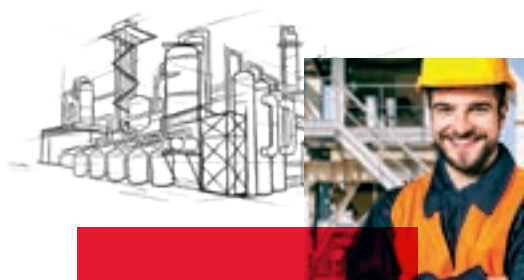


Product catalogue

Shaped for the industrial insulation market



ProRox®

Industrial
insulation

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Rockassist

Wherever you are in the world...

We meet the highest standards





We serve clients worldwide with a global product range that fits their local needs

We hear you

In today's world economy, a growing number of industrial businesses span the globe. You can be headquartered in Europe or North America and have production plants on every continent. Wherever you are, you need to have your challenges met locally. But to ensure your production sites operate safely and efficiently, you need universal solutions you can apply from Asia to South America.

Let's tackle your challenges

And that's not all. The industries of tomorrow face big global challenges. Not least climate change and the energy challenge it poses. ROCKWOOL® helps shape this developing world with solutions based on the natural power of stone. We're finding increasingly innovative ways to tackle these challenges and build industries and cities, so they are better for the environment and better for the people who live and work in them. The proof? Based on the natural power of stone, we have identified the 7 inherent strengths that reflect the versatile properties of stone wool.

Unique global product portfolio

In our universal ProRox product range, ROCKWOOL® Technical Insulation offers durable and sustainable stone wool insulation solutions to the petrochemicals,

power generation, refining and gas processing industries. At the same time, we have the expertise and flexibility to meet specific local needs. We keep a close eye on megatrends to ensure our product portfolio stays relevant to the most pressing issues facing our world.

"We think global and act local – just as much as we do the other way around."

This product catalogue clearly presents our unique and universal ProRox® product range, including thermal, fire-resistant, compression, multi-purpose and acoustic insulation solutions that can be effortlessly combined and fulfil your requirements and standards perfectly. Our product selector will help you find the right product. Keep it close by. It's a helpful tool when applying any of our ProRox insulation solutions in any process environment, wherever you are.

For insight into our product range for the Marine and Offshore market, please see our SeaRox Products & Solutions brochure.

John Mogensen
ROCKWOOL Technical Insulation
Managing Director

● Manufacturing facilities
● Sales offices

What's our purpose?



**Releasing the natural
power of stone to
enrich modern living**



This is how our range of products enriches modern living and addresses global challenges

There is something uniquely exciting about turning an abundant natural resource into products that enrich people's lives today and start to tackle planetary change. As we look to the future, stone wool and the products we make with it will play an increasingly significant role in tackling two of the megatrends that impact virtually every aspect of modern society – urbanisation and climate change. As more and more people flock to cities and the consequences of climate change begin to bite, there will be a mounting demand for housing, industry and energy.

Stone and civilisation go hand in hand

ROCKWOOL leverages the 7 strengths of stone to create products that meaningfully address the biggest challenges facing our world. The need to balance fast-paced urban life and human health and wellbeing presents challenges ROCKWOOL aims to overcome. We've spent the last eight decades investigating how we can turn these challenges into unique opportunities. The answer was right in front of us the whole time: stone.

Protecting people and assets

Since 1936 we have utilized the 7 strengths of stone in a broad product range with the aim of making people's lives safer, ensure operational efficiency and take care of the environment while delivering best value for your business. Even 80 years into our journey, as stone wool experts, we know there's still so much to learn. Our new stone innovations create opportunities and help us tackle the challenges tomorrow holds. In a sense, this is just the beginning.



Why is our brand symbol a volcano?

The volcano stands as the source of the natural stone we use in our stone wool solutions. Volcanic rock is an inexhaustible natural resource. We use it to create high-quality, durable products with a long lifespan that meet the needs of modern living. Our solutions help meet global challenges, including reducing CO₂ emissions.



7 strengths of stone

**There is something truly remarkable
about the natural power of stone**



Fire-resilience

Withstands temperatures above 1000°C (1800°F).



Thermal properties

Saves energy and reduces thermal losses to an absolute minimum by maintaining optimum temperatures also during transfer or storage.



Acoustic capabilities

Reduces noise.



Robustness

Longer-lasting performance and sturdiness with easier installation.



Water properties

When engineered to repel water, stone wool can defend valuable industrial equipment from CUI.



Aesthetics

Matches performance with aesthetics: see our sister brands Rockfon and Rockpanel.



Circularity

Reusable and recyclable material.

ProRox insulation

Our ProRox products combine most of the 7 strengths of stone with one ambitious goal in mind: to minimise the human impact on our surroundings, whilst maximising the safety and wellbeing of all the people interacting with our products.

ROCKWOOL stone wool is made from materials that nature itself produces in abundant quantities, one of the earth's inexhaustible resources - volcanic rock. In addition, stone wool withstands temperatures above 1000°C (1800°F), making it highly fire resilient. This means our ProRox product line improves the fire resistance of any technical installation.



Moreover, thanks to its thermal properties the heat stays in the pipework, tanks, columns, vessels, chimneys and boilers. Energy loss and CO₂ emissions are minimized and people are protected from burns (by thermal exposure or contact with hot surfaces). And talking of protection: stone wool has significant acoustic capabilities, keeping the noise down in any industrial environment.

At the same time, stone wool absorbs less water and dries faster, so the insulation maintains its optimal performance, mitigating the risk of CUI (corrosion under insulation).

Discover all the strengths of stone wool at rti.rockwool.com.

Product selector for industrial application

Find the right solution for the European, Middle East & African market


















































































1 Purpose	2 Applications	3 Requirements	Operating temperature		
			T ≤ 350°C/660°F	T > 350°C/660°F	
 Thermal insulation	Pipework	Ø ≤ 300 mm (12") without support construction	■		
		Ø ≤ 300 mm (12") with support construction*		■	
		Ø > 300 mm (12") without support construction	■		
		Ø > 300 mm (12") with support construction		■	
		Subject to mechanical loads			
		Bends and fittings	■	■	
	Storage tanks	Wall - light and flexible solution	■		
		Wall - rigid and resilient solution	■	■	
		Tank roof subjected to light foot traffic	■		
		Tank roof subjected to heavy foot traffic	■	■	
	Boilers	Tube boiler	■		
		Steam generator/reactor		■	
	Columns	Cracking		■	
		Light fraction	■		
	Air pollution control	Electrostatic precipitator	■		
		Flue gas ducts/chimneys	■		
	Furnaces			■	
	Gas separation plants	Cold boxes			
	Other	Irregular surface			
 Acoustic insulation	Pipework & fittings	Ø < 300 mm (12")			
		300 mm ≤ Ø < 650 mm (12" ≤ Ø < 25")			
		650 mm ≤ Ø < 1000 mm (25" ≤ Ø < 39")			


Here's how it works!

- 1 Define your **key purpose of insulation**.
- 2 Select the **right application**.
- 3 Check all **requirements** and choose the right **operating temperature**.
- 4 Find the **advised ProRox solution**. Go to the product page.



4 Advised solution

4 Advised solution			Compliances & certification**								Remarks	
Product	Page	CE Mark EN14303	VDI Keymark	AGI Q. 118	PMUC	VW 3.10.7	MED	ISO 15665***	ASTM***	CINI		
ProRox PS 960 	14								C547	2.2.03		
ProRox PS 960 	14								C547	2.2.03		
ProRox PS 960 	14								C547	2.2.03		
ProRox WM 951 	18								C592	2.2.02	ProRox WM 950 SW (for T > 400°C/750°F) ProRox WM 950 (for indoor applications)	
ProRox PS 970 	16								C547	2.2.03		
ProRox WM 951 	18								C612	2.2.02	ProRox WM 950 (for indoor applications)	
ProRox SL 930	30								C612	2.2.01		
ProRox SL 950	32								C612	2.2.01		
ProRox SL 550	26								C612	2.2.01		
ProRox SL 586	28								C612	2.2.01		
ProRox WM 951 	18								C592	2.2.02	ProRox WM 950 (for indoor applications)	
ProRox WM 961 	20								C592	2.2.02	ProRox WM 960 (for indoor applications)	
ProRox WM 961 	20								C592	2.2.02	ProRox WM 960 (for indoor applications)	
ProRox SL 950	32								C612	2.2.01		
ProRox WM 951 	18								C592	2.2.02		
ProRox SL 960	34								C612	2.2.01		
ProRox WM 961 	20								C592	2.2.02		
ProRox GR 903	37											
ProRox LF 970	36									2.2.04		
ProRox PS 960 	14								C547	2.2.03		
ProRox PS 960 	14								C547	2.2.03		
ProRox WM 951 	18								C592	2.2.02	ProRox WM 950 (for indoor applications)	

 = with WR-Tech,
see p.12-13

■ = only available from European production facilities

■ = only available from selected European production facilities

Find the advised product here

Quick and easy



* Pipework **with** support construction: at temperatures above 350°C/660°F, the provisional application of spacers should be determined in each individual case.

** Compliances & certification: get an overview of the norms and standards and make sure they cover your design and equipment requirements.

*** For more details on ASTM and ISO 15665 please contact ROCKWOOL Technical Insulation.

ProRox universal solutions for industrial applications

With our ProRox range we created a unique global product portfolio that in all its simplicity and effectiveness will deliver the best value for money when insulating your installation. Our 4 key product categories contain all essential components and in their various combinations will resolve any insulation challenge whether big or small.

We have listened closely to our customers who need to keep their plant operations efficient, environmentally friendly and safe.

Based on this feedback, we thoroughly reviewed all of our insulation solutions to identify their fundamental qualities.

