North American Office
Acoustiblok, Inc.
6900 Interbay Boulevard
Tampa, FL 33616 USA
Phone: 813-980-1400
Fax: 813-549-2653
www.acoustiblok.com
sales@acoustiblok.com

SECTION 5

Acoustiblok Sound Isolation Material

- Acoustiblok Sound Isolation Material 3 Part Specification
- Acoustiblok Sound Isolation Material Test Index
- Acoustiblok 16oz. Specification & Acoustical Test Report
- Acoustiblok 32oz. Specification & Acoustical Test Report
- Underwriters Laboratories (UL) Classification File Certificate
- Mold Growth Resistance Test Report
- Tile Council of North America – Robinson Floor Test Reports
- Acoustiblok MSDS

Acoustiblok, Inc.
6900 Interbay Boulevard
Tampa, FL 33616
Phone: (813) 980-1400
Fax: (813) 849-6347
E-mail: info@acoustiblok.com
www.acoustiblok.com

This MANU-SPEC® utilizes the Construction Specifications Institute (CSI) *Project Resource Manual* (PRM) including *MasterFormat*™, *SectionFormat*™ and *PageFormat*™. A MANU-SPEC is a manufacturer-specific proprietary product specification using the proprietary method of specifying applicable to project specifications and master guide specifications. Optional text is indicated by brackets [ ]; delete optional text in final copy of specification. Specifier Notes typically precede specification text; delete notes in final copy of specification. Trade/brand names with appropriate symbols typically are used in Specifier Notes; symbols are not used in specification text. Metric conversion, where used, is soft metric conversion.

This MANU-SPEC specifies a sound isolation membrane. These products are manufactured by Acoustiblok, Inc. Revise MANU-SPEC section number and title below to suit project requirements, specification practices and section content. Refer to CSI *MasterFormat*™ for other section numbers and titles.

SECTION 09 80 00
ACOUSTIC TREATMENT

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Sound isolation material for wall, ceiling and floor installations.

Specifier Note: Article below may be omitted when specifying manufacturer's proprietary products and recommended installation. Retain Reference Article when specifying products and installation by an industry reference standard. If retained, list standard(s) referenced in this section. Indicate issuing authority name, acronym, standard designation and title. Establish policy for indicating edition date of standard referenced. Conditions of the Contract or Section 01 42 19 - Reference Standards may establish the edition date of standards. This article does not require compliance with standard, but is merely a listing of references used. Article below should list only those industry standards referenced in this section. Retain only those reference standards to be used within the text of this Section. Add and delete as required for specific project.

1.02 REFERENCES

A. ASTM International (ASTM

1. ASTM C423 Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
2. ASTM C627 Standard Test Method for Evaluating Ceramic Floor Tile Installation Systems Using the Robinson-Type Floor Tester
3. ASTM D3273 Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber.
4. ASTM D3274 Standard Test Method for Evaluating Degree of Surface Disfigurement of Paint Films by Microbial (Fungal or Algal) Growth or Soil and Dirt Accumulation.
5. ASTM E90 Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.
6. ASTM E413 Classification for Rating Sound Insulation.
7. ASTM E492 Standard Test Method for Laboratory Measurement of Impact Sound Transmission Through Floor-Ceiling Assemblies Using the Tapping Machine.
8. ASTM E2179 Standard Test Method for Laboratory Measurement of the Effectiveness of Floor Coverings in Reducing

Impact Sound Transmission Through Concrete Floors.

B. Underwriters Laboratories Inc.: (UL)

1. Standard 263 Standard for Fire Tests of Building Construction and Materials.

Specifier Note: Article below includes submittal of relevant data to be furnished by Contractor, either before, during or after construction. Coordinate this article with Architect's and Contractor's duties and responsibilities in Conditions of the Contract and Section [01 33 00 - Submittals Procedures].

1.03 SUBMITTALS

A. General: Submit listed submittals in accordance with Conditions of the Contract and Section [01 33 00 - Submittal Procedures] [_____].

B. Product Data: Submit product data, including manufacturer's SPEC-DATA® sheet, for specified products.

C. Samples: Submit 8 inch × 10 inch (203 × 254 mm) samples of each product specified.

D. Quality Control Submittals:

1. Manufacturer's Instructions: Manufacturer's installation instructions.

Specifier Note: Article below should include prerequisites, standards, limitations and criteria which establish an overall level of quality for products and workmanship for this section. Coordinate article below with Division 01 Quality Assurance Section.

1.04 QUALITY ASSURANCE

A. Regulatory Requirements: In accordance with Section [01 41 00 - Regulatory Requirements] [_____].

B. Installation: In accordance with manufacturer requirements.

1.05 DELIVERY, STORAGE & HANDLING

A. General: Comply with Section [01 61 00 - Common Product Requirements] [_____].

B. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.

C. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer.

PART 2 PRODUCTS

Specifier Note: Retain article below for proprietary method specification. Add product attributes, performance characteristics, material standards, and descriptions as applicable. Use of such phrases as "or equal," "or approved equal" or similar phrases may cause ambiguity in specifications. Such phrases require verification (procedural, legal and regulatory) and assignment of responsibility for determining "or equal" products.

2.01 ACOUSTIC TREATMENT

Specifier Note: Paragraph below is an addition to CSI *SectionFormat* and a supplement to MANU-SPEC. Retain or delete paragraph below per project requirements and specifier's practice.

A. Manufacturer: Acoustiblok, Inc.

1. Contact: 6900 Interbay Boulevard, Tampa, FL 33616; Phone: (813) 980-1400; Fax: (813) 849-6347; E-mail: info@acoustiblok.com; website: www.acoustiblok.com.

2.02 MATERIALS

Specifier Note: Retain products below to conform to project requirements. If more than one product is retained, create designators and coordinate with drawings.

A. 16 oz. Sound Isolation Material:

1. Thickness: 0.11" ± 0.03" (2.79 mm ± 0.76 mm)

2. Weight: 1 psf (4.89 kg/m^2)

3. Acoustical Properties:

a. Sound transmission coefficient (STC) of not less than 26 when tested in accordance with ASTM E90 and E413, with a minimum sound attenuation of 19 dBA at 100 Hz.

b. Delta Impact Insulation Class (IIC) Rating of 12 when tested in accordance with ASTM E90 and E413.

c. Impact Insulation Class (IIC) Rating of 67, dependent upon assembly construction, and when tested in accordance with ASTM E492 and E989.

