PAROC PRO SECTION WR 100 INS

INSULATION OF HEAT-TRACED PIPELINES

SUPPORTS SAVING COSTS:

- No additional aluminium foil needed (plus savings on transport costs)

FACILITATES SAVING TIME:

- Aluminium foil is directly applied inside the pipe section, no cutting
- Saving time that is usually needed for measuring, unpacking, cutting and applying of foil, removal of waste

LESS WASTE:

- Less packing waste (no additional foil needed)
- No redundant material (foil is already applied to the pipe section)

COMPLIANT TO STANDARDS:

- e. g. CINI, SSG, NF, BS

PROMOTES AN ENERGY-EFFICIENT, PROFESSIONAL AND CLEAN SOLUTION

CAN REDUCE THE RISK OF CORROSION UNDER INSULATION

OUTSTANDING WATER REPELLENCY

OWENS CORNING® PAROC®

Saves >33%
of costs for labour, waste and material!*

PAROC PRO SECTION WR 100 INS

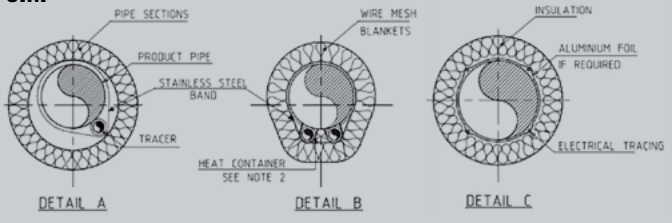
STONE WOOL PIPE SECTION WITH ALUMINIUM FOIL ON THE INSIDE DESIGNED FOR PIPELINES WITH HEATING CABLES AND HEAT TRACING

PAROC PRO SECTION WR 100 INS

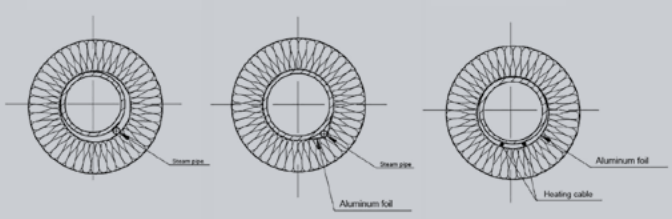
Is designed specifically to provide efficient and cost-effective insulation for pipelines with heating cables and heat tracing for industrial pipelines and offers several advantages over the traditional method of using aluminum foil wrapping and insulation material separately:

- **Cost Savings:** PAROC Pro Section WR 100 INS eliminates the need for wrapping additional aluminium foil, therefore, saving costs through reduced transport needs and lower installation times.
- **Lower installation time:** As aluminium foil is directly applied on the inside of the pipe section, there's no need for handling foil separately, nor additional installation time. Unpacking, cutting, and applying foil, and removing waste can be reduced*.
- **Less waste:** PAROC Pro Section WR 100 INS offers a convenient solution as it avoids redundant materials like extra aluminium foil and reduces additional transport.
- **Professional solution:** PAROC Pro Section WR 100 INS helps to provide a professional insulation solution that maintains the integrity and performance of heating cables and heat tracing.
- **Convenient and simple to order:** Removing the need to order and install separate aluminium foil, PAROC Pro Section WR 100 INS is simple to order, and available for multiple or staggered installations, additionally requiring less calculations for ordering different components. It also reduces the need for pre-financing or warehouse space.
- **Recommended in standards for steam tracing (e. g. BS, NF):** "in order to prevent the presence of insulation between the pipe and its tracer, aluminum foil is wrapped around them before installing the insulation" (NF DTU 45.2, 8.1.4)
- **Mentioned in standards for electrical tracing (e. g. CINI, SSG):** "on all pipes with tracing, a heat container shall be created with aluminium foil or with a profile" (CINI 1.3.01, 4.2.1)

CINI



SSG



WATER-REPELLENT WITH OUTSTANDING WATER ABSORPTION PROPERTIES:

