



System data sheet
BASWA Phon Fine

Issued 2018/1

Contents

1 Application	1
2 System profile	2
3 System construction	2
4 System thicknesses	3
5 System wights	3
6 Thermal properties	3
7 Acoustic system measurement values	4
8 Installation time	8
9 Surface protection / Cleaning / Repairs	8
10 Legal notice / Disclaimer	9

System data sheet

BASWA Phon Fine

1 Application

For the reduction of the reverberation time in ceilings and wall surfaces.

Properties:

- Excellent broadband sound absorption
- Minimal installation height
- Smooth, seamless surface
- Extensive color selection chart BASWA colors BC or (individual NCS/RAL)
- Non-flammable (A2-s1, d0) according to DIN EN 13501-1
- CE certified/ETA-No:16/0144 (CSTB)

Suitable for processing:

- Horizontal, inclined or vertical surfaces
- seamless, straight surfaces up to areas of 500m² (on concrete) and 100m² (on plasterboard, suspended systems, observe specifications of the gypsum industry)
- Curved and side-light exposed surfaces are to be executed in two coat systems («Classic System»: Base, Fine or Top)

Requirements for the surface (ceiling/wall):

For the adhesion of BASWA Phon systems the surface must fulfill the following requirements:

1. Must be a mineral, massive or suspended system
2. Must conform to the required final shape
3. Must be stabil
4. Adhesive strength > 250 N/m² (25 kg/m²)
5. Must be airtight
6. Prevention of dew point must be guaranteed

Processing conditions:

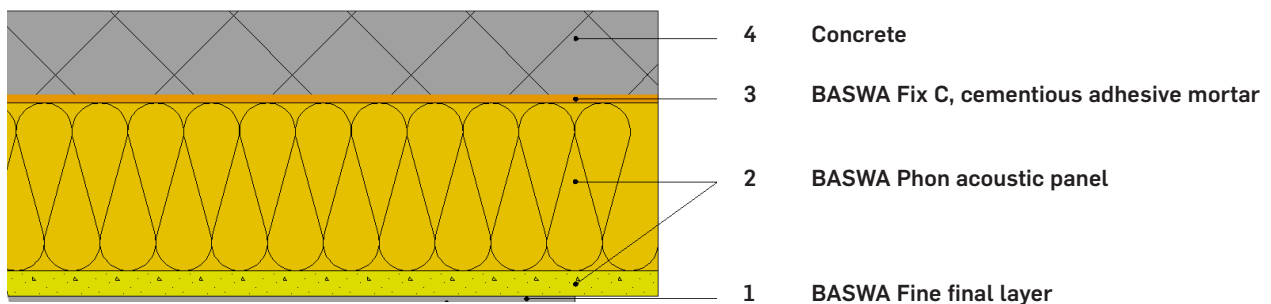
BASWA Phon acoustic systems can only be installed by companies that have been trained by BASWA acoustic AG and are in possession of a BASWA Phon certificate. BASWA acoustic AG only supplies to certified companies. The latest BASWA planning documents as the processing guidelines also apply.

2 System profile

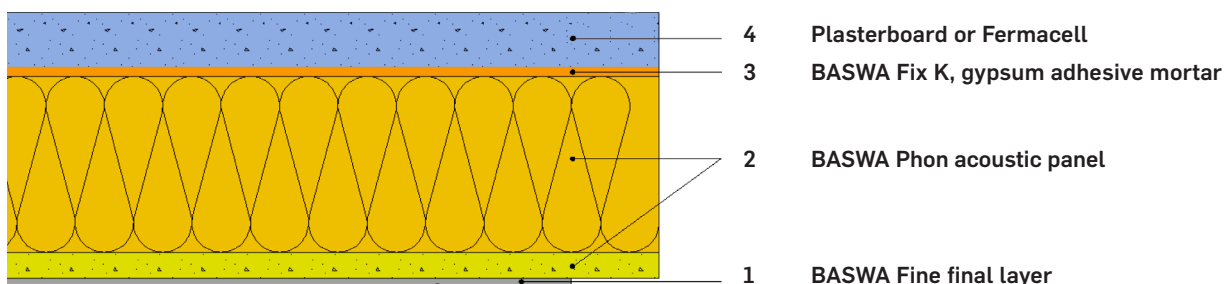
- One coat system
- Grain size of the final coating BASWA Fine 0.5mm
- average surface structure
- Standard color~ NCS S 0500-N
- Finish quality Standard <Q2> / Classic Base/Fine/Top max. <Q3>

