

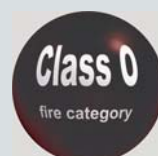
AF/Armaflex®

THE FLEXIBLE INSULATION WITH
ANTIMICROBIAL PROTECTION



- Reliable condensation control
- Contributes to indoor air quality
- Secure system solution
- Reduction of structure-borne noise

- Microban technology
- System warranty 10 years
- Supervised performance:
Euroclass (B/B_L-s3, d0), $\lambda_0 \text{ } ^\circ\text{C} \leq 0,033 \text{ W}/(\text{m} \cdot \text{K})$ and $\mu \geq 10.000$



Technical Data - AF/Armaflex

Brief description	Highly-flexible, closed-cell insulation material with high water vapour diffusion resistance, low thermal conductivity and built-in Microban® antimicrobial protection.				
Material type	Elastomeric foam based on synthetic rubber.				
Colour	black				
Material Special Information	Self-adhesive coating: pressure-sensitive adhesive coating on modified acrylate basis with mesh structure, covered with polyethylene foil. Traces of silicon can be found on the protection paper/foil used to protect self-adhesive closures.				
Applications	Insulation / protection for pipes, air ducts, vessels (incl. elbows, fittings, flanges etc.) of air-conditioning / refrigeration and process equipment to prevent condensation and save energy. Structure-borne noise reduction in service-water and waste-water installations.				
Special Features	Increasing insulation wall thicknesses for tubes ensures that the surface temperature is maintained as the pipe diameter is increased.				
Property	Value/Assessment	Test¹	Super- vision²	Special Remark	
Temperature Range					
Temperature Range	max. service temperature	+ 110 °C (+ 85 °C if sheet or tape is glued to the object with its whole surface.)	D 4594	○	Tested acc.to DIN EN 14706, DIN EN 14707 and DIN EN 14304
	min. service temperature ¹	-50 °C (-200 °C)			
Thermal Conductivity					
Thermal Conductivity	ϑ_m +/-0	°C	$\lambda =$	D 4841	○/● Tested acc. to DIN EN 12667 EN ISO 8497
	Tubes (AF-1 to AF-4)	$\lambda \leq 0,033$	$W/(m \cdot K)$	$[33 + 0,1 \cdot \vartheta_m + 0,0008 \cdot \vartheta_m^2]/1000$	
	Tubes (AF-5 to AF-6)	$\lambda \leq 0,036$	$W/(m \cdot K)$	$[36 + 0,1 \cdot \vartheta_m + 0,0008 \cdot \vartheta_m^2]/1000$	
	Sheets, strips, tape (AF-10MM to AF-32MM)	$\lambda \leq 0,033$	$W/(m \cdot K)$	$[33 + 0,1 \cdot \vartheta_m + 0,0008 \cdot \vartheta_m^2]/1000$	
	Sheets (AF-50MM)	$\lambda \leq 0,036$	$W/(m \cdot K)$	$[36 + 0,1 \cdot \vartheta_m + 0,0008 \cdot \vartheta_m^2]/1000$	
Water vapour diffusion resistance					
Water vapour diffusion resistance	Sheets (AF-10MM to AF-32MM) and tubes (AF-1 to AF-4)	μ	\geq	10.000	D 4532 ○/● Tested acc. to EN 12086 and EN 13469
	Sheets (AF-50MM) and tubes (AF-5 to AF-6)	μ	\geq	7.000	
Fire performance					
Reaction to fire ²	Low flammability. Tubes Sheets Tape		B _L -s3, d0 (Z-56.269.3530) B / B _L -s3, d0 (Z-56.269.768) B-s3,d0 (Z-56.269.768)	D 3334 D 4505	○/● Tested acc. to DIN EN 13823 DIN EN ISO 11925-2
Other Fire Class	UL - approved FM - approved			UL: D 4266 FM: D 3763	○/● UL: Tested according to UL94, IEC 60695 and Can/ CSA-C.22.2 No0.17., UL 746C FM: Tested according to UBC26-3, Class No.4924
Practical Fire Behaviour	Self-extinguishing, does not drip, does not spread flames				
Fire resistance of structural element ³	Wall penetrations Ceiling penetrations	\leq	R90 (P-3849/5370 MPA BS) R90 (P-3849/5370 MPA BS)	D 2300	Tested acc. to DIN 4102, Part 11
Acoustic Performance					
Reduction of structure-borne sound transmission	Insulation effect	\leq	28 dB(A)	D 3660	Tested acc. to DIN 52219 and DIN EN ISO 3822-1
Weighted sound absorption coefficient α_w		\leq	0.45	D 4763	Tested acc. to EN ISO 354
Other technical features					
Dimensions and tolerances	In accordance with EN 14304, table 1			D 4594	Tested acc. to EN 822, EN 823, EN 13467
Storage & Shelf life	Self-adhesive tapes, self-adhesive sheets, self-adhesive tubes, stripes: 1 year				Can be stored in dry, clean rooms at normal relative humidity (50% to 70%) and ambient temperature (0 °C – 35 °C).

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Antimicrobial
behaviour

In-built Microban® active antimicrobial protection: No fungal growth observed

D 4640
D 4641

Tested acc. to
ASTM G21 and
ASTM C 1338

1. For temperatures below -50 °C please contact our Customer Service Center to request for the corresponding technical information.
 2. The building materials classification is valid on metal or solid, mineral surfaces.
 3. 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.
- *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. Please consult our Customer Service Center before insulating stainless steels. Armaflex 520 adhesive 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 with Armafinish Paint or Arma-Chek covering within 3 days of installation.