



- ARMAFLEX 520 ADHESIVE
- ARMAFLEX HT625 ADHESIVE
- ARMAFLEX RS850 ADHESIVE
- ARMAFLEX ULTIMA ADHESIVES
- ARMAFLEX CLEANNER
- ARMAFINISH 99 PAINT
- KNIFE SETS & SLITTING TOOLS
- CERAMIC KNIVES
- CUTTING TEMPLATE
- AF/ARMAFLEX TAPE
- ARMAFLEX HT TAPE
- ARMAFLEX NH TAPE
- ARMAFLEX ULTIMA TAPE
- ARMAFLEX TUFFCOAT TAPE
- ARMA-CHEK SILVER TAPE
- TUBOLIT TAPE
- ARMA-CHEK MASTICS
- ARMAFLEX TUFFCOAT MASTIC

A guide to the complete range of accessories available from Armacell to ensure a professional standard of application when working with Armaflex® thermal insulation and Arma-Chek® covering materials.

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ADHESIVES RANGE

Specially formulated for sealing the Armaflex® range of flexible elastomeric foam insulation materials, our range of adhesives combine reliable bonding strength with practical application:

ARMAFLEX® 520 ADHESIVE

Tried and tested by thermal insulation contractors for over 20 years, Armaflex 520 is suitable for use with all Armaflex materials (except Armaflex Ultima and HT/Armaflex), making it an extremely versatile adhesive. Available in 0.25 (including brush), 0.5, 1 and 2.5 litre cans.



ARMAFLEX® HT625 ADHESIVE

Specially formulated to perform at the higher temperatures involved when installing HT/Armaflex materials, HT625 is also suitable for use with all other Armaflex materials (except Armaflex Ultima). Available in 0.5, 1 and 2.5 litre cans.



ARMAFLEX® RS850 ADHESIVE

Armaflex RS850 is a non-drip, reduced solvent gel adhesive suitable for processing all Armaflex materials with the exception of HT/Armaflex and Armaflex Ultima. Available in 0.75 litre cans the new product is ideal for hard to access applications and to meet the requirements of sustainable building projects.



ARMAFLEX® ULTIMA ADHESIVES

New range of blue coloured adhesives developed for sealing Armaflex Ultima tubes and sheets. Armaflex Ultima 700 is available in 1 litre cans and is a one-component adhesive. An Ultima version of the reduced solvent, non-drip Armaflex RS850 is also available.



MASTICS RANGE

Required for installing Arma-Chek® R and Arma-Chek D covering systems, and for Armaflex Tuffcoat tubes when installed in washdown areas or for t-pieces and elbows located outdoors:

ARMA-CHEK® GREY MASTIC (ACH-MASTICS)

The recommended mastic to provide a water proof seal for Arma-Chek R Grey installations, developed to be able to withstand the harsh conditions associated with marine and offshore environments.



ARMA-CHEK® BLACK MASTIC (ACH-MASTICD)

Black mastic recommended for use with the Arma-Chek D covering system and with Armaflex Tuffcoat black tubes or sheet in pressurised washdown areas. This mastic is also specified for use to seal Armaflex Tuffcoat t-pieces and elbows located outdoors.



ARMAFLEX® TUFFCOAT MASTIC

White mastic for sealing Armaflex Tuffcoat white tubes and sheets against moisture ingress in pressurised washdown areas and for t-pieces and elbows located outdoors. The mastic is FDA approved for use in food manufacturing, preparation and storage areas.



TAPE RANGE

A complete range of tapes made from the same high performance insulation materials as those used on pipework and ductwork installations*:

AF/ARMAFLEX[®] TAPE

3mm strips of AF/Armaflex material compatible for use with AF/Armaflex and Class 0 Armaflex tube and sheet ranges to give additional integrity and thermal insulation at joints. Available in 50mm wide x 15m rolls.



HT/ARMAFLEX[®] TAPE

Available to compliment the HT/Armaflex tube and sheet range for solar and hot gas and steam line applications up to 150°C, HT tape comes in 3mm thick x 50mm wide x 15m rolls. UV resistant for use outdoors.



NH/ARMAFLEX[®] TAPE

Approved for use in marine and offshore environments in combination with the NH/Armaflex tube and sheet range, NH tape is available in 3mm thick x 50mm wide x 15m rolls.