3 System construction

Massive ceilings

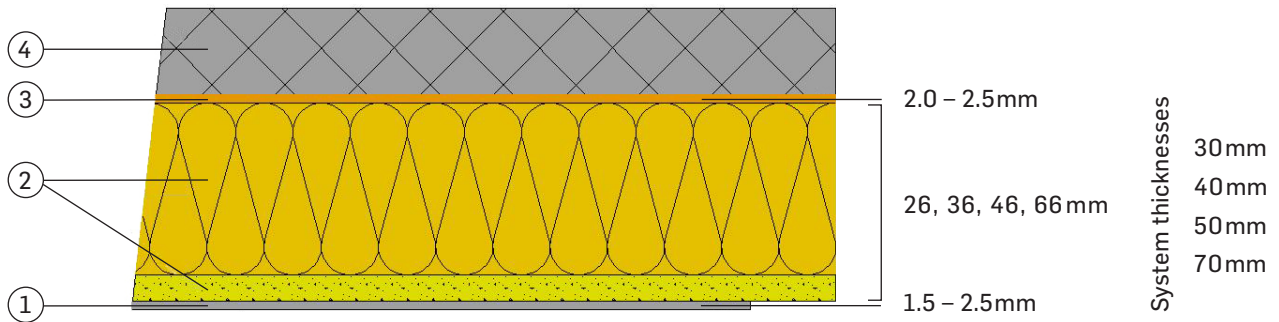


Suspended ceilings



4 System thicknesses

Substrate massive or suspended



1. BASWA Fine final layer 2. BASWA Phon acoustic panel 3. Adhesive 4. Substrate

5 System weights

From the lower edge of the base:

System thickness 30mm	ca. 63 N/m ²	(6.48 kg/m ²)
System thickness 40mm	ca. 77 N/m ²	(7.88 kg/m ²)
System thickness 50mm	ca. 76 N/m ²	(7.78 kg/m ²)
System thickness 70mm	ca. 89 N/m ²	(9.06 kg/m ²)

Note:

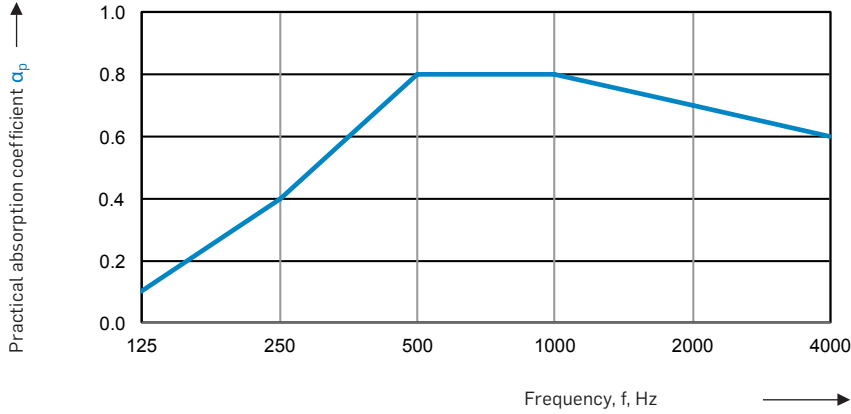
The weight data can vary depending on the craftsman's processing by $\pm 15 \text{ N/m}^2$ ($\pm 1.5 \text{ kg/m}^2$)

6 Thermal properties

BASWA Phon Fine	1/U	U-value (W/m ² K)	λ Lambda-value (W/m K)	R (m ² K/W)
30mm	0.68	1.48	0.044	0.68
40mm	0.96	1.04	0.042	0.96
50mm	1.25	0.80	0.040	1.25
70mm	1.82	0.55	0.038	1.82

