



MANUFACTURERS AND CONTRACTORS SINCE 1973

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## **SPECIFICATION FOR CONCRETEx MKIII VIP PANEL TOILET**

### **A. PREFABRICATED CONCRETE ELEMENT:**

#### **1.1. WORKMANSHIP AND FINISH IN GENERAL:**

Element shall be manufactured from sound concrete, free of structural defects, complying with any sample if previously submitted. Element shall have off-shutter finish on three sides, with the fourth side having a wood floated finish.

#### **1.3. PERFORMANCE REQUIREMENTS (STRENGTH):**

The required concrete compressive strength in all prefabricated elements shall be a minimum of 40 Mpa at 28 days, determined in accordance with SABS method 863.

#### **1.4. CURING:**

All concrete elements shall be cured in accordance with the recommendations given in SABS method 863.

#### **1.5. REINFORCEMENT:**

All steel used for reinforcements in prefabricated elements shall be high yield steel and shall be free of rust, loose scale, flux, grease or oil substances and shall in general comply with SABS 1024-1991. The opening will be reinforced with Y-10 steel bar.

### **B. SUPERSTRUCTURE**

#### **1. FLOOR SLAB:**

1.5m x 1.0m x 0.05m reinforced with Ref 311 mesh. The slab is cast with positioning holes for four concrete posts.

#### **2. CONCRETE RIBS (SUPPORT POSTS):**

Concrete ribs are reinforced with 4 x 4mm Hard Drawn wire along the length of the post. Posts are recessed to accommodate side panels and these are bolted together using 8mm galvanised steel bolts. Posts are

positioned to the floor slab at each corner and bolted to rear and side panels for which holes are provided.

3. **SIDE AND REAR PANELS:**

35mm thick panels are bolted onto the posts to form the side and rear walls of the toilet. All panels are reinforced with Ref 100 mesh.

4. **ROOF PANEL:**

40mm thick panel is positioned on to the top of the structure. The panel has holes into which the top of the concrete posts fit. Ref 245 mesh is used for reinforcing.

5. **DE SLUDGE PANEL:**

1.5m x 0.5m x 0.05m reinforced with Ref 311 mesh. The slab is positioned against the floor slab on top of the pit liner.

6. **DOOR:**

Plastic moulded door complete with lockable barrel bolt is fitted to the front of the unit using recessed holes in the Roof and Floor panels for the pivot hinge.

7. **VENT PIPE:**

100mm vent pipe, complete with fly-screen is positioned internally.

8. **PEDESTAL (OPTIONAL EXTRA):**

200mm plastic pedestal and lid.

9. **HAND WASH FACILITY (OPTIONAL EXTRA):**

Plastic bracket to hold 2L water bottle.

**B: SUBSTRUCTURE**

1. **CONCRETE PLINTH PADS:**

For base structure of 0.300 x 0.300 x 0.050.

2. **CONCRETE WEDGE PLANKS:**

1.5m x 0.3m x 0.1m concrete plank reinforced with 4 x 7.1mm steel bars in a cage form, using specially designed plastic spacers.

**C: ERECTION(PIT):**

1. A pit is dug of approximately 1650x1650x1300. This should be slightly oversize to allow for backfilling of soil on to wedge planks.

2. Four plinth pads are placed at the four bottom corners of the pit such that the corners of the wedge planks rest centrally on the pads. These must be level and square to ensure the integrity of the pit and top structure
3. The first row of planks are placed end-to-end in a square with corners resting on the plinth pads. Soil is backfilled to lock the planks in place.
4. The process is repeated with the following three 'layers' of wedge planks, resulting in a pit height of 1290.

**D: ERECTION(TOP STRUCTURE):**

1. The floor slab is placed on top of the pit with the desludge panel alongside. Again, these should also be correctly square and level.
2. Ribs are placed in the floor slab and secured with side and rear panels. Do not tighten completely as this provides slight play and ensures easier placing of the roof slabs.
3. Once all panels are in place, the roof panel is lifted on to the top and positioned with ribs locking into the slots provided. Tighten any remaining bolts as required.