

News

Cygnum gets passive certification for timber frame system

Cygnum has become the first Irish company to achieve passive house certification for a complete building system. The Cygnum Passive 350 system is now only the second certified build system in the UK and Ireland. It includes wall, roof, and foundation details.

Passive 350 features a 300mm twin wall sheathed on both sides with 9mm OSB, with a membrane on the inside forming the airtight layer. The build-up features a 140mm cellulose-insulated stud, a 53mm thermal break, and a second 89mm insulated stud which is designed to be thermal bridge free.

Passive 350 achieves a U-value of 0.13, but this can be increased or reduced by altering the dimensions of the thermal break.

“To get this certification, we had to ensure that everything — materials, detail design and factory quality control standards — were to the highest level,” says Cygnum’s Heber McMahon.

“Four key factors had to be addressed: U-values, airtightness, thermal bridging, and interior surface temperatures. The fact that Passive 350 is certified will reduce the cost of building passive. Because all the information on this system is now included in PHPP version 8.5, a PHPP designer can literally



choose the Cygnum system from dropdowns and avoid having to reinvent the wheel with a lot of initial design work. Their workload is less, and the quality is assured.”

The system is suitable for everything from large non-domestic projects to one-off passive houses.

Cork-based Cygnum has already built two passive

house certified schools in the UK and is currently working on more. The company is building a new passive house archive and records centre for Herefordshire Council and will start work later this summer on another passive building at the University of East Anglia.

(above) Cellulose insulation being blown into a Cygnum timber frame panel in their Cork factory

Photo: Andrew Bradley

Ecological Building Systems launches new airtightness tapes

Leading airtightness solutions company Pro clima has expanded its range of tapes with the launch of the new Extoseal range, which includes Extoseal Encors, Extoseal Magov and Extoseal Finoc.

Extoseal Encors features a unique acrylate butyl adhesive glue, which is designed to provide the optimum combination of acrylate glue reliability combined with the sealing and adaptive properties of butyl glues. Pro clima said that unlike conventional butyl tapes, thanks to the addition of Pro clima’s acrylate, Extoseal may be applied reliably even at very low temperatures combined with high reliability even in humid conditions, as often experienced in Ireland and the UK.

Niall Crosson, technical engineer with Pro clima’s UK and Ireland distributor Ecological Building Systems, commented; “The combination of extremely high adhesive strength, water tightness and flexibility ensures Extoseal Encors provides a reliable solution in areas prone to water leakage, particularly below window sills. This is often seen as a weak point in external insulation systems. With Extoseal Encors the

water tightness of the area under window sills are delivered more simply and more reliably than ever. Even in the event that nails are applied through the sill at a later stage, Extoseal Encors’s inherent ability to self-seal nail penetrations ensures water tightness is maximised.”

The Pro clima Extoseal series of butyl tapes includes Extoseal Finoc, a butyl tape with uses including acting as a capillary break directly beneath sole plates. In addition the highly flexible connection tape Extoseal Magov is designed for sealing around circular penetrations or awkward junctions.

The Extoseal range of tapes can adhere reliably to plywood, wood, plastic, metal, OSB, or even mineral/concrete substrates. Further Information and product samples can be obtained from Ecological Building Systems.

Ecological Building Systems UK has recently moved to new premises which now sees the warehousing and offices on one site on the outskirts of Carlisle, Cumbria. Penny Randell, the company’s UK general manager said: “It is an exciting period of development for us. As



well as the Pro clima stock we’re now able to comprehensively stock our Gutex range of wood fibreboards ensuring a more competitive price structure than previously, more efficient logistics and quicker turnaround on stock items. Our focus is to continue to provide high technical input and support to specifiers on projects, coupled with efficiencies in our supply and distribution. Our team is also expanding and we are currently recruiting for a technical engineer – all positive steps as the market continues to develop and grow.”

(above) Pro clima’s new Extoseal Encors and Magov tapes

Photo: Carsten Dittert