

Armaflex®
Duct

THE FIBRE FREE INSULATION FOR EASY
AND DURABLE PROTECTION OF AIR
DUCTS



- Prevents condensation
- Structure-borne noise control
- Easy to install and repair

- Fibre dust free
- Closed cell structure to prevent water vapour transmission
- Smooth surface for easy cleaning and aesthetic finish

Technical Data - Armaflex Duct

Brief description	Armaflex Duct is a black, closed-cell insulation material. It is especially designed and produced for the thermal and acoustic insulation of air-conditioning ducts. Armaflex Duct insulation reduces heat losses and the closed-cell structure prevents water vapor transmission, thus avoiding the risk of corrosion.
Material type	High flexible closed-cell elastomeric foam material based on synthetic rubber. Factory made flexible elastomeric foam (FEF) according to EN 14304.
Colour	black
Material Special Information	Self-adhesive coating: pressure-sensitive adhesive coating on modified acrylate basis with mesh structure and covered with polyethylene foil.
Applications	Insulation of rectangular and cylindrical air ducts
Remarks	Declaration of Performance is available in accordance with Article 7(3) of Regulation (EU) No 305/2011 on our homepage: www.armacell.com/DoP

Property	Value/Assessment	Test ^{*1}	Super- vision ^{*2}	Special Remark
Temperature Range				
Temperature Range	max. service temperature	+110 °C	EU 5697	Tested acc. to EN 14706, EN 14707 and EN 14304
	(+85 °C if sheet or tape is glued to the object with its whole surface)			
	min. service temperature	-50 °C		
Thermal Conductivity				
Thermal Conductivity	ϑ_m	+/-0	°C	$\lambda =$
	EU 5697	o/●	Declared acc. to EN ISO 13787 Tested acc. to EN 12667 EN ISO 8497	
	sheets 9 - 25 mm	$\lambda \leq 0,036$	W/(m · K)	$[36 + 0,1 \cdot \vartheta_m + 0,0008 \cdot \vartheta_m^2]/1000$
	sheets 32 - 40 mm	$\lambda \leq 0,038$	W/(m · K)	$[38 + 0,1 \cdot \vartheta_m + 0,0008 \cdot \vartheta_m^2]/1000$
Water vapour diffusion resistance				
Water vapour diffusion resistance	μ	\geq	7.000	EU 5697
				o/●
				Tested acc. to EN 12086
Fire performance				
Reaction to fire	sheets	D-s3, d0	EU 5697	o/●
				Classified acc. to EN 13501-1 Tested acc. to DIN EN 13823 DIN EN ISO 11925-2
Other technical features				
Dimensions and tolerances	In accordance with EN 14304, table 1		EU 5697	o/●
				Tested acc. to EN 822, EN 823, EN 13467
UV resistance ¹	Protection against UV-radiation is necessary.		TB 142	
Storage & Shelf life	Sheets, self-adhesive: 1 year			
				Can be stored in dry, clean rooms at normal relative humidity (50 % to 70 %) and ambient temperature (0 °C - 35 °C)

1. If Armaflex is applied under UV-radiation the material must be protected within 3 days with a covering.

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

*2 ●: Official supervision by independent institutes and /or test authorities
o: Own in-factory quality monitoring

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. Armaflex 520 adhesive and Clipse must be used to guarantee proper installation. For outside use, Armaflex should be protected with a suitable outer covering within 3 days of installation.

Technical Data - Armaflex Duct AL

Brief description	Armaflex Duct is a black, closed-cell insulation material with a bright silver finish. It is especially designed and produced for the thermal and acoustic insulation of air-conditioning ducts. Armaflex Duct insulation reduces heat losses and the closed-cell structure prevents water vapor transmission, thus avoiding the risk of corrosion.
Material type	Insulation: High flexible closed-cell elastomeric foam material based on synthetic rubber. Factory made flexible elastomeric foam (FEF) according to EN 14304. Covering: 12 µm laminate of aluminium, double coated glass scrimm 5 x 5 mm and 22 g/m ² LDPE coating.
Colour	silver (covering)
Material Special Information	Self-adhesive coating: pressure-sensitive adhesive coating on modified acrylate basis with mesh structure and covered with polyethylene foil.
Applications	Insulation of rectangular and cylindrical air ducts
Remarks	Declaration of Performance is available in accordance with Article 7(3) of Regulation (EU) No 305/2011 on our homepage: www.armacell.com/DoP

