



## **GAUTENG DEPARTMENT OF HOUSING NORMS AND SPECIFICATIONS FOR LOW COST HOUSING FOR 2008/09**

### **GENERAL:**

- ✓ All building materials to be SABS approved.
- ✓ All workmanship to be carried out in accordance with National Building Regulations and Building Standards Act (Act 103 of 1977, as amended) and the NHBRC Home Building Manual.
- ✓ In case of uncertainty National Building Regulations and the NHBRC Home Building Manual should take precedence.

### **DESIGN NORMS AND STANDARDS**

1. **Area of unit:** 40 square meters
2. **Bathroom:** The bathroom is to contain a wash hand basin [whb] and water closet [wc] and space for a future bath by beneficiary. (Refer to Gauteng Department of Housing (GDoH) approved drawings GDoH/A1/05 & GDoH/A2/05)
3. **Bedrooms:** The unit is to consist of two bedrooms.
4. **Privacy:** The unit designs shall allow for privacy of the occupants in terms of i) internal walls to be built up to underside of roof covering  
ii) all rooms to have lockable doors, 3 lever lock set for exterior doors & 2 lever lock set for interior doors.
5. **Lounge / open plan Kitchen:** This to be allowed for as open plan type design. The kitchen space shall allow for a sink unit securely mounted to the wall.
6. **Access/Entrances:** The unit to have at least two(2) external doors.
7. **Finishes:** i) external walls to be plastered. Internal walls to be smooth bagwashed.  
ii) all steel components to be treated against rust.  
iii) **Floors** to be power-floated or have a smooth steel-trowelled finish  
iv) All internal doors to be hollow core timber

### **CONSTRUCTION SPECIFICATIONS:**

(all of the following should be included in the Notes/ Specs on all drawings title block)

#### **FOUNDATIONS**

1. Foundation shall be as per the Engineer's design and specifications (A note to this effect on the drawing).
2. Foundations shall be inspected and certified by a registered Engineer.

#### **WALLS**

1. External walls to be single leaf 140mm thick cement Maxi bricks (290x140x90) or similar approved (7mpa) on 375micron DPC.
2. 2,8mm brick force every 4<sup>th</sup> course, as well as every course above windows and doors or as specified by the Engineer

3. Internal walls to be 140mm maxi brick on flat (or 290X90X90mm high special brick) and duly bonded to external walls every 4<sup>th</sup> course, with DPC and brick force as above
4. Cement mortar mix for walls to be of 1:5 proportion by volume **2 bags cement (1wheelbarrow) : 5 builders wheelbarrows sand**
5. **Ceiling Height:** A minimum of 2,5m ceiling height is required for all units
6. Where applicable provide waterproofing to shower walls and floor.
7. All External walls to be plastered and painted. Paint to be SABS approved PVA.

#### DOORS AND WINDOW FRAMES

1. Clisco type steel window frames or similar approved.
2. For window sizes and quantities refer to GDoH approved drawings GDoH/A1/05 & GDoH/A2/05.
3. Timber Hollow core internal doors on min. 1mm thick Pressed steel door frame.
4. 1mm thick Pressed steel combination doors with 3 lever lock set and door frames to external walls.
5. Window frames other than Clisco to comply with SABS 727.
6. ND type window frame to living room & bedrooms, NC type to kitchen and NE to bathroom.

#### PLUMBING

1. Provide a ceramic wash hand basin with tap to bathroom.
2. Cistern to be made of porcelain or alternatively heavy duty plastic with 11 litres water capacity, complete with ball and beta valve, flushing mechanism and flush pipe.
3. Water closet pan to be of glazed fire-clay or glazed porcelain, fixed to floor with 1:3 cement mortar mix. Seat to be heavy duty plastic type with flap and hinges of similar quality properly fixed to the pan.
4. Provide 1 stainless steel Sink with tap to Kitchen area. Sink to at least 900mm long and securely fixed to wall.
5. Galvanized pipes to be Class B as per SABS 62 and 509.

#### DRAINAGE

1. Provide one (1) gully with tap per house outside kitchen
2. Provide a 110mm diameter vent pipe to the drainage system.
3. Provide rodding eye at head of drain and within 1,5m of connection point, and an inspection eye at each junction.
4. Provide marked concrete covers at ground level for Rodding eyes.
5. Drain pipes to be at least 1m away from the walls/foundations
6. Drain pipe invert level to be min. 450mm at head of drain

#### FINISHES

1. **Floors** to be power-floated or a have a smooth steel-trowelled finish.
2. All steel doors, door and window **frames**, including concealed areas of these, to be painted with 1 coat of universal undercoat (oil based) and 2 final coats of enamel paint in addition to factory painted red-oxide.
3. Steel Roof **Purlins** to be painted same as above at the gable ends exposed to the elements.
4. All External walls to be plastered

ROOF (A) Rational roof designed by a competent Engineer

1. Marley roof tiles or similar approved on trusses.
2. 4mm galvanized roof wire anchors built-in 6 courses deep into walls
3. Roof to be fixed with approved galvanized roof nails or hook bolts with water-proofed cups/washers.

#### ROOF (B) Rational roof designed by a competent Engineer

1. 0.5mm "Full Hard" IBR or corrugated galvanized roof sheeting or department approved roof cover.
2. 150X50X20mm min cold formed lipped channel beams
3. Roof slope to be min 15 degrees.
4. 1 ½ corrugations side over-lap of roof sheets.
5. 4mm galvanized roof wire anchors built-in 6 courses deep into walls, tied over a nail over timber purlins and spaced at 1m intervals along a length of wall plate purlin
6. Roof to be fixed with approved galvanized roof nails or hook bolts with water-proofed cups/washers. Provide for 3 hook bolts/nails per purlin per roof sheet (1 at each side lap and one in the middle of the roof sheet).

#### GLAZING

1. Glass area of less than 0,75m<sup>2</sup> to be 3mm thick.
  2. All glass more than 0,75m<sup>2</sup> to be 4mm thick.
  3. Glass to bathroom to be 4mm obscured glass.
  4. All putty to be treated with a hardener and finished off with universal undercoat and 2 coats enamel based gloss paint to final colour and finish.
  5. Glass to comply with SABS 0137
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