Through the ProRox range, we offer a wide assortment of high-quality stone wool insulation products for sustainable insulation of industrial and power generation plants. Each of our products is developed with a specific field of application (e.g. pipework, boilers, vessels, columns and storage tanks) in mind.

ProRox Product overview

Mandrel-wound pipe sections **D H**

ProRox PS 960	14
ProRox PS 970	16

Wired mats **A B C D H**

ProRox WM 951 NEW	18
ProRox WM 961 NEW	20
ProRox WM 950	22
ProRox WM 960	24

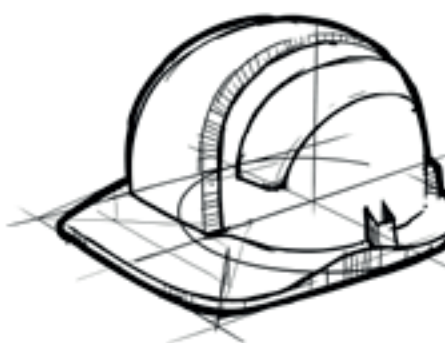
Slabs (boards) **B C E F**

ProRox SL 550 NEW	26
ProRox SL 586 NEW	28
ProRox SL 930	30
ProRox SL 950	32
ProRox SL 960	34

Granulates & loose wool **G**

ProRox LF 970	36
ProRox GR 903	37





Our product names, a logical structure

Each product name is structured in the same clear way:

e.g.: **ProRox PS 960 ALU**

Product range

Product identifier:

WM = Wired Mats
SL = Slabs
MA = Mats
PS = Pipe Sections
GR = Granulate

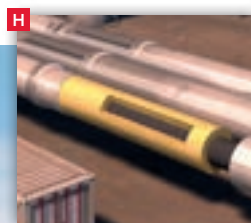
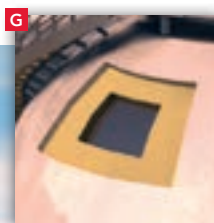
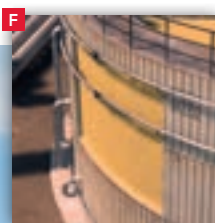
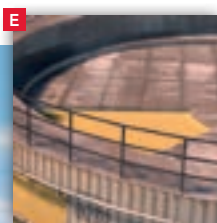
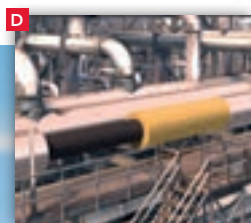
2 last digits = refer to other product characteristics

Application code:

1st digit:
5 = Compressive strength
9 = Thermal insulation

Product facings:

ALU = reinforced aluminium foil facing



Don't let water take hold of your plant

ROCKWOOL ProRox solutions with WR-Tech™



MANDREL-WOUND PIPE SECTIONS

ProRox PS 960
ProRox PS 970



WIRED MATS **NEW**

ProRox WM 951
ProRox WM 961



with
**WR
TECH™**



**PATENT
PENDING**

Combat CUI with the unique Water Repellency Technology WR-Tech

Corrosion under insulation (CUI) is a major issue in the industry. Our next generation ProRox stone wool insulation products with WR-Tech helps you get to grips with CUI. How? WR-Tech is an advanced Water Repellency Technology based on a unique binder that repels water. As such it **ensures the lowest possible water absorption**, also after heating and aging, **lowering the risk of CUI**.

But that's not all. WR-Tech also **reduces thermal losses, saves energy** and covers all applications, such as pipes, vessels and columns. So, thanks to this innovative technology we can help keep your plant safe, ensure operational effectiveness, reduce environmental impact and lower maintenance cost. Here's the proof.

WR-Tech has all the qualities to protect and optimize your plant

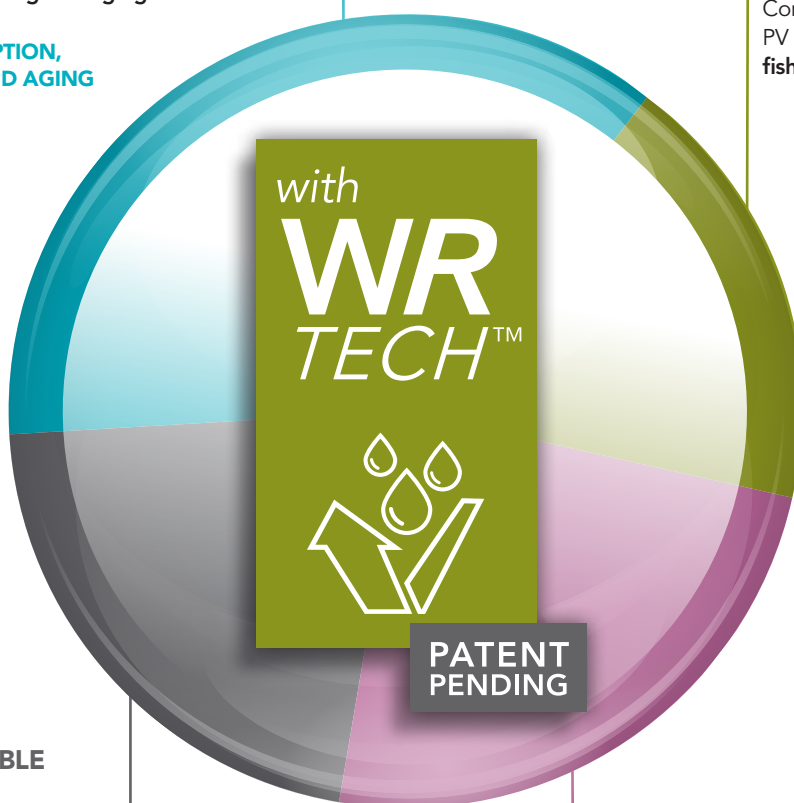
LOWEST WATER ABSORPTION

The highest water repellency ($<0.2 \text{ kg/m}^2$) **reduces water absorption fivefold** compared with the best available standard, EN 13472, maximizing water flow away from insulation material. And **there is no reduction in maximum water repellency after heating and aging**.

**< 5X LESS WATER ABSORPTION,
EVEN AFTER HEATING AND AGING**

SILICONE OIL-FREE

Complies with VW specification PV 3.10.7, **does not result in fish-eyes**, usable in paint shops.



LOW WATER LEACHABLE CHLORIDE CONTENT

Safe to use over steel ($<10 \text{ ppm}$).
Complies with strict industry standards ASTM C795 and EN 13468.

FASTEST WATER DISSIPATION

The vapor open structure ensures that **water can evaporate freely** if it could reach the pipe surface and ensures the fastest dry-out time under ASTM C1763.



We have a winner!

WR-Tech™, our revolutionary Water Repellency Technology for combatting corrosion under insulation, was a winner at the 2019 Materials Performance Corrosion Innovation of the Year Awards.



ProRox PS 960

Mandrel-wound pipe section

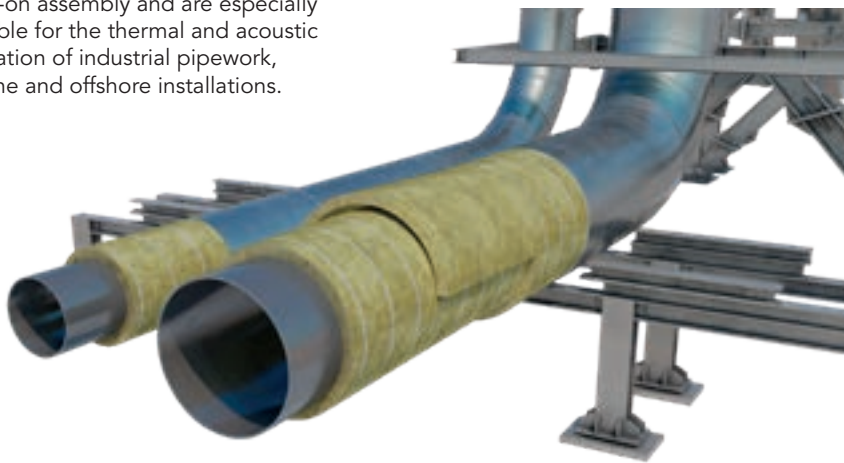
with WR-Tech

Product description

ProRox PS 960 is a mandrel-wound stone wool insulation pipe section. The pipe sections are produced with an innovative water-repellent binder, known as WR-Tech™, to mitigate the risk of corrosion under insulation (CUI). WR-Tech ensures our stone wool maintains its superior water repellency even at elevated operating temperatures within the CUI range, while preserving its excellent thermal performance in use.

Application

The highly durable insulation sections come split and hinged for easy snap-on assembly and are especially suitable for the thermal and acoustic insulation of industrial pipework, marine and offshore installations.



Available dimensions:

For Europe, Middle East & Africa:

- Diameter range: 28 mm to 915 mm
- Insulation thickness: 20 mm to 200 mm

For North America:

- Diameter range: 1" to 36"
- Insulation thickness: ½" to 36"

Product variances:

- Reinforced aluminium foil facing is available upon request for the European, Middle East and African markets.

Assembly

Fit the ProRox PS 960 closely around the pipe, with the lengthwise (horizontal) joint facing downwards. The lengthwise joints must be staggered at an angle of at least 30 degrees to each other. The shell is secured with galvanised binding wire, steel bands or other equivalent means, suitable for the service conditions and compatible with the cladding or protective material. In a multi-layer insulation scenario, staggering the lengthwise and crosswise joints is recommended ('masonry bond').

mountings, head and end caps, etc. should be made watertight using an appropriate sealant.

Notes

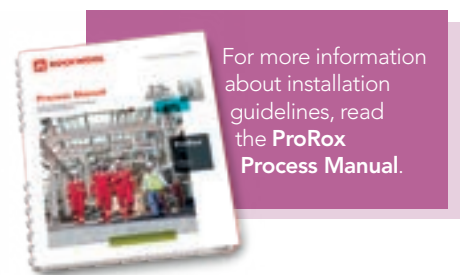
- All steel components exposed to a corrosive environment should be cleaned, degreased and coated with a protective finish.
- Local requirements (standards and specifications) for installation, support construction and cladding must be complied with.

