

**ArmaComfort<sup>®</sup>**

HIGH FLEXIBLE ACOUSTIC COMFORT



- Specially designed to reduce noise for rainwater and waste pipes
- Thin acoustic lagging with high performances
- Easy to apply and maintain





## NOISE CONTROL: KEY TERMS

**Sound** is a mechanical vibration which is perceived by the human ear in the frequency range 16 Hz to 16.000 Hz.

**Frequency** is the number of vibrations per second. The pitch rises as frequency increases. The most important range for building acoustics lies between 100 Hz and 3150 Hz.

**Sound Insertion loss** is the difference in sound levels measured between the bare pipe and the pipe with insulation. Such a measurement of sound reduction in dB(A) provides a direct indication of the improvement due to an acoustic solution.

**Bel (B) and decibel (dB)** are relative units and represent the ratio between two acoustic quantities on a logarithmic scale.

**Decibel (A), dB (A)** weights the volume according to frequencies. In this way it is possible to achieve a measurable representation of noise as it is perceived. Depending on the frequency, the human ear perceives tones of the same sound pressure as being of different loudness.

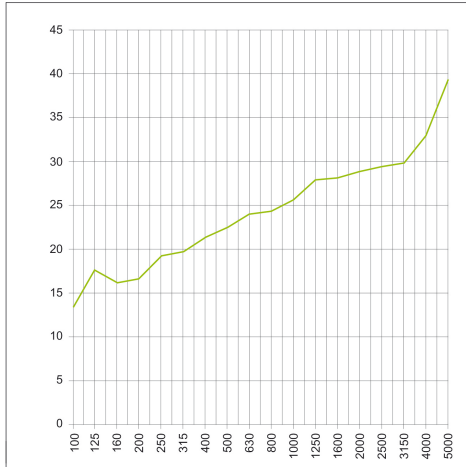
## Technical Data - ArmaComfort AB

Brief description	ArmaComfort® AB and AB Plus combine the acoustic performance of an excellent flexible Acoustic Barrier of 2 mm thickness and 4 kg/m <sup>2</sup> of weight and a damping Armaflex® flexible elastomeric foam of 9 mm.
Material type	Multilayer consists of an acoustic epdm-eva barrier and an elastomeric foam based on synthetic rubber.
Colour	Black
Material Special Information	ArmaComfort® AB and AB Plus offer an outstanding durability.
Applications	ArmaComfort® AB and AB Plus are widely used as an acoustical insulation of waste water, rain water and sewage pipes in residential and nonresidential buildings.
Remarks	Declaration of Performance is available in accordance with Article 7(3) of Regulation (EU) No 305/2011 on our homepage: <a href="http://www.armacell.com/DoP">www.armacell.com/DoP</a> .

Property	Value/Assessment	Test <sup>*1</sup>	Special Remark
<b>Temperature Range</b>			
Temperature Range	max. service temperature +110 °C min. service temperature (as is usual in plumbing installations)	EU 5843 EU 5933	Tested acc. to EN 14304
<b>Thermal Conductivity</b>			
Thermal Conductivity	$\pm 0 \text{ } ^\circ \lambda =$ C		
	ArmaComf AB $\lambda \leq 0,040$ [40 + 0,1 · $\vartheta_m$ + 0,0009 · $\vartheta_m^2$ ]/1000		
	ArmaComf AB Plus $\lambda \leq 0,042$ [42 + 0,1 · $\vartheta_m$ + 0,0009 · $\vartheta_m^2$ ]/1000		
<b>Water vapour diffusion resistance</b>			
Water vapour diffusion resistance	$\mu \geq 7.000$		
<b>Fire performance</b>			
Reaction to fire	ArmaComfort® AB D-s2,d0 ArmaComfort® AB Plus C-s2,d0 ArmaComfort® AB Plus self-adhesive C-s2,d0	EU 5843 EU 5933	Classified acc. to EN 13501-1 Tested acc. to EN 13823 and EN ISO 11925-2
<b>Acoustic Performance</b>			
Reduction of structure-borne sound transmission	on plastic waste water pipes $\leq 14$ dB(A) on Geberit PE HD $\leq 16$ dB(A) on Geberit Silent db 20 $\leq 18$ dB(A)	EU 6410 EU 6411 EU 6733	Tested acc. to EN 14366
Calculated broadband insertion loss	Weighted sound reduction index = 26 dB (C;Ctr) = (-1;-3) dB	EU 6412	Classified acc. to EN ISO 10140-1-2012 & 2-2010 & tested acc. to EN ISO 717-1:2003
<b>Other technical features</b>			
Density	ArmaComfort® AB and AB Plus in thickness 1 mm = 3,9 - 5,3 kg/m <sup>2</sup>		
Dimensions and tolerances	Thickness: 1 mm $\pm 1,6$ mm Width: 1000 mm $\pm 1,5\%$ Length: 2000 mm $\pm 1,5\%$		

\*1 Further documents such as test certificates, approvals and the like can be requested using the registration number given.

