

DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE

NO. 5461

25 October 2024

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

Notice is hereby given that Agrément South Africa has, with effect from 22 April 2024, **reappraised** an Agrément certificate, details of which appear in the schedule hereto.

SCHEDULE

Agrément certificate 2010/372: (Reappraisal April 2024): Blast Building System

Subject: Blast Building System

Certificate holder: Didutex (Pty) Ltd

Description: The Blast Building System foundations consist of conventional concrete surface bed foundations with thickened edge beams and thickening under the internal load-bearing walls. Surface bed is power-floated to a smooth finish or screed at a later stage.

The structural frame comprises 90mm x 40mm x 0.6mm zincalume base rails, 90mm x 40mm x 10mm x 0.6mm zincalume lipped channel vertical studs at 600mm centres and 90mm x 40mm x 0.6mm zincalume ring beams. Horizontal reinforcing bars, 8mm diameter, are centrally placed, passing through the vertical studs and spaced at 1.2m centres.

Internal walls are constructed from zincalume base rails, vertical studs, and ring beam capping (no horizontal reinforcing) of similar dimensions as the external wall and clad on both sides with 10mm thick magboard. Internal load-bearing walls are constructed as external walls.

The base rails are anchored to the surface bed with 10mm diameter expansion bolts with large diameter washes at 800mm centres. Bitumen 2mm thick forms the DPC below the base rail. The external base rail overlaps the edge of the foundation by 10mm.

Vertical studs, base rail and ring beams etc, are secured to one another using three self-drilling tapping tek screws per side.

Galvanised lipped channel roof beam 150mm or 100mm x 50mm x 10mm x 2mm thick span from gable to gable and can be supported on internal cross walls. Roof beams are anchored to ring beams with 32mm x 1.6mm galvanised mild steel straps taken over the beam and bolted to the ring beam on either side. Roof construction can also be conventional timber construction spanning from eaves to eaves. Roof cladding can be either light or heavy weight.

All external walls are internally clad with 6mm thick magnesium oxide boards (magboard) secured at 300mm centres to the structural frame. A 2mm wide gap is left between boards that are sealed with an acrylic sealant before painting. Internal walls are insulated with a 100mm thick fibreglass blanket wedged between the magboard linings.

Window and door openings are lined with zincalume lipped channels, Timber or "clisco" type frames are secured in position with foamed polyurethane.

20 MPa concrete (1: 5 mix with 750 micron to 10mm graded aggregate) is spray applied to external walls in two layers, filling the cavities between structural members and floating to a smooth finish. External walls are always rendered with 12mm to 15mm thick plaster.

Services 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, P O Box 1022, GARSFONTEIN, 0042