ARMAFLEX[®] TUFFCOAT TAPE

Available in white or black and in 12.5mm, 25mm or 50mm wide tapes to seal joints and fittings for the Tuffcoat tube and sheet range.



the corresponding tube and sheet products for sealing circumferential and longitudinal joints

TUBOLIT[®] TAPE

Applicable to provide additional insulation to seams of pipework protected with the Tubolit range of polyethylene tubes, ideal for domestic applications. Rolls are 3mm thick x 50mm wide x 15m length.



ARMAFLEX ULTIMA[®] TAPE

Armaflex Ultima tape material with minimal smoke development properties to offer improved fire safety in public buildings. To compliment applications of the new range of blue Armaflex Ultima tubes and sheet.



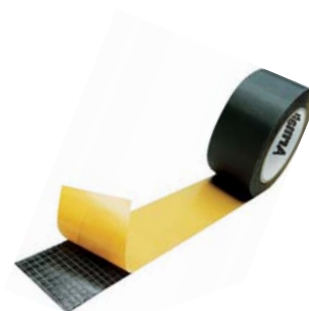
ARMA-CHEK[®] SILVER TAPE

30mm and 50mm wide silver tapes available, specially adapted to give strong adhesion to Armaflex Silver tubes, sheets and fittings, even in outdoor and humid application environments.



ARMA-CHEK[®] D TAPE

20mm, 50mm and 100mm wide tapes available for use on installations of the Arma-Chek D covering system developed for marine and transport applications.



TOOLS, CUTTING TEMPLATE, PAINT & CLEANER

All the high quality cutting tools and ancillaries required to help save time and achieve a pr

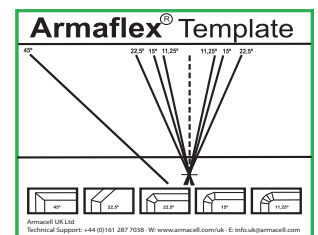
GLUEMASTER BRUSH

The Armaflex Gluemaster is an adhesive pump to help speed up application times and achieve a uniform coverage of glue. Available with 11mm or 17mm diameter brushes.



ARMAFLEX® CUTTING TEMPLATE

Durable PVC sheet version of the Armaflex cutting template to help with fabricating elbows and segmented bends from Armaflex and Armaflex Tuffcoat materials.



ARMAFINISH 99 PAINT

Provides a protective coating against UV damage for Armaflex materials installed outdoors (required for AF/Armaflex and Class 0 Armaflex only). Available in grey or white 2.5 litre tubs.



ARMAFLEX CLEANER

An essential accessory for cleaning adhesive from all tools and insulation materials and to give a neat finish to installations.



Professional standard of installation when working with Armaflex materials:

CUTTING SET

High quality Armaflex knife set including 3 different length knives to suit the range of different Armaflex tube and sheet sizes. Sharpening stone also included.



TUBE SLITTING KNIFE

Tube slitting safety knife for efficient and safe opening of Armaflex tubes. Replacement blades sold separately.



CERAMIC KNIFE

The ceramic knife does not become dulled when used to cut Armaflex materials and is excellent for cutting through the hard-to-puncture Armaflex Tuffcoat and Arma-Chek Silver coverings.





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A series of consumption tables to help determine the quantities of Armaflex and Armaflex Accessories required.

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QUANTITY OF ARMAFLEX TUBE FOR PIPEWORK FITTINGS

To determine the quantity of pipework fittings that can be achieved using Armaflex tube product.

For nominal ID bore pipework size range: 12 - 100mm

Pipe size		90° Elbow	45° Elbow	2+1 Bend segments	2+2 Bend segments	3+2 Bend segments	T-Piece	Reducer
ID	OD							
012	015	5	7	5	4	5	10	10
015	022	5	7	5	4	5	10	10
020	028	5	7	5	4	5	10	10
025	035	5	7	5	4	3	10	10
032	042	5	6	5	4	3	10	10
040	048	5	6	5	4	3	7	7
050	060	4	6	4	3	3	7	7
065	076	4	6	4	3	2	5	5
080	089	4	5	4	3	2	5	5
100	114	3	5	3	2	2	5	5

Figures based upon single items - per metre of Armaflex tube.

Guidance notes:

- All fittings with the exception of t-pieces and reducers have a throat length of 50mm
- All quantity totals above are complete totals, with a very small amount of waste product. However, these small amounts can be used to fabricate fittings as required
- All fittings with the exception of t-pieces and reducers are based upon angle cuts of 90°, 45°, 22.5° and 11.25°. Examples are based upon the fabrication techniques contained in the Armaflex application manual and the templates on each Armaflex tube carton
- The above figures should be used for estimation only

QUANTITY OF ARMAFLEX SHEET FOR PIPEWORK & FITTINGS

To determine the quantity of Armaflex sheet required for pipework fittings, using 09mm - 32mm thick products.

