

**NOTICE 324 OF 2013****DEPARTMENT OF PUBLIC WORKS****AGRÉMENT SOUTH AFRICA**

(Approval of innovative construction products and systems)

Notice is hereby given that Agrément South Africa has, with effect from 25 July 2012, issued an Agrément certificate, details of which appear in the schedule hereto.

**SCHEDULE****Agrément Certificate 2012/417**

**Name of product:** Eco-Build Sandbag Building System

**Certificate holder:** Ecobeam Technologies cc

**Description:**

Eco-Build Sandbag Building System is a timber frame structure consisting of timber lattice beams (Eco-Beam) as vertical and horizontal studs and wall plates with sandbags as infill. The Eco-beams are fabricated from 38 mm square treated timber sections (**SANS 10005**) connected by continuous galvanised steel straps which zigzag between the timber to form a lattice beam 220 mm deep.

The foundation and ground floor slabs are conventional concrete strip footing and surface bed with screed finish which are always the responsibility of a professional engineer.

The walls are 270 mm thick and constructed by fixing vertical Eco-beams (columns/studs) spaced at 900 mm centres to top and bottom Eco-beams (wall and sole plates). Bags made from UV protected non-woven polypropylene fabric are filled with sand and packed in between the studwork up to the wall plate. Each layer compacted slightly. The walls are finished by securing steel wire mesh on both sides of the frame and plastering with conventional sand-cement plaster.

At the corners or junctions the walls are reinforced with 6 mm diameter steel wire mesh at least 300 mm in length on both sides of the corner or junction. At window and door openings timber frames are built between Eco-beams with wire ties to restrain adjacent studs from buckling. Lintels are formed with welded steel wire mesh fixed to studs on both sides of the opening.

Electrical and plumbing services are positioned in place within the bags before the application of plaster. The roof is constructed of eco-beams, timber rafters or conventional timber trusses and light or heavy weight cladding. Window and door frames are incorporated as in timber frame structures and are conventional.

The Agrément certificate contains detailed information on the product and can be accessed at <http://www.agrement.co.za>

Copies are obtainable from: Chief Executive Officer (CEO)  
Agrément South Africa  
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0001  
**PRETORIA**