

## DEPARTMENT OF PUBLIC WORKS

NO. 186

22 FEBRUARY 2019

AGRÉMENT SOUTH AFRICA  
(Approval of innovative construction products and systems)

Notice is hereby given that Agrément South Africa has, with effect from 29 November 2017, issued an Agrément certificate, details of which appear in the schedule hereto.

SCHEDULE  
Agrément Certificate 2017/554

**Subject:** EVG 3D Panel Construction System

**Certificate holder:** EVG 3D Africa (Pty) Ltd

**Description:** EVG 3D Panel Construction System is a prefabricated building system which utilises factory produced sandwich panels that are assembled on site, and thereafter finished with shotcrete (20 MPa).

The building system is erected on a conventional concrete foundation (protected by a damp-proof membrane) and a 100 mm thick surface bed. The design and approval of foundations are always the responsibility of an approved competent person.

External wall panels consist of a 100 mm thick expanded polystyrene (EPS) core (15 kg/m<sup>3</sup>). Two plane-parallel welded wire mesh sheets (cover meshes), which act as a plaster key, placed on either side of the EPS core are welded to diagonal galvanised steel wires which penetrate through the EPS core. Walls are finished with 50 mm thick shotcrete on either side of the EPS core.

Internal loadbearing and non-loadbearing walls consist of a 50 mm thick EPS core (15 kg/m<sup>3</sup>). Two plane-parallel welded wire mesh sheets (cover meshes) placed on either side of the EPS core are welded to diagonal galvanised steel wires which penetrate through the EPS core. Loadbearing walls are finished with 50 mm thick shotcrete and non-loadbearing walls are finished with 40 mm thick shotcrete on either side of the EPS core.

Wall panels are produced in a standard width of 1200 mm, with lengths supplied as required; up to 6000 mm. Panels may be cut to shape and size on site. The exterior surfaces of panels are finished with a weatherproof coating and the interior surfaces are plastered and painted, or clad with conventional plasterboard systems.

A reinforced concrete ring beam is cast on top of external and loadbearing walls. External corner, internal wall and T-junctions are reinforced with L-shaped strips of welded wire mesh, fastened onto the wall panel welded wire mesh.

Roofs comprise galvanised light-weight steel trusses and purlins clad with conventional roofing tiles. Roof construction is the responsibility of an approved competent person. Alternatively, roof and floor slabs are constructed of panels consisting of a 100 mm thick EPS core. Two plane-parallel welded wire mesh sheets (cover meshes) placed on either side of the EPS core are welded to diagonal galvanised steel wires which penetrate through the EPS core. Slabs are finished with 50 mm thick shotcrete on the bottom side and 60 mm thick concrete on the top side.

Window and door frames are conventional or Agrément approved and are purposely made to suit the design of the building.

Services may be run concealed within the panels by installing them behind the welded wire mesh. If insufficient space exists between the welded wire mesh and the EPS core, the EPS may be cut or channeled (using a blow torch) to form a chase for the service.

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, P O Box 72381, LYNNWOOD RIDGE, 0040