Support construction

Support structures or spacers are needed for pipes that are expected to be subjected to mechanical loads (e.g. strong vibrations) or a temperature higher than 350°C (660°F).

Protection

All pipe sections should be protected with weather resistant cladding suitable for the service conditions. The joints should be made with an appropriate overlap to ensure that water runs off the construction. Where necessary, expansion joints are required. The cladding should be mounted securely to ensure both lengthwise and circular joints are tight. Connections to



Product benefits



- ProRox solutions with WR-Tech mitigate the effects of CUI and so ensure the safe and optimal performance of your plant
- Safe to use over stainless steel



- Pre-formed pipe sections ensure easy and fast installation
- Available in a wide range of diameters and thicknesses



- Excellent pipe fit and low water absorption prevents heat losses and secures an optimal thermal performance

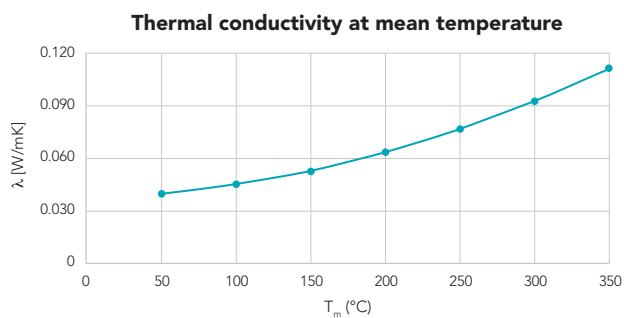
Product properties in accordance with EN 14303

Properties	Performance								Norms
Thermal conductivity at mean temperature	T_m (°C)	50	100	150	200	250	300	350	EN ISO 8497
	λ (W/mK)	0.040	0.046	0.054	0.064	0.077	0.092	0.112	
Maximum service temperature	650°C In case of aluminium facing the outer foil temperature should be limited to 80°C								EN 14707
Reaction to fire	Euroclass A1 _L Euroclass A2 _L -S1,d0 (for alu-foil faced product) Non-combustible Low flame spread characteristics								EN 13501-1 IMO 2010 FTP
Nominal density (*)	$\geq 100 \text{ kg/m}^3$								EN 13470
Corrosion resistance	Trace quantity of water leachable chloride ions: $\leq 10 \text{ ppm}$								EN 13468
Water absorption	$\leq 0.2 \text{ kg/m}^2$ $\leq 0.2 \text{ kg/m}^2$ (After 24 hrs. pre-heating at 250°C)								EN 13472
Water vapour diffusion resistance	$\mu = 1$								EN 14303
Influence on coating systems	Free from substances (e.g. silicone oil) that could impair surface wetting								VW 3.10.7
Designation code	MW EN 14303-T9(T8 if $D_o < 150$)-ST(+)-650-WS1-CL10								EN 14303

(*) ProRox insulation fully complies with EN 14303. Density is not an insulation property in itself, it simply reflects the actual weight of the product per cubic meter.

Compliance

- Validity of CE marking is restricted to European production facilities.
- A full overview of all ProRox PS 960 compliances can be found on page 9.



ProRox PS 970

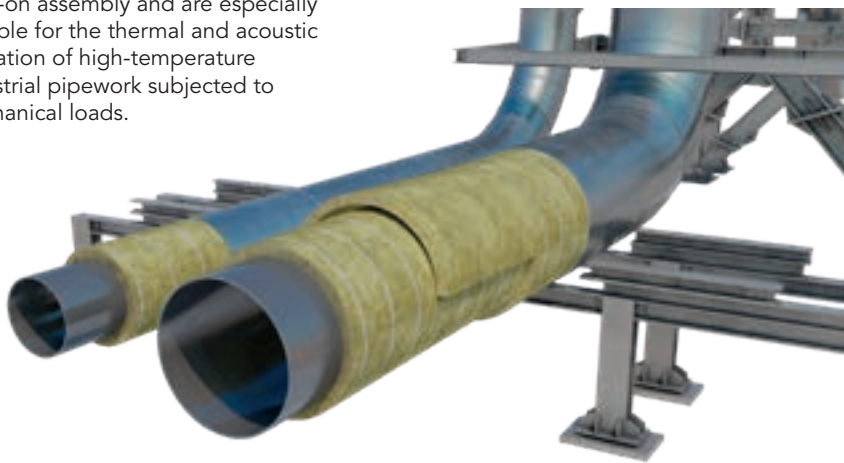
with WR-Tech

Product description

ProRox PS 970 is a mandrel-wound stone wool insulation pipe section. The pipe sections are produced with an innovative water-repellent binder, known as WR-Tech™, to mitigate the risk of corrosion under insulation (CUI). WR-Tech ensures our stone wool maintains its superior water repellency even at elevated operating temperatures within the CUI range, while preserving its excellent thermal performance in use.

Application

The highly durable insulation sections come split and hinged for easy snap-on assembly and are especially suitable for the thermal and acoustic insulation of high-temperature industrial pipework subjected to mechanical loads.



Assembly

Fit the ProRox PS 970 closely around the pipe, with the lengthwise (horizontal) joint facing downwards. The lengthwise joints must be staggered at an angle of at least 30 degrees to each other. The shell is secured with galvanised binding wire, steel bands or other equivalent means, suitable for the service conditions and compatible with the cladding or protective material. In a multi-layer insulation scenario, staggering the lengthwise and crosswise joints is recommended ('masonry bond').

Support construction

Support structures or spacers are needed for pipes that are expected to be subjected to mechanical loads (e.g. strong vibrations) or a temperature higher than 350°C (660°F).

Protection

All pipe sections should be protected with weather resistant cladding suitable for the service conditions. The joints should be made with an appropriate overlap to ensure that water runs off the construction. Where necessary, expansion joints are required. The cladding should be mounted securely to ensure both lengthwise and circular joints are tight. Connections to

mountings, head and end caps, etc. should be made watertight using an appropriate sealant.

Notes

- All steel components exposed to a corrosive environment should be cleaned, degreased and coated with a protective finish.
- Local requirements (standards and specifications) for installation, support construction and cladding must be complied with.

Mandrel-wound pipe section



Available dimensions:

For Europe, Middle East & Africa:

- Diameter range: 28 mm to 915 mm
- Insulation thickness: 20 mm to 200 mm

Product variances:

- Reinforced aluminium foil facing is available upon request.



For more information about installation guidelines, read the **ProRox Process Manual**.

Product benefits



- ProRox solutions with WR-Tech mitigate the effects of CUI and so ensure the safe and optimal performance of your plant
- Safe to use over stainless steel



- Pre-formed pipe sections ensure easy and fast installation
- Available in a wide range of diameters and thicknesses
- Applicable to pipework subjected to mechanical loads



- Excellent pipe fit and low water absorption prevents heat losses and secures optimal thermal performance, even at high temperatures and when subjected to high mechanical loads

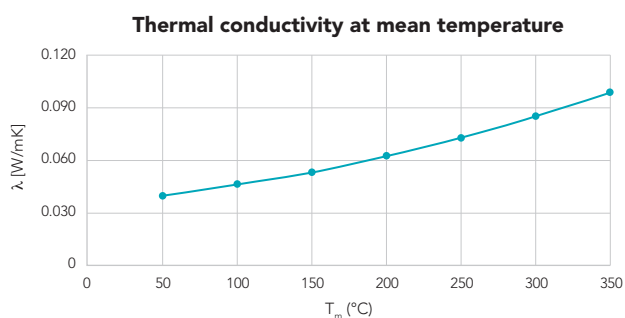
Product properties in accordance with EN 14303

Properties	Performance								Norms
Thermal conductivity at mean temperature	T_m (°C)	50	100	150	200	250	300	350	EN ISO 8497
	λ (W/mK)	0.040	0.046	0.053	0.062	0.073	0.085	0.099	
Maximum service temperature	680°C In case of aluminium facing the outer foil temperature should be limited to 80°C								EN 14707
Reaction to fire	Euroclass A1 _L Euroclass A2 _L -S1,d0 (for alu-foil faced product) Non-combustible Low flame spread characteristics								EN 13501-1 IMO 2010 FTP
Nominal density (*)	140 kg/m ³								EN 13470
Corrosion resistance	Trace quantity of water leachable chloride ions: ≤ 10 ppm								EN 13468
Water absorption	≤ 0.2 kg/m ² ≤ 0.2 kg/m ² (After 24 hrs. pre-heating at 250°C)								EN 13472
Water vapour diffusion resistance	$\mu = 1$								EN 14303
Influence on coating systems	Free from substances (e.g. silicone oil) that could impair surface wetting								VW 3.10.7
Designation code	MW EN 14303-T9(T8 if Do <150)-ST(+)/680-WS1-CL10								EN 14303

(*) ProRox insulation fully complies with EN 14303. Density is not an insulation property in itself, it simply reflects the actual weight of the product per cubic meter.

Compliance

- Validity of CE marking is restricted to European production facilities.
- A full overview of all ProRox PS 970 compliances can be found on page 9.



