Oct 2023

WILHAMS INSULATION FAR EAST SDN BHD

IHeatPro®

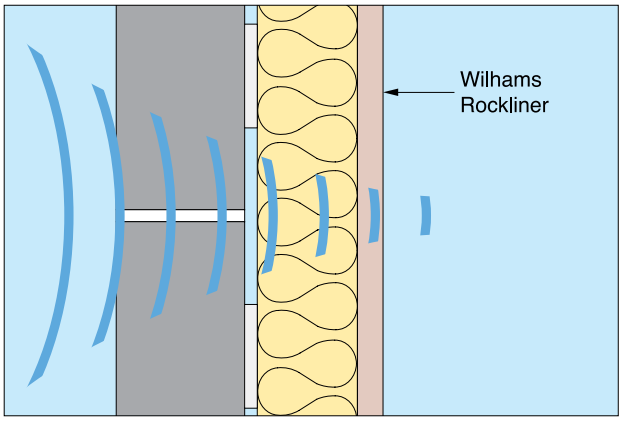
Wilhams Rockliner

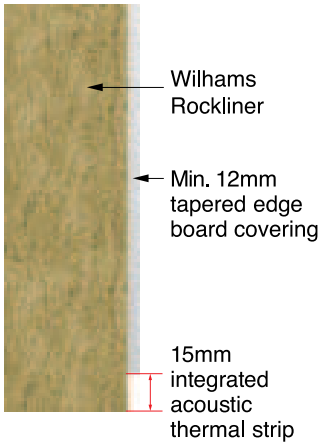
Acoustic and thermal mineral wool composite dry lining system

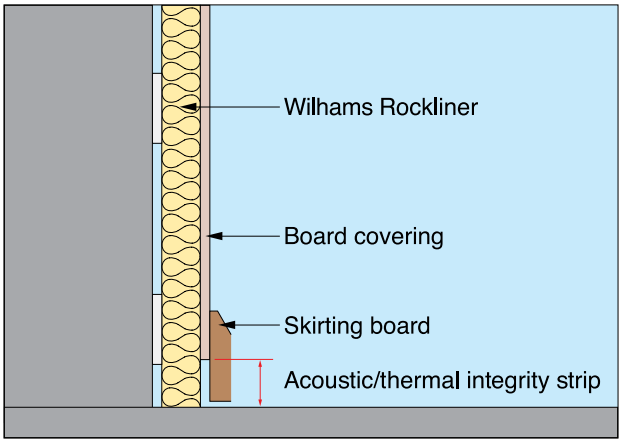
Wilhams Rockliner is a laminate of Wilhams insulation bonded to tapered edge plasterboard or cement particle board. It is designed principally as a dry lining material to achieve and improve upon the acoustic and thermal insulation for new build and refurbishment projects.

Advantages

- Contributes to GBI requirements
- Aids MS 1525 compliance
- Special insulation for improved acoustic performance
- Excellent thermal insulation
- Unique acoustic and thermal integrity strip
- Firesafe insulation Euro Class 'A1'
- Easy to install, finish and decorate
- Easily rebated to allow for services







Dimensions

Standard size – 2400 x 1200mm
Board weights:
The table below gives the weights and thicknesses of Wilhams Rockliner:

Standard thickness (mm)			Weight per board (kg)
Overall	Board	Mineral wool	
62.5	12.5	50	63.36
87.5	12.5	75	72.00
112.5	12.5	100	80.64

Other thicknesses available to order, subject to minimum order quantities.

Standards and Approvals

The mineral wool insulation complies with the requirements of BS EN 13162: 2001 Thermal Insulation products for buildings Factory made mineral wool (MW) products specification.

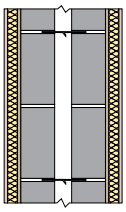
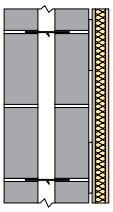
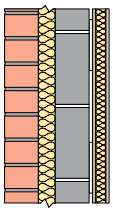
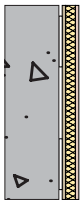
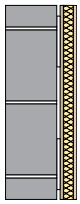
Design Notes

It must be ensured that any external wall, to which the Wilhams Rockliner is to be applied, resists the penetration of moisture.

In the case of solid wall constructions, the recommendations of BS 5628: Part 3: 1985, 'Materials and components – design and workmanship' should be adopted.

