

### General Product Information

ROCKWOOL stone wool products are made of basalt, a volcanic stone.

ROCKWOOL stone wool products are non-combustible with a melting point of approximately 1000°C. They are particularly suitable for thermal insulation, fire protection and sound reduction/absorption.

ROCKWOOL stone wool is inorganic and contains no nutritious substance. Therefore it will not be attacked by microorganisms. Stone wool will not rot and does not attract vermin.

No CFCs, HFCs, HCFCs or asbestos are used in the manufacture of ROCKWOOL stone wool products.

### RockTech S (Slab)





### Common applications

RockTech S is particularly suited to meet the specification requirements of thermal insulation, fire protection and sound attenuation of both flat and slightly curved surfaces of tanks, vessels, boilers and ducts. The fibre structure of RockTech S provides the product with great dimensional stability and pressure resistance.

RockTech S is normally used to insulate and achieve the desired surface temperature and minimize the heat loss from equipment, thus providing energy saving to the overall process.

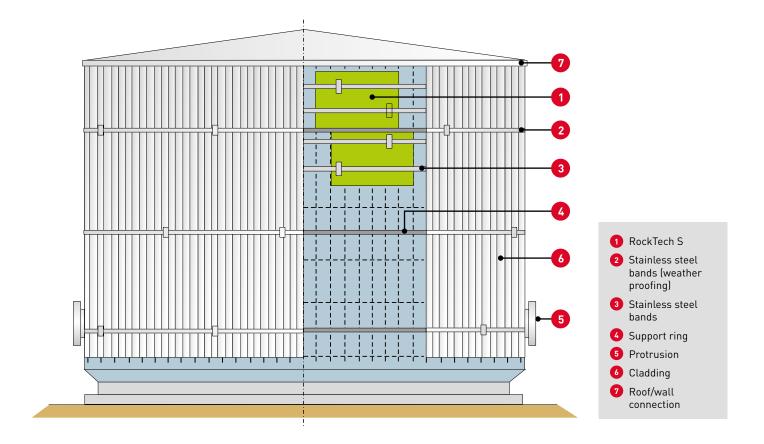
Specially formulated RockTech S850 product is designated to be used for maximum service temperature of up to 850°C. The optimum thickness to be used can be calculated with the use of sophisticated thermal insulation software available in ROCK-WOOL with the selected RockTech S series product.

### Basic installation guideline

RockTech S can be easily cut to required shape, length and width with a use of a handsaw or a sharp knife. RockTech S is securely fastened to the equipment to be insulated with the use of insulation pins which is either mechanically fastened



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or spot welded onto the surface of the equipment. The edges of each slab should be butt jointed closely together. All steel components or equipment to be insulated which is exposed to a corrosive environment should be cleaned, de-greased and coated with a protective finish before insulation is installed onto it.

The insulation should be finished with metal cladding i.e. aluminum or other approved cladding material. Both lengthwise and circular joints of the cladding are fastened with sheet metal screws or rivets. All the connections within the cladding should be made watertight using suitable sealant. In the event aluminum foil faced finishing is preferred, finished

lengthwise and crosswise joints with a self-adhesive aluminum tape (> 75mm width). When the insulating equipment is colder than the ambient temperature, and there is a risk of condensation, the insulation should be provided with a vapour barrier.

### Packaging and storage

RockTech S is shrink-wrapped in polyethylene sheets for ease of handling, transportation, storage and identification. Products should be stored indoors or under a waterproof covering. Ensure the insulation is not in direct contact with the floor; otherwise it may become wet as a result of ground moisture.



# RockTech S (Slab)

#### **Technical Parameters**

	S350	S450	S650	S850	Standards
Density	60kg/m³	80kg/m³	100kg/m³	110kg/m³	EN1602
Length x Width	1200mm x 600mm				EN882
Thermal conductivity					ASTM C177
50°C	0.037W/mK	0.038W/mK	0.038W/mK	0.038W/mK	
100°C	0.045W/mK	0.045W/mK	0.044W/mK	0.045W/mK	
150°C	0.053W/mK	0.054W/mK	0.050W/mK	0.054W/mK	
200°C	0.060W/mK	0.061W/mK	0.057W/mK	0.060W/mK	
250°C		0.074W/mK	0.065W/mK	0.072W/mK	
300°C			0.075W/mK	0.083W/mK	
350°C			0.088W/mK	0.099W/mK	
400°C				0.115W/mK	
450°C				0.131W/mK	
Hot surface performance	350°C	450°C	650°C	850°C	ASTM C411/ ASTM C447
Linear shrinkage, max % at	0%	0.2%	0.5%	0.02%	ASTM C356
maximum use temperature					
Compressive strength	Min 4 kPa, Max 30 kPa at 10% relative deformation				EN826
Surface burning characteristic					ASTM E84
FSI	0				
SD	Max 30				
Chloride content *	<=10ppm				ASTM C871
Water absorption	Min 0.12kg/m², Max 0.30kg/m²				BSEN1609
(partial immersion)					
Water vapor sorption	0.040% by weight	0.042% by weight	0.050% by weight	0.031% by weight	ASTM C1104
Corrosion to stainless steel	Conforms to the stainless steel corrosion specification as per ASTM C692 and C871 test method				ASTM C692/ ASTM C795
Health & Safety:					
Odor emission	No perceptible odour present				ASTM C665-06
Fungi resistance	Does not encourage growth of fungi				ASTM C1338
Compliance to standard	ASTM C612 "Standard specification for mineral fibre board and				
board thermal insulation" Type IA to IVB					

<sup>\*</sup>Chloride content varies between ROCKWOOL factories; please consult your local sales or technical representatives for the exact value.



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