NEW

ProRox WM 951

Wired mat

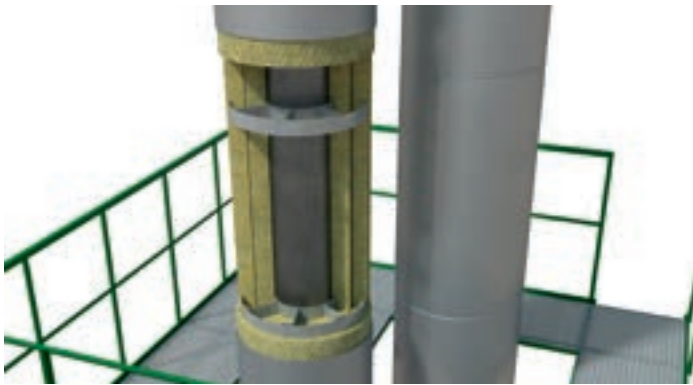
with WR-Tech

Product description

ProRox WM 951 is a lightly bonded stone wool insulation mat stitched on galvanized wire mesh with galvanized wire. The wired mats are produced with an innovative water-repellent binder, known as WR-Tech™, to mitigate the risk of corrosion under insulation (CUI). WR-Tech ensures our stone wool maintains its superior water repellency even at elevated operating temperatures within the CUI range, while preserving its excellent thermal performance in use.

Application

The wired mats are suitable for the thermal and acoustic insulation of industrial installations exposed to the environment, such as outdoor industrial pipework and equipment at petrochemical plants and refineries.



Available dimensions:

For Europe, Middle East & Africa:

- Standard thickness: 40 mm to 120 mm
- Width: 500 mm and 1000 mm
- Length: varies per thickness

Product variances:

- Stainless steel mesh, stainless steel binding wire and/or reinforced aluminium foil facing are available upon request.

Assembly

Wired mats are flexible mats that fit various geometries and surface structures. On flat surfaces, wired mats must be secured with at least six pins per square metre. On pipes, wired mats should be cut to length and fitted with slight pre-stressing. All the lengthwise and crosswise joints must be sewn or wired together or joined with six mat (wrap) hooks per metre. If the insulation is assembled in multiple layers, the joints of the individual insulation layers must be staggered ("masonry bond"). When stainless steel pipes are used or the operating temperature is >400°C (750°F), ProRox WM 951 SW is recommended, as both mesh and stitching wire are stainless steel.

securely to ensure both lengthwise and circular joints are tight. Connections to other components should be made watertight using an appropriate sealant.

Notes

- All steel components exposed to a corrosive environment should be cleaned, degreased and coated with a protective finish.
- Local requirements (standards and specifications) for installation, support construction and cladding must be complied with.



For more information about installation guidelines, read the **ProRox Process Manual**.

Support construction

Wired mats are not strong enough to bear the weight of the cladding, so spacers or supports should be used. The position and distance between supports depend on the installation type.

Protection

Wired mats should be protected with weather resistant cladding suitable for the service conditions. The joints should be made with an appropriate overlap to ensure that water runs off the construction. Where necessary, expansion joints are required. The cladding should be mounted

Product benefits



- ProRox solutions with WR-Tech mitigate the effects of CUI and so ensure the safe and optimal performance of your plant
- Safe to use over stainless steel



- Easy to install when flexibility is required
- Available in a wide range of thicknesses



- Excellent fit and low water absorption prevents heat losses and secures optimal thermal performance, even at high temperatures

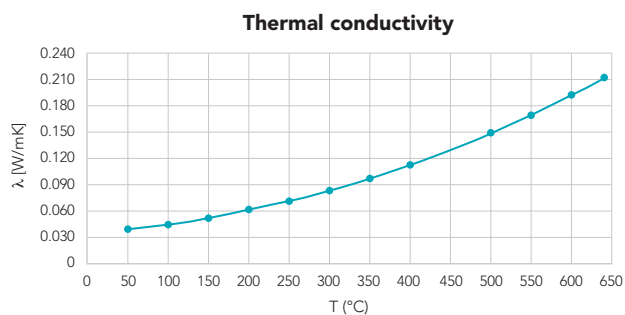
Product properties in accordance with EN 14303

Properties	Performance												Norms
Thermal conductivity	T (°C)	50	100	150	200	250	300	350	400	500	600	640	EN 12667
	λ (W/mK)	0.039	0.045	0.053	0.062	0.072	0.084	0.097	0.112	0.146	0.192	0.213	
Maximum service temperature	640°C												EN 14706
Reaction to fire	Euroclass A1 Non-combustible												EN 13501-1 IMO 2010 FTP
Nominal density	80 kg/m ³												EN 1602
Corrosion resistance	Trace quantity of water leachable chloride ions: ≤ 10 ppm												EN 13468
Water absorption	≤ 0.2 kg/m ² ≤ 0.2 kg/m ² (After 24 hrs. pre-heating at 250°C)												EN 1609
Water vapour diffusion resistance	$\mu = 1$												EN 14303
Influence on coating systems	Free from substances (e.g. silicone oil) that might impair surface wetting												VW 3.10.7
Designation code (*)	MW EN 14303-T2-ST(+)640-WS1-CL10												EN 14303

(*) Thickness class declared under the load of 1000 Pa.

Compliance

- Validity of CE marking is restricted to European production facilities.
- A full overview of all ProRox WM 951 compliances can be found on page 9.



NEW

ProRox WM 961

Wired mat

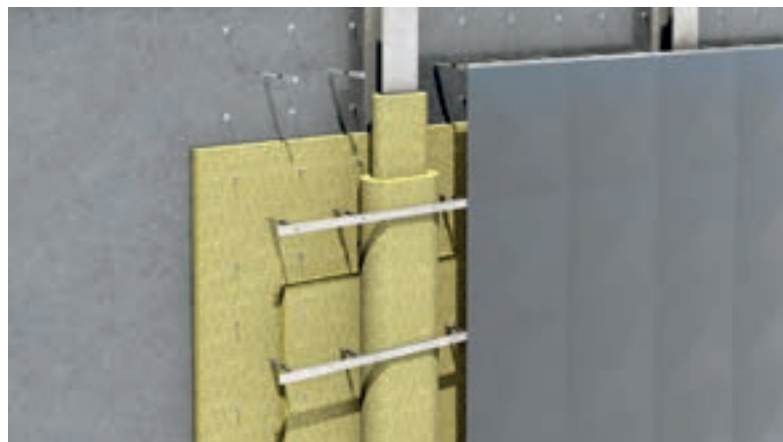
with WR-Tech

Product description

ProRox WM 961 is a lightly bonded heavy-duty stone wool insulation mat stitched on galvanized wired mesh with galvanized wire. The wired mats are produced with an innovative water-repellent binder, known as WR-Tech™, to mitigate the risk of corrosion under insulation (CUI). WR-Tech ensures our stone wool maintains its superior water repellency even at elevated operating temperatures within the CUI range, while preserving its excellent thermal performance in use.

Application

The wired mats are suitable for the thermal and acoustic insulation of industrial installations exposed to the environment, such as outdoor industrial pipework, reactors and furnaces at petrochemical plants and refineries.



Available dimensions:

For Europe, Middle East & Africa:

- Standard thickness: 40 mm to 120 mm
- Width: 500 mm and 1000 mm
- Length: varies per thickness

Product variances:

- Stainless steel mesh, stainless steel binding wire and/or reinforced aluminium foil facing are available upon request.

Assembly

Wired mats are flexible mats that fit various geometries and surface structures. On flat surfaces, wired mats must be secured with at least six pins per square metre. On pipes, wired mats should be cut to length and fitted with slight pre-stressing. All the lengthwise and crosswise joints must be sewn or wired together or joined with six mat (wrap) hooks per metre. If the insulation is assembled in multiple layers, the joints of the individual insulation layers must be staggered ('masonry bond'). When stainless steel pipes are used or the operating temperature is $>400^{\circ}\text{C}$ (750°F), ProRox WM 961 SW is recommended, as both mesh and stitching wire are stainless steel.

required. The cladding should be mounted securely to ensure both lengthwise and circular joints are tight. Connections to other components should be made watertight using an appropriate sealant.

Notes

- All steel components exposed to a corrosive environment should be cleaned, degreased and coated with a protective finish.
- Local requirements (standards and specifications) for installation, support construction and cladding must be complied with.



For more information about installation guidelines, read the **ProRox Process Manual**.

Support construction

Wired mats are not strong enough to bear the weight of the cladding, so spacers or supports should be used. The position and distance between supports depend on the installation type.

Protection

Wired mats should be protected with weather resistant cladding suitable for the service conditions. The joints should be made with an appropriate overlap to ensure that water runs off the construction. Where necessary, expansion joints are

Product benefits



- ProRox solutions with WR-Tech mitigate the effects of CUI and so ensure the safe and optimal performance of your plant
- Safe to use over stainless steel



- Easy to install when flexibility is required
- Available in a wide range of thicknesses
- Resistant to high temperatures and mechanical loads



- Excellent fit and low water absorption prevents heat losses and secures optimal thermal performance, even at high temperatures

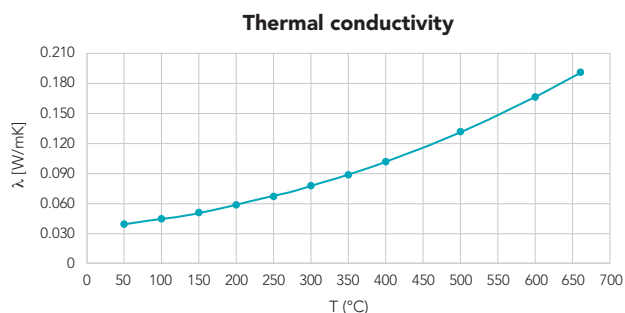
Product properties in accordance with EN 14303

Properties	Performance												Norms
Thermal conductivity	T (°C)	50	100	150	200	250	300	350	400	500	600	660	EN 12667
	λ (W/mK)	0.039	0.045	0.052	0.059	0.068	0.078	0.089	0.102	0.131	0.167	0.191	
Maximum service temperature	660°C												EN 14706
Reaction to fire	Euroclass A1 Non-combustible												EN 13501-1 IMO 2010 FTP
Nominal density	100 kg/m ³												EN 1602
Corrosion resistance	Trace quantity of water leachable chloride ions: ≤ 10 ppm												EN 13468
Water absorption	≤ 0.2 kg/m ² ≤ 0.2 kg/m ² (After 24 hrs. pre-heating at 250°C)												EN 1609
Water vapour diffusion resistance	$\mu = 1$												EN 14303
Influence on coating systems	Free from substances (e.g. silicone oil) that might impair surface wetting												VW 3.10.7
Designation code (*)	MW EN 14303-T2-ST(+)660-WS1-CL10												EN 14303

(*) Thickness class declared under the load of 1000 Pa.

