RIVERBANK ACOUSTICAL LABORATORIES

627 RIVERBANK DRIVE
GENEVA, IL 60134

630-232-0104

Test Report

www.riverbankacoustics.com

FOUNDED 1918 BY
WALLACE CLEMENT SABINE

SPONSOR: **Frasch**
Grand Prairie, TX

Sound Absorption
RAL™-A25-508

CONDUCTED: 2025-11-14

ON: 9mm PET Brik on 1" Fiberglass Backer

TEST METHODOLOGY

Riverbank Acoustical Laboratories™ is accredited by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST) under the National Voluntary Laboratory Accreditation Program (NVLAP) as an ISO 17025:2017 Laboratory (NVLAP Lab Code: 100227-0) and for this test procedure. The test reported in this document conformed explicitly with ASTM C423-23: "Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method." The specimen mounting was performed according to ASTM E795-23: "Standard Practices for Mounting Test Specimens During Sound Absorption Tests." A description of the measurement procedure and room specifications are available upon request. The results presented in this report apply to the sample as received from the test sponsor.

INFORMATION PROVIDED BY SPONSOR

The test specimen was designated by the sponsor as 9mm PET Brik on 1" Fiberglass Backer. The following nominal product information was provided by the sponsor prior to testing. The accuracy of such sponsor-provided information can affect the validity of the test results.

Product Under Test

Product Name:	9mm PET Brik on 1" Fiberglass Backer
Manufacturer:	Frasch

SPECIMEN MEASUREMENTS & TEST CONDITIONS

Through a full external visual inspection performed on the test specimen, Riverbank personnel verified the following information:

Test Specimen

Dimensions:	8 panels @ 606 mm (23.875 in.) by 1219 mm (48 in.)
Thickness:	35.8 mm (1.4095 in.)
Overall Weight:	23.59 kg (52 lbs)
Mass per Unit Volume:	111 kg/m^3 (6.95 lbs/ft^3)

SPECIMEN MEASUREMENTS & TEST CONDITIONS (continued)

Overall Specimen Properties

Size:	2.43 m (95.5 in) wide by 2.44 m (96.0 in) long
Thickness:	0.04 m (1.4095 in)
Weight:	23.59 kg (52.0 lbs)
Mass per Unit Area:	3.99 kg/m² (0.82 lbs/ft²)
Calculation Area:	5.915 m² (63.67 ft²)

Test Environment

Room Volume:	291.98 m³
Temperature:	21.2 °C ± 0.1 °C (Requirement: ≥ 10 °C and ≤ 5 °C change)
Relative Humidity:	59.4 % ± 0.9 % (Requirement: ≥ 40 % and ≤ 5 % change)
Barometric Pressure:	98.7 kPa (Requirement not defined)

MOUNTING METHOD

Type A Mounting: The test specimen was laid directly against the test surface. Perimeter edges were sealed with metal framing and tape.

