

# AF/ArmaFlex<sup>®</sup> Class 0

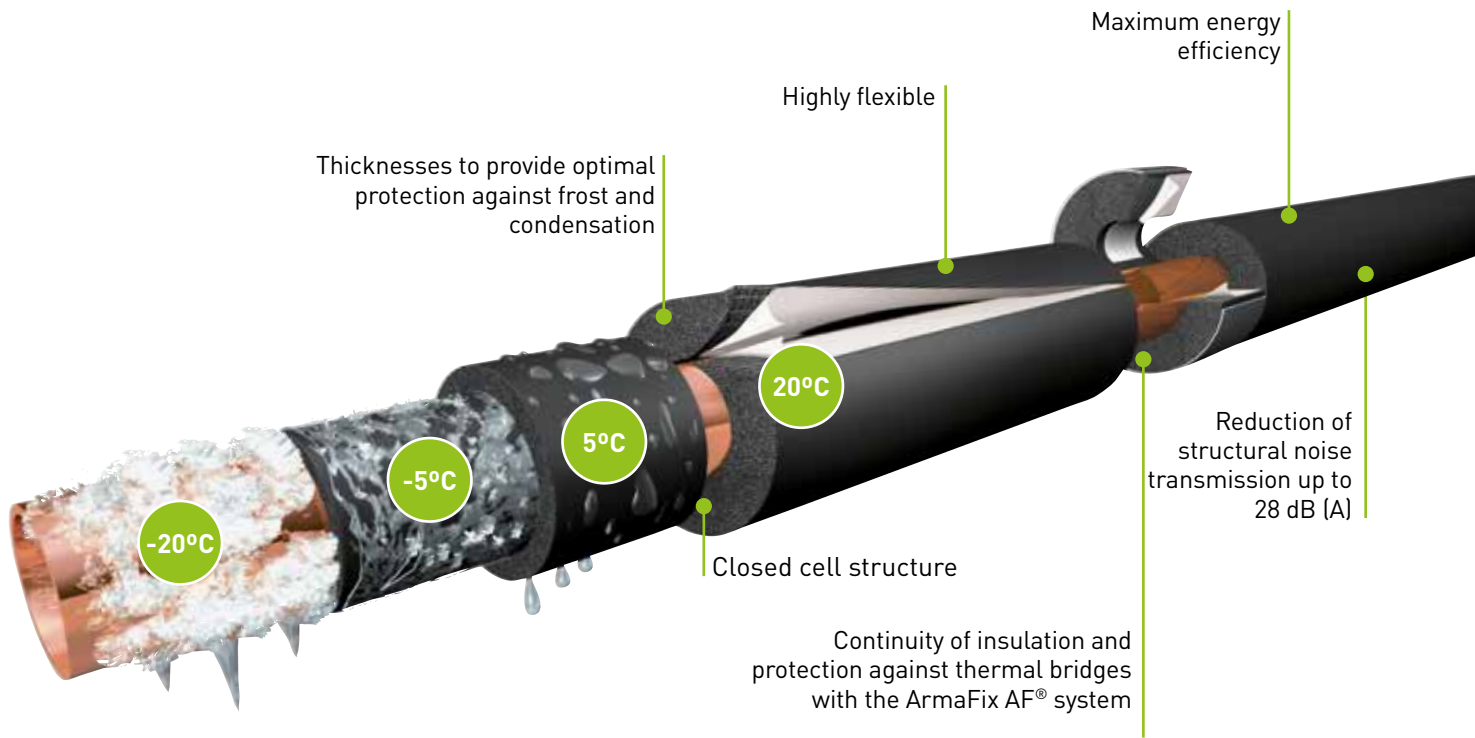


## THE FLEXIBLE & SUSTAINABLE INSULATION SYSTEM FOR ENERGY EFFICIENCY & CONDENSATION CONTROL – TRUSTED FOR OVER 40 YEARS

- Closed cell material
- Built in water vapour barrier reducing the risk of corrosion under insulation (CUI)
- FM approved
- Built-in Microban<sup>®</sup> antimicrobial protection reduces mould and bacteria growth
- Low thermal conductivity value (0.033 W/m • K @ 0°C)
- Euroclass B/B<sub>L</sub>-s3, d0
- BRE Green Guide A rating
- CE marked, EN 14304
- Highest system reliability when installed with ArmaFix pipe supports and ArmaFlex adhesives
- Available in handy self-seal tube format to speed up install times



