

ProRox® Product Catalogue

South East Asia



We share our knowledge to your advantage

ROCKWOOL Technical Insulation – a subsidiary of the ROCKWOOL Group – develops innovative technical insulation solutions for the process industry and the shipbuilding & offshore market. Through our comprehensive of product lines ProRox and SeaRox we offer a full spread of sustainable products and system guaranteeing the highest possible thermal and firesafe insulation of all technical installations.

Our over 80 years of experience are reflected in a complete set of high-grade products and expert advice. Today, our dedicated and technically experienced people remain fully committed to provide the very best service and tools in the market and a total range of cutting-edge insulation solutions.

Excellent insulation products, outstanding people.

All ROCKWOOL Technical Insulation solutions meet the most stringent quality and safety standards. All ProRox and SeaRox 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. And we deliver! Our people know your market down to the smallest detail and provide continual knowledge and service for the benefit of the client. Besides excellent insulation products, they are the real key to our success. Thanks to their expertise and extensive experience, we can offer you exceptional stone wool solutions, expert tools and an impeccable service

The best solutions, built on solid expertise

Our people's in-depth expertise is the best guarantee 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 and in the marine & offshore industry, our stone wool products offer the highest possible protection against heat and energy loss, fire, noise and other unwanted influences. Our experts will be delighted to share their knowledge and advise you in drawing up technical and project specifications.

Up-to-date information and expert tools.

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 and expert tools that come with them, which always incorporate the latest technical findings. That's why you should always check that the information and tools you have are up-to-date. If you have any questions about specific application issues, working methods or product properties, please visit our website at www.rockwoolasia.com or contact one of our local sales organisations (see the contact details on the back of this brochure).

Founding Partner of EIIF

ROCKWOOL Technical Insulation was one of the founding partners of the European Industrial Insulation Foundation (EIIF), which has established itself as a resource for industries that need to reduce CO₂ emissions.



The ROCKWOOL Group

ROCKWOOL Technical Insulation is a subsidiary of the ROCKWOOL Group, the world's largest and most experienced producer of stone wool products. ROCKWOOL International A/S is based in Hedehusene, Denmark. In 2016 the Group generated net sales of EUR 2,202 million. The Group's operations have a large presence in Europe and also facilities in Russia, North America, India and East Asia with more than 11,000 employees in more than 38 countries.

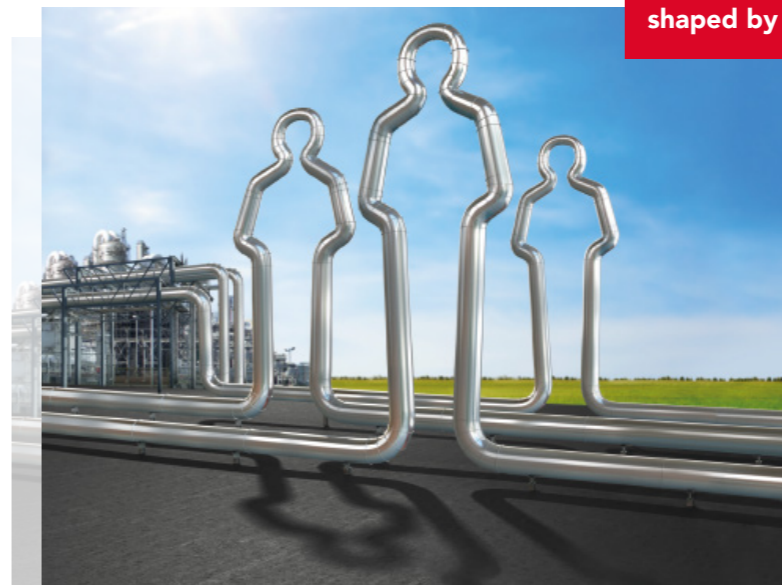
ROCKWOOL products has a melting point above 1000°C

ROCKWOOL products withstand temperatures up to 1000°C, making them exceptionally resistant to fire. This resistance can slow a fire's progress and buy precious time for rescue operations while helping to protect the building's structure from unnecessary damage. Yet while heat and flames are bad enough in a fire, smoke is the serious danger. It can suffocate occupants, and it can incapacitate people who might otherwise have been able to escape. ROCKWOOL insulation keeps toxic smoke from insulation to a minimum for even greater safety for the occupants during fire accident.

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, CO₂ 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.

Technical insulation shaped by experts.