## ArmaComfort® AB Sound Reduction Index Rw (EN ISO-717-1)



X-axis = Frequences (Hz)

Y-axis = Sound Reduction Index (dB)

All data and technical information are based on results achieved under typical application conditions. Recipients of this information should, in their own interest and responsibility, clarify with us in due time whether or not the data and information apply to the intended application area. Installation instructions are available in our Armaflex installation manual.



## Technical Data - ArmaComfort AB Alu

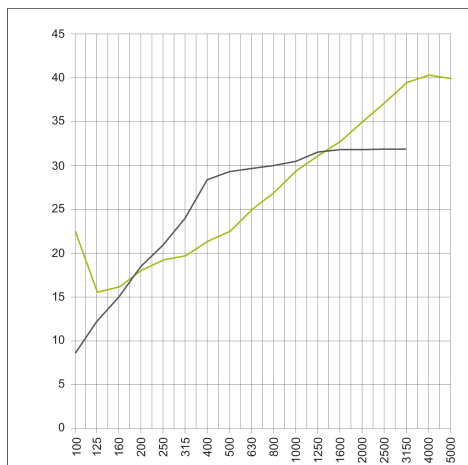
Brief description	ArmaComfort® AB Alu combines excellent acoustic performance and excellent fire performance B-s1,d0 to increase people safety.
Material type	Multilayer consists of an acoustic aluminium epdm-eva barrier of 2 mm thickness and 4 kg/m <sup>2</sup> of weight and a decoupling polyurethane foam of 10 mm .
Colour	Aluminium covering a black acoustic barrier combined with a black foam. Wrinkles horizontal or diagonal may occurred on the aluminium covering
Material Special Information	ArmaComfort®AB Alu offers an outstanding durability.
Applications	ArmaComfort® AB Alu is widely used as an acoustical insulation of waste water, rain water and sewage pipes. It has been specially designed for non residential buildings such as office buildings, hotels, hospitals, school buildings, retirement residence, shopping center, conference center,...
Special Features	Without halogens (chloride, bromide) acc. to DIN / VDE 0472, part 815.

Property	Value/Assessment	Test <sup>1</sup>	Special Remark
<b>Temperature Range</b>			
Temperature Range	max. service temperature <sup>1</sup> +100 °C min. service temperature <sup>1</sup>		Tested acc. to EN 14706 and EN 14304
<b>Fire performance</b>			
Reaction to fire	B-s1,d0	EU 6449	Tested acc. to EN 13823 and EN ISO 11925-2
<b>Acoustic Performance</b>			
Calculated broadband insertion loss	Weighted Sound Rw = 28 dB	EU 6439	UNI EN ISO 10140-1-2012 UNI EN ISO 10140-2-2010 UNI EN ISO 717-1: 2003
	Reduction Index (C; Ctr) = (-1;-4) dB		
<b>Other technical features</b>			
Density	Density: ArmaComfort® AB Alu in thickness 12 mm (barrier of 2400 +/- 500 kg/m <sup>3</sup> + 10 mm of polyurethane foam : 92,5 +/- 17,5 kg /m <sup>3</sup> ) 4,5 and 6,9 kg/m <sup>2</sup>		AIP 21/ DIN ISO 845 DIN EN ISO 2286-2:1998-07
Dimensions and tolerances	In accordance with EN 14304, table 1 Thickness: 12 mm ± 1,5 mm Width: 1000 mm ± 1,5% Length: 2000 mm ± 1,5%		Tested acc. to EN 822, EN 823, EN 13467

1. For further information, please contact our customer service.

\*1 Further documents such as test certificates, approvals and the like can be requested using the registration number given.

### ArmaComfort® AB Alu Sound Reduction Index Rw (EN ISO-717-1)



x-Achse = Frequenz (Hz)

y-Achse = Schalldämm-Mass (dB)

All data and technical information are based on results achieved under typical application conditions. Recipients of this information should, in their own interest and responsibility, clarify with us in due time whether or not the data and information apply to the intended application area. Installation instructions are available in our Armaflex installation manual.

## Technical Data - ArmaComfort AB Alu Plus

Brief description	ArmaComfort® AB Alu Plus combines excellent acoustic performance, fire performance B-s1,d0 to increase people safety and prevents corrosion.
Material type	Multilayer consists of an acoustic barrier epdm-eva barrier of 2 mm thickness with an aluminium foil and a decoupling elastomeric foam Armaflex® of 9 mm.
Colour	Aluminium covering a black acoustic barrier combined with a black foam.
Material Special Information	ArmaComfort® AB Alu Plus offers an outstanding durability
Applications	ArmaComfort® AB Alu Plus is used as an acoustical insulation of waste water, rain water and sewage pipes in residential and non-residential buildings.
Remarks	Declaration of Performance is available in accordance with Article 7 (3) of Regulation (EU) N° 305/2011 on our homepage: <a href="http://www.armacell.com/DoP">www.armacell.com/DoP</a> .

