

INSTALL IT. TRUST IT.

HT/ArmaFlex

Flexible elastomeric insulation material specially purposed for high temperature applications

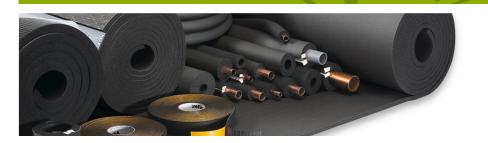
// Professional solution for high temperature applications up to +150 °C

// UL approved

// System approach with fit-for-purpose ArmaFlex HT625

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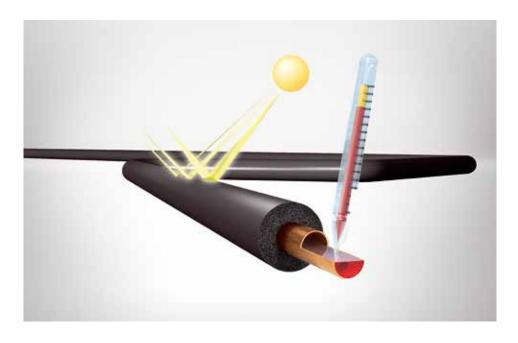


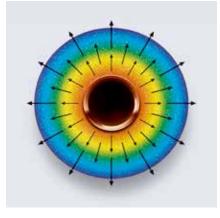




HT/ArmaFlex

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	Factory-made flexible elastomeric foam based on ethylene propylene diene methylene (EPDM), according to EN 14304.								
Product colour range	Black	3lack								
Special features	very good durability even thinkable installations, advance. Therefore, ins	V resistance testing regarding of these materials showed excellent results. When used on outdoor applications, the materials showed erry good durability even under UV exposure. However, due to the unpredictable nature of outdoor conditions in the whole variety of inkable installations, there might be occasional weathering influences on the consistence of the material, which cannot be tested in dvance. Therefore, installations in extreme environments (regions of extreme weather conditions like high mountains etc.) cannot be ecommended. In case of doubt, please contact our Customer Service.								
Applications	Thermal insulation of p temperature lines.	ermal insulation of pipes, vessels and ducts in solar collectors (including outdoors), motor vehicles, hot gas lines, steam lines and dual nperature lines.								
Installation		naFlex application manual a eliable and seamless instal	and more information is available in Armacell's Tec lation.	hnical Bulletin No. 71. Use ArmaFlex						
Property	Value / Assessment	ulue / Assessment S								
Temperature range										
Service temperature ^{1,2}	Range	Min. °C	Max. °C³	EN 14706, EN 14707, EN						
	Full range	-50	150	14304						
Thermal conductivity										
Declared thermal conductivity	θm		40°C	EN ISO 13787, EN 12667,						
	λd < [W/[m·K]]		0.042	EN ISO 8497						
	Range		Tubes							
	Formula		$\lambda = [36.92 + 0.125 \cdot \theta m + 0.0008 \cdot (\theta m - 30)^2] / 1$	000						
Declared thermal conductivity	θm		40°C	EN ISO 8497, EN ISO						
	λd ≼ [W/(m⋅K)]		0.045	13787, EN 12667						
	Range		Sheets / Tapes							
	Formula		$\lambda = [39.92 + 0.125 \cdot \theta m + 0.0008 \cdot (\theta m - 30)^2] / 1$	000						
Fire Performance and Approvals	5									
Reaction to fire	D(L)-s3,d0 (tubes) D-s3,d0 (sheets, tape)			EN 13501-1, EN ISO 11925-2, EN 13823						
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 f	lames.							
Others	Class 1			BS 476 Part 7						
Resistance to water vapour										
Water vapour diffusion resistance factor	≯ 4000 (tubes)≯ 3000 (sheets, tapes)			EN 12086, EN 13469						
Physical attributes										
Dimensions and tolerances	In accordance with EN 1	4304, table 1.		EN 822, EN 823, EN 13467						
Weather and UV resistance										
UV resistance ⁵	Very good			EN ISO 4892-2						

Property	Value / Assessment	
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).	