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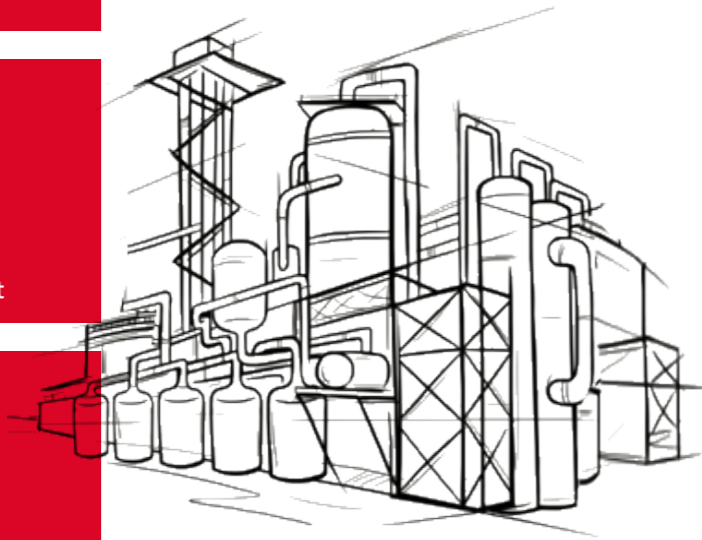
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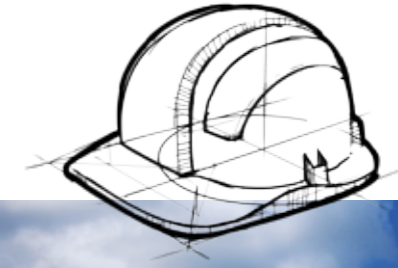
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Project
**Tanjung Bin Coal-Fired
Power Plant Project in
Malaysia**

Materials
Pipe section
Wired mats
Slabs

New product names, logical structure

Each product name is structured in the same clear way:

e.g.: **ProRox WM 970 ALU^{SA}**

Product range

Product identifier

WM = Wired Mats

SL = Slabs

PS = Pipe Sections

BL = Blanket

2 last digits = other product characteristics

Application code

1st 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. Beside you will get an overview of the **ProRox** range and its new names.

NEW GRADE	OLD EQUIVALENT GRADE	
ProRox PS 960 ^{SA}	RockTech SPI 120	10
ProRox PS 970 ^{SA}	RockTech SPI 150	12
ProRox WM 950 ^{SA}		14
ProRox WM 960 ^{SA}	RockTech WM650	16
ProRox WM 970 ^{SA}	RockTech WM650HD	18
ProRox SL 930 ^{SA}		20
ProRox SL 950 ^{SA}		21
ProRox SL 960 ^{SA}	RockTech S650	22
ProRox SL 970 ^{SA}	RockTech S650.128	23
ProRox SL 978 ^{SA}	RockTech S850	24
ProRox SL 980		25
ProRox SL 540 ^{SA}	RockTech S650.160.HC	26
ProRox SL 560	ROCKWOOL 251	27
ProRox SL 580	ROCKWOOL CRS	28
ProRox BL 938 ^{SA}	RockTech B350	29
ProRox BL 958 ^{SA}	RockTech B450	30
ProRox BL 960 ^{SA}	RockTech B650	31
ProRox LF 970		32
ProRox GR 903		33

Industrial insulation

Application selector

Thermal insulation	
Pipe work	
ø <356	ø >356

	NEW GRADE	OLD EQUIVALENT GRADE	DENSITY	ø <356	ø >356
Pipe Sections	ProRox PS 960 ^{SA}	RockTech SPI 120	120kg/m ³	■ ■ ■	■ ■
	ProRox PS 970 ^{SA}	RockTech SPI 150	150kg/m ³	■ ■ ■	■ ■
Wired Mats	ProRox WM 950 ^{SA}		80kg/m ³	■	■ ■ ■
	ProRox WM 960 ^{SA}	RockTech WM650	100kg/m ³	■	■ ■ ■
	ProRox WM 970 ^{SA}	RockTech WM650HD	128kg/m ³	■ ■	■ ■ ■
Slabs	ProRox SL 930 ^{SA}		60kg/m ³		
	ProRox SL 950 ^{SA}		80kg/m ³		
	ProRox SL 960 ^{SA}	RockTech S650	100kg/m ³		
	ProRox SL 970 ^{SA}	RockTech S650.128	128kg/m ³		
	ProRox SL 978 ^{SA}	RockTech S850	110kg/m ³		
	ProRox SL 980		145kg/m ³		
	ProRox SL 540 ^{SA}	RockTech S650.160.HC	160kg/m ³		
	ProRox SL 560	ROCKWOOL 251	175kg/m ³		
	ProRox PS 580	ROCKWOOL CRS	150kg/m ³		
Blankets	ProRox BL 938 ^{SA}	RockTech B350	60kg/m ³		
	ProRox BL 958 ^{SA}	RockTech B450	80kg/m ³		
	ProRox BL 960 ^{SA}	RockTech B650	100kg/m ³		
Loose Wool	ProRox LF 970				
	ProRox GR 903				

