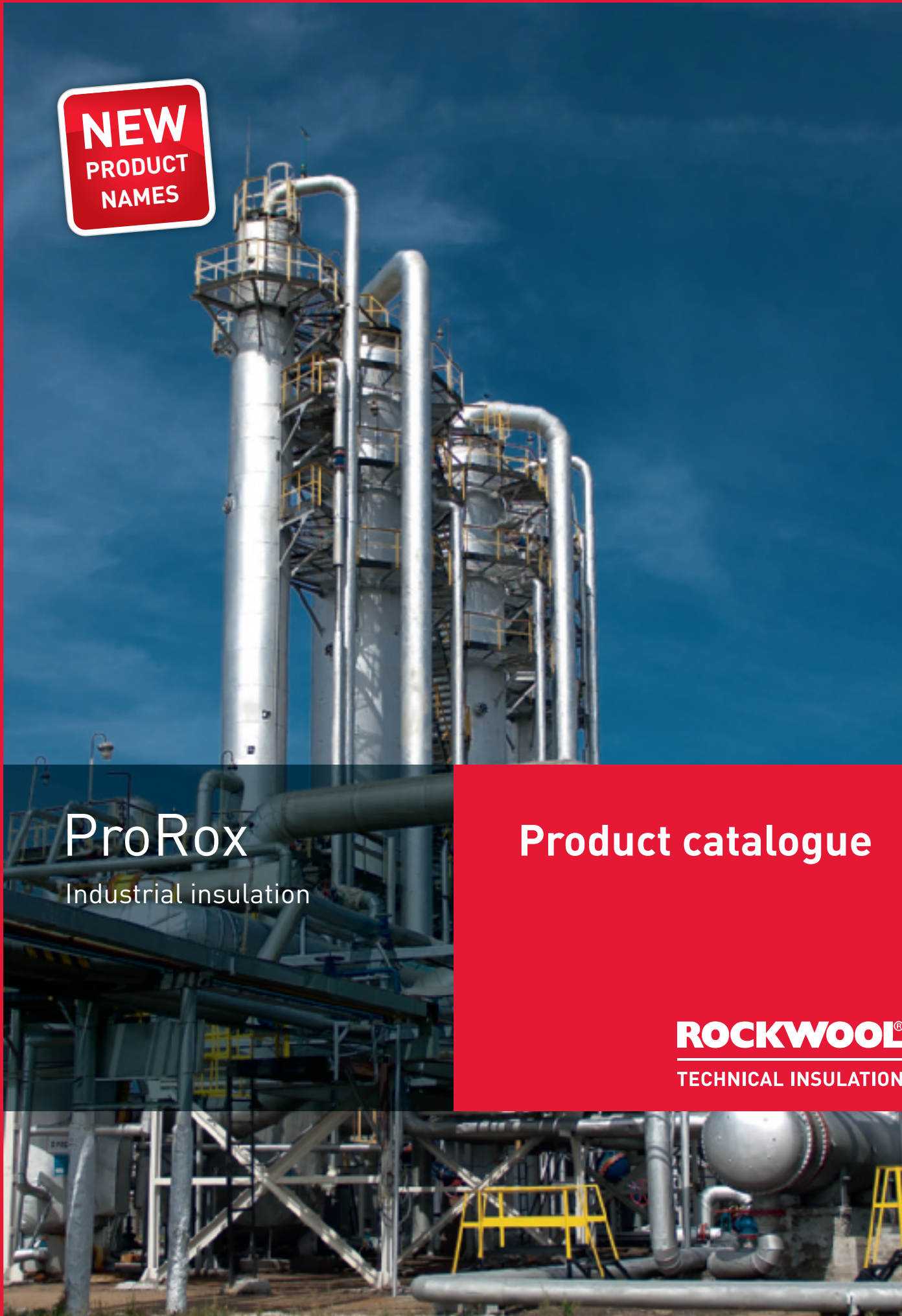


**NEW**  
PRODUCT  
NAMES

**ProRox**  
Industrial insulation

**Product catalogue**

**ROCKWOOL®**  
TECHNICAL INSULATION





# Excellence in technical insulation solutions

**ROCKWOOL® Technical Insulation – an independent entity within the ROCKWOOL Group – develops innovative technical insulation solutions for the process industry and the shipbuilding & offshore market. Through our two product lines, ProRox and SeaRox, we offer a full spread of products and systems guaranteeing the highest possible thermal and firesafe insulation of all technical installations. Our +70 years of experience is reflected in a complete set of high-grade products and expert advice. Today, we remain fully committed to providing the very best service in the market and a total range of cutting-edge insulation solutions.**

## Your highest quality is our minimum demand

All ROCKWOOL Technical Insulation solutions within our two product families, ProRox and SeaRox, meet the most stringent quality and safety standards. All products and constructions have been tested according to the latest regulations and approved by all major classification societies. As an innovation-driven company we demand excellence. In every segment we keep searching for new systems, methods and solutions. We endeavour to develop ever more efficient products and to constantly optimise production processes and processing technologies.

## Up-to-date information? Wherever, whenever? We can help!

As a highly skilled professional you are always looking for the best possible end result. The quickest way to achieve that is with ROCKWOOL Technical Insulation premium products and the detailed information that comes with them, which always incorporates the latest technical findings. That's why you should always check that the information you have is up-to-date. If you have any questions about specific application issues, working methods or product properties, please visit our website at [www.rockwool-rti.com](http://www.rockwool-rti.com) or contact us on +31(0)475 35 38 35.

## The best solutions, built on solid expertise

In addition to providing outstanding products, ROCKWOOL Technical Insulation is able to draw on in-depth expertise to ensure that end users in the petrochemicals, power generation, shipbuilding, offshore and the process industries are given the best and most advanced insulation solution. Both in the process industry as in the marine & offshore industry, our stone wool products offer the best possible protection against heat and energy loss, fire, noise and other unwanted influences. Our sales teams will be delighted to advise you in drawing up technical and project specifications.





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## Our people, your profit

The key to our success is the combination of excellent insulation products and outstanding people who know exactly what they are talking about. Thanks to their expertise and extensive experience, we can offer exceptional stone wool solutions and an impeccable service. With technical support on a high level we are prepared to help you to choose the optimal solutions and secure the necessary documentation.

## Part of the ROCKWOOL Group

ROCKWOOL Technical Insulation is an independent organisation within the ROCKWOOL Group, the world's largest producer of stone wool products. ROCKWOOL International A/S is based in Hedehusene, Denmark. The parent company has a net turnover of around € 1.85 billion in 2011. ROCKWOOL International has 26 factories in Europe, North America and Asia, and has around 9,300 employees.

## ROCKWOOL has a melting point above 1000°C

Our stone wool products meet the strictest fire protection classes and make an active contribution to the fire safety of a building or installation. Other insulation materials combust at much lower temperatures and often release dangerous substances during combustion. Stone wool is non-combustible and only melts above 1000°C. As a result, ROCKWOOL insulation inhibits the spread of fire, ultimately saving lives and protecting constructions & installations.

## Stone wool protects people and the environment

ROCKWOOL products offer effective protection and optimal performance for the entire life cycle of the installation. According to independent research ROCKWOOL is one of the most durable products available with an unequalled combination in the field of environmental improvement, energy savings, CO<sub>2</sub> reduction, acoustic insulation and fire safety. A positive 'carbon footprint': During its entire life cycle, ROCKWOOL insulation will save more than 20,000 times the carbon emissions caused by its production. The fire retardant and fire insulating characteristics of our stone wool products deliver superior protection to people, property and the environment.

## ProRox - Industrial insulation

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### ■ Application selector

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NEW NAME	OLD NAME	
<b>■ Products</b>		
ProRox PS 960	Rockwool 850	8
ProRox PS 970	Rockwool 851	10
ProRox WM 940 <sup>NL</sup>	Rockwool 160	12
ProRox WM 950 <sup>NL</sup>	Rockwool 164	14
ProRox WM 960 <sup>NL</sup>	Rockwool 159	16
ProRox WM 970 <sup>NL</sup>	Rockwool 168	18
ProRox MA 520 ALU	Rockwool Duraflex	20
ProRox SL 920	Rockwool Flexiboard	21
ProRox SL 930	Rockwool Multiboard	22
ProRox SL 940	Rockwool 231	23
ProRox SL 950	Rockwool HT 600	24
ProRox SL 960	Rockwool 233	25
ProRox SL 970	Rockwool HT 660	26
ProRox SL 980	Rockwool HT 700	27
ProRox SL 540	Rockwool 251.001	28
ProRox SL 560	Rockwool 251	29
ProRox SL 580	Rockwool CRS	30
ProRox LF 970	Rockwool Loose Fill	31
ProRox GR 903	Rockwool Granulate	32

## Delivery & storage

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### Founding Partner of EEIF

■ ROCKWOOL Technical Insulation was one of the founding partners of the European Industrial Insulation Foundation (EIIIF), which has established itself as a resource for industries that need to reduce CO<sub>2</sub> emissions.



## New product names, logical structure

Each product name is structured in the same clear way:

e.g.:

**ProRox WM 970 ALU<sup>NL</sup>**

Product range ◀

▶ 2 last digits = other product characteristics

### ■ Product identifier ◀

WM = Wired Mats

SL = Slabs

PS = Pipe Sections

MA = Mats

### ■ Application code

1<sup>st</sup> digit: 3 = acoustics, 5 = compression,

9 = thermal insulation

### ■ Product variants ◀

ALU = reinforced aluminium





# ProRox

## Industrial insulation

In the view of our rebranding strategy we have adapted and clarified the entire range of ROCKWOOL Technical Insulation products. From now on, all our insulation solutions for technical installations in the process industry will be part of the **ProRox** range. The main characteristic of these products is their high thermal insulation capacity. Next to this, they of course also comply with the most stringent requirements on fire resistance and acoustic insulation. Below you will get an overview of the **ProRox** range and its new names.

