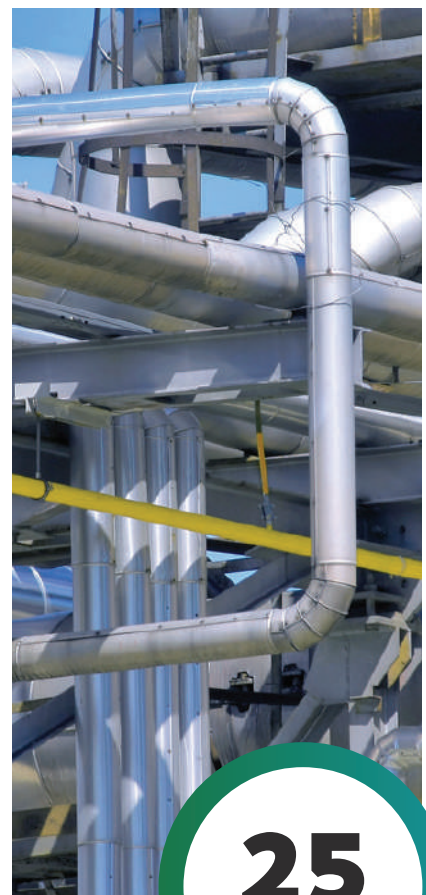


 FIRE RESISTANCE

 ACOUSTIC INSULATION

 ENERGY SAVING

 THERMAL INSULATION



25
♦ years ♦

ROCKAL MINERAL WOOL

Insulation Products





ROCKAL

Al-Alamia for Mineral wool (ROCKAL) is an 100% Egyptian industrial company that specializes in manufacturing insulation building materials, Rockal was founded in 2003 as a manufacturer of stonewool or widely known as Mineral wool starting with two production lines of 5000 tons per year. and a new production line in 2005 of 15,000 tons.

Totaling in 20,000 tons per year,

Rockal is considered a leader of the stonewool insulation in the Middle East and Africa with exports to countries like UAE, Saudi Arabia, Bahrain, Qatar, Lebanon. in Africa like Tanzania, Nigeria, Kenya, Sudan, Libya and more.

In 2016 Rockal has started manufacturing new products like Extruded Polystyrene XPS Foam, Polyethylene Foam.

In 2017 Rockal expanded its range of products to include Flexible Duct Connection, and Duct Connector for HVAC applications.

Conformity Standards:

ASTM C-767, C-795, C-612, C-692, C-871, C-355, C-177, C-411, C-423, C-556, C-165, C-665, C-553, C-692, C-303, C-1101, C-110, C-302, C-335, C-592, C-547, C-585, C-1104, E-84, E-136, E-119.
NPFA 255, ANSI A 2.5 – 1963, NAIMA, SMACNIA, UL723, IMO Resolution, CE Mark, EN 13501-2, EN 13820:2003, EN12667, EN13162, NBN EN 823&1604&12667



Rockal Mineral wool Products are tested and certified by the National Research Center, Belgian Building Research, Warrington Fire for the following properties:

- Thermal Conductivity (K-Value, R-Value)
- Chemical Analysis
- Heat Stability
- Fiber Content
- PH Value
- Linear Shrinkage
- Compressive Strength
- Water Vapor Absorption
- Odor Emission
- Flammability
- Corrosiveness to steel
- Sag Resistance

All tests and certifications are available upon request.

Our Mission

Rockal has a mission of being a major supplier & manufacturer of building materials locally & in the region to fulfill the increasing demand of building materials and specifically insulation in the region.

Business Strategy

Rockal is following an expansion based business strategy, seeking to expand production facilities to meet the market high demand, and also expanding in adding new products to the Rockal Directory of products to meet the market expectations in supplying high quality products with cost efficiency aiming at our client's total satisfaction providing totally friendly environment solutions.

Vision

Rockal vision in 10 years since 2010 to be market leader in the stone wool sector and develop higher quality standards in the market and add 5 new production lines of new products which has already been achieved ahead of schedule.

