

Sound absorption results Admiral backdrops ISO 354

Measurement of sound absorption in reverberation rooms

Material details

- curtain fabric type Euro Molton, colour 075 black
- single layer, material 64 % cotton, 36 % polyester
- area specific app. mass $m'' = 356 \text{ g/m}^2$
- airflow resistance $R_S = 803 \text{ Pa s/m}$
- thickness $t = 1.85 \text{ mm}$

Mounting

- arranged folded (100 %) in 1 curtain width x height = 6.96 m x 3.05 m
- clear distance to the wall 200 mm
- arranged without enclosing frame
- hanging on a metal rail (height 30 mm)
- total dimensions of the test surface: width x height = 3.48 m x 3.02 m

Room: E

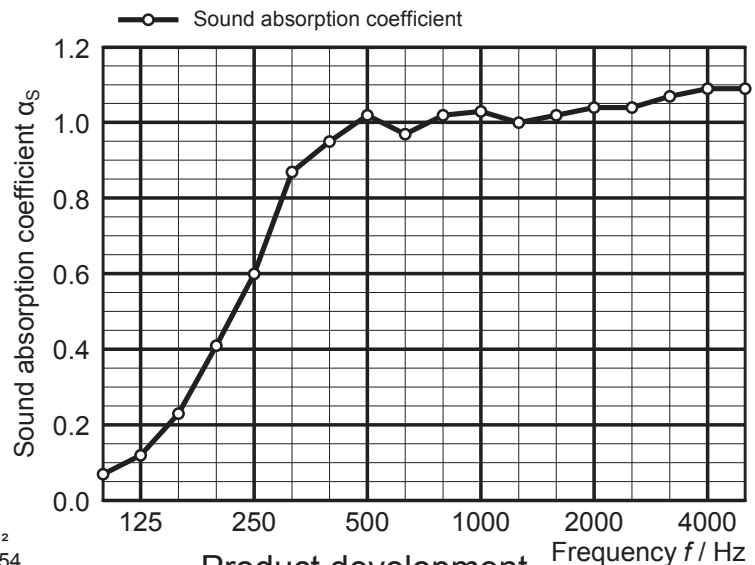
Volume: 199.60 m³

Size: 10.51 m²

Date of test: 2017-09-05

Frequency [Hz]	α_s 1/3 octave	α_p octave
100	0.07	
125	0.12	0.15
160	0.23	
200	0.41	
250	0.60	0.65
315	0.87	
400	0.95	
500	1.02	1.00
630	0.97	
800	1.02	
1000	1.03	1.00
1250	1.00	
1600	1.02	
2000	1.04	1.00
2500	1.04	
3150	1.07	
4000	1.09	1.00
5000	1.09	

	θ [°C]	r. h. [%]	B [kPa]
without specimen	22.3	58.8	95.7
with specimen	22.3	58.7	95.7



◦ Equivalent sound absorption area less than 1.0 m²
 α_s Sound absorption coefficient according to ISO 354
 α_p Practical sound absorption coefficient according to ISO 11654

Product development
only for internal use

Rating according to ISO 11654: Weighted sound absorption coefficient $\alpha_w = 0.95$ Sound absorption class: A	Rating according to ASTM C423: Noise Reduction Coefficient NRC = 0.90 Sound Absorption Average SAA = 0.91
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Material details

- curtain fabric type Euro Molton, colour 075 black
- single layer, material 64 % cotton, 36 % polyester
- area specific app. mass $m'' = 356 \text{ g/m}^2$
- airflow resistance $R_S = 803 \text{ Pa s/m}$
- thickness $t = 1.85 \text{ mm}$

Mounting

- arranged flat in 1 curtain width x height = 3.51 m x 3.05 m
- mounting type G-200: clear distance to the wall 200 mm
- arranged without enclosing frame
- hanging on a metal rail (height 30 mm)
- total dimensions of the test surface: width x height = 3.51 m x 3.02 m