### NEW NAME

### OLD NAME

ProRox PS 960	ROCKWOOL 850	8
ProRox PS 970	ROCKWOOL 851	10
ProRox WM 940 <sup>NL</sup>	ROCKWOOL 160	12
ProRox WM 950 <sup>NL</sup>	ROCKWOOL 164	14
ProRox WM 960 <sup>NL</sup>	ROCKWOOL 159	16
ProRox WM 970 <sup>NL</sup>	ROCKWOOL 168	18
ProRox MA 520 ALU	ROCKWOOL Duraflex	20
ProRox SL 920	ROCKWOOL Flexiboard	21
ProRox SL 930	ROCKWOOL Multiboard	22
ProRox SL 940	ROCKWOOL 231	23
ProRox SL 950	ROCKWOOL HT 600	24
ProRox SL 960	ROCKWOOL 233	25
ProRox SL 970	ROCKWOOL HT 660	26
ProRox SL 980	ROCKWOOL HT 700	27
ProRox SL 540	ROCKWOOL 251.001	28
ProRox SL 560	ROCKWOOL 251	29
ProRox SL 580	ROCKWOOL CRS	30
ProRox LF 970	ROCKWOOL Loose Fill	31
ProRox GR 903	ROCKWOOL Granulate	32

# Industrial insulation

## Application selector

			Thermal insulation	
			Pipe work	
			ø <356	ø >356
	NEW NAME	OLD NAME		
Pipe Sections	ProRox PS 960	Rockwool 850	■■■	■■
	ProRox PS 970	Rockwool 851	■■■	■■
Wired Mats	ProRox WM 940 <sup>NL</sup>	Rockwool 160	■	■■■
	ProRox WM 950 <sup>NL</sup>	Rockwool 164	■	■■■
	ProRox WM 960 <sup>NL</sup>	Rockwool 159	■	■■■
	ProRox WM 970 <sup>NL</sup>	Rockwool 168	■■	■■■
Mats	ProRox MA 520 ALU	Rockwool Duraflex	■■	■■■
Slabs	ProRox SL 920	Rockwool Flexiboard		
	ProRox SL 930	Rockwool Multiboard		
	ProRox SL 940	Rockwool 231		
	ProRox SL 950	Rockwool HT 600		
	ProRox SL 960	Rockwool 233		
	ProRox SL 970	Rockwool HT 660		
	ProRox SL 980	Rockwool HT 700		
	ProRox SL 540	Rockwool 251.001		
	ProRox SL 560	Rockwool 251		
	ProRox SL 580	Rockwool CRS		
Loose Fill	ProRox LF 970	Rockwool Loose Fill		
Industrial Hand fill	ProRox GR 903	Rockwool Granulate		



**ProRox PS 960**



Old name: Rockwool 850

Pipe Section



Ø mm	Approximate quantities per 40ft HC container in m <sup>3</sup>							
	25	30	40	50	60	80	100	120
17	12000	10000	6400	3600				
21	10000	8000	5200	3600	2400			
27	10000	8000	4800	3600	2400			
33	8000	6400	3600	3200	2000			
42	6400	4800	3600	2400	1600			
48	6000	4800	3600	2400	1600			
57	4800	3600	2400	2000	1600			
60	4400	3600	2400	2000	1600	1440	1044	
64	3600	3600	2400	1600	1992	1420	912	
70	3600	3200	2000	1600	1944	1400	896	
76	3600	2800	2000	1600	1738	1116	880	
83	2800	2400	2000	1992	1694	1098	864	
89	2400	2400	1600	1944	1650	1080	848	
102	2000	1600	1600	1694	1440	912	714	
108	2000	1600	1944	1650	1400	896	714	
114	1600	1600	1896	1480	1260	880	700	468
121	1600	1600	1694	1440	1098	864	686	468
127	1600	1968	1672	1400	1080	848	672	456
133	1992	1920	1480	1260	1062	742	672	456
140	1944	1716	1440	1116	1044	728	564	444
159	1650	1440	1116	1044	880	686	468	360
169	1440	1400	1080	896	848	672	456	350
194	1098	1400	880	728	700	468	360	330
219	896	1062	728	686	564	444	340	320
245	728	880	672	552	456	350	330	240
267	686	714	480	456	444	340	310	232
273	686	672	480	456	360	330	248	232
280	672	672	468	444	360	330	248	232
305	468	564	444	350	340	310	232	224
324	456	444	350	340	330	240	224	216
356	350	340	330	320	248	232	216	156
368	340	340	320	310	240	224	216	150
406	320	310	240	232	224	216	150	144
419		280	240	232	224	208	150	144
456		232	224	216	208	150	144	102
508		216	156	150	150	138	96	96
558		150	144	144	138	96	90	60
610			138	96	96	90	56	56

Packed in cartons

Packed in shrinkfoil

All pipe sections 1000 mm in length.

Other dimensions (up to diameters of 915 mm) are available upon request.



## Applications

ProRox PS 960 is a pre-formed stone wool pipe section. The sections are supplied split and hinged for easy snap-on assembly, and are suitable for the thermal and acoustic insulation of industrial pipe work.

## Compliance

ProRox PS 960 Pipe Sections full comply with the requirements as set by internationally recognized standards like EN14303, CINI 2.2.03, ASTM C547: Grade A for type I, II, IV.

## Installation guidelines

### Assembly

Fit the ProRox PS 960 closely around the pipe, with the lengthwise (horizontal) joint turned towards the underside. 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 (thickness 0.5 mm, at least 3/m). For insulation thickness above 100 mm (or temperatures > 250°C) the insulation should be applied in at least two layers. In the case of multi-layer insulation it is recommended that the lengthwise and crosswise joints are staggered ('masonry bond').

### Support construction

On pipes where mechanical loading (e.g. strong vibrations) of the insulation is expected and/or the temperature is higher than 300°C, a support structure (spacers) should be constructed. The number of spacers depends on the temperature and the

mechanical load. As a guide, the following intermediate distances can be used:

- Horizontal pipe work: 3 to 4 m
- Vertical pipe work: 5 to 6 m

### Finishing

All pipe sections should be finished with a metal (e.g. aluminium) cladding. Where necessary, expansion joints are required to cater for expansion of the pipes. Both the lengthwise and circular joints are fastened with sheet-metal screws: hard aluminium or stainless steel 1/2", 8 per metre. Close expansion joints with a steel tensioning wire. Connections to mountings, head and end caps, etc. should be made watertight using an appropriate sealant.

### Note

All steel components exposed to a corrosive environment should be cleaned, degreased and coated with a protective finish.

## Advantages

- Excellent fit provides optimal performance
- Easy to handle and to install
- Wide range of diameters and insulation thicknesses
- Suitable for use over stainless steel
- For temperatures up to 350°C, a support construction is not generally necessary

## Product properties



	Performance								Norms
	T <sub>m</sub> (°C)	50	100	150	200	250	300	350	
Thermal conductivity	λ (W/mK)	0.040	0.046	0.054	0.064	0.077	0.092	0.111	EN ISO 8497 ASTM C335
	Maximum Service Temperature	650°C (1200°F) 750°C (1382°F)							EN 14707 ASTM C411
Maximum surface performance	650°C (1200°F)							ASTM C447	
Reaction to fire	EuroClass A1 <sub>L</sub> Surface burning characteristics; Flame spread=passed, Smoke development=Passed							EN 13501-1 ASTM E84 (UL 723)	
Nominal density	125 kg/m <sup>3</sup> (7.8 lb/ft <sup>3</sup> )							EN 13470	
Water leachable chloride content	Chloride content < 10 ppm (AS - Quality)							EN 13468	
	Conforms to the stainless steel corrosion specification as per ASTM test methods C 692 and C 871 < 10 mg/kg (ph-value neutral to slightly alkaline)							ASTM C795 ASTM C871	
Water absorption	< 1 kg/m <sup>2</sup>							EN 13472	
	Water vapour absorption (Vapor sorption) ± 0.02% vol							ASTM C1104/C1104M	
Water vapour diffusion resistance	μ = 1							EN 14303	
Air Flow Resistivity	> 80 kPa.s/m <sup>2</sup>							EN 29053	
Designation code	MW EN 14303-T9(T8 if D <sub>0</sub> <150)-ST(+)&650-WS1-CL10							EN 14303	



Approximate quantities per 40ft HC container in m<sup>3</sup>

Insulation thickness in mm

Ø mm	25	30	40	50	60	80	100	120
17	12000	10000	6400	3600				
21	10000	8000	5200	3600	2400			
27	10000	8000	4800	3600	2400			
33	8000	6400	3600	3200	2000			
42	6400	4800	3600	2400	1600			
48	6000	4800	3600	2400	1600			
57	4800	3600	2400	2000	1600			
60	4400	3600	2400	2000	1600	1440	1044	
64	3600	3600	2400	1600	1992	1420	912	
70	3600	3200	2000	1600	1944	1400	896	
76	3600	2800	2000	1600	1738	1116	880	
83	2800	2400	2000	1992	1694	1098	864	
89	2400	2400	1600	1944	1650	1080	848	
102	2000	1600	1600	1694	1440	912	714	
108	2000	1600	1944	1650	1400	896	714	
114	1600	1600	1896	1480	1260	880	700	468
121	1600	1600	1694	1440	1098	864	686	468
127	1600	1968	1672	1400	1080	848	672	456
133	1992	1920	1480	1260	1062	742	672	456
140	1944	1716	1440	1116	1044	728	564	444
159	1650	1440	1116	1044	880	686	468	360
169	1440	1400	1080	896	848	672	456	350
194	1098	1400	880	728	700	468	360	330
219	896	1062	728	686	564	444	340	320
245	728	880	672	552	456	350	330	240
267	686	714	480	456	444	340	310	232
273	686	672	480	456	360	330	248	232
280	672	672	468	444	360	330	248	232
305	468	564	444	350	340	310	232	224
324	456	444	350	340	330	240	224	216
356	350	340	330	320	248	232	216	156
368	340	340	320	310	240	224	216	150
406	320	310	240	232	224	216	150	144
419		280	240	232	224	208	150	144
456		232	224	216	208	150	144	102
508		216	156	150	150	138	96	96
558		150	144	144	138	96	90	60

□ Packed in boxes

■ Shrink-wrapped pipe sections

All pipe sections 1000 mm in length.