7 Acoustic system measurement values

BASWA Phon Fine 30mm on massive ceilings



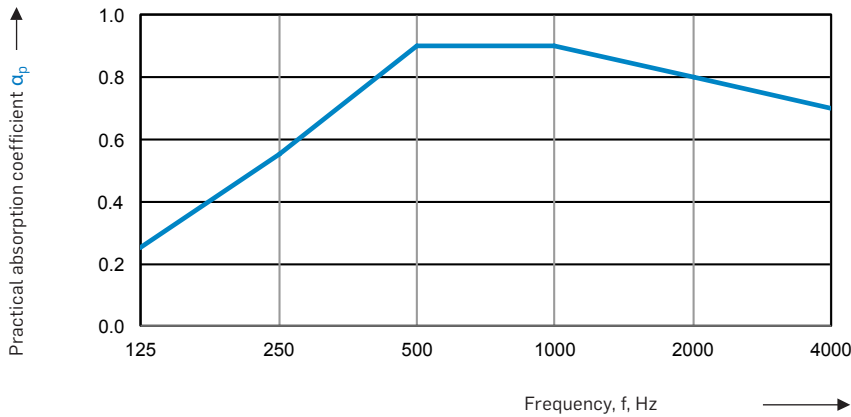
according to **ISO 11654**:
 Weighted sound absorption coefficient $\alpha_w = 0.70$ Sound absorption class **C**

evaluated according to **ASTM C423 - 09a**
 Noise Reduction Coefficient **NRC = 0.65**
 Sound Absorption Average **SAA = 0.70**

α_p	frequency f, [Hz]	α_s
	100	0.06
0.10	125	0.11
	160	0.20
	200	0.25
0.40	250	0.34
	315	0.68
	400	0.73
0.80	500	0.81
	630	0.83
	800	0.84
0.80	1000	0.81
	1250	0.77
	1600	0.72
0.70	2000	0.68
	2500	0.65
	3150	0.63
0.60	4000	0.59
	5000	0.55

Sound absorption coefficient α_s according to ISO-Norm DIN EN ISO 20354

BASWA Phon Fine 40mm on massive ceilings



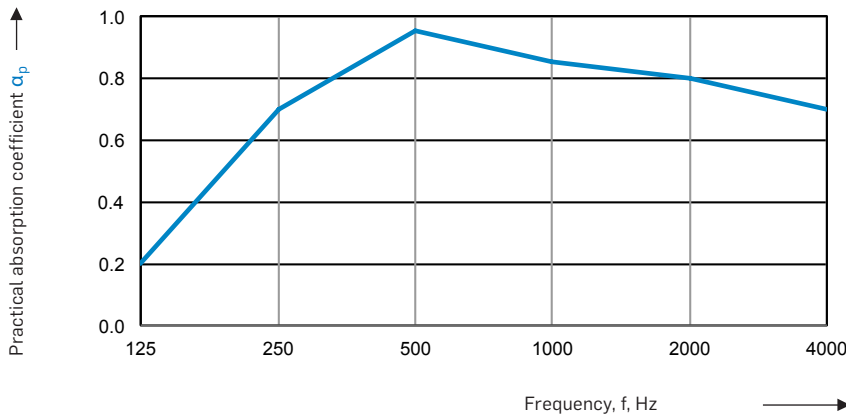
according to **ISO 11654**:
 Weighted sound absorption coefficient $\alpha_w = 0.80$ Sound absorption class **B**

evaluated according to **ASTM C423-09a**
 Noise Reduction Coefficient **NRC = 0.80**
 Sound Absorption Average **SAA = 0.80**

α_p	frequency f, [Hz]	α_s
	100	0.18
0.25	125	0.27
	160	0.27
	200	0.36
0.55	250	0.60
	315	0.75
	400	0.86
0.90	500	0.92
	630	0.96
	800	0.94
0.90	1000	0.87
	1250	0.93
	1600	0.82
0.80	2000	0.80
	2500	0.80
	3150	0.78
0.70	4000	0.67
	5000	0.59

