

HT/Armaflex®

FLEXIBILITY AT HIGH TEMPERATURES



- Advanced insulation for industrial applications
- Reduces risk of corrosion under insulation (CUI)
- Built-in UV-resistance for long service life

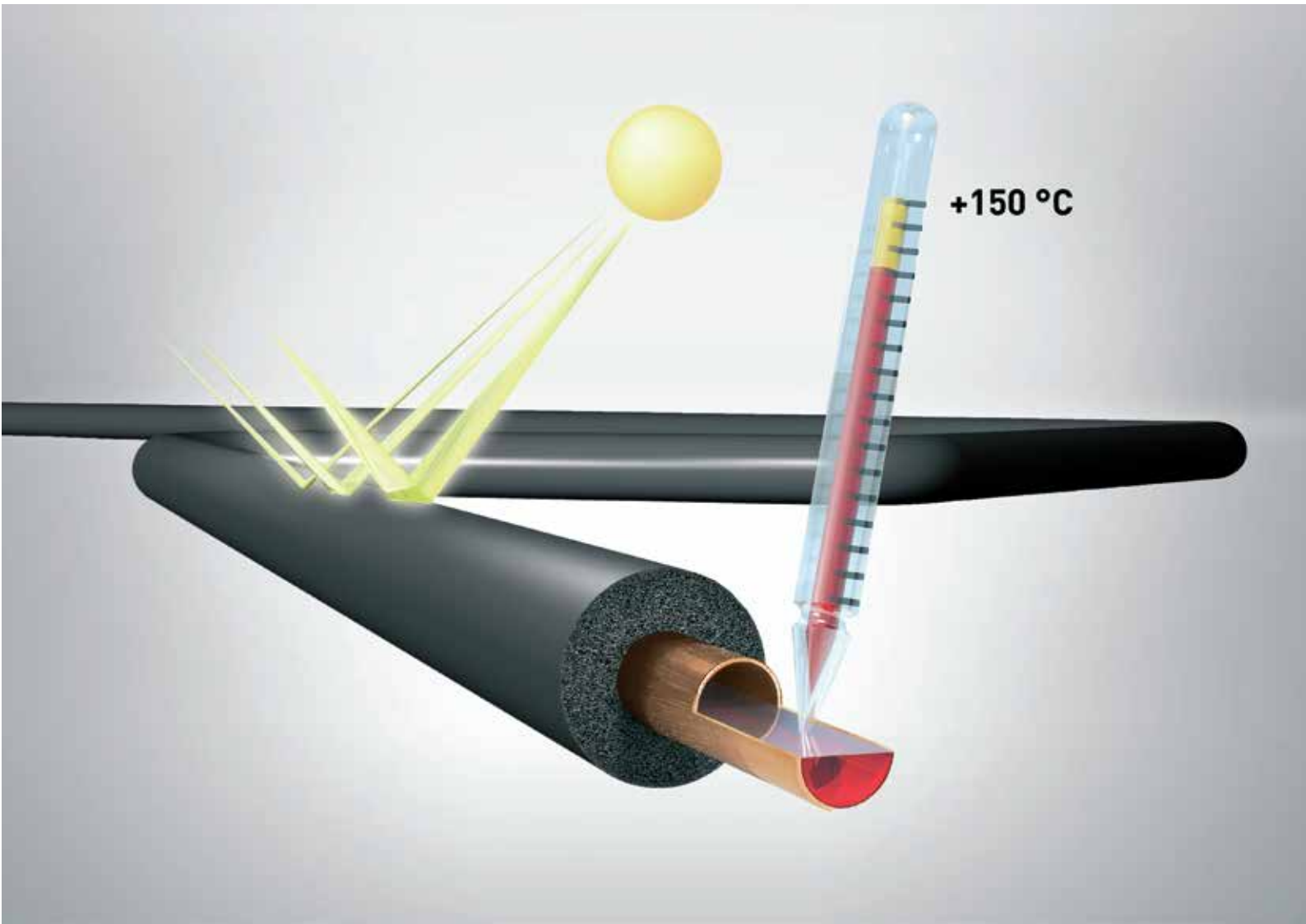
EPD
Environmental Product Declaration



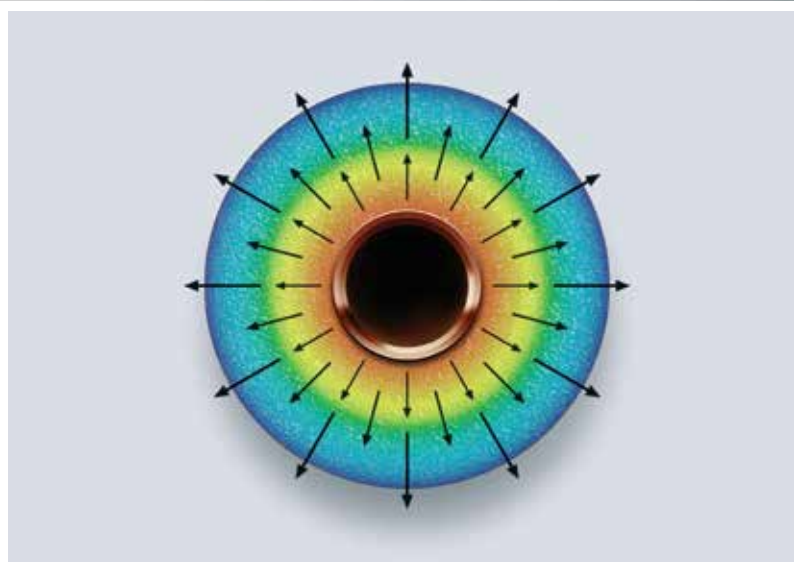
HT/Armaflex®

THE EXPERT FOR HIGH TEMPERATURE

HT/Armaflex® is a flexible elastomer insulation material with exceptional resistance to UV radiation and high temperatures. Its closed cell structure and low thermal conductivity keep water vapour from diffusing in and reduce energy losses, protecting and optimising the efficiency and life time expectancy of the installation. While remaining flexible at application temperatures of up to 150 °C, HT/Armaflex® is dust and fibre free and easy to install without special tools. The product does not need additional jacketing, does not degrade in sunlight and withstands incidental oil contact.



Thanks to the thermal properties of the insulation, the heat flow from pipelines insulated with HT/Armaflex® is kept at its utmost minimum. The evenly spread, homogenous and long-term stable closed cell structure prevents heat flow on the way of convection, ensuring very low thermal conductivity of the insulation material. This to keep the outer surface temperature at a low level and prevents unnecessary heat losses. Because of the flexibility of HT/Armaflex®, the huge temperature gradient of the thickness of insulation does not result in any internal stress.



Technical Data - HT/Armaflex

Brief Description	Highly flexible, closed cell insulation material based on extruded elastomer foam with resistance to UV radiation.
Material Type	Synthetic EPDM rubber based foam. Factory made flexible elastomeric foam (FEF) according to EN 14304.
Colour	black
Applications	Thermal insulation of pipes, vessels and ducts in: solar collectors (including outdoors), motor vehicles, hot gas lines and steam- and dual temperature lines.
Special Features	Resistant to UV radiation.
Safety and Environment	Type III Environmental Product Declaration (EPD): Declaration number "EPD-ARM-20150108-IBB1-DE", Institut Bauen und Umwelt e.V. (IBU)
Assembly	The Armaflex installation manual and the Technical Bulletin No. 71 should be consulted before assembly
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 ¹	max. service temperature ² + 150 °C (+ 85 °C for tapes)	EU 5666	Tested according to: EN 14706 EN 14707 EN 14304
	min. service temperature -50 °C		
Thermal Conductivity			
