1. PRODUCT NAME

- **APOLLO FITNESS TILES**

2. MANUFACTURER/SUPPLIER

Edgewood Matting Ltd
18120 – 109 Avenue
Edmonton Alberta Canada T5S 2K2
Tel: 780.466.2084
Toll Free: 800.668.1776
Fax: 780.468.9104
E-mail: inquires@edgewoodgroup.ca
www.edgewoodgroup.ca

3. PRODUCT DESCRIPTION

Composition & Materials

Apollo Fitness Tiles are made from a combination of 100% post-consumer recycled SBR (styrene butadiene rubber) and EPDM (ethylene propylene diene monomer) rubber, bonded with a water-based polymer. Colored toppings are made from EPDM granules. All colored toppings are approximately ½" *(12 mm)* thick with the SBR granules making up the remainder of the tile.

Apollo Fitness Tiles meet standards specified under the LEED® (Leadership in Energy and Environmental Design) criteria developed by both the U.S. Green Building Council (USGBC) and Canada Green Building Council (CaGBC).

Apollo Fitness Tiles are FloorScore(R) certified under the criteria developed by the Resilient Floor Covering Institute (RFCI) and certified by Scientific Certification Systems (SCS), Inc. Registration # SCS-FS-04063.

Special Considerations:

Fitness Centers: 1 ½" Tile not recommended for use under cardio equipment.

Apollo Fitness Tiles and accessories:

A. Apollo Fitness Tiles

Tile Size:	**Thickness:**
24" x 24" = 4 ft²	• 1" / *25 mm*
61 cm x 61 cm = 0.37 m² (2' x 2' square tile)	• 1½" / *38 mm*

NOTE: All measurements are subject to nominal variation.

B. Wedges & Wedge Tiles are used around the perimeter of an area to create a transition. They can be adhered with adhesive to the edge of the tile and/or glued to the sub-surface.

Dimensions:

1" / *25mm* transition wedge: 36" long x 12" wide = 3.0 sq.ft.
91.5 cm long x 30.5 cm wide = 0.28 m²

1½" / *38mm* transition wedge: 36" long x 18" wide = 4.5 sq. ft.
91.5 cm long x 45.7 cm wide =0.42 m²

C. Corner wedges, designed for use on all 90° angles.
(Note: corners for 1" tiles must be fabricated on site from 36" 1" wedge piece)

Dimensions: (available in outside and inside format)

1½" / *38mm* outside corner wedge: 9¾" long (inside edge) x 12" wide = .81 sq. ft.
24.8 cm long x 30.5 cm wide = 0.075 m²

1½" / *38mm* inside corner wedge: 9¾" long (outside edge) x 18" wide = 1.22 sq. ft.
24.8 cm long x 45.7 cm wide = 0.113 m²

1½" outside corner 1½" inside corner

D. Half Tiles are designed so that the area can be installed in a staggered layout.

E. Interlocking Pins are included with every order, four per tile:

- **1" Tiles :** 2.5" long and ¼" in diameter
- **1 ½" Tiles:** 3.5" long and 5/8" in diameter.

COLORS:

Standard Colors (*no minimum order required*):
Includes: 100% Black

Low Color 25 % colour speckle

High Color 70 % colour speckle

Custom Colors:

Custom colors available upon request using a combination of the 26 EPDM colors below. Create your own custom blend in concentrations up to 75% color. Minimum order of 24 tiles, order in 4 tile multiples.

• RED FLOWER	• IMPERIAL BLUE	• BEIGE	• GREY	• CREAM	• BROWN
• GREEN	• OCEAN GREEN	• PURPLE	• ORANGE	• PASTEL BLUE	• DENIM
• EVERGREEN	• OCEAN BLUE	• BLUE	• RED	• YELLOW	• PUTTY
• MUSTARD	• DEEP WATERS	• OFF WHITE	• SAND	• LIGHT GREY	• CHARCOAL
• LATTE	• EXPRESSO				

**NOTE – VARIATION IN UV STABILITY CAN OCCUR IN CUSTOM COLOR MIXES*

4. DESIGN & BASIC USE

Apollo Fitness Tiles are designed for use in sport and fitness facilities. The superior sound reduction qualities of Apollo Fitness Tiles make them the ideal solution for areas where excessive

sound transference between floors, or from room to room has been identified. Apollo Fitness Tiles should be considered in fitness facilities which are located over occupied spaces in schools, hotels, heath care, residential and commercial sports facilities.

a) Apollo Fitness Tile's "interlocking system" provides an easy, self-aligning installation feature that does not require adhesive. Interlocking pins or tubes are included with every order, four per tile.

b) Apollo Fitness Tiles can be installed over sub-surfaces which include concrete and wood. Other sub-surfaces shall be approved by Edgewood.