4. Fire Resistance: UL Fire Resistance Classification.

5. Fungal Growth: Rating of 10, no fungal or algal growth, no visible disfigurement when tested in accordance with ASTM D3273 and D3274.

6. Tensile Strength: Not less than 510 psi (3516 kPa) when tested in accordance with ASTM D5034.

7. Performance Level: Residential when tested as an underlayment system with Acoustiwool-TFO.11 in accordance with ASTM C627.

8. Color: Black.

B. 32 oz. Sound Isolation Material:

1. Thickness: 0.22" ± 0.03" (5.58 mm ± 0.76 mm.)

2. Weight: 2 psf (9.78 kg/m^2).

3. Acoustical Properties:

a. Sound transmission coefficient (STC) of not less than 32 when tested in accordance with ASTM E90 and E413.

b. Delta Impact Insulation Class (IIC) Rating of 14 when tested in accordance with ASTM E2179.

c. Impact Insulation Class (IIC) Rating of 51, dependent upon assembly construction, when tested in accordance with ASTM E492 and E989.

4. Tensile Strength: Not less than 365 psi (2517 kPa) when tested in accordance with ASTM D5034.

5. Color: Black.

2.03 ACCESSORIES

Specifier Note: Retain accessories below to conform to project requirements.

A. Seam Tape: Acoustigrip tape.

B. Caulk: Acoustiblok Acoustical Sound Sealant.

C. Underlayment Materials:

1. Acoustipad for carpet floor installations.

2. Acoustiwool-WF0.125 for wood floor installations.

3. Acoustiwool-TF0.11 for tile floor installations.

D. Sealant Pads: Acoustiputty Sound Sealant Pad.

E. Fasteners: As recommended by manufacturer.

2.04 PRODUCT SUBSTITUTIONS

A. No substitutions permitted.

PART 3 EXECUTION

Specifier Note: Paragraph below is an addition to CSI *SectionFormat* and a supplement to MANU-SPEC. Retain or delete paragraph below per project requirements and specifier's practice.

3.01 MANUFACTURER'S INSTRUCTIONS

A. Compliance: Comply with manufacturer's product data, including product technical bulletins, product catalog installation instructions and product carton instructions for installation.

3.02 EXAMINATION

A. Site Verification of Conditions: Verify that substrate conditions, for substrates previously installed under other sections, are

acceptable for product installation in accordance with manufacturer's instructions.

3.03 CLEANUP

A. Proceed in accordance with Section [01 74 23 - Final Cleaning] [_____].

B. Upon completion and verification of performance of installation, remove surplus materials, excess materials, rubbish, tools and equipment.

END OF SECTION

North American Office
Acoustiblok, Inc.
6900 Interbay Boulevard
Tampa, FL 33616 USA
Phone: 813-980-1400
Fax: 813-549-2653
www.acoustiblok.com
sales@acoustiblok.com

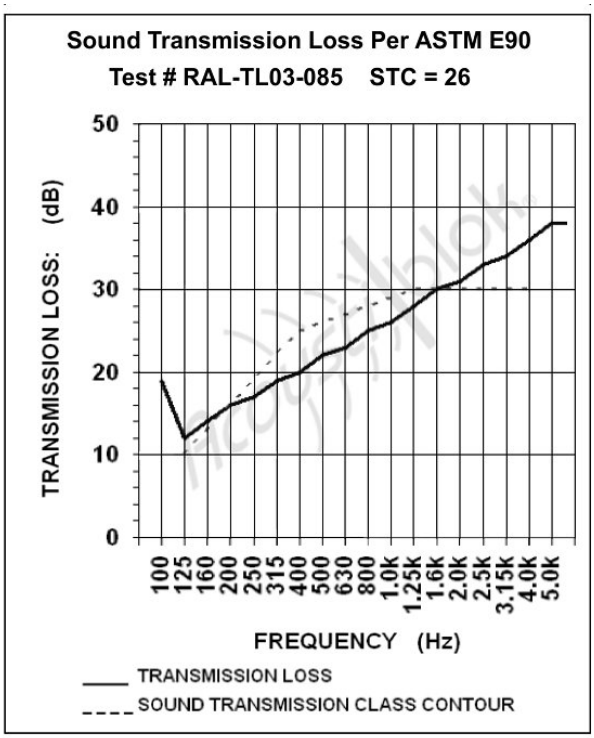
Acoustiblok Sound Isolation Material Test Index

Test Report	Rating	Description
TL03-084 Riverbank Acoustical Laboratories	STC 32	Sound Transmission Class (STC) ASTM E90 Acoustiblok 32oz sound Isolation Material
TL03-085 Riverbank Acoustical Laboratories	STC 26	Sound Transmission Class (STC) ASTM E90 Acoustiblok 16oz sound Isolation Material
R21490 Underwriters Laboratories (UL)	Passed 1hr	Fire Tests of Building Construction and Materials UL Standard 263. Classified for all U300, U400, V400 Wall Assemblies and L500 Floor/Ceiling Assemblies.
DL-14832 DL Labs	10	Mold & Mildew Growth Resistance ASTM D3273 Standard Testing
TCNA-308-06 Tile Council of North America (TCNA)	Passed Residential	ASTM C627 - Ceramic Tile Robinson Floor Test Acoustiblok 16oz. and Acoustiwool-TF0.11
TCNA-256-08 Tile Council of North America (TCNA)	Passed Residential	ASTM C627 - Ceramic Tile Robinson Floor Test Acoustiblok 16oz.

All test results and ratings are certified through independent accredited testing facilities. Test

North American Office
Acoustiblok, Inc.
6900 Interbay Boulevard
Tampa, FL 33616 USA
Phone: 813-980-1400
Fax: 813-549-2653
www.acoustiblok.com
sales@acoustiblok.com

16 oz. Acoustiblok® Sound Isolation Material Product Specifications



SOUND TRANSMISSION CLASS is a single number that represents the sound blocking capacity of a partition such as a wall or ceiling.