Thermal insulation						
Columns, Tanks, Vessels			Large Voids & Cavities	Cold Boxes	Ovens	Furnaces
Wall (ø <5m)	Wall (ø >5m)	Roof				
■ ■ ■	■ ■					
■ ■ ■	■ ■					
■ ■ ■	■ ■					
■ ■	■ ■ ■			■		■
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Remarks

Due to an almost limitless range of applications, we have not provided detail information for all the applications. Information is available in the following manuals/standards for industrial insulation:

- CINI manual 'Insulation for industries'
- AGI Q101 (Insulation work on power plant components)
- DIN 4140 (Insulation work on industrial installations and building equipment)

- BS 5970 (Code of practice for the thermal insulation of pipework, ductwork, associated equipment and other industrial installations)

For specific applications, our ROCKWOOL Technical Insulation sales team will be pleased to advise you.

ProRox PS 960^{SA}
Old Equivalent Grade: RockTech SPI 120

Pipe section



Dimensions		Length: 1200 mm
Nominal pipe size (NPS) inches	Internal diameter pipe insulation (ASTM C585-10) mm	
1/2	22	
3/4	27	
1	34	
1 1/4	43	
1 1/2	49	
2	61	
2 1/2	74	
3	90	
3 1/2	102	
4	115	
4 1/2 (Only available in Rayong factory)	128	
5	143	
6	170	
7	196	
8	221	
9	246	
10	275	
11	300	
12	326	
14	358	
16	408.8	
18	459.6	
20	510.4	
22	561.2	
24	612	
26	662.8	
28	713.6	
30 (Only available in Bukit Raja factory)	764.4	
32 (Only available in Bukit Raja factory)	815.2	

Applications

ProRox PS 960^{SA} 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 the industrial pipe work.

Compliance

ProRox PS 960^{SA} Pipe Sections comply with the requirements as set by internationally recognized CINI 2.2.03, ASTM C547 Grade A type I, II, IV.

Installation guidelines

Assembly

Fit the ProRox PS 960^{SA} 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 0.5mm, at least 3/m). For insulation thickness above 100mm (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 4m
- Vertical pipe work: 5 to 6m

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								Standard
	Mean Temp (°C)	50	100	150	200	250	300	350	
Thermal Conductivity	λ (W/mK)	0.037	0.042	0.048	0.055	0.063	0.072	0.083	ASTM C335
Nominal Density	120 kg/m ³								ASTM C302
Maximum Service Temperature	650°C								ASTM C411/ C447
Reaction to Fire	EuroClass A1 Surface burning characteristics; Flame spread = passed, Smoke development = passed								EN 13501-1 ASTM E84
Chloride Content	Less than 10 ppm Conforms to the stainless steel corrosion specification as per ASTM C795								ASTM C871 ASTM C692/ C871
Moisture Absorption	Less than 1% weight								ASTM C1104/ C1104M
Water Absorption	Less than 1 kg/m ²								EN 13472

Note: All information and data for technical parameters are based on laboratory testing.

ProRox PS 970^{SA}
 Old Equivalent Grade: RockTech SPI 150

Heavy duty pipe section



Dimensions		Length: 1200 mm
Nominal pipe size (NPS) inches	Internal diameter pipe insulation (ASTM C585-10) mm	
½	22	
¾	27	
1	34	
1 ¼	43	
1 ½	49	
2	61	
2 ½	74	
3	90	
3 ½	102	
4	115	
4 ½ (Only available in Rayong factory)	128	
5	143	
6	170	
7	196	
8	221	
9	246	
10	275	
11	300	
12	326	
14	358	
16	408.8	
18	459.6	
20	510.4	
22	561.2	
24	612	
26	662.8	
28	713.6	
30 (Only available in Bukit Raja factory)	764.4	
32 (Only available in Bukit Raja factory)	815.2	

Applications

ProRox PS 970^{SA} is a pre-formed high density stone wool pipe section. The sections are supplied split and hinged for easy snap-on assembly, and are specially 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^{SA} Pipe Sections comply with the requirements as set by internationally recognized CINI 2.2.03, ASTM C547 Grade A type I, II, IV.