Limitations

The following chemicals may cause damage to the surface and should be avoided: kerosene, solvents, grease, auto oil, animal or vegetable oil/fat, and highly concentrated acids and bases.
This product is not suitable for service environments that have heavy vehicular traffic, rolling or sliding machinery, or similar uses.

5. INSTALLATION METHODS

Apollo Fitness Tiles should be installed by experienced floor covering installer.
Refer to **Apollo Fitness Tile Installation & Maintenance Guidelines** for information relating to sub-surfaces listed:

• Concrete sub-surface
• Wooden sub-surface

6. INSTALLATION CONDITIONS

a) All other finishing work such as sanding, painting and overhead work must be completed prior to installing Apollo Fitness Tiles.

b) Lay out all the tiles on or near the sub-surface for installation the next day. Allow tiles to acclimatize to average ambient temperature.

c) Materials shall be protected from weather and extreme temperatures, solvents, and sources of damage prior to and during installation.

7. TECHNICAL DATA

Test Standards for: American Society for Testing and Materials (ASTM)

- **ASTM C423** Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method
- **ASTM D395B** Standard Test Methods for Rubber Property-Compression Set under force
- **ASTM D412** Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Eastover's –Tension
- **ASTM D2047-04** Standard Test Method for Coefficient of Friction of Polish-Coated Floor Surfaces as Measured by the James Machine
- **ASTM D2240** Standard Test Method for Rubber Property-Durometer Hardness
- **ASTM D4060** Standard Test Method for Abrasion resistance of Organic Coatings by the Taber Abrader
- **ASTM E492** Standard Test Method for Laboratory Measurement of Impact Sound Transmission Through Floor-Ceiling Assemblies Using the Tapping Machine.
- **ASTM E648-10** Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a

Radiant Heat Energy Source.

- **ASTM E1007** Standard Test Method for Field Measurement of Impact Sound Transmission
- **ASTM F970-00** Standard Test Method for Static Load Limit (1000 lbs)
- **California Specification 01350 (CHPS Compliant for VOC Emissions) - -**Emission tests are performed following California Dept. of Health Services Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers, CA/DHS/EHLRB/R-174, 07/15/04 (http://www.cal-iaq.org/VOC/Section01350_7_15_2004_FINAL_PLUS_ADDENDUM-2004-01.pdf).

PHYSICAL / CHEMICAL PROPERTIES

A) Apollo Fitness Tile – Black and Low color – Citrine, Amber, Topaz, Emerald, Ruby

TEST PROCEDURE	DESCRIPTION	ACHIEVED VALUES (Subject to nominal variation)
ASTM C423	Noise Reduction Coefficient	Sound Absorption 0.34 NRC 0.35
ASTM D2047.04	Static Coefficient of Friction (James Machine)	Dry 0.65, Wet 0.67
ASTM D2240	Hardness Shore A Durometer	65
ASTM D395	Compression Set Under Force (method B)	97.8% Recovered
ASTM D412	Tensile Strength	124.5 lbs/square inch
ASTM D4060	Taber Abrasion (H-19) 1000 g load	0.18% wt. loss
ASTM E492	Lab Measurement - Impact Sound Transmission	IIC = 58
ASTM E1007	Field Measurement - Impact Sound Transmission Apollo 1.5" Tile	FIIC 61 – Pass Code Requirement: FIIC 45
ASTM E648	Critical Radiant Flux of Floor-covering systems Using a Radiant Heat Energy Source	Contact Edgewood for results
ASTM F970	Static Load Limit (1000 lbs)	0.006 inch residual compression
CA 01350	VOC Emissions – Section 01350	Pass

B) Apollo Fitness Tile – High Color – Garnet, Jade, Jasper, Quartz, Sapphire

TEST PROCEDURE	DESCRIPTION	ACHIEVED VALUES (Subject to nominal variation)

