# WOODWIND ESTATES: DULCIAN MANOR BUILDER SPECIFICATIONS

# **GENERAL**

- Units will be constructed to comply with the requirements of the National Building Regulations (NBR), the NHBRC and relevant by-laws of the Local Authority.
- Specifications must be read in conjunction with all drawings under Part C4 and will not take precedence over aforementioned should any conflict arise. All unclear items to be raised with an RFI.

#### **AVAILABILITY OF MATERIAL**

All specified materials are subject to availability. Should any materials not be readily available, the Contractor may substitute any of the products with others of a similar value and quality after obtaining the written approval of the principal agent.

#### RAFT FOUNDATION

- Electrical and Data site reticulation to be concluded prior to excavation activities.
- Raft foundation as per engineer's design, specifications and notes.
- Raft soil platforms below the unit footprint to receive an 85mm G5 fill layer at 93% MOD AASHTO
- Raft soil platform below the walkways, staircase and patios shall be shaped as per design
- Approved soil poisoning shall be applied to surface beds and down stand bottom and sides of trenches.
- 250 Micron Damp Proof Membrane to all surface beds and trenched areas as per design.
- All services shafts shall remain open without a surface bed to be reinstated with low strength concrete after all services
  has been installed
- Stepped edge beam to be formed that's 170mm deep and 110mm wide as per design.
- 25Mpa/19mm Concrete to the entire element as per design.

# PRESTRESSED FLOOR SLAB

- 60mm thick 30Mpa Precast Concrete Plank slab with a 110mm structural 25Mpa In-Situ concrete topping as per engineer's design, specifications and notes.
- 2 ply Malthoid, 112.5mm wide placed on wall bearings below slabs.
- 20mm thick Polystyrene 170mm high, placed between slab edge and brick lining.
- Duraflex waterproofing slurry system with membrane to turns on external floor slabs prior to tiling.

# **SUPERSTRUCTURE**

- Face brickwork to deepened edge beam of Moroccan Red Blend Travertine bricks.
- · General brickwork from None Face Plaster clay brick.
- 14Mpa Bricks to all masonry components.
- Class I mortar to the ground and first floor envelope.
- Class II mortar to the second and third floor envelope.
- One brick wall to fire dividing walls within the roof cavity.
- One brick wall to roof cavities dividing walls on external walls by the walkways and balconies.
- Two 5.4mm dia. round bar build in horizontal below window openings with a 200mm overlap per side.
- 2.5mm brick force every 3<sup>rd</sup> course below lintels and every course above.

- Pre-stressed concrete lintels above all window, door and openings.
- Two 80x80x6mm angles support build into masonry back-to-back to the Type A window opening on the 3<sup>rd</sup> floor walkway
  to support the roof load as these two window openings should be 1.8m above the walkway. The type A windows on the
  walkways of the remaining floor should also have an opening at 1.8m high but supported with a standard lintel as the
  concrete floor slab will disperse the load.
- 300mm treads x 170mm riser x 40mm thick prestressed fabricated concrete steps by Smartcrete.
- 75mm dia. PVC weep hole through brickwork panels on walkways that are flush internal sealed into waterproofing layer and protruding brickwork panel on the façade.
- 375 (µm) micron dpc to walls and windowsills (with turn-ups).
- Polyurethane sealing compound including backing cord to movement/expansion joints.
- Windowsill and copings of Moroccan Red Blend Travertine with solid bricks on the ends.
- · Face brick brick on edge header coarse copings to all balustrade and balcony dividing walls.
- Bathtubs to be encased with half brick wall brick on edge skin.

#### **WALL FINISHES**

External Walls: Plaster panels according to architect drawings. Plaster thickness to be 10mm thick on the smooth

sections with a "wood float" finish and 6mm thick on the wrought sections with an imperfect finish free

from plaster tools and scaffold marks.

Two coats Prominent All Seasons matt paint for exterior use, or similar approved to all plastered sections,

as per colour schedule.

Internal Walls: Smooth "steel float" plaster finish. Plaster thickness to be 10mm.

Two coats non primer plaster skim and two coats premium quality ultra matt, fully washable and stain

resistant acrylic emulsion paint, as per colour schedule.

Shower walls: 2 coats ABE Duraflex waterproofing including membrane to turn ups to shower walls and floor prior to

tiling.

500x500mm Ennis Grey Pegasus ceramic tiles to shower walls of 1.7m long and 2.2m high at the

shower/bath combination corner. Grey waterproof grout.