Installation guidelines

Assembly

Fit the ProRox PS 970^{SA} 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 0.5mm, at least 3/m). For insulation thickness above 100mm (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 4m
- Vertical pipe work: 5 to 6m

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

- 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								Standard
	Mean Temp (°C)	50	100	150	200	250	300	350	
Thermal Conductivity	λ (W/mK)	0.038	0.043	0.048	0.055	0.063	0.072	0.082	ASTM C335
Nominal Density	150 kg/m ³								ASTM C302
Maximum Service Temperature	650°C								ASTM C411/ C447
Reaction to Fire	EuroClass A1 Surface burning characteristics; Flame spread = passed, Smoke development = passed								EN 13501-1 ASTM E84
Chloride Content	Less than 10 ppm Conforms to the stainless steel corrosion specification as per ASTM C795								ASTM C871 ASTM C692/ C871
Moisture Absorption	Less than 1% weight								ASTM C1104/ C1104M
Water Absorption	Less than 1 kg/m ²								EN 13472

Note: All information and data for technical parameters are based on laboratory testing.

ProRox WM 950^{SA}

Wired mat



Dimensions

Thickness(mm)	Standard Length (mm)	
	Malaysia Factory	Thailand Factory
40	5000	5000
50	5000	5000
60	4000	4000
70	2500	3000
75	2500	3000
80	2500	2000
90	2000	2000
100	2000	2000

Applications

ProRox WM 950^{SA} 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.

Compliance

ProRox WM 950^{SA} Wired Mats comply with the requirements as set by the internationally recognized standards like CINI 2.2.02 and ASTM C592 Type I, II and III.

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^{SA}, 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.

Note

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

Advantages

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

Product properties

	Performance							Standard
	Mean Temp (°C)	50	100	150	200	250	300	
Thermal Conductivity	λ (W/mK)	0.038	0.046	0.053	0.062	0.071	0.080	ASTM C177
Nominal Density	80 kg/m ³							ASTM C167
Maximum Service Temperature	650°C							ASTM C411/ C447
Linear Shrinkage	Less than 2% (at max service temperature)							ASTM C356
Reaction to Fire	EuroClass A1 Surface burning characteristics; Flame spread = passed, Smoke development = passed							EN 13501-1 ASTM E84
Chloride Content	Less than 10 ppm Conforms to the stainless steel corrosion specification as per ASTM C795							ASTM C871 ASTM C692/ C871
Moisture Absorption	Less than 1% weight							ASTM C1104/ C1104M
Water Absorption	Less than 1 kg/m ²							EN 1609

Note: All information and data for technical parameters are based on laboratory testing.

ProRox WM 960^{SA}
 Old Equivalent Grade: RockTech WM650

Heavy duty wired mat



Dimensions

Standard Width: 600 mm	Standard Length (mm)	
	Malaysia Factory	Thailand Factory
Thickness(mm)		
25	5000	5000
30	5000	5000
40	5000	5000
50	5000	5000
60	4000	4000
70	2500	3000
75	2500	3000
80	2500	2000
90	2000	2000
100	2000	2000

Applications

ProRox WM 960^{SA} 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^{SA} Wired Mats comply with the requirements as set by the internationally recognized standards like CINI 2.2.02 and ASTM C592 Type I, II and III.

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^{SA}, 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.

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

Product properties

	Performance							Standard
	Mean Temp (°C)	50	100	150	200	250	300	
Thermal Conductivity	λ (W/mK)	0.037	0.042	0.048	0.056	0.065	0.073	ASTM C177
Nominal Density	100 kg/m ³							ASTM C167
Maximum Service Temperature	650°C							ASTM C411/ C447
Linear Shrinkage	Less than 2% (at max service temperature)							ASTM C356
Reaction to Fire	EuroClass A1 Surface burning characteristics; Flame spread = passed, Smoke development = passed							EN 13501-1 ASTM E84
Chloride Content	Less than 10 ppm Conforms to the stainless steel corrosion specification as per ASTM C795							ASTM C871 ASTM C692/ C871
Moisture Absorption	Less than 1% weight							ASTM C1104/ C1104M
Water Absorption	Less than 1 kg/m ²							EN 1609

Note: All information and data for technical parameters are based on laboratory testing.

ProRox WM 970^{SA}
 Old Equivalent Grade: RockTech WM650HD

Heavy duty wired mat



Dimensions

Thickness(mm)	Standard Length (mm)	
	Malaysia Factory	Thailand Factory
25	5000	5000
30	5000	5000
40	5000	5000
50	5000	5000
60	4000	4000
70	2500	3000
75	2500	3000
80	2500	2000

Applications

ProRox WM 970^{SA} 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^{SA} Wired Mats comply with the requirements as set by the internationally recognized standards like CINI 2.2.02 and ASTM C592 Type I, II and III.