Experience

Our Sales & Marketing teams are well trained and efficient, they are motivated to achieve our targets and deliver the right and accurate answers to our client's inquiries, and answer all the technical details concerning Rockal Products.

Quality

Rockal follows the highest quality standards worldwide by applying a lot of strategies like the 5S and LEAN. Rockal is accredited the ISO 9001, 8001, 18001. Rockal is accredited the CE mark for its stone wool products. conducting over 50 Lab tests on the stone wool products, Rockal ensures the highest quality standards when it comes to a product carrying its name.



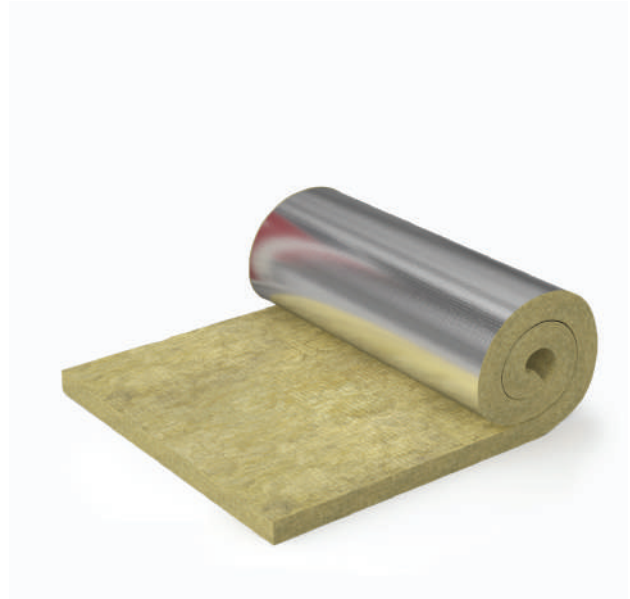
Trust

Rockal name has implied the meaning of trust over the years through our great experience in our field we are able to gain the trust of our valued clients and become a qualified partner in their journeys of success.

01

Rockal Duct Wrap DW 35 – DW 40 – DW 56

Rockal Mineral wool Rolls are composed of mineral rock fibers, processed from volcanic basaltic rocks, Fibers are bonded together with a thermosetting binder which gives the flexibility & resilience to the products. Rockal Mineral wool Rolls comply with ASTM C-553-92 Type VII, E-84, E-119.



Applications:

Thermal & Acoustic insulation of rectangular and round, heating, ventilation, air conditioning duct work temperature range 10°C to 600°C. Used in commercial, industrial, and residential buildings specially for small areas. Helps saving energy up to 80%, controlling heat loss or gain and condensation during system operations.



Available Products:

Product name	Dimensions		Density (Kg/M ³)	Thickness (mm.)	Thermal Conductivity (W/m.k @ 10° C)
	Length (m.)	Width (m.)			
Rockal DW 35	12.5	1.0 or 1.2	35	25 to 50	0.035 to 0.04
Rockal DW 40	12.5	1.0 or 1.2	40	25 to 50	
Rockal DW 56	12.5	1.0 or 1.2	56	25 to 50	

N.B Any other sizes can be manufactured upon special requests.

Facing:

Rockal Duct Wrap Rolls are faced with reflective vapor barrier material (Reinforced Aluminum Foil FSK).

Thermal Conductivity:
(0.028 to 0.04) W/m.k @ 10°C (ASTM C-177)

Mean Temperature (°C)	Thermal Conductivity (W/m.k) For the following densities in (Kg/M³)								
	35	40	50	70	100	128	140	160	200
10	0.036	0.037	0.037	0.038	0.037	0.038	0.038	0.028	0.028
50	0.048	0.039	0.040	0.038	0.037	0.039	0.035	0.037	0.037
100	0.046	0.047	0.047	0.046	0.046	0.049	0.039	0.040	0.040
150	0.054	0.054	0.055	0.053	0.054	0.053	0.041	0.056	0.057
200	0.066	0.067	0.068	0.064	0.060	0.058	0.049	0.055	0.059
250	0.081	0.082	0.084	0.080	0.081	0.069	0.056	0.065	0.067
350	0.112	0.122	0.124	0.120	0.121	0.091	0.084	0.087	0.088
450	0.131	0.142	0.146	0.135	0.136	0.139	0.132	0.128	0.135

All tests and certifications are available upon request.