Figure 1 – Specimen mounted in test chamber

Figure 2 – Individual specimen panel

Figure 3 – Individual specimen panel

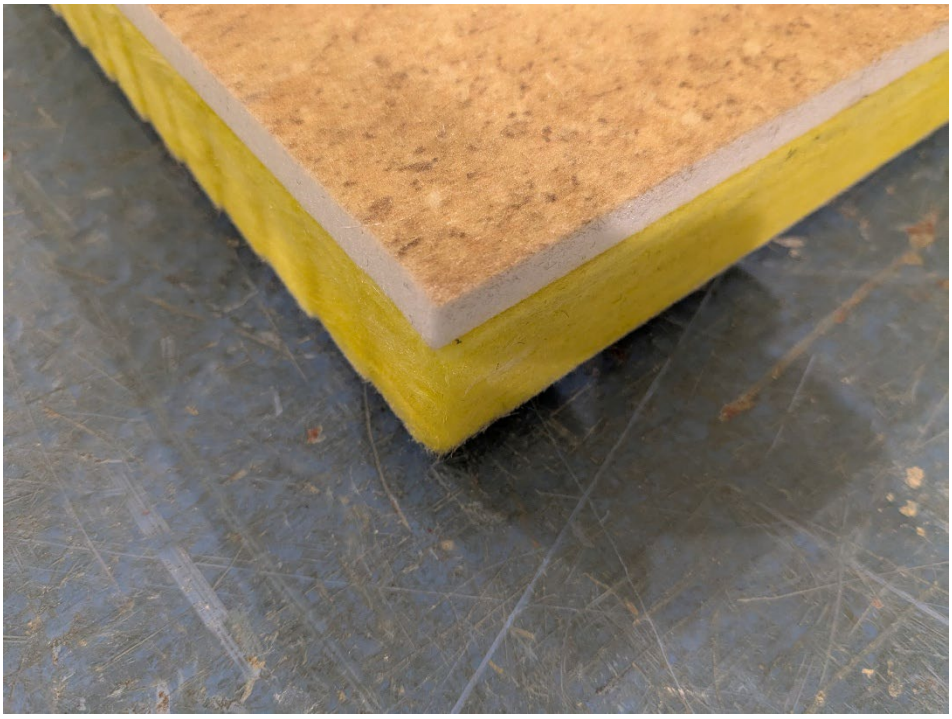

Figure 4 – Detail of specimen materials

TEST RESULTS

Specimen total absorption and absorption coefficient are tabulated at the eighteen standard frequencies. A graphic presentation of the data and additional information appear on the following pages.

1/3 Octave Center Frequency (Hz)	Total Absorption (m^2)	Total Absorption (Sabins)	Absorption Coefficient
100	0.63	6.73	0.11
** 125	1.00	10.77	0.17
160	1.24	13.36	0.21
200	1.95	20.99	0.33
** 250	2.62	28.17	0.44
315	3.89	41.91	0.66
400	4.72	50.81	0.80
** 500	5.62	60.50	0.95
630	6.19	66.64	1.05
800	6.45	69.48	1.09
** 1000	6.53	70.31	1.10
1250	6.47	69.66	1.09
1600	6.41	68.95	1.08
** 2000	6.26	67.40	1.06
2500	6.12	65.92	1.04
3150	6.09	65.58	1.03
** 4000	6.09	65.50	1.03
5000	6.19	66.58	1.05

SAA = 0.89
NRC = 0.90

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TEST RESULTS (continued)

The sound absorption average (SAA) is defined in ASTM C423-23 Section 3.1.1 as the arithmetic average of the sound absorption coefficients of a material for the twelve one-third octave bands from 200 Hz through 2500 Hz, inclusive, rounded to the nearest integer multiple of 0.01.

The noise reduction coefficient (NRC) is defined from previous versions of ASTM C423 as the arithmetic average of the sound absorption coefficients at 250 Hz, 500 Hz, 1000 Hz, and 2000 Hz, rounded to the nearest integer multiple of 0.05.

Tested by _____
Marc Sciaky
Senior Experimentalist

Report by _____
Keith Kimberling
Test Engineer

Approved by _____
Eric P. Wolfram
Laboratory Manager

Digitally signed by
Eric P Wolfram
Date: 2025.11.17
13:15:34 -06'00'