Performance and Properties

Acoustic Performance

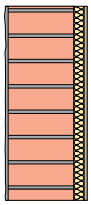
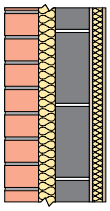
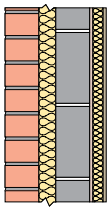
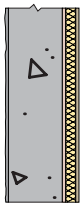
	Party Walls		Other Constructions		
Constructions	 Cavity wall Medium density 62.5mm block both sides mechanically fixed	 Cavity wall Lightweight block 62.5mm, Rockliner one side dab fixed	 Cavity wall 102mm brick, 50mm CWB, 100mm lightweight block, Rockliner dab fixed	 Solid wall 19mm render, 100mm dense concrete block wall, Rockliner dab fixed	 Solid wall 100mm Aircrete block (510kg/m³), Rockliner dab fixed
Thickness of Rockliner (mm)	62.5	52.5	62.5	62.5	62.5
Acoustic Performance (dB)	58[1] [1]AIRO report PT/3223*	56[2] [2]BTC report 2672A*	55[3] [3]Estimated	50[4] [4]AIRO report L2805/2/2*	45[5] [5]BRE report 208179

Note: The above figures are based on previous tests using 9.5mm plasterboard.

U-values

Wilhams Rockliner contributes to Green Building Index (GBI) requirements, significantly improving the energy efficiency of the external wall.

This solution also aids compliance to MS 1525 Energy efficiency and use of renewable energy for non-residential buildings - Code of practice. Please contact our technical department regarding insulation thicknesses relating to typical external wall constructions or see the table shown below.

Constructions	 225mm Brick (λ = 1.13 W/mK)	 100mm Brick 100mm Block (λ = 0.51 W/mK) Plaster	 100mm Brick 100mm Aerated Block (λ = 0.19 W/mK) Plaster	 200mm Brick Cast Concrete (λ = 1.40 W/mK) Plaster
Thickness of Rockliner (mm)				
Uninsulated	2.06	1.93	1.18	2.98
62.5	0.52	0.30	0.27	0.56
87.5	0.38	0.25	0.23	0.40
112.5	0.30	0.21	0.20	0.32
137.5	0.25	0.18	0.17	0.26
162.5	0.21	0.16	0.15	0.22
187.5	0.18	0.15	0.14	0.19
212.5	0.16	0.13	0.13	0.17
237.5	0.15	0.12	0.12	0.15

Fire
Wilhams Rockliner is manufactured from components which have a high degree of fire safety.

Wilhams Rockliner, when tested to the new European Fire classification, achieves Euro Class 'A2'. (The base insulation material achieves Class 'A1'.)

Water resistance
Wilhams Rockliner will not transmit liquid water, due to the presence of water repellent additives. The product should not however be used as protection against driving rain penetration. Appropriate remedial action should be taken, (see Design Notes).

Vapour resistance
Wilhams Rockliner is available with or without a vapour check. If a vapour check is incorporated in the Wilhams Rockliner this achieves a water vapour resistance in excess of 15MN/g when tested in accordance with BS 3177: 1959 (1995).

General Fixing Notes

There are two options: mechanical fixing or fixing with adhesive. The following information is given in good faith, but the method selected must ultimately be the decision of the dry lining contractor or responsible tradesman, having regard to the type and condition of the substrate to which the Wilhams Rockliner is to be fixed. Reference should be made to BS 8000: Part 8, para 3.1.9.7.

Mechanical fixing
If the wall is true and level, the Wilhams Rockliner may be fixed flush to the wall using nailable plugs.

The nailable plugs are installed 50mm from the edge of the board and at 600mm centres vertically, 550mm centres horizontally as shown in the following drawing.