For nominal ID bore pipework size range: 80 - 500mm

Pipe size: ID mm / inches	OD mm	Metre Run: sheet req.	90° Bend: sheet req.	45° Bend: sheet req.	Equal T: sheet req.	Flange: sheet req.	Gate Valve: sheet req.	N/R Valve: sheet req.
080 / 03	089	0.436	0.254	0.127	0.09	0.21	0.403	0.403
100 / 04	114	0.515	0.354	0.177	0.10	0.29	0.505	0.505
125 / 05	140	0.597	0.576	0.238	0.12	0.35	0.72	0.72
150 / 06	169	0.688	0.663	0.316	0.14	0.40	0.93	0.93
200 / 08	219	0.842	0.949	0.474	0.21	0.55	1.10	1.10
250 / 10	273	1.02	1.38	0.690	0.26	0.79	1.40	1.40
300 / 12	324	1.18	1.85	0.925	0.40	0.97	1.80	1.80
350 / 14	356	1.28	2.17	1.085	0.43	1.17	2.31	2.31
400 / 16	406	1.43	2.75	1.375	0.48	1.42	2.90	2.90
450 / 18	457	1.60	3.41	1.71	0.54	1.70	3.60	3.60
500 / 20	508	1.75	4.10	2.05	0.59	2.05	4.40	4.40

Figures based upon single items - per square metre of Armaflex sheet.

Guidance notes:

- Flange and valve estimates relate to PN.16 Table (f) product type
- 90° and 45° bends based upon standard BS radius product type
- Equal T length is based in being 200mm long

ARMAFLEX FABRICATION AND INSTALLATION - TIME NORMS

Labour installation time norms - including adhesive and tack time for single items.

Pipe size ID	Metre run: mins	Elbow	90° bend	45° bend	T-Piece	Reducer	Valve on site	Flange bench made	D.Box
12 ●	6	3	N/A	3	3	3	5	10 ■	N/A
25 ●	6	3	N/A	3	3	3	5	10 ■	N/A
32 ●	6	3	N/A	3	3	3	5	10 ■	N/A
40 ●	6	3	N/A	3	3	3	5	10 ■	N/A
50 ●	6	N/A	10 (2+1)	4	4	5	15 ■	10 ■	10 ■
65 ●	6	N/A	13 (2+2)	5	4	6	20 ■	15 ■	15 ■
80 ●	8	N/A	8 ■	4	4	6	20 ■	15 ■	15 ■
100 ●	9	N/A	10 ■	5	5	10 ■	30 ■	20 ■	20 ■
150 ■	12	N/A	15	8	15	15	40	25	30
200 ■	15	N/A	20	10	20	20	50	30	40

- = in tube material
- = in sheet material

Guidance notes:

- Based on single items, maximum working height of 2 metres above floor level. Times can be reduced if fitting covers are mass produced
- Based on labour having high levels of experience working with Armaflex products.
- Working with the correct type of tools and equipment
- Time evaluations are inclusive of the allowance for tack time of the Armaflex adhesive before bonding
- Fabrication and installation methods based upon Armaflex guidelines contained in the application manual, and demonstrated at training programmes relating to the application of Armaflex sheet and tube products

ARMAFINISH 99 PAINT COVERAGE CHART

Based on two coats at 3.6 square metres per litre per coat:

Pipe dia.	Insulation thickness					
	6	9	13	19	25	32
	Litres per linear metre					
15	0.05	0.06	0.07	0.09	0.11	0.14
22	0.06	0.07	0.08	0.10	0.13	0.15
28	0.07	0.08	0.09	0.12	0.14	0.16
35	0.08	0.09	0.11	0.13	0.15	0.17
42	0.09	0.10	0.12	0.14	0.16	0.19
48	0.10	0.12	0.13	0.15	0.17	0.20
54	0.12	0.13	0.14	0.16	0.18	0.21
60	0.13	0.14	0.15	0.17	0.19	0.22
67	0.14	0.15	0.16	0.18	0.20	0.23
76	0.15	0.16	0.18	0.20	0.22	0.24
80	0.16	0.17	0.19	0.21	0.23	0.25
89	0.18	0.19	0.20	0.22	0.24	0.27
93	0.18	0.19	0.21	0.23	0.25	0.27
108	0.21	0.22	0.23	0.25	0.28	0.30
114	0.22	0.23	0.24	0.27	0.29	0.31
140	0.27	0.28	0.29	0.31	0.33	0.36
168	0.31	0.32	0.34	0.36	0.38	0.40
214	0.39	0.40	0.42	0.44	0.46	0.49
273	0.50	0.51	0.52	0.54	0.56	0.59
324	0.59	0.60	0.61	0.63	0.65	0.68

