## DEPARTMENT OF PUBLIC WORKS

NO. 312 18 MARCH 2016

## AGRÉMENT SOUTH AFRICA

(Approval of innovative construction products and systems)

Notice is hereby given that Agrément South Africa has, with effect from 09 December 2014, issued an Agrément certificate, details of which appear in the schedule hereto.

## **SCHEDULE**

Agrément Certificate 2014/474

Name of product: FSM FR Polycore Building System

**Certificate holder:** Fabricated Steel Manufacturing Company (Pty) Ltd

**Description:** FSM FR Polycore Building System is used for single storey buildings. The system

comprises prefabricated components that are assembled on site, conventional strip  $% \left( 1\right) =\left( 1\right) \left( 1\right)$ 

or raft foundations and roofs with insulated ceilings.

Foundations are either cast in-situ concrete surface beds with thickened edge beams or with strip footings. Where the latter are used, the surface bed is thickened over the brick plinth. A 105 mm x 40 mm deep rebate is formed around the perimeter of

the slab to accommodate the external wall panels.

The minimum reinforcing mesh to be used in the slab is RF193. The design and approval of the foundation is always the responsibility of a registered professional competent engineer.

The external wall panels (wall type 1) are up to 3000 mm  $\times$  1120 mm  $\times$  103 mm thick. They comprise a 0.58 mm pre-galvanised Chromadek sheet on either side encapsulating a 90 mm thick Expanded Polystyrene (15 kg/m $^3$ ) core laminated to a 12 mm thick fire resistant MgO board.

Wall type 1 is also used as an internal wall for the following occupancy classifications:

- moderate and low-risk commercial service buildings (B2 & B3)
- low and moderate risk industrial (D2 & D3)
- large, small shops and wholesalers store (F1, F2 & F3)
- dwelling house (detached houses) and related outbuildings (H4).

The internal wall panels (wall type 2) are used for occupancies where 41-45 dB sound insulation is required. The panels are up to  $3000 \text{ mm} \times 1120 \text{ mm} \times 103 \text{ mm}$  thick. They comprise 2 sheets of 0.58 mm pre-galvanised Chromadek sheets and 2 boards of 12 mm thick fire resistant MgO encapsulating a 80 mm thick and Expanded Polystyrene (15 kg/m³) core. In addition, internal wall panels (wall type 3 can be up to  $3000 \text{ mm} \times 1120 \text{ mm} \times 206 \text{ mm}$  thick and comprise 2 No. wall type 1 erected back to back. These are for occupancies where a 60 minute FR and 45 dB sound insulation are required.

The roof structure comprises a bolted steel structure with light- or heavy-weight

cladding. Ceilings are always insulated.

Window and door frames are galvanised steel or are aluminium, which are purpose made to suite the design of the building system.

Plumbing and electrical conduits can be flush mounted or surface mounted onto the composite panels.

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

Copies are obtainable from: Chief Executive Officer (CEO)

Agrément South Africa

P O Box 395
PRETORIA

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