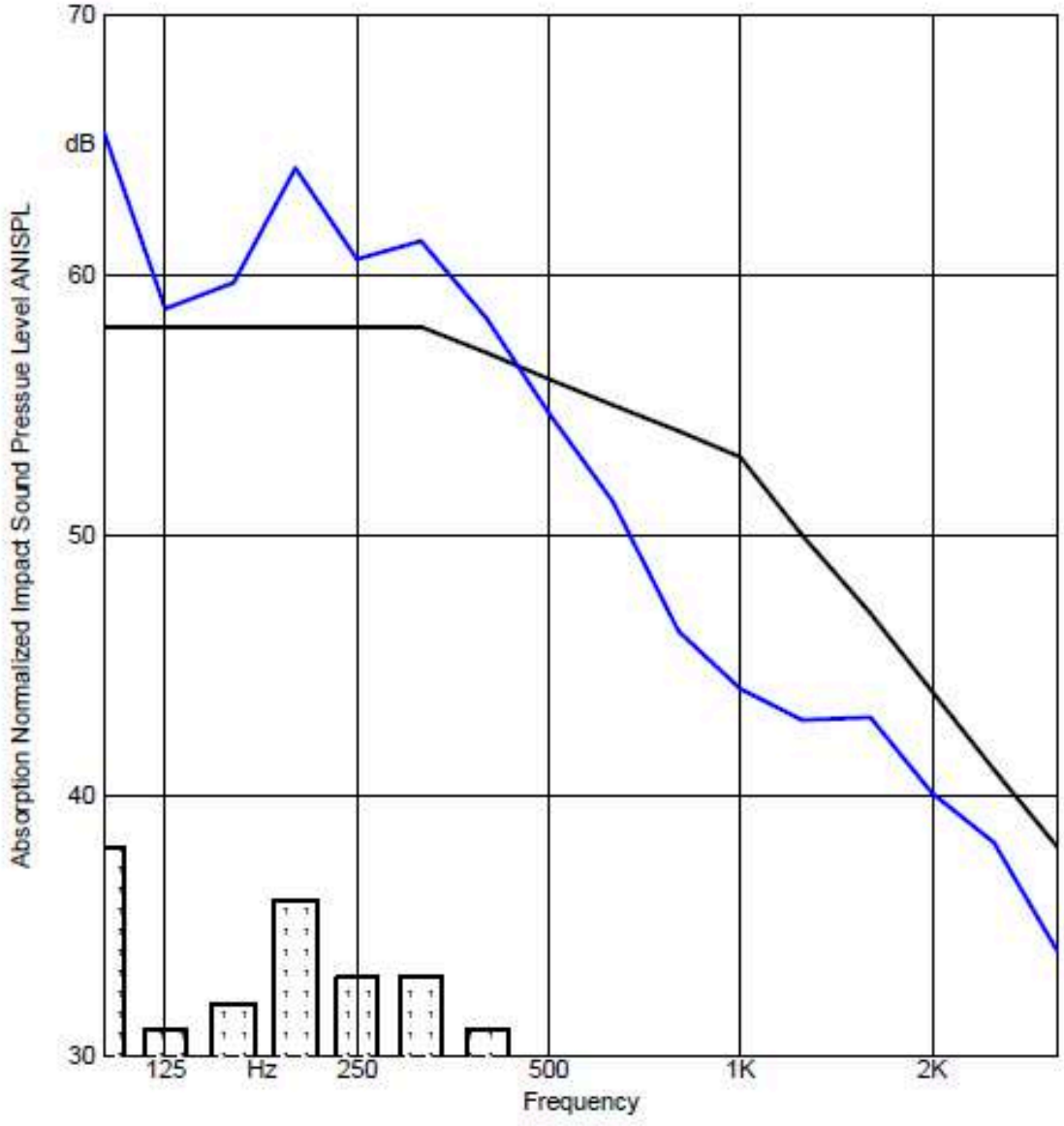
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

Description: GLT - 172mm
Rothoblaas : Piano B - 6mm
AcoustiTECH : SOFIX - 38mm
LV (Floated)
Bare Slab
AIIC = 54
A-HIIC = 59

Receiving room volume: 45.0 m^3

Sum of deficiencies: 24 dB

Frequency Hz	L_n dB
100	66
125	59
160	60
200	64
250	61
315	61
400	58
500	55
630	51
800	46
1000	44
1250	43
1600	43
2000	40
2500	38
3150	34



Classification based on ASTM E989 - 06

AIIC = 54
AHIR = 59

TEST REPORT

Rothoblaas Piano B (6 mm) + AcoustiTECH Sofix + Soprema Insonofloor + Vinyl Without Cork Backing

Apparent Impact Insulation Class (AIIC)	**58**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**60**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Soprema Insonofloor	3,5
Plywood 5/8”	16
Plywood 5/8”	16
AcoustiTECH Sofix	38
Rothoblaas Piano B	6
TOTAL	**84**