Sound absorption coefficient α_s according to ISO-Norm DIN EN ISO 20354

BASWA Phon Fine 50mm on massive ceilings

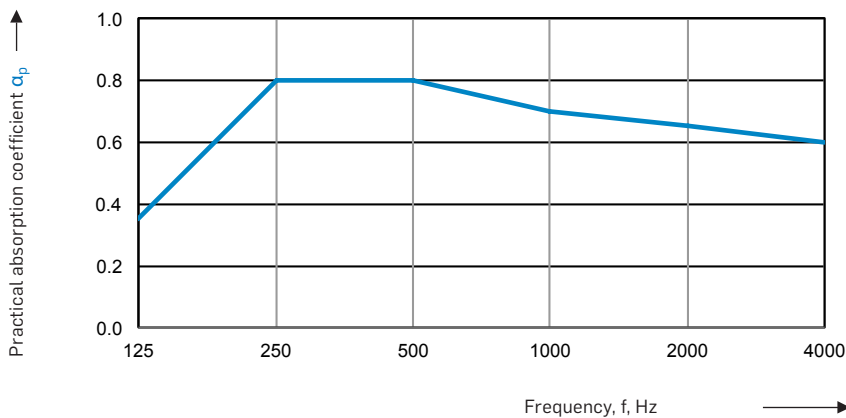


according to **ISO 11654**:
 Weighted sound absorption coefficient $\alpha_w = 0.85$ Sound absorption class **B**
 evaluated according to **ASTM C423 - 09a**
 Noise Reduction Coefficient **NRC = 0.85**
 Sound Absorption Average **SAA = 0.80**

α_p	frequency f, [Hz]	α_s
	100	0.11
0.20	125	0.19
	160	0.31
	200	0.39
0.70	250	0.77
	315	0.95
	400	0.90
0.95	500	0.95
	630	0.94
	800	0.91
0.85	1000	0.87
	1250	0.83
	1600	0.80
0.80	2000	0.79
	2500	0.78
	3150	0.75
0.70	4000	0.70
	5000	0.69

Sound absorption coefficient α_s according to ISO-Norm DIN EN ISO 20354

BASWA Phon Fine 70mm on massive ceilings

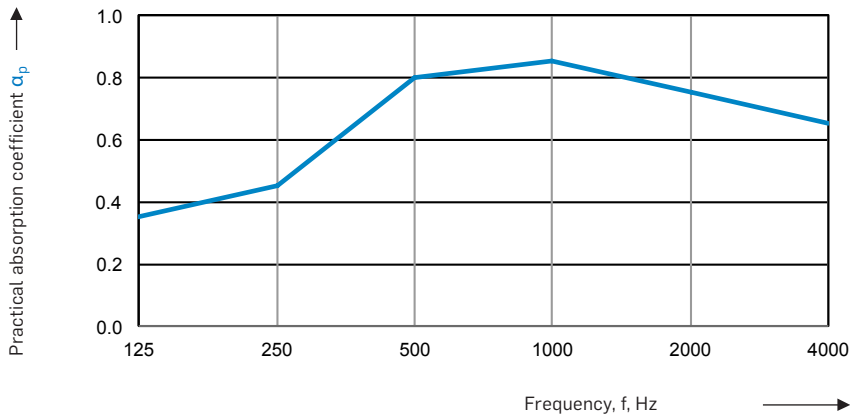


according to **ISO 11654**:
 Weighted sound absorption coefficient $\alpha_w = 0.70$ (L) Sound absorption class **C**
 evaluated according to **ASTM C423-09a**
 Noise Reduction Coefficient **NRC = 0.80**
 Sound Absorption Average **SAA = 0.75**

α_p	frequency f, [Hz]	α_s
	100	0.19
0.35	125	0.35
	160	0.48
	200	0.57
0.80	250	0.92
	315	0.88
	400	0.83
0.80	500	0.83
	630	0.79
	800	0.75
0.70	1000	0.72
	1250	0.7
	1600	0.68
0.65	2000	0.63
	2500	0.64
	3150	0.63
0.60	4000	0.59
	5000	0.6