STC numbers are often called out in architectural specifications, to assure that partitions will reduce noise levels adequately. For performance similar to laboratory test numbers, it is necessary to adhere closely to the construction materials and techniques used in the tested partition.

STC is calculated by comparing the actual sound loss measured when 18 test frequencies pass through a partition, with fixed values for each STC level. The highest STC curve that the measured sound loss numbers fit under, determines the STC rating of the partition.

STC calculations emphasize sound frequencies that match the human voice. A high STC partition will block the sound of human speech, and block noise that interferes with human speech. To estimate high and low frequency performance, consult the Sound Transmission Loss graph included in STC test reports. Impact Insulation Class (IIC) measure transmitted impact noise, and are specified for floor/ceiling assemblies only.

Acoustiblok is the most efficient and cost effective solution for controlling transmitted sound in commercial, institutional, and residential construction. A standard steel stud & gypsum board wall with one layer of 16 oz. Acoustiblok (STC 52) blocks more sound than a 12" thick poured concrete slab (STC 51).

UL Classified for application in all wall and floor/ceiling construction in the U300, U400, V400, and L500 categories, Acoustiblok assures compliance with life safety and building code requirements.

An Acoustiblok sound barrier material cut easily with a box knife and requires no special tools or skills to install.

Acoustical test reports for numerous wall and floor/ceiling designs are available from Acoustiblok on request. All our test data is taken directly from independent 3rd party laboratories under NVLAP certification.

16 OZ ACOUSTIBLOK

PHYSICAL PROPERTIES & SPECFICATIONS

- Minimum STC 26 per ASTM E90-02 & ASTM E413-87
- Minimum sound attenuation 19 dBA @ 100 Hz
- Width 54" ± 0.125" (1.372 meters ± 3.175 mm)
- Material thickness 0.11" ± 0.03" (2.79 mm ± 0.76 mm)
- Weight 1 lb. square foot (4.89 kg square meter)
- Color black
- High UV resistance
- Heat tolerance: 200 degrees F (93 ° C) for 7 days, less than 1% shrink, no deformation
- Freezes at -40 ° F (-40 ° C). Do not unroll or flex frozen material. Properties not affected by freeze/thaw cycles
- No fungal or algal growth and no visible disfigurement, per ASTM D3273 and ASTM D3274 (rating = 10)
- Tensile strength min. 510 PSI
- UL Classified, file # R21490
- Weight, per roll:
  - 30' (9.14 m) = 150 lb. (68 kg)
  - 60' (18.29 m) = 300 lb. (136 kg)
  - 350' (106.68 m) = 1600 lb. (725.75 kg)

RIVERBANK ACOUSTICAL LABORATORIES

1512 S. BATAVIA AVENUE
GENEVA, ILLINOIS 60134

Alion Science and Technology

630/232-0104
FOUNDED 1918 BY
WALLACE CLEMENT SABINE

TEST REPORT

FOR: Acoustiblok

Sound Transmission Loss Test
RAL™-TL03-085

ON: Acoustiblok 16

CONDUCTED: 14 March 2003

TEST METHOD

Unless otherwise designated, the measurements reported below were made with all facilities and procedures in explicit conformity with the ASTM Designations E90-02 and E413-87, as well as other pertinent standards. Riverbank Acoustical Laboratories has been accredited by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST) under the National Voluntary Laboratory Accreditation Program (NVLAP) for this test procedure. A description of the measuring technique is available separately.

DESCRIPTION OF THE SPECIMEN

The test specimen was designated by the manufacturer as Acoustiblok 16. The overall dimensions of the specimen as measured were 1.22 m (48 in.) wide by 2.44 m (96 in.) high and 2.54 mm (0.1 in.) thick. The specimen was a 16 oz. per square foot vinyl barrier. The specimen was placed directly in the laboratory's 1.22 m (4 ft) by 2.44 m (8 ft) test opening and was sealed on the periphery (both sides) with a dense mastic.

The weight of the specimen as measured was 13.6 kg (30 lbs.), an average of 4.4 kg/m^2 (0.9 lbs/ft^2). The transmission area used in the calculations was 3 m^2 (32 ft^2). The source and receiving room temperatures at the time of the test were 24±1ºC (75±2ºF) and 59±1% relative humidity. The source and receive reverberation room volumes were 178 m^3 (6,298 ft^3) and 139 m^3 (4,912 ft^3), respectively.

RIVERBANK ACOUSTICAL LABORATORIES

1512 S. BATAVIA AVENUE
GENEVA, ILLINOIS 60134

Alion Science and Technology

630/232-0104
FOUNDED 1918 BY
WALLACE CLEMENT SABINE

TEST REPORT

Acoustiblok RAL™-TL03-085

14 March 2003

TEST RESULTS

Sound transmission loss values are tabulated at the eighteen standard frequencies. A graphic presentation of the data and additional information appear on the following pages. The precision of the TL test data is within the limits set by the ASTM Standard E90-02.

FREQ.	T.L.	C.L.	DEF.	FREQ.	T.L.	C.L.	DEF.
100	19	0.95		800	25	0.14	3
125	12	0.99		1000	26	0.18	3
160	14	0.59		1250	28	0.16	2
200	16	0.41		1600	30	0.15	
250	17	0.32	2	2000	31	0.08	
315	19	0.32	3	2500	33	0.14	
400	20	0.22	5	3150	34	0.09	
500	22	0.22	4	4000	36	0.10	
630	23	0.20	4	5000	38	0.08	

STC=26

ABBREVIATION INDEX

FREQ. = FREQUENCY, HERTZ, (cps)
T.L. = TRANSMISSION LOSS, dB
C.L. = UNCERTAINTY IN dB, FOR A 95% CONFIDENCE LIMIT
DEF. = DEFICIENCIES, dB<STC CONTOUR (SUM OF DEF = 26)
STC = SOUND TRANSMISSION CLASS