Type of Installation : Floated

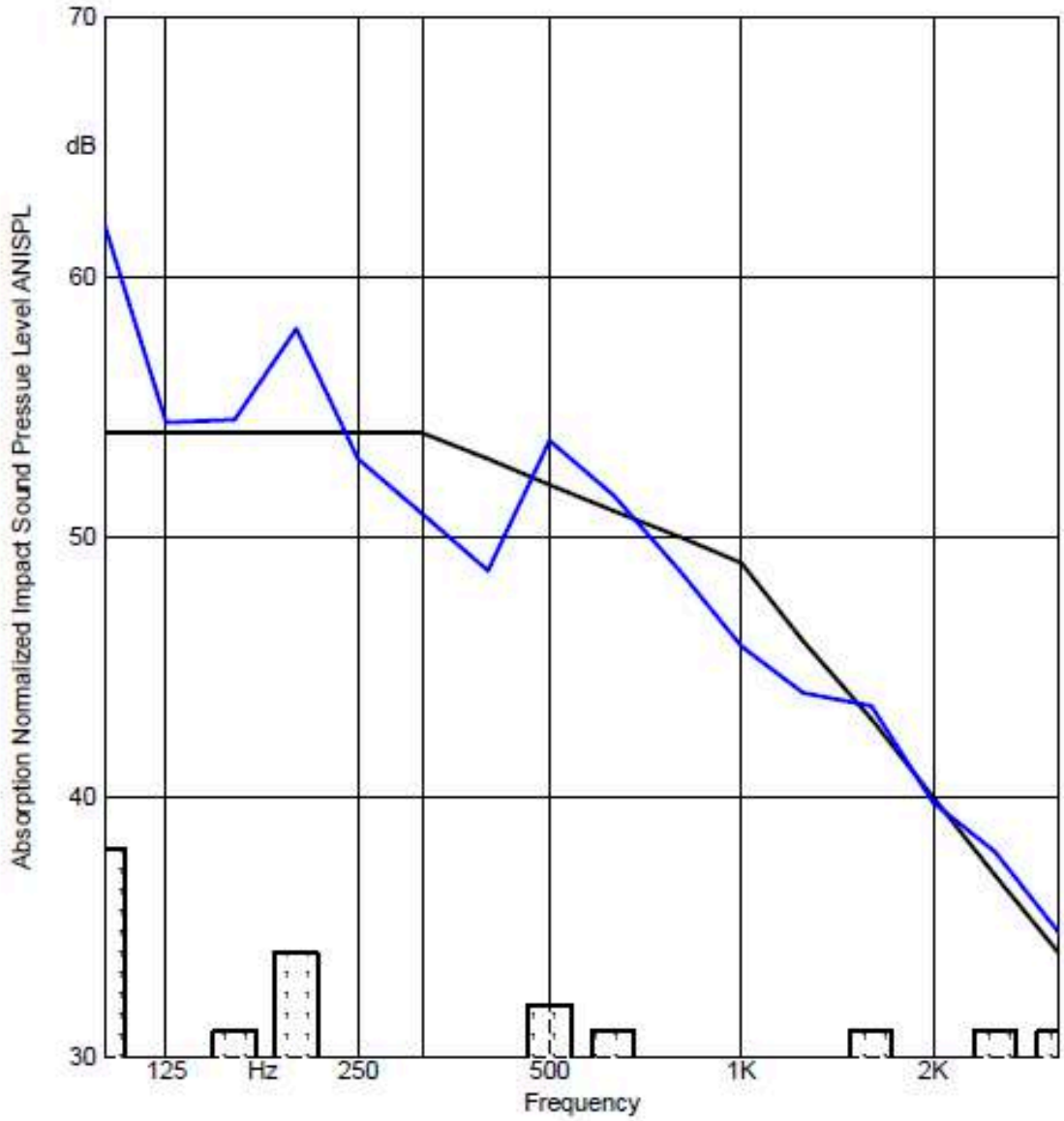
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

Description: GLT - 172mm
Rothoblaas : Piano B - 6mm
AcoustiTECH : SOFIX - 38mm
Soprema - Insonofloor - 3.5mm
LV (Floated)
Bare Slab
AIIC = 58
A-HIIC = 60

Receiving room volume: 45.0 m^3

Sum of deficiencies: 19 dB

Frequency Hz	L_n dB
100	62
125	54
160	55
200	58
250	53
315	51
400	49
500	54
630	52
800	49
1000	46
1250	44
1600	44
2000	40
2500	38
3150	35



Classification based on ASTM E989 - 06

AIIC = 58
AHIR = 60

TEST REPORT

Rothoblaas Piano B (6 mm) + AcoustiTECH Sofix + Vinyl With Cork Backing

Apparent Impact Insulation Class (AIIC)	**54**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**55**

Materials	**Thickness (mm)**
Vinyl With Cork Backing	8,3
Plywood 5/8”	16
Plywood 5/8”	16
AcoustiTECH Sofix	38
Rothoblaas Piano B	6
TOTAL	**84,3**

Type of Installation : Floated

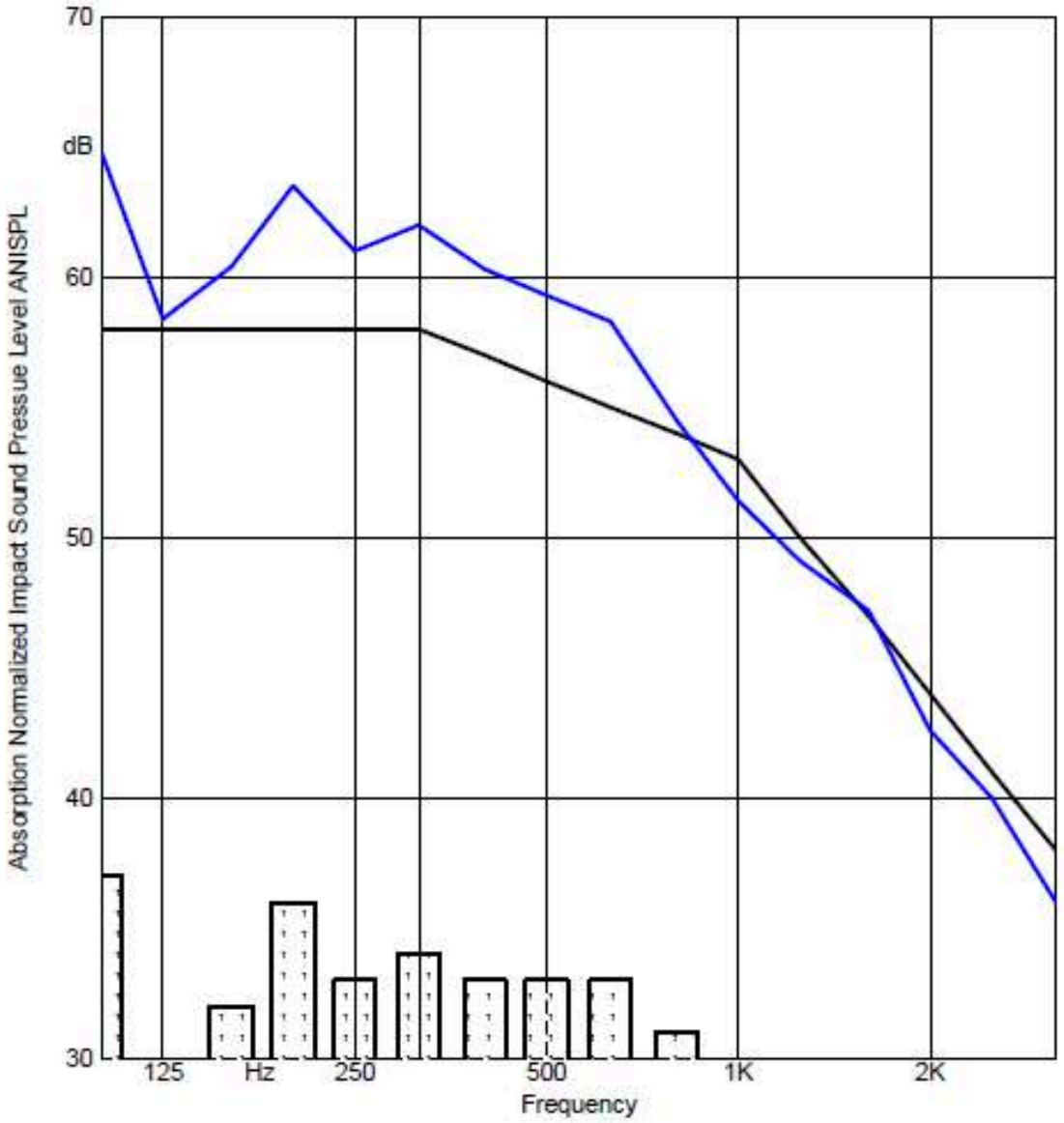
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

