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Rockal Rockwool Low Density Rolls

LDR30 – LDR50 – **LDR60**

Rockal Rockwool 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 Rockwool 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 Rockwool 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 {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 Rockwool is negligible its considered zero compared to other insulation materials	