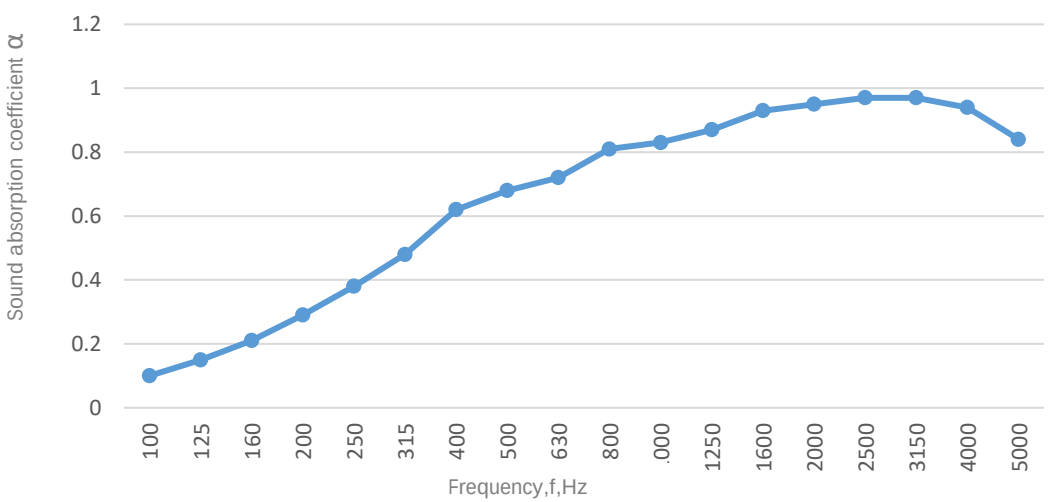
AUTEX

Sound Absorption Calculation

Description:	7mm APA + AAB 32kgm3 25mm	
Thickness mm:		
Flow resistivity product:	68983	0.5mm/s(Pa.s/m2) ISO 9053-12018
Flow resistivity product:	47003	0.5mm/s(Pa.s/m2) ISO 9053-12018
Thermal Rm-Total Calculated	23°	R-0.84

Frequency	Absorption Coefficient
100	0.1
125	0.15
160	0.21
200	0.29
250	0.38
315	0.48
400	0.62
500	0.68
630	0.72
800	0.81
1000	0.83
1250	0.87
1600	0.93
2000	0.95
2500	0.97
3150	0.97
4000	0.94
5000	0.84



Random Incidence:

Practical Sound Absorption Coefficients						NRC	Class Rating:	C
							aW:	0.65
125	250	500	1000	2000	4000		Shape indicator:	H
0.15	0.4	0.65	0.85	0.95	0.9	0.70	250 Hz :	
							500 - 1000 Hz:	
							2000 - 4000 Hz:	H