ASTM C423	Noise Reduction Coefficient	N/A
ASTM D2047.04	Static Coefficient of Friction (James Machine)	Dry 0.65, Wet 0.67
ASTM D2240	Hardness Shore A Durometer	68
ASTM D395	Compression Set under Force (method B)	98.1% Recovered
ASTM D412	Tensile Strength	174.31 lbs/square inch
ASTM D4060	Taber Abrasion (H-19) 1000 g load	0.21% wt. loss
ASTM E492	Lab Measurement - Impact Sound Transmission	N/A
ASTM E1007	Field Measurement - Impact Sound Transmission	N/A
ASTM E648	Critical Radiant Flux of Floor-covering systems Using a Radiant Heat Energy Source	Contact Edgewood for results
ASTM F970	Static Load Limit (1000 lbs)	0.008 inch residual compression
CA 01350	VOC Emissions – Section 01350	Pass

Note: Copies of test reports and additional product information are available upon request.

8. MAINTENANCE PROCEDURES

All Apollo Fitness Tile systems must be maintained as recommended. The type and frequency of maintenance will vary according to maintenance equipment and desired appearance of product. For detailed maintenance instructions refer to:

Apollo Cleaning and Maintenance Brochure

Toll Free Tel: 1.800.668.1776
Direct Line: 1.780.466.2084
Fax: 1.780.468.9104
www.edgewoodgroup.ca

9. AVAILABILITY & COST

Please contact the dealer, distributor, or Edgewood for information on availability and pricing.

10. WARRANTY

The standard warranty period is 5 years from date of shipment. Please, see Edgewood limited warranty for particulars of coverage.

11. TECHNICAL SERVICES

Contact Edgewood for more information, where our trained customer service personnel offer design assistance and technical support.

12. FILING SYSTEMS

- **www.edgewoodgroup.ca**

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REPORT

3933 US ROUTE 11 CORTLAND, NEW YORK 13045

Order No. 103930499 Date: December 20, 2021

REPORT NO. 103930499CRT-025p

IMPACT SOUND TRANSMISSION TEST ON
TEST NUMBER #282526
ID: 2 ¾" Apollo FLOORING
OVER A SIX INCH CONCRETE SLAB WITH A DROP CEILING

RENDERED TO

Edgewood Matting Ltd.

INTRODUCTION

This report gives the result of an Impact Sound Transmission test on flooring. The sample was selected and supplied by the client and received at the laboratories on December 16, 2021. The material appeared to be in new, unused condition upon arrival.

AUTHORIZATION

Signed Intertek Quotation No. Qu-00974967-0

TEST METHOD

The floor system was tested in general accordance with the American Society for Testing and Materials designation ASTM E492-09 (Reapproved 2016), "Standard Test Method for Laboratory Measurement of Impact Sound Transmission through Floor-Ceiling Assemblies Using the Tapping Machine". It was classified in accordance with ASTM E989-21, entitled, "Standard Classification for Determination of Single-Number Metrics for Impact Noise".

GENERAL

The test method is designed to measure the impact sound transmission performance of a floor-ceiling assembly, in a controlled laboratory environment. A standard tapping machine (Bruel & Kjaer Type 3207) was placed at four positions on the test floor that forms the horizontal separation between two rooms, one directly above the other. The data obtained was normalized to a reference room absorption of 10 square meters in accordance with the test method.

The standard also prescribes a single-figure classification rating called “Impact Insulation Class, IIC” which can be used by architects, builders and code authorities for acoustical design purposes in building construction.

The IIC is obtained by matching a standard reference contour to the plotted normalized one-third octave band sound pressure levels at each test frequency. The greater the IIC rating, the lower the impact sound transmission through the floor-ceiling assembly.

DESCRIPTION OF THE FLOOR/CEILING ASSEMBLY

The floor/ceiling assembly system consisted of a 6 inch thick concrete floor with a drop ceiling below forming the horizontal separation between two rooms, one directly above the other. The drop ceiling consisted of 14 inch deep steel bar joists spaced 38 inches on center. The ceiling construction consisted of 2 x 4 inch wood bolted to the bar joists. The 2 x 4 inch wood was spaced 24 inches on center. Resilient channels (1/2 inch single leaf) were positioned on 16 inch centers between the furring strips and the 1/2 inch gypsum board. Sound attenuation batts (U.S.G. Thermofiber), four (4) inches in thickness were placed between the joists in the formed cavity. The receiving room below measured 1440 cubic feet.