Compliance

- Validity of CE marking is restricted to European production facilities.
- A full overview of all ProRox WM 961 compliances can be found on page 9.



ProRox WM 950

Wired mat

Product description

ProRox WM 950 is a lightly bonded stone wool insulation mat stitched on galvanized wire mesh with galvanized wire.

Application

The wired mats are suitable for the thermal and acoustic insulation of industrial installations exposed to the environment when high-temperature resistance is demanded, such as industrial pipework, reactors and hot columns at petrochemical plants and refineries.



Available dimensions:

For Europe, Middle East & Africa:

- Standard thickness: 40 mm to 120 mm
- Width: 500 mm and 1000 mm
- Length: varies per thickness

Product variances:

- Stainless steel mesh, stainless steel binding wire and/or reinforced aluminium foil facing are available upon request.

Assembly

Wired mats are flexible mats that fit various geometries and surface structures. On flat surfaces, wired mats must be secured with at least six pins per square metre. On pipes, wired mats should be cut to length and fitted with slight pre-stressing. All the lengthwise and crosswise joints must be sewn or wired together or joined with six mat hooks per metre. If the insulation is assembled in multiple layers, the joints of the individual insulation layers must be staggered ('masonry bond'). When stainless steel pipes are used or the operating temperature is $>400^{\circ}\text{C}$ (750°F), ProRox WM 950 SW is recommended, as both mesh and stitching wire are stainless steel.

required. The cladding should be mounted securely to ensure both lengthwise and circular joints are tight. Connections to other components should be made watertight using an appropriate sealant.

Notes

- All steel components exposed to a corrosive environment should be cleaned, degreased and coated with a protective finish.
- Local requirements (standards and specifications) for installation, support construction and cladding must be complied with.



For more information about installation guidelines, read the **ProRox Process Manual**.

Support construction

Wired mats are not strong enough to bear the weight of the cladding, so spacers or supports should be used. The position and distance between supports depend on the installation type.

Protection

Wired mats should be protected with weather resistant cladding suitable for the service conditions. The joints should be made with an appropriate overlap to ensure that water runs off the construction. Where necessary, expansion joints are

Product benefits



- Safe to use over stainless steel



- Easy to install when flexibility is required
- Available in a wide range of thicknesses



- Excellent fit prevents heat loss and secures optimal thermal performance, even at high temperatures

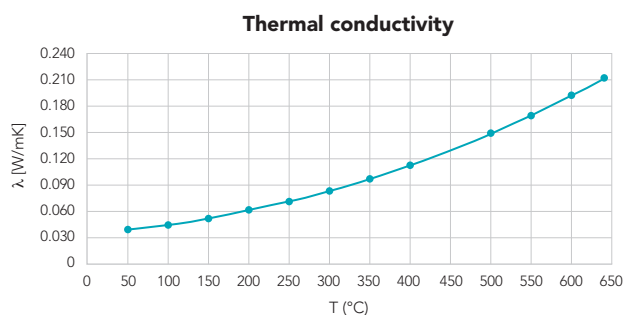
Product properties in accordance with EN 14303

Properties	Performance												Norms
Thermal conductivity	T (°C)	50	100	150	200	250	300	350	400	500	600	640	EN 12667
	λ (W/mK)	0.039	0.045	0.053	0.062	0.072	0.084	0.097	0.112	0.146	0.192	0.213	
Maximum service temperature	640°C												EN 14706
Reaction to fire	Euroclass A1 Non-combustible												EN 13501-1 IMO 2010 FTP
Nominal density	80 kg/m³												EN 1602
Corrosion resistance	Trace quantity of water leachable chloride ions: ≤ 10 ppm												EN 13468
Water absorption	< 1 kg/m²												EN 1609
Water vapour diffusion resistance	μ = 1												EN 14303
Designation code (*)	MW EN 14303-T2-ST(+)-640-WS1-CL10												EN 14303

(*) Thickness class declared under the load of 1000 Pa.

Compliance

- Validity of CE marking is restricted to European production facilities.
- A full overview of all ProRox WM 950 compliances can be found on page 9.



ProRox WM 960

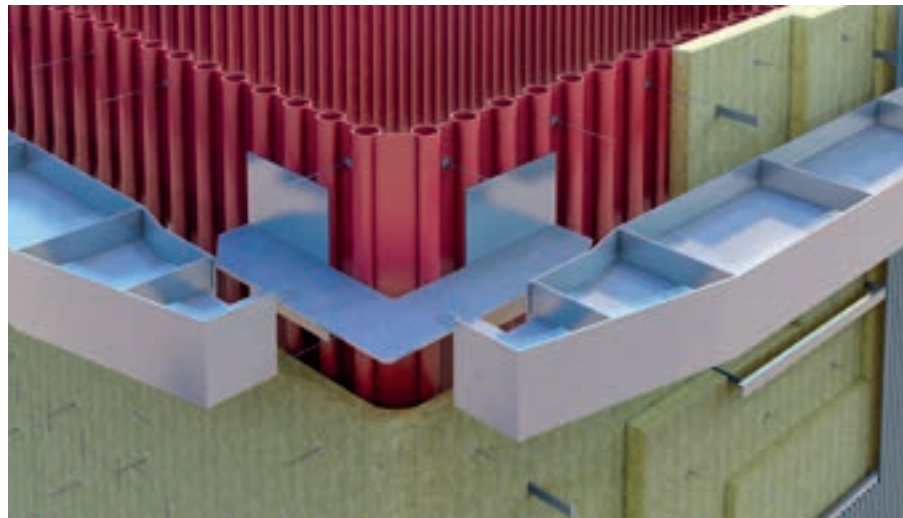
Wired mat

Product description

ProRox WM 960 is a lightly bonded heavy-duty stone wool insulation mat stitched on galvanized wired mesh with galvanized wire.

Application

The wired mats are especially suitable for the thermal insulation of industrial applications when high-temperature resistance is demanded, such as high-pressure steam pipes, reactors and furnaces.



Available dimensions:

For Europe, Middle East & Africa:

- Standard thickness: 40 mm to 120 mm
- Width: 500 mm and 1000 mm
- Length: varies per thickness

Product variances:

- Stainless steel mesh, stainless steel binding wire and/or reinforced aluminium foil facing are available upon request.

Assembly

Wired mats are flexible mats that fit various geometries and surface structures. On flat surfaces, wired mats must be secured with at least six pins per square metre. On pipes, wired mats should be cut to length and fitted with slight pre-stressing. All the lengthwise and crosswise joints must be sewn or wired together or joined with six mat hooks per metre. If the insulation is assembled in multiple layers, the joints of the individual insulation layers must be staggered ('masonry bond'). When stainless steel pipes are used or the operating temperature is $>400^{\circ}\text{C}$ (750°F), ProRox WM 960 SW is recommended, as both mesh and stitching wire are stainless steel.

required. The cladding should be mounted securely to ensure both lengthwise and circular joints are tight. Connections to other components should be made watertight using an appropriate sealant.

Notes

- All steel components exposed to a corrosive environment should be cleaned, degreased and coated with a protective finish.
- Local requirements (standards and specifications) for installation, support construction and cladding must be complied with.



For more information about installation guidelines, read the **ProRox Process Manual**.

Support construction

Wired mats are not strong enough to bear the weight of the cladding, so spacers or supports should be used. The position and distance between supports depend on the installation type.

Protection

Wired mats should be protected with weather resistant cladding suitable for the service conditions. The joints should be made with an appropriate overlap to ensure that water runs off the construction. Where necessary, expansion joints are

Product benefits



- Safe to use over stainless steel



- Easy to install when flexibility is required
- Available in a wide range of thicknesses
- Resistant to high temperatures and mechanical loads



- Excellent fit prevents heat loss and secures optimal thermal performance, even at high temperatures



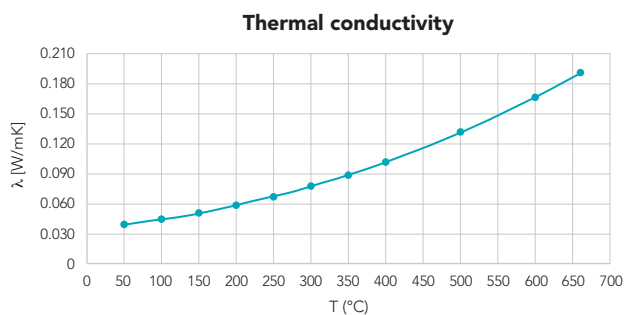
Product properties in accordance with EN 14303

Properties	Performance												Norms
Thermal conductivity	T (°C)	50	100	150	200	250	300	350	400	500	600	660	EN 12667
	λ (W/mK)	0.039	0.045	0.052	0.059	0.068	0.078	0.089	0.102	0.131	0.167	0.191	
Maximum service temperature	660°C												EN 14706
Reaction to fire	Euroclass A1 Non-combustible												EN 13501-1 IMO 2010 FTP
Nominal density	100 kg/m³												EN 1602
Corrosion resistance	Trace quantity of water leachable chloride ions: ≤ 10 ppm												EN 13468
Water absorption	< 1 kg/m²												EN 1609
Water vapour diffusion resistance	μ = 1												EN 14303
Designation code (*)	MW EN 14303-T2-ST(+)-640-WS1-CL10												EN 14303

(*) Thickness class declared under the load of 1000 Pa.

