

HVAC PRODUCTS SPECIFICATION UK & IRELAND

OWENS CORNING® PAROC®

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PAROC HVAC Products Specification

Specification for insulation and installation requirements, must be done at design stage. The Specification must include the reasons for insulating, space allowance, sufficient clearance pipes/ducts, additional weight of the finished insulation system.

Insulation is to improve ambient conditions/reduce overheating, to minimize costs (capital, operational and whole life), to ensure that a fluid in a pipe/air in the duct has specified physical properties at the point of delivery, reduce CO_2 emissions, meet regulations and avoid danger to personnel.



Calculus program for project specific requirements, please see link:
www.paroc.com/en-gb/tools-documents/calculators/calculus

Installation recommendations

Installation recommendations of insulation for all HVAC systems and building equipment. All insulation materials shall be installed in accordance with British Standard **BS 5970:2012** and manufacturers' recommendations, including fixings and finishes.

Paroc Documents to refer to:
- A Guide to PAROC Stonewool Thicknesses
- Safe use Instruction Sheet

Below points go through options and recommendations for Paroc HVAC insulation Products:
- All insulation materials should be kept dry both during storage and installation. Wet material must not be used. Any insulation material which has not been sufficiently protected and is beyond use, must be replaced.
- Surfaces to be insulated should be clean, dry and free of any contaminants. Prior to starting the insulation application, all surfaces to be insulated should be properly checked to verify that they are clean, dry, and free from oil, grease, dust, rust, scales and loose particles from any past, present activities or processes. Check that the surfaces to be joined with tape/connected are clean and dry.
- Insulation should be as close fitting as possible to the equipment pipe/surface. With incorrect securements, can result in sagging, detached from the underlying surface, and suffer from the effects of vibration.
- Bends should be insulated to the same specification as the adjacent straight piping.
- Allow the temperature of the insulating material to adjust to the ambient temperature.
- To prevent condensation and ensure thermal insulation performs as required, seal the joints and ends properly. Any damage to the insulation/joint, repair asap.
- Use an effective vapour/weather barrier.
- **When installing the AluCoat tape, ambient minimum 10°C**.
- **For insulation installing, ambient minimum 5°C**.
- **Medium/Operating/Service temperature 0°C to 250°C.**
- **Surface temp: 50-59°C for surfaces to protect personal and 43°C for surfaces where access to High-risk groups is likely**.
- Regarding insulation materials, wooden blocks must not be used.

Responsibility of insulation installation is under installer, in line with Regulation **BS 5970** & Manufacturer recommendations.

Designer of the insulation system should allow inspection and maintenance access to the insulated surface by removal and reinstatement with effective re-sealing of the insulation and surface finish. These should be designed to minimize the risk of water ingress. Leak detection systems may be incorporated into the insulation system.

Insulation systems may be permanently secured directly to the plant by examples below, at installer discretion:
- Mechanical clamps/other means
- Adhesives
- Combination of both.

Insulation may be installed as a removable module, for service and maintenance access. Adhesive users/specifiers should consult all available safety information before the products are used. Container labels, technical data series and manufacturers' health and safety data sheets give valuable information and obtained for study. (BASA guide, "Safe Handling of Adhesives" [14] and to HSE Guidance Note "EH 40, Workplace exposure limits" [13])

SECUREMENT FOR PIPEWORK/DUCTWORK INFORMATION:

If using Bands:

- Bands should be corrosion resistant. If aluminium sheet has been used as the outer covering for the insulation, only aluminium or stainless-steel bands should be used.
- Can use robust bands with UV protection and can withstand prolonged conditions of service.
- Aluminum or stainless steel lacing wire may also be used.

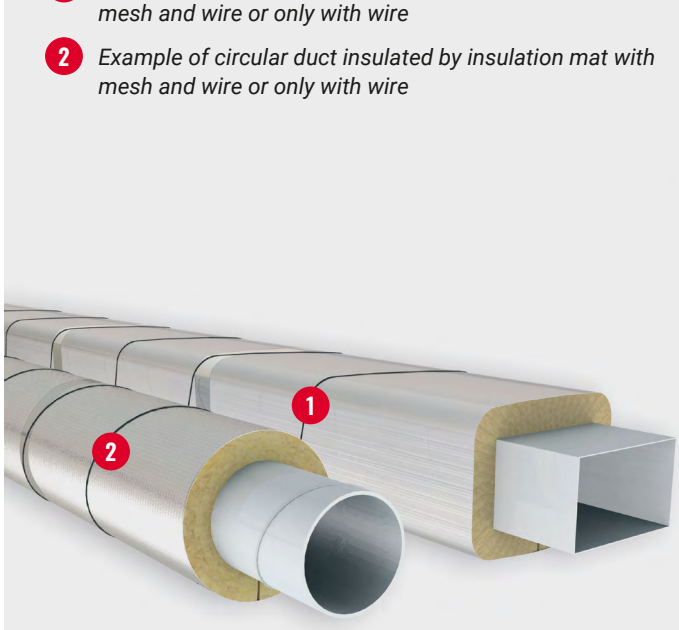
Pipework and ductwork insulation information:

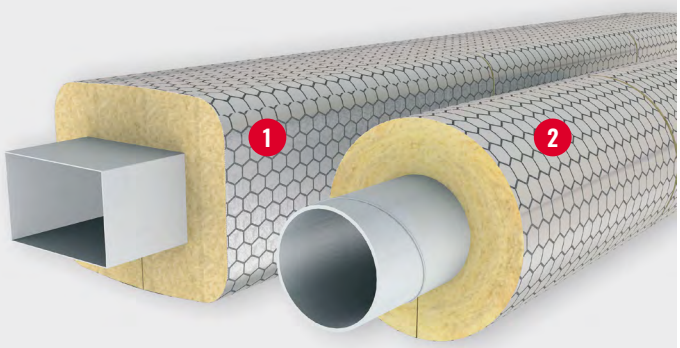
- Pipework/Ductwork must be insulated separately. Pipes/ducts running alongside each other must be insulated separately and not wrapped together.
- All joints in the facing are to be sealed with min, 50mm wide matching self-adhesive reinforced foil tape to complete the vapour barrier.
- Ensure that pipe section seams are tight, but without extra tension. The same applies at supports and other projecting parts.
- Secure the pipe sections with steel wire, strapping or tape.
- Ensure to Insulate pipe elbows, bends and fittings and shall be neatly mitred/ bevel the ends.
- Finish the pipe section ends with end fittings. Bend the end fitting strip around the end and fix it using rivets.
- Positioning longitudinal seams away from the prevailing weather and more than 90° from the vertical position.
- The line of insulation (and cladding) should be continuous through all pipe/duct supports.
- Pipe/Duct sections insulation should be selected to withstand moderate loads and vibration whilst in service. Any penetration of ventilation ductwork should be sealed.

When necessary, all systems should be warmed to maintain a temperature which is above the dew point. This temperature should be maintained before any insulation is installed. Insulation must not be installed to any surfaces which show signs of frost or condensation.

1 *Example of rectangular duct insulated by insulation mat with mesh and wire or only with wire*

2 *Example of circular duct insulated by insulation mat with mesh and wire or only with wire*





Extent of Insulation

Thermal insulation shall be installed to prevent heat loss or gain, to mitigate against condensation damage and to prevent water within pipework from freezing. Furthermore, applications such as providing a safe surface or ambient temperature for personnel protection, maintaining fire resistance and providing acoustic insulation are all achievable through the application of thermal insulation. Additionally, thermal insulation can provide reductions in CO_2 emissions and potentially reduce overall costs. Where there are more than one of these applications arising, the greater thickness of insulation shall be installed as specified in the British Standard, **BS 5422:2023**.

FREEZING PREVENTION:

To prevent freezing, there is no known insulation that prevents freezing of liquid under all conditions. Insulate supports and hangers, tracer pipes or electric heating elements, insulate valves, pumps, flanges etc to reduce heat loss.
Freezing should be analysed in two stages:

- Time required for the temperature of the system to fall from its initial temperature to that of the freezing point of the contained liquid.
- Time required for the liquid to freeze completely at this same temperature.

PIPE TRACE HEATING METHODS:

- External pipe tracing – a small-bore heating pipe is placed close to the main pipe (direct conduction).
- Electrical tracing - electrically heated tracing tape/cable is wound around the outside of the pipe or clipped immediately below and in direct contact with surface.
- Jacketing - main pipe is fitted with a jacket through which heating fluid is passed.
- Lancing - small-bore heating pipe is inserted inside the main pipe.
- Extruded pipe - has its own integral heating pipe in its wall.

CONDENSATION PROTECTION:

Condensation takes place on surfaces at temperatures below the dewpoint of the ambient air. A vapour barrier should be applied on the warm side of the insulation layer. Although the application of the insulation can prevent condensation at the insulation outer surface, it does not necessarily prevent the moisture being drawn through the insulation itself, and frequently the dewpoint is reached at some distance inside the layer of insulation. If the cold surface is at a temperature lower than freezing point, the moisture freezes and can damage the insulation. It is recommended for surface temperature to be above dew point.

Insulation applied to cold surfaces should be protected from water vapour penetration that gives increased conductivity and in extreme cases can cause freezing, resulting in rupturing the cells of the insulation causing permanent damage and accelerating the corrosion risk.

The integrity of the vapour barrier should be always maintained. Using an effective vapour/weather barrier. Barrier should always be applied to the warmer surface of the material.