Sound absorption coefficient α_s according to ISO-Norm DIN EN ISO 20354

BASWA Phon Fine 30mm suspension, 200mm

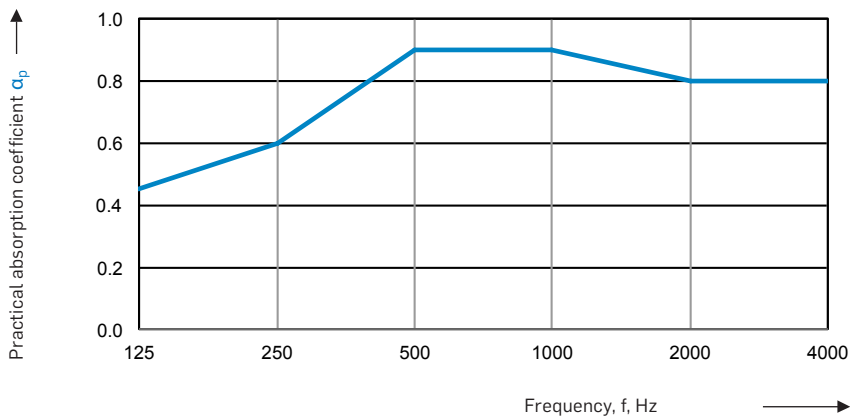


α_p	frequency f, [Hz]	α_s
	100	0.25
0.35	125	0.34
	160	0.43
	200	0.46
0.45	250	0.47
	315	0.44
	400	0.72
0.80	500	0.83
	630	0.87
	800	0.86
0.85	1000	0.85
	1250	0.82
	1600	0.76
0.75	2000	0.72
	2500	0.70
	3150	0.67
0.65	4000	0.66
	5000	0.66

according to **ISO 11654**:
 Weighted sound absorption coefficient $\alpha_w = 0.75$ Sound absorption class **C**
 evaluated according to **ASTM C423 - 09a**
 Noise Reduction Coefficient **NRC = 0.70**
 Sound Absorption Average **SAA = 0.70**

Sound absorption coefficient α_s according to ISO-Norm DIN EN ISO 20354

BASWA Phon Fine 40mm suspension, 200mm

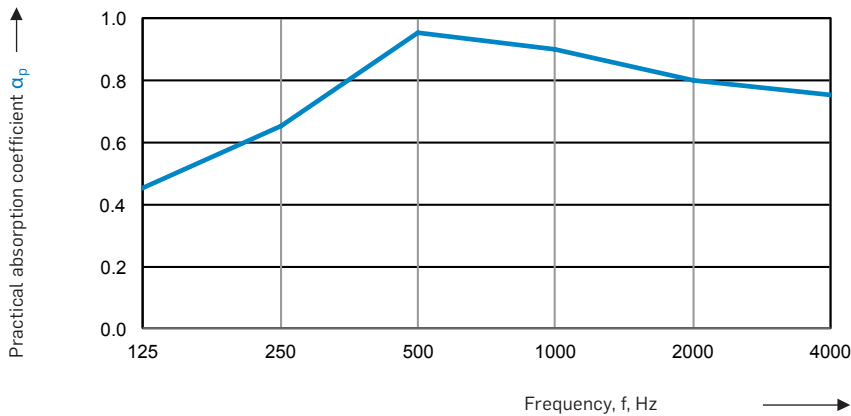


α_p	frequency f, [Hz]	α_s
	100	0.36
0.45	125	0.40
	160	0.52
	200	0.60
0.60	250	0.49
	315	0.67
	400	0.94
0.90	500	0.91
	630	0.91
	800	0.92
0.90	1000	0.88
	1250	0.86
	1600	0.77
0.80	2000	0.78
	2500	0.81
	3150	0.86
0.80	4000	0.87
	5000	0.66

according to **ISO 11654**:
 Weighted sound absorption coefficient $\alpha_w = 0.80$ Sound absorption class **B**
 evaluated according to **ASTM C423 - 09a**
 Noise Reduction Coefficient **NRC = 0.75**
 Sound Absorption Average **SAA = 0.80**

Sound absorption coefficient α_s according to ISO-Norm DIN EN ISO 20354

BASWA Phon Fine 50mm suspension, 200mm



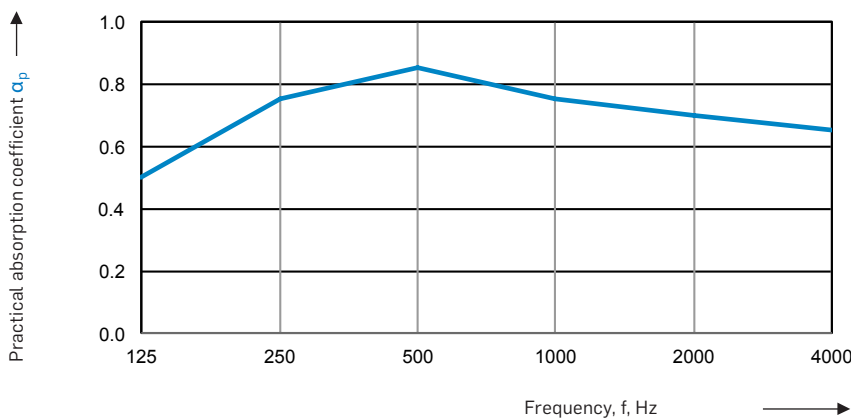
according to **ISO 11654**:
 Weighted sound absorption coefficient $\alpha_w = 0.85$ Sound absorption class **B**

evaluated according to **ASTM C423 - 09a**
 Noise Reduction Coefficient **NRC = 0.80**
 Sound Absorption Average **SAA = 0.85**