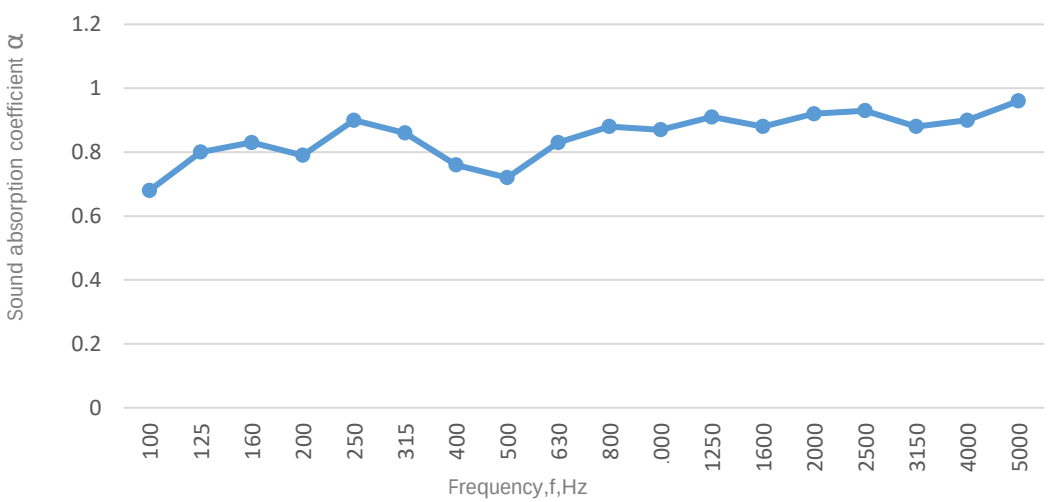
Reported values represent the estimated practical sound absorption coefficients calculated from flow resistivity values obtained in accordance with ISO 9053-12018 or ASTM C522-03. Where deviations in calculated values do not correlate with similar tested products some values may have been adjusted to account for these anomalies. The graph presents third octave sound absorption coefficients. The NRC rating is determined as the arithmetic average of the absorption coefficients measured by one-third octave bands centred on 250 Hz, 500 Hz, 1000 Hz and 2000 Hz, rounded to the nearest 0.05. Where the NRC is > 1 it is rounded to 1.00. The values and ratings in this report are obtained via calculation and not to be considered as a guarantee of performance.

Sound Absorption Calculation

Description: 7mm APA + AAB 32kgm3 25mm + **Aircavity**

Flow resistivity product: 68983 0.5mm/s(Pa.s/m2) ISO 9053-12018
Flow resistivity product: 47003 0.5mm/s(Pa.s/m2) ISO 9053-12018
Total System Depth 400mm

Frequency	Absorption Coefficient
100	0.68
125	0.8
160	0.83
200	0.79
250	0.9
315	0.86
400	0.76
500	0.72
630	0.83
800	0.88
1000	0.87
1250	0.91
1600	0.88
2000	0.92
2500	0.93
3150	0.88
4000	0.90
5000	0.96



Random Incidence:

Practical Sound Absorption Coefficients						NRC	Class Rating:	B
							aW:	0.85
125	250	500	1000	2000	4000		Shape indicator:	
0.75	0.85	0.75	0.9	0.9	0.9	0.85	250 Hz :	
							500 - 1000 Hz:	
							2000 - 4000 Hz:	

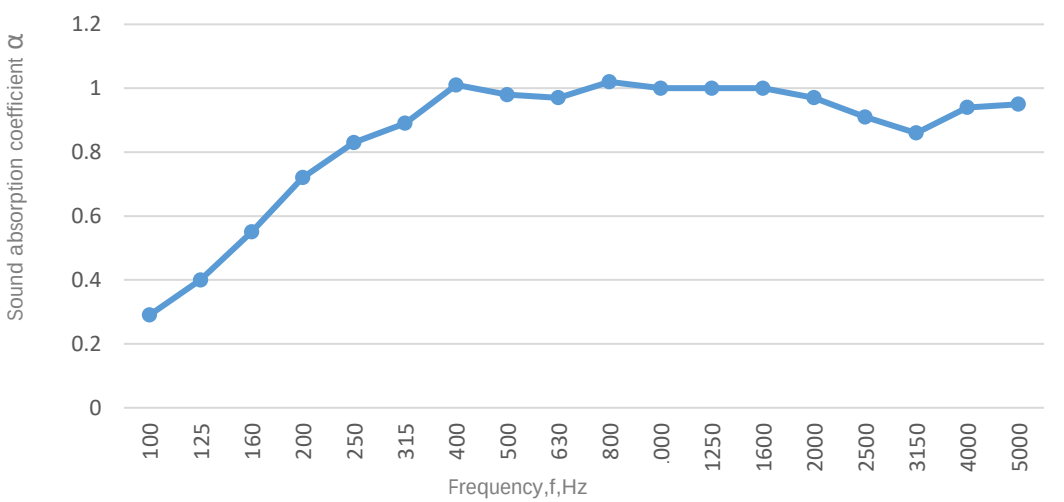
Reported values represent the estimated practical sound absorption coefficients calculated from flow resistivity values obtained in accordance with ISO 9053-12018 or ASTM C522-03. Where deviations in calculated values do not correlate with similar tested products some values may have been adjusted to account for these anomalies. The graph presents third octave sound absorption coefficients. The NRC rating is determined as the arithmetic average of the absorption coefficients measured by one-third octave bands centred on 250 Hz, 500 Hz, 1000 Hz and 2000 Hz, rounded to the nearest 0.05. Where the NRC is > 1 it is rounded to 1.00. The values and ratings in this report are obtained via calculation and not to be considered as a guarantee of performance.

