

NATIONAL TECHNICAL UNIVERSITY OF ATHENS

ACOUSTICS RESEARCH & SIMULATION LAB

School of Architecture

9 Iroon Politechneiou, Zografou Campus, 157 80 Athens, tel: 210-7721394, Fax 1393

Certificate of acoustic performance Sound absorption coefficients laboratory test

α_w | Sound Absorption Class | NRC

ISO 354

Measurement of sound absorption in a reverberation room

ISO 11654

Sound absorbers for use in buildings - Rating of sound absorption

ASTM C423

Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method

Certificate Serial Number: *PAPWOO WP aw 115-2026*

Total Pages: *15*

Contractor: *Pappous Woodworks Hellas*

Test Element Type: *Absorptive Wall Panel*

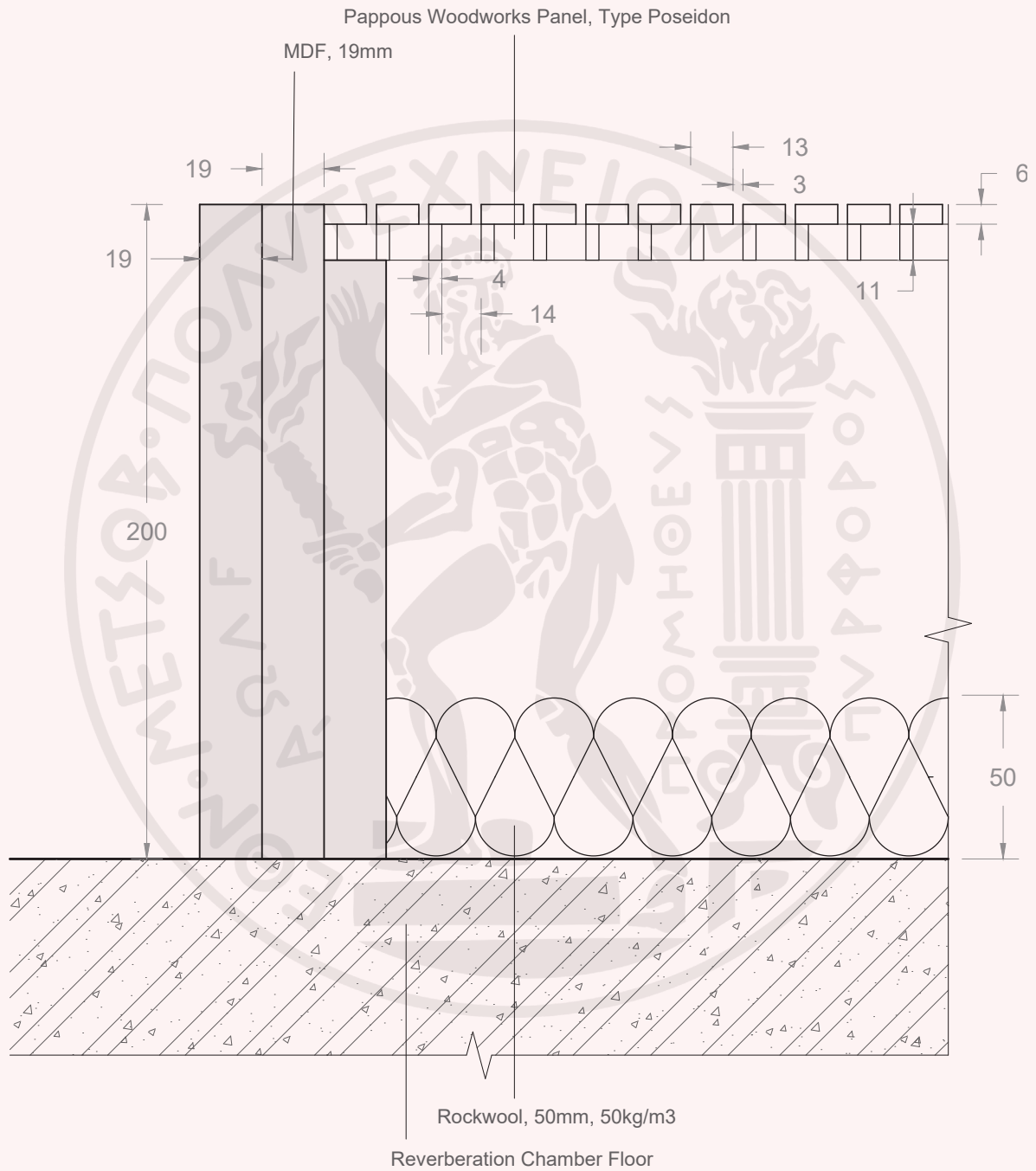
Contractor's Test Element ID : *Poseidon PA.001-50*