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 970^{SA}, 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.

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

Product properties

	Performance							Standard
	Mean Temp (°C)	50	100	150	200	250	300	
Thermal Conductivity	λ (W/mK)	0.038	0.043	0.050	0.057	0.066	0.076	ASTM C177
Nominal Density	128 kg/m ³							ASTM C167
Maximum Service Temperature	750°C							ASTM C411/ C447
Linear Shrinkage	Less than 2% (at max service temperature)							ASTM C356
Reaction to Fire	EuroClass A1 Surface burning characteristics; Flame spread = passed, Smoke development = passed							EN 13501-1 ASTM E84
Chloride Content	Less than 10 ppm Conforms to the stainless steel corrosion specification as per ASTM C795							ASTM C871 ASTM C692/ C871
Moisture Absorption	Less than 1% weight							ASTM C1104/ C1104M
Water Absorption	Less than 1 kg/m ²							EN 1609

Note: All information and data for technical parameters are based on laboratory testing.

ProRox SL 930^{SA}

Semi rigid slab



Applications

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

Compliance

ProRox SL 930^{SA} Slabs comply with the requirements as set by internationally recognized standards like CINI 2.2.01 and ASTM C612 Type IA and IB and II.

Installation guidelines

- Mechanically fix ProRox SL 930^{SA} 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 (≥75mm). 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.

Advantages

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

Product properties

	Performance						Standard
	Mean Temp (°C)	50	100	150	200	250	
Thermal Conductivity	λ (W/mK)	0.039	0.047	0.054	0.064	0.075	ASTM C177
Nominal Density	60 kg/m ³						ASTM C303
Maximum Service Temperature	450°C						ASTM C411/C447
Linear Shrinkage	Less than 2% (at max service temperature)						ASTM C356
Reaction to Fire	EuroClass A1 Surface burning characteristics; Flame spread = passed, Smoke development = passed						EN 13501-1 ASTM E84
Chloride Content	Less than 10 ppm Conforms to the stainless steel corrosion specification as per ASTM C795						ASTM C871 ASTM C692/C871
Moisture Absorption	Less than 1% weight						ASTM C1104/ C1104M
Water Absorption	Less than 1 kg/m ²						EN 1609

Note: All information and data for technical parameters are based on laboratory testing.

ProRox SL 950^{SA}

Rigid slab



Applications

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

Compliance

ProRox SL 950^{SA} Slabs comply with the requirements as set by internationally recognized standards like CINI 2.2.01 and ASTM C612 Type IA, II, III and IVA.

Advantages

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

Product properties

	Performance							Standard
	Mean Temp (°C)	50	100	150	200	250	300	
Thermal Conductivity	λ (W/mK)	0.038	0.046	0.053	0.062	0.072	0.081	ASTM C177
Nominal Density	80 kg/m ³							ASTM C303
Maximum Service Temperature	650°C							ASTM C411/ C447
Linear Shrinkage	Less than 2% (at max service temperature)							ASTM C356
Reaction to Fire	EuroClass A1 Surface burning characteristics; Flame spread = passed, Smoke development = passed							EN 13501-1 ASTM E84
Chloride Content	Less than 10 ppm Conforms to the stainless steel corrosion specification as per ASTM C795							ASTM C871 ASTM C692/ C871
Moisture Absorption	Less than 1% weight							ASTM C1104/ C1104M
Water Absorption	Less than 1 kg/m ²							EN 1609

Note: All information and data for technical parameters are based on laboratory testing.

ProRox SL 960^{SA}
Old Equivalent Grade: RockTech S650

Rigid slab



Applications

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

Compliance

ProRox SL 960^{SA} Slabs comply with the requirements as set by internationally recognized standards like CINI 2.2.01 and ASTM C612 Type IA,II, III, IVA and IVB.

Advantages

- Excellent thermal and acoustic insulation
- Resistant to high temperatures

Product properties

	Performance							Standard
	Mean Temp (°C)	50	100	150	200	250	300	
Thermal Conductivity	λ (W/mK)	0.038	0.044	0.050	0.057	0.065	0.075	ASTM C177
Nominal Density	100 kg/m ³							ASTM C303
Maximum Service Temperature	650°C							ASTM C411/ C447
Linear Shrinkage	Less than 2% (at max service temperature)							ASTM C356
Reaction to Fire	EuroClass A1 Surface burning characteristics; Flame spread = passed, Smoke development = passed							EN 13501-1 ASTM E84
Chloride Content	Less than 10 ppm Conforms to the stainless steel corrosion specification as per ASTM C795							ASTM C871 ASTM C692/ C871
Moisture Absorption	Less than 1% weight							ASTM C1104/ C1104M
Water Absorption	Less than 1 kg/m ²							EN 1609

Note: All information and data for technical parameters are based on laboratory testing.

