# Acoustic Board and Acoustic Panel

Arosa



06/2023 I AP E



# Arosa

#### **Product Description**

- The Schotten & Hansen Arosa is available as a board in width 1180 mm and as a panel in width 390 mm.
- Arosa is intended for further processing of interior elements without heavy mechanical stress and can be processed by interior fitters and carpenters.
- The barely visible micro-perforation absorbs sound and creates pleasantly muffled room acoustics.
   Whether in quiet or noisy environments, Arosa creates a gentle, clearly perceptible silence.
- In addition to oak in one of our Mineral & Terra colour schemes, Arosa is also available in other wood species or custom colours.
- The application of surface-finished veneers requires special handling of the material. The necessary expertise for this can be provided by Schotten & Hansen.

#### **Product Information**

Area of application	Ready for installation on walls and ceilings	
Description	Acoustic board and panel with Schotten & Hansen surface	
	Other wood species possible on request	
Length <sup>1</sup>	2820 mm	
	Other lenghts possible on reuquest	
Width <sup>1</sup>	1180 mm - acoustic panel / 390 mm - acoustic lamella	
	Other widths possible on request	
Thickness	approx. 16.5 mm (± 0.3 mm)	
Weight	approx. 11 kg / m²	
Construction	0.7 mm sliced veneer top layer, microperforated (0.3 mm hole diameter / 467,500 holes / m²) Multilayer construction: MDF exterior (moisture-resistant) glued on acoustic fleece (0.3 mm	
Profile processing	Groove circumferential micro bevel approx. 0.3 mm, 30°.	
Surface	Finished diffusion-open Schotten & Hansen surface	
	Surface treatment with natural oils, resins and waxes	
	Strong acids and alkalis should be avoided	
Cleaning & Care	Schotten & Hansen cleaning and maintenance products are recommended	
	For further information please refer to the cleaning and maintenance instructions or contact our	
	service department: service@schotten-hansen.com	
Recycling	Schotten & Hansen cleaning and maintenance products are recommended	
	For further information please refer to the cleaning and maintenance instructions or contact our	
	service department: service@schotten-hansen.com	

 $<sup>^{\</sup>mbox{\tiny 1}}\mbox{Dimensions}$  may vary slightly due to production.

All information in the data sheet as well as our further advice and consultation on application/use is based on emperical and scientific experiences. Therefore, these are provided without obligation or guarantee. Measurements may vary for production-related reasons. Due to the multitude of materials and different processing conditions, it is obligatory on the purchaser to verify the product's suitability for the requested purpose prior to the start of production.



# Arosa

#### Terra & Mineral

	Terra	Mineral
I		
II	A CANADA PROPERTY OF	
III		
IV		
V		

Customised colours on request.

#### Selection

1. Fine Rift, characterised by veneer sheets (approx. 70-160 mm) joined in the board character, with predominantly straight grain, free of sapwood and moon rings.

Fine selection in principle knot-free

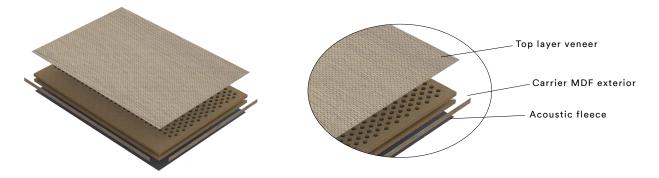
The specified width variation may be narrower at the edges due to manufacturing tolerances.

Other selection and veneer unwindings on request

#### **Treatment**

1. Brushed The wood's typical grain structure is acentuated through brushing

#### Construction



The long and the front sides are grooved and edged with the veneer edge 'Ascona'

Differences in colour between products is subject to variations and display exhibits or samples, as far as these are due to the natural quality of the used material as well as customary.

