## DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE

NO. 5468

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 2014/474: (Reappraisal April 2024): FSM FR Polycore Building System

Subject: 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 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 × 1120 mm × 103 mm thick. They comprise a 0.58 mm pre-galvanized. Chromadek sheet on either side encapsulating a 90 mm thick Expanded Polystyrene (15 kg/m<sup>3</sup>) core laminate 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 - 45dB sound insulation is required. The panels are up to 3000 mm × 1120 mm × 103 mm thick. They comprise two sheets of 0.58 mm pre-galvanised Chromadek sheets and two boards of 12 mm thick fire-resistant MgO encapsulating an 80 mm thick and Expanded Polystyrene (15 kg/m3) core. In addition, internal wall panels (wall type 3) can be up to 3000 mm x 1120 mm × 206 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 http://www.agrement.co.za.

Copies are obtainable from:

Chief Executive Officer (CEO) Agrément South Africa, P O Box 1022, GARSFONTEIN, 0042