

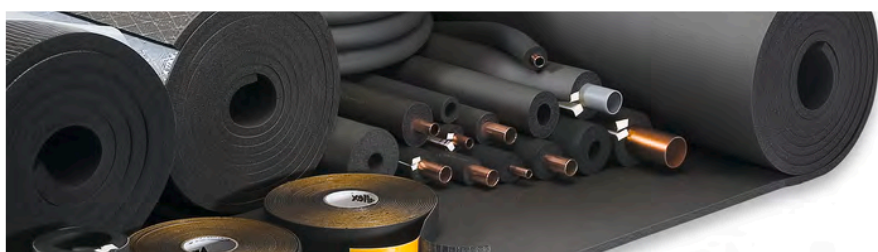
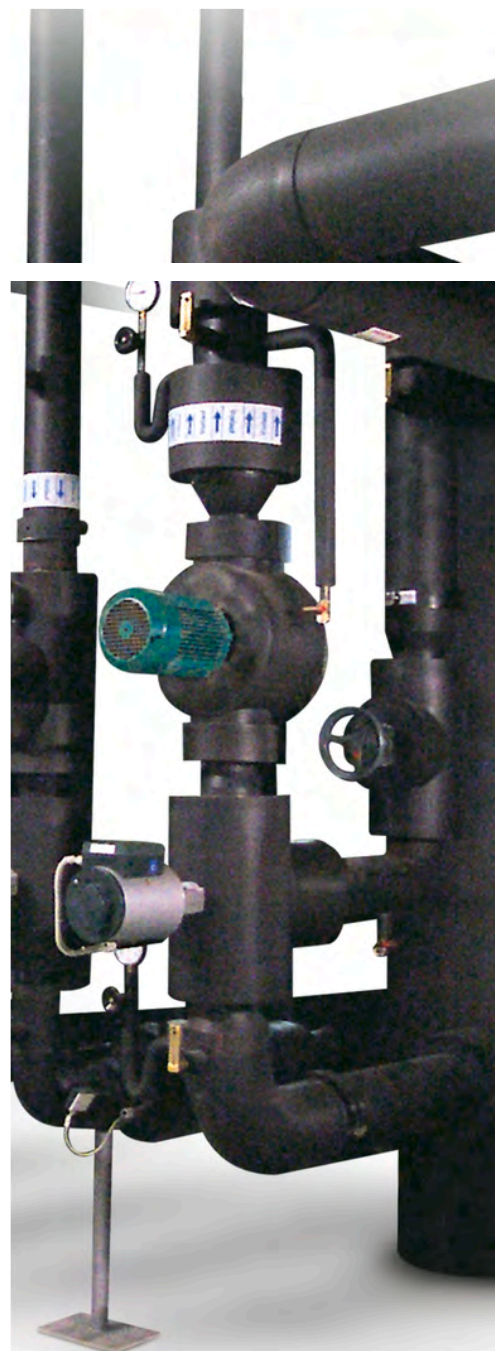


INSTALL IT. TRUST IT.

HT/ArmaFlex

Flexible elastomeric insulation material specially purposed for high temperature applications

- // Professional solution for high temperature applications up to +150 °C
- // UL approved
- // System approach with fit-for-purpose ArmaFlex HT625 Adhesive