Description: GLT - 172mm
Rothoblaas : Piano B - 6mm
AcoustiTECH : SOFIX - 38mm
LV w/ cork backing (Floated)
Bare Slab
AIIC = 54
A-HIIC = 55

Receiving room volume: 45.0 m^3

Sum of deficiencies: 32 dB

Frequency Hz	L_n dB
100	65
125	58
160	60
200	64
250	61
315	62
400	60
500	59
630	58
800	55
1000	51
1250	49
1600	47
2000	43
2500	40
3150	36



Classification based on ASTM E989 - 06

AIIC = 54
AHIR = 55

TEST REPORT

Rothoblaas Xylofon 20 (6 mm) + AcoustiTECH Sofix + Vinyl Without Cork Backing

Apparent Impact Insulation Class (AIIC)	**53**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**56**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Plywood 5/8”	16
Plywood 5/8”	16
AcoustiTECH Sofix	38
Rothoblaas Xylofon 20	6
TOTAL	**80,5**

Type of Installation : Floated

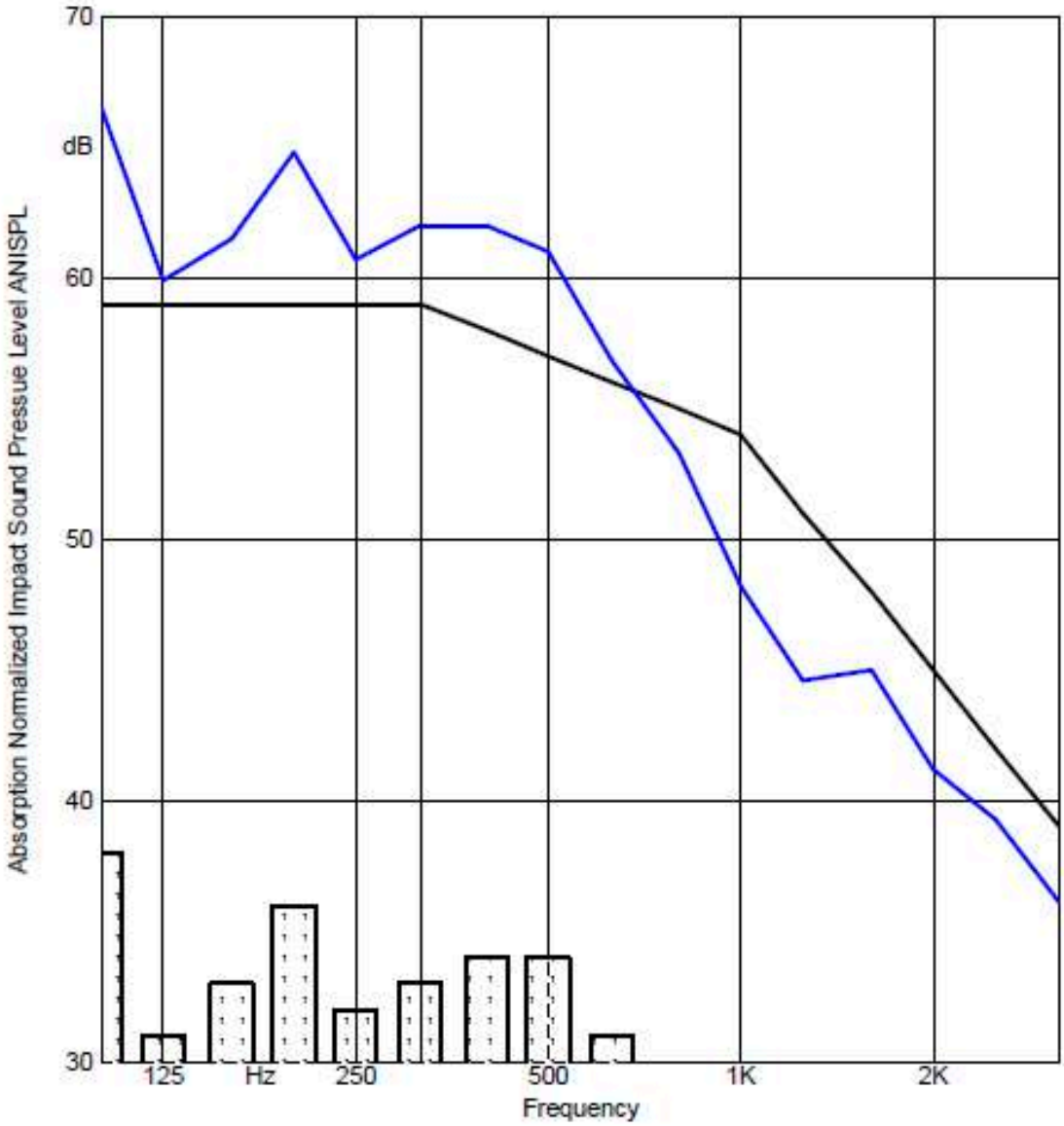
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