DESCRIPTION OF TEST SPECIMEN

The test specimen consisted of Test Number: #282526 ID: 2 ¾” Apollo Flooring. The recycled rubber flooring tiles measured 24 inches square by 2 ¾” thick and weighed 9.91 lbs./ft^2.

RESULTS OF TEST

The data obtained in the room below the panel normalized to A_o = 10 square meters, is as follows:

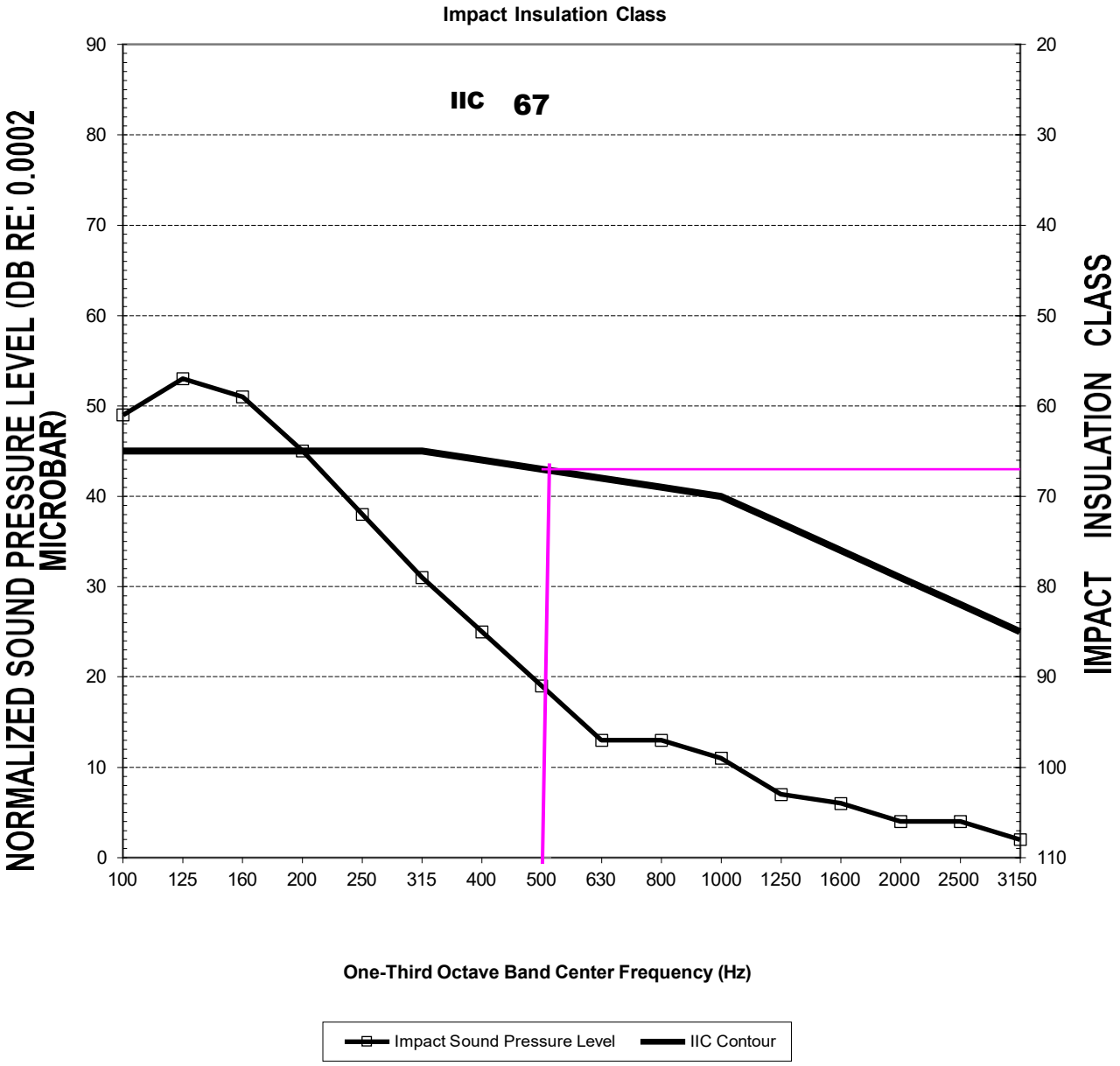
1/3 Octave Band Center Frequency Hertz	**TEST NUMBER #282526 ID: 2 ¾" APOLLO FLOORING** 1/3 Octave Band Sound Pressure Level dB re 0.0002 Microbar
100	49
125	53
160	51
200	45
250	38
315	31
400	25
500	19
630	13
800	13
1000	11
1250	7
1600	6
2000	4
2500	4
3150	2
Impact Insulation Class (IIC)	67

PRECISION

The 95% uncertainty level for each tapping machine location is less than 3 dB for the 1/3 octave bands centered in the range from 100 to 400 Hz and less than 2.5 dB for the bands centered in the range from 500 to 3150 Hz.

