

# INSTALLATION INSTRUCTIONS

## EARTHWOOL® GLASSWOOL INSULATION: DRITHERM® CAVITY INSULATION

These instructions should be read in conjunction with local standards AS 3999 or NZS 4246 and all applicable local, state and federal building regulations. Before you start installing, please make sure you are familiar with our Health and Safety Information contained in this document. Ensure that you use tools and equipment that are suitable for the intended application. This will include suitable safety equipment.

### Earthwool® glasswool insulation: DriTherm®

Earthwool® glasswool insulation: DriTherm® cavity slab is a semi rigid glass mineral wool with a water repellent additive and has been designed for the insulation of double brick and masonry constructions. The product is designed to suit multiple applications.

### **Masonry Cavity Walls**

DriTherm® cavity slab is designed to fill the cavity and provide a continuous layer of bulk insulation. Where cavities exceed the 50mm nominal thickness there are details on how to manage partial fill applications. DriTherm® cavity insulation can be installed as you construct the inner leaf, or it can be installed over a greater area using the brick ties or installation clips to hold the DriTherm® cavity insulation in place. Construction practices will vary from site to site. If a detail on your site is not adequately covered by these instructions, contact the Knauf Insulation technical team on +61 (0)7 3393 7300 or visit our websites www.knaufinsulation.com.au or www.knaufinsulation.co.nz.

The following instructions are a guide for a typical installation in a 50mm cavity where the outer leaf of the wall has been constructed first.

#### **Partial fill**

- For Deemed to Satisfy compliance a **40mm airspace** is required to be retained separating the insulation layer and the inner leaf of the outer masonry component.
- An accurate site measure should be completed to ensure you have enough DriTherm® cavity insulation to complete the targeted area.
- Where the cavity exceeds the nominal thickness of the insulation, insulation discs can be used to hold the insulation against the inside leaf. To ensure access, discs need to be installed at the base of the slab prior to bricking up the inner leaf. Insulation discs needs to be installed on all brick ties.
- Prepare the wall by cleaning off any remaining mortar squeeze and snots from the masonry and ensure the cavity is clean and free of debris.
- Lay the first course of bricks with a series of brick ties placed on the finished floor level. This will ensure the first layer of insulation is installed level and will prevent the insulation from falling into the drainage area prior to the friction fit being completed. **See diagram 1.**
- Install the insulation against the outer leaf staggering all vertical joints, ensuring that the slabs are firmly butted together. See diagram 2.
- Corners can be neatly cut and firmly butted together or bent around the corner where possible. See diagram 3.
- When using small off-cuts, the face of the slabs and not the edge, shall be positioned against the wall surface.
- When fitting the product over brick ties the product must be cut with either a sharp knife or trowel.
- When installing DriThermv cavity insulation as you construct the inner leaf, do not let the brick line go above the top edge of the insulation. This will ensure you are able to easily install the next slab over any brick ties, while preventing any mortar from falling on the leading edge of the insulation. **See diagram 4.**
- It is recommended that roof tie downs be installed prior to laying the course of bricks that the straps will be bedded on to. This will help provide room to simply cut the insulation and feed the roofing strap into position.
- Where soffits drop below the inner wall the insulation must continue up the inner face to the top plate. The section above windows and the outer leaf can be secured using a series of brick ties placed between the last courses of bricks. The insulation is simply cut to size and installed over the brick ties, fold the brick ties down to hold DriTherm cavity insulation in place. **See diagram 5.** Exposed product must be covered to protect it prior to being enclosed.
- Where a single skin gable is present, DriTherm® cavity insulation must be continued up the outer face to provide a continuous layer of insulation. This can be held in place by a series of brick ties being placed in the outer skin.





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## Helpful hints for cavity wall installation