Property	Value/Assessment	Test ^{*1}	Special Remark
Temperature Range			
Temperature Range	max. service temperature +110 °C min. service temperature -50 °C	(+85 °C if sheet or tape is glued to the object with its whole surface) EU 5697	Tested acc. to EN 14706, EN 14707 and min. service temperature ¹ -50 °C EN 14304
Thermal Conductivity			
Thermal Conductivity	ϑ_m 0 °C sheets 9 - 25 mm $\lambda \leq 0,036$ sheets 32 - 40 mm $\lambda \leq 0,038$	$\lambda =$ [36 + 0,1 · ϑ_m + 0,0008 · ϑ_m^2]/1000 [38 + 0,1 · ϑ_m + 0,0008 · ϑ_m^2]/1000	EU 5697 Declared acc. to EN ISO 13787 Tested acc. to EN 12667 EN ISO 8497
Water vapour diffusion resistance			
Water vapour diffusion resistance	μ	\geq 7.000	EU 5697 Tested acc. to EN 12086
Fire performance			
Reaction to fire	Euroclass E	EU 5697	Classified acc. to EN 13501-1 Tested acc. to EN 13823 EN ISO 11925-2
Other technical features			
Dimensions and tolerances	In accordance with EN 14304, table 1	EU 5697	Tested acc. to EN 822, EN 823, EN 13467
Weight	70 g/m ²		Tested acc. to EN 22 286
Tensile strength	MD 250 N / 25 mm CD 250 N / 25 mm		Tested acc. to EN ISO 527-3
Elongation	MD 4% CD 4%		Tested acc. to DIN 53 354
Storage & Shelf life	Sheets, self-adhesive: 1 year		Can be stored in dry, clean rooms at normal relative humidity (50 % to 70 %) and ambient temperature (0 °C - 35 °C)

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.

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. Armaflex 520 adhesive and Clipse must be used to guarantee proper installation. For outside use, Armaflex should be protected with a suitable outer covering within 3 days of installation.

Technical Data - Armaflex Duct Plus

Brief description	Armaflex Duct Plus is a closed-cell insulation material especially designed and produced for the thermal and acoustic insulation of air-conditioning ducts. Armaflex Duct Plus insulation reduces heat losses and the closed-cell structure prevents water vapour transmission, thus avoiding the risk of corrosion.
Material type	High flexible closed-cell elastomeric foam material based on synthetic rubber. Factory made flexible elastomeric foam (FEF) according to EN 14304.
Colour	black
Material Special Information	Self-adhesive coating: pressure-sensitive adhesive coating on modified acrylate basis with mesh structure and covered with polyethylene foil.
Remarks	Declaration of Performance is available in accordance with Article 7(3) of Regulation (EU) No 305/2011 on our homepage: www.armacell.com/DoP

Property	Value/Assessment	Test ^{*1}	Super- vision ^{*2}	Special Remark
Temperature Range				
Temperature Range	max. service temperature	+110 °C	EU 5697	Tested acc. to EN 14706, EN 14707 and EN 14304
	(+85 °C if sheet or tape is glued to the object with its whole surface)			
	min. service temperature	-50 °C		
Thermal Conductivity				
Thermal Conductivity	ϑ_m	+/-0 °C	EU 5697	Declared acc. to EN ISO 13787 Tested acc. to EN 12667 EN ISO 8497
	λ	W/(m · K)		
sheets 9 - 32mm	$\lambda \leq 0,036$	$[36 + 0,1 \cdot \vartheta_m + 0,0008 \cdot (\vartheta_m^2)]/1000$		
Water vapour diffusion resistance				
Water vapour diffusion resistance	μ	≥ 7.000	EU 5697	Tested acc. to EN 12086
Fire performance				
Reaction to fire	sheets	B-s3, d0	EU 5697	Classified acc. to EN 13501-1 Tested acc. to DIN EN 13823 DIN EN ISO 11925-2
Practical Fire Behaviour	Self-extinguishing, does not drip			
Other technical features				
Dimensions and tolerances	In accordance with EN 14304, table 1		EU 5697	Tested acc. to EN 822, EN 823, EN 13467
UV resistance ¹	Protection against UV-radiation is necessary:		TB 142	
Storage & Shelf life	self-adhesive sheets: 1 year			Can be stored in dry, clean rooms at normal relative humidity (50 % to 70 %) and ambient temperature (0 °C - 35 °C)

1. If Armaflex is applied under UV-radiation the material must be protected within 3 days with a covering.

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

*2 ●: Official supervision by independent institutes and /or test authorities
○: Own in-factory quality monitoring

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. Armaflex 520 adhesive and Clipse must be used to guarantee proper installation. For outside use, Armaflex should be protected with a suitable outer covering within 3 days of installation.