Other dimensions (up to diameter of 915 mm) are available upon request.

## Applications

ProRox PS 970 is a pre-formed high density stone wool pipe section. The sections are supplied split and hinged for easy snap-on assembly, and are especially suitable for the thermal and acoustic insulation of industrial pipe work which is exposed to high temperature and light (e.g. vibrations) mechanical loads.

## Compliance

ProRox PS 970 Pipe Sections full comply with the requirements as set by internationally recognized standards like EN14303, CINI 2.2.03, ASTM C547: Grade A for type I, II, IV.

## Installation guidelines

### Assembly

Fit the ProRox PS 970 closely around the pipe, with the lengthwise (horizontal) joint turned towards the underside. 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 (thickness 0.5 mm, at least 3/m). For insulation thickness above 100 mm (or temperatures > 250°C) the insulation should be applied in at least two layers. In the case of multi-layer insulation it is recommended that the lengthwise and crosswise joints are staggered ('masonry bond').

### Support construction

On pipes where mechanical loading (e.g. strong vibrations) of the insulation is expected and/or the temperature is higher than 300°C, a support structure (spacers) should be constructed. The number of

spacers depends on the temperature and the mechanical load. As a guide, the following intermediate distances can be used:

- Horizontal pipe work: 3 to 4 m
- Vertical pipe work: 5 to 6 m

### Finishing

All pipe sections should be finished with a metal (e.g. aluminium) cladding. Where necessary, expansion joints are required to cater for expansion of the pipes. Both the lengthwise and circular joints are fastened with sheet-metal screws: hard aluminium or stainless steel 1/2", 8/metre. Close expansion joints with a steel tensioning wire. Connections to mountings, head and end caps etc. should be made watertight using an appropriate sealant.

### Note

All steel components exposed to a corrosive environment should be cleaned, degreased and coated with a protective finish.

## Advantages

- Suitable for heavy duty applications which are exposed to high temperatures and high mechanical loads
- Excellent fit provides optimal performance
- Easy to handle and to install
- Wide range of diameters and insulation thicknesses
- Suitable for use over stainless steel
- For temperatures up to 350°C, a support construction is not generally necessary

## Product properties



	Performance								Norms
	T <sub>m</sub> [°C]	50	100	150	200	250	300	350	
Thermal conductivity	λ [W/mK]	0.040	0.046	0.053	0.062	0.073	0.085	0.099	EN ISO 8497 ASTM C335
	Maximum Service Temperature	680°C (1256°F) 750°C (1382°F)							EN 14707 ASTM C411
Maximum surface performance	650°C (1200°F)							ASTM C447	
Reaction to fire	EuroClass A1 <sub>L</sub> Surface burning characteristics; Flame spread=passed, Smoke development=Passed							EN 13501-1 ASTM E84 (UL 723)	
Nominal density	140 kg/m <sup>3</sup> [8.7 lb/ft <sup>3</sup> ]							EN 13470	
Water leachable chloride content	Chloride content < 10 ppm (AS - Quality) Conforms to the stainless steel corrosion specification as per ASTM test methods C 692 and C 871 < 10 mg/kg (ph-value neutral to slightly alkaline)							EN 13468 ASTM C795 ASTM C871	
Water absorption	< 1 kg/m <sup>2</sup> Water vapour absorption (Vapor sorption) ± 0.02% vol							EN 13472 ASTM C1104/C1104M	
Water vapour diffusion resistance	μ = 1							EN 14303	
Air Flow Resistivity	> 90 kPa.s/m <sup>2</sup>							EN 29053	
Designation code	MW EN 14303-T9(T8 if D <sub>0</sub> <150)-ST(+)&680-WS1-CL10							EN 14303	





Thickness mm	Length mm	Width mm	Packaging m <sup>2</sup> /roll	m <sup>2</sup> per 40ft HC container*
30	8000	500	4.0	2200
40	6000	500	3.0	1650
50	5000	500	2.5	1375
60	4000	500	2.0	1100
75	4000	500	2.0	1100
80	3000	500	1.5	825
100	3000	500	1.5	750
120	3000	500	1.5	720

**The following variants are available on request:**

- ProRox WM 940 SW<sup>NL</sup>: Stainless steel mesh and stitching wire
- ProRox WM 940 S<sup>NL</sup>: Galvanised steel mesh and stainless steel stitching wire
- ProRox WM 940 ALU<sup>NL</sup>: Galvanised steel mesh and stitching wire with addition of aluminium foil between mesh and stone wool
- ProRox WM 940 SW ALU<sup>NL</sup>: Stainless steel mesh and stitching wire with addition of aluminium foil between mesh and stone wool

Shrink-wrapped

\*Approximate quantities.

**Applications**

ProRox WM 940<sup>NL</sup> is a lightly bonded stone wool mat stitched on galvanised wire mesh using galvanised wire. The wired mat is suitable for thermal acoustic insulation of industrial applications reaching high temperatures, such as industrial pipe work, boiler walls, furnaces and smoke ducts. Stainless steel mesh, stainless steel binding wire and/or aluminium foil facing are available upon request.

**Advantages**

- Excellent thermal insulation
- Suitable for use over irregular surfaces
- Available in a wide range of thicknesses up to 120 mm
- Suitable for use over stainless steel

**Compliance**

ProRox WM 940<sup>NL</sup> Wired Mats fully comply with the requirements as set by internationally recognized standards like EN14303, CINI 2.2.02 and ASTM C592 Type I and II.

**Product properties**



	Performance											Norms
	T (°C)	50	100	150	200	250	300	350	400	500	600	
<b>Thermal conductivity</b>	T (°C)											EN 12667
	λ (W/mK)	0.039	0.047	0.055	0.064	0.075	0.088	0.103	0.119	0.157	0.205	ASTM C177
<b>Maximum Service Temperature</b>	600°C (1112°F)											EN 14706
	750°C (1382°F)											ASTM C411
<b>Reaction to fire</b>	EuroClass A1											EN 13501-1
	Surface burning characteristics; Flame spread = passed, Smoke development = Passed											ASTM E84 (UL 723)
<b>Nominal density</b>	70 kg/m <sup>3</sup> (4.4 lb/ft <sup>3</sup> )											EN 1602
<b>Water leachable chloride content</b>	Chloride content < 10 ppm (AS - Quality)											EN 13468
	Conforms to the stainless steel corrosion specification as per ASTM test methods C 692 and C 871											ASTM C795
	< 10 mg/kg (ph-value neutral to slightly alkaline)											ASTM C871
<b>Water absorption</b>	< 1 kg/m <sup>2</sup>											EN 1609
	Water vapour absorption (Vapor sorption) ± 0.02% vol											ASTM C1104/ C1104M
<b>Water vapour diffusion resistance</b>	μ = 1											EN 14303
<b>Air Flow Resistivity</b>	> 20 kPa.s/m <sup>2</sup>											EN 29053
<b>Designation code</b>	MW EN 14303-T2-ST(+)/600-WS1-CL10											EN 14303

**Note**

All steel components exposed to a corrosive environment should be cleaned, degreased and coated with a protective finish.

**Installation guidelines****Assembly**

Cut the wired mat to length, so that the mat fits the pipe with slight pre-stressing. The closing joints must be staggered at an angle of at least 30 degrees to each other. The closing joints of the mats (lengthwise and circular) must be wired together using steel wire (min. 0.5 mm) or secured with mat hooks. Stainless steel pipes and pipes with a temperature of > 400°C should preferably be insulated with ProRox WM 940 SW<sup>NL</sup>, in which both the mesh and the stitching wire is stainless steel. If the mats are assembled in multiple layers, both the lengthwise and circular joints must be staggered ('masonry bond').

**Support construction**

Given the limited pressure resistance of wired mats, in most cases a support is required for the board cladding. As a guideline, assume that a support is required every 3 to 4 metres.

**Finishing**

The insulation should be finished with a metal (e.g. aluminium) cladding. Where necessary, expansion joints are provided to cater for expansion of the pipes. Both the lengthwise and circular joints are fastened with sheet-metal screws: hard aluminium or stainless steel 1/2", 8/metre. Close the expansion joints with a steel tensioning wire. Connections to mountings, head and end caps, etc. should be made watertight using a suitable sealant.