Assembly Details:

Cut the lamella roll to the right length using the following formulas:

Circular Air Ducts:
(Diameter + 2 x insulation thickness) + 3.14 + 30 mm

Rectangular Ducts:
Circumference + 8 x Thickness insulation + 50 mm

For ducts with flanged joints, we recommend fitting the insulation to the exact width between the flanged joints. Rockal Duct Wrap can be mechanically fixed using self-adhesive stick pins, adhesive coating or tie rods according to preference.

Wherever there is a risk of condensation on the flange, place additional loose strip all joints shall be securely taped with self-adhesive aluminum tape with a minimum width of 75 mm.



All overlaps shall be stapled at the other side of the blanket by applying adhesive tape of at least 50 mm wide.

For rectangular ducts with large section length (more than 600 mm) the roll should be adjusted with adhesive straps or washers (5 or 6 per in2) fixed by a welded bar or hit to the duct. Follow the advices of the aluminum adhesive tapes producers to assure the needed air vapor retarding results.

Technical Properties:

Property	Value
Service Temp. (Hot Side)	400°C to 600°C
Melting Temp.	1500°C
Outer Facing Temp. Range	-29°C to 66°C
Moisture Absorption	< 1% (By weight, Water repellent, Non-Hygrosopic, Non-Capillary No Effect on Stability)
Corrosion Resistance	PH 7 or Slightly Alkaline
Soluble Chlorides	6 PPM
Fungi Resistance	Doesn't encourage Fungi growth
Noise Reduction Coefficient (NRC)	≈ 0.85
Asbestos Content	Non-Toxic and not hazardous to health and Asbestos Free Does not contain: AMPHIBOLE {CA2 MG3(OH)2 SI8 O22} Nor SERPENTINE Asbestos {MG3 SI2 (OH)4 O5}
Environment	CFC and HCFC Free
Expansion and Contraction	Completely Stable
Shot Content	Less then 25% ASTM C-1335
Condensation	The vapor diffusion of Rockal Mineral wool is negligible its considered zero compared to other insulation materials

Fire Safety:

Rockal Mineral wool fibers products are classified as Non-Combustible materials and follow the fire safety rating achievements:

- Class 1 Surface spread of flame in accordance to BS 476
- Class 0 in accordance to BS 476
- Class A1 in accordance to European standards
- Surface burning characteristics in accordance to ASTM E-84
- Fire Spread Index: Less than 10
- Smoke Developed Index: Less than 25

Packaging & Handling

- Each Rockal Duct Wrap Roll is packed in polyethylene bag protected from UV light rays and fixed with product specification sticker.
- Mineral wool Duct Wrap Rolls shall be handled with care since its mainly consisting of fibers.
- Rockal Duct Wrap Rolls shall be stored horizontally in a dry closed area securely packaged with a maximum of cumulative height of 3 rolls to maintain the product properties.



02

Rockal Mineral wool Low Density Rolls

LDR30 – LDR50 – LDR60

Rockal Mineral wool Low Density Rolls are composed of mineral rock fibers, processed from volcanic basaltic rocks, Fibers are bonded together with a thermosetting binder which gives the flexibility & resilience to the products.

Rockal Mineral wool Low Density Rolls are normally produced at low densities and comply with ASTM C-553-92 Type VII, E-84, E-119.