Tested by_____ Approved by_____

Dean Victor
Senior Experimentalist

David L. Moyer
Laboratory Manager

RIVERBANK ACOUSTICAL LABORATORIES

1512 S. BATAVIA AVENUE
GENEVA, ILLINOIS 60134

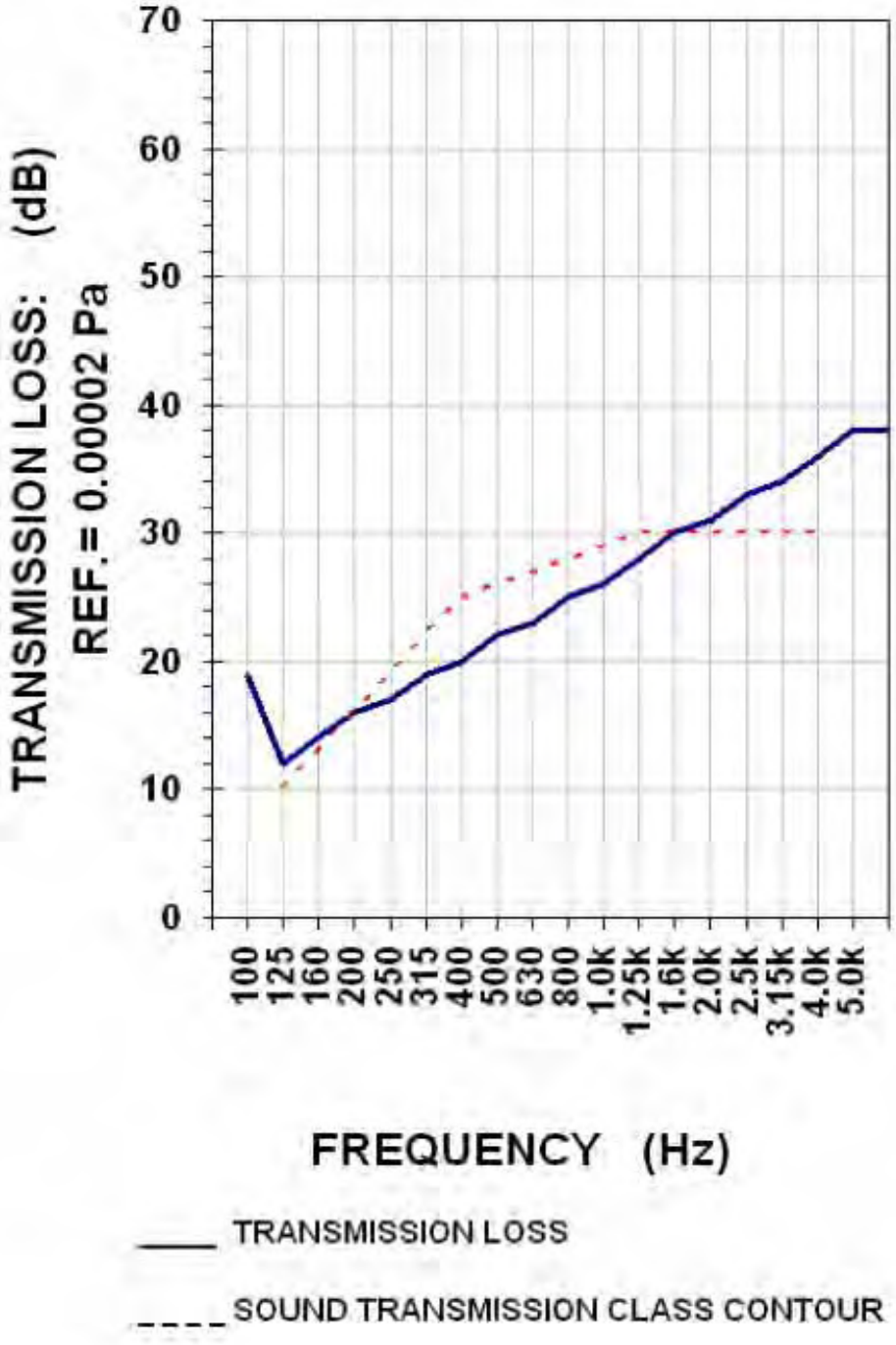
Alion Science and Technology

630/232-0104
FOUNDED 1918 BY
WALLACE CLEMENT SABINE

TEST REPORT

SOUND TRANSMISSION REPORT

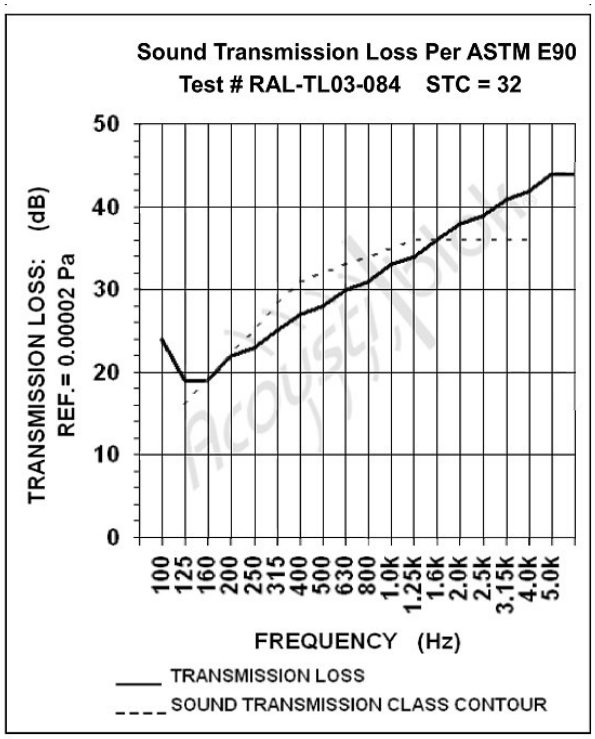
RAL-TL03-085



STC = 26

North American Office
Acoustiblok, Inc.
6900 Interbay Boulevard
Tampa, FL 33616 USA
Phone: 813-980-1400
Fax: 813-549-2653
www.acoustiblok.com
sales@acoustiblok.com

32 oz. Acoustiblok® Sound Isolation Material Product Specifications



SOUND TRANSMISSION CLASS is a single number that represents the sound blocking capacity of a partition such as a wall or ceiling.