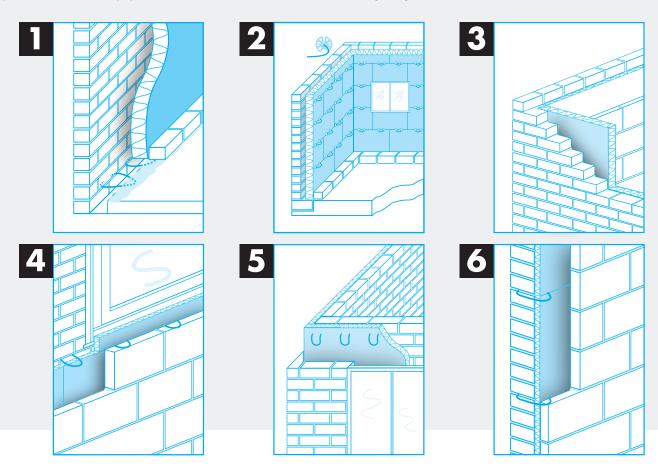
- If DriTherm® cavity insulation is specified prior to the construction of the outer leaf, all mortar squeezes and snots should be cleaned off the inner face. Brick ties can be set out to optimise the 600mm width, reducing the need to cut the insulation around brick ties. **See diagram 6.**
- If installing the insulation prior to bricking up the inside face, insulation discs can be used to provide additional support. These can be removed as you reach them and used for future jobs. Brick ties can be hooked over the top course of bricks to support the top of DriTherm cavity insulation. **See diagram 2.**
- When cutting the insulation, place the insulation on a solid surface and use a sharp knife or the side edge of the trowel.
- Bending the product around corners can be a useful way of staggering the vertical joins.
- DriTherm® cavity insulation should be fitted with all joints, including corners, closely butted. Vertical joints should be staggered, and no gaps should be left between DriTherm® cavity insulation. Joints must be left clean and free from mortar.
- Covering exposed DriTherm® cavity insulation can be easily achieved by using the DriTherm® cavity insulation packaging and temporarily held in place using bricks as hold downs.

### **Strap and Lining of Masonry Walls**

DriTherm® cavity insulation resists the transmission of water, therefore it can be installed directly against the masonry or concrete wall without risk of the insulation absorbing any moisture. Slightly over cut the slabs and friction fit DriTherm cavity insulation between the wall strapping. It is best practice to fill the available cavity with insulation, were the cavity is greater than the nominal thickness of the DriTherm cavity insulation, the insulation should be strapped to ensure it is held firmly against the masonry wall.

#### **CAUTION**

When installing DriTherm® cavity insulation you must use the appropriate work safe practices and comply with all recommended safety procedures. Safety – a mask and suitable eye protection should be used in addition to suitable clothing and gloves.





# **HEALTH AND SAFETY INFORMATION**

### **SAFETY WARNINGS AND HAZARDS**

#### **BEFORE INSTALLATION**

- You must turn the mains power "Off" and, if in any doubt about how to turn the power "Off", consult a licensed electrician.
- Do not enter the workspace for the purposes of the pre-work inspection or the installation until you are satisfied that the power has been isolated. Even after isolating the power via the switchboard there may still be an electrical mains cable in either the ceiling or underfloor space that is live.
- Complete a pre-work assessment before installation to identify safety hazards which may include but are not limited to the following:
  - o access to the roof area,
  - o working at heights,
  - o electrical safety hazards,
  - o adequate ventilation of the work area and
  - o nails and sharp objects on the ground
- Before commencing work you must have systems in place to reduce risks identified in the pre-work assessment such as but which are not limited to:
  - o systems to prevent falling when working at heights.
  - o ventilate the working area if possible.
  - o cover exposed skin. When working in an unventilated area, wear a disposable face mask.
  - o rinse hands in cold water before washing.
  - o wear goggles when working overhead.
  - o clean using vacuum equipment.

## **DURING INSTALLATION**

- Work with another person and maintain contact throughout both the assessment and installation process.
- Only open bags as required.
- Wear appropriate clothing for the job such as long sleeved top, flat rubber sole shoes, gloves conforming to Australian Standard AS2161 and ventilated non-fogging dust resistant goggles conforming to AS/NZ 1336, and a P2 dust mask.
- Avoid eye contact with dust or fibres to minimise eye or skin contact and inhalation during handling.
- Avoid installing insulation in hot weather and at the hottest part of the day.
- Under no circumstances must fixing devices in ceiling spaces or under floors, or in proximity to electrical wiring, be of metal or other conductive material.

#### **SUITABLE CLOTHING**

- When handling any insulation material, especially in enclosed poorly ventilated areas and/or overhead, the use of suitable eye protection conforming to AS1336 will greatly reduce contact with dust or fibres.
- Wear suitable loose fitting clothes, including long sleeved shirts, long pants, cap and gloves.
- A suitable dust mask is recommended when working in confined, poorly ventilated and dusty areas.
- Wash work clothes separately and rinse the washing machine after use.