- **10 Times better** than the requirements of the toughest known standard available (EN13472), even after being exposed to temperatures up to 300 °C
  (average water absorption level <0,1 kg/m² after 300 °C/24 prepake; based on 3rd party testing in 2019 and internal testing in 2023 and 2024)

** based on internal calculations, e. g. assuming 100,00 PLN (approx. 23€)/running meter for additional material and waste handling and 3 PLN (approx. 0,69 €)/running meter additional labour costs for a pipe with 114 mm diameter and 40 mm thickness.*

BENEFITS AND SAVINGS*:

- **No need to apply separate aluminium foil** on piping (fast and simple application)
- **No need to purchase aluminium foil** - 1 running meter of pipe can require 2x20 cm overlap plus 10 cm overlap along the length of the pipe. This equals approximately 0,50 m² additional foil needed per 1 running meter of piping
- **No need to calculate** how much aluminium foil is needed
- **No need to cut and prepare** needed length of aluminium foil
- **Easy adaption and application** when insulating pipelines

** No fluttering in windy conditions*
** numbers taken from trial installation and can be released on request*

CONVENTIONAL METHOD USING SEPARATE ALUFOIL

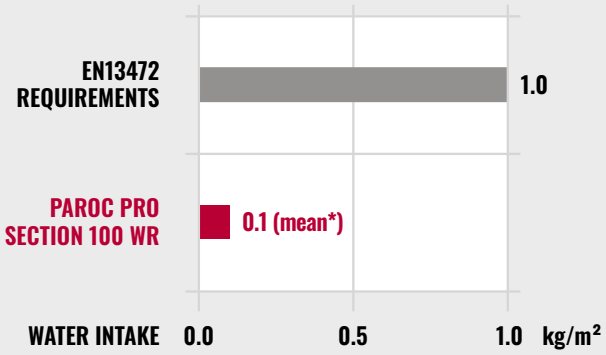
INNOVATIVE METHOD USING PAROC PIPE SECTION ALUCOAT WR 100 INS

PIPE SECTIONS

PAROC PRO SECTION WR 100 INS

Stone wool pipe section (with leading edge water repellency) and aluminium foil on the inside for heating cables and heat tracing

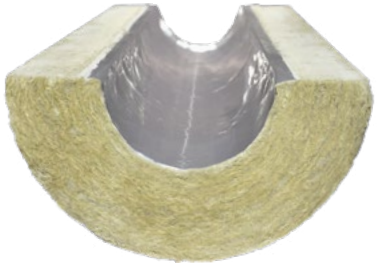
Accessories:
PAROC Galvanised Wire
PAROC Pallet Hoods
PAROC Pro Knife XTK001/003



OUTSTANDING WATER ABSORPTION PROPERTIES FOR STONE WOOL INSULATION

10 TIMES BETTER THAT THE REQUIREMENTS OF THE TOUGHEST KNOWN STANDARD AVAILABLE (EN13472), EVEN AFTER BEING EXPOSED TO TEMPERATURES UP TO 300 °C*

** average water absorption level <0,1 kg/m² after 300 °C/24h prebake; based on 3rd party testing in 2019 and internal testing in 2023 and 2024*



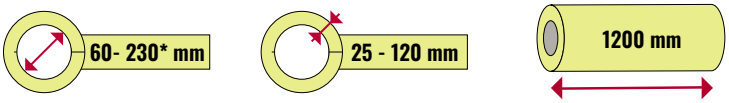
APPLICATION

- Thermal insulation of industrial pipework with heat tracing
- Superior solution compared to Wired Mats[1]; no support structure needed

TECHNICAL SPECIFICATIONS

- Outstanding water-repellency and substantially better than the toughest standard (EN13472)
- AS quality according to EN 13468 and AGI Q 132
- Paroc pipe sections are tested for painting conformity according to VDMA 24364: 2018
- Insulation code 10.04.03.50.10
- CE designation code: MW-EN 14303-T8 / T9-ST (+) 640-WS1-CL10
- Environmental Product Declaration (EPD) according ISO 14025, ISO 21930 and EN 15804