STC numbers are often called out in architectural specifications, to assure that partitions will reduce noise levels adequately. For performance similar to laboratory test numbers, it is necessary to adhere closely to the construction materials and techniques used in the tested partition.

STC is calculated by comparing the actual sound loss measured when 18 test frequencies pass through a partition, with fixed values for each STC level. The highest STC curve that the measured sound loss numbers fit under, determines the STC rating of the partition.

STC calculations emphasize sound frequencies that match the human voice. A high STC partition will block the sound of human speech, and block noise that interferes with human speech. To estimate high and low frequency performance, consult the Sound Transmission Loss graph included in STC test reports. Impact Insulation Class (IIC) measure transmitted impact noise, and are specified for floor/ceiling assemblies only.

Acoustiblok is the most efficient and cost effective solution for controlling transmitted sound in commercial, institutional and residential construction projects.

A standard steel stud & gypsum board wall with one layer of 16 oz. Acoustiblok (STC 53) blocks has greater sound reduction properties than a 12" thick poured concrete wall (STC 51).

An Acoustiblok sound barrier material cut easily with a box knife and requires no special tools or skills to install.

Acoustical test reports for numerous wall and floor/ceiling designs are available from Acoustiblok on request. All our test data is taken directly from independent 3rd party laboratories under NVLAP certification.

32 OZ ACOUSTIBLOK

PHYSICAL PROPERTIES

- Minimum STC 32 per ASTM E90-02 & ASTM E413-87
- Minimum sound attenuation 24 dBA @ 100 Hz
- Width 54" ± 0.125" (1.372 meters ± 3.175 mm)
- Material thickness: 0.22" ± 0.03" (2.79 mm ± 0.76 mm)
- Weight: 2 lb. square foot (9.78 kg square meter)
- Color: black
- High UV resistance
- Heat tolerance: 200 degrees F (93 ° C) for 7 days, less than 1% shrink, no deformation
- Freezes at -40 ° F (-40 ° C). Do not unroll or flex frozen material. Properties not affected by freeze/thaw cycles
- No fungal or algal growth and no visible disfigurement, per ASTM D3273 and ASTM D3274 (rating = 10)
- Tensile strength min. 365 PSI
- Weight, per roll: 100' (30.48 m) = 900 lb. (408.24 kg)

RIVERBANK ACOUSTICAL LABORATORIES

1512 S. BATAVIA AVENUE
GENEVA, ILLINOIS 60134

Alion Science and Technology

630/232-0104
FOUNDED 1918 BY
WALLACE CLEMENT SABINE

TEST REPORT

FOR: Acoustiblok

Sound Transmission Loss Test
RAL™-TL03-084

ON: Acoustiblok 32

CONDUCTED: 14 March 2003

TEST METHOD

Unless otherwise designated, the measurements reported below were made with all facilities and procedures in explicit conformity with the ASTM Designations E90-02 and E413-87, as well as other pertinent standards. Riverbank Acoustical Laboratories has been accredited by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST) under the National Voluntary Laboratory Accreditation Program (NVLAP) for this test procedure. A description of the measuring technique is available separately.

DESCRIPTION OF THE SPECIMEN

The test specimen was designated by the manufacturer as Acoustiblok 32. The overall dimensions of the specimen as measured were 1.22 m (48 in.) wide by 2.44 m (96 in.) high and 5.1 mm (0.2 in.) thick. The specimen was a 32 oz. per square foot vinyl barrier. The specimen was placed directly in the laboratory's 1.22 m (4 ft) by 2.44 m (8 ft) test opening and was sealed on the periphery (both sides) with a dense mastic.

The weight of the specimen as measured was 29.3 kg (64.5 lbs.), an average of 9.8 kg/m^2 (2 lbs/ft^2). The transmission area used in the calculations was 3 m^2 (32 ft^2). The source and receiving room temperatures at the time of the test were 23±1ºC (74±1ºF) and 59±2% relative humidity. The source and receive reverberation room volumes were 178 m^3 (6,298 ft^3) and 139 m^3 (4,912 ft^3), respectively.

TEST REPORT

Acoustiblok RAL™-TL03-084

14 March 2003 Page 2 of 3

TEST RESULTS

Sound transmission loss values are tabulated at the eighteen standard frequencies. A graphic presentation of the data and additional information appear on the following pages. The precision of the TL test data is within the limits set by the ASTM Standard E90-02.

FREQ.	T.L.	C.L.	DEF.	FREQ.	T.L.	C.L.	DEF.
100	24	0.99		800	31	0.18	3
125	19	0.68		1000	33	0.15	2
160	19	0.70		1250	34	0.14	2
200	22	0.47		1600	36	0.12	
250	23	0.38	2	2000	38	0.13	
315	25	0.21	3	2500	39	0.12	
400	27	0.27	4	3150	41	0.09	
500	28	0.25	4	4000	42	0.09	
630	30	0.20	3	5000	44	0.09	

STC=32

ABBREVIATION INDEX

FREQ. = FREQUENCY, HERTZ, (cps)
T.L. = TRANSMISSION LOSS, dB
C.L. = UNCERTAINTY IN dB, FOR A 95% CONFIDENCE LIMIT
DEF. = DEFICIENCIES, dB<STC CONTOUR (SUM OF DEF = 23)
STC = SOUND TRANSMISSION CLASS