Material Restrictions

Stainless steel services and associated fittings shall be protected against chloride induced stress corrosion. We support the precaution in accordance with **BS 5970:2012** to provide protection, that sacrificial foil is placed at least on hot stainless pipework, before the insulation. This is because handling, moisture etc can introduce contamination onto the pipe surface, more than is present in the insulation itself. Aluminium foil tape should be applied to the stainless-steel surface so that the insulation can be applied over the foil. The joints of the foil should be arranged to shed water with overlaps.

Ensure to provide temporary weather protection of incomplete insulation systems. Protecting austenitic surfaces, especially if the plant is likely to be heated to temperatures 50°C - 150°C at any time, e.g. for sterilizing or cleaning.

All insulation on pipework and ductwork, for all dimensions, shall be supported in accordance with British standards. All protrusions and terminations should be fitted to shed water. For flanges and blank ends, extra distance should be allowed for bolt clearance.

Paroc Insulation Material

Pipe supports shall be high density stone wool, foil faced/AluCoat and purpose designed. Manufactured from PAROC® stonewool.

All insulated pipework and ductwork installations shall be supported by load bearing insulation support unit inserts installed between the insulated surface and the support member.

Refer to **BS 5422:2023** 'A Guide to PAROC® Stonewool Thickness' to provide guidance and clarity.

Download guide;
https://www.paroc.com/en/documents/uploads/guide-to-paroc-stone-wool-thicknesses



Internal Pipework Systems

PAROC® HVAC SECTION ALUCOAT T
Insulation to be made of non-combustible PAROC® stonewool, with a factory applied reinforced AluCoat facing.

Pipe sections of 1.2m length, with a factory fitted self-adhesive overlap. Section joints to be sealed with 50mm wide self-adhesive aluminium foil tape to maintain the integrity of the vapour barrier.

Refer to **BS 5970:2012** for fixing and securing details.

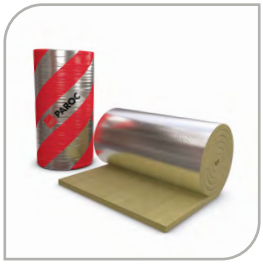


Internal Circular Ductwork

PAROC® HVAC MAT ALUCOAT, PAROC® HVAC LAMELLA MAT ALUCOAT OR ICEROCK DUCTWRAP
Insulation mat made of non-combustible PAROC® stonewool, with a factory applied reinforced AluCoat facing.

On circular ductwork greater than 200mm diameter, mechanical support shall take the form of aluminum banding or lacing wire as circumferential fixings at 300mm centers. To avoid tension/compression on the AluCoat Aluminum foil, use further securement, such as additional wire/tape/metal bands, and ensure no damage to the facing.

Joints shall be securely sealed with aluminum foil tape.
Refer to **BS 5970:2012** for fixing and securing details.



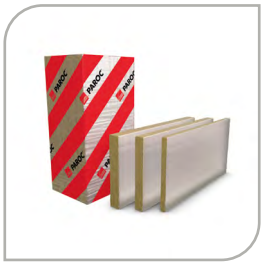


Internal Square/Rectangular Ductwork

PAROC® HVAC SLAB ALUCOAT, PAROC® HVAC MAT ALUCOAT, PAROC® HVAC LAMELLA MAT ALUCOAT OR ICEROCK DUCTWRAP
Insulation mat made of non-combustible PAROC® stonewool, with a factory applied reinforced AluCoat facing.

When installed on rectangular ductwork greater than 500mm width or depth, insulation shall be secured with welding pins at 300mm centers allowing the insulation to be impaled on the pins. Where the pins puncture the AluCoat facing, they should be sealed by removing the excess pin and applying aluminum tape to seal the vapour barrier. To avoid tension/compression on the AluCoat Aluminium foil, use further securement, such as additional wire/tape/metal bands, and ensure no damage to the facing.

Joints shall be securely taped with aluminium foil tape.
Refer to **BS 5970:2012** for fixing and securing detail.





External Pipework Systems

PAROC® HVAC SECTION ALUCOAT T
All external pipe insulation to be weather proofed by means, for example, metal cladding at thicknesses detailed in **BS 5970:2012** Table 9.



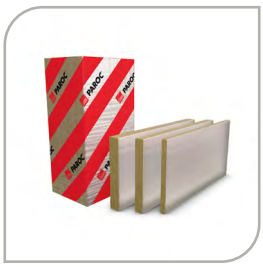
External Ductwork – Square/Rectangular/Circular

PAROC® HVAC MAT, PAROC® HVAC SLAB ALUCOAT, PAROC® HVAC LAMELLA MAT ALUCOAT OR ICEROCK DUCTWRAP PAROC®
All external insulation to be weather proofed by means, for example, metal cladding at thicknesses detailed in **BS 5970:2012** Table 9.