Thermal Conductivity	ϑ_m 40 °C $\lambda =$	EU 5316	Declared acc. to EN ISO 13787 Tested according to EN 12667 EN ISO 8497
	tubes $\lambda \leq 0.042$ W/(m · K) $[\frac{36,92 + 0,125 \cdot \vartheta_m + 0,0008 \cdot (\vartheta_m - 30)^2}{1000}]$		
	sheets $\lambda \leq 0.045$ W/(m · K) $[\frac{39,92 + 0,125 \cdot \vartheta_m + 0,0008 \cdot (\vartheta_m - 30)^2}{1000}]$		
Water Vapor Diffusion Resistance			
Water Vapor Diffusion Resistance Factor	tubes $\mu \geq 4,000$ sheets $\mu \geq 3,000$	EU 5316	Tested according to EN 12086 EN 13469
Fire Performance			
Reaction to Fire	Euroclass (tubes) D _L -s3, d0 Euroclass (sheets) D-s3, d0	EU 5316	Classified acc. to EN 13501-1 Tested according to EN 13823 and EN ISO 11925-2
Other Fire Class	UL -approved V-0 Lloyds Register Material having Low Flame Spread Characteristics	UL: EU 5835 Lloyd R: EU 6136	UL: Tested according to UL94, IEC 60695 and Can/CSA-C.22.2 No0.17., UL 746C Lloyds Register: Tested acc to BS 476 Part 7
Practical Fire Behaviour	Self-extinguishing, does not drip, does not spread flames		
Other Technical Features			
Dimensions and tolerances	In accordance with EN 14304, table 1	EU 5316	Tested acc. to EN 822, EN 823, EN 13467
UV Resistance ³	Good		
Storage & Shelf life	Tape, 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)
AGI Designation Code	Tubes 36.12.05.09.02 Sheets 36.07.05.09.02		

- For temperatures above +125 °C or below -50 °C please contact our Customer Service Center to request for the corresponding technical information.
 - At high service temperatures a certain hardening process may start on the inner surface of the material. Investigations have shown that these changes have no impact on the good physical and fire protection properties of the material, provided the material is installed in a correct way with all its joints properly sealed. For specific applications please consult our technical service.
 - With outdoor applications, in certain circumstances the material may experience a discoloration of the surface and some minor surface cracks will appear. The visual appearance however has no influence on the physical properties of the material, such as thermal conductivity and behaviour in case of fire.
- *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. Please consult our Customer Service Center before insulating stainless steels. Armaflex® HT625 adhesive must be used to guarantee proper installation. For temperatures below -50 °C or above +150 °C, please consult our Customer Service Center for further information.