Armaflex Duct sheets endless



Code	Insulation thickness [mm]	Roll length [m]	Width [m]	m ² /carton
ADU-09MM/E	9,0	20	1.5	30
ADU-13MM/E	13,0	16	1.5	24
ADU-19MM/E	19,0	12	1.5	18
ADU-25MM/E	25,0	8	1.5	12

Length tolerance for sheets	+/- 1,5 %		
Thickness tolerance for sheets	≤ 6 mm:	±1,0 mm	
	7 -19 mm:	±1,5 mm	
	> 19 mm:	±2,0 mm	

Armaflex Duct sheets endless self-adhesive



Code	Insulation thickness [mm]	Roll length [m]	Width [m]	m ² /carton
ADU-09MM/EA	9,0	20	1.5	30
ADU-13MM/EA	13,0	16	1.5	24
ADU-19MM/EA	19,0	12	1.5	18
ADU-25MM/EA	25,0	8	1.5	12
ADU-32MM/EA	32,0	6	1.5	9

Length tolerance for sheets	+/- 1,5 %		
Thickness tolerance for sheets	≤ 6 mm:	±1,0 mm	
	7 -19 mm:	±1,5 mm	
	> 19 mm:	±2,0 mm	

Armaflex Duct AL sheets endless pre-covered



1,5 m width				
Code	Insulation thickness [mm]	Roll length [m]	Width [m]	m ² /carton
ADU-09MM/E-L	9,0	20	1.5	30
ADU-13MM/E-L	13,0	16	1.5	24
ADU-19MM/E-L	19,0	12	1.5	18
ADU-25MM/E-L	25,0	8	1.5	12
ADU-32MM/E-L	32,0	6	1.5	9

Length tolerance for sheets	+/- 1,5 %		
Thickness tolerance for sheets	≤ 6 mm:	±1,0 mm	
	7 -19 mm:	±1,5 mm	
	> 19 mm:	±2,0 mm	

Armaflex Duct AL sheets endless self-adhesive pre-covered



1,0 m width					1,5 m width				
Code	Insulation thickness [mm]	Roll length [m]	Width [m]	m ² /carton	Code	Insulation thickness [mm]	Roll length [m]	Width [m]	m ² /carton
ADU-09MM-1/EA-L	9,0	20	1.0	20	ADU-09MM/EA-L	9,0	20	1.5	30
ADU-13MM-1/EA-L	13,0	16	1.0	16	ADU-13MM/EA-L	13,0	16	1.5	24
ADU-19MM-1/EA-L	19,0	12	1.0	12	ADU-19MM/EA-L	19,0	12	1.5	18
ADU-32MM-1/EA-L	32,0	6	1.0	6	ADU-25MM/EA-L	25,0	8	1.5	12
-	-	-	-	-	ADU-32MM/EA-L	32,0	6	1.5	9

Length tolerance for sheets	+/- 1,5 %		
Thickness tolerance for sheets	≤ 6 mm:	±1,0 mm	
	7 -19 mm:	±1,5 mm	
	> 19 mm:	±2,0 mm	

Armaflex Duct AL tapes self-adhesive



Covering Color silver

Code	Width [mm]	Length [m]	Thickness [mm]	Rolls/carton
ACH-PSATAPES-30	30,0	25	0.08	10
ACH-PSATAPES-50	50,0	50	0.08	6

Armaflex Duct Plus sheets endless



Code	Insulation thickness [mm]	Roll length [m]	Width [m]	m ² /carton
ADU-09MM/E-P	9,0	20	1.5	30
ADU-13MM/E-P	13,0	16	1.5	24
ADU-19MM/E-P	19,0	12	1.5	18
ADU-25MM/E-P	25,0	8	1.5	12
ADU-32MM/E-P	32,0	6	1.5	9

Length tolerance for sheets	+/- 1,5 %	
Thickness tolerance for sheets	≤ 6 mm:	±1,0 mm
	7 -19 mm:	±1,5 mm
	> 19 mm:	±2,0 mm

Armaflex Duct Plus sheets endless self-adhesive



Code	Insulation thickness [mm]	Roll length [m]	Width [m]	m ² /carton
ADU-09MM/EA-P	9,0	20	1.5	30
ADU-13MM/EA-P	13,0	16	1.5	24
ADU-19MM/EA-P	19,0	12	1.5	18
ADU-25MM/EA-P	25,0	8	1.5	12
ADU-32MM/EA-P	32,0	6	1.5	9

Length tolerance for sheets	+/- 1,5 %	
Thickness tolerance for sheets	≤ 6 mm:	±1,0 mm
	7 -19 mm:	±1,5 mm
	> 19 mm:	±2,0 mm