

This installation guide has been compiled based upon empirical testing in accordance with AS 5637.1-2015 and its reference standard AS ISO 9705 -2003 (R2016). In accordance with these provisions, this installation guide serves to illustrate, as far as possible, a means of installing the Bradford PIR Board system in a manner that is consistent with the tested system (BRANZ F111441-001). To maintain its suitability of use, the onus is on the installer to adhere to these instructions as far as reasonably practical.

The following components are part of the nominated install system and were used as part of the tested system.

The system is comprised of the following:

- Bradford PIR Boards
- Plastic insulation fasteners (Powers C5 Insulation Fastener or approved alternative*)
- AFC100 (100mm) reinforced self-adhesive tape

INSTALLATION CONSIDERATIONS

If there are fire collar penetrations in the soffit, then a clearance of a minimum of 25mm must be maintained between the fire collar and the insulation board. Fire collar penetrations must be taped with AFC100 (100mm) reinforced self-adhesive tape in accordance with taping instructions, covering the exposed edge.

The recommend install system is as tested to **AS ISO 9705:2003 (R2016) in accordance with A5637.1:2015. Any variation to this install recommendation will need to be referred to Bradford, or the design team on the project.

NOTE: This is a building insulation product and not an architectural building lining. Imperfections may occur in the manufacturing process.

DIRECT FIXING TO CEILINGS & SOFFITS

Pin Placement for Ceilings & Soffits

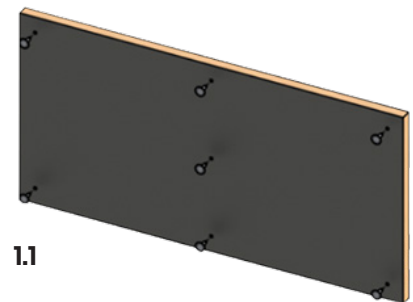
For a typical 2400mm x 1200mm Bradford PIR Board, a minimum of 7 plastic insulation fasteners per board is required (≥ 2.43 fixings per m^2).

Where custom length long boards have been ordered, a minimum fixing density of 2.43 fixings per m^2 must be maintained. The fixing pattern should resemble a repeat pattern of the diagram below. For smaller boards, fixing should be located at 100mm from each edge and a maximum 1100mm in the longitudinal direction and 1000mm in the cross direction with every second row requiring a center fixing as indicated in illustrations 1.1 and 1.2.

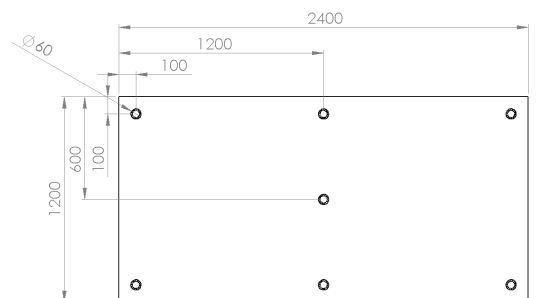
When fixing the board to the soffit, start with the center fixing, this will help support the weight of the board while the remaining fixings are installed.

The plastic fasteners must be installed perpendicular to the face of the board. This will ensure a flush placement of the fastener on the Bradford PIR Board.

For ends or edges where an exposed edge will be visible, please refer to taping instructions before fastening into position.



1.1



1.2

Bradford™ PIR boards

Installation Guide

DIRECT FIXING TO WALLS

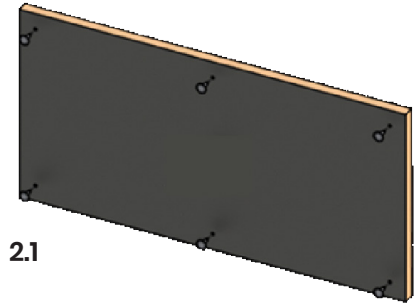
Pin Placement for Walls

For a typical 2400mm x 1200mm Bradford PIR Board, a minimum of 6 plastic insulation fasteners per board is required (≥ 2.08 fixings per m^2).

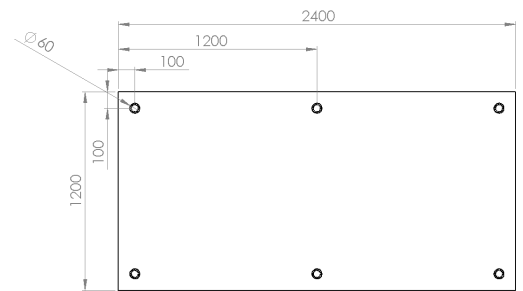
Where custom length long boards have been ordered, a minimum fixing density of 2.08 fixings per m^2 must be maintained. The fixing pattern should resemble a repeat pattern of the diagram below. For smaller boards, fixing should be located at 100mm from each edge and a maximum 1100mm in the longitudinal direction and 1000mm in the cross direction.

The plastic fasteners must be installed at a 90deg angle. This will ensure a flush placement of the fastener on the Bradford PIR Board.

For end or edge boards where an exposed edge will be visible, please refer to taping instructions before fastening into position.