<u>Bathtub/HWB</u>: 500x500mm Ennis Grey Pegasus ceramic tiles to masonry box and a 500mm high splashback to remaining

perimeter of the bathtub. One full tile splashback to HWB. Grey waterproof grout.

Kitchen Splashback: 300x300 Shiny White Samca ceramic tiles with white waterproof grout to kitchen counter perimeter at

300mm high with a white silicone bead on the counter.

#### ROOF STRUCTURE AND COVER

- Hip and valley type roof construction as per roof engineer design in accordance with the architect plan.
- Trusses to be tied into walls with 2.4mm galvanized wire roof ties built minimum 300mm into walls in accordance with the building regulation.
- · Radenshield D/S Eco fixed under battens.
- Double Roman concrete roof tiles and concrete ridging tiles on matching oxide mortar bed with DPC.
- Colour of tiles as per colour scheme of complex.
- 10mm Thick x 225mm high Nutec fascia boards and 80 x 200mm barge boards where required.
- Fascia and barge board sides being fixed to trusses shall be pre-painted prior to fixing.
- 100 x 125mm Ogee profile seamless pre-painted gutter system with 80 x 55mm downpipes.

- Downpipe positions to be approved by the Principal Agent.
- The roof structure to be certified by a qualified roof engineer for both manufacturing and erecting.
- Exposed roof timber to be treated with two coats carbolineum oil prior to hoisting in place.

#### CEILINGS

Internal & External Ceilings: 6.4mm Rhino Gypsum board screwed to 38x38mm brandering at 450mm intervals and joined

with metal tee strips. One coat alkali resistant primer and two coats super quality acrylic

emulsion paint. Bathroom Ceilings: Two coats of moisture, steam and mould resistant paint.

Cornice: 75mm coved polystyrene cornices ceiling perimeter, gaps closed with acrylic silicon. One coat

alkali resistant primer and two coats super quality acrylic emulsion paint.

Isolation: 100mm thick "Think Pink ISOVER" isolation blankets laid on top of all ceilings except areas above

walkways and staircases.

<u>Trapdoor:</u> 540x540mm pressed steel hinged trapdoor, 1 per unit and 1 per staircase.

Internal Concrete Soffits: One coat non primer plaster skim and two coats premium quality ultra matt, fully washable and

stain resistant acrylic emulsion paint.

External Concrete Soffits: smooth off shutter finish with cementitious remedial to imperfections and joints.

#### **FLOOR FINISHES**

- Sloping screed on concrete slabs to achieve a tiled upper surface to fall 1:100 over the width of the walkways and balconies.
- 2 coats of ABE Duraflex including membrane turn ups/down to walkways and balconies
- 500x500 Ennis Grey Pegasus ceramic floor tiles to all internal floor areas, steps and skirtings. Grey waterproof grout.
- 500x500 Ennis Charcoal slip resistant Pegasus ceramic floor tiles to external floor areas, steps and skirtings. Grey waterproof grout.
- Tile joints on all floor perimeters shall be 10mm wide and be cleaned and prepared with a 10mm dia. foam backing cord prior to applying 100m high tile skirtings.
- 10mm wide Kirk PVC expansion joint to be placed in the width of walkways every 3 meters.
- 12mm high L aluminium L section corner protection to tiled steps, thresholds and exposed perimeter.

# **DOORFRAMES & DOORS**

External Entrance doors: 813x2032x44mm Horizontal slated meranti veneer door with a meranti weather strip, hanged to

a 55x90mm rebated saligna doorframe with rubber seals, 44x8mm meranti cover strip

 $architraves,\, 100 mm\ steel\ butt\ hinges,\, single\ cylinder\ deadlock\ with\ striker\ plate\ and\ Coupe\ Oulu$ 

anodised aluminium flush handles. Doors and frames to sealed with three coats superior quality-

stained gloss varnish.

Storeroom doors: 813x2032x44mm Horizontal slated meranti veneer door with a meranti weather strip, hanged to

a 1.2mm double rebate pressed steel doorframe with hinges and a striker plate, single cylinder deadlock and Coupe Oulu anodised aluminium flush handles. Doorframes to be painted with one coat primer and two coats premium quality universal enamel. Doors to sealed with three coats

superior quality-stained gloss varnish

Internal doors: 813x2032x40mm hollow core doors with flush hardboard on both sides, hanged to a 38x76mm

rebated saligna doorframe with 44x8mm meranti cover strip architraves, 100mm steel butt

hinges, two lever locksets with striker plate and Coupe Oulu anodised aluminium flush handles.