Applications:

Thermal and acoustic insulation for cold storages, refrigerated tanks & curved duct. Used in commercial, industrial and residential buildings especially in prefabricated housing, cavity walls, steel structure buildings under or over purlins and double cladding system sandwich panel systems, wall partitions and poultry farms and suspended ceilings. Helps in controlling heat loss or gain and condensation. Aluminum foil acts as a vapor barrier to prevent condensation.

Available Products:

Product name	Dimensions		Density (Kg/M ³)	Thickness (mm.)	Thermal Conductivity (W/m.k)
	Length (m.)	Width (m.)			
Rockal LDR 30	12.5	1.0 or 1.2	30	30 to 100	
Rockal LDR 40	12.5	1.0 or 1.2	40	30 to 100	0.035 to 1.36
Rockal LDR 50	12.5	1.0 or 1.2	50	30 to 100	
Rockal LDR 60	12.5	1.0 or 1.2	60	30 to 100	

N.B Any other sizes can be manufactured upon special requests.

Facing:

Rockal Low Density Rolls are faced with reflective vapor barrier material (Reinforced Aluminum Foil FSK), or colored vinyl or BGT or BGF or Kraft Paper.

Mean Temperature (°C)	Thermal Conductivity (W/m.k) For the following densities in (Kg/M³)								
	35	40	50	70	100	128	140	160	200
10	0.036	0.037	0.037	0.038	0.037	0.038	0.038	0.028	0.028
50	0.048	0.039	0.040	0.038	0.037	0.039	0.035	0.037	0.037
100	0.046	0.047	0.047	0.046	0.046	0.049	0.039	0.040	0.040
150	0.054	0.054	0.055	0.053	0.054	0.053	0.041	0.056	0.057
200	0.066	0.067	0.068	0.064	0.060	0.058	0.049	0.055	0.059
250	0.081	0.082	0.084	0.080	0.081	0.069	0.056	0.065	0.067
350	0.112	0.122	0.124	0.120	0.121	0.091	0.084	0.087	0.088
450	0.131	0.142	0.146	0.135	0.136	0.139	0.132	0.128	0.135

N.B. The R Value is 1/Thermal Conductivity or Thickness(m.) / Thermal Conductivity

Fire Safety:

Rockal Mineral wool fibers products are classified as Non-Combustible materials and follow the fire safety rating achievements:

- Class 1 Surface spread of flame in accordance to BS 476
- Class 0 in accordance to BS 476
- Class A1 in accordance to European standards
- Surface burning characteristics in accordance to ASTM E-84
- Fire Spread Index: Less than 10
- Smoke Developed Index: Less than 25

Packaging & Handling

Each Rockal Low Density Roll is packed in polyethylene bag protected from UV light rays and fixed with product specification sticker.

Rockal Low Density Rolls shall be handled with care since its mainly consisting of fibers.

Rockal Low Density Rolls shall be stored horizontally in a dry closed area securely packaged with a maximum of cumulative height of 4 rolls to maintain the product properties.



Technical Properties:

Property	Value
Service Temp. (Hot Side)	400°C
Melting Temp.	1500°C
Outer Facing Temp. Range	-29°C to 66°C
Moisture Absorption	< 1% (By weight, Water repellent, Non-Hygroscopic, Non-Capillary No Effect on Stability)
Corrosion Resistance	PH 7 or Slightly Alkaline
Soluble Chlorides	6 PPM
Fungi Resistance	Doesn't encourage Fungi growth
Noise Reduction Coefficient (NRC)	≈ 0.85
Asbestos Content	Non-Toxic and not hazardous to health and Asbestos Free Does not contain: AMPHIBOLE {CA2 MG3(OH)2 SI8 O22} Nor SERPENTINE Asbestos {MG3 SI2 (OH)4 O5}
Environment	CFC and HCFC Free
Expansion and Contraction	Completely Stable
Shot Content	Less than 25% ASTM C-1335
Condensation	The vapor diffusion of Rockal Mineral wool is negligible its considered zero compared to other insulation materials

03

Rockal Mineral wool Wired Rolls

WR70 – WR80 – WR100
WR120 – WR140 – WR160



Applications:

Thermal and acoustic insulation for heavy industrial applications where severe conditions of heat and vibration occur due to high velocities involved. Also used for large diameter piping, flanges, valves, vessels, chimney walls and furnaces. Ideal for wrapping large curved surfaces or structures.