Description: GLT - 172mm
Rothoblaas : Xylofon 20 - 6mm
AcoustiTECH : SOFIX - 38mm
LV (Floated)
Bare Slab
AIIC = 53
A-HIIC = 56

Receiving room volume: 45.0 m^3

Sum of deficiencies: 32 dB

Frequency Hz	L_n dB
100	67
125	60
160	62
200	65
250	61
315	62
400	62
500	61
630	57
800	53
1000	48
1250	45
1600	45
2000	41
2500	39
3150	36



Classification based on ASTM E989 - 06

AIIC = 53

AHIR = 56

TEST REPORT

Rothoblaas Xylofon 20 (6mm) + AcoustiTECH Sofix + Vinyl With Cork Backing

Apparent Impact Insulation Class (AIIC)	**52**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**53**

Materials	**Thickness (mm)**
Vinyl With Cork Backing	8,3
Plywood 5/8”	16
Plywood 5/8”	16
AcoustiTECH Sofix	38
Rothoblaas Xylofon 20	6
TOTAL	**84,3**

Type of Installation : Floated

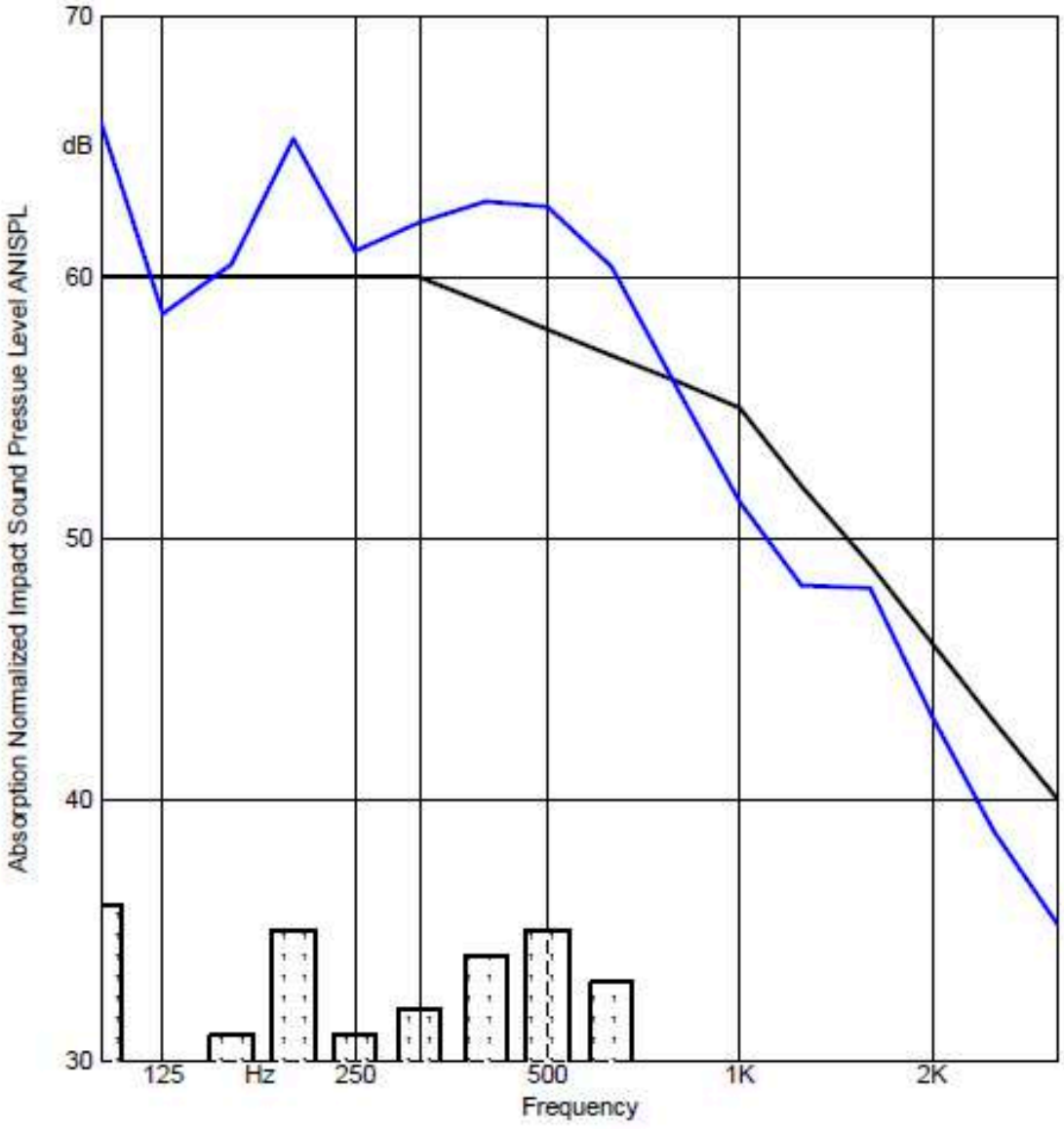
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

Description: GLT - 172mm
Rothoblaas : Xylofon 20 - 6mm
AcoustiTECH : SOFIX - 38mm
LV w/ cork backing (Floated)
Bare Slab
AIIC = 52
A-HIIC = 53

Receiving room volume: 45.0 m^3

Sum of deficiencies: 27 dB

Frequency Hz	L_n dB
100	66
125	59
160	61
200	65
250	61
315	62
400	63
500	63
630	60
800	56
1000	51
1250	48
1600	48
2000	43
2500	39
3150	35



Classification based on ASTM E989 - 06

AIIC = 52
AHIR = 53

TEST REPORT

Rothoblaas Xylofon 20 (6 mm) + AcoustiTECH Sofix + Soprema Insonofloor + Vinyl Without Cork Backing

