

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							
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.