Armaflex® Duct

FIBRE-FREE DUCT INSULATION WITH A DURABLE AND AESTHETIC SILVER FINISH



- Fibre-free to prevent potential air-quality problems
- Low thermal conductivity for effective energy saving
- Closed-cell insulation to provide a continuous barrier to water vapor

- Optimal surface design for lasting aesthetic impression
- Easy to apply
- High flexibility for ease of fitting
- Washable surface to support hygiene maintenance

Microban® antibacterial protection

Technical data - Armaflex Duct Class 0

Description	Armaflex® Duct Class 0 is a black, closed-cell insulation material also available with a bright silver finish. It is especially designed and produced for the thermal and acoustic insulation of air-conditioning ducts. Armaflex® Duct Class 0 insulation reduces heat losses and the closed-cell structure prevents water vapor transmission, thus reducing the risk of corrosion.
Material Type	**Aluminum foil covered sheets made of foamed synthetic rubber.**
Colour	Black/ Silver
Applications	**Insulation / protection for air ducts to prevent condensation and save energy.**

Property	**Value/ Assessment**				**Special remarks**
Temperature Range					
Temperature Range	max. service temperature		+ 85 °C		For temperature above +85 °C, please consult our Technical Department.
	min. service temperature		- 50 °C		
Thermal Conductivity					
Thermal Conductivity	ϑ_m	+/- 0	+ 20	+ 40 [°C]	Tested acc. to DIN52612 DIN52613
	λ	≤ 0.034	0.036	0.039 W/(m · K)	
Water Vapour Diffusion Resistance					
Water Vapour Diffusion Resistance	μ		≥	10,000	Tested acc. to DIN 52615
Fire Performance					
Reaction to fire	Fire Performance		Class 0		Tested acc. to BS 476 Part 7: 1997 BS 476 Part 6: 1989 Registered by Fire Services Department of Hong Kong for use in ductwork and pipework insulation. For entire range of thickness
Practical Fire Behaviour	**Self-extinguishing, no fire dripping**				
Health Aspects	Dust free & fibre free Free of Formaldehyde				
Antimicrobial behaviour	**In-built Microban® antimicrobial protection : No fungal growth observed**				
Water Absorption	0.9% by volume average (28 days) 1.5% by volume maximum (28 days)				
Environmental Aspects	**ODP zero, GWP zero**				

All statements and technical information are based on results obtained under typical conditions. It is the responsibility of the recipient to verify with us that the information is appropriate for the specific use intended by the recipient. For outside use, Armaflex® should be protected within 3 days, eg. with Armaflnish® Paint 99 or Arma-Chek® covering.

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Armaflex Duct Class 0 self-adhesive sheets, pre-covered



Width 1.22 m and Length 1.0 m, foil faced

Code	Insulation thickness [mm]	Width [m]	Pieces/carton	m²/carton
ICO13122SZA	13.0	1.22	15	18.3
ICO19122SZA	19.0	1.22	10	12.2
ICO25122SZA	25.0	1.22	8	9.76

Armaflex Duct Class 0 continuous sheets, pre-covered



Width 1.22 m, foil faced

Code	Insulation thickness [mm]	Width [m]	Roll length [m]	Pieces/carton	m²/carton
ICO13122SA0	13.0	1.22	8	1	9.76
ICO19122SA0	19.0	1.22	6	1	7.32
ICO25122SA0	25.0	1.22	4	1	4.88

Remarks	For trimmed foiled-faced Armaflex® Duct Class 0, the width tolerance is 1.18m - 0mm/ + 30mm. For untrimmed foiled-faced Armaflex® Duct Class 0, the width tolerance is 1.2m - 0mm/ + 30mm.

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Technical data - Armaflex Duct Class 1

Description	Armaflex® Duct Class 1 is a black, closed-cell insulation material available with a bright silver finish. It is especially designed and produced for the thermal and acoustic insulation of air-conditioning ducts. Armaflex® Duct Class 1 insulation reduces heat losses and the closed-cell structure prevents water vapor transmission, thus avoiding the risk of corrosion.
Material Type	Aluminum foil covered sheets made of foamed synthetic rubber.
Colour	Black/ Silver
Applications	Insulation / protection for air ducts to prevent condensation and save energy.