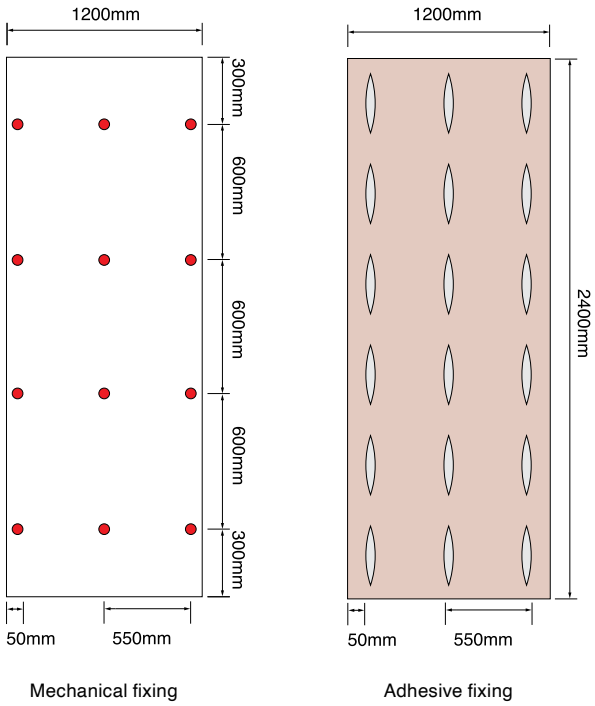
The cutting to size of the board and the maintaining of the acoustic/thermal connection is as for fixing with adhesive dabs.

Fixing with adhesive dabs
The choice of adhesive and the possible requirement for pre-treatment of the substructure for fixing Wilhams Rockliner is dependent on the condition and the unevenness of the wall. High suction masonry and high density smooth concrete may require prior treatment with a PVA bonding agent to improve adhesion.

The 1200mm wide board is primed using three 200mm wide continuous bands of bonding adhesive. The wall is dabbed out using standard drylining techniques, 4 rows of dabs, each dab approximately 250mm long and 50-75mm wide at 300mm centres. Dabs should be applied in accordance with BS 8212: 1988 and BS 8000, Part 8: 1994 to give a minimum area of contact between the board and background of 20%.

The Wilhams Rockliner is accurately cut to the full floor/ceiling height leaving the integrity strip intact at the bottom of the laminate. The Wilhams Rockliner is then offered up to the wall with the lower edge resting on the floor. It is then firmly tamped back using a straight edge.

Note: On external walls continuous bands of adhesive are required around wall perimeters, at junctions with frames and electrical boxes (BRE Good Practice Guide 105).



Mechanical fixing

Adhesive fixing

Reveals
To minimise hot bridging reveals to doors and windows should be lined with pieces of Wilhams Rockliner board using the fixing with adhesive dabs.

If the narrowness of the frame prevents the same thickness of Wilhams Rockliner board being used, the insulation thickness can be trimmed with a fine tooth saw. Using this installation method, the boards on the head reveals need to be supported until the adhesive is dry.

Electrical Cables and Services

Where services are surface mounted to the substructure, the insulation at the back of the Wilhams Rockliner can be accurately chased out to accommodate them, as shown in the photograph below.

Accurately cutting the chases for the services will help to minimise any acoustic or thermal losses from the construction.

The IEE Wiring regulations, 16th edition, British Standard 7671: 1992 and the Electricians' Handbook (latest edition) give guidance on the correction factors to be applied in down-rating cables according to situation, and each case should be separately calculated.

Because mineral wool is chemically inert, the breakdown of the sheathing of electrical cables caused by plasticiser migration does not occur. This eliminates the need for any additional protection.

Packaging

Supplied in shrink wrapped polythene with corner protection on environmentally friendly plasterboard packers on pallet feet.

Ordering

Please quote the area in square metres, the overall thickness in millimetres and if a vapour barrier is required.

Supply

Available throughout the Malaysia from Wilhams.

Storage

Boards should be stored indoors in dry conditions on a flat surface.

Specification Clause

The dry lining is to be Wilhams Rockliner, ... mm overall thickness, as supplied by Wilhams, and fixed in accordance with the manufacturer's instructions.

Health and Safety

Current HSE 'CHIP' Regulations and EU directive 97/69/EC confirm the safety of the mineral wool; fibres are not classified as a possible human carcinogen.

The maximum exposure limit for mineral wool is 5mg/m³, 8 hour time-weighted average.

A Material Safety Data Sheet is available from the Wilhams Marketing Services Department to assist in the preparation of risk assessments.

Environment

Mineral wool insulation relies on entrapped air for its thermal properties; air is not a VOC and it does not have Global Warming Potential (GWP) or Ozone Depleting Potential (ODP).

ZERO GWP
GLOBAL WARMING POTENTIAL

ZERO ODP
OZONE DEPLETING POTENTIAL

Technical Helpline

Technical advice relating to Wilhams Rockliner is available from Wilhams Insulation Far East Sdn Bhd at +603-7846 6728.

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