



Institute for Timber Construction
Association Incorporated under Section 21 of Companies Act

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Dear All,

Most of you have either heard of or been involved to some extent with the use of a product known as ISOBOARD. ISOBOARD is gaining popularity as a finishing material that is both attractive and thermally efficient. It is an excellent modern product. The use of the ISOBOARD product has also come to the knowledge of the Institute for Timber Construction ("ITC").

However, the matter of its use was referred to the ITC's Timber Engineering Advisory Committee ("TEAC") for consideration and investigation. From our initial investigations, the ITC has serious concerns with the use of the ISOBOARD sheets and the recommended FIXING PROCEDURE. After properly considering all relevant aspects pertaining to the installation of ISOBOARD and the relevant fixing methods, the ITC is obligated to warn you against the use of the ISOBOARD products in an 'over rafter installation' method. The problem lies with one of the installation methods recommended by ISOBOARD. They recommend a system whereby sheets of ISOBOARD are fixed on top of truss rafters and underneath the purlins/battens. Up until now, the concept is that ISOBOARD sheets of varying thickness are placed on top of the truss rafters and then the tile battens or sheeting purlins are placed on top of the ISOBOARD. The resulting cushion is effectively reducing the bracing stiffness, essential to prevent rafter buckling and even severely influences the overall roof stability. The resulting 'stiffness' is only some 10% of that assumed by the roof truss design. This severely compromises the structural stability and functioning of a roof. From an engineering perspective, this method is NOT AN ACCEPTABLE form of the installation of these ISOBOARD sheets. Research has PROVEN THAT VITAL LATERAL STABILITY OF THE TRUSS RAFTER IS REDUCED BY UP TO 90%. This is therefore not acceptable and the unacceptability is NON-NEGOTIABLE. We are waiting for ISOBOARD to revise their "over rafter installation" fixing instructions.

The alternative may be to fix the battens or purlins directly onto the rafters (as has always been the STANDARD PROCEDURE) and then to cut the ISOBOARD into strips to fit between the battens or purlins. This cut width would vary from roof to roof as the purlin or batten spacing varies. Another alternative would be to fit the ISOBOARD to the underside of the battens or purlins, which would entail cutting the ISOBOARD to fit between the truss rafters and not over them. Both of these alternatives are fraught with practical problems and neither may be acceptable visually.

No competent engineer, understanding the dangers of the recommended "over rafter fixing method", will "sign off" an ISOBOARD finished roof where the ISOBOARD is fitted, sandwiched between the batten / purlin and the rafter. (None of MiTek's, ITS's or Alpine's engineers have signed off any such roofs in the past).

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Please contact ISOBOARD to request their latest, official fixing detail recommendations and/or contact the ITC for further information.

You are therefore strongly advised not use the ISOBOARD sheets in an “over rafter under purlin/batten” application, unless you have ensured, through the assistance and certification of a registered professional engineer, that such a fixing method will not compromise the structural stability and/or functioning of the roof. Should there be any doubt, please contact the ITC.

Prof. J. Wium’s, who conducted the research, report is available in electronic format if so required.

Trust you find the above in order.

Yours faithfully

A. FAUL
EXECUTIVE DIRECTOR