



ROCKAL PANELS

LDP40-50-70-HDB100-120-140-200

DESCRIPTION:

*ROCKAL panels products are composed of mineral rock fibers, processed from the volcanic basalt rocks. Fibers are bonded together with a thermosetting binder and complying with **ASTM C-612***

APPLICATION:

- * *For Thermal and Acoustical Insulation and fire barrier Used in Commercial, Industrial, and Residential Buildings especially for prefabricated house. Cold stores, refrigerated tanks and large vessels, bulk heads and ship decks, external duct insult, duct lining cavity walls, steel structure buildings under or over purlins and duple cladding system –sandwich system, wall partitions, floors and suspended calling.*
- * *Acoustical insulation for seminar & conference rooms, workshops, factories and sport halls.*

AVAILABLE PRODUCTS:

Product Name	Dimension		Density kg/m ³ Rang (30 To 56)	Thickness (mm)	Thermal Conductivity W/mk @ 10 °C
	Length (m)	Width (m)			
ROCKAL LDP 40	1.20	0.60	40	30 to 100	0.036 TO 0.04
ROCKAL LDP 50			50		
ROCKAL LDP 70			70		
ROCKAL LDP 100			100		
ROCKAL LDP 120			120		

NOTE:

Any other sizes can be produced upon special order

FACING:

ROCKAL panel can be Non-Faced or Faced with Reflective vapor barrier material as aluminum Foil or Non Reflective facing (Kraft paper), bitumen paper, fiber glass tissue (white or black)



THERMAL CONDUCTIVITY: (0.036) W/M K@ 10 °C (ASTM C-177)

MEAN TEMPERATURE (°C)	THERMAL CONDUCTIVITY W/MK				
	40 KG/M3	60 KG/M3	70 KG/M3	100 KG/M3	120 KG/M3
50	0.046	0.042	0.039	0.038	0.036
100	0.050	0.047	0.045	0.043	0.042
150	0.075	0.060	0.054	0.051	0.050
200	0.098	0.070	0.065	0.062	0.060
250	0.124	0.087	0.074	0.072	0.071
300	-----	0.109	0.087	0.087	0.053



INSTALLATION GUIDELINES:

*mechanically fix rockal board using self-adhesive or welded pins in the case of aluminum foil facing;
 finish lengthwise and crosswise joints with a self – adhesive aluminum tape.*

*(≥75 mm) when insulating objects colder than the ambient temperature, where there is a risk of condensation
 the insulation should be provided with a vapour barrier.*

*for external applications the insulation should be finished with a metal, (e.g aluminum)
 watertight covering*





TECHNICAL PROPERTIES:

PROPERTY	VALUE	PRODUCT COMPLIANCE
SERVICE TEMP.(HOT SIDE) ROCKWOOL MELTING TEMP. OUTER FACING LIMITING TEMP.	750 °C 1150 °C 100	ASTM C 411
FIRE CLASSIFICATION FLAME SPREAD INDEX SMOKE DEVELOPED FIRE RATING	NON- COMBUSTIBLE < 10 < 15 3-4 HRS	ASTM E 136, BS 476 P , 4, DIN 4120, IMO RESOLUTION A 4729 (X1) ASTM E 84 ASTM E 84
MOISTURE SORPTION	< 1 % (BY WEIGHT, WATER REPELLANT NON HYGROSCOPIC NON CAPILLARY NO EFFECT ON ITS STABILITY	ASTM C 1104
CORROSION RESISTANCE SOLUBLE CHLORIDES	PH 7 OR SLIGHTLY ALKALINE 6 PPM	ASTM C 871 , ASTM C 692-77 (CORROSION TEST) ASTM C 871-77 (CHEMICAL TEST)
FUNGI RESISTANCE	DOES NOT ENCOURAGE FUNGI GROWTH	(ASTM C -665)
NOISE REDUCTION COEFFICIENT (NRC)	0.95-1.1	ASTM C 423-90A BS-EN ISO 354: 2003
ASBESTOS CONTENT	DOES NOT CONTAIN : AMPHIBOLE (CA2 MG3(OH)2 SIB O22) NOR SERPENTINE ASBESTOS (MG3 SIZ (OH)4 O5)	
ENVIRONMENT	CFC AND HCFC FREE	
EXPANSION AND CONTRACTION	COMPLETELY STABLE	
SHOT CONTENT	< 25% BY WEIGHT	
RIGIDITY	RIGID	ASTM C 1101 /C 1101 M

SOUND ABSORPTION COEFFICIENT FOR DENSITY 50KG/M3

INSULATION THICKNESS (MM)	SOUND ABSORPTION COEFFICIENT AT FREQUENCIES (HZ)						
	125	250	500	1000	2000	4000	NRC
40	0.23	0.59	0.85	0.91	0.99	0.98	0.88
60	0.28	0.68	0.90	0.97	1.00	0.98	0.95
70	0.30	0.72	1.00	1.00	0.96	0.99	0.98
100	0.33	0.86	1.10	1.10	1.05	0.99	1.05

COMPRESSSION RESISTANCE:

load in kpa at 10 % compression

DENSITY (KG/M3)	40	60	70	100	120
LOAD (KPA)	2.8	5	6	10.5	18.8

PACKING:

Packed in polyethylene bag protected from uv light rays and fixed with sticker.