Apparent Impact Insulation Class (AIIC)	**57**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**59**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Soprema Insonofloor	3,5
Plywood 5/8”	16
Plywood 5/8”	16
AcoustiTECH Sofix	38
Rothoblaas Xylofon 20	6
TOTAL	**84**

Type of Installation : Floated

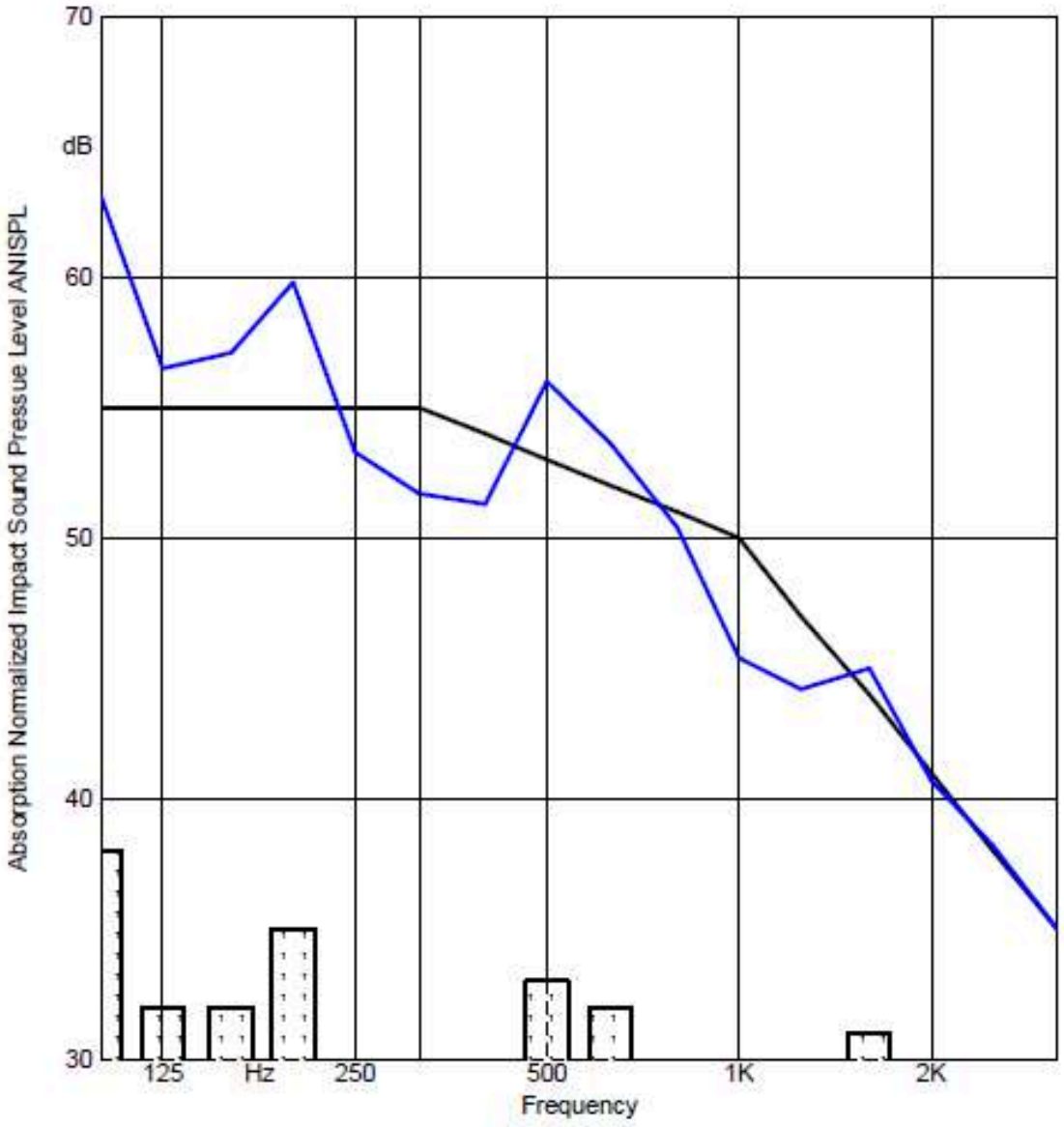
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

Description: GLT - 172mm
Rothoblaas : Xylofon 20 - 6mm
AcoustiTECH : SOFIX - 38mm
Soprema - Insonofloor - 3.5mm
LV (Floated)
Bare Slab
AIIC = 57
A-HIIC = 59

Receiving room volume: 45.0 m^3

Sum of deficiencies: 23 dB

Frequency Hz	L_n dB
100	63
125	57
160	57
200	60
250	53
315	52
400	51
500	56
630	54
800	50
1000	45
1250	44
1600	45
2000	41
2500	38
3150	35



Classification based on ASTM E989 - 06

AIIC = 57
AHIR = 59

TEST REPORT

Rothoblaas Silent Floor Pur (20 mm) + Concrete Topping + Soprema Insonofloor + Vinyl Without Cork Backing

Apparent Impact Insulation Class (AIIC)	**58**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**61**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Soprema Insonofloor	3,5
Concrete Topping	51
Rothoblaas Silent Floor Pur	20
TOTAL	**79**