ProRox WM 950<sup>NL</sup>



Old name: Rockwool 164

Wired mat



Thickness mm	Length mm	Width mm	Packaging m <sup>2</sup> /roll	m <sup>2</sup> per 40ft HC container*
30	8000	500	4.0	2200
40	6000	500	3.0	1650
50	5000	500	2.5	1375
60	4000	500	2.0	1100
75	4000	500	2.0	1100
80	3000	500	1.5	825
100	3000	500	1.5	750
120	3000	500	1.5	720

**The following variants are available on request:**

- ProRox WM 950 SW<sup>NL</sup>: Stainless steel mesh and stitching wire
- ProRox WM 950 S<sup>NL</sup>: Galvanised steel mesh and stainless steel stitching wire
- ProRox WM 950 ALU<sup>NL</sup>: Galvanised steel mesh and stitching wire with addition of aluminium foil between mesh and stone wool
- ProRox WM 950 SW ALU<sup>NL</sup>: Stainless steel mesh and stitching wire with addition of aluminium foil between mesh and stone wool

Shrink-wrapped

\*Approximate quantities.

**Applications**

ProRox WM 950<sup>NL</sup> is a lightly bonded stone wool mat stitched on galvanised wire mesh using galvanised wire. The wired mat is suitable for thermal and acoustic insulation of industrial applications reaching high temperatures, such as industrial pipe work, boiler walls, furnaces and smoke ducts.

**Advantages**

- Suitable for high temperature application
- Flexible application
- Available in a wide range of thicknesses
- Suitable for use over stainless steel

**Compliance**

ProRox WM 950<sup>NL</sup> Wired Mats fully comply with the requirements as set by internationally recognized standards like EN14303, CINI 2.2.02 and ASTM C592 Type I, II and III.

**Product properties**



	Performance												Norms
	T (°C)	50	100	150	200	250	300	350	400	500	600	640	
<b>Thermal conductivity</b>	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	EN 12667
<b>Maximum Service Temperature</b>		640°C (1184°F) 750°C (1382°F)											EN 14706 ASTM C411
<b>Reaction to fire</b>		EuroClass A1 Surface burning characteristics; Flame spread = passed, Smoke development = Passed											EN 13501-1 ASTM E84 (UL 723)
<b>Nominal density</b>		80 kg/m <sup>3</sup> [5.0 lb/ft <sup>3</sup> ]											EN 1602
<b>Water leachable chloride content</b>		Chloride content < 10 ppm (AS - Quality) Conforms to the stainless steel corrosion specification as per ASTM test methods C 692 and C 871 < 10 mg/kg (ph-value neutral to slightly alkaline)											EN 13468 ASTM C795 ASTM C871
<b>Water absorption</b>		< 1 kg/m <sup>2</sup> Water vapour absorption (Vapor sorption) ± 0.02% vol											EN 1609 ASTM C1104/ C1104M
<b>Water vapour diffusion resistance</b>		μ = 1											EN 14303
<b>Air Flow Resistivity</b>		> 40 kPa.s/m <sup>2</sup>											EN 29053
<b>Designation code</b>		MW EN 14303-T2-ST(+)/640-WS1-CL10											EN 14303



**Note**

All steel components exposed to a corrosive environment should be cleaned, degreased and coated with a protective finish.

**Installation guidelines****Assembly**

Cut the wired mat to length, so that the mat fits the pipe with slight pre-stressing. The closing joints must be staggered at an angle of at least 30 degrees to each other. The closing joints of the mats (lengthwise and circular) must be wired together using steel wire (min. 0.5 mm) or secured with mat hooks. Stainless steel pipes and pipes with a temperature of > 400°C should preferably be insulated with ProRox WM 950 SW<sup>NL</sup>, in which both the mesh and the stitching wire is stainless steel. If the mats are assembled in multiple layers, both the lengthwise and circular joints must be staggered ('masonry bond').

**Support construction**

Given the limited pressure resistance of wired mats, in most cases a support is required for the board cladding. As a guideline, assume that a support is required every 3 to 4 metres.

**Finishing**

The insulation should be finished with a metal (e.g. aluminium) cladding. Where necessary, expansion joints are provided to cater for expansion of the pipes. Both the lengthwise and circular joints are fastened with sheet-metal screws: hard aluminium or stainless steel 1/2", 8/metre. Close the expansion joints with a steel tensioning wire. Connections to mountings, head and end caps etc. should be made watertight using a suitable sealant.



Thickness mm	Length mm	Width mm	Packaging m <sup>2</sup> /roll	m <sup>2</sup> per 40ft HC container*
30	8000	500	4.0	2200
40	6000	500	3.0	1650
50	5000	500	2.5	1375
60	4000	500	2.0	1100
75	4000	500	2.0	934
80	3000	500	1.5	825
100	3000	500	1.5	750
120	3000	500	1.5	720

**The following variants are available on request:**

- ProRox WM 960 SW<sup>NL</sup>: Stainless steel mesh and stitching wire
- ProRox WM 960 S<sup>NL</sup>: Galvanised steel mesh and stainless steel stitching wire
- ProRox WM 960 ALU<sup>NL</sup>: Galvanised steel mesh and stitching wire with addition of aluminium foil between mesh and stone wool
- ProRox WM 960 SW ALU<sup>NL</sup>: Stainless steel mesh and stitching wire with addition of aluminium foil between mesh and stone wool

Shrink-wrapped

\*Approximate quantities.

**Applications**

ProRox WM 960<sup>NL</sup> is a lightly bonded heavy stone wool mat stitched on galvanised wired mesh with galvanised wire. The wired mat is especially suitable for industrial installations such as high-pressure steam pipes, reactors, furnaces, etc. where high demands are made on the temperature resistance of the insulation.

**Compliance**

ProRox WM 960<sup>NL</sup> Wired Mats fully comply with the requirements as set by internationally recognized standards like EN14303, CINI 2.2.02 and ASTM C592 Type I, II and III.

**Advantages**

- Suitable for heavy duty applications which are exposed to high temperatures and high mechanical loads
- Resistant to high temperatures
- Flexible application
- Available in a wide range of thicknesses
- Suitable for use over stainless steel

**Product properties**



	Performance												Norms
	T (°C)	50	100	150	200	250	300	350	400	500	600	660	
<b>Thermal conductivity</b>	T (°C)	50	100	150	200	250	300	350	400	500	600	660	EN 12667 ASTM C177
	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	
<b>Maximum Service Temperature</b>	660°C (1220°F)												EN 14706 ASTM C411
	750°C (1382°F)												
<b>Reaction to fire</b>	EuroClass A1												EN 13501-1 ASTM E84 (UL 723)
	Surface burning characteristics; Flame spread = passed, Smoke development = Passed												
<b>Nominal density</b>	100 kg/m <sup>3</sup> (6.2 lb/ft <sup>3</sup> ) EN 1602												EN 1602
<b>Water leachable chloride content</b>	Chloride content < 10 ppm (AS - Quality)												EN 13468 ASTM C795
	Conforms to the stainless steel corrosion specification as per ASTM test methods C 692 and C 871 < 10 mg/kg (ph-value neutral to slightly alkaline)												
<b>Water absorption</b>	< 1 kg/m <sup>2</sup>												EN 1609 ASTM C1104/ C1104M
	Water vapour absorption (Vapor sorption) ± 0.02% vol												
<b>Water vapour diffusion resistance</b>	μ = 1												EN 14303
<b>Air Flow Resistivity</b>	> 60 kPa.s/m <sup>2</sup>												EN 29053
<b>Designation code</b>	MW EN 14303-T2-ST(+J660-WS1-CL10)												EN 14303

**Note**

All steel components exposed to a corrosive environment should be cleaned, degreased and coated with a protective finish.

**Installation guidelines****Assembly**

Cut the wired mat to length, so that the mat fits the pipe with slight pre-stressing. The closing joints must be staggered at an angle of at least 30 degrees to each other. The closing joints of the mats (lengthwise and circular joints) must be wired together using e.g. steel wire min. 0.5 mm or secured with mat hooks.

Stainless steel pipes and pipes with a temperature of > 400°C should preferably be insulated with ProRox WM 960 SW<sup>NL</sup>, in which both the mesh and the stitching wire is in stainless steel. If the mats are assembled in multiple layers, both the lengthwise and circular joints must be staggered ('masonry bond').

**Support construction**

Given the limited pressure resistance of wired mats, in most cases a support is required for the board cladding. As a guideline, assume that a support is required every 3 to 4 metres.

**Finishing**

The insulation should be finished with a metal (e.g. aluminium) cladding. Where necessary, expansion joints are provided to cater for expansion of the pipes. Both the lengthwise and circular joints are fastened with sheet-metal screws: hard aluminium or stainless steel 1/2", 8/metre. Close the expansion joints with a steel tensioning wire. Connections to mountings, head and end caps, etc. should be made watertight using a suitable sealant.





Thickness mm	Length mm	Width mm	Packaging m <sup>2</sup> /roll	m <sup>2</sup> per 40ft HC container*
30	8000	500	4.0	2200
40	6000	500	3.0	1650
50	5000	500	2.5	1375
60	4000	500	2.0	1100
75	4000	500	2.0	934
80	3000	500	1.5	825
100	3000	500	1.5	750

Shrink-wrapped

**The following variants are available on request:**

- ProRox WM 970 SW<sup>NL</sup>: Stainless steel mesh and stitching wire
- ProRox WM 970 S<sup>NL</sup>: Galvanised steel mesh and stainless steel stitching wire
- ProRox WM 970 ALU<sup>NL</sup>: Galvanised steel mesh and stitching wire with addition of aluminium foil between mesh and stone wool
- ProRox WM 970 SW ALU<sup>NL</sup>: Stainless steel mesh and stitching wire with addition of aluminium foil between mesh and stone wool

\*Approximate quantities.

