

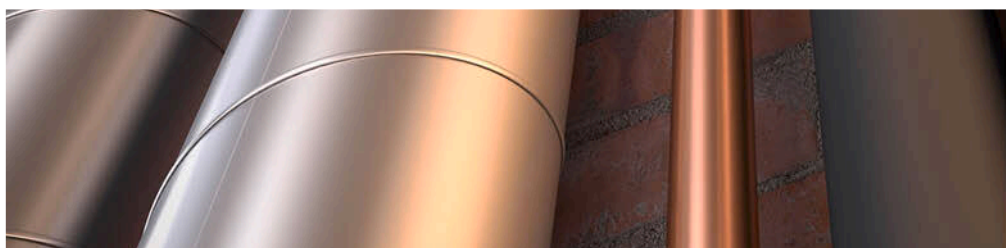


ENHANCED PERFORMANCE  
AND INDOOR AIR QUALITY

# ArmaFlex FRV

High-performance insulation for air-conditioning, heating and refrigeration

- // Fire-tested for vertical pipe chases to NFPA 274
- // Reduces mould and bacteria growth through MICROBAN® antimicrobial product protection, unique to Armacell
- // Type III Environmental Product Declaration (EPD)
- // FM Approved



 **armacell**<sup>®</sup>  
ArmaFlex<sup>®</sup>

## TECHNICAL DATA - ARMAFLEX FRV

Brief description	ArmaFlex FRV is a highly flexible closed-cell insulation material made from nitrile rubber, with high water vapour diffusion resistance and low thermal conductivity.
Material type	Elastomeric foam based on synthetic rubber.
Product colour range	Black
Special features	ArmaFlex sheets is infused with Microban antimicrobial protection to provide additional assurance against mould and bacteria growth.
Installation	Please refer to the ArmaFlex installation manual for advice. ArmaFlex can be used together with ArmaFlex 520 adhesive and ArmaFix pipehangers for a complete insulation system.

Property	Value / Assessment			Standard / Test method	
<b>Temperature range</b>					
Service temperature	Min. °C	Max. °C			
	-50	105			
	Remarks	+85 °C if sheet or tape is glued to the object with its whole surface			
<b>Thermal conductivity</b>					
Declared thermal conductivity	θm	0°C	15°C	23°C	ASTM C518, EN 12667
	λd ≤ [W/(m·K)]	0.033	0.034	0.035	
	Range	Thickness ≤ 25mm			
Declared thermal conductivity	θm	0°C	15°C	23°C	
	λd ≤ [W/(m·K)]	0.035	0.036	0.037	
	Range	Thickness > 25mm			
<b>Fire Performance and Approvals</b>					
Surface spread of flame	Class 1			BS 476 Part 7	
Burning behaviour of building materials and products	Compliant with the requirements for fire hazard properties of insulation materials, as per Specification 7 Clause 7 - of the National Construction Code Volume One - BCA (excluding fire control rooms and fire-isolated exits)			AS/NZS 1530.3, ISO 5660	
	Material Group Number Classification: 2 per New Zealand Building Code Verification Method C/VM2 Appendix A				
Vertical pipe chase	Peak rate of heat release: ≤ 300kW Total heat release (THR10min): ≤ 83MJ Total smoke release (TSR10min): ≤ 500m2 Extent of flame: ≤ 0.3m (1ft)			NFPA 274	
FM approved	Yes			FM 4924	
<b>Flammability</b>					
Flammability of plastic materials	V-0 rating			UL 94	
<b>Fire performance</b>					
Practical fire behaviour	Does not generate flaming droplets.				
<b>Resistance to water vapour</b>					
Water vapour diffusion resistance factor	μ ≥ 5,000			EN 12086, EN 13469	
<b>Resistance to water</b>					
Water absorption	< 0.2% by volume			ASTM C1763	
<b>Weather and UV resistance</b>					
UV resistance	For UV protection an ArmaFinish Paint or Arma-Chek® covering is required. For outside use, ArmaFlex should be protected within three days of installation.				

Property	Value / Assessment	Standard / Test method
<b>Health and environment</b>		
Antimicrobial behaviour	Built-in Microban antimicrobial product protection: No fungal growth is observed.	ASTM G21
Health aspects	Free of fibre and formaldehyde. Low volatile organic compounds (VOC), low total aldehyde. GREENGUARD GOLD for even lower VOC and total chemical emissions.	UL 2818
Environmental Product Declaration (EPD)	Type III EPD: Declaration number 4789125188.101.1, UL Environment.	ISO 14025
<b>Other technical features</b>		
Shelf life	Self-adhesive sheets, tubes and tapes: 1 year	
Storage	Material shall be stored in dry, clean rooms at normal relative humidity (50% to 70%) and ambient temperature (0 °C to 35 °C).	

Item	Insulation thickness [mm]	Width (m)	Content [metric]
FRVA-09MM/E	9	1.22	12.2 m <sup>2</sup>
FRVA-13MM/E	13	1.22	9.76 m <sup>2</sup>
FRVA-19MM/E	19	1.22	7.32 m <sup>2</sup>
FRVA-25MM/E	25	1.22	4.88 m <sup>2</sup>
FRVA-32MM/E	32	1.22	3.66 m <sup>2</sup>
FRVA-38MM/E	38	1.22	3.66 m <sup>2</sup>
FRVA-50MM/E	50	1.22	3.66 m <sup>2</sup>

Item	Insulation thickness [mm]	Width (m)	Length [m]	Content [metric]
FRVA-03MM/L	3	1.22	15	18.3 m <sup>2</sup>
FRVA-06MM/L	6	1.22	15	18.3 m <sup>2</sup>
FRVA-09MM/L	9	1.22	15	18.3 m <sup>2</sup>
FRVA-13MM/L	13	1.22	15	18.3 m <sup>2</sup>
FRVA-19MM/L	19	1.22	15	18.3 m <sup>2</sup>
FRVA-25MM/L	25	1.22	15	18.3 m <sup>2</sup>

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## ABOUT ARMACELL

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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.



For more information, please visit:  
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