On rectangular ductwork greater than 500mm width or depth, insulation shall be secured with welding pins at 300mm centers allowing the insulation to be impaled on the pins. Where the pins puncture the AluCoat facing, they should be sealed by removing the excess pin and applying aluminum tape to seal the vapour barrier. To avoid tension/compression on the AluCoat Aluminum foil, use further securement, such as additional wire/tape/metal bands, and ensure no damage to the facing.

On circular ductwork the insulation is to be fully adhered to the duct with approved adhesive. On circular ductwork greater than 200mm diameter, mechanical support shall take the form of aluminium banding or lacing wire as circumferential fixings at 300mm centers.

Joints shall be securely sealed with aluminium foil tape.
Refer to **BS 5970:2012** for fixing and securing details.
Aluminium foil tape or similar must NOT be used to fix the insulation to the duct.

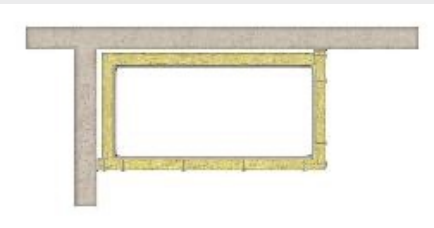


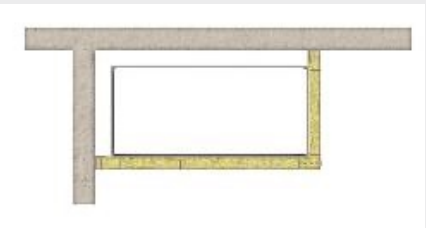


Did you know our products are on NBS?
Browse and specify PAROC products using NBS Source directly.