**Applications**

ProRox WM 970<sup>NL</sup> is a lightly bonded heavy stone wool mat stitched on galvanised wired mesh with galvanised wire. The wired mat is especially suitable for industrial installations where high temperature and vibration resistance is required.

**Compliance**

ProRox WM 970<sup>NL</sup> Wired Mats fully comply with the requirements as set by internationally recognized standards like EN14303, CINI 2.2.02 and ASTM CC592 Type I, II and III.

**Advantages**

- Suitable for heavy duty applications which are exposed to high temperatures and high mechanical loads
- Resistant to high temperatures
- Flexible application
- Available in a wide range of thicknesses
- Suitable for use over stainless steel

**Product properties**



	Performance												Norms
	T (°C)	50	100	150	200	250	300	350	400	500	600	680	
<b>Thermal conductivity</b>	λ (W/mK)	0.040	0.045	0.051	0.058	0.066	0.075	0.085	0.096	0.123	0.157	0.188	EN 12667 ASTM C177
	<b>Maximum Service Temperature</b>	680°C (1256°F) 750°C (1382°F)											EN 14706 ASTM C411
<b>Reaction to fire</b>	EuroClass A1 Surface burning characteristics; Flame spread = passed, Smoke development = Passed											EN 13501-1 ASTM E84 (UL 723)	
<b>Nominal density</b>	128 kg/m <sup>3</sup> (8.0 lb/ft <sup>3</sup> )											EN 1602	
<b>Water leachable chloride content</b>	Chloride content < 10 ppm (AS - Quality)											EN 13468	
	Conforms to the stainless steel corrosion specification as per ASTM test methods C 692 and C 871 < 10 mg/kg (ph-value neutral to slightly alkaline)											ASTM C795 ASTM C871	
<b>Water absorption</b>	< 1 kg/m <sup>2</sup>											EN 1609	
	Water vapour absorption (Vapor sorption) ± 0.02% vol											ASTM C1104/ C1104M	
<b>Water vapour diffusion resistance</b>	μ = 1											EN 14303	
<b>Air Flow Resistivity</b>	> 80 kPa.s/m <sup>2</sup>											EN 29053	
<b>Designation code</b>	MW EN 14303-T2-ST(+)/680-WS1-CL10											EN 14303	

**Note**

All steel components exposed to a corrosive environment should be cleaned, degreased and coated with a protective finish.

**Installation guidelines****Assembly**

Cut the wired mat to length, so that the mat fits the pipe with slight pre-stressing. The closing joints must be staggered at an angle of at least 30 degrees to each other. The closing joints of the mats (lengthwise and circular joints) must be wired together using steel wire (min. 0.5 mm) or secured with mat hooks. Stainless steel pipes and pipes with a temperature of > 400°C should preferably be insulated with ProRox WM 970 SW<sup>NL</sup>, in which both the mesh and the stitching wire is in stainless steel. If the mats are assembled in multiple layers, both the lengthwise and circular joints must be staggered ('masonry bond').

**Support construction**

Given the limited pressure resistance of wired mats, in most cases a support is required for the board cladding. As a guideline, assume that a support is required every 3 to 4 metres.

**Finishing**

The insulation should be finished with a metal (e.g. aluminium) cladding. Where necessary expansion joints are provided to cater for expansion of the pipes. Both the lengthwise and circular joints are fastened with sheet-metal screws: hard aluminium or stainless steel 1/2", 8/metre. Close the expansion joints with a steel tensioning wire. Connections to mountings, head and end caps, etc. should be made watertight using a suitable sealant.

# ProRox MA 520 ALU



Old name: Rockwool Duraflex

Load bearing mat



Thickness mm	Length mm	Width mm	Packaging m <sup>2</sup> /duo roll	m <sup>2</sup> per 40ft HC container
30	8000	500	8.0	2336
40	6000	500	6.0	1752
50	5000	500	5.0	1400
60	4500	500	4.5	1170
70	4000	500	4.0	1000
80	3500	500	3.5	875
90	3000	500	3.0	780
100	3000	500	3.0	700

□ Shrink-wrapped

## Applications

ProRox MA 520 ALU is a compression resistant stone wool insulation mat bonded onto fibreglass reinforced aluminium foil. The insulation mat is suitable for the thermal and acoustic insulation of especially large diameter piping, vessels, ducts and equipment up to intermediate temperatures.

## Compliance

ProRox MA 520 ALU full comply with the requirements as set by internationally recognized standards like EN14303 and CINI 2.2.05.

## Advantages

- Suitable for heavy duty applications which are exposed to high temperatures and high mechanical loads
- Resistant to high temperatures
- Flexible application
- Available in a wide range of thicknesses
- Suitable for use over stainless steel

## Product properties



	Performance									Norms
	T (°C)	50	100	150	200	250	300	400	500	
<b>Thermal conductivity</b>	T (°C)	50	100	150	200	250	300	400	500	EN 12667 ASTM C177
	λ (W/mK)	0.044	0.053	0.064	0.077	0.092	0.110	0.156	0.216	
<b>Maximum Service Temperature</b>	500°C (932°F) The outer foil temperature is restricted to 80°C (176°F). ProRox MA 520 ALU should therefore not be applied at operating temperatures in excess of 300°C.									EN 14706
<b>Reaction to fire</b>	EuroClass A1 Surface burning characteristics; Flame spread=passed, Smoke development=Passed									EN 13501-1 ASTM E84 (UL 723)
<b>Nominal density</b>	60 kg/m <sup>3</sup> (3.7 lb/ft <sup>3</sup> )									
<b>Water leachable chloride content</b>	Chloride content < 10 ppm (AS - Quality)									EN 13468
	Conforms to the stainless steel corrosion specification as per ASTM test methods C 692 and C 871 < 10 mg/kg (ph-value neutral to slightly alkaline)									ASTM C795 ASTM C871
<b>Water absorption</b>	< 1 kg/m <sup>2</sup>									EN 14303
	Water vapour absorption (Vapor sorption) ± 0.02%vol									EN 12086
<b>Water vapour diffusion resistance</b>	μ = 1									EN 14303
	Sd > 200 m (for Alu-foil faced product)									EN 12086
<b>Compression resistance</b>	> 10 kPa (at 10% deformation)									EN 826
<b>Air Flow Resistivity</b>	> 20 kPa.s/m <sup>2</sup>									EN 29053
<b>Designation code</b>	MW EN 14303-T3-ST(+J500-CS(10)10-WS1-MV2-CL10									EN 14303

# ProRox SL 920



Old name: Rockwool Flexiboard

Flexible slab



Thickness mm	Length mm	Width mm	Packaging m <sup>2</sup> /pack	m <sup>2</sup> per 40ft HC container*
25	1000	600	14.4	2419
30	1000	600	12.0	2016
40	1000	600	9.0	1512
50	1000	600	7.2	1210
60	1000	600	6.0	1008
70	1000	600	3.6	907
75	1000	600	4.8	806
80	1000	600	3.6	756
100	1000	600	3.6	605

Available on request with a one-sided facing of fibreglass reinforced aluminium foil (Alu) or glass tissue

□ Boards are shrink-wrapped

\*Approximate quantities.

## Applications

ProRox SL 920 is a flexible stone wool slab. ProRox SL 920 is suitable for the thermal insulation of horizontal and vertical walls. A one-sided facing with fibreglass reinforced aluminium foil (Alu) or glass tissue is available upon request.

## Compliance

ProRox SL 920 Slabs fully comply with the requirements as set by internationally recognized standards like EN14303, CINI 2.2.01 and ASTM C612 Type IA.

## Advantages

- Flexible application
- Available in a wide range of thicknesses

## Product properties



	Performance						Norms
	T (°C)	50	100	150	200	250	
<b>Thermal conductivity</b>	T (°C)	50	100	150	200	250	EN 12667
	λ (W/mK)	0.042	0.054	0.069	0.086	0.106	ASTM C177
<b>Maximum Service Temperature</b>	250°C (482°F) 450°C (842°F)						EN 14706
	In case of aluminium facing the outer foil temperature should be limited to 80°C (176°F)						ASTM C411
<b>Reaction to fire</b>	EuroClass A1						EN 13501-1
	Surface burning characteristics; Flame spread=passed, Smoke development=Passed						ASTM E84 (UL 723)
<b>Nominal density</b>	40 kg/m <sup>3</sup> (2.5 lb/ft <sup>3</sup> )						EN 1602
<b>Water leachable chloride content</b>	Conforms to the stainless steel corrosion specification as per ASTM test methods C 692 and C 871						ASTM C795
<b>Water absorption</b>	< 1 kg/m <sup>2</sup>						EN 1609
	Water vapour absorption (Vapor sorption) ± 0.02% vol						ASTM C1104/C1104M
<b>Water vapour diffusion resistance</b>	μ = 1						EN 14303
	Sd > 200 m (for Alu-foil faced product)						
<b>Air Flow Resistivity</b>	> 10 kPa.s/m <sup>2</sup>						EN 29053
<b>Designation code</b>	MW EN 14303-T4(T3 if t<60)-ST(+)-250-WS1						EN 14303
	MW EN 14303-T4(T3 if t<60)-ST(+)-250-WS1-MV2 (for Alu-foil faced product)						

## Installation guidelines

- Mechanically fix ProRox SL 920 using self-adhesive or welded pins.
- In the case of aluminium foil facing, finish length-wise and crosswise joints with a self-adhesive aluminium tape (>75 mm). When insulating objects colder than the ambient temperature, where there

is a risk of condensation, the insulation should be provided with a vapour barrier. For external applications, the insulation should be finished with a metal, (e.g. aluminium) watertight covering.