Tested by_____ Approved by_____

Dean Victor, Senior Experimentalist
David L. Moyer, Laboratory Manager

RIVERBANK ACOUSTICAL LABORATORIES

1512 S. BATAVIA AVENUE
GENEVA, ILLINOIS 60134

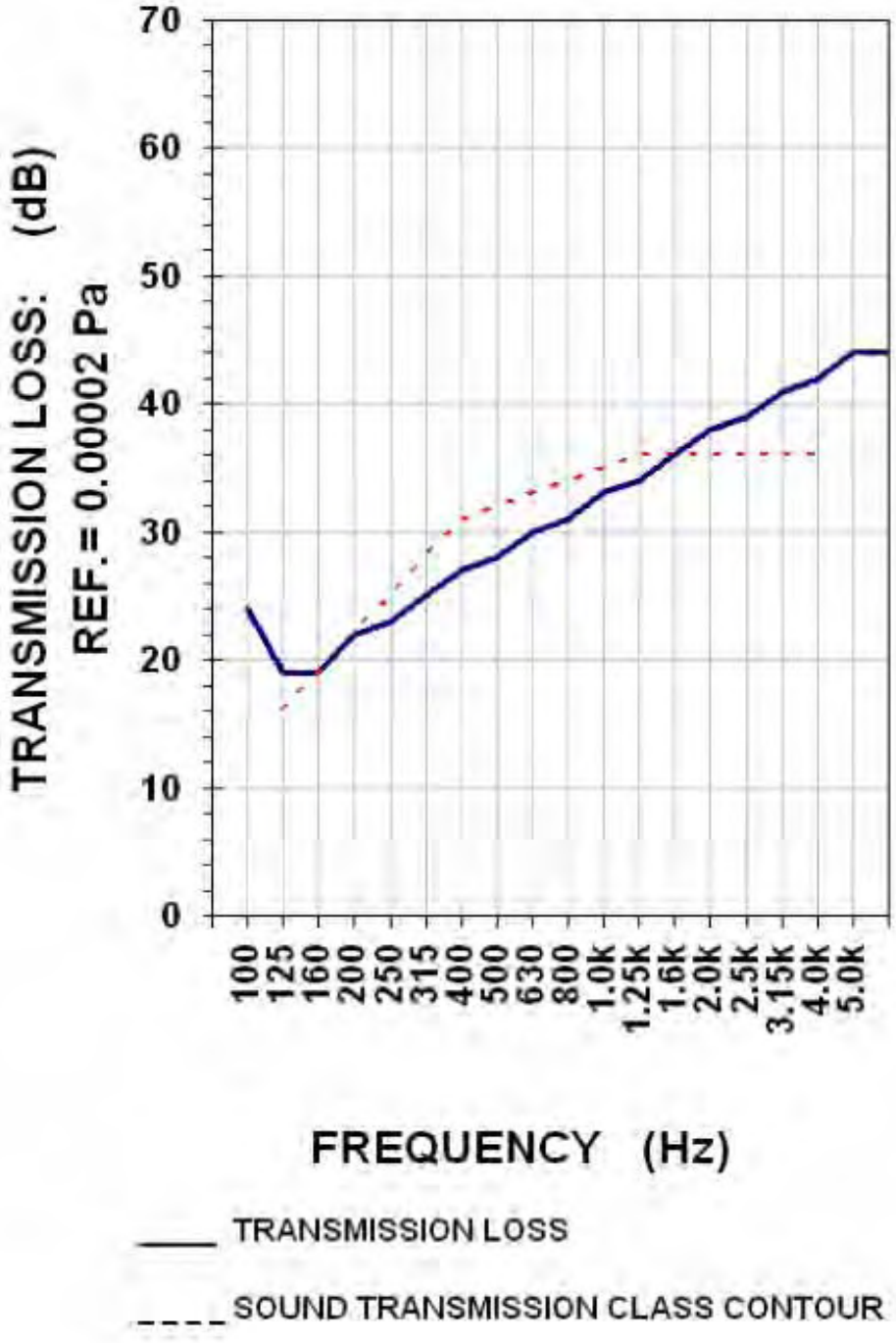
Alion Science and Technology

630/232-0104
FOUNDED 1918 BY
WALLACE CLEMENT SABINE

TEST REPORT

SOUND TRANSMISSION REPORT

RAL-TL03-084



STC = 32

Wall and Partition Facings and Accessories

See General Information for Wall and Partition Facings and Accessories

ACOUSTIBLOK INC R21490
6900 INTERBAY BLVD
TAMPA, FL 33616 USA

Type Acoustiblok (1 lb.) membrane for use in wall designs of the U300, U400, and V400 series. Also may be used in floor-ceiling constructions of the L500 series.

Material shall be installed per the manufacturer's installation instructions furnished with the rolls of the membrane material.

Last Updated on 2003-12-01

CONCLUSION

The following conclusions represent the judgment of Underwriters Laboratories Inc. based upon the results of the examinations and tests presented in this Report as they relate to established principles and previously recorded data.

FIRE RESISTIVE PROPERTIES:

It is judged that the wall and partition assemblies constructed of the materials and in the manner described herein will afford 1 h protection against the passage of flame and dangerous transmission of heat when exposed to fire from the underside of the floor and from either side of the wall assembly.

The limiting temperatures (Finish Rating) of the wood studs (250°F average or 325°F individual above the initial temperature) occurred at 27 min for Assembly No. 1 and at 28 min for Assembly No. 2.

The assemblies performed during the 1 h Classification period without developing unexposed surface conditions that would ignite cotton waste.

The above Classification is based on "Conditions of Acceptance" for tests of walls and partitions as specified in the Standard, Fire Tests of Building Construction and Materials, ANSI/UL 263 (ASTM E119, NFPA 251).

PRACTICABILITY:

The materials used in the test assemblies were readily installed by qualified workers with tools and methods commonly used for construction work of this nature.

Materials and procedures, in accordance with those described in this Report, are considered significant factors in the fire resistance of the construction.

CONFORMITY:

The test assemblies, as described in this Report were tested in accordance with the Standard, "Fire Tests of Building Construction and Materials", ANSI/UL 263 (ASTM E119, NFPA 251).

FOLLOW-UP SERVICE PROGRAM:

The Acoustiblok, as described herein are judged to be eligible for Classification and Follow-Up Service of Underwriters Laboratories Inc. Under the Service, the manufacturer is authorized to use the UL Classification Marking on such products which comply with the Follow-Up Service Procedure and any other applicable requirements of Underwriters Laboratories Inc. Only those materials which bear the UL Classification Marking are considered as Classified by Underwriters Laboratories Inc.