Rockal Mineral wool Wired Rolls are composed of mineral rock fibers, processed from volcanic basaltic rocks, formed by stitching galvanized steel wires to hexagonal galvanized wire mesh. Fibers are bonded together with a thermosetting binder which gives the flexibility & resilience to the products. Rockal Mineral wool Wired Rolls are normally produced at low densities and comply with ASTM C-592-80 Class 1, E-84, E-119.



Available Products:

Product name	Dimensions		Density (Kg/M ³)	Thickness (mm.)	Thermal Conductivity (W/m.k @ 10 C)
	Length (m.)	Width (m.)			
Rockal WR 70	3 or 5	1	70	30 to 100	
Rockal WR 80	3 or 5	1	80	30 to 100	
Rockal WR 100	3	1	100	30 to 100	0.034 to 1.36
Rockal WR 120	3	1	120	30 to 50	
Rockal WR 140	3	1	140	30 to 50	
Rockal WR 160	3	1	160	30 to 50	

N.B Any other sizes can be manufactured upon special requests.

Facing:

Rockal Mineral wool Wired Blankets are produced with 25 mm (1 Inch) opening galvanized hexagonal wire mesh $y = 0.7\text{mm}$ on one side. Wire mesh adds strength to the material and also forms an excellent surface for different finishing materials to be installed. Special orders for stainless steel wire mesh facing 0.7mm are available.

Packaging & Handling

- Each Rockal Wired Roll is packed in polyethylene bag protected from UV light rays and fixed with product specification sticker.
- Rockal Wired Rolls shall be handled with care since its mainly consisting of fibers.
- Rockal Wired Rolls shall be stored horizontally in a dry closed area securely packaged with a maximum of cumulative height of 4 rolls to maintain the product properties.

Thermal Conductivity:

Mean Temperature (°C)	Thermal Conductivity (W/m.k) For the following densities in (Kg/M ³)						
	80	96	100	120	128	144	150
50	0.038	0.037	0.037	0.038	0.038	0.039	0.039
100	0.044	0.043	0.043	0.045	0.046	0.046	0.046
150	0.053	0.050	0.051	0.051	0.052	0.051	0.052
200	0.062	0.059	0.060	0.060	0.060	0.059	0.059
250	0.070	0.068	0.069	0.070	0.070	0.069	0.069
300	0.086	0.081	0.082	0.083	0.082	0.082	0.081
350	0.102	0.095	0.095	0.091	0.091	0.091	0.091

N.B. The R Value is $1/\text{Thermal Conductivity} \times \text{Thickness(m)}$ / Thermal Conductivity

Technical Properties:

In Sabine units **a** s. (ISO, R-354 Standard)

Property	Value	
Service Temp. (Hot Side)	400°C to 750°C	
Melting Temp.	1500°C	
Outer Facing Temp. Range	-29°C to 66°C	
Moisture Absorption	< 1% (By weight, Water repellant, Non-Hygroscopic, Non-Capillary No Effect on Stability)	
Corrosion Resistance	PH 7 or Slightly Alkaline	
Soluble Chlorides	6 PPM	
Fungi Resistance	Doesn't encourage Fungi growth	
Noise Reduction Coefficient (NRC)	≈ 0.85	
Asbestos Content	Non-Toxic and not hazardous to health and Asbestos Free Does not contain: AMPHIBOLE {CA2 MG3(OH)2 Si8 O22} Nor SERPENTINE Asbestos {MG3 Si2 (OH)4 O5}	
Environment	CFC and HCFC Free	
Expansion and Contraction	Completely Stable	
Shot Content	Less than 25%	ASTM C-1335
Condensation	The vapor diffusion of Rockal Mineral wool is negligible its considered zero compared to other insulation materials	
Rigidity	Rigid	ASTM C-1101 / M