Examples of Duct work with Slab or Mat insulation







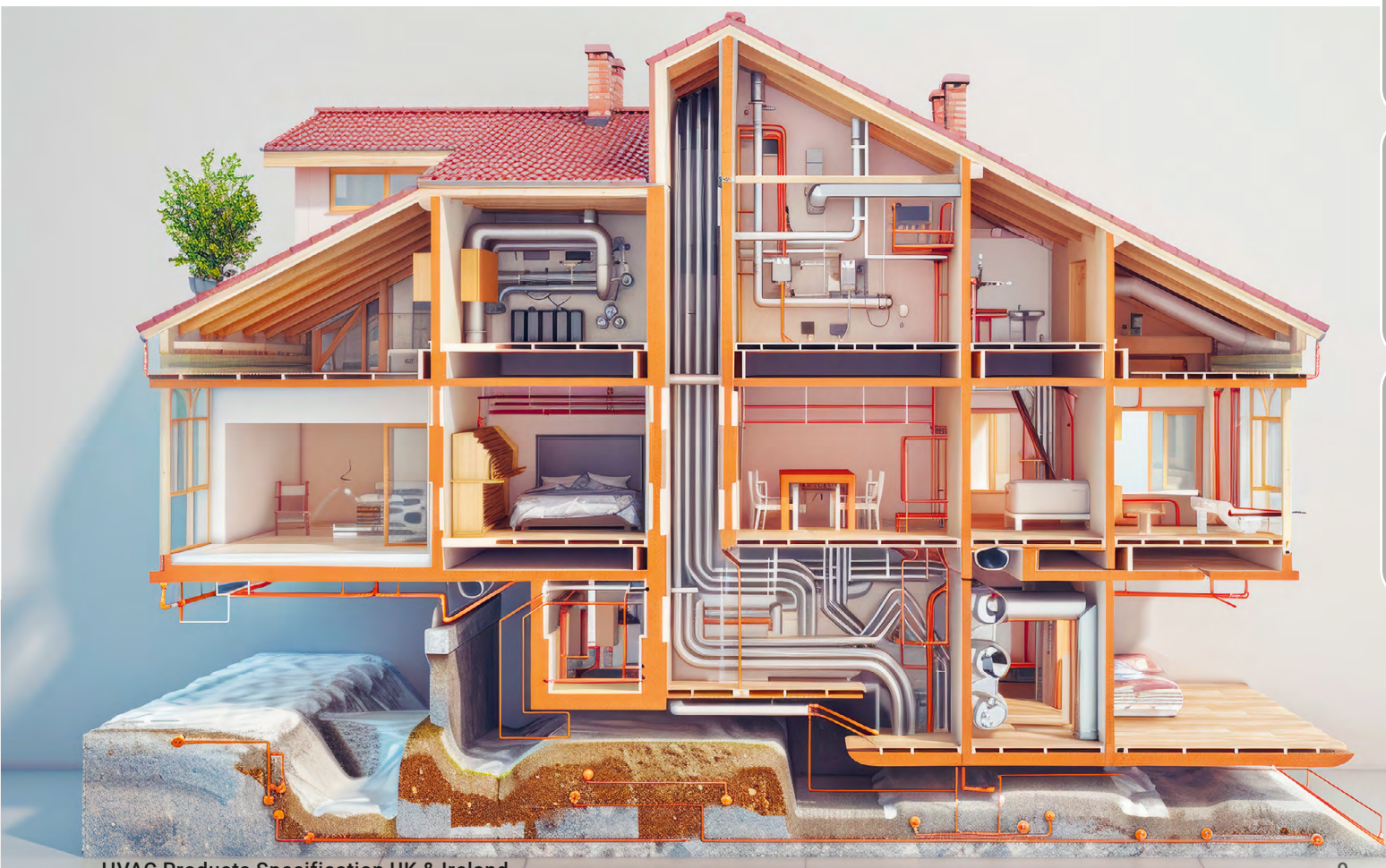
Insulation Finishes

In plant rooms, if required, insulation shall be enclosed in cladding with minimum 40mm wide circumferential and longitudinal laps at joints. Longitudinal laps to be secured with cadmium plated self-tapping screws or rivets at maximum 100mm centres.
On chilled and cold services care shall be taken to ensure that the insulation vapour barrier is not punctured by screws or rivets by, where practical securing the cladding with banding. Cladding and insulation shall be detachable in way of valves, flanges or other bolted connections.

Thickness of aluminium cladding shall be as follows:
Ducting and vessels - 0.71mm
Pipe insulation - 0.56mm

In ceiling voids and other hidden areas from sight, the reinforced aluminium foil pre-bonded to the insulation will be sufficient to constitute to the final finish. On pipework, all joints in the foil facing to be sealed with Aluminum foil tape. On ductwork all joints in the foil facing to be sealed with Aluminum foil tape.

All external insulation to be weather proofed by means of metal cladding, for example, and at thicknesses detailed in **BS 5970:2012** Table 9, with care taken to adhere to the installation and manufactures recommendations.



Product Specification

PAROC® HVAC SECTION ALUCOAT T



Is a rigid foil-faced stone wool sections for pipework insulation made of non-combustible PAROC® stonewool. The product is designed to provide thermal and condensation insulation for pipework. Suitable for all indoor pipes only. Medium/ Operating/Service temperature 0°C to 250°C.

Facing Material Reinforced aluminium foil. The surface temperature of the facing, MUST not exceed +80°C (temperature restriction determined in accordance with the heat resistance of adhesive).

DIMENSIONS		
THICKNESS	**INNER DIAMETER**	**PIPE SECTION LENGTH**
20, 25, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120mm	12 – 1016mm	1200mm (1.2m)
According to EN 13467	According to EN 13467	According to EN 13467
PROPERTY	**VALUE**	**Regulation**
THERMAL PROPERTIES		
Thermal Conductivity in 10°C, λ_{10}	0.033 W/(m·K)	EN 14303:2009+A1:2013 (EN ISO 8497)
Thermal Conductivity in 50°C, λ_{50}	0.037 W/(m·K)	EN 14303:2009+A1:2013 (EN ISO 8497)
Thermal Conductivity in 100°C, λ_{100}	0.044 W/(m·K)	EN 14303:2009+A1:2013 (EN ISO 8497)
AluCoat Emissivity	0.15Ɛ	
FIRE PROPERTIES		
Reaction to Fire, Euroclass	A2L - s1, d0	EN 14303:2009+A1:2013 (EN 13501-1)
Continuous Glowing Combustion	NPD	EN 14303:2009+A1:2013
Combustibility	Base product non-combustible - EN ISO 1182	
Fire Classification (IMO)	Non-combustible - IMO 2010 FTP Code Annex 1 Part 1	
Surface Flammability (IMO)	Surface material with low flame-spread characteristics - IMO 2010 FTP Code Annex 1 Part 5	
MOISTURE PROPERTIES		
Water Absorption, Short Term WS (Wp)	≤ 1 kg/m²	EN 14303:2009+A1:2013 (EN 13472)
Water Vapour Diffusion Resistance	MV2	EN 14303:2009+A1:2013 (EN 13469)
Chloride Ions, Cl-	< 10 ppm	EN 14303:2009+A1:2013 (EN 13468)
Physical & Chemical Properties	Solid, Fibrous, Low odour, Greyish-green, Insoluble in water	
Emission Classification of Building Materials	M1	

PAROC® Pipe Sections can be used to satisfy the requirements as given in the tables for insulation thickness in **BS 5422:2023**. Poor installation will result in poor insulation.