Measurement Location: *NTUA Acoustics Laboratory - Zografou Campus, Athens-Greece*

Transaction Details: *1ArD5bVUzvRxvwwg1bpYv Eurobank e-banking Electronic Payment*

Issue Date: *24-01-2026*

TECHNICAL DRAWINGS

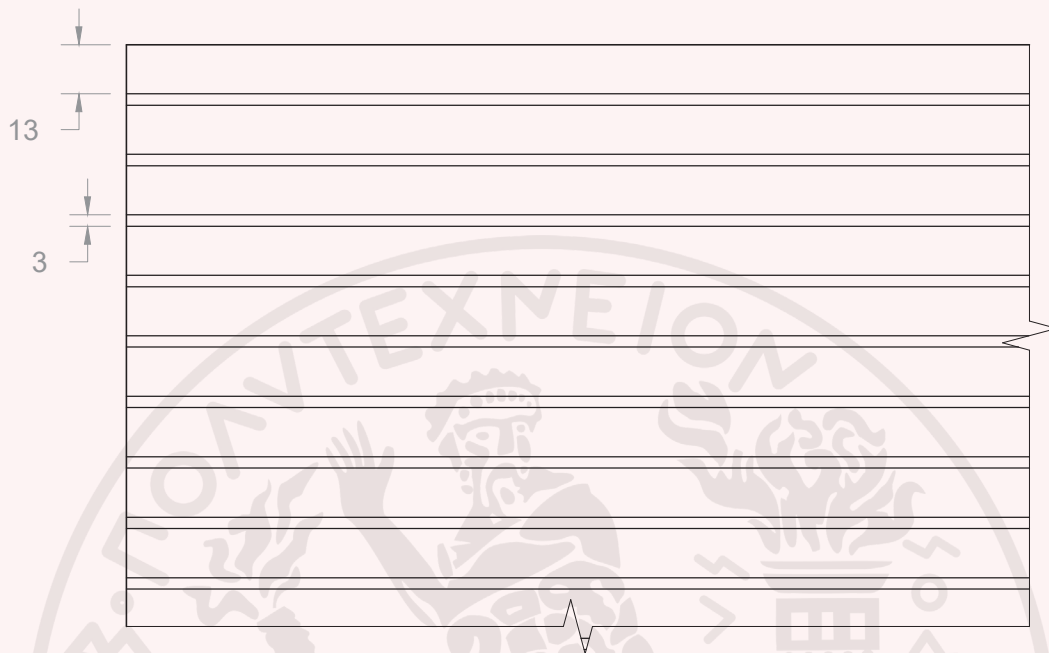


Test Element Section Detail

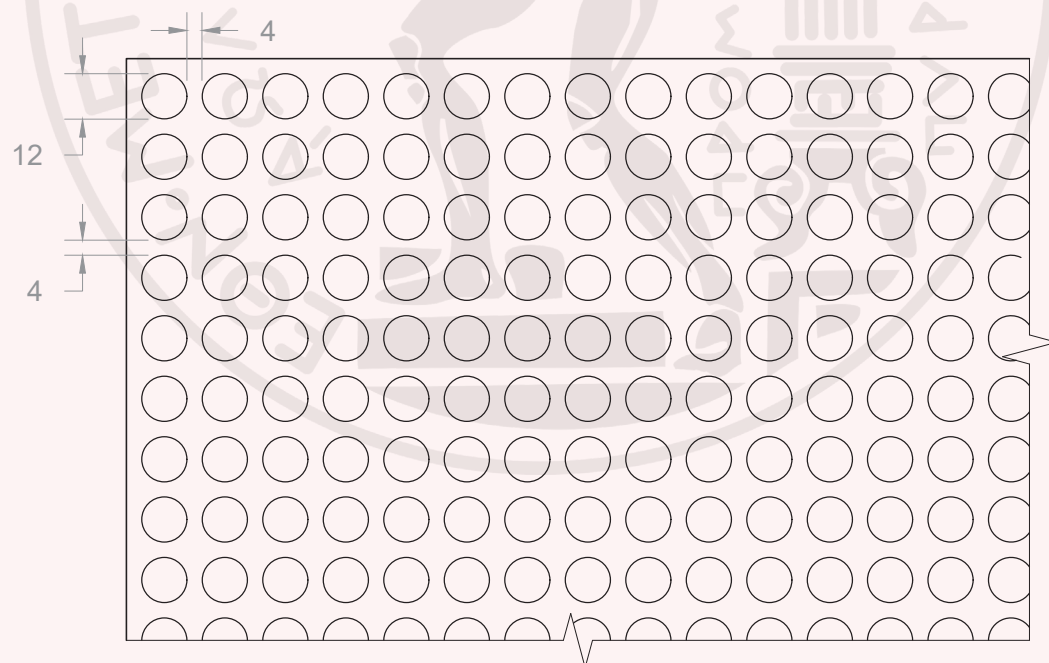
Scale 1:2

All dimensions in millimeters

TECHNICAL DRAWINGS



Panel Detail | Front



Panel Detail | Rear

Scale 1:2

All dimensions in millimeters

MEASUREMENT RESULTS

The performance indices and spectral analysis for the predescribed test item are as follows :

Sound absorption according to ISO 354:2003
Measurement of sound absorption in a reverberation room

Client: Pappous Woodworks | Hellas Date of test: 11/12/2025
 Object: Poseidon Timber Panel | As per manufacturer's description & technical drawings [Attached]
