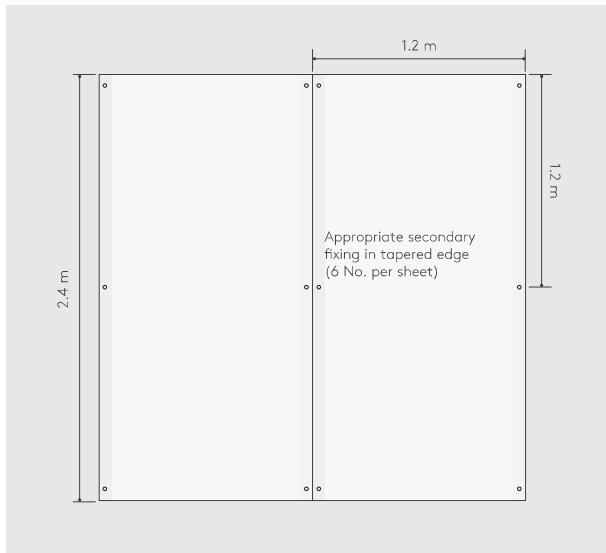


# Sitework



**Figure 6 - Appropriate Secondary Fixing Pattern for Drywall Adhesive Dab Bonding Using 6 Additional Fixings (See Figure 7 for the Appropriate Secondary Fixing Pattern when using 2 Additional Fixings)**

- Fixings should be long enough to allow minimum 25 mm penetration into the fair faced masonry.
- Fixings should be driven straight, with the heads embedded just below the surface of the plasterboard.
- Care should be taken not to overdrive screws.
- Each sheet of insulated plasterboard should be lightly butted.
- The perimeter of the Kingspan Kooltherm® K118 Insulated Plasterboard should be sealed. The 15 mm clearance gap at the base of the wall should be sealed with a combination of flexible polyurethane foam and flexible sealant or equivalent.

## Acrylic Sealant / PU Foam Adhesive Bonding

- This method is suitable for use on flat brick, block or concrete cavity or rendered solid walls, which are dry, stable and free from moisture penetration.
- This method is also suitable for use on linings such as lath and plaster, plaster or plasterboard, providing the existing structure is dry, stable and free from moisture penetration.
- This method is not suitable for use directly on non-rendered solid masonry walls where there is a risk of moisture penetration.
- In order to provide sufficient space for services, the background will need to be chased out, unless the services exist within the wall or are contained within the lining framework cavity. Existing services should be assessed to determine any alterations that may need to be made, for example relocating sockets and switches.
- The existing substrate should be within a 5 mm tolerance when measured with a 2,000 mm straight edge. A total distance of 2-3 mm plus the thickness of the Kingspan Kooltherm® K118 should be allowed for from the wall's high point. A line should then be drawn across the floor. This should be plumbed for alignment before transferring the line to the ceiling and extending the line to the room corners.
- Guidelines should be marked out on the walls at 1,200 mm horizontal centres to indicate where the edges of Kingspan Kooltherm® K118 should finish.
- Kingspan Kooltherm® K118 should be cut approximately 15 mm short of the floor to ceiling height.
- There are many suitable adhesives that can be used. Please see Table 2 for details.

Fixing Method	Suitable Adhesive	Bonding Agent to be Applied to the Insulation	No. of Appropriate Secondary Fixings Required
Acrylic Sealant Adhesive	Firetherm Intumastic ADL	No	2
Acrylic Sealant Adhesive	Geocel QUICKGRIP SUPERGRAB	No	2
PU Foam Adhesive	Dow INSTA-STIK MP	No	2

**Table 2 - Adhesive Options for Acrylic Sealant / PU Foam Adhesive Bonding**

# Sitework

- Acrylic sealant adhesive should be gun-applied to the wall or back of the board in blobs at 300 mm centres, horizontally and vertically.
- PU foam adhesive should be gun-applied to the wall or back of the board in continuous beads 20 - 25 mm wide. A minimum of 3 vertical beads should be applied per board (unless otherwise stated by the PU foam adhesive manufacturer). A continuous bead of PU foam adhesive should also be applied horizontally at the top and the bottom of the board.
- The adhesive adjacent to the board joints should be applied approximately 25 mm in from the edge of the boards to avoid bridging the joint.
- The boards should be lifted tight to the ceiling using a foot-lifter and supported by the packing strips until the adhesive sets. If the wall height exceeds 2,400 mm, start from the bottom of the wall, working upwards, to allow boards to be held on the lower level of the wall and prevent any boards from sliding down.
- The boards should then be tapped back to align with the predetermined guidelines on the floor and ceiling. The use of a spirit level is recommended to provide a vertical plumb finish.
- Once the adhesive has set, appropriate secondary fixings should be used in addition to the adhesive.
- These are normally applied at a rate of 2 No. per sheet, 15 mm in from the edge of the sheet, after the adhesive has set (see Figure 7).
- It is recommended that appropriate secondary fixings are positioned in the tapered edge of the sheets so that they are covered when the board is finished (e.g. joints taped and 3 mm skim coating). The number of appropriate secondary fixings is specified in Table 2.
- Fixings should be long enough to allow minimum 25 mm penetration into the masonry (excluding plaster). If a lining exists, fixings should be long enough to allow minimum 25 mm into the timber or 10 mm into the metal framework (excluding plasterboard or lath and plaster).
- Fixings should be driven straight, with the heads embedded just below the surface of the plasterboard.
- Care should be taken not to overdrive screws.
- Each sheet of insulated plasterboard should be lightly butted.
- The perimeter of the Kingspan Kooltherm® K118 should be sealed. The 15 mm clearance gap at the base of the wall should be sealed with a combination of flexible polyurethane foam and flexible sealant or equivalent.

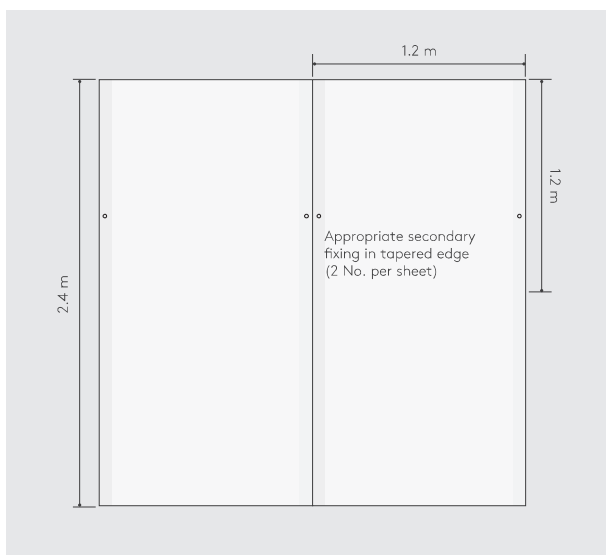


Figure 7 - Appropriate Secondary Fixing Pattern for Acrylic Sealant / PU Foam Adhesive Bonding