

# FIRE ROCK

## ROCKWOOL BOARD

### Description

Rockwool is inorganic spun fibers made from natural rocks and minerals bonded by organic binder.

Rockwool is non-combustible, suitable for thermal insulation, fire protection and sound absorption/noise reduction.

FIRE ROCK BOARD is suitable for general insulation purposes on the application in industrial and commercial buildings.



### ■ Standard Densities and Sizes

Product Name		Nominal Density	Standard Thickness (mm)	Standard Size (mm)
		(kg/m <sup>3</sup> )		
FIRE ROCK	040	40	25, 40, 50, 75 and 100	600 x 1200
	060	60		
	080	80		
	100	100		
	120	120		

\* Other densities and sizes are also available on request. For details, please contact us.

### ■ Maximum Service Temperature and Classification

Product Name		Nominal Density	Max. Service Temperature (°C)	Test Method	Classification by ASTM
		(kg/m <sup>3</sup> )			
FIRE ROCK	060	60	650	ASTM C411	Type IV
	080	80			
	100	100			
	120	120			

### ■ Apparent Thermal Conductivities

Product Name	Apparent Thermal Conductivities (W/mK)					Test Method	
	Nominal Density (kg/m <sup>3</sup> )	60	80	100	120		
FIRE ROCK	Mean Temperature (°C)	24	0.033	0.034	0.034	0.034	ASTM C177
		38	0.036	0.035	0.036	0.036	
		93	0.045	0.043	0.043	0.043	
		149	0.056	0.052	0.050	0.049	
		204	0.064	0.059	0.057	0.055	
		260	0.083	0.072	0.069	0.065	
		316	0.101	0.088	0.082	0.077	
		370	0.121	0.105	0.097	0.089	
	Average 70 +5/-0	0.044 max. (Conform to JIS A9504 requirement)				JIS A1412 ISO 8302	

\* These figures are actual test result and shall not be used for specification purpose.

**P.T. NICHIAS ROCKWOOL INDONESIA**

# FIRE ROCK ROCKWOOL BOARD

## Technical Properties

Items	Unit	MG Board #100 Test Results	Spec.	Test Method
Linear shrinkage at 650°C	%	0.55	2.0 max.	ASTM C356
Fire tests on building materials	-	Non-combustible	-	BS 476 Part 4
Surface burning characteristics	Index	Flame spread 0	25 max	ASTM E84
	Index	Smoke developed 0	50 max	
Water vapor sorption	%	0.19	5.0 max.	ASTM C1104
Water absorption	kg/m <sup>2</sup>	0.044	-	EN 1609
Non fibrous (shot) content	%	150 µm 13.0	-	ASTM C1335
		500 µm 1.6	4 max.	JIS A9504
Corrosive resistances	-	Passed 28 day preproduction corrosion test		ASTM C795
Odor emission	-	Pass	-	ASTM C1304
Sound absorption	-	SAA *	1.0	ASTM C423
	-	NRC *	1.0	

\* SAA : Sound Absorption Average    NRC: Noise Reduction Coefficient

## Conforming Specification

- ASTM C612      Mineral Fiber Block and Board Thermal Insulation - Type IV
- JIS A 9504      Man made mineral fiber thermal insulation materials  
Rockwool Board No. 1 and 2 (Density : 40 ~ 100 and 101 ~ 160 kg/m<sup>3</sup>)

Remarks : For JIS A9504, our board size (600 x 1200mm) is not conforming to this specification since JIS requirement is either 605 x 910 mm or 605 x1210mm.

## Handling & Storage

- Handling carefully, avoid damages on the edge and surfaces of product
- Store in indoor and protect from direct exposure to the water