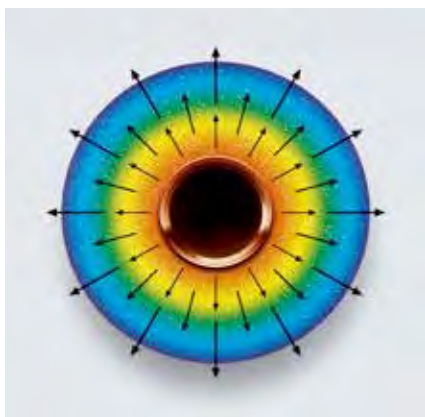
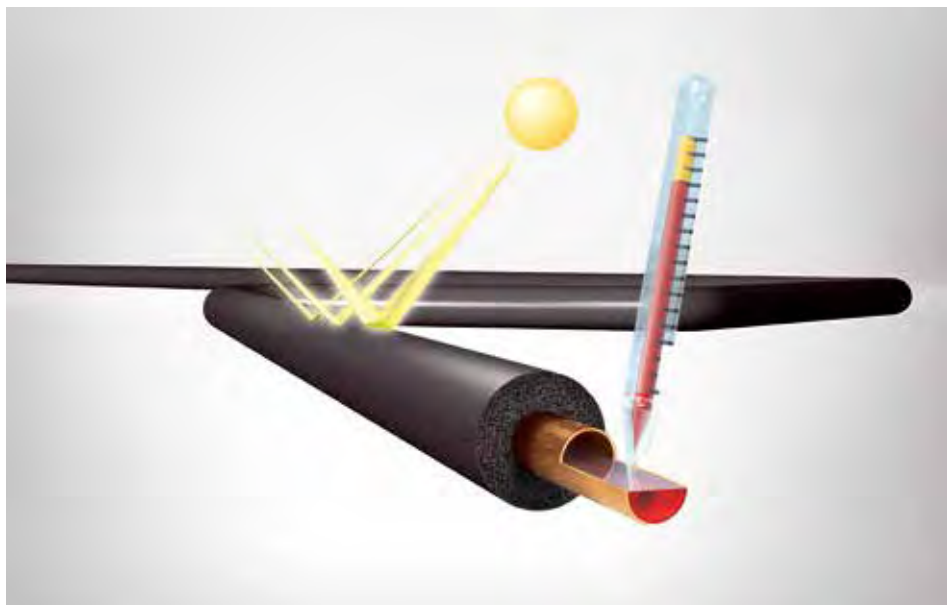


 **armacell**[®]
ArmaFlex[®]

INSTALL IT. TRUST IT.

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 longterm 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	HT/ArmaFlex is a highly flexible, closed-cell insulation material with resistance to UV radiation.
Material type	Factory-made flexible elastomeric foam based on ethylene propylene diene methylene (EPDM), according to EN 14304.
Product colour range	Black
Special features	UV resistance testing regarding of these materials showed excellent results. When used on outdoor applications, the materials showed very good durability even under UV exposure. However, due to the unpredictable nature of outdoor conditions in the whole variety of thinkable installations, there might be occasional weathering influences on the consistence of the material, which cannot be tested in advance. Therefore, installations in extreme environments (regions of extreme weather conditions like high mountains etc.) cannot be recommended. In case of doubt, please contact our Customer Service.
Applications	Thermal insulation of pipes, vessels and ducts in solar collectors (including outdoors), motor vehicles, hot gas lines, steam lines and dual temperature lines.
Installation	Please refer to the ArmaFlex application manual and more information is available in Armacell's Technical Bulletin No. 71. Use ArmaFlex HT625 adhesive for a reliable and seamless installation.
Declaration of performance	Declaration of Performance in accordance with Article 7(3) of Regulation (EU) No 305/2011 is available at www.armacell.com/DoP .

Property	Value / Assessment			Standard / Test method
Temperature range				
Service temperature ^{1,2}	Range	Min. °C	Max. °C ³	EN 14706, EN 14707, EN 14304
	Full range	-50	150	
Thermal conductivity				
Declared thermal conductivity	θm	40°C		EN ISO 13787, EN 12667, EN ISO 8497
	λd ≤ [W/(m·K)]	0,042		
	Range	Tubes		
	Formula	λ = [36.92 + 0.125 · θm + 0.0008 · (θm-30) ²] / 1000		
Declared thermal conductivity	θm	40°C		EN ISO 8497, EN ISO 13787, EN 12667
	λd ≤ [W/(m·K)]	0,045		
	Range	Sheets / Tapes		
	Formula	λ = [39.92 + 0.125 · θm + 0.0008 · (θm-30) ²] / 1000		
Fire Performance and Approvals				
Reaction to fire	D(L)-s3,d0 (tubes)			EN 13501-1, EN ISO 11925-2, EN 13823
	D-s3,d0 (sheets, tape)			
UL standards				
UL 94 V-0 ⁴	Pass			IEC 60695-11-10
Fire performance				
Practical fire behaviour	Self-extinguishing, does not drip, does not spread flames.			
Others	Class 1			BS 476 Part 7
Resistance to water vapour				
Water vapour diffusion resistance factor	≥ 4.000 (tubes) ≥ 3.000 (sheets, tapes)			EN 12086, EN 13469
Physical attributes				
Dimensions and tolerances	In accordance with EN 14304, table 1.			EN 822, EN 823, EN 13467
Weather and UV resistance				
UV resistance ⁵	Very good			EN ISO 4892-2