For the floor/ceiling construction, the 95% uncertainty limits (⎍↤↤L_n) for the normalized sound pressure levels were determined to be less than 2 dB for the 1/3 octave bands centered in the range from 100 to 3150 Hz.

TEST NUMBER #282526
ID: 2 ¾" APOLLO
FLOORING
OVER A SIX INCH CONCRETE SLAB WITH A DROP CEILING



EDGEWOOD MATTING LTD.

REMARKS

1. Ambient Temperature: 69°F
2. Relative Humidity: 42%

CONCLUSION

The test method employed for this test has no pass-fail criteria; therefore, the evaluation of the test results is left to the discretion of the client.

Date of Test: December 17, 2021

Report Approved by:

Brian Cyr
Engineer
Acoustical Testing

Report Reviewed by:

James R. Kline
Engineer/Quality Supervisor
Acoustical Testing

Attachments: None

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REPORT

3933 US ROUTE 11 CORTLAND, NEW YORK 13045

Order No. 103930499 Date: February 24, 2022

REPORT NO. 103930499CRT-025pa

IMPACT SOUND TRANSMISSION TEST ON
TEST NUMBER #282526
ID: 2 ¾" APOLLO FLOORING
OVER A SIX INCH CONCRETE SLAB WITH A DROP CEILING

RENDERED TO

Edgewood Matting Ltd.

INTRODUCTION

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AUTHORIZATION

Signed Intertek Quotation No. Qu-00974967-0

TEST METHOD

The floor system was tested in general accordance with ISO 10140-3:2010, "Acoustics -- Laboratory measurement of sound insulation of building elements -- Part 3: Measurement of impact sound insulation". It was classified in accordance with ISO 717-2:2013, entitled, "Acoustics -- Rating of sound insulation in buildings and of building elements -- Part 2: Impact sound insulation".

GENERAL

The test method is designed to measure the impact sound transmission performance of a floor-ceiling assembly, in a controlled laboratory environment. A standard tapping machine (Bruel & Kjaer Type 3207) was placed at four positions on the test floor that forms the horizontal separation between two rooms, one directly above the other. The data obtained was normalized to a reference room absorption of 10 square meters in accordance with the test method.

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f1	Bare Massive Floor			f1	With floor Covering		
1/3 Octave Band Center Frequency, Hz	Ln, dB	Reference Values Shifted by 28 dB	Unfavourarable deviation, dB	1/3 Octave Band Center Frequency, Hz	Ln, dB	Reference Values Shifted by -20 dB	Unfavourarable deviation, dB
100	65.5	90	0	100	49.3	42	7.3
125	67.5	90	0	125	53.1	42	11.1
160	70.4	90	0	160	51.1	42	9.1
200	70.8	90	0	200	45.1	42	3.1
250	71.8	90	0	250	38.1	42	0
315	73.4	90	0	315	31.1	42	0
400	73.5	89	0	400	25.4	41	0
500	74.1	88	0	500	19.3	40	0
630	74.3	87	0	630	13.2	39	0
800	75.1	86	0	800	13.2	38	0
1000	76.7	85	0	1000	11.4	37	0
1250	78.9	82	0	1250	6.6	34	0
1600	80.8	79	1.8	1600	6.1	31	0
2000	82.7	76	6.7	2000	4.3	28	0
2500	82.1	73	9.1	2500	3.7	25	0
3150	81.4	70	11.4	3150	2.0	22	0
	Ln,Sum =	88.9	dB		Ln,Sum =	56.6	dB
	C1 =	-14.1	dB		C1 =	1.6	dB
	Unfavorable Deviation, dB		29		Unfavorable Deviation, dB		31
	Ln,w =	88	dB		**Ln,w =**	**40**	**dB**

PRECISION

The 95% uncertainty level for each tapping machine location is less than 3 dB for the 1/3 octave bands centered in the range from 100 to 400 Hz and less than 2.5 dB for the bands centered in the range from 500 to 3150 Hz.