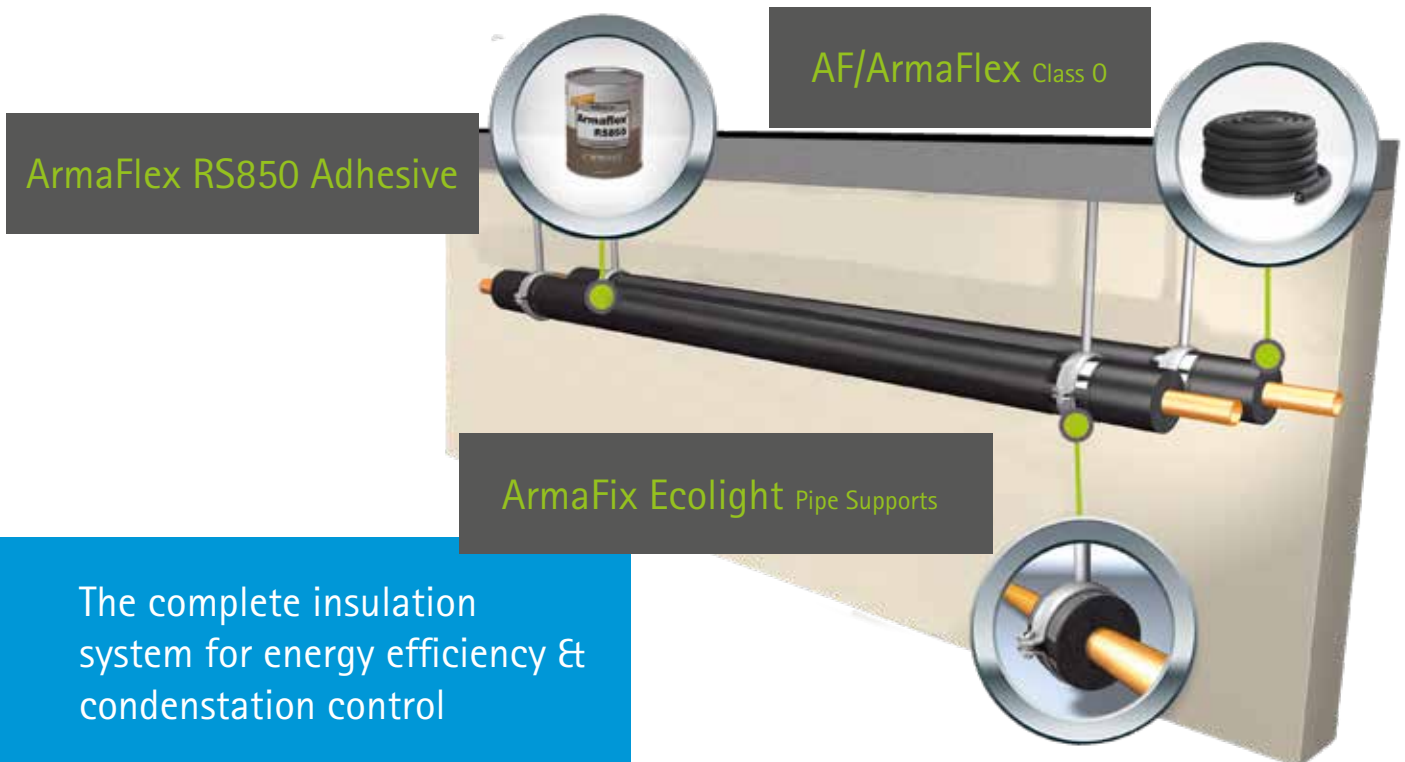
# PROPERTIES



- Euroclass B<sub>L</sub>-s3, d0
  - $\lambda_{0^\circ\text{C}} \leq 0,033 \text{ W}/(\text{m}\cdot\text{K})$
  - $\mu \geq 10,000$
- for more information consult technical data



# COMPLETE SYSTEM



## RANGE

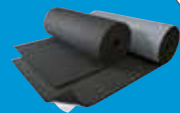
## TUBE

Tubes, self-adhesive tubes (self-seal), AC coils, 15m coils



## SHEET

Sheet, self-adhesive sheet, continuous sheet (rolls), self-adhesive continuous sheet (rolls)



## TAPE

Self-adhesive tape



## RECOMMENDED PRODUCTS

For a complete installation



ArmaFix Ecolight



ArmaFlex RS850 adhesive



ArmaFlex Cleaner



ArmaFinish 99

# TECHNICAL DATA

Flexible closed-cell thermal insulation with high resistance to water vapour diffusion, low thermal conductivity and built-in Microban® antimicrobial protection.

<b>Material type</b>	Flexible, closed-cell insulation material with built-in Microban® antimicrobial protection.
<b>Colour</b>	Black
<b>Material information</b>	Self-adhesive coating: pressure-sensitive adhesive coating on modified acrylate basis with mesh structure. Covered with polyethylene film.
<b>Applications</b>	Insulation/protection to control condensation, reduce energy loss and protect against frost on pipes, air ducts, vessels (incl. elbows, fittings, flanges etc). Suitable for hot and cold water services, chilled water lines, heating systems, air conditioning ductwork and refrigerated pipework.
<b>Special features</b>	MCCP-free
<b>Safety &amp; environment</b>	Type III Environmental product Declaration (EPD): Declaration # EPD-ARM-20150110-IBB1-DE, Insitut Bauen und Umwelt e.V. (IBU).
<b>Assembly</b>	Lightweight and flexible. Closed cell structure means no additional vapour barrier is required.
<b>Remarks</b>	Declaration Of Performance (DOP) is available in accordance with Article 7(3) of regulation [EU] No 305/2011

Property	Value/Assessment	Test Ref	Standards & Remarks
<b>Temperature Range</b>			
<b>Max service temperature</b>	+110 °C (+85 °C if sheet or tape is glued to a flat object)	EU 5709	Tested acc to EN 14706, EN 14707 & EN 14304
<b>Min service temperature</b>	-50 °C (for temperatures below -50 °C please contact our technical department)		
<b>Thermal Conductivity</b>			
<b>Tubes 6-19mm Sheet &amp; tape 3-32mm</b>	$\lambda$ 0 °C $\leq$ 0.033 W/(m·K) $[33+0.1 \cdot \varrho_m + 0.0008 \cdot \varrho_m^2]/1000$	EU 5709	Declared acc. to EN ISO 13787. Tested acc. to EN12667 & EN ISO 8497
<b>Tubes 25-32mm</b>	$\lambda$ 0 °C $\leq$ 0.036 W/(m·K) $[36+0.1 \cdot \varrho_m + 0.0008 \cdot \varrho_m^2]/1000$		
<b>Water Vapour Diffusion Resistance</b>			
<b>Tubes 6-19mm Sheet 6-32mm</b>	$\mu \geq 10,000$	EU 5709	Tested acc.to EN 12086 & EN 13469
<b>Tubes 25-32mm</b>	$\mu \geq 7,000$		
<b>Fire Performance</b>			
<b>Tubes</b>	B <sub>L</sub> -s3, d0	EU 5709	Classified acc. to EN 13501-1. Tested acc. to EN 13823 & EN ISO 11925-2
<b>Sheets &amp; tapes</b>	B-s3, d0		
<b>Surface Spread of Flames</b>	Class 1	GB 6935 & GB 6936	Tested acc. to BS 476 Part 7:1997 Tested acc. to BS 476 Part 6:1989
<b>Fire Propagation</b>	Total Index Performance (I) $\leq$ 12 Sub Index (i <sub>p</sub> ) $\leq$ 6		
<b>Fire performance acc. to Building Regulations</b>	Class 0		
<b>Fire Class</b>	FM Approved	D5551	Tested acc.to UBC26-3 Class No. 4924
<b>Fire resistance on metal pipes</b>	EI30 - EI90	EU5584	Classified acc. to EN 13501-2. Tested acc.to EN1366-3
<b>Marine approval</b>	DNV-GL Approval	EU5928	Tested acc. to IMO 2010 FTP code
<b>Practical fire behaviour</b>	Self-extinguishing, does not drip & does not spread flames		
<b>Other technical features</b>			
<b>Dimensions &amp; tolerances</b>	In accordance with EN 14304, table 1	EU 5709	Tested acc. to EN 822, EN 823 & EN 13467
<b>UV resistance</b>	For protection against UV radiation use ArmaFinish 99 paint. Alternatively use HT/ArmaFlex, ArmaFlex Tuffcoat or Arma-Chek Silver		
<b>Health aspects</b>	ODP & GWP rating 0		
<b>Storage &amp; shelf life</b>	Self-adhesive tapes, sheets & tubes	1 year	
<b>Antimicrobial behaviour</b>	Built-in Microban® active antimicrobial protection	No fungal growth observed	