Fire Safety:

Rockal Mineral wool fibers products are classified as Non-Combustible materials and follow the fire safety rating achievements:

- Class 1 Surface spread of flame in accordance to BS 476
- Class 0 in accordance to BS 476
- Class A1 in accordance to European standards
- Surface burning characteristics in accordance to ASTM E-84
- Fire Spread Index: Less than 10
- Smoke Developed Index: Less than 25



Rockal Mineral wool Wired Rolls are fire proof, the following figures indicate the thickness of the rolls needed for application between two flat steel structures with reference to the ISO curves.

Density (Kg/M) ³	Recommended Thickness (mm.)			
	30 min.	60 min.	90 min.	120 min.
70	50	100	140	190
80	50	90	120	160
100	50	80	110	130

Installation & Assembly

Cut the wired roll length so that the roll 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 joint of the rolls (linear and circular) must be wired together using steel wire (Min. 0.5mm) or secured with matt hooks. Stainless steel pipes with a temperature of >350°C are preferably to be insulated using Rockal Mineral wool Wired Rolls with stainless steel wire mesh instead.

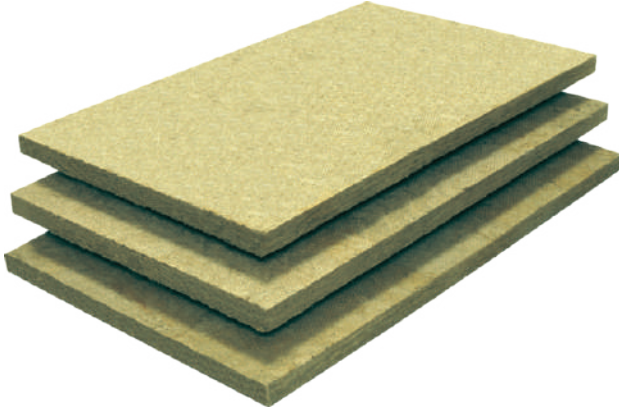
If the rolls are assembled in multiple layers all joints and overlaps must be staggered (Masonry Bond). During installation please note that every 3 to 4 meters insulation supports shall be installed before the cladding is applied due to the limited pressure resistance of the Mineral wool Rolls. The insulation finishing shall be a metallic surface (e.g. aluminum), expansion joints are provided to cater for expansion of the



the piping. Both linear and circular joints are fastened with sheet-metal screws, hard aluminum or stainless steel 1/2" with 8 pcs per meter. Close the expansion joints with a steel tensioning wire. Connections to mountings, head and end caps etc.

04

Rockal Mineral wool High & Low Density Boards



LDB40 – LDB50 – LDB70 – HDB100 – HDB120

Rockal Mineral wool Boards are composed of mineral rock fibers, processed from volcanic basaltic rocks, Fibers are bonded together with a thermosetting binder which gives the flexibility & resilience to the product. Rockal Boards are especially rigid than other Rockal Mineral wool products and comply with ASTM C-612.

Applications:

Thermal and acoustic insulation and fire barrier used in commercial, industrial, residential buildings. Mainly used for flat surfaces like rectangular tanks, building facades, studios, theaters, gypsum board partitioning, ceiling, building facades and curtain walls and flooring insulation.

Available Products:

Product name	Dimensions		Density (Kg/M ³)	Thickness (mm.)	Thermal Conductivity (W/m.k)
	Length (m.)	Width (m.)			
Rockal LDB 40	1.2	0.6	40	50 to 100	
Rockal LDB 50	1.2	0.6	50	50 to 100	0.035 to 1.36
Rockal LDB 70	1.2	0.6	70	25 to 100	
Rockal HDB 100	1.2	0.6	100	25 to 50	
Rockal HDB 120	1.2	0.6	120	30 to 50	

N.B Any other sizes can be manufactured upon special requests.