AUTEX

Sound Absorption Calculation

Description:	7mm APA + AAB 32kgm3 50mm	
Thickness mm:		
Flow resistivity product:	68983	0.5mm/s(Pa.s/m2) ISO 9053-12018
Flow resistivity product:	47003	0.5mm/s(Pa.s/m2) ISO 9053-12018
Thermal Rm-Total Calculated	23°	R-1.48

Frequency	Absorption Coefficient
100	0.29
125	0.4
160	0.55
200	0.72
250	0.83
315	0.89
400	1.01
500	0.98
630	0.97
800	1.02
1000	1
1250	1
1600	1
2000	0.97
2500	0.91
3150	0.86
4000	0.94
5000	0.95



Random Incidence:

Practical Sound Absorption Coefficients						NRC	Class Rating:	A
							aW:	1
125	250	500	1000	2000	4000		Shape indicator:	
0.4	0.8	1	1	0.95	0.9	0.95	250 Hz :	
							500 - 1000 Hz:	
							2000 - 4000 Hz:	

Reported values represent the estimated practical sound absorption coefficients calculated from flow resistivity values obtained in accordance with ISO 9053-12018 or ASTM C522-03. Where deviations in calculated values do not correlate with similar tested products some values may have been adjusted to account for these anomalies. The graph presents third octave sound absorption coefficients. The NRC rating is determined as the arithmetic average of the absorption coefficients measured by one-third octave bands centred on 250 Hz, 500 Hz, 1000 Hz and 2000 Hz, rounded to the nearest 0.05. Where the NRC is > 1 it is rounded to 1.00. The values and ratings in this report are obtained via calculation and not to be considered as a guarantee of performance.

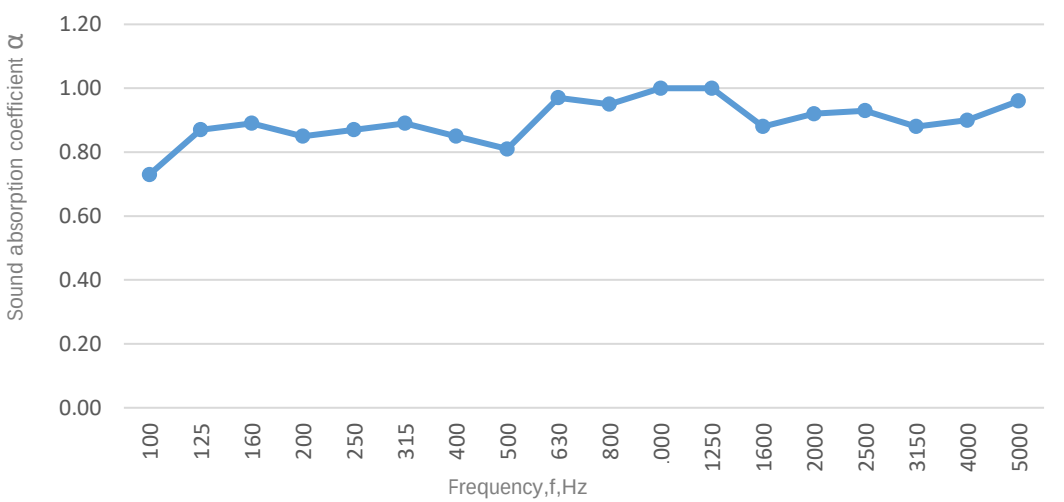
AUTEX

Sound Absorption Calculation

Description: 7mm APA + AAB 32kgm3 50mm + **A**irspace

Flow resistivity product: 68983 0.5mm/s(Pa.s/m2) ISO 9053-12018
Flow resistivity product: 47003 0.5mm/s(Pa.s/m2) ISO 9053-12018
Nominal Air-cavity 200mm