Thickness mm	Length mm	Width mm	Packaging m <sup>2</sup> /pack	m <sup>2</sup> per 40ft HC container*
40	1000	600	6.0	1620
50	1000	600	4.8	1210
60	1000	600	4.8	1008
70	1000	600	3.6	907
75	1000	600	3.6	756
80	1000	600	3.6	756
90	1000	600	3.0	630

Available on request with a one-sided facing of fibreglass reinforced aluminium foil (Alu) or glass tissue

□ Boards are shrink-wrapped

\*Approximate quantities.

### Applications

ProRox SL 930 is a semi rigid stone wool slab. A one-sided facing with fibreglass reinforced aluminium foil (Alu) or glass tissue is available upon request.

### Advantages

- Available in a wide range of thicknesses
- Semi-rigid product combined with aluminium foil or fibreglass coating provides a smart, smooth surface finish

### Compliance

ProRox SL 930 Slabs fully comply with the requirements as set by internationally recognized standards like EN14303, CINI 2.2.01 and ASTM C612 Type IA.

### Product properties



	Performance								Norms
	T (°C)	50	100	150	200	250	300	350	
<b>Thermal conductivity</b>	λ (W/mK)	0.040	0.049	0.059	0.070	0.085	0.103	0.122	EN 12667 ASTM C177
	<b>Maximum Service Temperature</b>	350°C (662°F) 450°C (842°F) In case of aluminium facing the outer foil temperature should be limited to 80°C (176°F)							EN 14706 ASTM C411
<b>Reaction to fire</b>	EuroClass A1 Surface burning characteristics; Flame spread=passed, Smoke development=Passed							EN 13501-1 ASTM E84 (UL 723)	
<b>Nominal density</b>	55 kg/m <sup>3</sup> [3.4 lb/ft <sup>3</sup> ]							EN 1602	
<b>Water leachable chloride content</b>	Conforms to the stainless steel corrosion specification as per ASTM test methods C 692 and C 871							ASTM C795	
<b>Water absorption</b>	< 1 kg/m <sup>2</sup> Water vapour absorption (Vapor sorption) ± 0.02% vol							EN 1609 ASTM C1104/C1104M	
<b>Water vapour diffusion resistance</b>	μ = 1 Sd > 200 m (for Alu-foil faced product)							EN 14303	
<b>Air Flow Resistivity</b>	> 20 kPa.s/m <sup>2</sup>							EN 29053	
<b>Designation code</b>	MW EN 14303-T4(T3 if t<60)-ST(+)-350-WS1							EN 14303	
	MW EN 14303-T4(T3 if t<60)-ST(+)-350-WS1-MV2 (for Alu-foil faced product)								

### Installation guidelines

- Mechanically fix ProRox SL 930 using self-adhesive or welded pins. Due to the rigidity of the product, it can also be mounted in cassettes.
- In the case of aluminium foil facing, finish lengthwise and crosswise joints with a self-adhesive aluminium tape (≥75 mm). When

insulating objects colder than the ambient temperature, where there is a risk of condensation, the insulation should be provided with a vapour barrier. The insulation should be finished with a metal (e.g. aluminium), watertight covering.



## ProRox SL 940



Old name: Rockwool 231



Thickness mm	Length mm	Width mm	Packaging m <sup>2</sup> /pack	m <sup>2</sup> per 40ft HC container*
25	1000	600	9.6	2419
30	1000	600	6.0	2016
40	1000	600	6.0	1512
50	1000	600	3.6	1210
60	1000	600	4.8	1008
75	1000	600	2.4	806
100	1000	600	2.4	605
120	1000	600	2.4	504

□ Boards are shrink-wrapped

\*Approximate quantities.

### Applications

ProRox SL 940 is a rigid stone wool slab, specially developed for the thermal and acoustic insulation of technical equipment in the intermediate temperature range.

### Advantages

- Excellent thermal and acoustic insulation
- Resistant to high temperatures

### Product properties



	Performance									Norms
	T (°C)	50	100	150	200	250	300	350	400	
<b>Thermal conductivity</b>	λ (W/mK)	0.039	0.047	0.055	0.065	0.078	0.093	0.108	0.126	EN 12667 ASTM C177
	<b>Maximum Service Temperature</b>	400°C (752°F) 500°C (932°F)								
<b>Reaction to fire</b>	EuroClass A1 Surface burning characteristics; Flame spread=passed, Smoke development=Passed									EN 13501-1 ASTM E84 (UL 723)
<b>Nominal density</b>	70 kg/m <sup>3</sup> (4.4 lb/ft <sup>3</sup> )									EN 1602
<b>Water leachable chloride content</b>	Conforms to the stainless steel corrosion specification as per ASTM test methods C 692 and C 871									ASTM C795
<b>Water absorption</b>	< 1 kg/m <sup>2</sup> Water vapour absorption (Vapor sorption) ± 0.02% vol									EN 1609 ASTM C1104/C1104M
<b>Water vapour diffusion resistance</b>	μ = 1 Sd > 200 m (for Alu-foil faced product)									EN 14303
<b>Air Flow Resistivity</b>	> 30 kPa.s/m <sup>2</sup>									EN 29053
<b>Designation code</b>	MW EN 14303-T4(T3 if t<60)-ST(+)-400-WS1									EN 14303
	MW EN 14303-T4(T3 if t<60)-ST(+)-400-WS1-MV2 (for Alu-foil faced product)									

# ProRox SL 950



Old name: Rockwool HT600

Rigid slab



Thickness mm	Length mm	Width mm	Packaging m <sup>2</sup> /pack	m <sup>2</sup> per 40ft HC container*
25	1000	600	9.6	2592
30	1000	600	6.0	2016
40	1000	600	6.0	1620
50	1000	600	4.8	1296
60	1000	600	3.0	1008
80	1000	600	3.0	810
100	1000	600	2.4	648
120	1000	600	1.8	529

□ Boards are shrink-wrapped

\*Approximate quantities.

## Applications

ProRox SL 950 is a strong, rigid slab, specially developed for the thermal and acoustic insulation of boilers, columns and vessels up to intermediate temperatures.

## Advantages

- Suitable up to intermediate temperatures
- Retains shape
- Available in a wide range of thicknesses

## Compliance

ProRox SL 950 Slabs fully comply with the requirements as set by internationally recognized standards like EN14303, CINI 2.2.01 and ASTM C612 Type IA, IB, II, III, IVA and IVB.

## Product properties

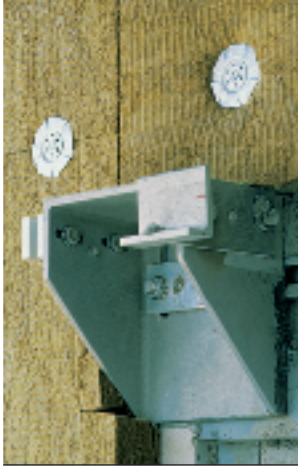


	Performance												Norms
	T [°C]	50	100	150	200	250	300	350	400	500	600	640	
Thermal conductivity	λ (W/mK)	0.039	0.045	0.053	0.062	0.073	0.084	0.097	0.112	0.144	0.185	0.203	EN 12667
													ASTM C177
Maximum Service Temperature		640°C (1184°F)											EN 14706
		750°C (1382°F)											ASTM C411
Reaction to fire		EuroClass A1											EN 13501-1
		Surface burning characteristics; Flame spread = passed, Smoke development = Passed											ASTM E84 (UL 723)
Nominal density		80 kg/m <sup>3</sup> [5.0 lb/ft <sup>3</sup> ]											EN 1602
Water leachable chloride content		Conforms to the stainless steel corrosion specification as per ASTM test methods C 692 and C 871											ASTM C795
Water absorption		< 1 kg/m <sup>2</sup>											EN 1609
		Water vapour absorption (Vapor sorption) ± 0.02% vol											ASTM C1104/ C1104M
Water vapour diffusion resistance		μ = 1											EN 14303
Air Flow Resistivity		> 40 kPa.s/m <sup>2</sup>											EN 29053
Designation code		MW EN 14303-T4(T3 if t<60)-ST(+)+640-WS1											EN 14303

## ProRox SL 960



Old name: Rockwool 233



Thickness mm	Length mm	Width mm	Packaging m <sup>2</sup> /pack	m <sup>2</sup> per 40ft HC container*
25	1000	600	8.4	2470
30	1000	600	6.0	2016
40	1000	600	3.6	1663
50	1000	600	3.6	1210
60	1000	600	3.0	1008
70	1000	600	1.8	907
75	1000	600	2.4	806
80	1000	600	1.8	832
100	1000	600	1.8	605
120	1000	600	1.2	554

□ Boards are shrink-wrapped

\*Approximate quantities.

### Applications

ProRox SL 960 is a strong and rigid slab and is especially suitable for the thermal and acoustic insulation of constructions up to intermediate temperatures.

### Advantages

- Excellent thermal and acoustic insulation
- Resistant to high temperatures

### Compliance

ProRox SL 960 Slabs fully comply with the requirements as set by internationally recognized standards like EN14303, CINI 2.2.01 and ASTM C612 Type IA and IB.