Property	Value/ Assessment				Special remarks
Temperature Range					
Temperature Range	max. service temperature		+ 85 °C		For temperature above +85 °C, please consult our Technical Department.
	min. service temperature		- 50 °C		
Thermal Conductivity					
Thermal Conductivity	ϑ_m	+/-0	+ 20	+ 40	[°C]	Tested acc. to ASTM C518
	λ	≤ 0.034	0.036	0.038	W/(m · K)	
Water Vapour Diffusion Resistance					
Water Vapour Diffusion Resistance	< 0.08 perm-inch				Tested acc. to ASTM E96 Method A
Fire Performance					
Reaction to fire	Surface Spread of Flames		Class 1		Tested acc. to BS 476 Part 7: 1997
Practical Fire Behaviour	Self-extinguishing, no fire dripping				
Health Aspects	Dust free & fibre free				
Water Absorption	0.2% by volume				Tested acc. to ASTM C209
Environmental Aspects	ODP zero, GWP zero				

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Armaflex Duct Class 1 self-adhesive sheets, pre-covered



Width 1.5 m and Length 1.0 m, Foil faced

Code	Insulation thickness [mm]	Width [m]	Pieces/carton	m²/carton
IC113150SZA	13.0	1.5	15	22.5
IC119150SZA	19.0	1.5	10	15
IC125150SZA	25.0	1.5	8	12

Armaflex Duct Class 1 continuous sheets, pre-covered



Width 1.5 m, Foil faced

Code	Insulation thickness [mm]	Width [m]	Roll length [m]	Pieces/carton	m²/carton
IC113150SA0	13.0	1.5	8	1	12
IC119150SA0	19.0	1.5	6	1	9
IC125150SA0	25.0	1.5	4	1	6

Remarks

For trimmed foiled-faced Armaflex® Duct Class 1, the width tolerance is 1.18m - 0mm/ + 30mm.
For untrimmed foiled-faced Armaflex® Duct Class 1, the width tolerance is 1.2m - 0mm/ + 30mm.

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Technical data - Armaflex Duct MC

Description	Armaflex® Duct MC is a black, closed-cell insulation material also available with a bright silver finish. It is especially designed and produced for the thermal and acoustic insulation of air-conditioning ducts. Armaflex® Duct MC insulation reduces heat losses and the closed-cell structure prevents water vapor transmission, thus avoiding the risk of corrosion.
Material Type	Aluminum foil covered sheets made of foamed synthetic rubber.
Colour	Black/ Silver
Applications	Insulation / protection for pipes, air ducts of air-conditioning / refrigeration and chilled water to prevent condensation and save energy.

Property	Value/ Assessment						Special remarks
Temperature Range							
Temperature Range	max. service temperature			+ 85 °C			For temperature above +85 °C, please contact our Technical Department.
	min. service temperature			- 50 °C			
Thermal Conductivity							
Thermal Conductivity	ϑ_m	-20	+/- 0	24	32	40	[°C]	Tested acc. to ASTM CS18 ASTM C177
	λ ≤	0.032	0.034	0.036	0.037	0.039	W /(m · K)	
	≤	0.230	0.240	0.250	0.260	0.270	Btu·in/(h·ft²·°F)	
Water Vapour Diffusion Resistance							
Water Vapour Diffusion Resistance	> 0.02 perm-in.							Tested acc. to ASTM E96 Method A EN 12086 DIN 52615
	> 2.8 x 10^{-11} g/(m·s·Pa)							
	Moisture Resistance Factor	μ		≥		7,000		
Fire Performance							
Reaction to fire	V-0, HB (TBC after testing)							Tested acc. to UL 94 ASTM D635 (TBC after testing)
Practical Fire Behaviour	**Self-extinguishing, no fire dripping**							
Health Aspects	Dust free & fibre free							
Water Absorption	**≤ 3% by weight ≤ 0.05% by volume**							**Tested acc.to ASTM D1056 ASTM C209**
Environmental Aspects	ODP zero, GWP zero							

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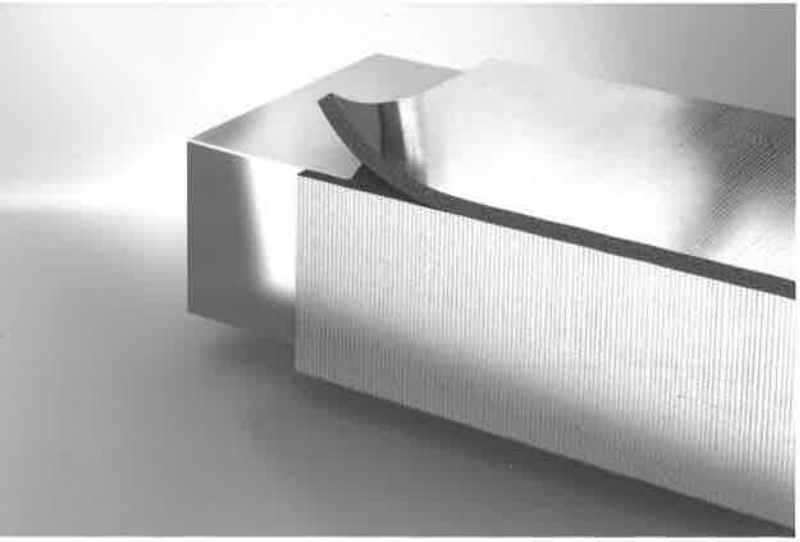
Armaflex Duct MC continuous sheets, pre-covered