Frequency	Absorption Coefficient
100	0.73
125	0.87
160	0.89
200	0.85
250	0.87
315	0.89
400	0.85
500	0.81
630	0.97
800	0.95
1000	1.00
1250	1.00
1600	0.88
2000	0.92
2500	0.93
3150	0.88
4000	0.90
5000	0.96



Random Incidence:

Practical Sound Absorption Coefficients						NRC	Class Rating:	A
							aW:	0.95
125	250	500	1000	2000	4000		Shape indicator:	
0.85	0.85	0.9	1	0.9	0.9	0.90	250 Hz :	
							500 - 1000 Hz:	
							2000 - 4000 Hz:	

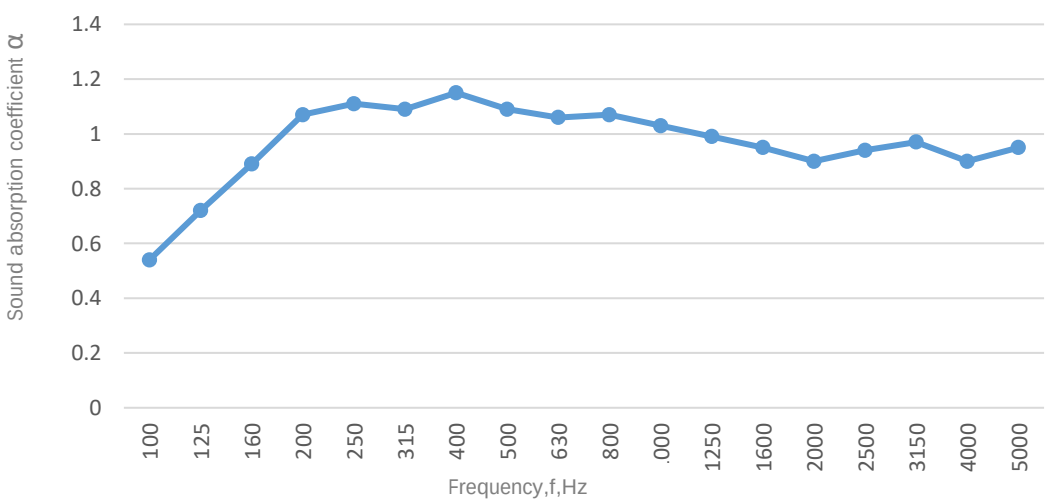
Reported values represent the estimated practical sound absorption coefficients calculated from flow resistivity values obtained in accordance with ISO 9053-12018 or ASTM C522-03. Where deviations in calculated values do not correlate with similar tested products some values may have been adjusted to account for these anomalies. The graph presents third octave sound absorption coefficients. The NRC rating is determined as the arithmetic average of the absorption coefficients measured by one-third octave bands centred on 250 Hz, 500 Hz, 1000 Hz and 2000 Hz, rounded to the nearest 0.05. Where the NRC is > 1 it is rounded to 1.00. The values and ratings in this report are obtained via calculation and not to be considered as a guarantee of performance.