Facing:

Rockal Mineral wool Boards can be Non-Faced or faced with reflective vapor barrier material (Reinforced Aluminum Foil FSK) or Kraft Paper, fiber glass tissue BGT or BGF.

Technical Properties:

In Sabine units α s. (ISO, R-354 Standard)

Property	Value	
Service Temp. (Hot Side)	400°C to 750°C	
Melting Temp.	1500°C	
Outer Facing Temp. Range	-29°C to 66°C	
Moisture Absorption	< 1% (By weight, Water repellent, Non-Hygroscopic, Non-Capillary No Effect on Stability)	
Corrosion Resistance	PH 7 or Slightly Alkaline	
Soluble Chlorides	6 PPM	
Fungi Resistance	Doesn't encourage Fungi growth	
Noise Reduction Coefficient (NRC)	≈ 0.85	
Asbestos Content	Non-Toxic and not hazardous to health and Asbestos Free Does not contain: AMPHIBOLE {CA ₂ MG ₃ (OH) ₂ Si ₈ O ₂₂ } Nor SERPENTINE Asbestos {MG ₃ Si ₂ (OH) ₄ O ₅ }	
Environment	CFC and HCFC Free	
Expansion and Contraction	Completely Stable	
Shot Content	Less than 25%	ASTM C-1335
Condensation	The vapor diffusion of Rockal Mineral wool is negligible its considered zero compared to other insulation materials	
Rigidity	Rigid	ASTM C-1101 / M

Sound absorption coefficient:

Insulation Thickness (mm.)	Sound Absorption Coefficient at Frequencies (HZ)						
	125	250	500	1000	2000	4000	NRC
							NRC
35	0.06	0.30	0.53	0.75	0.76	0.91	0.60
40	0.35	0.60	0.64	0.89	0.97	1.00	0.95
50	0.38	0.63	0.67	0.90	0.98	1.00	0.96
60	0.38	0.67	0.83	0.91	0.99	1.00	0.96
70	0.42	0.82	0.90	0.91	0.99	1.00	0.96
80	0.51	0.83	0.93	0.93	0.99	1.00	0.97

Compression Resistance:

Load in Kpa at 10% Compression

Density (Kg/M ³)	40	60	70	100	120
Load (kpa)	2.8	5	6	10.5	18.8

Thermal Conductivity:

Mean Temperature (°C)	Thermal Conductivity (W/m.k) For the following densities in (Kg/M ³)						
	35	40	50	70	100	128	140
10	0.036	0.037	0.037	0.038	0.037	0.038	0.038
50	0.048	0.039	0.040	0.038	0.037	0.039	0.035
100	0.046	0.047	0.047	0.046	0.046	0.049	0.039
150	0.054	0.054	0.055	0.053	0.054	0.053	0.041
200	0.066	0.067	0.068	0.064	0.060	0.058	0.049
250	0.081	0.082	0.084	0.080	0.081	0.069	0.056
350	0.112	0.122	0.124	0.120	0.121	0.091	0.084
450	0.131	0.142	0.146	0.135	0.136	0.139	0.132

N.B. The R Value is 1/Thermal Conductivity or Thickness(m.)/ Thermal Conductivity

Packaging & Handling

- Each 8 or 4 (depending on thickness)
Rockal Mineral wool Board is packed in polyethylene bag protected from UV light rays and fixed with product specification sticker.
- Rockal Mineral wool Boards shall be handled with care since its mainly consisting of fibers.
- Rockal Mineral wool Boards shall be stored horizontally in a dry closed area securely packaged with a maximum of cumulative height of 4 packets to maintain the product properties.