ProRox SL 970^{SA}
Old Equivalent Grade: RockTech S650.128

High temperature slab



Applications

ProRox SL 970^{SA} 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.

Compliance

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

Advantages

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

Product properties

	Performance							Standard
	Mean Temp (°C)	50	100	150	200	250	300	
Thermal Conductivity	λ (W/mK)	0.038	0.043	0.049	0.056	0.064	0.074	ASTM C177
Nominal Density	128 kg/m ³							ASTM C303
Maximum Service Temperature	650°C							ASTM C411/ C447
Linear Shrinkage	Less than 2% (at max service temperature)							ASTM C356
Reaction to Fire	EuroClass A1 Surface burning characteristics; Flame spread = passed, Smoke development = passed							EN 13501-1 ASTM E84
Chloride Content	Less than 10 ppm Conforms to the stainless steel corrosion specification as per ASTM C795							ASTM C871 ASTM C692/ C871
Moisture Absorption	Less than 1% weight							ASTM C1104/ C1104M
Water Absorption	Less than 1 kg/m ²							EN 1609

Note: All information and data for technical parameters are based on laboratory testing.

ProRox SL 978^{SA}
Old Equivalent Grade: RockTech S850

High temperature slab



Applications

ProRox SL 978^{SA} 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 978^{SA} Slabs comply with the requirements as set by internationally recognized standards like CINI 2.2.01 and ASTM C612 Type IA, II, III and IVA.

Advantages

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

Product properties

	Performance							Standard
	Mean Temp (°C)	50	100	150	200	250	300	
Thermal Conductivity	λ (W/mK)	0.038	0.045	0.053	0.061	0.072	0.083	ASTM C177
Nominal Density	110 kg/m ³							ASTM C303
Maximum Service Temperature	850°C							ASTM C411/ C447
Linear Shrinkage	Less than 2% (at max service temperature)							ASTM C356
Reaction to Fire	EuroClass A1 Surface burning characteristics; Flame spread = passed, Smoke development = passed							EN 13501-1 ASTM E84
Chloride Content	Less than 10 ppm Conforms to the stainless steel corrosion specification as per ASTM C795							ASTM C871 ASTM C692/ C871
Moisture Absorption	Less than 1% weight							ASTM C1104/ C1104M
Water Absorption	Less than 1 kg/m ²							EN 1609

Note: All information and data for technical parameters are based on laboratory testing.

ProRox SL 980

Heavy duty slab



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 application which are exposed to high temperatures and high mechanical loads
- Retains shape
- Available in a wide range of thicknesses

Product properties

	Performance							Standard
	Mean Temp (°C)	50	100	150	200	250	300	
Thermal Conductivity	λ (W/mK)	0.038	0.043	0.049	0.056	0.064	0.074	ASTM C177
Nominal Density	145 kg/m ³							ASTM C303
Maximum Service Temperature	750°C							ASTM C411 / C447
Linear Shrinkage	Less than 2% (at max service temperature)							ASTM C356
Reaction to Fire	EuroClass A1 Surface burning characteristic; Flame spread = Passed, Smoke development = Passed							EN 13501-1 ASTM E84
Chloride Content	Less than 10 ppm Conforms to the stainless steel corrosion specification as per ASTM C795							ASTM C871 ASTM C692 / C871
Moisture Absorption	Less than 1% weight							ASTM C1104 / C1104M
Water Absorption	Less than 1 kg/m							EN 1609

Note: All information and data for technical parameters are based on laboratory testing.

ProRox SL 540^{SA}
Old Equivalent Grade: RockTech S650.160.HC

Compression resistant slab



Applications

ProRox SL 540^{SA} 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.

Compliance

ProRox SL 540^{SA} Slabs comply with the requirements as set by internationally recognized standards like EN14303, CINI 2.2.01 and ASTM C612 Type IA, IB, II, III and IVA.

Advantages

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

Product properties

	Performance							Standard
	Mean Temp (°C)	50	100	150	200	250	300	
Thermal Conductivity	λ (W/mK)	0.038	0.045	0.052	0.062	0.070	0.079	ASTM C177
Nominal Density	160 kg/m ³							ASTM C303
Maximum Service Temperature	650°C							ASTM C411/ C447
Linear Shrinkage	Less than 2% (at max service temperature)							ASTM C356
Reaction to Fire	EuroClass A1 Surface burning characteristics; Flame spread = passed, Smoke development = passed							EN 13501-1 ASTM E84
Chloride Content	Less than 10 ppm Conforms to the stainless steel corrosion specification as per ASTM C795							ASTM C871 ASTM C692/ C871
Moisture Absorption	Less than 1% weight							ASTM C1104/ C1104M
Water Absorption	Less than 1 kg/m ²							EN 1609

Note: All information and data for technical parameters are based on laboratory testing.