Guidance notes:

- The Armaflex surface should be clean, dry and free from any oil, grease or other substances that may affect adhesion and curing
- The coating should not be applied if the ambient temperature is likely to fall below 5°C, or the relative humidity is above 90%
- Where practical the first coat should be in a contrasting colour to the second so that adequate coverage can be seen. The second coat should be applied at right angles to the first
- Armafinish 99 paint should dry within 1 - 2 hours in normal conditions. The second coat can be applied as soon as the first coat is dry and should be carried out within 3 days of the first coat

TAPE QUANTITY CHART

Tapes can be used to provide additional integrity to all joins and seams (available in AF/Armaflex, HT/Armaflex, NH/Armaflex, Armaflex Ultima, Armaflex Tuffcoat, Tubolit and Arma-Chek Silver ranges).

Armaflex Tuffcoat tape should be used to seal all linear and segmented bend seams in order to provide a neat finish and prevent moisture ingress on outdoor applications. The below table gives a guide to the amount of tape required per metre (based on one linear / butt join per metre):

Pipe O.D.	Linear m (slit)		Linear m (unslit)		2+1 Segment Bend		2+2 Segment Bend		2+3 Segment Bend		T-Piece	
	13mm	19mm	13mm	19mm	13mm	19mm	13mm	19mm	13mm	19mm	13mm	19mm
10	1.23	1.27	0.13	0.17	0.25	0.34	0.38	0.50	0.50	0.67	0.13	0.17
12	1.24	1.28	0.14	0.18	0.27	0.35	0.40	0.52	0.53	0.70	0.14	0.18
15	1.25	1.29	0.15	0.19	0.29	0.37	0.43	0.55	0.57	0.74	0.15	0.19
20	1.26	1.30	0.16	0.20	0.32	0.40	0.48	0.61	0.64	0.81	0.16	0.20
22	1.27	1.31	0.17	0.21	0.34	0.42	0.50	0.63	0.67	0.83	0.17	0.21
28	1.29	1.33	0.19	0.23	0.38	0.46	0.56	0.69	0.75	0.92	0.19	0.23
35	1.31	1.36	0.21	0.26	0.43	0.51	0.64	0.76	0.85	1.01	0.21	0.26
42	1.34	1.38	0.24	0.28	0.47	0.56	0.71	0.83	0.94	1.11	0.24	0.28
48	1.36	1.40	0.26	0.30	0.52	0.60	0.77	0.90	1.03	1.19	0.26	0.30
54	1.38	1.42	0.28	0.32	0.56	0.64	0.83	0.96	1.11	1.27	0.28	0.32
60	1.40	1.44	0.30	0.34	0.60	0.68	0.90	1.02	1.19	1.36	0.30	0.34
67	1.43	-	0.33	-	0.65	-	0.97	-	1.29	-	0.33	-

CONSUMPTION CHARTS

QUANTITY OF MASTIC

Mastic should be used to seal all seams for the Arma-Chek R Grey and Arma-Chek D covering systems, and for elbows and t-pieces in outdoor areas and on all seams subject to pressurised washing regimes when using Armaflex Tuffcoat.

The below table shows the number of mastic tubes required per metre. Each tube gives approximately 15 linear metres of coverage based on a 10mm wide and 3mm thick bead:

Pipe O.D.	Linear m (slit)		Linear m (unslit)		2+1 Segment Bend		2+2 Segment Bend		2+3 Segment Bend		T-Piece	
	13mm	19mm	13mm	19mm	13mm	19mm	13mm	19mm	13mm	19mm	13mm	19mm
10	0.08	0.08	0.01	0.01	0.02	0.02	0.03	0.03	0.03	0.04	0.01	0.01
12	0.08	0.08	0.01	0.01	0.02	0.02	0.03	0.04	0.04	0.05	0.01	0.01
15	0.08	0.08	0.01	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.01	0.02
20	0.08	0.08	0.01	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.01	0.02
22	0.08	0.08	0.01	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.01	0.02
28	0.08	0.08	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.06	0.02	0.02
35	0.08	0.09	0.02	0.02	0.03	0.03	0.04	0.05	0.06	0.07	0.02	0.02
42	0.08	0.09	0.02	0.02	0.03	0.04	0.05	0.05	0.06	0.07	0.02	0.02
48	0.09	0.09	0.02	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.02	0.02
54	0.09	0.09	0.02	0.02	0.04	0.04	0.05	0.06	0.07	0.08	0.02	0.02
60	0.09	0.09	0.02	0.02	0.04	0.05	0.06	0.07	0.08	0.09	0.02	0.02
67	0.09	-	0.02	-	0.04	-	0.06	-	0.08	-	0.02	-

ARMAFLEX ADHESIVES COVERAGE

When estimating the amounts of Armaflex 520, HT625, RS850, Ultima 700 or Ultima RS850 adhesive ranges required, the following consumption figures can be used as a guide.

Armaflex tubes coverage		
Thickness (mm)	Consumption unslit (m per litre)	Consumption slit (m per litre)
10	1120	140
20	280	70
30	175	45
40	130	35

Figures for estimation only, coverage varies depending on specific conditions.

Guidance notes:

- Cans of Armaflex Adhesive should be stored in a cool environment wherever possible. Cans must also have been kept free from frost.
- Damage due to frost can be reversed by storing in warm conditions, or for immediate use by placing the can into a bucket of hot water. Shelf life approx. 1 year.
- Where installation surfaces are soiled with dust, dirt, oil or water all of these contaminants must be removed and, where applicable, cleaned with Armaflex cleaner before starting work. In addition all surfaces to be joined must be dry before gluing begins.
- Do not use adhesive under 0°C. If the adhesive is too cold it can be warmed in a bucket of hot water. At temperatures below 5°C, condensation can appear on the surfaces to be glued or the adhesive film. If this occurs materials become difficult to bond. Check whether this has happened by applying absorbent paper.
- Stir adhesive well after opening. If left to stand, heavier components in the adhesive may settle in the bottom of the can. These must be mixed thoroughly before use in order to effectively activate the adhesive.
- Use a brush with short, stiff bristles and keep clean. For larger projects the Armaflex Gluemaster is recommended to speed up application times.
- Apply Armaflex adhesive thinly and evenly onto both surfaces to be glued.
- The tack time for Armaflex 520 adhesive ranges between 3 and 10 min. The time will vary according to the grade, ambient temperature and relative humidity. Avoid 'open times' in excess of 20 min.
- Allow the adhesive to 'tack-dry'. The correct initial drying time may be determined by the 'fingernail-test': touch the surface with a fingernail, if the fingernail does not adhere to the surface and the surface itself does not feel tacky the seam may be closed. The maximum adhesive force will be obtained when two tack dry surfaces are brought together.

PIPE DIAMETER CHART

Copper pipes Cu				Steel pipes Fe		Plastic pipes
Pipe max. Outside-ø [mm]	Outside-ø [mm]	Outside-ø [inch]	Inches	Outside-ø [mm]	Nominal diameter DN	Outside-ø [mm]
6	6	1/4		6		
8	8			8		
10	10	3/8	1/8	10.2	6	
12	12	1/2		12		
15	15	5/8	1/4	13.5	8	14
16						16
18	18		3/8	17.2	10	
20				20		20
22	22	7/8	1/2	21.3	15	
25	25			25		25
28	28	1 1/8	3/4	26.9	20	
30				30		
32				32		32
35	35	1 3/8	1	33.7	25	
38				38		
40	40			40		40
42	42	1 5/8	1 1/4	42.4	32	
45				44.5		
48			1 1/2	48.3	40	
50						50
54	54	2 1/8		54		
57				57		
60				60.3	50	
64	64		2	63.5		63
67						
70	70			70		
76	76	3	2 1/2	76.1	65	75
80	80	3 1/8				
89	89		3	88.9	80	90
90						
102				101.6		
108	108	4 1/4				
110						110
114			4	114.3	100	
125				125		125
133	133					
140			5	139.7	125	
154				152.4		
160	159					
165			6	165.1		
168				168.3	150	
180						
204						200
219	219			219.1	200	
254						250
267	267					
273				273	250	
306						300