**TUBE**

Length - 2m

Colour - Black

Antimicrobial protection - Microban®



Pipe max. Outside Ø (mm)	Inner tube. Ø min (mm)	Inner tube. Ø max (mm)	6mm INSULATION THICKNESS			9mm INSULATION THICKNESS		
			Code	m/carton		Code	m/carton	
6	7	9	AF-CO-06X006	544		AF-CO-09X006	352	
10	11	13	AF-CO-06X010	400		AF-CO-09X010	280	
12	13	15	AF-CO-06X012	336		AF-CO-09X012	240	
15	16	18	AF-CO-06X015	266		AF-CO-09X015	192	
20	21	23	-	-		AF-CO-09X020	156	
22	23	25	-	-		AF-CO-09X022	140	
28	29	31.5	-	-		AF-CO-09X028	98	
35	36	38.5	-	-		AF-CO-09X035	84	
42	43	46	-	-		AF-CO-09X042	60	
48	49	51.5	-	-		AF-CO-09X048	56	
54	55	58	-	-		AF-CO-09X054	54	
60	61	64	-	-		AF-CO-09X060	42	

Pipe max. Outside Ø (mm)	Inner tube. Ø min (mm)	Inner tube. Ø max (mm)	13mm INSULATION THICKNESS			19mm INSULATION THICKNESS		
			Code	m/carton		Code	m/carton	
6	7	9	AF-CO-13X006	226		-	-	
10	11	13	AF-CO-13X010	188		AF-CO-19X010	104	
12	13	15	AF-CO-13X012	162		AF-CO-19X012	92	
15	16	18	AF-CO-13X015	136		AF-CO-19X015	78	
18	19	21	AF-CO-13X018 •	118		AF-CO-19X018 •	70	
20	21	23	AF-CO-13X020	112		AF-CO-19X020	70	
22	23	25	AF-CO-13X022	104		AF-CO-19X022	64	
25	26	28	AF-CO-13X025 •	84		AF-CO-19X025 •	54	
28	29	31.5	AF-CO-13X028	78		AF-CO-19X028	50	
32	33	35.5	AF-CO-13X032 •	60		AF-CO-19X032 •	40	
35	36	38.5	AF-CO-13X035	60		AF-CO-19X035	40	
42	43	46	AF-CO-13X042	56		AF-CO-19X042	32	
48	49	51.5	AF-CO-13X048	40		AF-CO-19X048	30	
54	55	58	AF-CO-13X054	42		AF-CO-19X054	24	
60	61	64	AF-CO-13X060	36		AF-CO-19X060	24	
64	65	67	AF-CO-13X064 •	34		AF-CO-19X064 •	20	
67	68	71	AF-CO-13X067	34		AF-CO-19X067	20	
76	77	80	AF-CO-13X076	28		AF-CO-19X076	18	
80	81	84	AF-CO-13X080	28		AF-CO-19X080	16	
89	90	93	AF-CO-13X089	22		AF-CO-19X089	16	
93	94	97	AF-CO-13X093 •	20		AF-CO-19X093 •	16	
108	110	114	AF-CO-13X108 •	18		AF-CO-19X108 •	12	
114	116	120	AF-CO-13X114 •	18		AF-CO-19X114 •	12	

# TUBE

Length - 2m, Colour - Black, Antimicrobial protection - Microban®



Pipe max. Outside Ø (mm)	Inner tube. Ø min (mm)	Inner tube. Ø max (mm)	25mm INSULATION THICKNESS			32mm INSULATION THICKNESS		
			Code	m/carton		Code	m/carton	
12	13	15	AF-CO-25X012	50		-	-	
15	16	18	AF-CO-25X015	48		AF-CO-32X015	32	
20	21	23	AF-CO-25X020	40		-	-	
22	23	25	AF-CO-25X022	40		AF-CO-32X022	32	
28	29	31.5	AF-CO-25X028	32		AF-CO-32X028	24	
35	36	38.5	AF-CO-25X035	24		AF-CO-32X035	18	
42	43	46	AF-CO-25X042	24		AF-CO-32X042	16	
48	49	51.5	AF-CO-25X048	22		AF-CO-32X048	12	
54	55	58	AF-CO-25X054	18		AF-CO-32X054	12	
60	61	64	AF-CO-25X060	18		AF-CO-32X060	12	
67	68	71	AF-CO-25X067	16		AF-CO-32X067	12	
76	77	80	AF-CO-25X076	14		AF-CO-32X076	10	
80	81	84	AF-CO-25X080	12		-	-	
89	90	93	AF-CO-25X089	12		AF-CO-32X089	8	
93	94	97	AF-CO-25X093 •	12		-	-	
108	110	114	AF-CO-25X108 •	8		-	-	
114	116	120	AF-CO-25X114 •	8		AF-CO-32X114 •	6	

# LARGE DIAMETER TUBES

Length - 2m, Colour - Black, Antimicrobial protection - Microban®



Pipe max. Outside Ø (mm)	Inner tube Ø min (mm)	Inner tube Ø max (mm)	AF-2			AF-3		
			Insulation thickness (mm)	Code	m/carton	Insulation thickness (mm)	Code	m/carton
125	127	131	15	AF-2-125	12	19	AF-3-125	12
140	142	146	15.5	AF-2-140	8	19	AF-3-140	80
160	162	166	16	AF-2-160	8	19	AF-3-160	8

Pipe max. Outside Ø (mm)	Inner tube Ø min (mm)	Inner tube Ø max (mm)	AF-4			AF-5		
			Insulation thickness (mm)	Code	m/carton	Insulation thickness (mm)	Code	m/carton
125	127	131	23.5	AF-4-125	12	31.5	AF-5-125	6
140	142	146	24.5	AF-4-140	10	32	AF-5-140	6
160	162	166	25	AF-4-160	6	-	-	-
168	170	174	25	AF-4-168	4	45	AF-5-168	4

# DOMESTIC BUILDING SERVICES COMPLIANCE GUIDE

Length - 2m, Colour - Black, Antimicrobial protection - Microban®



Thickness required to meet Domestic Building Services Compliance Guide / Part L max permissible heat losses					
Pipe max. outside Ø (mm)	Max Permissible Heat Loss (W/m)	Thickness	Code	m/carton	
8	7.06	13	AF-CO-13X010	188	
10	7.23	13	AF-CO-13X010	188	
12	7.35	19	AF-CO-19X012	92	
15	7.89	19	AF-CO-19X015	78	
22	9.12	25	AF-CO-25X022	40	
28	10.07	25	AF-CO-25X028	32	
35	11.08	25	AF-CO-25X035	24	
42	12.19	25	AF-CO-25X042	24	
54	14.12	32	AF-CO-32X054	12	

