AIS Stonewool™ Wire Mattress

Product Description

AIS Stonewool™ Wire Mattress is a versatile non-combustible stonewool mat insulation stitched on stainless steel wired mesh with stainless steel wire. It is designed to be used in a wide range of industrial applications where high demands are made on the temperature resistance of the insulation.

It is available in a range of densities, with both stainless steel and galvanised wire mesh and binding wire.

Application

AIS Stonewool™ Wire Mattresses are suitable for the thermal and acoustic insulation of industrial installations exposed to the environment, such as outdoor industrial pipework, reactors and furnaces at petrochemical plants and refineries. The material complies with the requirements set by international standards like ASTM C592 Type I, II, and III.

Technical Specification

When specifying, state the following:

The insulation material shall be AIS Stonewool™ 80/100/128 WM SS/G (stainless steel or galvanised) _____(thickness) x _____(width) _____(length) mm.

Product Properties

AIS STONEWOOL™ 80 WM								
Properties	**Performance**							**Standard**
Thermal Conductivity	Tm (°C)	50°	100°	150°	200°	250°	300°	ASTM C177
	λ (W/mK)	0.032	0.038	0.054	0.058	0.069	0.081	
Nominal Density	80kg/m³							EN 1602
Maximum Service Temperature	650°C							ASTM C411/C447
Linear Shrinkage	≤4.0% (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	Conforms to the stainless-steel corrosion specification as per							ASTM C692/C795
Moisture Absorption	<1% weight							ASTM C1104/C1104M
Water Absorption	<1kg/m²							EN 1609

AIS STONEWOOL™ 100 WM								
Properties	**Performance**							**Standard**
Thermal Conductivity	Tm (°C)	50°	100°	150°	200°	250°	300°	ASTM C177
	λ (W/mK)	0.032	0.038	0.053	0.057	0.067	0.080	
Nominal Density	100kg/m³							EN 1602
Maximum Service Temperature	650°C							ASTM C411/C447
Linear Shrinkage	≤4.0% (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	Conforms to the stainless-steel corrosion specification as per							ASTM C692/C795
Moisture Absorption	<1% weight							ASTM C1104/C1104M
Water Absorption	<1kg/m²							EN 1609

AIS STONEWOOL™ 128 WM								
Properties	**Performance**							**Standard**
Thermal Conductivity	Tm (°C)	50°	100°	150°	200°	250°	300°	ASTM C177
	λ (W/mK)	0.030	0.035	0.053	0.057	0.066	0.078	
Nominal Density	128kg/m³							EN 1602
Maximum Service Temperature	750°C							ASTM C411/C447
Linear Shrinkage	≤4.0% (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	Conforms to the stainless-steel corrosion specification as per							ASTM C692/C795
Moisture Absorption	<1% weight							ASTM C1104/C1104M
Water Absorption	<1kg/m²							EN 1609