



**NGP INDUSTRIES LIMITED**

(ISO 9001 : 2000 CERTIFIED)



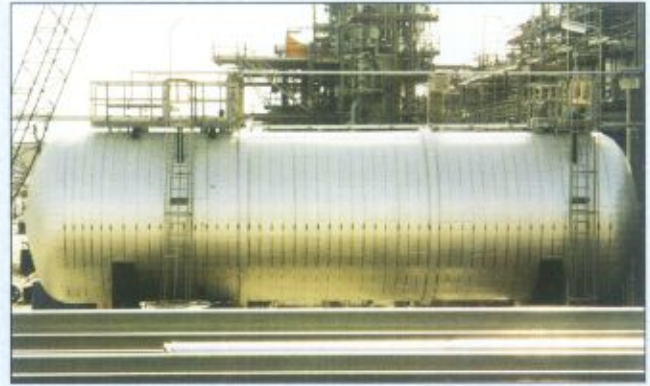
**ROCKLOYD  
MATTRESS**

Service Temperature : Up to 750°C

## PRODUCT DESCRIPTION

Rockloyd Mattress is precisely engineered bonded fibrous insulation in which fibres are laid in the optimum configuration to offer maximum resistance to heat flow, fire protection & sound attenuation.

To retain these exceptional properties up to point of end-use, rockwool fibres are interlocked lightly by a thermosetting binder and Rockloyd Mattress are stitched to specified wire mesh to provide maximum strength & flexibility.



## APPLICATION

Rockloyd Mattress are specially developed to use in large process pipe-work, tanks, vessels, boilers and ducts to provide unrivalled combination of matchless thermal insulation, fire protection, sound attenuation, high performance & flexibility of use.

Rockloyd Mattresses are also suitable where high temperatures combine with vibrations or a high fire resistance is required.

## SPECIFICATION CONFORMANCE

Rockloyd mattresses are manufactured in accordance to International & National standards such as

ASTM : C592 & C553

BS 3958 (Part : 3)

IS 8183 : 1993

Approved for A-60 class insulation.

## THERMAL CONDUCTIVITY

Rockloyd Mattress is tested as per IS 3346 and ASTM C 592 & offer **LOWEST THERMAL CONDUCTIVITY TO-WEIGHT RATIO** among all Industrial insulants. Thermal Conductivity or k-value of our material does not exceed the values mentioned in the adjacent table given.

Mean Temperature °C	Bulk Density	
	80 to 120 Kg/M <sup>3</sup>	120 to 150 Kg/M <sup>3</sup>
	Thermal Conductivity (mW/cm°C)	
50	0.43	0.43
100	0.52	0.52
150	0.62	0.62
200	0.73	0.68
250	0.84	0.80
300	0.95	0.90

## FIRE RESISTANCE

Incombustible when tested as per IS 3144 : 1992. Melting point of Fibres is above 1000 °C (1832 °F)

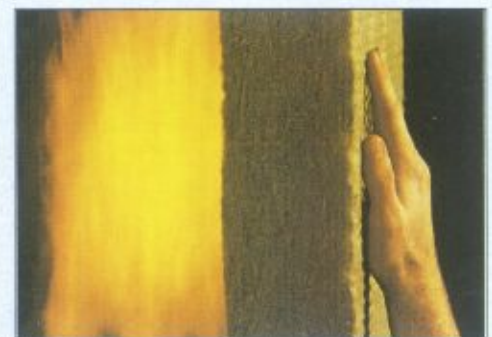
## CORROSION PROTECTION

Rockloyd Mattresses are free of impurities like halides (Chlorides & Fluorides) and sulphides which are commonly found in glasswool.

This is due to the fact that Rockloyd fibres are manufactured by dry manufacturing process and its faint alkalinity actually fights corrosive reactions.

It meets various critical specifications including ASTM C795 requirement specified.

Continuously new advancements for new applications being found for this extremely versatile product.



## WATER & MOISTURE REPELLENT

Rockloyd Mattresses, by virtue of their fiber surface treatment and lay pattern, having an angle of contact exceeding 90°, results in good resistance to water absorption and moisture ingress. Rockloyd Mattresses don't promote capillary action & is found to be a superior material as compared to glasswool which is inherently hygroscopic in nature.



## SOUND ABSORPTION

Rockloyd Mattresses provides excellent sound absorption by virtue of its scientific fibre lay pattern, ensuring controlled dispersion of air pockets and precise air-flow resistance & confirms to the sound absorption level as per specified under BS3638.

## COMPATIBILITY

Compatible with all forms of material in normal industrial and building applications.

## CHEMICALLY INERT

Found chemically inert as per testing procedure mentioned in BS2972 & ASTM C871 and recommended for use over steel surfaces as it satisfies the criteria of ASTM C692 (Corrosion test) & ASTM C871.

## BIOLOGICAL PROPERTIES

Rockloyd Mattresses do not support the growth of bacteria, mould or fungi & are Rot-proof, with non-hygroscopic nature.

## TECHNICAL SPECIFICATION

Standard Densities*	: 100,120 & 150 kg/m <sup>3</sup>
Service Temperature	: up to 750 °C
Standard Thickness**	: 40, 50, 65,75mm
Standard Size	: 1520 x 1220mm

\*Other Densities are manufactured on request.

\*\*Other thickness from 20 to 100 mm in steps of 5mm can also be offered on request.

## FACINGS

Rockloyd Mattresses are available with facing of Aluminum Foil & Aluminum reinforced in one direction or in two directions as per requirement.

## PACKING & DELIVERY

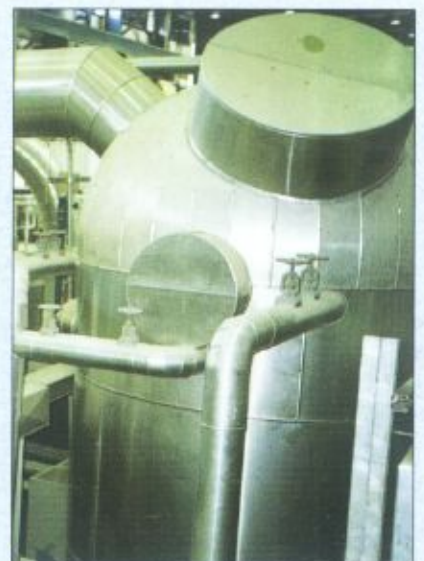
Rockloyd Mattresses are packed in HDPE bags for easy handling, transportation, storage and each batch is marked with specification of product for easy identification.

## ADVANTAGES

- Excellent thermal resistance
- Wide range of service temperatures
- Lightweight and user friendly
- Long service life
- Non-wicking
- Good compressive strength
- Proven acoustical performance
- Excellent Fire Protection

## BENEFITS

- Energy conservation
- Continuous service
- Reduced installation time
- Good water-shedding properties
- Easy handling and application capabilities
- Solid-resilient for banding and jacketing needs



## The Rockloyd Family



Consult us for recommendation on thickness of insulation  
and applications to suit your end-use conditions.



**THE NGP MISSION:  
CONSERVING ENERGY AND  
PROTECTING THE ENVIRONMENT**



## NGP INDUSTRIES LTD

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