Width 1.0 m and 1.22 m, Foil faced

Code	Insulation thickness [mm]	Width [m]	Roll length [m]	Pieces/carton	m²/carton
AD-06122CS-15	6.0	1.22	15	1	18.3
AD-09122CS-10	9.0	1.22	10	1	12.2
AD-09122CS-15	9.0	1.22	15	1	18.3
AD-13122CS-15	13.0	1.22	15	1	18.3
AD-13122CS-8	13.0	1.22	8	1	9.76
AD-19122CS-15	19.0	1.22	15	1	18.3
AD-19122CS-6	19.0	1.22	6	1	7.32
AD-25122CS-15	25.0	1.22	15	1	18.3
AD-25122CS-4	25.0	1.22	4	1	4.88
AD-32122CS-6	32.0	1.22	6	1	7.32
AD-38122CS-6	38.0	1.22	6	1	7.32
AD-50122CS-6	50.0	1.22	6	1	7.32

Remarks	For trimmed foiled-faced Armaflex® Duct MC, the width tolerance is 1.18m - 0mm/ + 30mm. For untrimmed foiled-faced Armaflex® Duct MC, the width tolerance is 1.2m - 0mm/ + 30mm. Self Adhesive Armaflex Duct Mc available on request.

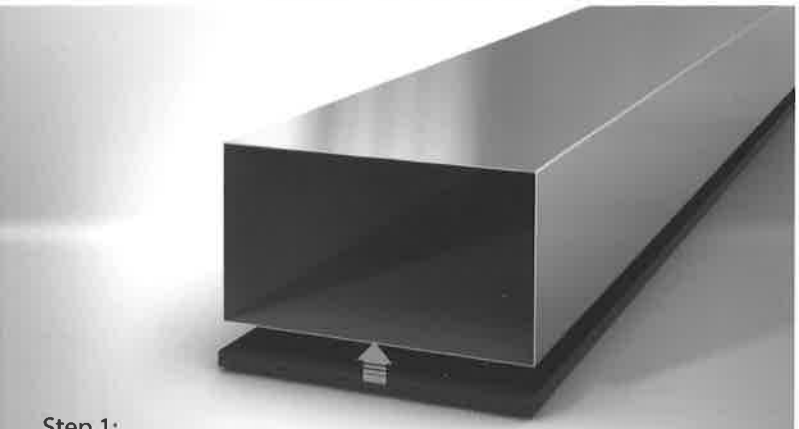
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Armaflex® Duct

- Closed cell insulation to provide a continuous barrier to water vapour
- High flexibility for ease of fitting
- The silver finishing gives an extra on aesthetics and hygiene
- Reduced thickness for space optimization

Easy to apply (*)



Step 1:
Clean all surfaces using Armaflex cleaner to remove grease, oil, dirt, etc. Measure surface dimensions and cut Armaflex sheet to size. Add 5 mm. so that material is fitted under compression. Insulate at first the bottom side of the duct.



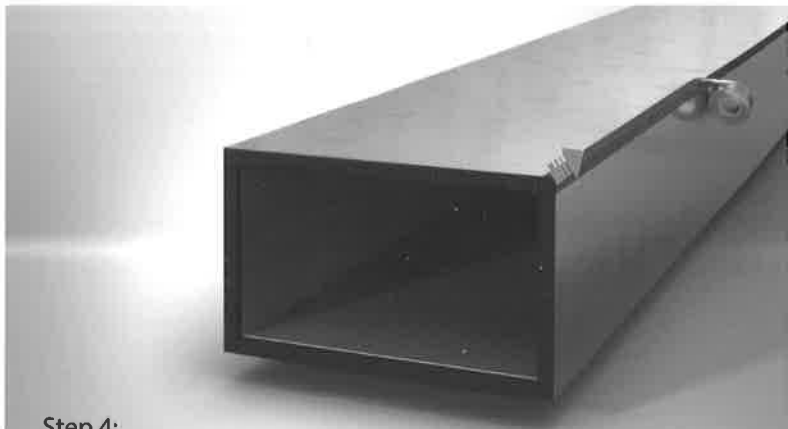
Step2:

Apply the cut sheets at either side of the duct.



Step 3:

Finally insulate the top of the duct.



Step 4:
Apply a wet seal application with Armaflex 520 Adhesive to the compressed butt joints.
By using Armaflex Duct apply AL-tape along the edges of the insulated duct.

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