For installation, please refer to **BS 5970:2012** and below link/document:
https://www.paroc.com/en-gb/tools-documents/installation/paroc-hvac-section-alucoat-t

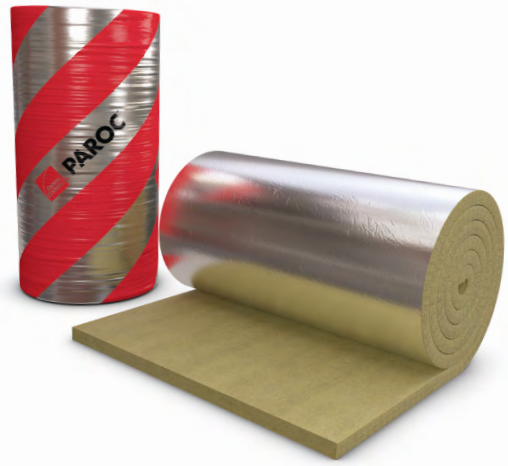
Installation and operation information:

- All insulation materials should be kept dry both during storage and installation.
- Surfaces to be insulated should be clean, dry and free of any contaminants.
- Allow the insulating material to adjust to the ambient installation temperature.
- HVAC up to 250°C maximum service temp.
- Impact excludes any lamination.
- To prevent condensation, seal the joints and ends properly.

Certification Number
0809-CPR-1016 Eurofins Expert Services Ltd, Kivimiehentie 4, FI-02150 Espoo, Finland
MED Type-Examination (Module B) certificates 74480/A1 and 74479/A1 and UK Type-Examination (Module B) certificates 74465/A1 and 74467/A1.
CE marked.

Product Specification

PAROC® HVAC MAT ALUCOAT



Is a circular ductwork insulation Mat made of non-combustible PAROC® stonewool. The product is designed for thermal and condensation insulation of ventilation ducts and other ventilation equipment in HVAC systems. Suitable for all indoor ventilation ducts and equipment only. Medium/Operating/Service temperature 0°C to 250°C.

Facing Material Reinforced aluminium foil. The surface temperature of the facing, MUST not exceed +80°C (temperature restriction determined in accordance with the heat resistance of adhesive).

DIMENSIONS		
WIDTH X LENGTH mm		**THICKNESS mm**
500/1000 x 8000		30
500/1000 x 7000		40
500/1000 x 7000		50
500/1000 x 7000		60
500/1000 x 5000		70
500/1000 x 5000		80
500/1000 x 4000		90
500/1000 x 4000		100
In accord EN 822		In accord EN 823
PROPERTY	**VALUE**	**Regulation**
THERMAL PROPERTIES		
Thermal Conductivity in 0°C, λ_0	0.034 W/(m·K)	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 10°C, λ_{10}	0.036 W/(m·K)	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 50°C, λ_{50}	0.046 W/(m·K)	EN 14303:2009+A1:2013 (EN 12667)
AluCoat Emissivity	0.15Ɛ	
FIRE PROPERTIES		
Reaction to Fire, Euroclass	A1	EN 14303:2009+A1:2013 (EN 13501-1)
Continuous Glowing Combustion	NPD	EN 14303:2009+A1:2013
MOISTURE PROPERTIES		
Water Absorption, Short Term WS, (Wp)	≤ 1 kg/m²	EN 14303:2009+A1:2013 (EN 1609)
Water Vapour Diffusion Resistance	MV2	EN 14303:2009+A1:2013 (EN 12086)
Chloride Ions, Cl-	< 10 ppm	EN 14303:2009+A1:2013 (EN 13468)
Physical & Chemical Properties	Solid, Fibrous, Low odour, Greyish-green, Insoluble in water	
Emission Classification of Building Materials	M1	

PAROC® Mats can be used to satisfy the requirements as given in the tables for insulation thickness in **BS 5422:2023**. PAROC® Mats conform to **BS 3958-5**. Poor installation will result in poor insulation performance.

For installation, please refer to **BS 5970:2012** and below link/document:
https://www.paroc.com/en-gb/products/hvac-mat-alucoat-pgm-200156

Installation and operation information:

- All insulation materials should be kept dry both during storage and installation.
- Surfaces to be insulated should be clean, dry and free of any contaminants.
- Allow the insulating material to adjust to the ambient installation temperature.
- HVAC up to 250°C maximum service temp.
- Impact excludes any lamination.
- To prevent condensation, seal the joints and ends properly.

Certification Number
0809-CPR-1016 Eurofins Expert Services Ltd, Kivimiehentie 4, FI-02150 Espoo, Finland
CE marked.

Product Specification

ICEROCK DUCTWRAP/MAT

Is a high-quality mineral fibre rolls, faced with reinforced aluminium foil. The product is designed for thermal and condensation insulation of circular ductwork and other ventilation equipment in HVAC systems. Suitable for all indoor ventilation ducts and equipment only. Medium/Operating/Service temperature 0°C to 250°C.

Facing Material Reinforced aluminium foil. The surface temperature of the facing, MUST not exceed +80°C (temperature restriction determined in accordance with the heat resistance of adhesive).