Doors and frames to be painted with one coat primer and two coats premium quality universal

white enamel.

External Lounge doors: Powder coated aluminium SD1521 XO sliding door, 1500 x 2125mm high including a SL621

sidelight, 600 x 2100mm high. Fixed to masonry or concrete including silicone sealant. Glazing to

comply with NBR, COC required.

Shower doors: 800 x 1450mm high White aluminium shower panel, fixed to bathtubs and masonry wall

including silicone bead. Glazing to comply with NBR, COC req.

Geyser Shaft doors: Double hinged aluminium door with mid-rail and 6mm Nutec board inserts, 2200mm wide x

2720mm high. Fixed to masonry or concrete including silicone sealant. Nutec insert to be painted

with one coat alkali resistant primer and two coats super quality acrylic emulsion paint for

exterior use.

#### WINDOWS

- Powder coated aluminium 30.5 casement window units complete with subframes, ironmongery, glass, sealant, etc and fixed to brickwork or concrete.
- Standard colour aluminium window frames, as per colour schedule.
- Clear sheet glass to all windows, obscure glass to all bathroom and toilet windows.
- All glazing to comply with NBR, SANS 10400 certificate required.

#### IRONMONGERY

- Door handles External: Coupe Oulu anodised aluminium flush door handle with a 3-lever cylinder lockset.
- Door handles Internal: Coupe Oulu anodised aluminium flush door handle with a 2-lever mortise lockset.
- Anodised Aluminium doorstop with rubbers plugged to floor
- Standard white single rail curtain track over all windows, min 100mm wider than opening per side
- La Gio Bella 4300 Fiorano range 5-piece chrome gift set, plugged. Positions to be confirmed.
- La Gio Bella 4300 hand towel holder to be plugged at hand wash basins.
- Stainless steel corner shelf fixed to tiles at each shower. Product code at Gelmar: 7407
- A chrome plated bath cover fixed to tiles over bath service hatch.
- 200 x 200 x 2mm chromadek plate with house number, glued to masonry.

#### **ELECTRICAL**

- Supply cable Airdac SNE 10mm2 cables in a 32mm conduit including termination and labelling.
- Internal Electrical, Solar and DATA reticulation within a P9000 powder coated. trunking and covered with P0184 cover, neatly fixed to masonry within the electrical/DATA and geyser service shafts, no exposed conduits in shaft.
- One 25mm PVC conduit within floor slab per floor from DATA duct to both geyser service shafts.
- One 25mm PVC conduit within floor slab per unit from DATA point to DATA trunking
- Electrical Layout as per market up architect plans by the Principal Agent.
- Plug point quantity: 8 plug points per unit & 3 communal plug points
- Light Points: 7 lights points per unit & 52 communal light points
- One flush mounted distribution board per unit complete as follow: NUR Flush mounted SQI. 12 Way DB Board with LESCO breakers: 2P 63 Amp Main breaker, 2P 63 Amp Earth Breaker, 1P 32 Amps Stove breaker, three 1P 20 Amp

- Plug breakers, 1P 20 Amp Geyser breaker and 1P 20 Amp MAJOR TECH digital programmable geyser timer, Installed
  in recess in brick wall complete with wiring and labelling.
- Euro combination plug point with wiring diameter not to be less than 2.5mm2
- All lights wire size not less than 1.5mm2.
- One stove point with isolator, wire size not less than 4mm2.
- · One geyser point with isolator, wire size not less than 4mm2.
- One major tech digital geyser timer.
- TV cable point in the lounge, conduits of all units routed to a centralized point within the roof cavity.
- Onesto Trinity Range plugs, light switches and isolators
- Complete installation of Geyser Robot GR4KVA Lite System with solar panels for 50% electrical usage saving on a 100L
- . One 20mm PVC conduit from PV panels to Geyser Duct including waterproofing self-adhesive tape to roof tile.
- IP65 weatherproof box per geyser isolator with service shaft to enclose geyser robot.
- Two earth spikes with 10mm earth wire within electrical duct up to ceiling volume connected to one earth bar and
- · One 6mm earth wire from PV panel mounting rails to earth bar.
- Defy Slimline 600SU undercounter Electrical Oven (DBO485) and Defy Slimline Solid Hob (DHD 333), complete.
- Certificate of compliance for each unit on all electrical components
- Certificate of compliance for each block on all communal electrical components
- Internal light fittings:
  - Radiant Brite Star Range chrome spotlight trio 3 light bow with LED bulbs 2no. per unit.
  - Radiant Brite Star Range round ceiling light with styled clips and LED bulbs 4no. per unit.
- External light fittings:
  - o Round surface mounted clear LED light 1no. per patio/balcony and 52no. communal points.

