



Construction Specifications

1 FOUNDATIONS / FLOORS / SURFACE BEDS

- 1.1 **Floating Raft Foundation:** The foundation and surface bed will consist of an in-situ floating raft foundation with a minimum thickness for the surface bed of 100mm, and a min edge thickening of 250mm - cast from 20MPa mass concrete on top of 250Micron damp-proof membrane 300mm lap joined, on top of well compacted ground to Min 90 MOD AASHTO in layers not exceeding 100mm.
- 1.2 The surface bed will receive Ref245 reinforcement mesh.

2 INTERNAL & EXTERNAL STRUCTURAL WALLS

- 2.1 All Structural walls (internal as well external) will consist out of of 150mm thick Structural Insulated Panels (SIP).
- 2.2 The **Structural SIP** is a composite panel manufactured out of two outer layers of 9mm thick Magnesium Oxide (MgO) Boards glued to a core of 132mm thick 15kg/m³ polystyrene.
- 2.3 The walls are connected to the foundations by means of a specially designed and accredited Composite Base Rail (**BS**), which will be mechanically connected to the foundations by means of M8 expansion bolts.
- 2.4 The SIPs will laterally be connected to each other by means of a specially designed and accredited Composite Strut (**JS**) by means of self cutting screws.
- 2.5 The SIPs will perpendicularly be connected to other panels by means of the specially designed and accredited Structural T-Joint Connector (**TS**), utilising M6 Heavy Duty Toggles
- 2.6 All connections to be 'tape and jointed' and skimmed and finished smooth ready to be painted as per paint specifications.

3 INTERNAL PARTITIONING WALLS

- 3.1 Where internal partitioning walls are required, it will consist out of of a 100mm thick Structural Insulated Panels (SIP).
- 3.2 The **Partitioning SIP** is a composite panel manufactured out of two outer layers of 9mm thick Magnesium Oxide (MgO) Boards glued to a core of 82mm thick 15kg/m³ polystyrene.
- 3.3 The walls are connected to the foundations, and perpendicular to each other by means of a specially designed and accredited cold formed Base Rail (**BP**). These base rails will be mechanically connected to the foundations by means of M8 expansion bolts.
- 3.4 The SIPs will laterally be connected to each other by means of a specially designed and accredited cold formed Strut (**JP**) by means of self cutting screws.
- 3.5 All connections to be 'tape and jointed' and skimmed and finished smooth ready to be painted as per paint specifications.

4 SUSPENDED SLABS

- 4.1 Where suspended floor slabs are required, this will consist out of the same 150mm thick Structural SIPs as utilised for structural or load bearing Walls.
- 4.2 The connection of the **SIP Slabs** to the Structural SIP Walls would be by means of the specially designed and accredited Structural T-Joint Connector (**TS**), utilising M6 Heavy Duty Toggles.

5 ROOFS

- 5.1 Depending on the design, the units will either have a 25deg or a 40deg roof pitch.
- 5.2 All roofs will be constructed utilising a 200mm thick Structural Insulated Roof Panels.
- 5.3 The **Roof SIP** will consist out of a composite panel manufactured with an outer skin of traditional IBR roof sheeting and an internal skin consisting out of a 9m thick MgO Boards all glued to a core consisting of 150mm thick 15kg/m³ polystyrene.
- 5.4 The Roof Panels will be supported at the ridge by a specially designed and accredited Ridge Beam (**RB25 or RB40**), and secured by Hollow Wall Expansion Anchors.
- 5.5 At the eaves, the Roof Panels will be supported by a specially designed and accredited composite Eaves Beam (**EC25 or EC40**) secured by Hollow Wall Expansion Anchors.
- 5.6 Depending on the design, the Eaves will either be a Traditional or a Barn feel or finish.
- 5.7 For a Barn finish, the required flashings will be fitted in order to provide the required waterproofing and closures.
- 5.8 For the Traditional finish, prefabricated timber eaves supports (**ES25 or ES40**) will be secured to the walls in order to support the roof overhang.
- 5.9 The Roof Panels will be finished at the Gable end by specially designed flashings (**GF**) in order to waterproof and finish the roof overhang.
- 5.10 All connections to be 'tape and jointed' and skimmed and finished smooth ready to be painted as per paint specifications.