ProRox SL 560
Old Equivalent Grade: ROCKWOOL 251

Compression resistant slab



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.

Compliance

ProRox SL 560 Slabs comply with the requirements as set by internationally recognized standards like EN14303, CINI 2.2.01 and ASTM C612 Type IA, IB, II, III and IVA.

Advantages

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

Product properties

	Performance							Standard
	Mean Temp (°C)	50	100	150	200	250	300	
Thermal Conductivity	λ (W/mK)	0.037	0.042	0.048	0.055	0.063	0.074	ASTM C177
Nominal Density	175 kg/m ³							ASTM C303
Maximum Service Temperature	650°C							ASTM C411 / C447
Linear Shrinkage	Less than 2% (at max service temperature)							ASTM C356
Reaction to Fire	EuroClass A1 Surface burning characteristic; Flame spread = Passed, Smoke development = Passed							EN 13501-1 ASTM E84
Chloride Content	Less than 10 ppm Conforms to the stainless steel corrosion specification as per ASTM C795							ASTM C871 ASTM C692 / C871
Moisture Absorption	Less than 1% weight							ASTM C1104 / C1104M
Water Absorption	Less than 1 kg/m ²							EN 1609
Compressive Strength	Up to 30kPa (At 10% deformation)							EN 826

Note: All information and data for technical parameters are based on laboratory testing.

ProRox SL 580
Old Equivalent Grade: ROCKWOOL CRS

Compression resistant slab



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 construction subjected to a mechanical load.

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.

Advantages

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

Product properties

	Performance							Standard
	Mean Temp (°C)	50	100	150	200	250	300	
Thermal Conductivity	λ (W/mK)	0.038	0.042	0.048	0.055	0.064	0.074	ASTM C177
Nominal Density	150 kg/m ³							ASTM C303
Maximum Service Temperature	250°C							ASTM C411 / C447
Linear shrinkage	Less than 2% (at max service temperature)							ASTM C356
Reaction to Fire	EuroClass A1 Surface burning characteristic; Flame spread = Passed, Smoke development = Passed							EN 13501-1 ASTM E84
Chloride Content	Less than 10 ppm Conforms to the stainless steel corrosion specification as per ASTM C795							ASTM C871 ASTM C692 / C871
Moisture Absorption	Less than 1% weight							ASTM C1104 / C1104M
Water Absorption	Less than 1 kg/m							EN 1609
Compressive Strength	Up to 50kPa (At 10% deformation)							EN 826

Note: All information and data for technical parameters are based on laboratory testing.

ProRox BL 938^{SA}
Old Equivalent Grade: RockTech B350

Blanket



Dimensions

Standard Width: 600 mm	Standard Length (mm)	
	Malaysia Factory	Thailand Factory
Thickness(mm)		
50	5000	5000
75	2500	3000
100	2000	2000

Applications

ProRox BL 938^{SA} is a Blanket type product used in thermal insulation of non-vibrating industrial equipment's where temperatures can be up to 350 deg Celcius.

Compliance

ProRox BL 938^{SA} Blanket comply with the requirements as set by internationally recognized standards like ASTM C553 Type I, II and III.

Advantages

- Ease of use
- Flexible application

Product properties

	Performance				Standard
	Mean Temp (°C)	50	100	150	
Thermal Conductivity	λ (W/mK)	0.039	0.047	0.057	ASTM C177
Nominal Density	60 kg/m ³				ASTM C167
Maximum Service Temperature	350°C				ASTM C411/C447
Linear Shrinkage	Less than 2% (at max service temperature)				ASTM C356
Reaction to Fire	EuroClass A1 Surface burning characteristics; Flame spread = passed, Smoke development = passed				EN 13501-1 ASTM E84
Chloride Content	Less than 10 ppm Conforms to the stainless steel corrosion specification as per ASTM C795				ASTM C871 ASTM C692/C871
Moisture Absorption	Less than 1% weight				ASTM C1104/C1104M
Water Absorption	Less than 1 kg/m ²				EN 1609

Note: All information and data for technical parameters are based on laboratory testing.