The Classification Marking to be used on each board is illustrated below:

ISSUE NO. ____
FIRE RESISTANCE CLASSIFICATION
SEE UL FIRE RESISTANCE DIRECTORY

Report by:

MICHAEL J. PINKOWSKI
Senior Engineering Associate

Reviewed by:

HOWARD J. GRUSZYNSKI
Staff Engineer

FREDRICK HERVEY
Engineering Team Leader

74 Kent Street
Brooklyn, New York 11222-1517

Phone (718) 383-5080
Fax (718) 383-7445
E-mail: dllabs@aol.com

Accredited by National Voluntary Laboratory Accreditation Program - Lab Code 100252
ISO / IEC 17025 and relevant requirementsof ISO 9002

June 13, 2006

Acoustiblok, Inc.
4216 East Busch Blvd.
Tampa, FL 33617

Att: **Mr. Mark Nothstine**

DL-14832
Via FAX (813) 985-9026

OBJECTIVE

To determine the fungal resistance of a set of coated panels.

PRODUCTS TESTED

The six – 3" X 6" coated test panels were submitted by the Acoustiblok, Inc. for testing. The panels were identified as black rubber membrane material. In addition, a pine panel was exposed as a control in this testing.

PROCEDURES

The fungal resistance of the specimens was conducted in accordance with procedures outlined in:

ASTM D 3273, "Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber"

ASTM D 3274, "Standard Test Method for Evaluating Degree of Surface Disfigurement of Paint Films by Microbial (Fungal or Algal) Growth or Soil and Dirt Accumulation".

TEST RESULTS

The mold and mildew resistance was rated using a scale of 10 to 0, as determined by comparison with pictorial standards depicted in ASTM D 3274. The ASTM ratings are as follows:

10 – No fungal growth
9 – Trace of fungal growth
8 – Very slight fungal growth
6 – Slight fungal growth
4 – Moderate fungal growth
2 – Considerable fungal growth
0 – Severe fungal growth

TEST RESULTS (cont.)

The coated test panels exhibited the no fungal growth after 28-days of exposure in the mold / mildew chamber.

Sample	Rating
Acoustiblok	10
Control	0

DL Labs, Inc.

Thomas J. Sliva
Vice President/
Technical Director

cc: M. Lazaro, Jr.

TILE COUNCIL OF NORTH AMERICA, INC.

PRODUCT TESTING SERVICE

100 Clemson Research Blvd. Anderson, SC 29625 Tel (864) 646-TILE Fax (864) 646-2821

TCNA TEST REPORT NUMBER: TCNA-308-06

TEST REQUESTED BY: Acoustiblok, Inc.
Attn: Mark Nothstine
4216 E.Busch Blvd.
Tampa, FL 33617

TEST SUBJECT MATERIAL: Identified by client as: Acoustiblok & Acoustiwool Underlayment System

TEST DATE: 11/3/06

TEST PROCEDURE: ASTM C627: "A Standard Test Method for Evaluating Ceramic Floor Tile Installation Systems Using the Robinson-Type Floor Tester"

Materials:

A thin-set installation over a concrete base was prepared using the following materials:

1) A 42" x 42" x 2" concrete base with a smooth finish
2) Acoustiwool Acoustic Underlayment
3) Acoustigrip Tape
4) Acoustiblok 1/8" thick
5) Laticrete 254 Platinum Multipurpose Thin-set Mortar
6) 12" x 12" Crossville porcelain, ¼" grout joints
7) Laticrete Spectralock Pro Epoxy grout

Base and Underlayment:

Acoustiwool was cut into two pieces (42" x 40" and 42" x 2") and taped down the seam with Acoustigrip tape. Multipurpose mortar, mixed with water per manufacturer's instructions, was troweled over the concrete with a 1/4" x 3/8" square notched trowel. The Acoustiwool was then laid over the thin-set and flattened with a 75-pound roller. The same multipurpose mortar, mixed with water per manufacturer's instructions, was troweled over the Acoustiwool with a 1/4" x 3/8" square notched trowel. The Acoustiblok membrane was then placed over the Acoustiwool and flattened with a 75-pound roller. The system was allowed to cure for 24 hours.

TCNA TEST REPORT NUMBER: TCNA-308-06 **PAGE:** 2 **OF** 2

Tile and Grout:

Multipurpose mortar, mixed with water per manufacturer's instructions, was troweled over the Acoustiblok membrane with a 1/4" x 3/8" square notched trowel. The thin-set mortar was first keyed in with the flat side of the trowel and allowed to dry. Additional thin-set mortar was then combed with the notched side to form parallel ridges. The porcelain tiles were set in the thin-set by pressing down and sliding the tile in a direction perpendicular to the combed ridges. A beat-in block and rubber mallet were used to reduce lippage between tiles. After the tiles were installed, the thin-set was allowed to cure for 24 hours before grouting.

Sanded grout, mixed with admix per manufacturer's instructions was forced into the ¼" grout joints with a rubber float. Excess grout was removed with the edge of the float by holding the float at a 90° angle. The grout was allowed to set up for approximately 20 minutes before the installation was cleaned with a sponge and clean water. The grouted installation was subsequently allowed to cure for 14 days.

At the end of the cure period, the installation was subjected to load cycling as defined in ASTM C-627.

TEST RESULTS:

The installation completed five cycles with no evidence of damage to the tile or grout joints. At the completion of cycle six (hard rubber wheels, two hundred pounds per wheel), six tile were chipped. At this point, the damage constituted failure of the installation according to the evaluation criteria of ASTM C-627.*

*All evaluation criteria were based on 8 tiles and 8 grout joints in the wheel path of the Robinson-Type Floor Tester.

CONCLUSION:

In accordance with the Performance-Level Requirement Guide of the 2006 Handbook for Ceramic Tile Installation (page15), the installation is rated "RESIDENTAL" for *"kitchens, bathrooms, and foyers."*

Virgil Irick
Director of Laboratory Services

12/14/06
Date

TILE COUNCIL OF NORTH AMERICA, INC.