For 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. $^{3}\text{+}85~^{\circ}\text{C}\text{,}$ for products with a self-adhesive layer.

 $^{^4}$ Only for products without self-adhesive-layer.

⁵ Extended 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.

Shelf 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	

Pipe Ø [mm]	Item	Inner diameter (minimum) [mm]	Inner diameter (maximum) [mm]	NRF	EAN	Content [metric]
10	HT-10X010	11	14	9455878	7612207121032	192 m
12	HT-10X012	13	16	9455879	7612207121056	172 m
15	HT-10X015	16	19	9455881	7612207121070	144 m
18	HT-10X018	19	22	9455882	7612207121087	130 m
22	HT-10X022 23	23	26	9455883	7612207121100	108 m 82 m
28	HT-10X028	29	32	9455884	7612207121131	
35	HT-10X035	36	39	9455885	7612207121155	60 m
42	HT-10X042	43	46	9455886	7612207121162	50 m
Other information						
Thickness toleran	ce	10 - 13 mm ± 1,5 mm 19 - 25 mm ± 2,5 mm				
Length tolerance		± 1,5 %				

Tube – standard. 2m Length.

13 mm

Pipe Ø [mm]	Item	Inner diameter (minimum) [mm]	Inner diameter (maximum) [mm]	NRF	EAN	Content [metric]		
10	HT-13X010	11	14	9455894	7612207121261	140 m		
12	HT-13X012	13	16	9455895	7612207121278	130 m		
15	HT-13X015	16	19	9455896	7612207121285	112 m		
18	HT-13X018	19	22	9455897	7612207121292	98 m		
22	HT-13X022	23	26	9455898	7612207121322	84 m		
28	HT-13X028	29	32	9455899	7612207121353	64 m		
35	HT-13X035	36	39	9455901	7612207121377 7612207121391 7612207121414	50 m 40 m 32 m		
42	HT-13X042	43	46	9455902				
48	HT-13X048	49	52	9455903				
54	HT-13X054	HT-13X054 55 58 9455	9455904	7612207121438	32 m			
60	HT-13X060	61	64	9455906	7612207121452	28 m		
76	HT-13X076	77	80	9455907	7612207121476	24 m		
89	HT-13X089	90	93	9455908	7612207121490	18 m		
Other information								
Thickness tolerand	ce	10 - 13 mm ± 1,5 mm 19 - 25 mm ± 2,5 mm						
Length tolerance		± 1,5 %						

Tube - standard. 2m Length.

19 mm

Pipe Ø [mm]	Item	Inner diameter (minimum) [mm]	Inner diameter (maximum) [mm]	NRF	EAN	Content [metric]
12	HT-19X012	13	16	9455909	7612207121520	80 m
15	HT-19X015	16	19	9455911	7612207121537	64 m
18	HT-19X018	19	22	9455912	7612207121551	58 m
22	HT-19X022	23	26	9455913	7612207121575	50 m

Tube - standard. 2m Length.

19	mm		

Pipe Ø [mm]	Item Inner diameter Inner diameter (minimum) [mm] (maximum) [mm]			NRF	EAN	Content [metric]	
28	HT-19X028	29	32		7612207121605	48 m	
35	HT-19X035	36	39	9455915	7612207121612	32 m	
42	HT-19X042	43	46	9455916	7612207121629	24 m	
48	HT-19X048	HT-19X048 49	52	9455917	7612207121636	22 m	
54	HT-19X054	55	58	9455918	7612207121643 7612207121667 7612207469158	18 m 16 m	
60	HT-19X060	61	64	9455921			
64	HT-19X064	65	68				
76	HT-19X076	77	80 9455922	7612207121681	18 m		
89	HT-19X089	90	93	9455923	7612207121698	16 m	
Other information							
Thickness toleran	ce	10 - 13 mm ± 1,5 mm 19 - 25 mm ± 2,5 mm					
Length tolerance		± 1,5 %					

Tube – standard. 2m Length.