ProRox BL 958^{SA}
Old Equivalent Grade: RockTech B450

Blanket



Dimensions

Standard Width: 600 mm	Standard Length (mm)	
	Malaysia Factory	Thailand Factory
Thickness(mm)		
50	5000	5000
75	2500	3000
100	2000	2000

Applications

ProRox BL 958^{SA} is a flexible stone wool Blanket. It is suitable for the thermal insulation of nonvibrating industrial equipment's where temperatures can be up to 450 deg Celcius.

Compliance

ProRox BL 958^{SA} Blanket comply with the requirements as set by internationally recognized standards like ASTM C553 Type I, II, III and IV.

Advantages

- Suitable up to intermediate temperature
- Ease of use
- Flexible application

Product properties

	Performance						Standard
	Mean Temp (°C)	50	100	150	200	250	
Thermal Conductivity	λ (W/mK)	0.039	0.046	0.054	0.064	0.075	ASTM C177
Nominal Density	80 kg/m ³						ASTM C167
Maximum Service Temperature	450°C						ASTM C411/C447
Linear Shrinkage	Less than 2% (at max service temperature)						ASTM C356
Reaction to Fire	EuroClass A1 Surface burning characteristics; Flame spread = passed, Smoke development = passed						EN 13501-1 ASTM E84
Chloride Content	Less than 10 ppm Conforms to the stainless steel corrosion specification as per ASTM C795						ASTM C871 ASTM C692/C871
Moisture Absorption	Less than 1% weight						ASTM C1104/ C1104M
Water Absorption	Less than 1 kg/m ²						EN 1609

Note: All information and data for technical parameters are based on laboratory testing.

ProRox BL 960^{SA}
Old Equivalent Grade: RockTech B650

Blanket



Dimensions

Density: 100 kg/m ³	Standard Length (mm)	
	Malaysia Factory(Bukit Raja)	Thailand Factory(Rayong)
Thickness(mm)		
50	5000	5000
75	2500	3000
100	2000	2000

Applications

ProRox BL 960^{SA} is a Blanket type product used in thermal insulation of non-vibrating industrial equipment's where temperatures can be up to 650 deg Celcius.

Compliance

ProRox BL 960^{SA} Blanket comply with the requirements as set by internationally recognized standards like ASTM C553 Type I, II, III, IV, V, VI and VII.

Advantages

- Resistant to high temperatures
- Ease of use
- Flexible application

Product properties

	Performance							Standard
	Mean Temp (°C)	50	100	150	200	250	300	
Thermal Conductivity	λ (W/mK)	0.041	0.049	0.057	0.066	0.074	0.083	ASTM C177
Nominal Density	100 kg/m ³							ASTM C167
Maximum Service Temperature	650°C							ASTM C411/ C447
Linear Shrinkage	Less than 2% (at max service temperature)							ASTM C356
Reaction to Fire	EuroClass A1 Surface burning characteristics; Flame spread = passed, Smoke development = passed							EN 13501-1 ASTM E84
Chloride Content	Less than 10 ppm Conforms to the stainless steel corrosion specification as per ASTM C795							ASTM C871 ASTM C692/ C871
Moisture Absorption	Less than 1% weight							ASTM C1104/ C1104M
Water Absorption	Less than 1 kg/m ²							EN 1609

Note: All information and data for technical parameters are based on laboratory testing.

ProRox LF 970

Loose fill



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							Standard
	Mean Temp (°C)	50	100	150	200	250	300	
Thermal Conductivity	λ (W/mK)	0.040	0.049	0.057	0.067	0.075	0.091	EN 12667
Maximum Service Temperature	680°C (1256°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)
Water Absorption	< 1 kg/m ² Water vapour absorption (Vapor sorption) ± 0.02% vol							EN 1609 ASTM C1104/ C1104M
Water Leachable Chloride Content (AS Quality)	Chloride content < 10 ppm Conforms to the stainless steel corrosion specification as per ASTM test methods C692 and C871 < 10 mg/kg (ph-value neutral to slightly alkaline)							EN 13468 ASTM C795 ASTM C871
Water Vapour Diffusion Resistance	μ = 1							EN 12086

Note: All information and data for technical parameters are based on laboratory testing.

ProRox GR 903

Granulate wool



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.

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.

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							Standard
	Mean Temp (°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
Water Leachable Chloride Content (AS Quality)	Chloride content < 10 ppm Conforms to the stainless steel corrosion specification as per ASTM test methods C692 and C871 < 10 mg/kg (ph-value neutral to slightly alkaline)							EN 13468 ASTM C795 ASTM C871
Reaction to Fire	EuroClass A1 Surface burning characteristics; Flame spread = passed, Smoke development = passed							EN 13501-1 ASTM E84 (UL 723)

Note: All information and data for technical parameters are based on laboratory testing.

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