## **PLUMBING & SANITARYWARE**

- One 20mm dia. inline water meters with pulse out per unit within the geyser service shaft at GF level.
- Water supply pipe to manifold from main line to be 40mm HDPE pipe.
- Galv. Manifold with shut off valve to connect all water meters with individual shut off valve at GF level.
- Geyser Service Shaft appearance All piping to be neat and securely fixed to masonry.
- Water supply pipes within the shaft to be copper or galvanized steel.
- Hot and cold-water piping and waste pipes to comply with SANS 10400.
- 20mm copper piping chased into the walls from water meter to the unit.
- 15mm copper piping chased into walls to all sanitary points.
- 110mm uPVC sewer pipe from unit shaft to internal main line at house connections, incl. rodding eyes.
- · Two wet precast gulley's per block.
- 50mm uPVC waste piping from sanitary points.
- 50mm uPVC waste pipes to be chased into walls upwards, protruding with a bend behind the waste union.
- 100L Kwikot Superline 400kPa Dual B rated geyser including Bull Mortice air release valve, 22mm 400 KPA pressure, 22mm
   Cobra PRV Thermostatic mixing valve and 22mm none return valves, 22mm high pressure tampering valve, 22mm 400 kpa rated Vacuum breaker, est. complete, mounted horizontal to masonry within geyser service shaft. Overflow/release to sewer line.
- Pressure regulating valve to each unit within the service shaft, overflow to sewer line.

- Lockable brass external hose-bib tap to communal water points to all wet gulley's.
- Waste connection for washing machine to have an in-line trap to each unit.
- Angle valves to be fitted flush with wall finishes.
- Two firehouse reels on every floor with independent galvanised water supply pipe, all to be painted red.
- Two 4.5kg Dry chemical powder fire extinguisher per floor, with wooden wall plate and hook, fixed to wall.

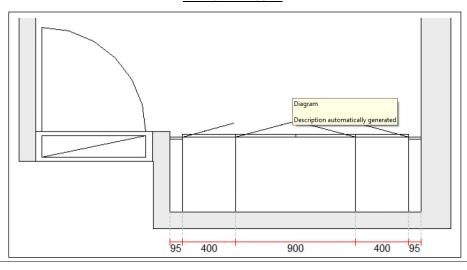
#### Sanitary Fittings & taps:

- <u>Bathtub</u>: C1700mm long x 700mm wide long Acrylic Tarmin bath without handles with Cachet Ballaugh concealed diverter Bath/Shower Mixer (SL100BA), chrome shower arm and an Ellies Lotus shower head (FSFSH1), Chrome Nikki Spout with Flexi Connector, Bath Trap, Waste, etc., complete.
- <u>En-Suite Basin</u>: Cobra Code: COB-CWLBAWH1-6DT01 with Gio bottle trap, Cachet Ballaugh basin mixer, 32mm waste and
  plug with flex connector, angle valves, etc., complete.
- <u>Bathroom Basin</u>: Cobra Code: COB-CWLBAWH2-6DT01 with Gio bottle trap, Cachet Ballaugh basin mixer, 32mm waste
  and plug with flex connector, angle valves, etc., complete.
- <u>Toilet</u>: Betta Astina Top Flush Toilet Suite with dual flush mechanism, white wooden toilet seat, angle valve, flex water hose, etc., complete.
- <u>Kitchen Sink</u>: Cam Africa Drop-in double bowl sink (DC1248S/DEB) with 40mm unslotted waste, Cachet Ballaugh wall type sink mixer (SL210BA), Spazio sink trap, etc., complete.
- Washing Machine point: Cachet Pilano under tile stop tap, undercounter water connection, undercounter 50mm waste
  with trap, etc., complete.

#### **BEDROOM CUPBOARDS**

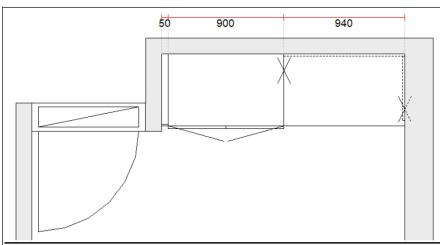
- Built in cupboards as indicated on the BIC drawings under Part C4 Drawings.
- 4 door BIC to main bedroom and a 2 door BIC with a 940mm countertop to the second bedroom.
- White melamine (A-Grade) doors and carcasses with 1.5mm PVC edging on doors and 0.4mm PVC edging on the carcass.
- 96mm Black Neptune bar handles.
- BIC are 2m high with a flush top with backing.

