



ROCKLOYD



ROCKWOOL SLAB, ROLLS, MATTRESS, PIPE SECTIONS, BULK FIBRE

Rockloyd is a precisely engineered Resin Bonded Fibrous insulation to offer maximum resistance to heat passage. Rockloyd fibers are spun from selected rocks, melted at 1600°C and blended to a carefully adjusted chemical composition. Its centrifugally spun fibers have a diameter 1/20th that of human hair which are felted using State of the Art Technology into bonded and cured Slabs, Mattress and Pipe Section to optimum density and resilience.

Over 50 million sq. mts. of Rockloyd Insulation is in services in prestigious projects within the country saving millions of tonnes of fuel year after year.



SALIENT FEATURES

- ➔ Higher Thermal Performance, as it is made out of Rockwool and not slagwool.
- ➔ Eliminates settling and sagging.
- ➔ Longer life, permitting reuse after removal during maintenance.
- ➔ Environment friendly, as there is no chicken feathering (which normally pollutes the environment). It is ECO friendly to personnel due to the chemistry of fibres.
- ➔ Untaminated, as manufacturing is totally a Dry Process.
- ➔ Application Friendly, as it permits very fast installation.
- ➔ Can feature resistance to capillary if needed.

CORROSION PROTECTION

Rockloyd fibers, in the first place, are devoid of impurities like Halides (Chlorides & Fluorides) and Sulphides which are commonly found in other materials such as Calcium Silicate. This is due to the fact that Rockloyd fibers are manufactured by a dry manufacturing process and its faint alkalinity actually fight against corrosive reactions. It meets various critical specifications including ASTM C-795 requirements where specified.

This feature is responsible for its exclusive selection for critical applications such as Nuclear Power Plants, Ship building and Railway coaches where corrosion resistance is of vital significance.

WATER & MOISTURE REPELLENCE

Rockloyd by virtue of fiber surface treatment and lay pattern has an angle of contact exceeding 90°C which results in good resistance to water and moisture ingress and hence does not promote capillary action. When tested as per IS, BS and ASTM standards the material exhibits excellent resistance to moisture as compared to materials like Calcium Silicate and Glasswool which are inherently hygroscopic in nature.

All insulation materials degrade in their properties when water or moisture enters their body.

WATER REPELLENT GRADE ROCKWOOL PRODUCTS

It is special grade Rockwool materials wherein special type of chemical is added during its manufacturing process to make it Water Repellent grade. For this property it is tested as per BS : 2972 with partial immersion in water for 48 hrs. which exhibits superior results as compared to normal grade Rockwool.

INHIBITED ROCKWOOL PRODUCTS

Where stress corrosion is there on austenitic Stainless Steel inhibited Rockwool products are used. Inhibition is done by spraying sodium silicate of adequate quantity in order to lower chloride content as low as 2 ppm.

SOUND ABSORPTION

Excellent sound absorption by virtue of its scientific fiber lay pattern which ensures controlled dispersion of air pockets and precise air flow resistance.

FIRE RESISTANCE

Incombustible when tested as per IS:3144 (Melting Point of fibers is above 1000°C (1825°F)

COMPRESSION RESISTANCE

Excellent Compression resistance by virtue of its scientific fibre lay pattern which ensures controlled dispersion of air pockets.

THERMAL CONDUCTIVITY

Resin bonded Rockloyd material is the only one to offer the LOWEST THERMAL CONDUCTIVITY to weight ratio among all industrial insulants thus minimizing the total load on the applied equipment and piping.

ROCKLOYD MATTRESS

WHY RESIN BOND & MACHINE STITCH



ROCKLOYD, like all scientifically processed fibrous insulants is composed of fibres which are laid in the optimum configuration to offer maximum resistance to heat flow. To retain these exceptional properties up to the point of end-use, fibres are interlocked by lightly bonding them together using a thermosetting binder. Subsequently, matts are factory stitched to specified wire mesh

using a continuous stitching machine to permit a ready-to-use configuration.

SPECIFICATION CONFORMANCE

ROCKLOYD Mattress manufactured from select rocks to State of the Art Specification fully conform to local & international Standards such as:

IS : 8183 BS : 3958 Part - 3 ASTM C592
Approved for A-60 class insulation. The only product in India.

