
PhotonFrame Fixing instructions

General

- ✓ PhotonFrame must be installed in accordance with these instructions and should follow Building Regulations and current good building practice.
- ✓ PhotonFrame can be damaged by high winds, prolonged exposure to UV, careless handling or by vandalism and must be covered as soon as practically possible on completion of installation. Any damaged areas should be repaired or replaced before completion.
- ✓ PhotonFrame does not require personal protective equipment to be used.
- ✓ As with all insulation, installers should follow the Electrical Wiring Regulations when in the presence of electrical wiring.
- ✓ Secondary insulation such as PIR and glass wool should be installed as described in manufacturers' literature.
- ✓ Installation should follow Building Regulations and current good building practice.

Air gaps

- ✓ Air in a relatively narrow unventilated cavity bounded by low emissivity surfaces is an excellent insulator.
- ✓ PhotonFrame's very low emissivity surfaces allow the optimisation of air gap performance.
- ✓ The optimum thermal performance of PhotonFrame is gained from the use of 20mm air gaps.
- ✓ The flexible nature of PhotonFrame allows it to be easily stapled and sealed to awkward shaped structures.

Installation

- ✓ PhotonFrame is normally applied vertically to the timber sheathing/rafters/studs but can be applied horizontally if the timber sheathing/rafters/stud layout makes this more effective.
- ✓ To assist with the subsequent location of the vertical studs clearly mark them on the external surface of the PhotonFrame. Standard timber frame wall ties should be used (Staifix or similar).
- ✓ PhotonFrame should be held in place by stainless steel nails or staples of at least 14mm depth at regular intervals not exceeding 500mm vertically and 1.0m horizontally PhotonFrame and then permanently fixed with appropriate battens or insulation washers dependant on the external cladding of the building.
- ✓ PhotonFrame has 50mm flaps on both edges which allow it to be butted up to itself with a 50mm membrane overlap. Laps can be taped using single sided aluminium foil tape, minimum 50mm wide.
- ✓ Upper layers should overlap lower layers to shed water away from the structure and below the level of the lowest timber. It is essential that the lowest timber members are protected by PhotonFrame.
- ✓ At openings PhotonFrame should be detailed into the opening return to ensure there is sufficient lap and weathering with the proposed framing.
- ✓ For detailing around openings where thickness is a concern the insulation core of PhotonFrame can be cut away leaving just the reflective membrane outer that can be detailed into the opening.
- ✓ PhotonFrame is easily cut with sharp scissors (Kretzer Finny recommended) or sharp knife against a board.