Other information and remarks									
Length tolerance for tubes	±1.5%								
Thickness tolerance for tubes	<table border="0"> <tr> <td>≤ 8mm</td> <td>± 1mm</td> </tr> <tr> <td>9 - 18mm</td> <td>± 1.5mm</td> </tr> <tr> <td>19 - 31mm</td> <td>± 2.5mm</td> </tr> <tr> <td>&gt; 31mm</td> <td>± 3mm</td> </tr> </table>	≤ 8mm	± 1mm	9 - 18mm	± 1.5mm	19 - 31mm	± 2.5mm	> 31mm	± 3mm
≤ 8mm	± 1mm								
9 - 18mm	± 1.5mm								
19 - 31mm	± 2.5mm								
> 31mm	± 3mm								
All AF/ArmaFlex Class 0 tubes available as SLIT items. Add 0.12 p/m net after discount has been applied. For ordering add -SLT to above codes e.g. AF-CO-19X010-SLT									
• Not a stock item									



# SELF-ADHESIVE TUBE (SELF SEAL)

Length - 2m, Colour - Black, Antimicrobial protection - Microban®



Pipe max. Outside - Ø (mm)	Inner tube Ø min (mm)	Inner tube Ø max (mm)	9mm INSULATION THICKNESS			13mm INSULATION THICKNESS		
			Code	m/carton		Code	m/carton	
15	16	18	AF-CO-09X015-A	192		AF-CO-13X015-A	136	
20	21	23	AF-CO-09X020-A •	156		AF-CO-13X020-A	112	
22	23	25	AF-CO-09X022-A	140		AF-CO-13X022-A	104	
28	29	31.5	AF-CO-09X028-A	98		AF-CO-13X028-A	78	
35	36	38.5	AF-CO-09X035-A	84		AF-CO-13X035-A	60	
42	43	46	AF-CO-09X042-A	60		AF-CO-13X042-A	56	
48	49	51.5	AF-CO-09X048-A •	56		AF-CO-13X048-A	40	
54	55	58	AF-CO-09X054-A	54		AF-CO-13X054-A	42	
60	61	64	AF-CO-09X060-A •	42		AF-CO-13X060-A	36	
67	68	71				AF-CO-13X067-A •	34	
76	77	80				AF-CO-13X076-A	28	
89	90	93				AF-CO-13X089-A	22	

Pipe max. Outside - Ø (mm)	Inner tube Ø min (mm)	Inner tube Ø max (mm)	19mm INSULATION THICKNESS			25mm INSULATION THICKNESS		
			Code	m/carton		Code	m/carton	
15	16	18	AF-CO-19X015-A	78		AF-CO-25X015-A	48	
20	21	23	AF-CO-19X020-A •	70		AF-CO-25X020-A •	40	
22	23	25	AF-CO-19X022-A	64		AF-CO-25X022-A	40	
28	29	31.5	AF-CO-19X028-A	50		AF-CO-25X028-A	32	
35	36	38.5	AF-CO-19X035-A	40		AF-CO-25X035-A	24	
42	43	46	AF-CO-19X042-A	32		AF-CO-25X042-A	24	
48	49	51.5	AF-CO-19X048-A	30		AF-CO-25X048-A	22	
54	55	58	AF-CO-19X054-A	24		AF-CO-25X054-A	18	
60	61	64	AF-CO-19X060-A	24		AF-CO-25X060-A	18	
67	68	71	AF-CO-19X067-A •	20		AF-CO-25X067-A •	16	
76	77	80	AF-CO-19X076-A	18		AF-CO-25X076-A	14	
89	90	93	AF-CO-19X089-A	16		AF-CO-25X089-A	12	

Other information and remarks									
Length tolerance for tubes	±1.5%								
Thickness tolerance for tubes	<table border="0"> <tr> <td>≤ 8mm</td> <td>± 1mm</td> </tr> <tr> <td>9 - 18mm</td> <td>± 1.5mm</td> </tr> <tr> <td>19 - 31mm</td> <td>± 2.5mm</td> </tr> <tr> <td>&gt; 31mm</td> <td>± 3mm</td> </tr> </table>	≤ 8mm	± 1mm	9 - 18mm	± 1.5mm	19 - 31mm	± 2.5mm	> 31mm	± 3mm
≤ 8mm	± 1mm								
9 - 18mm	± 1.5mm								
19 - 31mm	± 2.5mm								
> 31mm	± 3mm								
• Not a stock item									

## 15M COILS

Colour - Black , Antimicrobial protection - Microban®, supplied in clear polyethylene bag



Pipe max. Outside - Ø (mm)	Inner tube Ø min (mm)	Inner tube Ø max (mm)	6mm INSULATION THICKNESS			9mm INSULATION THICKNESS		
			Code	m/carton		Code	m/carton	
6	7	9				AF-CO-09X006/E-15	180	
10	11	13	AF-CO-06X010/E-15	210		AF-CO-09X010/E-15	150	
12	13	15	AF-CO-06X012/E-15	180		AF-CO-09X012/E-15	135	
15	16	18	AF-CO-06X015/E-15 •	135		AF-CO-09X015/E-15	135	
20	21	23				AF-CO-09X020/E-15	105	
22	23	25				AF-CO-09X022/E-15	90	
28	29	31.5				AF-CO-09X028/E-15	75	

Pipe max. Outside - Ø (mm)	Inner tube Ø min (mm)	Inner tube Ø max (mm)	13mm INSULATION THICKNESS		
			Code	m/carton	
6	7	9	AF-CO-13X006/E-15	135	
10	11	13	AF-CO-13X010/E-15	105	
12	13	15	AF-CO-13X012/E-15	90	
15	16	18	AF-CO-13X015/E-15	90	
20	21	23	AF-CO-13X020/E-15	90	
22	23	25	AF-CO-13X022/E-15	75	
28	29	31.5	AF-CO-13X028/E-15	60	

## AC COILS

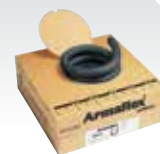
Length - 2m, Colour - Black , Antimicrobial protection - Microban®, supplied in a specially designed carton for easy dispense



Pipe max. Outside - Ø (mm)	6mm INSULATION THICKNESS			9mm INSULATION THICKNESS		
	Code	m/carton		Code	m/carton	
6				AF-CO-09X006/E	70	
10	AF-CO-06X010/E	75		AF-CO-09X010/E	50	
12				AF-CO-09X012/E	45	
15	AF-CO-06X015/E	55		AF-CO-09X015/E	40	
20				AF-CO-09X020/E	34	
22				AF-CO-09X022/E	30	
28				AF-CO-09X028/E	26	

## AC COILS

Length - 2m, Colour - Black , Antimicrobial protection - Microban®, supplied in a specially designed carton for easy dispense