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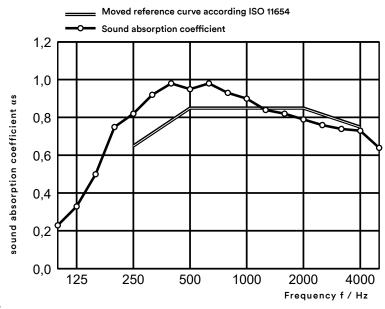
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#### **Acoustic Performance**

Evaluation according to ISO 11654	lphaw= 0.85 (Sound absorption coefficient)
Evaluation according to ASTM C423	NRC= 0.85 (Noice Reduction Coefficient)
Evaluation according to ASTM C423	SAA= 0.87 (Sound Absorption Average)

### $\alpha s$ Sound absorption coefficient

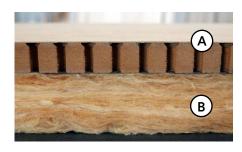
100         0.23           125         0.33         0.35           160         0.50         0.35           200         0.75         0.82           250         0.82         0.85           315         0.92         0.95           400         0.98         0.95           500         0.95         0.95           630         0.98         0.99           800         0.93         0.90           1000         0.90         0.90           1250         0.84         0.90           1600         0.82         0.00           2500         0.76         0.80           3150         0.74         0.73           4000         0.73         0.70	frequency [Hz]	third $lpha$ s	octave $\alpha$ p
160     0.50       200     0.75       250     0.82     0.85       315     0.92       400     0.98       500     0.95     0.95       630     0.98       800     0.93       1000     0.90     0.90       1250     0.84       1600     0.82       2000     0.79     0.80       2500     0.76       3150     0.74       4000     0.73     0.70	100	0.23	
200     0.75       250     0.82       315     0.92       400     0.98       500     0.95       630     0.98       800     0.93       1000     0.90       1250     0.84       1600     0.82       2000     0.79       2500     0.76       3150     0.74       4000     0.73     0.70	125	0.33	0.35
250     0.82     0.85       315     0.92     0.95       400     0.98     0.95       500     0.95     0.95       630     0.98     0.90       1000     0.90     0.90       1250     0.84     0.90       1600     0.82     0.80       2000     0.79     0.80       2500     0.76     0.74       4000     0.73     0.70	160	0.50	
315     0.92       400     0.98       500     0.95       630     0.98       800     0.93       1000     0.90       1250     0.84       1600     0.82       2000     0.79       2500     0.76       3150     0.74       4000     0.73       0.70	200	0.75	
400     0.98       500     0.95       630     0.98       800     0.93       1000     0.90       1250     0.84       1600     0.82       2000     0.79       2500     0.76       3150     0.74       4000     0.73       0.70	250	0.82	0.85
500     0.95       630     0.98       800     0.93       1000     0.90       1250     0.84       1600     0.82       2000     0.79       2500     0.76       3150     0.74       4000     0.73       0.90       0.90       0.90       0.90       0.90       0.90       0.90       0.90       0.90       0.90       0.80       0.70	315	0.92	
630     0.98       800     0.93       1000     0.90     0.90       1250     0.84       1600     0.82       2000     0.79     0.80       2500     0.76       3150     0.74       4000     0.73     0.70	400	0.98	
800 0.93 1000 0.90 0.90 1250 0.84 1600 0.82 2000 0.79 0.80 2500 0.76 3150 0.74 4000 0.73 0.70	500	0.95	0.95
1000 0.90 0.90 1250 0.84 0.90 1600 0.82 2000 0.79 0.80 2500 0.76 0.74 4000 0.73 0.70	630	0.98	
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1600 0.82 2000 0.79 0.80 2500 0.76 3150 0.74 4000 0.73 0.70	1000	0.90	0.90
2000     0.79     0.80       2500     0.76       3150     0.74       4000     0.73     0.70	1250	0.84	
2500     0.76       3150     0.74       4000     0.73     0.70	1600	0.82	
3150 0.74 4000 0.73 0.70	2000	0.79	0.80
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	3150	0.74	
	4000	0.73	0.70
5000 0.64	5000	0.64	

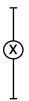


 $\alpha s$  Sound absorption coefficient according to ISO 354

 $\alpha p$  Practical sound absorption coefficient according to ISO 11654

## Test setup





(A) Acoustic board and panel	approx. 16.5 mm / acoustic fleece back
(B) Insulation	Commercially available mineral wool insulation (30 mm/ 23 kg/m³) - not a Schotten & Hansen product
(X) Total thickness	approx. 50 mm