### Product properties



	Performance										Norms
	T (°C)	50	100	150	200	250	300	350	400	500	
<b>Thermal conductivity</b>	T (°C)	50	100	150	200	250	300	350	400	500	EN 12667
	λ (W/mK)	0.039	0.045	0.052	0.060	0.071	0.081	0.094	0.107	0.140	ASTM C177
<b>Maximum Service Temperature</b>	500°C (932°F)										EN 14706
	600°C (1112°F)										ASTM C411
<b>Reaction to fire</b>	EuroClass A1										EN 13501-1
	Surface burning characteristics; Flame spread = passed, Smoke development = Passed										ASTM E84 (UL 723)
<b>Nominal density</b>	100 kg/m <sup>3</sup> [6.2 lb/ft <sup>3</sup> ]										EN 1602
<b>Water leachable chloride content</b>	Conforms to the stainless steel corrosion specification as per ASTM test methods C 692 and C 871										ASTM C795
<b>Water absorption</b>	< 1 kg/m <sup>2</sup>										EN 1609
	Water vapour absorption (Vapor sorption) ± 0.02% vol										ASTM C1104/ C1104M
<b>Water vapour diffusion resistance</b>	μ = 1										EN 14303
<b>Air Flow Resistivity</b>	> 60 kPa.s/m <sup>2</sup>										EN 29053
<b>Designation code</b>	MW EN 14303-T4(T3 if t<60)-ST(+)-500-WS1										EN 14303



Thickness mm	Length mm	Width mm	Packaging m <sup>2</sup> /pack	m <sup>2</sup> per 40ft HC container*
30	1000	600	6.0	2016
40	1000	600	4.8	1613
50	1000	600	3.6	1210
60	1000	600	3.0	1008
80	1000	600	1.8	832

□ Boards are shrink-wrapped

\*Approximate quantities.

### Applications

ProRox SL970 is a strong and rigid stone wool slab, for the thermal and acoustic insulation of constructions where higher temperatures and light mechanical loads (e.g. vibrations) occur. Typical examples are ovens, furnaces and exhaust ducts.

### Advantages

- Suitable for high temperature application
- Retains shape
- Available in a wide range of thicknesses

### Compliance

ProRox SL 970 Slabs fully comply with the requirements as set by internationally recognized standards like EN14303, CINI 2.2.01 and ASTM C612 Type IA, IB, II, III, IVA and IVB.

### Product properties



	Performance												Norms
	T (°C)	50	100	150	200	250	300	350	400	500	600	680	
<b>Thermal conductivity</b>	λ (W/mK)	0.041	0.046	0.056	0.068	0.077	0.087	0.099	0.128	0.162	0.162	0.196	EN 12667
													ASTM C177
<b>Maximum Service Temperature</b>	680°C (1256°F) 750°C (1382°F)												EN 14706 ASTM C411
<b>Reaction to fire</b>	EuroClass A1 Surface burning characteristics; Flame spread = passed, Smoke development = Passed												EN 13501-1 ASTM E84 (UL 723)
<b>Nominal density</b>	115 kg/m <sup>3</sup> (7.2 lb/ft <sup>3</sup> )												EN 1602
<b>Water leachable chloride content</b>	Chloride content < 10 ppm (AS - Quality)												EN 13468
	Conforms to the stainless steel corrosion specification as per ASTM test methods C 692 and C 871 < 10 mg/kg (ph-value neutral to slightly alkaline)												ASTM C795 ASTM C871
<b>Water absorption</b>	< 1 kg/m <sup>2</sup>												EN 1609
	Water vapour absorption (Vapor sorption) ± 0.02% vol												ASTM C1104/ C1104M
<b>Water vapour diffusion resistance</b>	μ = 1												EN 14303
<b>Air Flow Resistivity</b>	> 70 kPa.s/m <sup>2</sup>												EN 29053
<b>Designation code</b>	MW EN 14303-T4(T3 if t<60)-ST(+)-680-WS1-CL10												EN 14303

**ProRox SL 980**



Old name: Rockwool HT 700

Heavy duty slab



Thickness mm	Length mm	Width mm	Packaging m <sup>2</sup> /pack	m <sup>2</sup> per 40ft HC container*
30	1000	600	3.6	2117
40	1000	600	3.0	1638
50	1000	600	2.4	1310
60	1000	600	1.8	1058

\*Approximate quantities.

### Applications

ProRox SL 980 is a strong and rigid stonewool slab, for the thermal and acoustic insulation of constructions where higher demands are made on the temperature resistance and mechanical loads of the insulation.

### Compliance

ProRox SL 980 Slabs fully comply with the requirements as set by internationally recognized standards like EN14303, CINI 2.2.01 and ASTM C612 Type IA, IB, II, III, IVA and IVB.

### Advantages

- Suitable for heavy duty applications which are exposed to high temperatures and high mechanical loads
- Retains shape
- Available in a wide range of thicknesses

### Product properties



	Performance												Norms
	T [°C]	50	100	150	200	250	300	350	400	500	600	700	
Thermal conductivity	λ (W/mK)	0.040	0.044	0.049	0.055	0.062	0.069	0.077	0.086	0.106	0.130	0.158	EN 12667
Maximum Service Temperature	700°C (1292°F) 750°C (1382°F)												EN 14706 ASTM C411
Reaction to fire	EuroClass A1 Surface burning characteristics; Flame spread = passed, Smoke development = Passed												EN 13501-1 ASTM E84 (UL 723)
Nominal density	145 kg/m <sup>3</sup> (9.1 lb/ft <sup>3</sup> )												EN 1602
Water leachable chloride content	Conforms to the stainless steel corrosion specification as per ASTM test methods C 692 and C 871												ASTM C795
Water absorption	< 1 kg/m <sup>2</sup> Water vapour absorption (Vapor sorption) ± 0.02% vol												EN 1609 ASTM C1104/ C1104M
Water vapour diffusion resistance	μ = 1												EN 14303
Air Flow Resistivity	> 110 kPa.s/m <sup>2</sup>												EN 29053
Designation code	MW EN 14303-T4(T3 if t<40)-ST(+)-700-WS1												EN 14303



## ProRox SL 540



Old name: Rockwool 251.001



Thickness mm	Length mm	Width mm	Packaging m <sup>2</sup> /pack	m <sup>2</sup> per 40ft HC container*
30	1000	600	4.8	2117
40	1000	600	3.6	1663
50	1000	600	2.4	1301
60	1000	600	2.4	1058
65	1000	600	1.8	983

□ Boards are shrink-wrapped

\*Approximate quantities.

### Applications

ProRox SL 540 is a highly pressure resistant stone wool slab for the thermal and acoustic insulation of constructions where high temperatures and mechanical loads (e.g. vibrations) occur.

### Advantages

- Excellent thermal and acoustic insulation
- Resistant to high temperatures
- Resistant to mechanical loads

### Compliance

ProRox SL 540 Slabs comply with the requirements as set by EN14303, CINI 2.2.01 and ASTM C612: type IA, IB, II, III, IVA...

### Product properties



	Performance												Norms
	T (°C)	50	100	150	200	250	300	350	400	500	600	700	
Thermal conductivity	λ (W/mK)	0.042	0.047	0.052	0.057	0.064	0.072	0.082	0.093	0.117	0.147	0.181	EN 12667
Maximum Service Temperature	700°C (1292°F) 750°C (1382°F)												EN 14706 ASTM C411
Reaction to fire	EuroClass A1 Surface burning characteristics; Flame spread = passed, Smoke development = Passed												EN 13501-1 ASTM E84 (UL 723)
Nominal density	160 kg/m <sup>3</sup> (10.0 lb/ft <sup>3</sup> )												EN 1602
Water leachable chloride content	Conforms to the stainless steel corrosion specification as per ASTM test methods C 692 and C 871												ASTM C795
Water absorption	< 1 kg/m <sup>2</sup> Water vapour absorption (Vapor sorption) ± 0.02% vol												EN 1609 ASTM C1104/ C1104M
Water vapour diffusion resistance	μ = 1												EN 14303
Compression resistance	> 25 kPa (at 10% deformation)												EN 826
Air Flow Resistivity	> 120 kPa.s/m <sup>2</sup>												EN 29053
Designation code	MW EN 14303-T4(T3 if t < 40)-ST(+)-700-CS(10)25(if t ≥ 50)-WS1												EN 14303

## ProRox SL 560



Old name: Rockwool 251



Thickness mm	Length mm	Width mm	Packaging m <sup>2</sup> /pack	m <sup>2</sup> per 40ft HC container*
40	1000	600	2.4	1613
50	1000	600	1.8	1285
60	1000	600	1.8	1058
80	1000	600	1.2	806
100	1000	600	1.2	655

Shrink-wrapped

\*Approximate quantities.

### Applications

ProRox SL 560 is a highly pressure resistant stone wool slab for the thermal and acoustic insulation of constructions where high temperatures and mechanical loads (e.g. vibrations) occur.

### Advantages

- Excellent thermal and acoustic insulation
- Resistant to high temperatures
- Resistant to mechanical loads

### Compliance

ProRox SL 560 Slabs comply with the requirements as set by EN14303, CINI 2.2.01 and ASTM C612: type IA, IB, II, III, IVA.