6 DOORS AND FRAMES

- 6.1 All internal and external door frames will be powder coated aluminium.
- 6.2 All external glazed doors and sliding doors to be powder coated aluminium framed doors with glass insert panels as per window schedule.
- 6.3 All external doors to be solid hardwood doors.
- 6.4 All internal doors to be standard hollow core doors with hardboard faces suitable for painting.
- 6.5 All doors will be finished with pre-cut Aluminium angles glued into place in order to seal of and finish the exposed SIP panel.
- 6.5 All doors are generally 2100mm high. This height corresponds to the internal ceiling / slab height, which is a minimum of 2200mm at lowest point.

7 WINDOWS & GLAZING

- 7.1 All external windows to be powder coated aluminium framed windows with insert panels, except windows to toilets and bathrooms, which will be glazed with obscure glass.

- 7.2 Glass standards to conform to the National Building Regulations
- 7.3 All windows will be finished with pre-cut Aluminium angles glued into place in order to seal of and finish the exposed SIP panel.

8 FLOOR FINISHES

- 8.1 The floating raft foundation (surface beds) will be finished smooth with a steel trowel.
- 8.2 The concrete will then be finished and sealed with an industry approved concrete seal.
- 8.3 Shower floors (where applicable) will receive a mosaic finish of choice by the developer.
- 8.4 Tiled flooring would be an additional option at an additional cost as per the Options offered below.

9 BATHROOMS & KITCHEN FINISHES

- 9.1 Wall Tiles: Three different wall tiles of N\$200/m² each will be provided by the developer. The client / purchaser will have a choice of one tile type / colour per Unit. Grouting as per Developer to match wall tile selected by client.
- 9.2 Tiles as selected by the client / purchaser will be provided as follows:
 - Kitchen – Between kitchen cupboards or 600mm above base units.
 - Bathrooms – 2.1m above floor level in shower area and 300mm behind basin / vanity Unit.
 - Rest of bathroom to be painted as per the rest of the unit.

10 PAINT WORK

- 10.1 Underside of roofs and slabs will be painted with 1 coat plaster primer and 2 coats of interior quality white ceiling acrylic PVA as chosen by developer.
- 10.2 All interior wall surfaces will be painted with 1 coat plaster primer and 2 coats acrylic PVA as chosen by developer.
- 10.3 All un-tiled areas of the bathrooms to be painted with water-repellent paint.
- 10.4 All exterior walls to be painted with 2 coats Natural textured paint. (Or similar approved.)
- 10.5 All wood surfaces will be finished with 2 coats of wood sealer or one undercoat / wood primer and two coats of paint as approved by Developer.
- 10.6 Five external colour options all the colours as per Promac Paints - Colours of Namibia - will be available, from which the client can choose one.

11 IRONMONGERY

- 11.1 All external doors will be fitted with a cylinder lockset with door handle as per developers choice.
- 11.2 All internal doors will be fitted with a two-lever lockset with door handle as per developers choice.
- 11.3 ONLY where specifically indicated and applicable will an aluminium frame shower door be fitted.
- 11.4 One toilet roll holder will be fitted per toilet.
- 11.5 Doorstops not to be provided.
- 11.6 One mirror, 450x600mm, will be installed per HWB.

12 JOINERY

- 12.1 The kitchen joinery will be from a pre-manufactured and packaged nature, to be assembled on site, such as the Genesis Range from Easy Life Kitchens or similar approved by the Developer.
- 12.2 The drawings of the kitchen shows the design intended and the position and sizes of the kitchen units to be installed.
- 12.3 Three different cupboard finishes of the range indicated will be provided, of which the client has the option to to choose one.
- 12.4 Kitchen worktops to be Formica Tops.
- 12.5 Kitchens will be fitted with a two plate electrical hob. Only where specifically indicated will a four plate hob be provided.
- 12.6 Only where specifically indicated will an electrical connection point only be provided for an extractor fan.
- 12.7 Wardrobes in the bedrooms are not included, and would be an optional extra at an additional cost as per the below.