25 mm

Pipe Ø [mm]	Item	Inner diameter (minimum) [mm]	Inner diameter (maximum) [mm]	NRF	EAN	Content [metric]
15	HT-25X015	16	19		7612207121735	40 m
18	HT-25X018	19	22		7612207121742	36 m
22	HT-25X022	23	26	9455927	7612207121759	36 m
28	HT-25X028	29	32	9455928	7612207121773	32 m
35	HT-25X035	36	39 9455929		7612207121780	24 m
42	HT-25X042	43	46	46		20 m
48	HT-25X048	49	52		7612207121803	16 m
54	HT-25X054	55	58		7612207121810	16 m
60	HT-25X060	61	64		7612207121834	16 m
76	HT-25X076	77	80	9455936	7612207121841	12 m
89	HT-25X089	90	93	9455937	7612207121858	12 m
Other information						
Thickness tolerand	ce	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]	Content [metric]
HT-10-99/E	10	1	10	10 m²
HT-13-99/E	13	1	8	8 m²
HT-19-99/E	19	1	6	6 m ²
HT-25-99/E	25	1	4	4 m ²
HT-32-99/E	32	1	3	3 m ²
Other information				

Roll - standard

Item	Thickness [mm]	Width (m)	Length [m]	Content [metric]
Thickness tolerance	10 - 19 mm ± 1,5 mm 25 - 32 mm ± 2,0 mm			
Length tolerance	+ 5 % - 1,5 %			

Coil

13 mm				19 mm	19 mm				
ltem	Length [m]	EAN	Content [metric]	Pipe Ø [mm]	Item	Length [m]	EAN	Content [metric]	
HT-13X015/E	26	7612207235753	26 m	15	HT-19X015/E	16	7612207235784	16 m	
HT-13X018/E	22	7612207235760	22 m	18	HT-19X018/E	14	7612207235791	14 m	
HT-13X022/E	18	7612207235777	18 m	22	HT-19X022/E	12	7612207235807	12 m	
on									
Length tolerance ± 1,5 %									
	HT-13X015/E HT-13X018/E HT-13X022/E on	HT-13X015/E 26 HT-13X018/E 22 HT-13X022/E 18 on ance	HT-13X015/E 26 7612207235753 HT-13X018/E 22 7612207235760 HT-13X022/E 18 7612207235777 on ance 10 - 13 mm ± 1,5 19 - 25 mm ± 2,5	Imetric Imetric HT-13X015/E 26 7612207235753 26 m HT-13X018/E 22 7612207235760 22 m HT-13X022/E 18 7612207235777 18 m on	HT-13X015/E 26 7612207235753 26 m 15 18 HT-13X018/E 22 7612207235760 22 m 18 HT-13X022/E 18 7612207235777 18 m 22 22 24 25 25 25 25 25	Length [m] EAN Content [metric] Pipe Ø [mm] Item	Length [m] EAN Content [metric] Pipe Ø [mm] Item Length [m]	Length [m] EAN Content Pipe Ø [mm] Item Length [m] EAN HT-13X015/E 26 7612207235753 26 m 15 HT-19X015/E 16 7612207235784 HT-13X018/E 22 7612207235760 22 m 18 HT-19X018/E 14 7612207235791 HT-13X022/E 18 7612207235777 18 m 22 HT-19X022/E 12 7612207235807 Inchesis	

Tape - insulation

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

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ABOUT ARMACELL

As the inventor of flexible foam for equipment insulation and a leading provider of engineered foams, Armacell develops innovative and safe thermal and mechanical solutions that create sustainable value for its customers. Armacell's products significantly contribute to global energy efficiency making a difference around the world every day. With more than 3,300 employees and 25 production plants in 19 countries, the company operates two main businesses, Advanced Insulation and Engineered Foams. Armacell focuses on insulation materials for technical equipment, high-performance foams for acoustic and lightweight applications, recycled PET products, next-generation aerogel technology and passive fire protection systems.