Compliance

- Validity of CE marking is restricted to European production facilities.
- A full overview of all ProRox WM 960 compliances can be found on page 9.



NEW

ProRox SL 550

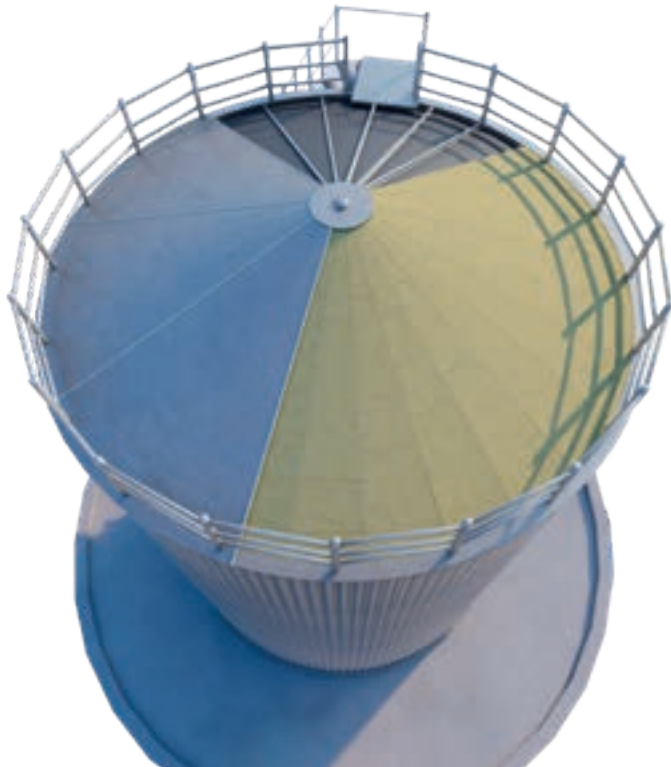
Rigid slab (board)

Product description

ProRox SL 550 is a strong, rigid stone wool insulation slab (board).

Application

The slab (board) is suitable for the thermal and acoustic insulation of industrial applications subjected to mechanical loads, such as tank roofs.



Available dimensions:

For Europe, Middle East & Africa:

- Standard thickness: 50 mm to 100 mm
- Width: 600 mm
- Length: 1000 mm

Assembly

For cone and dome roofs the radial segments with raised edges can be applied for covering the insulation slabs. Slabs in a multilayer system shall be applied with staggered joints. In case of heavy load pressure, it is recommended to use ProRox SL 550 as a bottom layer in combination with ProRox SL 586 as a top layer to increase point load resistance.

Protection

Slabs should be finished with a weather resistant cladding suitable for the service conditions. Generally, on top of roofs, a metal sheet cladding with a radial or "riveted" segment arrangement is applied. As tank roofs are vulnerable to delamination, screws may be damaged (pulled loose). The suction caused by the wind on tank roofs can create delamination forces which unleash the fixings (screws) of the metal cladding. This can be solved by applying a welded steel bar. If welding the roof is not possible, the steel radial segments in the centre of the roof can be hooked together in a ring around

the perimeter of the roof. Turnbuckles are used to keep the radials correctly tensioned.

Notes

- All steel components exposed to a corrosive environment should be cleaned, degreased and coated with a protective finish.
- Local requirements (standards and specifications) for installation, support construction and cladding must be complied with.



For more information about installation guidelines, read the **ProRox Process Manual**.

Product benefits



- Safe to use over stainless steel



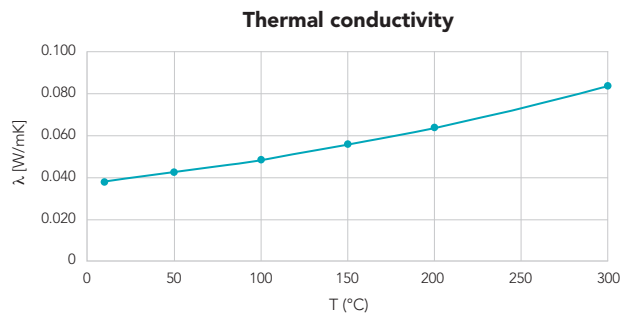
- Optimized compression resistance especially suitable for tank roofs that are subjected to light and occasional foot traffic
- Product is light in weight and therefore easy to handle during installation
- Suitable as bottom layer insulation for industrial applications subjected to high mechanical loads

Product properties in accordance with EN 14303

Properties	Performance							Norms
Thermal conductivity	T (°C)	10	50	100	150	200	300	EN 12667
	λ (W/mK)	0.038	0.043	0.049	0.056	0.063	0.084	
Maximum service temperature	300°C							EN 14706
Reaction to fire	Euroclass A1							EN 13501-1
Nominal density	100 kg/m ³							EN 1602
Corrosion resistance	Trace quantity of water leachable chloride ions: ≤ 10 ppm							EN 13468
Water absorption	≤ 1 kg/m ²							EN 1609
Water vapour diffusion resistance	$\mu = 1$							EN 14303
Compressive stress at 10% deformation	30 kPa							EN 826
Tensile strength perpendicular to faces	7.5 kPa							EN 1607
Designation code	MW EN 14303-T4(T3 if $t < 60$)-ST(+)-300-CS(10)30-WS1-CL10							EN 14303

Compliance

- Validity of CE marking is restricted to European production facilities.
- A full overview of all ProRox SL 550 compliances can be found on page 9.



NEW

ProRox SL 586

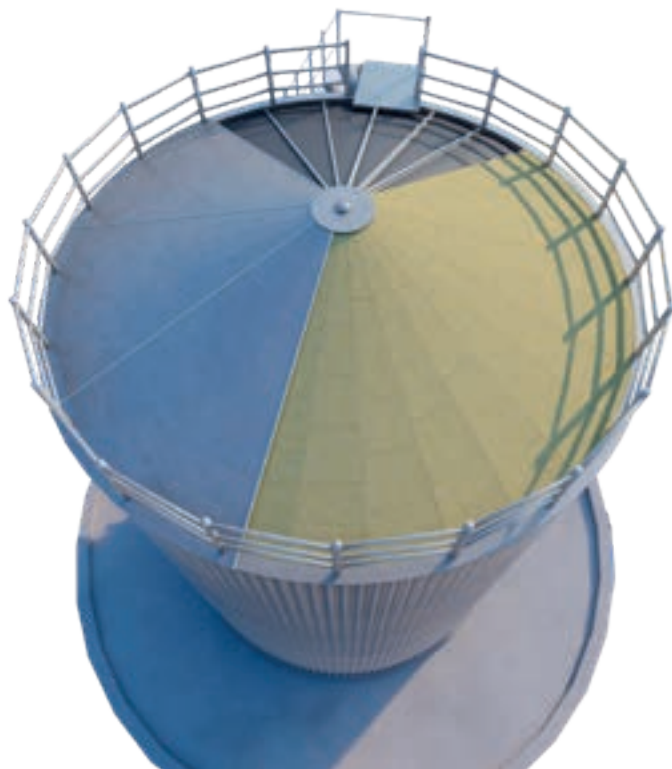
Pressure-resistant rigid slab (board)

Product description

ProRox SL 586 is a pressure-resistant rigid stone wool insulation slab (board).

Application

The slab (board) is suitable for the thermal and acoustic insulation of high-temperature industrial applications exposed to foot traffic or constructions subjected to heavy mechanical loads, such as tank roofs.



Available dimensions:

For Europe, Middle East & Africa:

- Standard thickness: 40 mm to 100 mm
- Width: 600 mm
- Length: 1000 mm

Assembly

For cone and dome roofs the radial segments with raised edges can be applied for covering the insulation slabs. Slabs in a multilayer system shall be applied with staggered joints.

Protection

Slabs should be finished with a weather resistant cladding suitable for the service conditions. Generally, on top of roofs, a metal sheet cladding with a radial or "riveted" segment arrangement is applied. As tank roofs are vulnerable to delamination, screws may be damaged (pulled loose). The suction caused by the wind on tank roofs can create delamination forces which unleash the fixings (screws) of the metal cladding. This can be solved by applying a welded steel bar. If welding the roof is not possible, the steel radial segments in the centre of the roof can be hooked together in a ring around the perimeter of the roof. Turnbuckles are used to keep the radials correctly tensioned.

Notes

- All steel components exposed to a corrosive environment should be cleaned, degreased and coated with a protective finish.
- Local requirements (standards and specifications) for installation, support construction and cladding must be complied with.



For more information about installation guidelines, read the **ProRox Process Manual**.

Product benefits



- Safe to use over stainless steel



- Usable for high mechanical loads such as heavy foot traffic during installation and maintenance
- Resistance to high and shifting wind suction and snow loads
- Suitable for high temperature applications

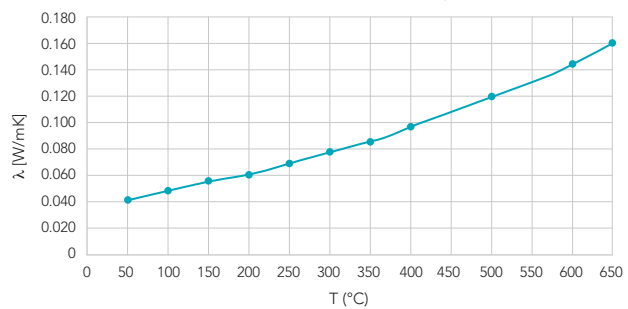
Product properties in accordance with EN 14303

Properties	Performance												Norms
Thermal conductivity	T (°C)	50	100	150	200	250	300	350	400	500	600	650	EN 12667
	λ (W/mK)	0.043	0.048	0.054	0.061	0.068	0.077	0.086	0.097	0.119	0.145	0.160	
Maximum service temperature	650°C												EN 14706
Reaction to fire	Euroclass A1												EN 13501-1
Nominal density	150 kg/m ³												EN 1602
Corrosion resistance	Trace quantity of water leachable chloride ions: ≤ 10 mg/kg												EN 13468
Water absorption	< 1 kg/m ²												EN 1609
Water vapour diffusion resistance	$\mu = 1$												EN 14303
Compressive stress at 10% deformation	50 kPa												EN 826
Tensile strength perpendicular to faces	10 kPa												EN 1607
Pointload at 5 mm deformation	400 N												EN 12430
Designation code	MW EN 14303-T4(T3 if $t < 60$)-ST(+)-650-CS(10)50-WS1-CL10												EN 14303

Compliance

- Validity of CE marking is restricted to European production facilities.
- A full overview of all ProRox SL 586 compliances can be found on page 9.