Pipe max. Outside - Ø (mm)	13mm INSULATION THICKNESS		
	Code	m/carton	
6	AF-CO-13X006/E	45	
10	AF-CO-13X010/E	35	
12	AF-CO-13X012/E	32	
15	AF-CO-13X015/E	32	
20	AF-CO-13X020/E	28	
22	AF-CO-13X022/E	26	
28	AF-CO-13X028/E	20	

## SHEET

Length - 2m, Width - 0.5m, Colour - Black , Antimicrobial protection - Microban®



Code	Thickness (mm)	m <sup>2</sup> /carton	
AF-CO-10MM	10	13	
AF-CO-13MM	13	9	
AF-CO-19MM	19	7	
AF-CO-25MM	25	5	
AF-CO-32MM	32	4	

## SELF-ADHESIVE SHEET

Length - 2m, Width - 0.5m, Colour - Black , Antimicrobial protection - Microban®



Code	Thickness (mm)	m <sup>2</sup> /carton	
AF-CO-10MM/A •	10	13	
AF-CO-13MM/A •	13	9	
AF-CO-19MM/A •	19	7	
AF-CO-25MM/A •	25	5	
AF-CO-32MM/A •	32	4	

## CONTINUOUS SHEET (ROLLS)

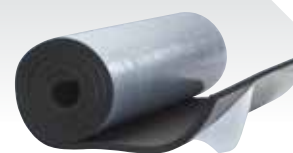
Width - 1m, Colour - Black, Antimicrobial protection - Microban®



Code	Thickness (mm)	Roll Length (m)	m <sup>2</sup> /carton	
AF-03MM/E •	3	30	30	
AF-CO-06MM/E	6	15	15	
AF-CO-10MM/E	10	10	10	
AF-CO-13MM/E	13	8	8	
AF-CO-19MM/E	19	6	6	
AF-CO-25MM/E	25	4	4	
AF-CO-32MM/E	32	3	3	
AF-50MM/E	50	5	5	

## SELF-ADHESIVE CONTINUOUS SHEET (ROLLS)

Width - 1m, Colour - Black, Antimicrobial protection - Microban®



Code	Thickness (mm)	Roll Length (m)	m <sup>2</sup> /carton	
AF-03MM/EA •	3	30	30	
AF-CO-06MM/EA •	6	15	15	
AF-CO-10MM/EA •	10	10	10	
AF-CO-13MM/EA •	13	8	8	
AF-CO-19MM/EA •	19	6	6	
AF-CO-25MM/EA •	25	4	4	
AF-CO-32MM/EA •	32	3	3	
AF-50MM/EA •	50	5	5	

### Other information and remarks

Length tolerance for tubes and sheet	± 1.5 to 5%	
Thickness tolerance for sheets	≤ 6mm	± 1mm
	7 - 19mm	± 1.5mm
	> 19mm	± 2mm

- Not a stock item.

## TAPE

Colour - Black, Antimicrobial protection - Microban®



Code	Width (mm)	Length (m)	Thickness (mm)	Rolls/carton	
AF-TAPE-MC	50	15	3	12	

# ArmaFix® Ecolight

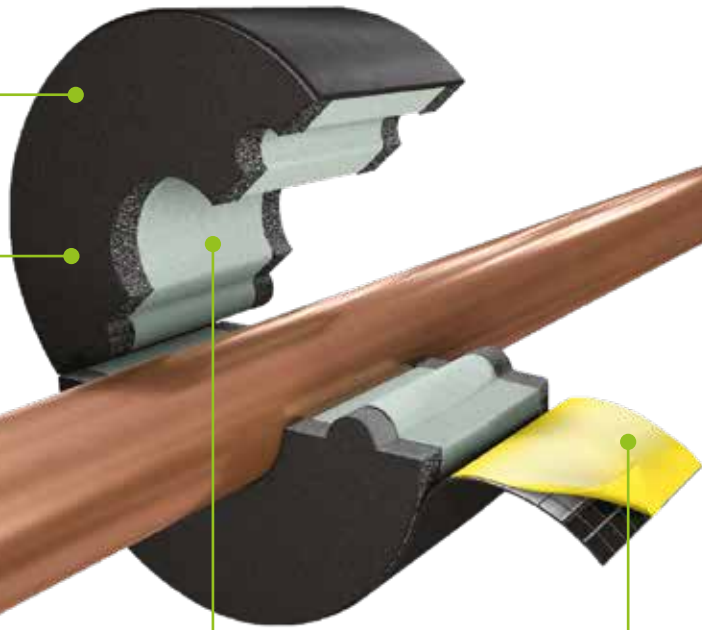


## ECO-FRIENDLY PIPE SUPPORTS FOR A COMPLETE INSULATION SYSTEM

- Available in 13, 19, 25, 32 & 40mm insulation thickness
- Light weight pipe support system with a density of 95 - 105kg/m<sup>3</sup>
- Thermal Conductivity 0.033 W/(m · k)
- Temperature range -30°C up to +80°C
- Fire rating to match ArmaFlex insulation
- Energy saving & condensation control
- Self seal closing seams for fast application
- Prevents thermal bridging at pipe fixings for HVAC applications
- Dust and fibre free
- PET Material is made using 100% recycled PET bottles
- Compatible with ArmaFlex black elastomeric ranges
- ArmaFix clamps available with M8/M10 mounting nut

# PROPERTIES

ArmaFix Ecolight to thermally insulate pipe bracket



Manufactured with a PET core for greater load capacity

Integrated vapour barrier and self-adhesive seal on both sides of the support to avoid thermal bridges and condensation. Prevents energy losses at joins

By installing ArmaFix Ecolight pipe supports, direct contact between the pipe bracket and pipework is avoided. This eliminates cold spots and prevents condensation from forming on chilled water and refrigeration lines. By helping to control condensation, the risk of corrosion and secondary damage to surrounding goods and equipment can be prevented

## RECYCLED PET FOAM

Made using 100% recycled plastic bottles, diverting thousands of tonnes of plastic from landfill.



## CLAMPS

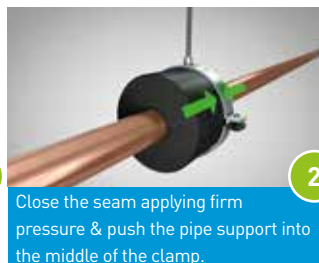
ArmaFix clamps are available to match the ArmaFix Ecolight sizes.



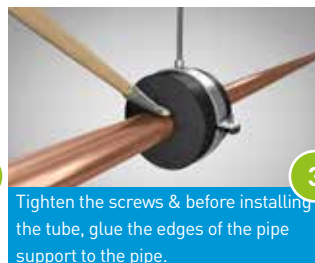
# INSTALLATION GUIDE



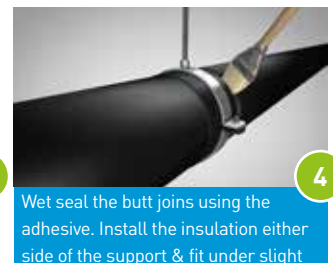
**1** Install the support around the pipe, seal the surface using adhesive & remove the backing strip.



