

DEPARTMENT OF PUBLIC WORKS

NO. 1182

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

Notice is hereby given that Agrément South Africa has, with effect from 07 December 2016, issued an Agrément certificate, details of which appear in the schedule hereto.

SCHEDULE
Agrément Certificate 2016/532

Subject: Klevabrick Building System

Certificate holder: Astro Kretzmann Family Trust

Description: Klevabrick Building System is used for single-storey buildings. For use in two or more storey buildings a certificate from a registered professional competent engineer is required. The system comprises Klevabricks (blocks), raft foundations and roofs with insulated ceilings. Foundation footings are cast in in-situ raft foundation with a concrete surface bed. Deep rebates on foundation footings around the perimeter of the slab accommodate the external blocks.

Walls comprise steel reinforced concrete building blocks with compressive strength of 25MPa. Exterior wall Klevabricks comprise variations from K1 to K10, each of which serves a unique function in an exterior wall. Interior wall Klevabricks comprise variations from i1 to i4 each of which has a separate function in an interior wall. All Klevabricks are 260 mm high, a minimum of 145 mm wide and 435 mm long, except K3 and i2 which are 290 mm long.

Blocks are recessed both horizontally and vertically at each corner to allow for the interlocking of blocks in a building. The steel reinforcing is bent in such a manner so as to form loops in these pre-determined recesses both horizontally and vertically, through which 8 mm bolts are placed to connect and fasten adjacent Klevabricks together.

The different variations of Klevabricks include:

External Walls

- K1 – exterior Klevabrick
- K2 – exterior left corner Klevabrick
- K3 – exterior 290mm long Klevabrick (to fit a 435 mm x 435 mm grid)
- K4 – exterior Klevabrick + connection for inside wall
- K5 – exterior right corner Klevabrick
- K6 – exterior Klevabrick + electrical box on inside face
- K7 – exterior wall perpendicular left hand wall connection
- K8 – exterior wall perpendicular left hand wall connection
- K9 - exterior wall with inner recess applicable for suspended floor beams
- K10 – exterior wall Klevabrick derived from the K1 with an additional left hand lip to accommodate both door and window frames.

Internal Walls

- i1 – interior Klevabrick + centre wall connection + corner wall connections
- i2 – interior wall short Klevabrick to adjust lengths between Klevabricks
- i3 – interior 290 mm Klevabrick + electrical box on one side face
- i4 – interior Klevabrick facilitates laying of suspended floor beams over interior wall.

Roof trusses can be either conventional timber or galvanized light gauge steel. The trusses and the wall-plate are bolted to the connecting reinforcing loops of the top blocks.

Door and window frames are made from steel, timber, aluminium or Agrément approved material. Exterior Klevabricks K1 and K10 have moisture sealing lips which form a recess into which a door or window frame can fit. The provision of standard 20 mm diameter holes through certain blocks facilitates the easy connection and distribution of electrical points and copper water pipes within a building.

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 395, **PRETORIA**, 0001