Type of Installation : Floated

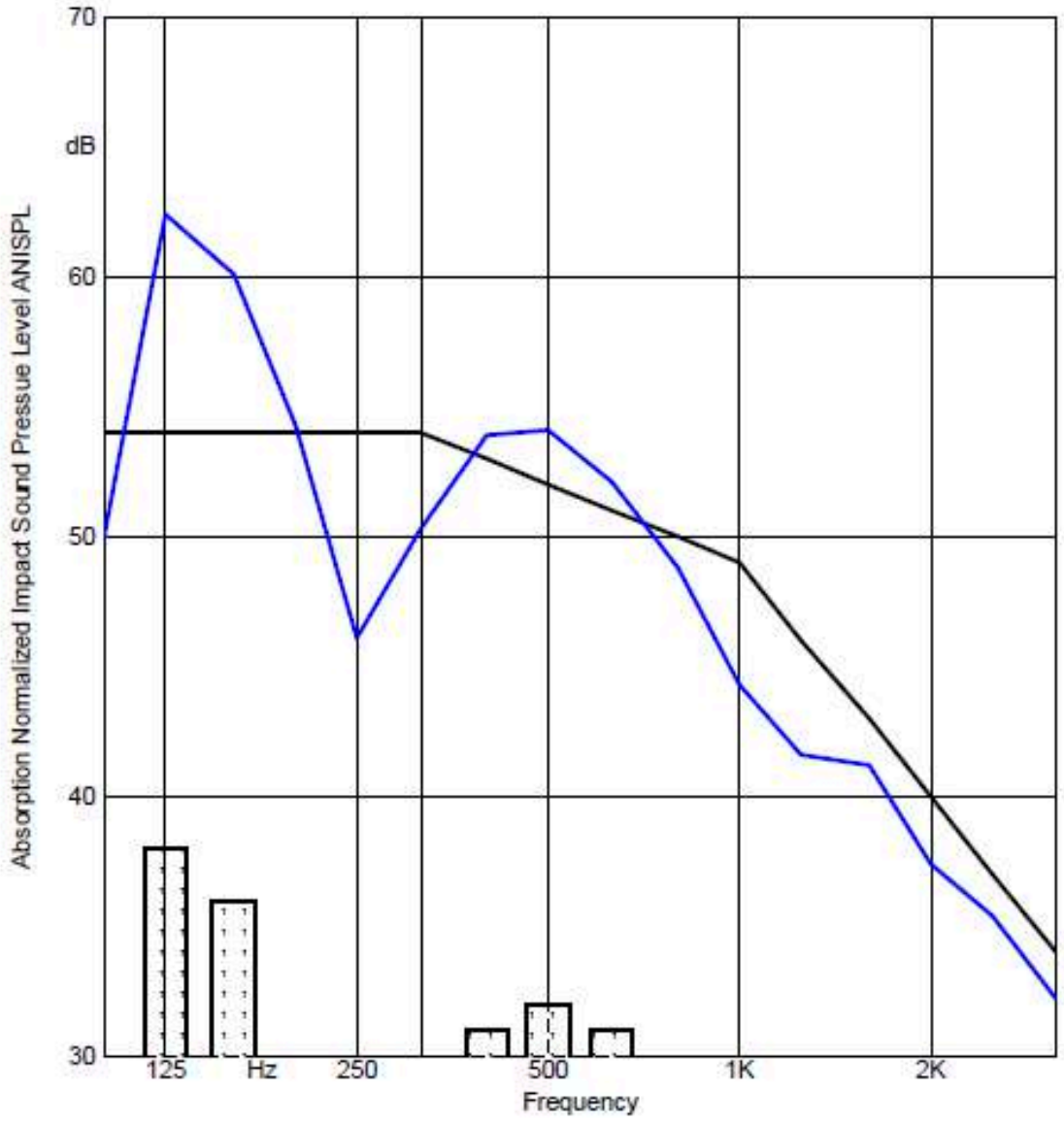
Absorption normalized impact sound pressure level according to ASTM E1007-11
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

Description: GLT - 172mm
Rothoblaas : Silent Floor Pur - 20mm
Concrete 2in - 51mm
Soprema - Insonofloor - 3.5mm
LV (Floated)
Bare Slab
AIIC = 58
A-HIIC = 61

Receiving room volume: 45.0 m^3

Sum of deficiencies: 18 dB

Frequency Hz	L_n dB
100	50
125	62
160	60
200	54
250	46
315	50
400	54
500	54
630	52
800	49
1000	44
1250	42
1600	41
2000	37
2500	35
3150	32



Classification based on ASTM E989 - 06

AIIC = 58
AHIR = 61

TEST REPORT

Rothoblaas Silent Floor Pur (20 mm) + Concrete Topping + Vinyl Without Cork Backing

Apparent Impact Insulation Class (AIIC)	**55**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**57**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Concrete Topping	51
Rothoblaas Silent Floor Pur	20
TOTAL	**75,5**

Type of Installation : Floated

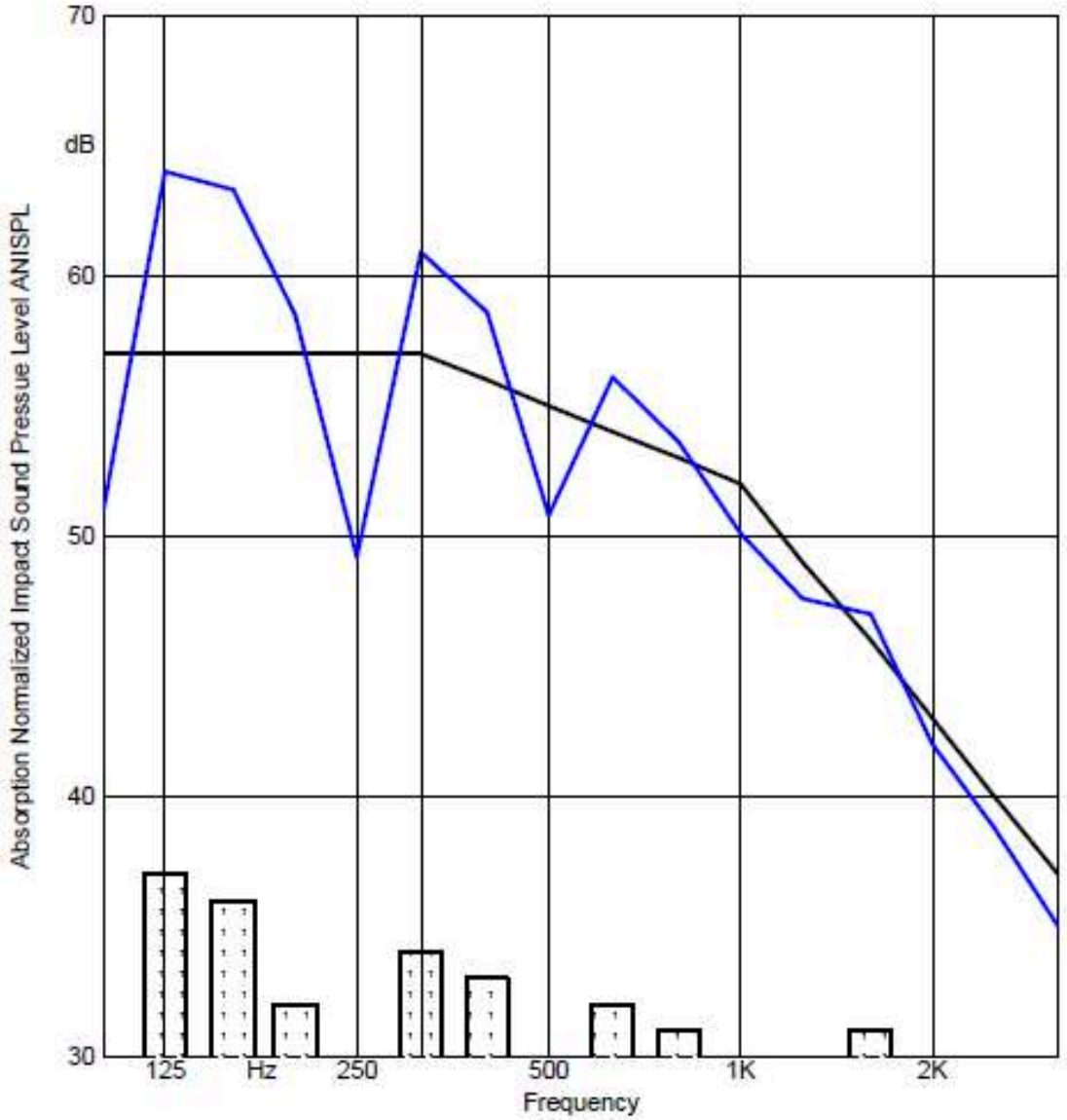
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