**2** Close the seam applying firm pressure & push the pipe support into the middle of the clamp.



**3** Tighten the screws & before installing the tube, glue the edges of the pipe support to the pipe.



**4** Wet seal the butt joins using the adhesive. Install the insulation either side of the support & fit under slight compression.

RANGE

## PIPE SUPPORTS & CLAMPS



## RECOMMENDED PRODUCTS

For a complete installation



ArmaFlex 520 adhesive



ArmaFlex RS850 adhesive



AF/ArmaFlex Class 0

## TECHNICAL DATA

Pipe support for refrigeration and air conditioning applications to prevent condensation at fixing points. PET load bearing segments with outer ArmaFlex layer for system compatibility with adjoining insulation.

<b>Material type</b>	PET foam bearing segments with outer ArmaFlex insulation for connection to adjoining tube sections. Outside cladding made from PVC foil.
<b>Colour</b>	Black
<b>Material information</b>	Traces of silicon can be found on the protective film used on the self-adhesive closures. Please contact our customer services for details
<b>Applications</b>	An integral component for ArmaFlex insulation systems, providing thermal isolation of pipework in air conditioning and refrigeration applications.
<b>Remarks</b>	When used in applications with intermittent temperatures, expansion of the insulation should be taken into account during installation (application temperature above 10°C)

Property	Value/Assessment	Standards & Remarks
<b>Temperature Range</b>		
Max service temperature	+80°C	
Min service temperature	0°C	
<b>Thermal Conductivity</b>		
	0.033 W/m•K) @ 0°C	Declared acc. to EN ISO 13787 Tested acc. to EN12667 & EN ISO 8497
<b>Water Vapour Diffusion Resistance</b>		
	$\mu \geq 10,000$	Tested acc. to EN 12086 & EN 13469
<b>Fire Performance</b>		
Reaction to fire	Euroclass E Euroclass Bs3 d0 (when installed with an Bs3 d0 rated pipe insulation). Equivalent to Class 0 rating in the UK	Classified acc. to EN 13501-1 Tested acc. to EN 13823 & EN ISO 11925-2
<b>Acoustic Performance</b>		
Reduction of structure-borne sound transmission	According to insulation material used	
<b>Other technical features</b>		
Density	95 - 105 kg/m <sup>3</sup> (pipe bearing segments)	
Storage & shelf life	Products with self-adhesive closures to be installed within 1 year	

<b>ArmaFix Clamps</b>	
<b>Description</b>	Pipe clamp with quick release closing and combination mounting nut
<b>Material type</b>	Steel with an electrolytic zinc coating to protect the clamp from corrosion.
<b>Colour</b>	Silver
<b>Material information</b>	Clamp supplied with combination nut for fixing to threaded rod.
<b>Applications</b>	For use alongside ArmaFlex insulation at pipe hanging points to eliminate thermal bridging on refrigeration and air-conditioning installations.
<b>Fire Performance</b>	The insulation layer does not affect the fire performance of the steel clamp
<b>Screw connections</b>	M8 / M10 combination nut
<b>Tension screws</b>	M6 / M8
<b>Clamp</b>	Width 20mm - 30mm, Thickness 1.5mm - 3mm



# PIPE SUPPORTS AND CLAMPS



Pipe max. Outside - Ø (mm)	Max permissible distance (m)	13mm INSULATION THICKNESS			CLAMPS 13mm		
		Code	Pieces/carton		Code	Pieces/carton	
6	2	ECP-13X006	25		PCX 025/030	25	
10	2	ECP-13X010	25		PCX 025/030	25	
12	2	ECP-13X012	25		PCX 025/030	25	
15	2	ECP-13X015	25		PCX 033/037	25	
18	2	ECP-13X018	25		PCX 033/037	25	
22	2	ECP-13X022	25		PCX 042/046	25	
28	3	ECP-13X028	25		PCX 047/052	25	
32	3	ECP-13X032	25		PCX 047/052	25	
35	3	ECP-13X035	25		PCX 054/058	25	
42	3	ECP-13X042	25		PCX 063/068	25	
48	4	ECP-13X048	20		PCX 068/073	10	
54	4	ECP-13X054	20		PCX 068/073	10	
60	4	ECP-13X060	20		PCX 082/085	10	
64	4	ECP-13X064	20		PCX 082/085	10	
76	5	ECP-13X076	20		PCX 092/099	10	
89	6	ECP-13X089	15		PCX 108/112	10	
102	6	ECP-13X102	15		PCX 125/130	10	
114	6	ECP-13X114	15		PCX 133/137	10	

Pipe max. Outside - Ø (mm)	Max permissible distance (m)	19mm INSULATION THICKNESS			CLAMPS 19mm		
		Code	Pieces/carton		Code	Pieces/carton	
6	2	ECP-19X006	25		PCX 038/041	25	
10	2	ECP-19X010	25		PCX 038/041	25	
12	2	ECP-19X012	25		PCX 038/041	25	
15	2	ECP-19X015	25		PCX 047/052	25	
18	2	ECP-19X018	25		PCX 047/052	25	
22	2	ECP-19X022	25		PCX 054/058	25	
28	3	ECP-19X028	25		PCX 059/063	25	
32	3	ECP-19X032	25		PCX 059/063	25	
35	3	ECP-19X035	25		PCX 063/068	10	
42	3	ECP-19X042	20		PCX 068/073	10	
48	4	ECP-19X048	20		PCX 072/080	10	
54	4	ECP-19X054	20		PCX 082/085	10	
60	4	ECP-19X060	20		PCX 088/092	10	
64	4	ECP-19X064	20		PCX 088/092	10	
76	5	ECP-19X076	20		PCX 099/103	10	
89	6	ECP-19X089	15		PCX112/118	10	
102	6	ECP-19X102	15		PCX133/137	10	
114	6	ECP-19X114	15		PCX137/142	10	