Property	Value / Assessment	Standard / Test method
Health and environment		
Volatile organic compounds (VOC) content	Fulfills all VOC requirements (French, Italian, Belgian, German AgBB, Blauer Engel and Eurofins Indoor Air Comfort GOLD).	ISO 16000 Parts 3, 6 & 9
Environmental Product Declaration (EPD)	Type III Environmental Product Declaration (EPD): Declaration number "EPD-ARM-20200222-IBA1-EN", Institut Bauen und Umwelt e.V. (IBU)	
Green building assessment	Meets the sustainable construction requirements for LEED v4.1, BREEAM international, WELL v2 and DGNB.	
Additional features	SCCP, MCCP-free	
Other technical features		
AGI designation code	Tubes: 36.12.05.09.02 Sheets: 36.07.05.09.02	
Shelf life ⁶	Tape, self-adhesive: 1 year	
Storage	Can be stored in dry, clean rooms at normal relative humidity (50% to 70%) and ambient temperature (0°C to 35°C).	

¹For temperatures above +125 °C or below -50 °C, please contact our Customer Service Centre to request for the corresponding technical information.

²At 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.

³+85 °C, for products with a self-adhesive layer.

⁴Only for products without self-adhesive-layer.

⁵Extended exposure to certain conditions could result in aesthetic changes to insulation material. This includes examples such as minor discolouration, surface cracks or hardening of inner surface material due to extended exposure to high service line temperatures. These physical changes do not affect the technical performance of the insulation material, such as thermal conductivity and behaviour in case of a fire. For further information, please contact our Technical Service department.

⁶Shelf life (maximum storage time) is limited to ensure that only currently manufactured products are installed on projects. This limitation is restricted solely to storage of the product and does not affect the lifetime of product after it has been installed.

Tube – standard. 2m Length.

10 mm						13 mm					
Pipe Ø [mm]	Item	Inner diameter (minimum) [mm]	Inner diameter (maximum) [mm]	EAN	Content [metric]	Pipe Ø [mm]	Item	Inner diameter (minimum) [mm]	Inner diameter (maximum) [mm]	EAN	Content [metric]
10	HT-10X010	11	14	7612207121032	192 m	10	HT-13X010	11	14	7612207121261	140 m
12	HT-10X012	13	16	7612207121056	172 m	12	HT-13X012	13	16	7612207121278	130 m
15	HT-10X015	16	19	7612207121070	144 m	15	HT-13X015	16	19	7612207121285	112 m
18	HT-10X018	19	22	7612207121087	130 m	18	HT-13X018	19	22	7612207121292	98 m
22	HT-10X022	23	26	7612207121100	108 m	22	HT-13X022	23	26	7612207121322	84 m
28	HT-10X028	29	32	7612207121131	82 m	28	HT-13X028	29	32	7612207121353	64 m
35	HT-10X035	36	39	7612207121155	60 m	35	HT-13X035	36	39	7612207121377	50 m
42	HT-10X042	43	46	7612207121162	50 m	42	HT-13X042	43	46	7612207121391	40 m
-	-	-	-	-	-	48	HT-13X048	49	52	7612207121414	32 m
-	-	-	-	-	-	54	HT-13X054	55	58	7612207121438	32 m
-	-	-	-	-	-	60	HT-13X060	61	64	7612207121452	28 m
-	-	-	-	-	-	76	HT-13X076	77	80	7612207121476	24 m
-	-	-	-	-	-	89	HT-13X089	90	93	7612207121490	18 m

Other information

Thickness tolerance 10 - 13 mm ± 1,5 mm
19 - 25 mm ± 2,5 mm

Length tolerance ± 1,5 %

Tube – standard. 2m Length.