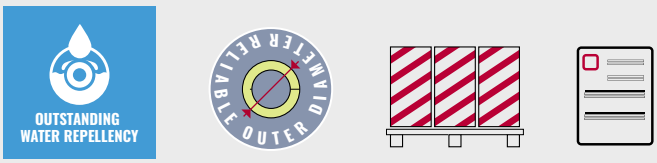
[1]according to calculation with PAROC Calculus



**other dimensions on request*

Nominal value of the thermal conductivity λ according to DIN EN ISO 8497

t	°C	50	100	150	200	300
$\lambda_{N,P}$	W/mK	0.039	0.045	0.054	0.064	0.092



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

PAROC® Calculus is a technical insulation calculation program for dimensioning thermal insulation for different HVAC and Process Industry applications e.g. pipes, ventilation ducts and process industry tanks. With PAROC Calculus it is also possible to calculate the heat loss for insulated and uninsulated valves and flanges, which usually increases the risk of heat loss. Additionally, the heat loss caused by thermal bridges in pipe and duct suspensions can be taken into account.

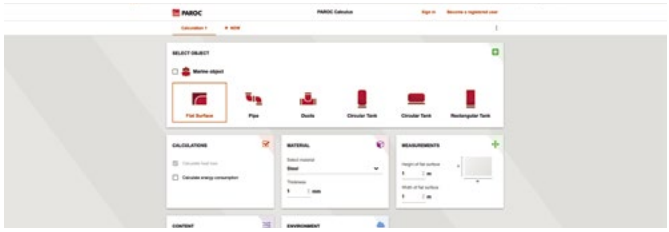
With PAROC Calculus you can design energy efficient and economical insulation solutions for different HVAC and process industry applications with PAROC products.

Updated according to ISO 12241:2022

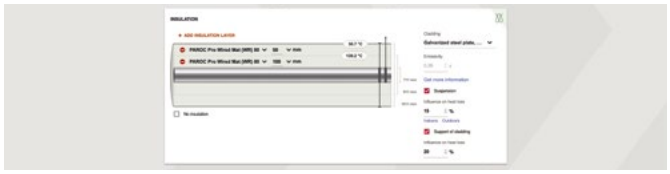
PAROC Calculus features:

- Easy to use interface
- Works on pc, tablets and mobile phones
- Calculations for heat loss, surface temperature and temperature drop in pipes, ventilation ducts, process industry tanks, valves and flanges.
- Easy input of pipe diameters and duct dimensions (predefined)
- Thermal bridges of pipe and duct suspensions
- Print out your calculations to pdf
- All calculations are based on equations described in the EN ISO 12241 standard.

Select application



Calculate with surface temperature display - cladding systems, suspensions and substructures can optionally be used for the calculation



This software (the Service) calculates properties of insulation solutions made by PAROC Technical Insulation products. Calculations are based on standard ISO 12241. The latest version is always on Paroc web pages. The information contained in the online insulation, energy and CO_2 calculations (the Service) is provided in good faith and for general information purpose only. Owens Corning as well as any of its direct or indirect affiliates, including Paroc Group OY (individually and jointly "Owens Corning") assumes no responsibility for errors or omissions in the contents of the Service, including technical or product data, product recommendations, research information, data and/or content contained in the Service. In providing the Service, Owens Corning does not make any warranties about its completeness, its reliability and its accuracy. Any action you take upon the information you find in using the Service, is strictly at your own risk. In no event shall Owens Corning be liable for any special, direct, indirect, consequential, or incidental damages or any other damages whatsoever, whether in an action of contract, negligence or other tort, arising out of or in connection with the use of the Service or the contents of the Service. Owens Corning reserves the right to make additions, deletions, or modification to the contents on the Service at any time without prior notice. By using the Service, you hereby consent to the present disclaimer and agree to its terms.

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Applications: September 2024
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