AUTEX

Sound Absorption Calculation

Description:	7mm APA + AAB 32kgm3 75mm	
Thickness mm:		
Flow resistivity product:	68983	0.5mm/s(Pa.s/m2) ISO 9053-12018
Flow resistivity product:	47003	0.5mm/s(Pa.s/m2) ISO 9053-12018
Thermal Rm-Total Calculated	23°	R-2.12

Frequency	Absorption Coefficient
100	0.54
125	0.72
160	0.89
200	1.07
250	1.11
315	1.09
400	1.15
500	1.09
630	1.06
800	1.07
1000	1.03
1250	0.99
1600	0.95
2000	0.9
2500	0.94
3150	0.97
4000	0.9
5000	0.95



Random Incidence:

Practical Sound Absorption Coefficients						NRC	Class Rating:	A
							aW:	1
125	250	500	1000	2000	4000		Shape indicator:	
0.7	1	1	1	0.95	0.95	1.00	250 Hz :	
							500 - 1000 Hz:	
							2000 - 4000 Hz:	

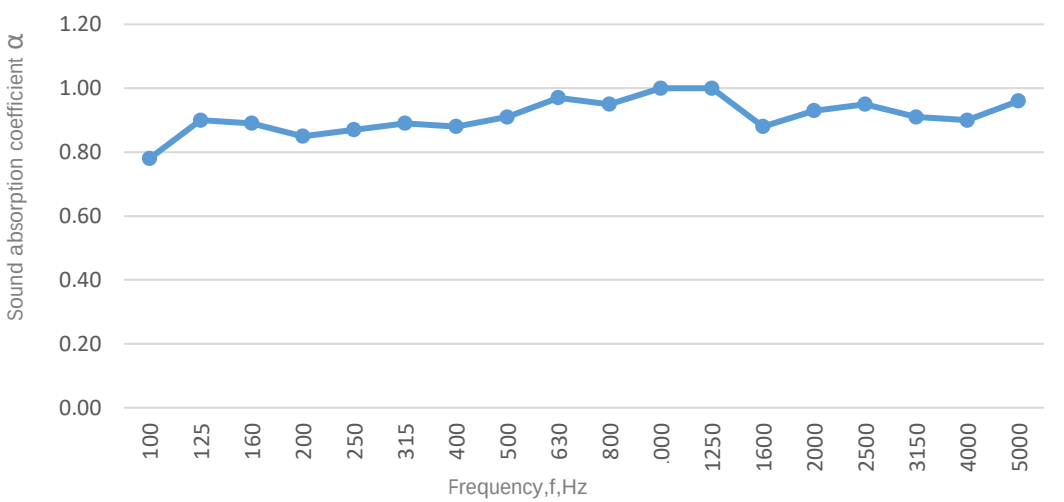
Reported values represent the estimated practical sound absorption coefficients calculated from flow resistivity values obtained in accordance with ISO 9053-12018 or ASTM C522-03. Where deviations in calculated values do not correlate with similar tested products some values may have been adjusted to account for these anomalies. The graph presents third octave sound absorption coefficients. The NRC rating is determined as the arithmetic average of the absorption coefficients measured by one-third octave bands centred on 250 Hz, 500 Hz, 1000 Hz and 2000 Hz, rounded to the nearest 0.05. Where the NRC is > 1 it is rounded to 1.00. The values and ratings in this report are obtained via calculation and not to be considered as a guarantee of performance.

Sound Absorption Calculation

Description: 7mm APA + AAB 32kgm3 75-**100**mm + Aircavity

Flow resistivity product: 68983 0.5mm/s(Pa.s/m2) ISO 9053-12018
Flow resistivity product: 47003 0.5mm/s(Pa.s/m2) ISO 9053-12018
Total System Depth 400mm

Frequency	Absorption Coefficient
100	0.78
125	0.90
160	0.89
200	0.85
250	0.87
315	0.89
400	0.88
500	0.91
630	0.97
800	0.95
1000	1.00
1250	1.00
1600	0.88
2000	0.93
2500	0.95
3150	0.91
4000	0.90
5000	0.96



Random Incidence:

Practical Sound Absorption Coefficients						NRC	Class Rating:	A
							aW:	0.95
125	250	500	1000	2000	4000		Shape indicator:	
0.85	0.85	0.9	1	0.9	0.9	0.95	250 Hz :	
							500 - 1000 Hz:	
							2000 - 4000 Hz:	