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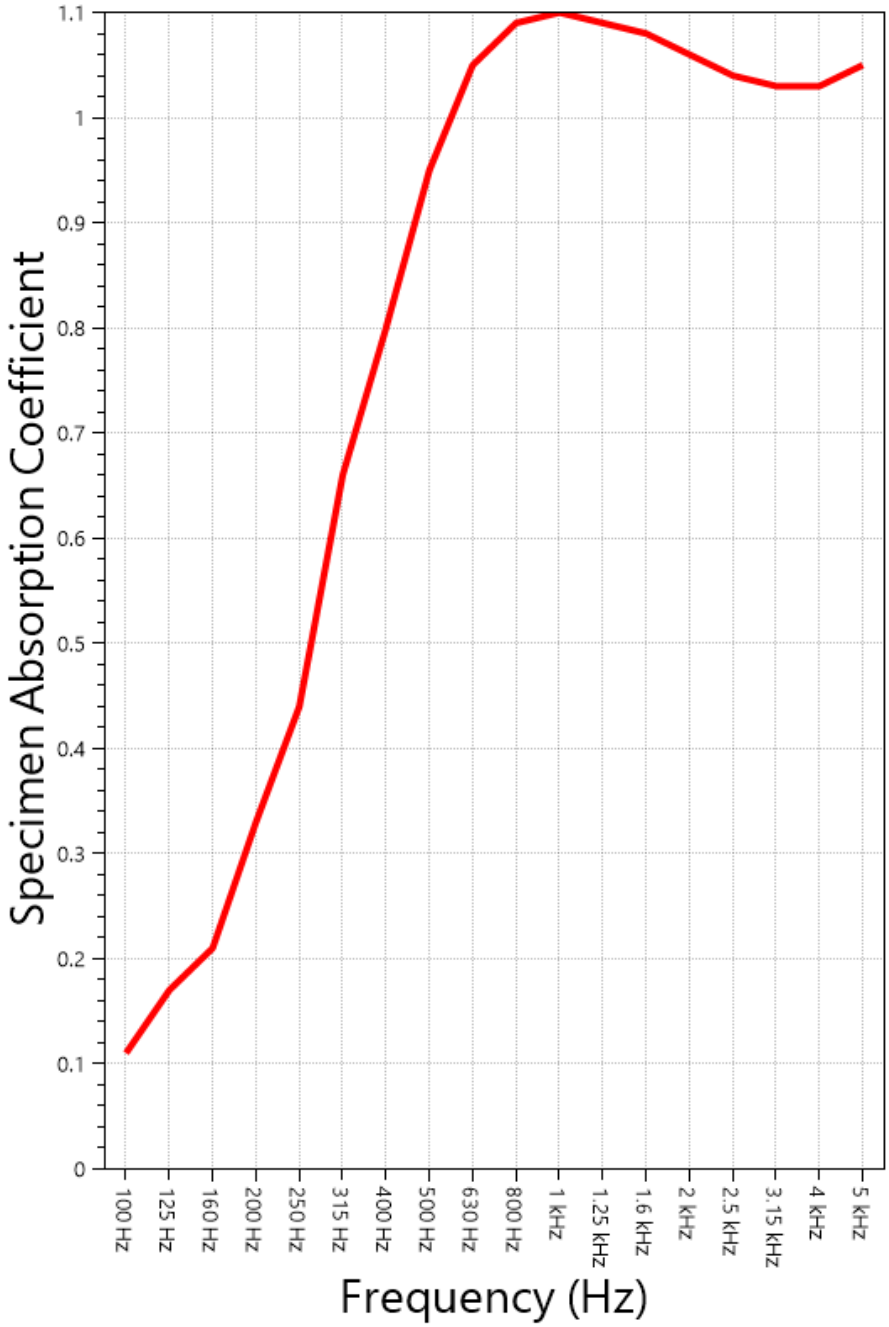
SOUND ABSORPTION REPORT

9mm PET Brik on 1" Fiberglass Backer



SAA = 0.89
NRC = 0.90

NVLAP TESTING
NVLAP LAB CODE 100227-0

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APPENDIX A: Extended Frequency Range Data

Specimen: 9mm PET Brik on 1" Fiberglass Backer (See Full Report)

The following non-accredited data were obtained in accordance with ASTM C423-23, but extend beyond the defined frequency range of 100Hz to 5,000Hz. These unofficial results are representative of the RAL test environment only and intended for research & comparison purposes.

1/3 Octave Band Center Frequency (Hz)	**Total Absorption** (Sabins)	**Absorption Coefficient**
31.5	4.07	0.06
40	3.17	0.05
50	6.43	0.10
63	0.03	0.00
80	5.99	0.09
100	6.73	0.11
125	10.77	0.17
160	13.36	0.21
200	20.99	0.33
250	28.17	0.44
315	41.91	0.66
400	50.81	0.80
500	60.50	0.95
630	66.64	1.05
800	69.48	1.09
1000	70.31	1.10
1250	69.66	1.09
1600	68.95	1.08
2000	67.40	1.06
2500	65.92	1.04
3150	65.58	1.03
4000	65.50	1.03
5000	66.58	1.05
6300	69.08	1.08
8000	66.80	1.05
10000	66.60	1.05
12500	68.29	1.07

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APPENDIX B: Instruments of Traceability

Specimen: 9mm PET Brik on 1" Fiberglass Backer (See Full Report)

Description	Model	Serial Number	Date of Certification	Calibration Due
System 1	Type 3160-A-042	3160-106968	2025-07-21	2026-07-21
Bruel & Kjaer Mic And Preamp E	Type 4943-B-001	2311441	2025-06-09	2026-06-09
Bruel & Kjaer Pistonphone	Type 4228	2781248	2025-07-21	2026-07-21
EXTECH Hygro 662	SD700	A083662	2024-12-30	2025-12-30

APPENDIX C: Revisions to Original Test Report

Specimen: 9mm PET Brik on 1" Fiberglass Backer (See Full Report)

Date	Revision
2025-11-14	Original report issued

END