Thermal conductivity



ProRox SL 930

Semi-rigid slab (board)

Product description

ProRox SL 930 is a semi-rigid stone wool insulation slab (board).

Application

The slab (board) is suitable for the thermal and acoustic insulation of horizontal and vertical applications requiring a stable insulation product, such as tank walls, vessels and columns.



Available dimensions:

For Europe, Middle East & Africa:

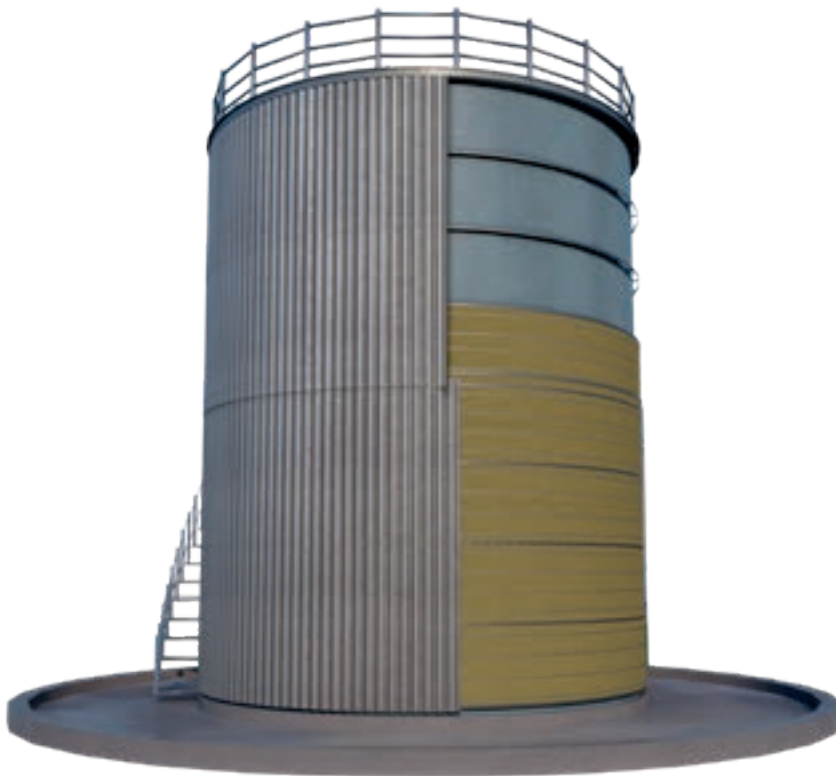
- Standard thickness: 40 mm to 100 mm
- Width: 600 mm
- Length: 1000 mm

For North America:

- Available solution is ProRox SL 930^{NA}
- Standard thickness: 1" to 6"
- Width: 24"
- Length: 48"

Product variances:

- Reinforced aluminium foil facing is available upon request for the European, Middle East and African markets.



Assembly

Slabs should be fastened with steel pins, steel bands or mounted in cassettes. Slabs in a multilayer system must be secured with staggered joints. Each layer must be secured separately. When aluminium foil facing is used, lengthwise and crosswise joints should be finished with a self-adhesive aluminium tape.

Protection

Slabs should be protected with weather resistant cladding suitable for the service conditions. The joints should be made with an appropriate overlap to ensure that water runs off the construction. Where necessary, expansion joints are required. The cladding should be mounted securely to ensure both lengthwise and circular joints are tight. Connections to other components should be made watertight using an appropriate sealant.

Notes

- All steel components exposed to a corrosive environment should be cleaned, degreased and coated with a protective finish.
- Local requirements (standards and specifications) for installation, support construction and cladding must be complied with.



For more information about installation guidelines, read the **ProRox Process Manual**.

Product benefits



- Safe to use over stainless steel



- Semi-rigid product combined with aluminium foil ensures a smart, smooth surface finish
- Retains its shape
- Product is light in weight and therefore easy to handle during installation



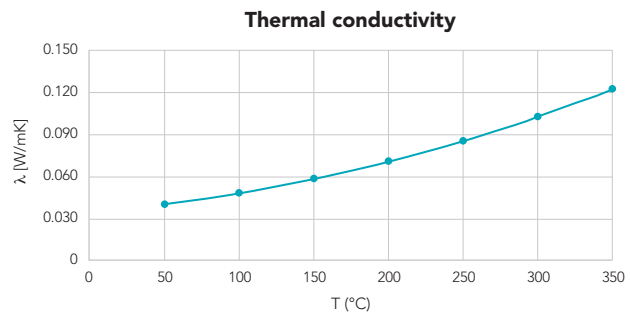
- Resistant to intermediate temperatures

Product properties in accordance with EN 14303

Properties	Performance								Norms
Thermal conductivity	T (°C)	50	100	150	200	250	300	350	EN 12667
	λ (W/mK)	0.040	0.049	0.059	0.070	0.085	0.103	0.122	
Maximum service temperature	350°C In case of aluminium facing the outer foil temperature should be limited to 80°C								EN 14706
Reaction to fire	Euroclass A1								EN 13501-1
Nominal density	55 kg/m ³								EN 1602
Corrosion resistance	Trace quantity of water leachable chloride ions: ≤ 10 ppm								EN 13468
Water absorption	< 1 kg/m ²								EN 1609
Water vapour diffusion resistance	$\mu = 1$								EN 14303
Designation code	MW EN 14303-T4(T3 if $t < 60$)-ST(+)-350-WS1 CL10								EN 14303

Compliance

- Validity of CE marking is restricted to European production facilities.
- A full overview of all ProRox SL 930 compliances can be found on page 9.



ProRox SL 950

Rigid slab (board)

Product description

ProRox SL 950 is a rigid stone wool insulation slab (board).

Application

The slab (board) is suitable for the thermal and acoustic insulation of high-temperature industrial applications, such as tank walls, vessels and columns.



Available dimensions:

For Europe, Middle East & Africa:

- Standard thickness: 40 mm to 100 mm
- Width: 600 mm
- Length: 1000 mm

Product variances:

- Reinforced aluminium foil facing is available upon request.



Assembly

Slabs should be fastened with steel bands or mechanically fixed with welded pins. Slabs in a multilayer system must be secured with staggered joints. Each layer must be secured separately. When aluminium foil facing is used, lengthwise and crosswise joints should be finished with a self-adhesive aluminium tape.

Protection

Slabs should be protected with weather resistant cladding suitable for the service conditions. The joints should be made with an appropriate overlap to ensure that water runs off the construction. Where necessary, expansion joints are required. The cladding should be mounted securely to ensure both lengthwise and circular joints are tight. Connections to other components should be made watertight using an appropriate sealant.

Notes

- All steel components exposed to a corrosive environment should be cleaned, degreased and coated with a protective finish.
- Local requirements (standards and specifications) for installation, support construction and cladding must be complied with.



For more information about installation guidelines, read the **ProRox Process Manual**.

Product benefits



- Safe to use over stainless steel



- Retains its shape



- Resistant to high temperatures

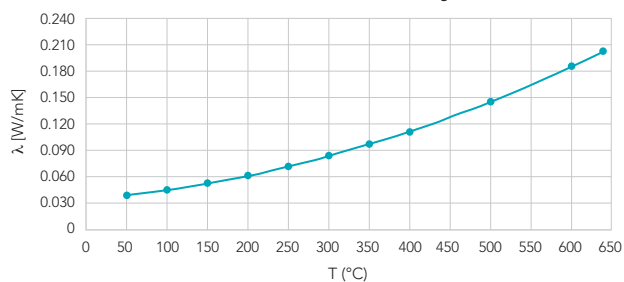
Product properties in accordance with EN 14303

Properties	Performance												Norms
Thermal conductivity	T (°C)	50	100	150	200	250	300	350	400	500	600	640	EN 12667
	λ (W/mK)	0.039	0.045	0.053	0.062	0.073	0.084	0.097	0.112	0.144	0.185	0.203	
Maximum service temperature	640°C												EN 14706
Reaction to fire	Euroclass A1												EN 13501-1
Nominal density	80 kg/m³												EN 1602
Corrosion resistance	Trace quantity of water leachable chloride ions: ≤ 10 ppm												EN 13468
Water absorption	< 1 kg/m²												EN 1609
Water vapour diffusion resistance	μ = 1												EN 14303
Designation code	MW EN 14303-T4(T3 if t<60)-ST(+)-640-WS1-CL10												EN 14303

Compliance

- Validity of CE marking is restricted to European production facilities.
- A full overview of all ProRox SL 950 compliances can be found on page 9.

Thermal conductivity



ProRox SL 960

Rigid slab (board)

Product description

ProRox SL 960 is a strong, rigid stone wool insulation slab (board).

Application

The slab (board) is suitable for the thermal and acoustic insulation of high-temperature industrial applications, such as boilers, vessels, columns and flue gas ducts.



