

ROCKWOOL Roofrock & Hardrock

Installation Guideline

Prior to commencing installation, it is imperative to review these instructions in conjunction with local standards AS 3999 or NZS 4246, as well as all relevant local, state and/or federal building regulations.

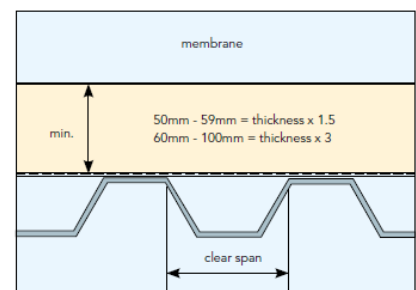
Typical installation method for flat roof application

1. ROCKWOOL roofing boards should be laid with staggered joints wherever possible and tightly butted to avoid gaps. The use of small pieces of insulation board should be avoided.
2. Care should be taken to clean off all surfaces prior to the laying of insulation boards and membrane. Appropriate stop battens should be installed to protect open edges of boards.
3. ROCKWOOL stone wool insulation consists of randomly oriented water repellent fibres. Wetting will therefore only occur in proximity to its surface. As the stone wool is diffusion open, boards that become wet during installation must be allowed to dry out naturally, prior to the application of the roof membrane.
4. Installation of ROCKWOOL roofing boards during rain should be strictly avoided. Force water such as rain water will penetrate through the product and weaken the wool structure.
5. The installation sequence shall follow the membrane installation.
6. Install only as much insulation as can be covered by a complete roof membrane in the same day. Any exposed insulation boards should immediately be covered with waterproof covering to avoid penetration of rain water.

Design considerations

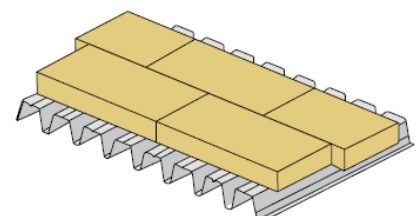
Clear Span

- ROCKWOOL roofing boards between the thickness of 50mm and 59mm shall have the maximum clear span of = thickness of insulation board x 1.5.
- ROCKWOOL roofing boards between the thickness of 60mm to 100mm shall have the maximum clear span of = thickness of insulation board x 3.



Crown and Trough Position

- ROCKWOOL roofing boards must be laid with the long edge at right angles to the profiles of the metal deck.
- Butt joints can be made freely on the roof, if rules for cantilevering have been adhered to. If cantilevering has not been adhered to butt joints should occur at the mid-crown.

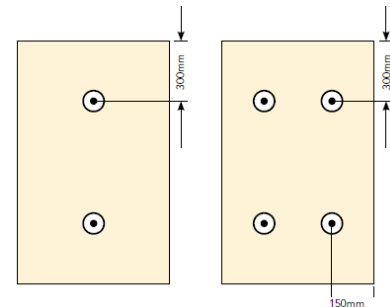


Cantilevering

- ROCKWOOL roofing boards of 60mm or greater thickness may cantilever over a trough, provided that the maximum trough width does not exceed twice the board thickness.
- For example, 80mm thick Hardrock roofing board may cantilever over a maximum through width of 160mm.

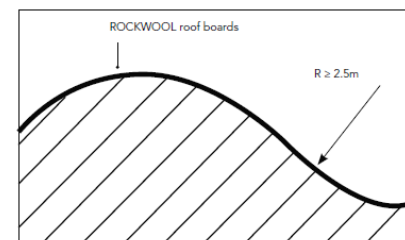
Mechanical Fastening of Insulation

- ROCKWOOL recommend the use of a plastic tube washer, or stress plate support thread when mechanically fastening roof boards to metal, concrete or timber deck warm roof systems.
- Where the roofing system is mechanically fastened, 2 fasteners per 0.72m² (1200mm x 600mm board size) is recommended for membrane roof system.
- For both the field area and the edge region of flat roofs sufficient stability is achieved when using 2 fasteners.
- However, for the corner region of flat roofs, it is universal practice to increase the number of membrane fasteners per m², and also to reduce the distance between the rows of fasteners.



Mechanical Fastening of Insulation for Roof with Curvatures

- ROCKWOOL roofing boards can be installed in curved roof with a radius as low as 2.5m.
- For application at curved roofs, a minimum of 4 fasteners per board to locate and secure the boards during installation (see under 'mechanical fastening').



Additional Roof Loads Plant and Machinery

- Wherever possible, any roof-mounted plant, such as air handling and refrigeration units, should be positioned on independent upstands bearing directly onto the substrate.
- Where this is not possible and the equipment is to be placed directly onto the finished roof, additional roofing boards should be used and further protection to spread the load may be required.

Workmanship

1. ROCKWOOL stone wool insulation board products are to be stored and laid strictly in accordance with the ROCKWOOL Standard Guideline for Handling, Transporting, Shipping, Storage and Application of ROCKWOOL Stone Wool Insulation Material.
2. Install ROCKWOOL stone wool insulation boards to the thickness specified. Avoid compression of the insulation wherever possible.
3. Adequate temporary protection must be provided above the installed ROCKWOOL roofing boards where any of the following occur: unloading or access points, temporary walkways, stockpiles of roofing materials, waste skips or any other activities that might cause damage to the insulation.
4. Under no circumstances should the finished roof be used as a working platform without adequate protection being provided.
5. Do not step onto the insulation boards as it will damage the fibre structure.
6. Install only as much insulation boards as can be covered and completed before the end of the day's work or before the onset of inclement weather.

7. It is a good construction practice to wear PPE during installation of the insulation. Approved protective respirators shall be worn when working in confined areas. Gloves and long sleeve shirt shall be worn when installing insulation materials.
8. Additional details are available in Standard Guideline for Handling, Transporting, Shipping, Storage and Application of ROCKWOOL Stone Wool Insulation Material.

Limitation

1. ROCKWOOL Stone Wool Insulation must be kept clean and dry during transport, storage and installation.
2. ROCKWOOL Stone Wool Insulation should not be crushed, folded or compressed.

Health & Safety

The mechanical effect of fibres in contact with skin may cause temporary itching.



Cover exposed skin
When working in unventilated area wear disposable face mask.



Clean area using vacuum equipment.



Waste should be disposed of according to local regulations.



Rinse in cold water before washing.



Ventilate working area if possible.



Wear goggles when working overhead.

This product is not subject to a warning or a ban issued under section 26 of the Building Act 2004.

Disclaimer: All information contained herein is solely based upon the generic installation and workmanship which may change based on situation in hand. It is the responsibility of the user to confirm the adequacy and accuracy of the information supplied. ROCKWOOL makes no representations nor gives any warranties of any kind as to the accuracy or completeness of the information as provided herein. Customer is requested to check with the installation team as well as local ROCKWOOL representative for further information if needed.