Room: E

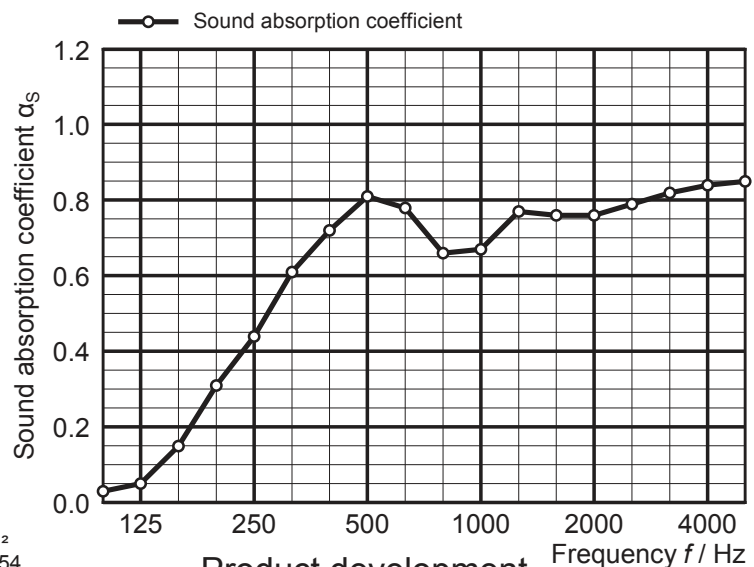
Volume: 199.60 m³

Size: 10.60 m²

Date of test: 2017-09-05

Frequency [Hz]	α_s 1/3 octave	α_p octave
100	0.03	
125	0.05	0.10
160	0.15	
200	0.31	
250	0.44	0.45
315	0.61	
400	0.72	
500	0.81	0.75
630	0.78	
800	0.66	
1000	0.67	0.70
1250	0.77	
1600	0.76	
2000	0.76	0.75
2500	0.79	
3150	0.82	
4000	0.84	0.85
5000	0.85	

	θ [°C]	r. h. [%]	B [kPa]
without specimen	22.3	58.8	95.7
with specimen	22.4	58.8	95.7



◦ Equivalent sound absorption area less than 1.0 m²

α_s Sound absorption coefficient according to ISO 354

α_p Practical sound absorption coefficient according to ISO 11654

Product development
only for internal use

Rating according to ISO 11654:
Weighted sound absorption coefficient
 $\alpha_w = 0.70 (H)$
Sound absorption class: C

Rating according to ASTM C423:
Noise Reduction Coefficient NRC = 0.65
Sound Absorption Average SAA = 0.67

MÜLLER-BBM

Planegg, 2017-09-05
No. of test M100047/1

Appendix A
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Rolight Theatertechniek bv
Josink Kolkweg 18
7545 PR Enschede



Your notice of
25-10-2018

Your reference

Date
06-12-2018

Analysis Report 18.06134.03

Required tests :

EN 13773 (2003)

Identification number	Information given by the client	Date of receipt
T1824747	Admiral backdrop, 320 g/m ²	25-10-2018

Gina Créelle

Order responsible

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The results of the analysis cover the received samples. Centexbel is not responsible for the representativeness of the samples.
In assessing compliance with the specifications, we did not take into account the uncertainty on the test results.



Reference: T1824747 - Admiral backdrop, 320 g/m²

Textiles – Burning behaviour – Curtains and drapes - Textile fabrics - Determination of the ignitability of vertically oriented specimens.

Date of ending the test 12-11-2018
Standard used EN 1101 (1995) + A1 (2005)
Product standard EN 13773 (2003)

Deviation from the standard -

Conditioning 20°C, relative humidity 65%

Ignition Bottom edge

The test specimens have not been cleaned nor submitted to an accelerated ageing procedure.

Length

Flame application time (s)	Cases of ignition	Cases of non-ignition
1	0	1
2	0	1
3	0	1
4	0	1
5	0	1
10	0	1
15	0	1
20	0	5

The mean of the recorded times at which ignition was observed is calculated
No ignition within 20 s



Width

Flame application time (s)	Cases of ignition	Cases of non-ignition
1	0	1
2	0	1
3	0	1
4	0	1
5	0	1
10	0	1
15	0	1
20	0	5

The mean of the recorded times at which ignition was observed is calculated
 No ignition within 20 s

Reference: T1824747 - Admiral backdrop, 320 g/m²

Textiles and textile products – Burning behaviour – Curtains and drapes. Measurement of flame spread of vertically oriented specimens with large ignition source.

Date of ending the test 19-11-2018
 Standard used EN 13772 (2011)
 Product standard EN 13773 (2003)

Deviation from the standard -

Conditioning 20°C, relative humidity 65%

The test specimens have not been cleaned nor submitted to an accelerated ageing procedure.

Length

	Face A	Face B	Face B	Face B
Severance 1 st thread	no	yes	yes	yes
Severance 2 nd thread	no	no	no	no
Severance 3 rd thread	no	no	no	no
Time to sever 3 rd thread (s)	/	/	/	/
Destroyed length (mm)	195	210	205	200
Flaming debris	no	no	no	no

Width

	Face A	Face B	Face B	Face B
Severance 1 st thread	yes	yes	yes	yes
Severance 2 nd thread	no	no	no	no
Severance 3 rd thread	no	no	no	no
Time to sever 3 rd thread (s)	/	/	/	/
Destroyed length (mm)	190	200	190	195
Flaming debris	no	no	no	no

Classification in accordance with EN 13773 Class 2