 Type E-200 | With 50 mm. 50 kg/m3 Rockwool backing directly on the floor

Room Volume: 242.80 m³ Specimen Area: 11.9 m²
 T1 Temperature: 16.0 °C Humidity: 61.9 % Pressure: 100.200 kPa
 T2 Temperature: 16.7 °C Humidity: 55.7 % Pressure: 100.200 kPa

Freq f Hz	T1 RT s	T2 RT s	α_s	α_p
100	15.85	8.04	0.20	0.30
125	12.16	6.28	0.25	
160	11.66	4.83	0.40	
200	11.94	3.69	0.62	0.75
250	12.51	3.46	0.69	
315	11.26	2.83	0.88	
400	9.91	2.97	0.78	0.75
500	10.13	3.17	0.72	
630	9.30	3.14	0.70	
800	8.81	3.04	0.71	0.80
1000	8.30	2.79	0.79	
1250	7.44	2.54	0.85	
1600	6.45	2.38	0.87	0.85
2000	5.20	2.21	0.85	
2500	4.06	2.03	0.80	
3150	3.15	1.81	0.75	0.65
4000	2.43	1.60	0.66	
5000	1.96	1.42	0.58	

Sound Absorption Coefficient

Rating in accordance with ISO 11654:1997:
 $\alpha_w = 0.80$ Class B

Rating in accordance with ASTM C423-17:
NRC = 0.75 SAA = 0.77

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