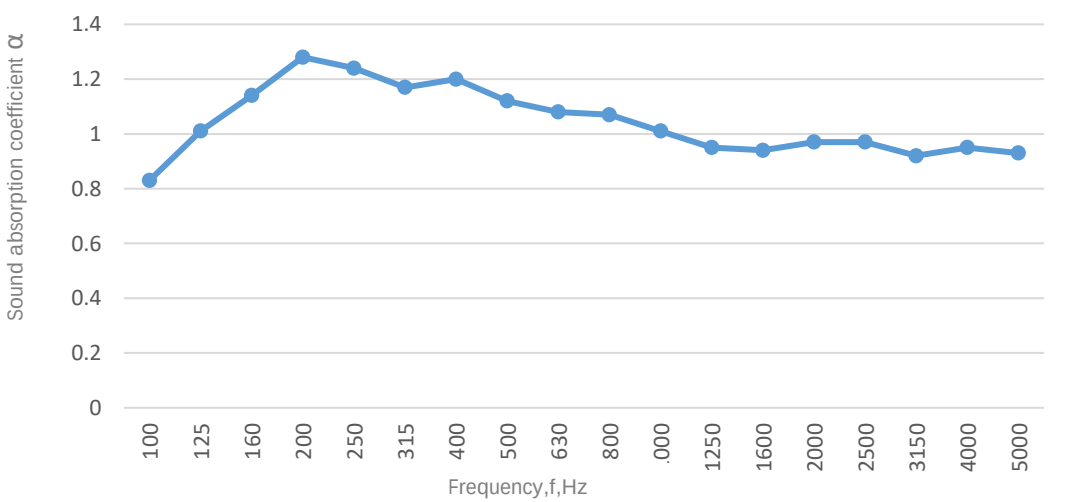
Reported values represent the estimated practical sound absorption coefficients calculated from flow resistivity values obtained in accordance with ISO 9053-12018 or ASTM C522-03. Where deviations in calculated values do not correlate with similar tested products some values may have been adjusted to account for these anomalies. The graph presents third octave sound absorption coefficients. The NRC rating is determined as the arithmetic average of the absorption coefficients measured by one-third octave bands centred on 250 Hz, 500 Hz, 1000 Hz and 2000 Hz, rounded to the nearest 0.05. Where the NRC is > 1 it is rounded to 1.00. The values and ratings in this report are obtained via calculation and not to be considered as a guarantee of performance.

AUTEX

Sound Absorption Calculation

Description:	7mm APA + AAB 32kgm3 100mm	
Thickness mm:		
Flow resistivity product:	68983	0.5mm/s(Pa.s/m2) ISO 9053-12018
Flow resistivity product:	47003	0.5mm/s(Pa.s/m2) ISO 9053-12018
Thermal Rm-Total Calculated	23°	R-2.70

Frequency	Absorption Coefficient
100	0.83
125	1.01
160	1.14
200	1.28
250	1.24
315	1.17
400	1.2
500	1.12
630	1.08
800	1.07
1000	1.01
1250	0.95
1600	0.94
2000	0.97
2500	0.97
3150	0.92
4000	0.95
5000	0.93



Random Incidence:

Practical Sound Absorption Coefficients						NRC	Class Rating:	A
							aW:	1
125	250	500	1000	2000	4000		Shape indicator:	
1	1	1	1	0.95	0.95	1.00	250 Hz :	
							500 - 1000 Hz:	
							2000 - 4000 Hz:	

Reported values represent the estimated practical sound absorption coefficients calculated from flow resistivity values obtained in accordance with ISO 9053-12018 or ASTM C522-03. Where deviations in calculated values do not correlate with similar tested products some values may have been adjusted to account for these anomalies. The graph presents third octave sound absorption coefficients. The NRC rating is determined as the arithmetic average of the absorption coefficients measured by one-third octave bands centred on 250 Hz, 500 Hz, 1000 Hz and 2000 Hz, rounded to the nearest 0.05. Where the NRC is > 1 it is rounded to 1.00. The values and ratings in this report are obtained via calculation and not to be considered as a guarantee of performance.