Description; GLT - 172mm
Rothoblaas : Silent Floor Pur - 20mm
Concrete 2in - 51mm
LV (Floated)
Bare Slab
AIIC = 55
A-HIIC = 57

Receiving room volume: 45.0 m^3

Sum of deficiencies: 26 dB

Frequency Hz	L_n dB
100	51
125	64
160	63
200	59
250	49
315	61
400	59
500	51
630	56
800	54
1000	50
1250	48
1600	47
2000	42
2500	39
3150	35



Classification based on ASTM E989 - 06

AIIC = 55
AHIR = 57

TEST REPORT

PLITEQ - FF17 + Concrete Topping + Vinyl Without Cork Backing

Apparent Impact Insulation Class (AIIC)	**52**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**57**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Concrete Topping	51
Pliteq-FF17	17
TOTAL	**72,5**

Type of Installation : Floated

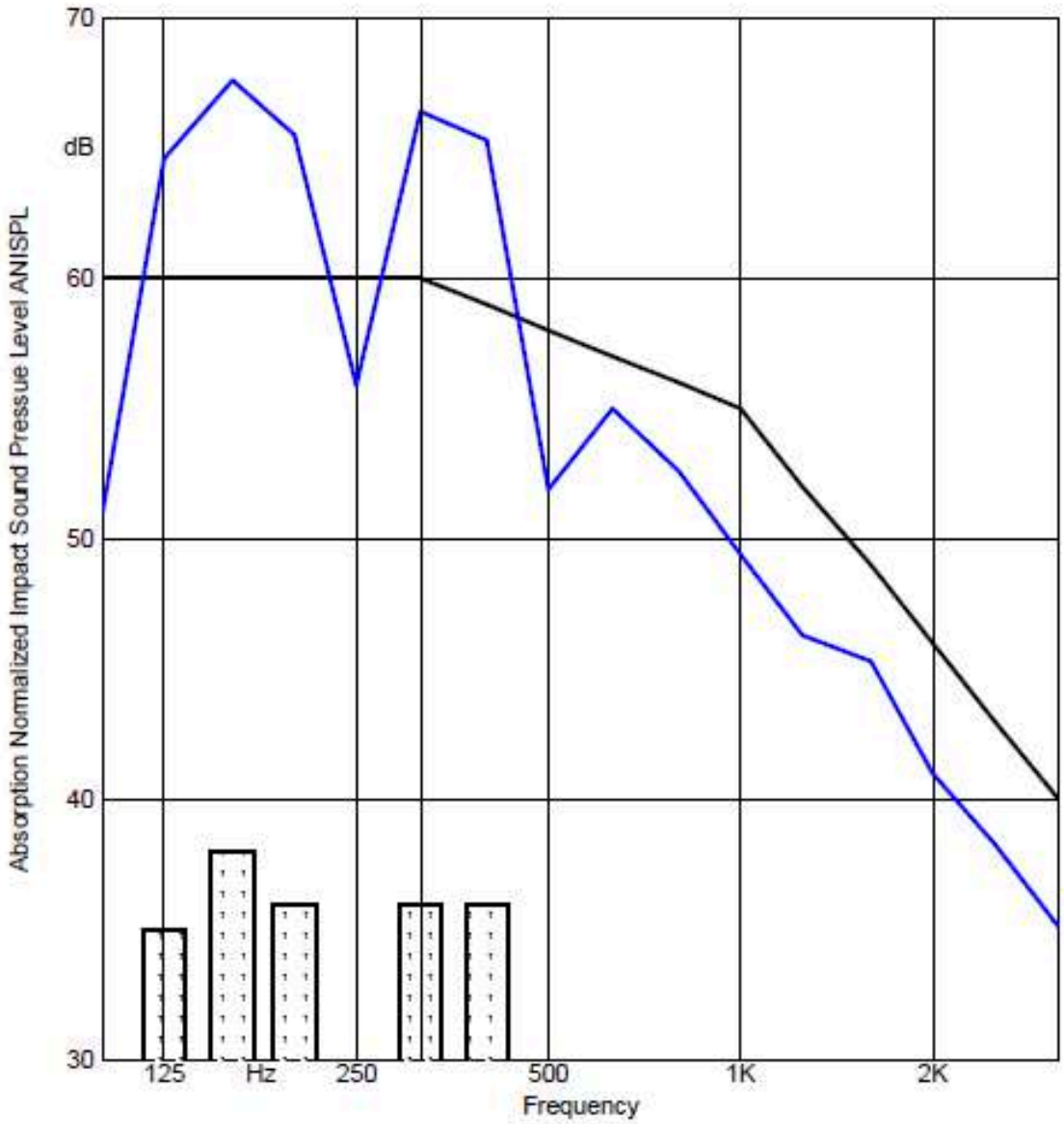
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