DIMENSIONS		
WIDTH X LENGTH mm		**THICKNESS mm**
900 x 10000		25
900 x 8500		40
900 x 7500		50
900 x 5500		75
According to EN 822		According to EN 823
PROPERTY	**VALUE**	**Regulation**
THERMAL PROPERTIES		
Thermal Conductivity in 10°C, λ_{10}	0.034 W/(m·K)	EN 12667
Thermal Conductivity in 50°C, λ_{50}	0.039 W/(m·K)	EN 12667
Thermal Conductivity in 100°C, λ_{100}	0.049 W/(m·K)	EN 12667
AluCoat Emissivity	0.15Ɛ	
FIRE PROPERTIES		
Reaction to Fire, Euroclass	A1	EN 14303:2009+A1:2013 (EN 13501-1)
Continuous Glowing Combustion	NPD	EN 14303:2009+A1:2013
Water Solubility	Practically insoluble	
General Information	Solid, Fibrous, Yellowish brown, Odourless	

ICEROCK Ductwrap can be used to satisfy the requirements as given in the tables for insulation thickness in **BS 5422:2023**. ICEROCK Ductwrap conform to **BS 3958-5**. Poor installation will result in poor insulation performance.

For installation, please refer to **BS 5970:2012** and manufactures recommendations.
Download datasheet
https://pim.owenscorning.io/data/assets/approved/en_gb/Icerock-Ductwrap-en-GB-01032025.pdf

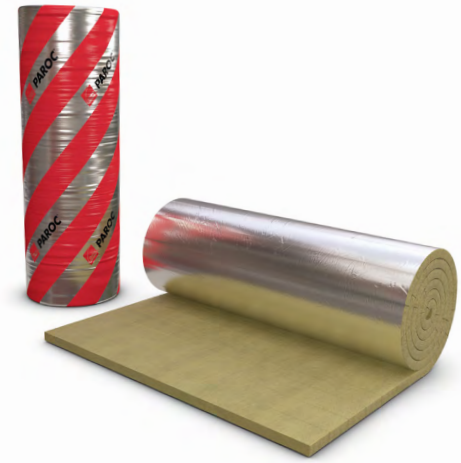
Installation and operation information:

- All insulation materials should be kept dry both during storage and installation.
- Surfaces to be insulated should be clean, dry and free of any contaminants.
- Allow the insulating material to adjust to the ambient installation temperature.
- HVAC up to 250°C maximum service temp.
- Impact excludes any lamination.
- To prevent condensation, seal the joints and ends properly.

Certification Number
0809-CPR-1016 Eurofins Expert Services Ltd, Kivimiehentie 4, FI-02150 Espoo, Finland
CE marked.

Product Specification

PAROC® HVAC LAMELLA MAT ALUCOAT



Is a circular ductwork insulation mat made of non-combustible PAROC® stonewool. The product is designed for thermal and condensation insulation of ventilation ducts and other ventilation equipment in HVAC systems. Suitable for all indoor ventilation ducts and equipment only. Medium/Operating/Service temperature 0°C to 250°C.

Facing Material Reinforced aluminium foil. The surface temperature of the facing, MUST not exceed +80°C (temperature restriction determined in accordance with the heat resistance of adhesive).

DIMENSIONS		
WIDTH X LENGTH mm		**THICKNESS mm**
1000 x 10000		20
1000 x 9000		25
1000 x 8000		30
1000 x 6000		40
1000 x 5000		50
1000 x 4000		60
1000 x 3500		70
1000 x 3000		80
1000 x 2500		90
1000 x 2500		100
According to EN 822		According to EN 823
PROPERTY	**VALUE**	**Regulation**
THERMAL PROPERTIES		
Thermal Conductivity in 10°C, λ_{10}	0.038 W/(m·K)	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 50°C, λ_{50}	0.047 W/(m·K)	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 100°C, λ_{100}	0.059 W/(m·K)	EN 14303:2009+A1:2013 (EN 12667)
AluCoat Emissivity	0.15Ɛ	
FIRE PROPERTIES		
Reaction to Fire, Euroclass	A1	EN 14303:2009+A1:2013 (EN 13501-1)
Continuous Glowing Combustion	NPD	EN 14303:2009+A1:2013
MOISTURE PROPERTIES		
Water Absorption, Short Term WS, (Wp)	≤ 1 kg/m²	EN 14303:2009+A1:2013 (EN 1609)
Water Vapour Diffusion Resistance	MV2	EN 14303:2009+A1:2013 (EN 12086)
Chloride Ions, Cl-	< 10 ppm	EN 14303:2009+A1:2013 (EN 13468)
Physical & Chemical Properties	Solid, Fibrous, Low odour, Greyish-green, Insoluble in water	
Emission Classification of Building Materials	M1	

PAROC® Lamella Mats can be used to satisfy the requirements as given in the tables for insulation thickness in **BS 5422:2023**. Poor installation will result in poor insulation.