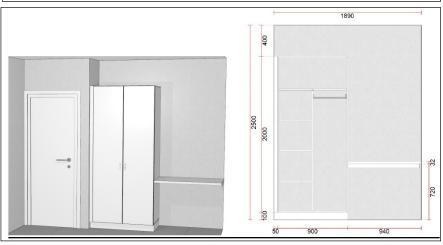
## TYPE A & B: BEDROOM 1





# TYPE A & B: BEDROOM 2

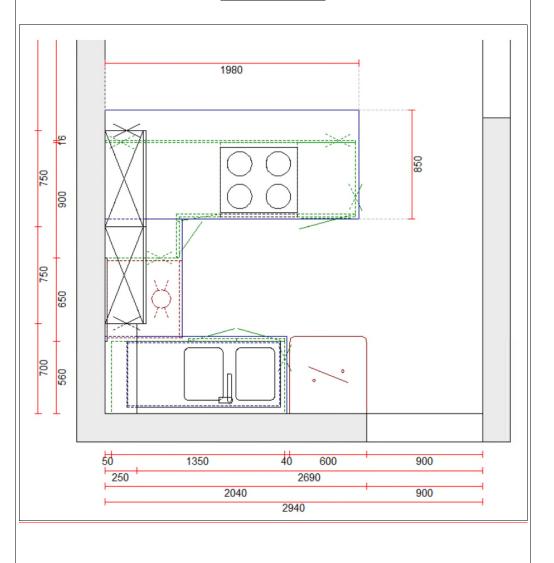




# KITCHEN CUPBOARDS

- Kitchen cupboards as per the layout under Part C4 Drawings.
- White melamine (A-grade) carcass with Storm Grey Peen and Dunblane Grey Peen on external sections.
- 1.5mm PVC edging on doors and 0.4mm PVC edging on carcass.
- Aluminium kick plates.
- 30mm Rustenburg granite worktops.
- 96mm Black Neptune bar handles.
- Cam Africa Drop-in double bowl sink (DC1248S/DEB) with 40mm waste.

**TYPE A & B: LAYOUT PLAN** 









## **BATHROOM CUPBOARDS**

 Medicine Cabinet - 450mm long x 150mm deep x 800mm high with a 200mm high open section and 600mm high door with a mirror.

# **EXTERNAL WORKS**

# **Boundary Wall**:

- 1.8 meter high Corojem face brick wall with brick force every 4th course, brick on side roller course with an overhang drip built on a 600 x 250mm mass concrete strip foot foundation as per engineer's specification.
- Expansion joints between columns every 3.5 meters.
- Face bricks to be similar as estate boundary wall (Country Classic Red).

## Carport/s:

• Double/triple shade nets as per SDP to the Developers colour scheme.

# Paving:

- Carports and driveways will be paved with grey interlocking pavers (200x100x60mm).
- Patios, walkways and aprons to be paved with grey rectangular pavers (200x100x50mm).
- · All paving to have edge restraints that are either masonry walls, pre-cast kerbs or mortar beds incl. edge
- Weed killer to all prepared patio, walkways and aprons paved areas.

## Gardens and Lawns:

 Stormwater management shaping on the top structure platform has been implemented to extent of final landscaping level and will need to be reinstated prior to the commencement of the landscaping contractor.

#### Steel Handrails to Steps:

- 50mm External diameter x 2mm thick pipe rails with welded on end cap.
- 10mm solid round bar at 200mm long welded to the pipe rail at 1000mm c/c that's to be fixed to the masonry wall by
  means of inserting the round bars in epoxy filled holes.
- Handrail to be 850mm above the pitch line. Including metal primer and two coats matt enamel paint.

# Steel Balustrades to Walkways and Balconies:

- 50mm External diameter x 2mm thick pipe rails welded onto an 40x40mm end cap with a 10mm solid round bar inbetween rail and end cap, end cap welded to a 40x40mm square tubing upright and fixed to concrete slabs at bottom.
- 16X16mm square tubing horizontal between upright with 12x12mm uprights at 100mm c/c. Handrail to be 1000mm above floor level. Including metal primer and two coats matt enamel paint.