For the floor/ceiling construction, the 95% uncertainty limits ($\triangle L_n$) for the normalized sound pressure levels were determined to be less than 2 dB for the 1/3 octave bands centered in the range from 100 to 3150 Hz.

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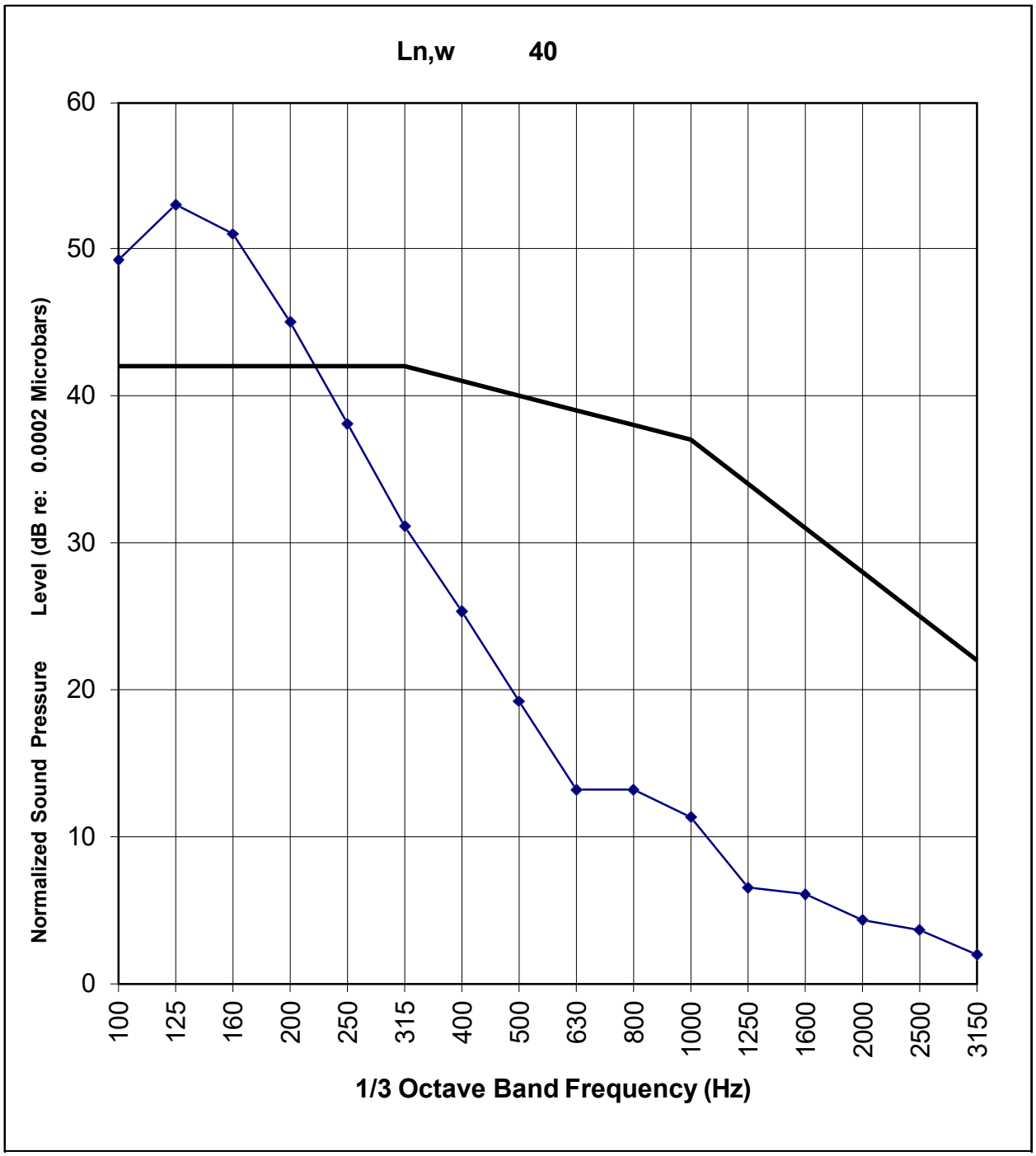

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