19 mm						25 mm					
Pipe Ø [mm]	Item	Inner diameter (minimum) [mm]	Inner diameter (maximum) [mm]	EAN	Content [metric]	Pipe Ø [mm]	Item	Inner diameter (minimum) [mm]	Inner diameter (maximum) [mm]	EAN	Content [metric]
12	HT-19X012	13	16	7612207121520	80 m	15	HT-25X015	16	19	7612207121735	40 m
15	HT-19X015	16	19	7612207121537	64 m	18	HT-25X018	19	22	7612207121742	36 m
18	HT-19X018	19	22	7612207121551	58 m	22	HT-25X022	23	26	7612207121759	36 m
22	HT-19X022	23	26	7612207121575	50 m	28	HT-25X028	29	32	7612207121773	32 m
28	HT-19X028	29	32	7612207121605	48 m	35	HT-25X035	36	39	7612207121780	24 m
35	HT-19X035	36	39	7612207121612	32 m	42	HT-25X042	43	46	7612207121797	20 m
42	HT-19X042	43	46	7612207121629	24 m	48	HT-25X048	49	52	7612207121803	16 m

Tube – standard. 2m Length.

19 mm						25 mm					
Pipe Ø [mm]	Item	Inner diameter (minimum) [mm]	Inner diameter (maximum) [mm]	EAN	Content [metric]	Pipe Ø [mm]	Item	Inner diameter (minimum) [mm]	Inner diameter (maximum) [mm]	EAN	Content [metric]
48	HT-19X048	49	52	7612207121636	22 m	54	HT-25X054	55	58	7612207121810	16 m
54	HT-19X054	55	58	7612207121643	18 m	60	HT-25X060	61	64	7612207121834	16 m
60	HT-19X060	61	64	7612207121667	16 m	76	HT-25X076	77	80	7612207121841	12 m
64	HT-19X064	65	68	7612207469158	16 m	89	HT-25X089	90	93	7612207121858	12 m
76	HT-19X076	77	80	7612207121681	18 m	-	-	-	-	-	-
89	HT-19X089	90	93	7612207121698	16 m	-	-	-	-	-	-

Other information

Thickness tolerance 10 - 13 mm ± 1,5 mm
 19 - 25 mm ± 2,5 mm

Length tolerance ± 1,5 %

Roll - standard

Item	Thickness [mm]	Width [m]	Length [m]	EAN	Content [metric]
HT-10-99/E	10	1	10	7612207121247	10 m ²
HT-13-99/E	13	1	8	7612207121506	8 m ²
HT-19-99/E	19	1	6	7612207121704	6 m ²
HT-25-99/E	25	1	4	7612207121865	4 m ²
HT-32-99/E	32	1	3	7612207121872	3 m ²

Other information

Thickness tolerance 10 - 19 mm ± 1,5 mm
 25 - 32 mm ± 2,0 mm

Length tolerance + 5 % - 1,5 %

Coil

13 mm					19 mm				
Pipe Ø [mm]	Item	Length [m]	EAN	Content [metric]	Pipe Ø [mm]	Item	Length [m]	EAN	Content [metric]
15	HT-13X015/E	26	7612207235753	26 m	15	HT-19X015/E	16	7612207235784	16 m
18	HT-13X018/E	22	7612207235760	22 m	18	HT-19X018/E	14	7612207235791	14 m
22	HT-13X022/E	18	7612207235777	18 m	22	HT-19X022/E	12	7612207235807	12 m

Other information

Thickness tolerance 10 - 13 mm ± 1,5 mm
 19 - 25 mm ± 2,5 mm

Length tolerance ± 1,5 %

Tape – insulation

Item	Thickness [mm]	Width [mm]	Length [m]	Content [quantity]
HT-TAPE	3	50	15	12 roll

Accessories

Item	Description	Content [quantity]
SF-CLEANER/1,0	Solvent-free cleaner for use with ArmaFlex	6 tin

Adhesives and Cleaners

Item	Description	Content [quantity]
ADH-HT625/0,25	ArmaFlex HT625 one-component adhesive. Available as 0.25 litre cans (with brush).	40 tin
ADH-HT625/0,5	ArmaFlex HT625 one-component adhesive. Available as 0.5 litre cans.	12 tin
ADH-HT625/1,0	ArmaFlex HT625 one-component adhesive. Available as 1.0 litre cans.	12 tin
CLEANER/1,0	Special cleaner for use with ArmaFlex adhesives	4 tin