PRODUCT TESTING SERVICE

100 Clemson Research Blvd. Anderson, SC 29625 Tel (864) 646-TILE Fax (864) 646-2821

TCNA TEST REPORT NUMBER: TCNA-256-08 **PAGE:** 1 **OF** 2

TEST REQUESTED BY: Acoustiblok, Inc.
Attn: Ryan Dittmar
6900 Interbay Blvd.
Tampa, FL 33616

TEST SUBJECT MATERIAL: Identified by client as: 16 oz Acoustiblok Sound Isolation Material 1/8"

TEST DATE: 7/17/08

TEST PROCEDURE: ASTM C627: "A Standard Test Method for Evaluating Ceramic Floor Tile Installation Systems Using the Robinson-Type Floor Tester"

Materials:

A thin-set installation over a concrete base was prepared using the following materials:

1) A 42" x 42" x 2" concrete base with a smooth finish
2) 16 oz Acoustiblok Sound Isolation Material 1/8"
3) Acoustiblok Acoustigrip tape
4) Laticrete 317 with Laticrete 333 Additive
5) 12" x 12" Crossville porcelain tiles (¼" grout joints)
6) Laticrete SpectraLOCK Pro Epoxy grout

Base and Underlayment:

The Acoustiblok Sound Isolation Material was cut into two pieces (29" x 42" and 13" x 42"). The pieces were abutted and the seam was taped with Acoustiblok Acoustigrip tape. The perimeter was secured with wood supports to ensure the assembly would remain in place during testing.

Katelyn Simpson 7/23/08
Katelyn Simpson Date
Laboratory Engineer

Tile and Grout:

Laticrete 317 thin-set mortar, mixed with Laticrete 333 additive per manufacturer's instructions, was troweled over the Acoustiblok Sound Isolation Material with a ¼" x ¼" square notched trowel. The thin-set mortar was first keyed in with the flat side of the trowel and then combed with the notched side to form parallel ridges. The 12" x 12" Crossville porcelain tiles were set in the thin-set by pressing down and sliding the tile in a direction perpendicular to the combed ridges. A beat-in block and rubber mallet were used to reduce lippage between tiles. After the tiles were installed, the thin-set was allowed to cure for 24 hours before grouting.

Laticrete SpectraLOCK Pro epoxy grout, mixed per manufacturer's instructions was forced into the ¼" grout joints with a rubber float. Excess grout was removed with the edge of the float. The grout was allowed to set up for approximately 20 minutes before the installation was cleaned with a sponge and clean water. The grouted installation was subsequently allowed to cure for 14 days. At the end of the cure period, the installation was subjected to load cycling as defined in ASTM C-627.

TEST RESULTS:

The installation completed five cycles with no evidence of damage to the tile or grout joints. At the completion of cycle six (hard rubber wheels, two hundred pounds per wheel), three tiles were broken. At this point, the damage constituted failure of the installation according to the evaluation criteria of ASTM C627.*

*All evaluation criteria were based on 8 tiles and 8 grout joints in the wheel path of the Robinson-Type Floor Tester.

CONCLUSION:

In accordance with the Performance-Level Requirement Guide of the 2008 *TCA Handbook for Ceramic Tile Installation* (page16), the installation is classified "RESIDENTAL" for *"Kitchens, bathrooms, and foyers."*

Katelyn Simpson
Laboratory Engineer

7/23/08
Date

Material Safety Data Sheet

May be used to comply with

OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

IDENTITY *(As Used on Label and List)* ***AB 16/32, Flexible PVC Calendered Sheet***	Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name **Acoustiblok, Inc.**	Emergency Telephone Number **813-980-1400**
Address *(Number, Street, City, State, and ZIP Code)*	Telephone Number for Information **813-980-1400**
6900 Interbay Blvd	Date Prepared **05-22-00**
Tampa, FL 33616	Signature of Preparer *(optional)*

Section II - Hazard Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	*%(optional)*

This product is not hazardous as defined in 29 CFR 1910. 1200

Section III - Physical/Chemical Characteristics

Boiling Point	**N/A**	Specific Gravity (H_2O = 1)	**1.67 to 2.02**
Vapor Pressure (mm Hg.)	**N/A**	Melting Point	**N/A**
Vapor Density (AIR = 1)	**N/A**	Evaporation Rate (Butyl Acetate = 1)	**N/A**
Solubility in Water **Insoluble**			

Appearance and Odor	**Black solid sheet with slight but noticeable odor**

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used) **N/A**	Flammable Limits **Excess of 600F**	LEL **N/A**	UEL **N/A**
Extinguishing Media **Water Spray**			
Special Fire Fighting Procedures **No special procedures are expected to be necessary for this product. Normal fire fighting procedures should be followed to avoid inhalation of smoke and gases**.			
Unusual Fire and Explosion Hazards **Decomposition by burning in an open flame may yield toxic. Hydrogen Chloride gas (HCI), Carbon Dioxide (CO2) and Carbon Monoxide (CO).**			

Section V - Reactivity Data

Stability	Unstable		Conditions to Avoid **N/A**
	Stable	**x**	
Incompatibility *(Materials to Avoid)* ***Avoid contact with acetal or acetal copolymers and with amine containing materials during processing.***			
Hazardous Decomposition or Byproducts **Oxides of carbon and Hyrdocholric acid**			
Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	**x**	

Section VI - Health Hazard Data

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
Health Hazards *(Acute and Chronic)* **No known health hazards**			
Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
Signs and Symptoms of Exposure			

Medical Conditions Generally Aggravated by Exposure
Emergency and First Aid Procedures **Molten material: If molten material comes in contact with skin, immerse in running water until cooled before attempting removal.**

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled **Land spill: Recover spilled material and place in suitable containers for recycle or disposal. Consult an expert on disposal of recovered material and ensure conformity to local regulations**.
Waste Disposal Method **Incineration of waste material in a permitted facility in conformance to local state and federal regulations. Land filling in licensed facility according to regulations**.
Precautions to Be taken in Handling and Storing **N/A**
Other Precautions **Store in sprinklered warehouse. Keep temperature below 60C (140 F) for quality control**

Section VIII - Control Measures

Respiratory Protection *(Specify Type)* **When grinding up material use appropriate respirator if acceptable limits for nuisance dust are exceeded.**		
Ventilation	Local Exhaust Provide adequate ventilation	Special
	Mechanical *(General)*	Other

Protective Gloves **When handling hot material**	Eye Protection **Safety glasses or goggles**
Other Protective Clothing or Equipment	
Work/Hygienic Practices	