05

Rockal Mineral wool Pipe Section

PS128 – PS140 – PS160



Rockal Performed Pipe Section are made of Mineral wool fibers spun from molten basaltic rocks bonded together by a thermo-setting resin binder. The fibers are molded around the pipes of different standard diameter at the required thickness and dried to form rigid hollow cylinder insulation, which then is linearly slit to allow easy installation.

Applications:

Rockal Performed Pipe Section is used over a very wide range of temperatures to insulate all sizes of cold and hot piping. Like domestic water in buildings and chemical process such as in oil refineries, chemical and petro-chemical insulation and

and desalination plants, HVAC chilled water systems, oil pipelines. Also used as acoustic insulation of pipelines where gas fluids or solid particles are transferred in high velocities.

Available Products:

Product name	Dimensions		Density (Kg/M ³)	Thickness (mm.)	Thermal Conductivity (W/m.k)
	Length (m.)	Pipe size (Inch: schedule 40)			
Rockal PSXX	1	½” – 24”	100-200	25 to 250	0.037 to 0.122

N.B Any other sizes can be manufactured upon special requests.

Facing:

Rockal Mineral wool Pipe Section comes Non-faced or faced with reflective vapor barrier material (Reinforced Aluminum foil FSK).



Thermal Conductivity:

Mean Temperature (°C)	Thermal Conductivity (W/m.k)
0°	0.034
50°	0.036
100°	0.041
150°	0.051
200°	0.063
250°	0.074
300°	0.90
400°	0.122



Technical Properties:

Property	Value
Service Temp. (Hot Side)	400°C to 750°C
Melting Temp.	1500°C
Outer Facing Temp. Range	-29°C to 66°C
Moisture Absorption	< 1% (By weight, Water repellent, Non-Hygroscopic, Non-Capillary No Effect on Stability)
Corrosion Resistance	PH 7 or Slightly Alkaline
Soluble Chlorides	6 PPM
Fungi Resistance	Doesn't encourage Fungi growth
Noise Reduction Coefficient (NRC)	≈ 0.85
Asbestos Content	Non-Toxic and not hazardous to health and Asbestos Free Does not contain: AMPHIBOLE {CA2 MG3(OH)2 S18 O22} Nor SERPENTINE Asbestos {MG3 SI2 (OH)4 O5}
Environment	CFC and HCFC Free
Expansion and Contraction	Completely Stable
Shot Content	Less than 25% ASTM C-1335
Condensation	The vapor diffusion of Rockal Mineral wool is negligible its considered zero compared to other insulation materials

Steel Pipes to BS 1387, and ASI/ASTM B 36. 10–1985

NOM.BOR		O.D		MM							
Mm	inch	mm	inch	20	25	30	40	50	60	75	100
				inch $\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3	4
15	$\frac{1}{2}$	21	27/32								
20	$\frac{3}{4}$	27	11/16								
25	1	43	1 11/32								
32	1 $\frac{1}{4}$	42	1 11/16								
40	1 $\frac{1}{2}$	48	1 29/32								
50	2	60	2 3/8								
65	2 $\frac{1}{2}$	76	3								
80	3	89	3 $\frac{1}{2}$								
100	4	114	4 $\frac{1}{2}$								
125	5	140	5 $\frac{1}{2}$								
150	6	166	6 $\frac{1}{2}$								
200	8	219	8 $\frac{5}{8}$								

Installation & Assembly

Prior to the installation of Rockal Mineral wool Pipe Section, it is important to consider the following notes:

Clean up and dry all surfaces to be insulated before installation of the pipe section insulation. Under no circumstances should the surface be insulated while its wet or in frosted condition. Stapling the aluminum sealing strip (overlap) and thus puncturing the vapor barrier is not permissible.

During installation, the pipe section shall be wrapped around the pipe with horizontal seem on the lower side of the pipe and the ends jointed. The self-adhesive tape is used to seal the pipe section after its snapped on the pipe. Binding wires can be used to secure insulation all around the pipe to ensure maximum safety in the event of fire. Pipe bends are insulated using the same specifications as the straight piping.



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