### Product properties



	Performance												Norms	
	T (°C)	50	100	150	200	250	300	350	400	500	600	700		
<b>Thermal conductivity</b>	T (°C)													EN 12667
	λ (W/mK)	0.042	0.047	0.052	0.057	0.064	0.072	0.082	0.093	0.117	0.147	0.181		
<b>Maximum Service Temperature</b>	700°C (1292°F) 750°C (1382°F)												EN 14706 ASTM C411	
<b>Reaction to fire</b>	EuroClass A1 Surface burning characteristics; Flame spread = passed, Smoke development = Passed												EN 13501-1 ASTM E84 (UL 723)	
<b>Nominal density</b>	175 kg/m <sup>3</sup> (10.9 lb/ft <sup>3</sup> )												EN 1602	
<b>Water leachable chloride content</b>	Conforms to the stainless steel corrosion specification as per ASTM test methods C 692 and C 871												ASTM C795	
<b>Water absorption</b>	< 1 kg/m <sup>2</sup> Water vapour absorption (Vapor sorption) ± 0.02% vol												EN 1609 ASTM C1104/ C1104M	
<b>Water vapour diffusion resistance</b>	μ = 1												EN 14303	
<b>Compression resistance</b>	> 30 kPa (at 10% deformation)												EN 826	
<b>Air Flow Resistivity</b>	> 120 kPa.s/m <sup>2</sup>												EN 29053	
<b>Designation code</b>	MW EN 14303-T4(T3 if t < 40)-ST(+)-700-CS(10)30(if t ≥ 50)-WS1												EN 14303	



Thickness mm	Length mm	Width mm	Packaging m <sup>2</sup> /pack	m <sup>2</sup> per 40ft HC container*
40	1000	600	3.0	1638
50	1000	600	2.4	1310
60	1000	600	2.4	1109
80	1000	600	1.8	832
100	1000	600	1.2	655

Shrink-wrapped

\*Approximate quantities.

### Applications

ProRox SL 580 is a pressure resistant stone wool slab with high resistance to mechanical loads. The compression resistant slab is developed for the thermal insulation of tank roofs subjected to pedestrian traffic, and the thermal and acoustic insulation of constructions subjected to a mechanical load.

### Advantages

- Resistant to foot traffic
- Available in a wide range of thicknesses

### Compliance

ProRox SL 580 Slabs fully comply with the requirements as set by internationally recognized standards like EN14303, CINI 2.2.01 and ASTM C612 Type IA, IB, II, III, IVA and IVB.

### Product properties



	Performance						Norms
	T (°C)	50	100	150	200	250	
<b>Thermal conductivity</b>	λ (W/mK)	0.041	0.047	0.053	0.060	0.067	EN 12667
<b>Maximum Service Temperature</b>	250°C (482°F)						EN 14706 ASTM C411
<b>Reaction to fire</b>	EuroClass A1 Surface burning characteristics; Flame spread = passed, Smoke development = Passed						EN 13501-1 ASTM E84 (UL 723)
<b>Nominal density</b>	150 kg/m <sup>3</sup> (9.4 lb/ft <sup>3</sup> )						EN 1602
<b>Water leachable chloride content</b>	Conforms to the stainless steel corrosion specification as per ASTM test methods C 692 and C 871						ASTM C795
<b>Water absorption</b>	< 1 kg/m <sup>2</sup> Water vapour absorption (Vapor sorption) ± 0,02% vol						EN 1609 ASTM C1104/C1104M
<b>Water vapour diffusion resistance</b>	μ = 1						EN 14303
<b>Compression resistance</b>	> 50 kPa (at 10% deformation)						EN 826
<b>Air Flow Resistivity</b>	> 110 kPa.s/m <sup>2</sup>						EN 29053
<b>Designation code</b>	MW EN 14303-T4(T3 if t<40)-ST(+) 250-CS(10)50(if t>50)-WS1						EN 14303

## ProRox LF 970



Old name: Rockwool Loose Fill

Loose Fill



Product	Packaging	Kg/packaging	Kg per 40 ft HC Container*
ProRox LF 970 (Rolls)	Bag	15	5250

Packed into bags

\*Approximate quantities.

### Applications

ProRox LF 970 ROCKWOOL Loose Fill is lightly bonded impregnated stone wool. This product is especially suitable for thermal insulation and acoustic insulation of joints and irregularly formed constructions.

### Advantages

- Ease of use
- Flexible application

### Product properties

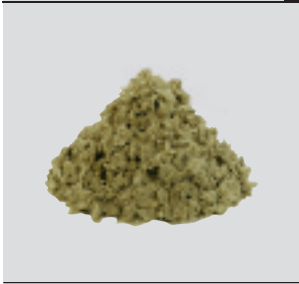
	Performance							Norms
	T (°C)	50	100	150	200	250	300	
<b>Thermal conductivity</b>	T (°C)	50	100	150	200	250	300	EN 12667
	$\lambda$ (W/mK)	0.040	0.049	0.057	0.067	0.075	0.091	
<b>Maximum Service Temperature</b>	680°C (1256°F)							EN 14706 ASTM C411
<b>Reaction to fire</b>	EuroClass A1 Surface burning characteristics; Flame spread=passed, Smoke development=Passed							EN 13501-1 ASTM E84 (UL 723)
<b>Water absorption</b>	< 1 kg/m <sup>2</sup> Water vapour absorption (Vapor sorption) $\pm$ 0,02% vol							EN 1609 ASTM C1104/C1104M
<b>AS quality (Water leachable chloride content)</b>	Chloride content < 10 ppm Conforms to the stainless steel corrosion specification as per ASTM test methods C 692 and C 871 < 10 mg/kg (ph-value neutral to slightly alkaline)							EN 13468 ASTM C795 ASTM C871
<b>Water vapour diffusion resistance</b>	$\mu = 1$							EN 12086

## ProRox GR 903



Old name: Rockwool Granulate

Granulate wool



Product	Packaging	Kg/packaging	Kg per 40 ft HC Container*
ProRox GR 903	Bag	20	12000

Lightly compressed and packed in bags

\*Approximate quantities.

### Applications

ProRox GR 903 is a stone wool granulate with no additives. The granulate is especially suitable for the thermal insulation of cold boxes and air separation plants.

### Advantages

- Complies with the most stringent requirements for the insulation of cold boxes
- Chemically inert to steel
- Easy to remove for inspection purposes

### Product properties

	Performance							Norms
	T [°C]	20	-20	-60	-100	-140	-180	
Thermal conductivity	λ (W/mK)	0.039	0.033	0.027	0.022	0.018	0.015	EN 12667
	Chloride content < 10 ppm							EN 13468
AS quality	Conforms to the stainless steel corrosion specification as per ASTM test methods C 692 and C 871							ASTM C795
	< 10 mg/kg (ph-value neutral to slightly alkaline)							ASTM C871
Reacton to fire	EuroClass A1							EN 13501-1
	Surface burning characteristics; Flame spread = passed, Smoke development = Passed							ASTM E84 (UL 723)

### Installation guidelines

The guidelines for the use of granulate wool in cold applications are given in the AGI Q 118 standard. These guidelines are available on request. Please ask your ROCKWOOL Technical Insulation sales consultant.



# Delivery and storage

ROCKWOOL Technical Insulation can accept no liability for any faults in installation and deficiencies. The respective terms of general sale and delivery of ROCKWOOL bv, lodged with the Commercial Court under number 13014428. A copy of these conditions can be provided on request.

## Delivery service

ROCKWOOL Technical Insulation strives to make all its products readily available. Delivery normally takes place from our dealers' warehouses. However, direct delivery by ROCKWOOL Technical Insulation to the site of installation is also possible. To simplify construction site logistics, deliveries using containers can be arranged. Contact your dealer for more information.

## Packaging and storage

Where our goods are supplied packed, packaging is included in the price. The polyethylene used in packaging is free of chlorine and sulphur compounds, and suitable for recycling. ROCKWOOL Technical Insulation products must be stored in the original packaging, protected from the weather and off the ground.

## Advice

ROCKWOOL Technical Insulation offers more than just the rapid delivery of the right product. ROCKWOOL can also act as your partner during the design phase to help to resolve technical problems, such as providing advice for complex technical insulation calculations, construction advice and help with drafting specifications.

All the values given in this publication are indicative average values, subject to manufacturing tolerances. ROCKWOOL Technical Insulation retains the right to change product specifications at any time without prior notice.





# ROCKWOOL Technical Insulation

ROCKWOOL® Technical Insulation, an independent organisation of the international ROCKWOOL Group, is the world wide market leader in technical insulation. With our two product lines, ProRox and SeaRox, we cover the whole industrial market and marine & offshore industry, providing a full range of products and systems for the thermal and firesafe insulation of technical applications. Besides sustainable products we offer reliable expert advice, from documentation to delivery and after sales service. Throughout the whole chain from specifier, through dealer to contractor and installer we aim to add value. We don't just sell products, we supply solutions. It's this total approach that makes us the ideal choice for professionalism, innovation and trust.

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 [www.rockwool-rti.com](http://www.rockwool-rti.com)

## The ROCKWOOL Group

The ROCKWOOL Group is the world's leading supplier of innovative products and systems based on stone wool, improving the environment and the quality of life for millions of people. The Group is amongst the global leaders within the insulation industry. Together with other building-related products such as acoustic ceilings, cladding boards and our consultancy business, the Group ensures energy efficient and firesafe buildings with good acoustics and a comfortable indoor climate. We create green solutions for the horticultural industry, inventive special fibres for industrial use, effective insulation for the process industry and marine & offshore as well as noise and vibration systems for modern infrastructure.

Our more than 9,300 employees in more than 30 countries cater for customers all over the world. The Group's head office is located close to Copenhagen. In 2011 the Group generated sales of EUR 1.85 billion. The company is listed on the NASDAQ OMX Nordic Exchange Copenhagen. The Group's operations have a main presence in Europe and we are expanding production, sales and service activities in North and South America and Asia. Together with a broad network of business partners, this ensures that the Group's products and systems reach almost every corner of the globe. For more information, please visit [www.rockwool.com](http://www.rockwool.com)

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