Description: GLT - 172mm
Pliteq : GenieMat FF17 - 17mm
Concrete 2in - 51mm
LV (Floated)
Bare Slab
AIIC = 52
A-HIIC = 57

Receiving room volume: 45.0 m^3

Sum of deficiencies: 31 dB

Frequency Hz	L_n dB
100	51
125	65
160	68
200	66
250	56
315	66
400	65
500	52
630	55
800	53
1000	49
1250	46
1600	45
2000	41
2500	38
3150	35



Classification based on ASTM E989 - 06

AIIC = 52

AHIR = 57

TEST REPORT

PLITEQ - FF17 + Concrete Topping + Soprema Insonofloor + Vinyl Without Cork Backing

Apparent Impact Insulation Class (AIIC)	**56**
Absorption-Normalized High-Frequency Impact Rating (AHIR)	**59**

Materials	**Thickness (mm)**
Vinyl Without Cork Backing	4,5
Soprema Insonofloor	3,5
Concrete Topping	51
Pliteq-FF17	17
TOTAL	**76**

Type of Installation : Floated

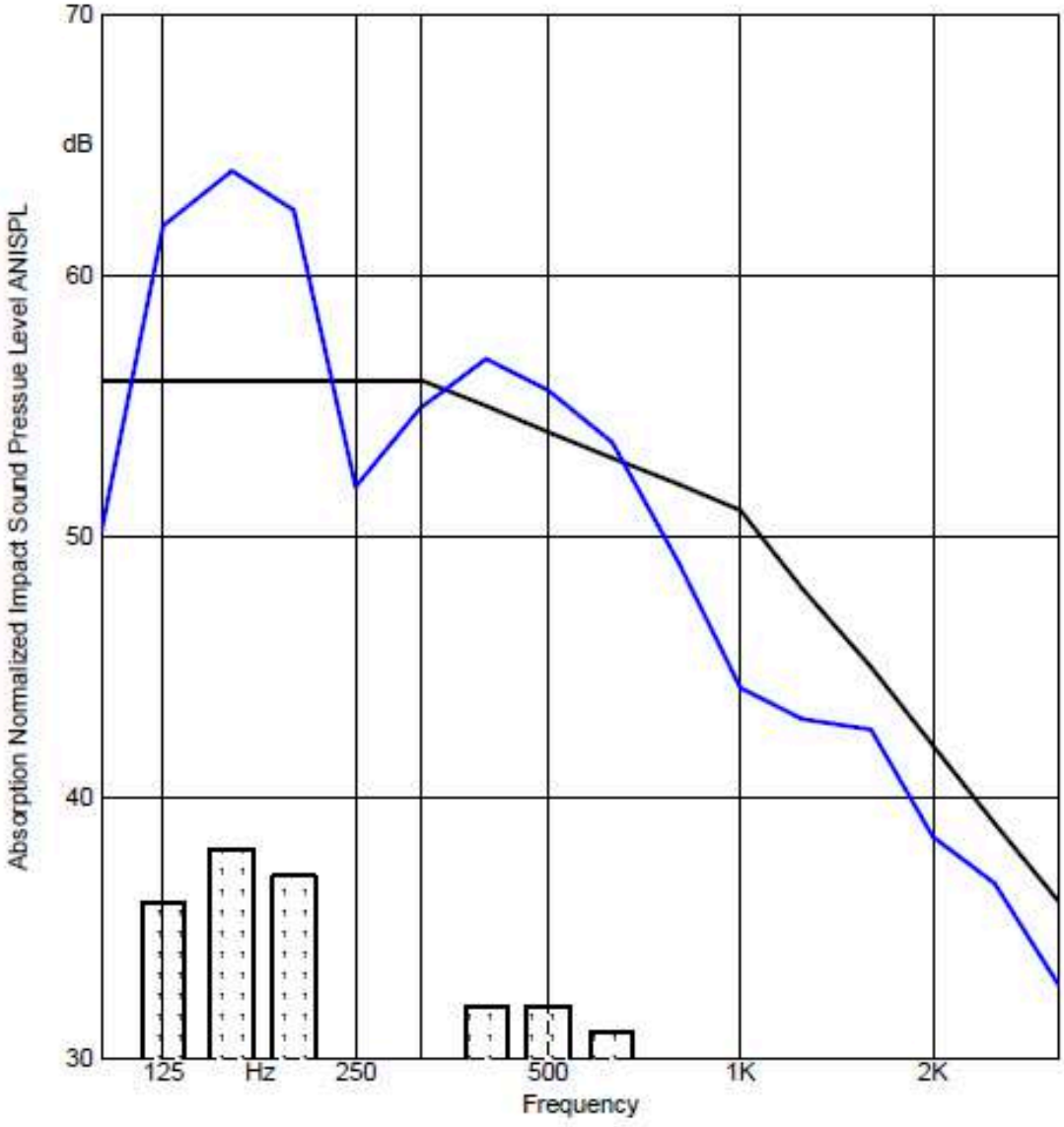
Absorption normalized impact sound pressure level according to ASTM E1007
Field measurements of Impact Sound Transmission Through Floor-Ceiling Assemblies

Description: GLT - 172mm
Pliteq : GenieMat FF17 - 17mm
Concrete 2in - 51mm
Soprema - Insonofloor - 3.5mm
LV (Floated)
Bare Slab
AIIC = 56
A-HIIC = 59

Receiving room volume: 45.0 m^3

Sum of deficiencies: 26 dB

Frequency Hz	L_n dB
100	50
125	62
160	64
200	63
250	52
315	55
400	57
500	56
630	54
800	49
1000	44
1250	43
1600	43
2000	39
2500	37
3150	33



Classification based on ASTM E989 - 06

AIIC = 56

AHIR = 59

For More Information

Contact Us

service@acousti-tech.com