For installation, please refer to **BS 5970:2012** and below link/document:
https://www.paroc.com/en-gb/tools-documents/installation/paroc-hvac-lamella-mat-alucoat

Installation and operation information:

- All insulation materials should be kept dry both during storage and installation.
- Surfaces to be insulated should be clean, dry and free of any contaminants.
- Allow the insulating material to adjust to the ambient installation temperature.
- HVAC up to 250°C maximum service temp.
- Impact excludes any lamination.
- To prevent condensation, seal the joints and ends properly.

Certification Number
0809-CPR-1016 Eurofins Expert Services Ltd, Kivimiehentie 4, FI-02150 Espoo, Finland

Product Specification

PAROC® HVAC SLAB ALUCOAT



Is for square and rectangular ductwork insulation slab made of non-combustible PAROC® stonewool. The product is designed for thermal and condensation insulation of ventilation ducts and other ventilation equipment in HVAC systems. Suitable for all indoor ventilation ducts and equipment only. Medium/Operating/ Service temperature 0°C to 250°C.

Facing Material Reinforced aluminium foil. The surface temperature of the facing, MUST not exceed +80°C (temperature restriction determined in accordance with the heat resistance of adhesive).

DIMENSIONS		
THICKNESS	**INNER DIAMETER**	**PIPE SECTION LENGTH**
600 x 1200	30, 40, 50, 60, 80, 100mm	1200mm (1.2m)
According to EN 822	According to EN 823	According to EN 13467
PROPERTY	**VALUE**	**Regulation**
THERMAL PROPERTIES		
Thermal Conductivity in 10°C, λ_{10}	0.035 W/(m·K)	EN 14303:2009+A1:2013 (EN ISO 8497)
Thermal Conductivity in 40°C, λ_{50}	0.039 W/(m·K)	EN 14303:2009+A1:2013 (EN ISO 8497)
Thermal Conductivity in 50°C, λ_{50}	0.040 W/(m·K)	EN 14303:2009+A1:2013 (EN ISO 8497)
Thermal Conductivity in 100°C, λ_{100}	0.047 W/(m·K)	EN 14303:2009+A1:2013 (EN ISO 8497)
AluCoat Emissivity	0.15Ɛ	
FIRE PROPERTIES		
Reaction to Fire, Euroclass	A1	EN 14303:2009+A1:2013 (EN 13501-1)
Continuous Glowing Combustion	NPD	EN 14303:2009+A1:2013
MOISTURE PROPERTIES		
Water Absorption, Short Term WS, (Wp)	≤ 1 kg/m²	EN 14303:2009+A1:2013 (EN 1609)
Water Vapour Diffusion Resistance	MV2	EN 14303:2009+A1:2013 (EN 12086)
Chloride Ions, Cl-	< 10 ppm	EN 14303:2009+A1:2013 (EN 13468)
Physical & Chemical Properties	Solid, Fibrous, Low odour, Greyish-green, Insoluble in water	
Emission Classification of Building Materials	M1	

PAROC® Slabs can be used to satisfy the requirements as given in the tables for insulation thickness in **BS 5422:2023**. PAROC® Slabs conform to **BS 3958-5**. Poor installation will result in poor insulation performance.

For installation, please refer to **BS 5970:2012** and below link/document:
https://www.paroc.com/en-gb/tools-documents/installation/paroc-hvac-slab-alucoat

Installation and operation information:

- All insulation materials should be kept dry both during storage and installation.
- Surfaces to be insulated should be clean, dry and free of any contaminants.
- Allow the insulating material to adjust to the ambient installation temperature.
- HVAC up to 250°C maximum service temp.
- Impact excludes any lamination.
- To prevent condensation, seal the joints and ends properly.

Certification Number
0809-CPR-1016 Eurofins Expert Services Ltd, Kivimiehentie 4, FI-02150 Espoo, Finland
CE marked.

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PAROC® CALCULUS:
DESIGN ENERGY-EFFICIENT INSULATION TAILORED TO YOUR PROJECT

PAROC® Calculus is a technical insulation calculation program for dimensioning thermal insulation for various applications in the HVAC and Process industries.

PAROC® Calculus features:

- Easy-to-use interface; works on PCs, tablets, and cellphones
- Calculations of heat losses, surface temperatures, and temperature drop in pipes, ventilation ducts, process industry tanks, valves, and flanges
- Simple input of pipe diameters and duct dimensions (predefined)
- Correcting for thermal bridges of pipe and duct suspensions
- Print calculations as a PDF. Multiple simultaneous printouts in PDF are possible
- Saving projects and customizations (for registered users)
- Calculations based on the ISO 12241:2022 standard



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