Pipe max. Outside - Ø (mm)	Max permissible distance (m)	25mm INSULATION THICKNESS			CLAMPS 25mm		
		Code	Pieces/carton		Code	Pieces/carton	
6	2	ECP-25X006	25		PCX 047/052	25	
10	2	ECP-25X010	25		PCX 047/052	25	
12	2	ECP-25X012	25		PCX 047/052	25	
15	2	ECP-25X015	25		PCX 059/063	25	
18	2	ECP-25X018	25		PCX 059/063	25	
22	2	ECP-25X022	25		PCX 063/068	25	
28	3	ECP-25X028	20		PCX 068/073	25	
32	3	ECP-25X032	20		PCX 068/073	25	
35	3	ECP-25X035	20		PCX 072/080	25	
42	3	ECP-25X042	20		PCX 082/085	25	
48	4	ECP-25X048	20		PCX 088/092	10	
54	4	ECP-25X054	20		PCX 092/099	10	
60	4	ECP-25X060	20		PCX 099/103	10	
64	4	ECP-25X064	20		PCX 099/103	10	
76	5	ECP-25X076	20		PCX 112/118	10	
89	6	ECP-25X089	15		PCX 133/137	10	
102	6	ECP-25X102	15		PCX 137/142	10	
114	6	ECP-25X114	15		PCX 159/164	10	

Pipe max. Outside - Ø (mm)	Max permissible distance (m)	32mm INSULATION THICKNESS			CLAMPS 32mm		
		Code	Pieces/carton		Code	Pieces/carton	
6	2	ECP-32X006	25		PCX 063/068	25	
10	2	ECP-32X010	25		PCX 063/068	25	
12	2	ECP-32X012	25		PCX 063/068	25	
15	2	ECP-32X015	20		PCX 072/080	10	
18	2	ECP-32X018	20		PCX 072/080	10	
22	2	ECP-32X022	20		PCX 072/080	10	
28	3	ECP-32X028	20		PCX 088/092	10	
32	3	ECP-32X032	20		PCX 092/099	10	
35	3	ECP-32X035	20		PCX 092/099	10	
42	3	ECP-32X042	20		PCX 099/103	10	
48	4	ECP-32X048	20		PCX 108/112	10	
54	4	ECP-32X054	20		PCX 112/118	10	
60	4	ECP-32X060	20		PCX 112/118	10	
64	4	ECP-32X064	20		PCX 125/130	10	
76	5	ECP-32X076	20		PCX 133/137	10	
89	6	ECP-32X089	15		PCX 145/152	10	
102	6	ECP-32X102	15		PCX 159/164	10	
114	6	ECP-32X114	15		PCX 168/173	10	
140	6	ECP-32X140	15		PCX 199	10	
168	6	ECP-32X168	15		PCX 222	10	

Pipe max. Outside - Ø (mm)	Max permissible distance (m)	40mm INSULATION THICKNESS			CLAMPS 40mm		
		Code	Pieces/carton		Code	Pieces/carton	
6	2	ECP-40X006	20		PCX 082/085	10	
10	2	ECP-40X010	20		PCX 082/085	10	
12	2	ECP-40X012	20		PCX 082/085	10	
15	2	ECP-40X015	20		PCX 088/092	10	
18	2	ECP-40X018	20		PCX 092/099	10	
22	2	ECP-40X022	20		PCX 092/099	10	
28	3	ECP-40X028	20		PCX 099/103	10	
32	3	ECP-40X032	20		PCX 108/112	10	
35	3	ECP-40X035	20		PCX 122/118	10	
42	3	ECP-40X042	20		PCX 125/130	10	
48	4	ECP-40X048	20		PCX 133/137	10	
54	4	ECP-40X054	20		PCX 133/137	10	
60	4	ECP-40X060	20		PCX 133/137	10	
64	4	ECP-40X064	20		PCX 137/142	10	
76	5	ECP-40X076	20		PCX 145/152	10	
89	6	ECP-40X089	15		PCX 164/169	10	
102	6	ECP-40X102	15		PCX 168/173	10	
114	6	ECP-40X114	15		PCX 199	10	

# ArmaFlex RS850

## NON-DRIP ADHESIVE FOR FASTER & CLEANER APPLICATIONS.

- Minimum solvent emissions when idle
- Ideal for hard to access areas
- Extended shelf-life
- Reduced solvent content to meet requirements for sustainable building projects
- Superior bonding with Armaflex
- Thixotropic gel based adhesive
- Low viscosity, air drying adhesive



Non-drip one component adhesive in gel form. Specifically developed for ArmaFlex insulation materials based on synthetic rubber.	
<b>Material type</b>	Thixotropic contact adhesive on polychloroprene basis.
<b>Colour</b>	Beige
<b>Material special info</b>	Gel form
<b>Applications</b>	Application on pipes, ducts and tanks with service temperature up to +70 °C. Gluing of all flexible ArmaFlex insulation materials (except HT/ArmaFlex & ArmaFlex Ultima).
<b>Special features</b>	Specially formulated adhesive for uniform and safe seam bonding of ArmaFlex insulation materials.
<b>Assembly</b>	Please observe our installation instructions/product data sheets. Application temperature: ideally +20 °C, not below 0 °C. At temperatures below +5 °C or high humidity approx above 80%), increased condensation may form on the surfaces to be glued or adhesive films. In these cases bonding is poor or impossible. This can be tested by using absorbent paper (blotting or crepe paper). Work should not be carried out on operating plant or areas exposed to strong sunlight. Shake and stir well before use. Apply thinly to the areas to be bonded with a brush or spatula. For contact adhesion press together with force during the contact adhesion time. Detailed application guidance is available.
<b>Remarks</b>	The adhesive achieves its final strength after 24 hours. The system should never be operated during this time and any self-adhesive tape or protective coating (exception: ArmaFinish 99), should only be applied after the time has elapsed.

# TECHNICAL DATA

Temperature Range	
Max service temperature	+70°C
Min service temperature	-40°C
Performance	
Coverage (guidance only)	<p>Minimum consumption with the adhesive applied to both surfaces:</p> <p><b>ArmaFlex tubes</b> (thickness &gt; consumption unslit &gt; consumption slit)</p> <ul style="list-style-type: none"> <li>• 10mm &gt; 1,120m per litre &gt; 140m per litre</li> <li>• 20mm &gt; 280m per litre &gt; 70m per litre</li> <li>• 30mm &gt; 175m per litre &gt; 45m per litre</li> <li>• 40mm &gt; 130m per litre &gt; 35m per litre</li> </ul> <p><b>ArmaFlex Sheets</b></p> <ul style="list-style-type: none"> <li>• 3-4 m<sup>2</sup> per litre</li> </ul>
Storage & shelf life	
<p>36 months in an unopened container.            Store between 0°C and 35°C in a dry place. Do not store with explosive substances or spontaneously combusting substances. Store as cool as possible but protected from frost. Cold or frozen adhesive (under 5°C) will become fully useable if slowly acclimatised up to working temperature (approx 20°C)</p>	
Preparation of surfaces	
<p>Clean surfaces and ArmaFlex Ultima surface with Armaflex Cleaner.            Compatibility with bases:</p> <ul style="list-style-type: none"> <li>• Very good adhesion to metallic surfaces.</li> <li>• The adhesive's compatibility with colour coated surfaces needs to be tested.</li> <li>• Incompatible with asphalt, bitumen, red lead (linseed oil-based), polystyrene and plasticated PVC</li> </ul>	
Working time at 20 °C	
Wet adhesion time	Up to 2 minutes
Drying time	2 min
Contact adhesion	10 - 15 mins
Setting	24 hours
The open time depends on the quantity as well as indoor climate conditions. Before operating plant the setting time needs to be allowed to elapse.	
Other technical features	
Flash point	approx -17 °C
Explosion limits	<b>Lower:</b> approx 1.1 Vol %, <b>Upper:</b> approx 11.5 Vol %
Hazard class	Highly flammable, Regulation of inflammable liquids.
Ageing stability	Very good
Resistance to weathering	Very good
Recycling	Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company. For details see relevant Safety Data Sheet. Packaging must be emptied of all residues. Packaging with traces of cured product can be recycled. Packaging with uncured product must be recycled into new product.
Transport classes	Depending on the type of transport

