

## **SMARTPLY OSB3 T&G specified for barn conversions**



O2i design consultants were asked by their client, an international artist, to make almost every visible interior surface of their two barn conversions in Somerset all exposed OSB.

SMARTPLY OSB was specified because of its zero added formaldehyde and environmental credentials, as well as its local availability. Samples were supplied and tested for suitability of use and acceptability by the Building Control Department who, approved subject to the use of a suitable intumescent fire retardant.

The project involved the conversion of two Somerset barns into an open plan workshop and living space and now virtually the entire interior is dedicated to SMARTPLY OSB. OSB sits comfortably with the existing timber roof structure, and now forms the walls, ceilings, sub-floors, reveals for windows and roof lights, frames and doors for the kitchen units and bench seating, doors, door linings and stops, sliding wardrobe doors, balustrade panels, shelving, TV cabinet, and boxing and battens. Even the stair treads are three layers of OSB bonded together.

Underneath the OSB wall surfaces the contractor developed his own OSB 'eco-batten' to replace solid timber, comprising 50x15mm and 50x30mm bonded OSB. The client wanted to retain the unique pattern of the OSB so the panels have been stained and varnished and finished with a clear, water-based fire retardant. The building has high levels of thermal performance through insulation and glazing and airtightness, as well as incorporating energy-efficient fittings and appliances. High levels of insulation, including sheep's wool were used in the roof and the large areas of south facing glazing of 1.1W/m2K U-value allow some solar gain. The front of the building is fitted with sliding oak shutters, which control solar gain by shading the space.

SmartPly OSB 3 is the only commercially available OSB manufactured using zero added formaldehyde in the UK and Ireland.

Andrea Pyle of O2i Design comments "The client was keen that the finish should not alter the appearance of the OSB. The smooth finish and high grade enabled the building contractor to scribe the sheets of SmartPly around existing beams and structures without too much difficulty. The 15mm tongue and groove panels also matched up neatly without leaving unsightly gaps. The OSB finish has given the space a warm, natural and serene feel, very much in keeping with the beautiful rural surroundings, I would consider using it in a similar context in future projects. OSB is a flexible, warm, natural and sustainable product where possibilities are endless."