Available dimensions:

For Europe, Middle East & Africa:

- Standard thickness: 40 mm to 100 mm
- Width: 600 mm
- Length: 1000 mm

For North America:

- Available solution is ProRox SL 960^{NA}
- Standard thickness: 1" to 6"
- Width: 24"
- Length: 48"

Product variances:

- Reinforced aluminium foil facing is available upon request for the European, Middle East and African markets.



Assembly

Slabs should be fastened with steel bands or mechanically fixed with welded pins. Slabs in a multilayer system must be secured with staggered joints. Each layer must be secured separately. When aluminium foil facing is used, lengthwise and crosswise joints should be finished with a self-adhesive aluminium tape.

Protection

Slabs should be protected with weather resistant cladding suitable for the service conditions. The joints should be made with an appropriate overlap to ensure that water runs off the construction. Where necessary, expansion joints are required. The cladding should be mounted securely to ensure both lengthwise and circular joints are tight. Connections to other components should be made watertight using an appropriate sealant.

Notes

- All steel components exposed to a corrosive environment should be cleaned, degreased and coated with a protective finish.
- Local requirements (standards and specifications) for installation, support construction and cladding must be complied with.



For more information about installation guidelines, read the **ProRox Process Manual**.

Product benefits



- Safe to use over stainless steel



- Retains its shape



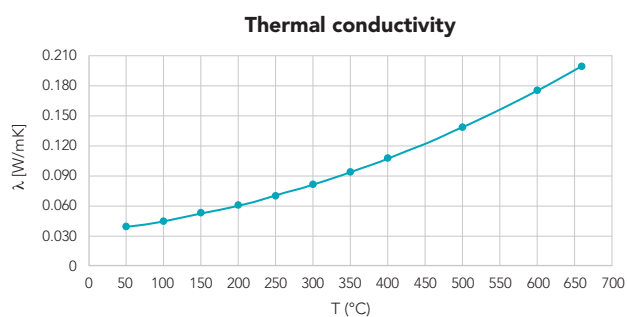
- High thermal performance ensures optimal insulation and improves energy efficiency of installations
- Resistant to high temperatures

Product properties in accordance with EN 14303

Properties	Performance												Norms
Thermal conductivity	T (°C)	50	100	150	200	250	300	350	400	500	600	660	EN 12667
	λ (W/mK)	0.040	0.045	0.052	0.060	0.071	0.081	0.094	0.107	0.140	0.175	0.200	
Maximum service temperature	660°C In case of aluminium facing the outer foil temperature should be limited to 80°C												EN 14706
Reaction to fire	Euroclass A1												EN 13501-1
Nominal density	100 kg/m³												EN 1602
Corrosion resistance	Trace quantity of water leachable chloride ions: ≤ 10 ppm												EN 13468
Water absorption	< 1 kg/m²												EN 1609
Water vapour diffusion resistance	μ = 1												EN 14303
Designation code	MW EN 14303-T4(T3 if t<60)-ST(+)/660-WS1-CL10												EN 14303

Compliance

- Validity of CE marking is restricted to European production facilities.
- A full overview of all ProRox SL 960 compliances can be found on page 9.



ProRox LF 970

Loose fill

Product description

ProRox LF 970 is a lightly bonded loose-fill, impregnated stone wool insulation product.

Application

This product is especially suitable for the thermal and acoustic insulation of voids, joints and irregularly formed constructions.

Assembly

Wool is pulled or cut from the felt as filling for irregular spaces or between insulation mattress cladding.



Product benefits



- Easy to install when flexibility is required



For more information about installation guidelines, read the **ProRox Process Manual**.

Product properties

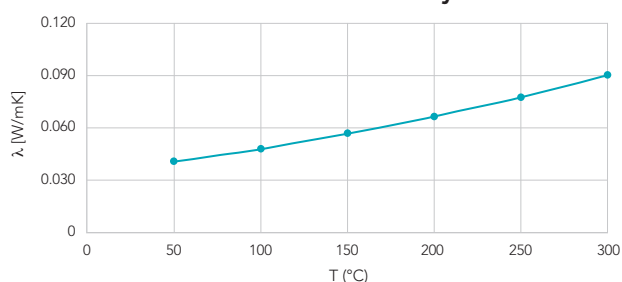
Properties	Performance							Norms
Thermal conductivity (*)	T (°C)	50	100	150	200	250	300	EN 12667
	λ (W/mK)	0.040	0.049	0.057	0.067	0.075	0.091	
Maximum service temperature	680°C							EN 14706
Reaction to fire	Euroclass A1							EN 13501-1
Corrosion resistance	Trace quantity of water leachable chloride ions: ≤ 10 ppm							EN 13468
Water absorption	< 1 kg/m ²							EN 1609
Water vapour diffusion resistance	$\mu = 1$							EN 12086

(*) Stuffing density 100 kg/m³.

Compliance

- A full overview of all ProRox LF 970 compliances can be found on page 9.

Thermal conductivity



ProRox GR 903

Granulated loose fill

Product description

ProRox GR 903 is a stone wool insulation product in granulated form.

Application

This product is especially suitable for the thermal insulation of cold boxes and air separation plants.

Assembly

Granulate is applied using an insulation blowing machine.

See the AGI Q 118 standard or plant specifications for the guidelines for using granulate wool in cold applications.



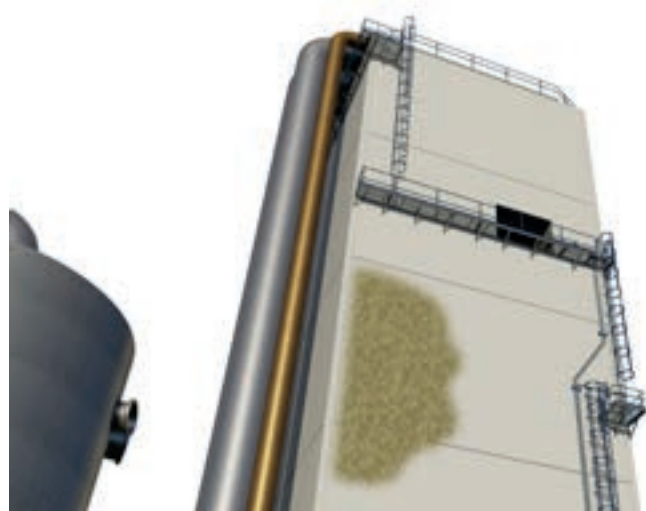
Product benefits



- Easy to install when flexibility is required
- Easy to remove for inspections



- Complies with the strictest requirements for insulation of cold boxes
- Chemically inert to steel



For more information about installation guidelines, read the **ProRox Process Manual**.

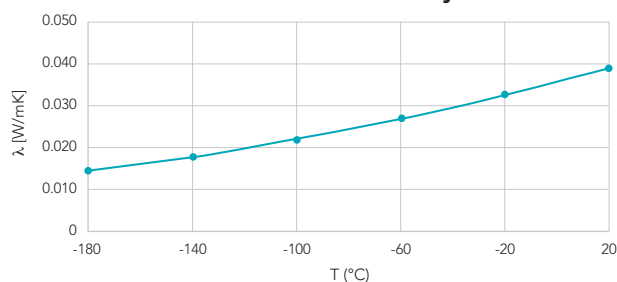
Product properties

Properties	Performance							Norms
Thermal conductivity	T (°C)	-180	-140	-100	-60	-20	20	EN 12667
	λ (W/mK)	0.015	0.018	0.022	0.027	0.033	0.039	
Reaction to fire	Euroclass A1							EN 13501-1
Corrosion resistance	Trace quantity of water leachable chloride ions: ≤ 10 ppm							EN 13468

Compliance

- A full overview of all ProRox GR 903 compliances can be found on page 9.

Thermal conductivity



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The online expert tool for technical insulation



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It's this easy:

Rockassist's intuitive design makes it virtually self-explanatory from the get-go.

The input panel offers seven ways to calculate your technical insulation need.

The **Quick Check Mode** provides a speedy recommendation on insulation and thickness.

All you do is enter a couple of parameters:

- Shape and dimensioning of the insulated object
- Operating temperature of the medium

The app gives such data as ambient temperature, windspeed and the cladding type, a default value reflecting real-world practice.

The **Detailed Check** offers the full functionality of Rockassist. You enter the specific object under "Insulation system". The technical insulation is calculated, based on precisely the application situation which you specified.

The advantage: it proposes the optimal insulation solution in terms of insulation thickness and minimal heat loss.

There are an additional five calculation options for experienced engineers and insulation installers who want to use the app in greater depth.



Sign up and
start calculating for free!

ROCKWOOL Technical Insulation

ROCKWOOL Technical Insulation is part of the ROCKWOOL Group and is offering advanced technical insulation solutions for the process industry as well as marine & offshore.

At the ROCKWOOL Group, we are committed to enriching the lives of everyone who comes into contact with our solutions. Our expertise is perfectly suited to tackle many of today's biggest sustainability and development challenges, from energy consumption and noise pollution to fire resilience, water scarcity and flooding. Our range of products reflects the diversity of the world's needs, while supporting our stakeholders in reducing their own carbon footprint.

Stone wool is a versatile material and forms the basis of all our businesses. With approx. 11,700 passionate colleagues in 39 countries, we are the world leader in stone wool solutions, from building insulation to acoustic ceilings, external cladding systems to horticultural solutions, engineered fibres for industrial use to insulation for the process industry and marine & offshore.

All explanations correspond to our current range of knowledge and are therefore up-to-date. The examples of use outlined in this document serve only to provide a better description and do not take special circumstances of specific cases into account. ROCKWOOL Technical Insulation places great value upon continuous development of products, to the extent that we too continuously work to improve our products without prior notice. We therefore recommend that you use the most recent edition of our publications, as our wealth of experience and knowledge is always growing. Should you require related information for your specific application or have any technical queries, please contact our sales department or visit our website rti.rockwool.com.



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