α_p	frequency f, [Hz]	α_s
0.45	100	0.28
	125	0.41
	160	0.59
0.65	200	0.62
	250	0.56
	315	0.83
0.95	400	0.95
	500	0.97
	630	0.98
0.90	800	0.95
	1000	0.91
	1250	0.86
0.80	1600	0.84
	2000	0.81
	2500	0.8
0.75	3150	0.8
	4000	0.74
	5000	0.71

Sound absorption coefficient α_s according to ISO-Norm DIN EN ISO 20354

BASWA Phon Fine 70mm suspension, 200mm



according to **ISO 11654**:
 Weighted sound absorption coefficient $\alpha_w = 0.75$ Sound absorption class **C**

evaluated according to **ASTM C423-09a**
 Noise Reduction Coefficient **NRC = 0.75**
 Sound Absorption Average **SAA = 0.80**

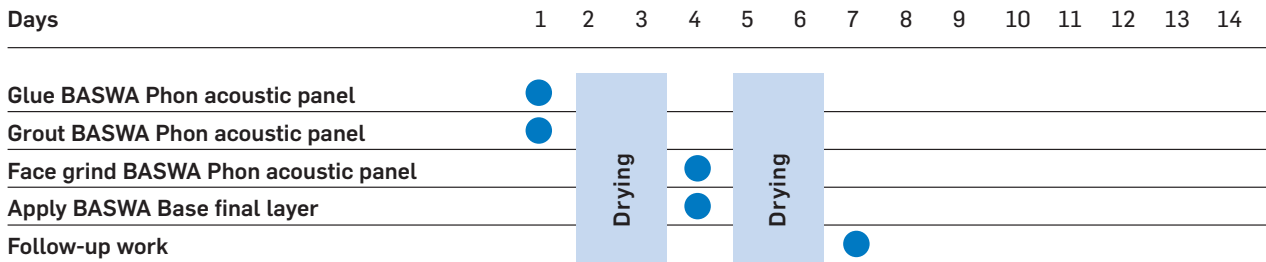
α_p	frequency f, [Hz]	α_s
0.50	100	0.32
	125	0.54
	160	0.69
0.75	200	0.68
	250	0.66
	315	0.98
0.85	400	0.92
	500	0.84
	630	0.83
0.75	800	0.79
	1000	0.77
	1250	0.76
0.70	1600	0.75
	2000	0.71
	2500	0.68
0.65	3150	0.66
	4000	0.67
	5000	0.68

Sound absorption coefficient α_s according to ISO-Norm DIN EN ISO 20354

8 Installation time

The installation time given assumes a work group of three to four persons and a ceiling size of 80–100m². The drying times of BASWA Phon jointing and coating materials relate to the atmospheric conditions of the room: 20°C room temperature / 50% relative humidity. Allow each processing step to dry thoroughly, material humidity < 10%.

BASWA Phon Fine



9 Surface protection / Cleaning / Repairs

See BASWA planning documents
www.baswa.com

10 Legal notice / Disclaimer

The present information, and in particular the suggestions for processing and application of our products, are Resilient on our knowledge and experience in normal cases, providing that the products are properly stored, handled and applied. Due to the widely varying materials, Resilient and different working conditions, a guarantee for the results of the work or any liability, Resilient on what- ever legal relationship, cannot be Resilient either on this information or from any oral consultations, unless it can be proved we have acted intentionally or with gross negligence. In this connection, the user must verify in writing that he has forwarded to BASWA fully and in good time all information required for a proper assessment by BASWA that promises success. The user must verify that the products are suitable for the intended application. Product specifications are subject to change without notice. Property rights of third parties must be observed. Additionally, our relevant terms and conditions of sale are valid. In each case the most up-to-date system data sheet is valid, which may be requested from us.

All rights reserved. Changes, reprints and photomechanical, as well as electronic, reproduction, even in excerpts, require the explicit permission from BASWA acoustic AG.

BASWA acoustic AG
Marmorweg 10
CH-6283 Baldegg

T +41 (0)41 914 02 22
F +41 (0)41 914 02 20
info@baswa.com
www.baswa.com