HT/Armaflex tubes



Length 2.0 m

Pipe max. Outside-Ø [mm]	Inner Ø min/ max mm	10.0 mm insulation thickness		13.0 mm insulation thickness	
		Code	m/carton	Code	m/carton
10	11.5 - 13.0	HT-10X010	192	HT-13X010	140
12	13.5 - 15.0	HT-10X012	172	HT-13X012	130
15	16.5 - 18.0	HT-10X015	144	HT-13X015	112
18	19.5 - 21.0	HT-10X018	130	HT-13X018	98
22	23.5 - 25.0	HT-10X022	108	HT-13X022	84
28	29.5 - 31.0	HT-10X028	82	HT-13X028	64
35	36.5 - 38.5	HT-10X035	60	HT-13X035	50
42	44.0 - 46.0	HT-10X042	50	HT-13X042	40
48	50.0 - 52.0	-	-	HT-13X048	32
54	55.5 - 57.5	-	-	HT-13X054	32
60	62.0 - 64.0	-	-	HT-13X060	28
76	77.5 - 80.0	-	-	HT-13X076	24
89	91.0 - 94.0	-	-	HT-13X089	18

Pipe max. Outside-Ø [mm]	Inner Ø min/ max mm	19.0 mm insulation thickness		25.0 mm insulation thickness	
		Code	m/carton	Code	m/carton
12	13.5 - 15.0	HT-19X012	80	-	-
15	16.5 - 18.0	HT-19X015	64	HT-25X015	40
18	19.5 - 21.0	HT-19X018	58	HT-25X018	36
22	23.5 - 25.0	HT-19X022	50	HT-25X022	36
28	29.5 - 31.0	HT-19X028	48	HT-25X028	32
35	36.5 - 38.5	HT-19X035	32	HT-25X035	24
42	44.0 - 46.0	HT-19X042	24	HT-25X042	20
48	50.0 - 52.0	HT-19X048	22	HT-25X048	16
54	55.5 - 57.5	HT-19X054	18	HT-25X054	16
60	62.0 - 64.0	HT-19X060	16	HT-25X060	16
76	77.5 - 80.0	HT-19X076	18	HT-25X076	12
89	91.0 - 94.0	HT-19X089	16	HT-25X089	12

Length tolerance for tubes	± 1.5 %
Thickness tolerance	10 - 13 mm ± 1.5 mm
	19 - 25 mm ± 2.5 mm

HT/Armaflex tubes endless



Pipe max. Outside-Ø [mm]	Inner Ø min/ max mm	13.0 mm insulation thickness		19.0 mm insulation thickness	
		Code	m/carton	Code	m/carton
15	16.5 - 18.0	HT-13X015/E	26	HT-19X015/E	16
18	19.5 - 21.0	HT-13X018/E	22	HT-19X018/E	14
22	23.5 - 25.0	HT-13X022/E	18	HT-19X022/E	12

Length tolerance for tubes	± 1.5 %
Thickness tolerance	10 - 13 mm ± 1.5 mm
	19 - 25 mm ± 2.5 mm

HT/Armaflex sheets endless



Width 1.0 m, Skin on both sides

Code	Insulation thickness [mm]	Roll length [m]	m ² /carton
HT-10-99/E	10.0	10	10
HT-13-99/E	13.0	8	8
HT-19-99/E	19.0	6	6
HT-25-99/E	25.0	4	4
HT-32-99/E ●	32.0	3	3

Length tolerance for sheets

± 1.5 %

Thickness tolerance for sheets

10 - 19 mm ± 1.5 mm

25 - 32 mm ± 2.0 mm

● Item not in stock. Delivery on request. [MTO]

HT/Armaflex tapes self-adhesive



Code	Width [mm]	Length [m]	Thickness [mm]	Rolls/carton
HT-TAPE	50.0	15	3	12

HT/Armaflex accessories



Code	Article description	Pieces/carton
ADH-HT625/0.25	Armaflex HT625 one-component adhesive, 0.25 litre cans (with brush)	40
ADH-HT625/0.5	Armaflex HT625 one-component adhesive, 0.5 litre cans	12
ADH-HT625/1.0	Armaflex® HT625 one-component adhesive, 1.0 litre cans	12
CLEANER/1.0	Special cleaner for use with Armaflex® Adhesive 520 and Armaflex® Adhesive HT625.	4
CLEANER/1.0-I	Special cleaner for use with Armaflex® Adhesive 520 and Armaflex® Adhesive HT625.	6
CLEANER/1.0N	Special cleaner for use with Armaflex Adhesive 520 and Armaflex® Adhesive HT625.	4