Property	Value/Assessment	Test* <sup>1</sup>	Special Remark
<b>Temperature Range</b>			
Temperature Range	max. service temperature +110 °C	EU 5934	Tested acc. to EN 14706 and EN 14304
<b>Thermal Conductivity</b>			
Thermal Conductivity	$\vartheta_m \pm 0$ °C	EU 5934	Declared acc. to EN ISO 13787 Tested acc. to EN 12667
	$\lambda$ 0,042 W(m · K)		
<b>Fire performance</b>			
Reaction to fire	B-s1,d0	EU 5934	Classified acc. to EN 13501-1 Tested acc. to EN 13823 and EN ISO 11925-2
<b>Acoustic Performance</b>			
Reduction of structure-borne sound transmission	on Geberit Silent db 20 $\leq 18$ dB(A)	EU 6733	Tested acc. to EN 14366
<b>Other technical features</b>			
Density	ArmaComfort® AB Alu Plus in thickness 11 mm = 3,9 - 5,3 kg/m <sup>2</sup>		
Dimensions and tolerances	In accordance with EN 14304, table 1 Thickness: 11 mm $\pm$ 1,5 mm Width: 1000 mm $\pm$ 1,5% Length: 2000 mm $\pm$ 1,5% or 25000 mm $\pm$ 1,5%	EU 5934	Tested acc. to EN 822, EN 823, EN 13467

\*1 Further documents such as test certificates, approvals and the like can be requested using the registration number given.

All data and technical information are based on results achieved under typical application conditions. Recipients of this information should, in their own interest and responsibility, promptly clarify with us to determine whether or not the data and information apply to the intended application area. Installation instructions are available in our Armaflex installation manual. Please consult our Customer Service Center before insulating stainless steels. Adhesive Armaflex 520 must be used to guarantee proper installation. For some refrigerants, the discharge temperature may exceed +110 °C; please consult our Customer Service Center for further information. For outside use, Armaflex should be protected within 3 days, e.g. with Armafinish 99 Paint or Arma-Chek covering.



## ArmaComfort AB sheets



Color black

Code	Width [mm]	Length [m]	Thickness [mm]	m <sup>2</sup> /carton
AO-11-99/E-AB	1.000,0	2	11	2

**Remark** ArmaComfort® AB must be applied with Armaflex®520 adhesive and ArmaComfort® AB tape

## ArmaComfort AB Plus sheets



Color black

Code	Width [mm]	Length [m]	Thickness [mm]	m <sup>2</sup> /carton
AO-11-99/E-AB+	1.000,0	2	11	2

**Remark** ArmaComfort®AB Plus must be applied with Armaflex® 520 adhesive and ArmaComfort®AB tape

## ArmaComfort AB Plus sheets self-adhesive



Color black

Code	Width [mm]	Length [m]	Thickness [mm]	m <sup>2</sup> /carton
AO-11-99/EA-AB+	1.000,0	2	11	2

**Remark** ArmaComfort® AB Plus self-adhesive must be applied with Armaflex®520 adhesive and ArmaComfort® AB tape

## ArmaComfort AB tapes



Color black

Code	Width [mm]	Length [m]	Thickness [mm]	Rolls/carton
TAPE-PE-FE904	50,0	25	0.23	30

## ArmaComfort AB Alu sheets



12,0 mm  
insulation thickness

Code	Width [mm]	Length [m]	Thickness [mm]	m <sup>2</sup> /carton
AO-12-99/E-AB-AL	1.000,0	2	12	2

**Remark** ArmaComfort®AB Alu must be applied with Armaflex® 520 adhesive and ArmaComfort® AB Alu tape

## ArmaComfort AB Alu tapes



Code	Width [mm]	Length [m]	Thickness [mm]	Rolls/carton
ACH-PSATAPES-30	30,0	25	0.08	10

## ArmaComfort AB Alu Plus sheets



Code	Width [mm]	Length [m]	Thickness [mm]	m <sup>2</sup> /carton
AO-11-99/E-AB-AL+	1.000,0	2	11	2

**Remark** ArmaComfort®AB Alu Plus must be applied with Armaflex® 520 adhesive and ArmaComfort® AB Alu tape.  
The bobbins (25 m<sup>2</sup> each bobbin) are sold by 3 bobbins which are inseparable on one pallet. It means the minimum order quantity is 75 m<sup>2</sup>.

## ArmaComfort AB Alu Plus tapes



Code	Width [mm]	Length [m]	Thickness [mm]	Rolls/carton
<b>ACH-PSATAPES-30</b>	30,0	25	0.08	10