TECHNICAL SPECIFICATIONS

Standard Densities	: 100, 120 and 150 Kg/m ³
Application Temperatures :	-100°C to + 800°C
Standard Thickness*	: 25, 40 , 50, 60, 65, 75mm
Standard Size	: 1520 x 1220 mm

*Other thickness from 20 to 100mm in steps of 5mm can also be made available.

ROCKWOOL SLAB

ROCKLOYD SLAB & ROLL

SPECIFICATION CONFORMANCE

Rockloyd manufactured from select rocks using State of the Art Technology conforms to and exceeds requirements specified in local and International Standards such as :

IS : 8183

BS : 3958 Part 5

ASTM : C553 C612

IMO for A-15, A-30 & A-60 class fire barrier insulation.**

**The only product to carry this certification in India.



AVAILABILITY

Rigid, Semi rigid and Flexible Slabs & Flexible Rolls.

DENSITY

Rockloyd is available in following standard densities.

Slabs - 48, 64, 96, 144 kg/m³

Rolls - 48 kg/m³

DIMENSIONS

Slabs - 1000 mm x 500 mm
1200 mm x 750 mm

Rolls - 12000 mm x 500 mm

(Other sizes are also available on request.)

THICKNESS

Slabs - 25,40,50,65,75 & 100 mm

Rolls - 25 & 50 mm

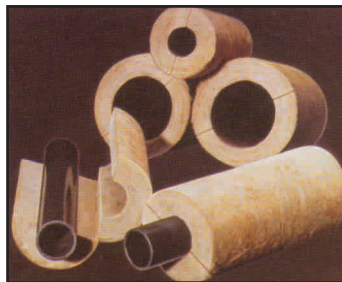
(Other thickness are also available on request.)

FACING

Aluminium Foil, Vinyl cloth & Kraft Paper. Other facings are also available on request.

ROCKLOYD PIPE SECTION

WHY USE PREFORMED PIPE SECTION



Mandrel wound and concentrically formed form fitting pipe sections, precisely made to fit standard pipe diameters offer uniform maximum resistance to passage of heat along and around the entire 360° of the pipe axis. Superior density of this product enhances compression resistance in service. These sections are easy to fit and hence afford speedy application at site.

ACOUSTICS

Rockloyd features excellent noise reduction properties. Tests have shown that with suitably designed -constructions, excellent sound reduction can be achieved.

Noise Reduction Co-efficients of ROCKLOYD.

Thickness in mm Density in kg/m ³	25*	50*	25**	50**
48.0	0.65	1.0	0.78	1.04
64.0	0.73	1.03	0.84	1.11

* Rigid Backing ** with 1" Air Gap

THERMAL CONDUCTIVITY

Rockloyd has very low conductivity values.

Mean Temp. (°C)	K values (W/mk)
10	0.028
24	0.033
50	0.043
100	0.052
200	0.068

THERMAL RESISTANCE (R=T/K)

Rockloyd provides excellent 'R' values (hr. ft² Deg F/BTU)

Mm	Density (kg/m ³)			
	48	64	96	144
25	3.9	4.1	4.2	4.4
50	7.9	8.1	8.4	8.9
75	11.8	12.2	12.5	13.3
100	15.8	16.2	16.7	16.7

SPECIFICATION CONFORMANCE

Rockloyd Pipe sections manufactured from select rocks using State of the Art Technology conform to local & International Standards such as:

IS : 9842

BS : 3958 Part 4

ASTM C547

TECHNICAL SPECIFICATIONS

Standard Densities: 144, 150 & 160 Kg/M³

Application Temperatures: -100°C to + 800°C

Standard Thickness* : 25,40, 50, 60, 65,75mm

Diameter Range** : 12.5mm to 350mm NB

Standard Length: 0.5, 0.75, 1.0 Mts.

Facing (if specified): Kraft paper, Scrim Cloth, Canvas or Aluminium Foil.

*Other thicknesses from 20 to 100mm in steps of 5mm can also be made available.

**Outer Diameter of Pipe to be specified.

Lloyd Insulations (India) Limited

(An ISO 9001, ISO 14001 & OHSAS 18001 Certified Organisation)

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