13 ELECTRICAL

- 13.1 A standard range of pugs and light fittings as per the developer will be installed as per the drawings.
- 13.2 One electrical point will be provided for the hob.
- 13.3 Only where specifically indicated will an electrical point be provided for an oven or an extractor.
- 13.4 For vaulted roofs - either in living areas or bedrooms or other, pendant lights will be provided.
- 13.5 For lights at the underside of slabs, ceiling mounted lights will be provided.
- 13.6 Bedrooms to have one ceiling mounted / pendant light per room.
- 13.7 Bathrooms to have one ceiling mounted light per room.
- 13.8 One outside lights to be provided.
- 13.9 Wall mounted lights will be provided where this is specifically indicated on the drawings
- 13.10 All light fittings, being pendant, ceiling or wall mounted, for internal as well as external is as per the choice of the developer

14 PLUMBING

- 14.1 The hot water cylinder will be 100l of Kwikot type or similar,
- 14.2 WC suites will have standard 6litre close coupled WC Pan with Cistern
- 14.3 A single bowl drop-in sink mounted on a sink kitchen unit will be installed in the kitchen.
- 14.4 Only where specifically indicated, will a double drop-in sink be provided.
- 14.5 All sanitary fittings as per the developers choice, but in line with the look and feel as per the finishes sheet hereto attached.
- 14.6 All taps and and connectors as per the developers choice, but in line with the look and feel as per the finishes sheet hereto attached.

15 SITE WORK

- 15.1 No site-work is allowed for, and would be an additional option at an additional cost if and where required.
- 15.2 No provision of services provided. Connection point to existing services to be within 10m of the proposed new building.

16 EXCLUSIONS

- 16.1 Curtain railing,
- 16.2 Bathroom wall cupboards, bathroom vanities , except where specifically indicated.
- 16.3 No Burglar bars.
- 16.4 Wardrobes in bedrooms

17 SPECIFICATION

- 17.1 In case of a discrepancy between this specification and the drawings and/or any other document the description in this specification will take precedence.
- 17.2 This specification may be changed without prior notice, with a similar product of the same value – as approved by the developer.
- 17.3 All prices, budget amounts, and costs indicated does **include** VAT.

18 OPTIONAL EXTRAS

The following items can be provided at the additional cost as indicated below: The full payment thereof has to be received before instruction for such work will be given to the contractor:

General Finishes:

- 18.1 Floor tiles to be chosen from the developers range at an additional price of N\$350/m²
- 18.2 Additional wall tiles in bathroom at an additional price of N\$400/m²

Kitchen:

- 18.3 For a gas hob in the kitchen - Indicative price: N\$6,500 (TBC)
- 18.4 Extractor above Hob – Indicative price: N\$7,500 (TBC)
- 18.5 Granite Worktop in Kitchen – Indicative price: N\$15,000 (TBC)

Bedroom:

- 18.6 Wardrobe prices to ne confirmed

Services:

- 18.6 A solar system on the roof - (Price TBC)
- 18.7 Additional Battery System - (Price TBC)

I ACKNOWLEDGE THAT I AM FAMILIAR WITH AND UNDERSTAND THE CONTENTS OF THIS SPECIFICATION DOCUMENT.

CLIENT

DATE














WITNESS / AGENT

DATE

DEVELOPER

DATE

PROPOSED STYLE OF FINISHES FOR LIVING HOME SERIES

Basin Tab		Toilet with cistern	
Kitchen Sink Tab		2 Burner Hob - Electricity	
Shower Tab		4 Burner Hob - Electricity	
Shower Head		2 Burner Hob - Gas	
Small Basin		4 Burner Hob - Gas	
Large Basin (Option 1)		Kitchen Sink - Single	
Large Basin (Option 2)		Kitchen Sink - Double	