## ARMAFLEX RS850



Code	Description	Pieces/carton	£/pc
ADH-RS850/0.5	ArmaFlex RS850 0.5 Litre can	6	25.44

# ArmaFinish 99

## THE ELASTIC PAINT DESIGNED FOR PROTECTION & COVERING OF ARMAFLEX

- Resistant to weathering and ageing
- Coating remains elastic
- Drip-free paint
- Specially developed for covering Armaflex®
- Protection of Armaflex® insulation materials



<b>ARMAFINISH 99</b>	
UV resistant paint that remains permanently elastic, resistant to weathering and with good ageing resistance.	
<b>Colour</b>	Black, White (RAL 9001) OR GREY (RAL 7037)
<b>Material type</b>	Non-drip
<b>Material special info</b>	Normal consumption: 0.55 Litres per M <sup>2</sup> when two coats applied (corresponds to a dry film thickness of 0.26mm)
<b>Applications</b>	Protection of ArmaFlex insulation materials when installed outdoors and for marking purposes when used indoors.
<b>Assembly</b>	ArmaFlex insulation (except HT/ArmaFlex & ArmaFlex Ultima, see product data sheets) installed outdoors, should be covered with two coats. Application temperature: +10 °C to +30 °C, Drying time: 2 hours (+20 °C), Max relative humidity: 80%. It's necessary to allow 2 hours between each coat and the second coat must be applied within 7 days. The paint may be applied with a brush or roller and tools cleaned with water or ArmaFlex cleaner.
<b>Remarks</b>	Unprotected ArmaFlex must not be exposed to weathering for more than 3 days and ArmaFinish 99 paint should be applied as soon as possible. The protective coating should be inspected at regular intervals. After 2 years at the latest a further two coats should be applied.

## TECHNICAL DATA

Technical features	
<b>Storage &amp; shelf life</b>	12 months in unopened container. Once open keep container tightly closed in a cool, well ventilated place and protect from frost.
<b>Explosion limits</b>	None
<b>Recycling</b>	Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company. For details see relevant Safety Data Sheet. Cans must be emptied prior to recycling. Cans containing adhesive must be recycled into new product.

## ARMAFINISH 99 PAINT

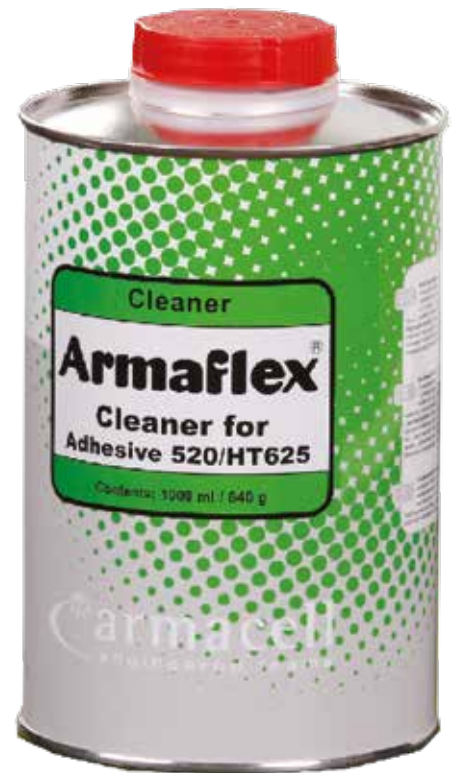


Code	Description	Pices/carton
FINISH/BK-2.5	Protective paint for ArmaFlex, black, 2.5 Litres	4
FINISH/WH-2.5	Protective paint for ArmaFlex, White, 2.5 Litres	4
FINISH/GY-2.5	Protective paint for ArmaFlex, grey, 2.5 Litres	4

# ArmaFlex Cleaner

## SURFACE CLEANER FOR ARMAFLEX INSTALLATIONS

- Ensures a clean surface before the use of ArmaFlex® Adhesives
- Removal of dirt from surfaces
- Cleaning of brushes and tools contaminated with ArmaFlex® adhesive



<b>ARMAFLEX Cleaner</b>	
Special cleaner for use with all ArmaFlex adhesives	
<b>Colour</b>	Clear
<b>Material special info</b>	Liquid
<b>Applications</b>	Cleaning of surfaces where ArmaFlex is to be installed.
<b>Assembly</b>	To ensure a perfect adhesion all contaminated surfaces, including ArmaFlex, must be cleaned. In addition the cleaner can be used to surfaces where ArmaFinish 99 is being applied.
<b>Remarks</b>	Can also be used to clean tools.



## TECHNICAL DATA

Technical features	
<b>Storage &amp; shelf life</b>	12 months sealed in original container. Keep container tightly closed in a cool, well ventilated place. Protect from heat & direct sunlight. Do not store together with explosive substances or spontaneously combusting substances.
<b>Preparation of surfaces</b>	Clean surfaces and ArmaFlex surface with ArmaFlex Cleaner. Compatibility with bases: <ul style="list-style-type: none"><li>• Very good adhesion to metallic surfaces.</li><li>• The adhesive's compatibility with colour coated surfaces needs to be tested.</li><li>• Incompatible with asphalt, bitumen and red lead (linseed oil-based)</li></ul>
<b>Flash point</b>	approx -20 °C
<b>Explosion limits</b>	Lower: approx 1% Vol, Upper: approx 13 % Vol. Regulation of inflammable liquids.
<b>Recycling</b>	Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company. For details see relevant Safety Data Sheet. Packaging must be emptied of all residues. Cans must be emptied prior to recycling. Cans containing adhesive must be recycled into new product.
<b>Transport classes</b>	Dependent on the transport sector

## ARMAFLEX CLEANER



Code	Description	Pices/carton
CLEANER/1.0	Special cleaner for use with ArmaFlex Adhesive	4