

### ARMAFLEX RAIL ZH

**Description:** Halogen free, flexible closed cell insulation foam with improved fire retardant properties and low smoke generation for railway vehicles.

**Material Type:** Elastomeric foam based rubber on synthetic rubber.

**Colour:** Dark Grey

**Material Special Information:** The pressure sensitive adhesive coating is based on modified acrylate basis with mesh structure and covered with polyethylene foil. Traces of silicone can be found on protection paper/foil used to protect self-adhesive closures.

**Applications:** Insulation / protection for air ducts and pipes (inc elbows, fittings, flanges etc) of air-conditioning / refrigeration equipment to prevent condensation.

**Special Features:** Without halogens (chloride, bromide) acc. DIN/VDE 0472, part 815. Fulfils DIN 1988 Parts 200.

**Remarks:** Armaflex Rail ZH is not designed for applications exposed to sunlight and is not UV stable.

PROPERTY	SPECIFICATION LIMITS	TEST	REMARKS
<b>Temperature Range</b>			
Max service temperature	+110°C (+85°C when sheet or tape is glued to a flat object)		Tested acc. to EN14706 EN14707 and EN14304
Min service temperature	-50°C		
<b>Thermal Conductivity</b>			
	$\lambda \text{ 0}^\circ\text{C} \leq 0.040 \text{ W}/(\text{m}\cdot\text{K}) \quad [40+0.1 \cdot \vartheta_m + 0.0009 \cdot \vartheta_m^2]/1000$		Declared acc. to EN ISO 13787  Tested acc. to EN 12667 & EN ISO 8497
<b>Water Vapour Diffusion Resistance</b>			
	$\mu \geq 1000$		Tested acc. to EN 12086 & EN 13469
<b>Fire Performance</b>			
Hazard Levels	HL2, R1	EU5816 EU5857 EU5896 EU6665	Declared acc. to EN45545-2
Practical fire behaviour	Self-extinguishing, does not drip, does not spread flames		
<b>Other technical features</b>			
Storage & Shelf Life	Self-adhesive tapes, self-adhesive sheets: 1 year	Stored in dry clean rooms at normal relative humidity (50% to 70%) and ambient temperature (0°C - 35°C)	

Convertors and suppliers of die cut gaskets, tape, sheeting, fabrications, machined plastic components, rubber mouldings, extrusions and adhesives.



### ARMAFLEX RAIL ZH-C

**Description:** Halogen free, flexible closed cell, pre-covered insulation foam with improved fire retardant properties and low smoke generation for railway vehicles.

**Material Type:** Elastomeric foam based on synthetic rubber with patented high-tech multi-layer coating.  
EU patent no. 2 522 502.

**Colour:** Dark grey with silver metallic look covering.

**Material Special Information:** The pressure sensitive adhesive coating is based on modified acrylate basis with mesh structure and covered with polyethylene foil. Traces of silicone can be found on protection paper/foil used to protect self-adhesive closures.

**Applications:** Insulation / protection for air ducts and pipes (inc elbows, fittings, flanges etc) of air-conditioning / refrigeration equipment to prevent condensation.

**Special Features:** Without halogens (chloride, bromide) acc. DIN/VDE 0472, part 815. Fulfills DIN 1988 Parts 200. The covering offers an excellent durability, even under UV exposure when used for outdoor applications. The insulation system is designed for easy cleaning.

**Remarks:** When dimensioning the insulation thickness, please calculate with an external surface coefficient of 8 W/(m-K).

PROPERTY	SPECIFICATION LIMITS	TEST	REMARKS
<b>Temperature Range</b>			
Max service temperature	+110°C (+85°C if sheet or tape is glued to the object with its whole surface)		Tested acc. to EN14706 EN14707 and EN14304
Min service temperature	-50°C		
<b>Thermal Conductivity</b>			
	$\lambda \text{ } 0^{\circ}\text{C} \leq 0.040 \text{ W}/(\text{m}\cdot\text{K}) \quad [40+0.1 \cdot \vartheta_m + 0.0009 \cdot \vartheta_m^2]/1000$		Declared acc. to EN ISO 13787  Tested acc. to EN 12667 & EN ISO 8497
<b>Water Vapour Diffusion Resistance</b>			
	$\mu \geq 10000$		Tested acc. to EN 12086 & EN 13469
<b>Fire Performance</b>			
Hazard Levels	HL3, R1	EU6364 EU5818	Declared acc. to EN45545-2
Practical fire behaviour	Self-extinguishing, does not drip, does not spread flames		
<b>Other technical features</b>			
Storage & Shelf Life	Self-adhesive tapes, self-adhesive sheets: 1 year		Stored in dry clean rooms at normal relative humidity (50% to 70%) and ambient temperature (0°C - 35°C)

Convertors and suppliers of die cut gaskets, tape, sheeting, fabrications, machined plastic components, rubber mouldings, extrusions and adhesives.