2.1

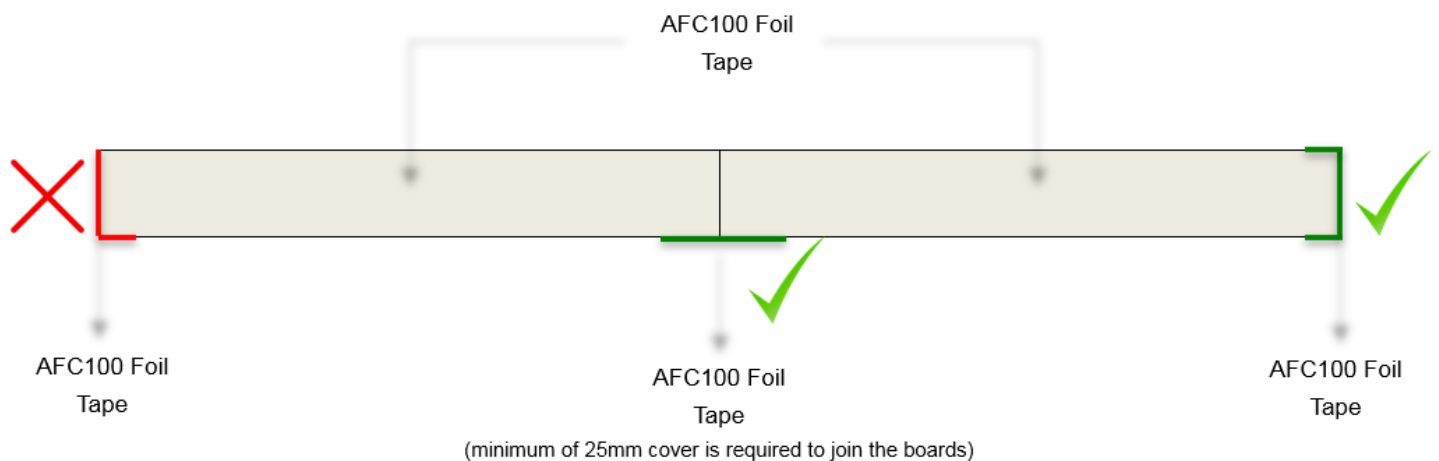


2.2

DIRECT FIXING TO WALLS, CEILINGS & SOFFITS

Tape Application AFC100 100mm Reinforced Self-Adhesive Tape

1. The area of application is required to be free of contaminants such as oils or dust. The surface must be cleaned with a clean dry cloth before applying the AFC100 (100mm) adhesive tape.
2. Where a surface is unable to be cleaned effectively with a clean dry cloth, or if oil containments are present, scrub with a 50:50 mixture of isopropyl alcohol and water until clean.

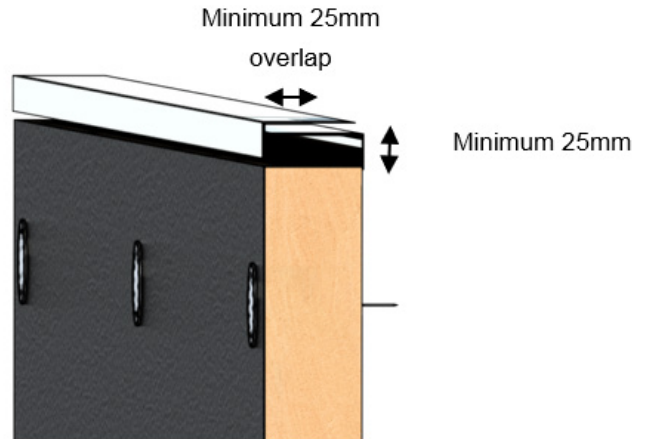


3. Seaming of the center joints requires equal tape cover along each edge using the AFC100 (100mm) reinforced self-adhesive tape. In all cases, a minimum of 25mm coverage from the edge of the board is required.
4. Seaming of the end/edges on Bradford PIR Boards require the use of AFC100 (100mm) reinforced self-adhesive tape and must be wrapped around the ends with a minimum 25mm tape cover top and bottom facing of the Bradford PIR Boards facing edge. The seaming of the edges of ends should occur before fixing the boards into position.

Bradford™ PIR boards

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- Where the Bradford PIR Board is more than 50mm thick, the AFC100 will not be wide enough to satisfy the minimum 25mm adhesion width to the foil surfaces of the board. In these instances, two lengths of the AFC100 will need to be overlapped by a minimum of 25mm to create a wide edge tape.
- Once the tape is applied to the Bradford PIR Board facing, using the white plastic applicator supplied, firm amount of pressure must be applied to the reinforced self-adhesive tape to achieve sufficient wet-out onto the Bradford PIR Board. Sufficient pressure is required to form an adequate bond.



Note: The AFC100 (100mm) reinforced self-adhesive tape will not stick to the exposed PIR core. Sufficient adhesion area must be found in contact with the foil facings.

Bradford PIR Boards & Plastic Fastener Size Combinations

PRODUCT THICKNESS	FASTENER LENGTH
25mm	25mm
30mm	30mm
40mm	40mm
50mm	50mm
60mm	60mm

Nail length in accordance with fixing supplier's recommendation for adequate penetration depth for substrate

