

# Cost of Building a 4-Bedroom Bungalow in Nigeria 2023



Before you dig earth, make sure you have all required APPROVED documents for the construction process, viz a viz:

- Architectural drawings.
- Structural drawings.
- Mechanical drawings.
- Electrical drawings.

Some people break the earth without some of these drawings and hope everything turns out fine. That is a wrong mentality. Please follow the right process.

For this analysis, a case sample of the design shown below is used. We have only put uploaded draft renderings of the design so as to provide a basis for this costing.

In calculating the cost of building a 4-bedroom bungalow in Nigeria, it is advisable to break down the construction process into stages. This is the norm and is actually helpful in planning your progress. For a bungalow, we can split the construction stages into:

- Earthwork and excavation
- Foundation (German floor).
- DPC to lintel level Stage.
- Roofing Stage.
- Plastering / Finishing Stage.
- Painting Stage

## Cost of Foundation (German Floor)

This is the first stage of construction and it includes setting out, digging, concrete work, block laying, backfilling, and flooring as the processes in this stage.

### **Material Requirements For Earthwork And Excavation**

- Site clearance Labour only (238 sqm) = NGN 23,800
- Topsoil removal labor only (238 sqm) = NGN 119,000
- Setting out (excavation/building line) materials = NGN 79,680
- Setting out (excavation/building line) labor only = NGN 147,980
- Trench excavation (128 m) @ NGN 600 per meter = NGN 76,800
- Backfilling and removal of surplus (labor only) = NGN 23,100
- Laterite Filling (10tyres truck) – 3 trips @ NGN 15,000 per trip = NGN 45,000
- Hardcore (10tyres truck) – 3 trips @ 50,000 per trip = NGN 150,000
- Laying Hardcore and Ramming of laterite (labor only) = NGN 40,000

**The estimated cost of earthwork and excavation is NGN 705,360.**

### **Material Requirements For Earthwork Support**

- 115 Length of 1" x 12" x 3.60m long plank @ NGN 1,200 each = NGN 138,000
- 65 Length of 4" x 4" x 3.60m for strutting @ NGN 800 each = NGN 52,000
- 26 Length of 2" x 2" x 3.60m for bracing @ NGN 600 each = NGN 15,600
- 2 bags Nail of Various Sizes (3", 4" & 5" Sizes) @ NGN 9,000 per bag = NGN 18,000
- Labor for fixing Earthwork support (118 sqm) @ NGN 500 per sqm = NGN 59,000
- 17 nos (4-liter gallon) Anti termite treatment @ NGN 3,600 per gallon = NGN 61,200
- Labor = NGN 20,000
- 2 rolls Damp proof membrane @ NGN 5,000 per roll = NGN 10,000

**The estimated cost of earthwork support is NGN 373,800.**

### **Material Requirements for Blinding**

- 3 bags of cement @ NGN 3,800 each = NGN 9,880
- 18 tonnes stone dust @ 2,500 per tonne = NGN 45,000
- Labour @ NGN 700 per bag = NGN 1,820

**The estimated cost of concrete work = NGN 56,700.**

### **Material Requirements For Foundation Footing**

This is done in the trench with the ratio (1:2:4)

- 87 bags of cement @ NGN 3,800 each = NGN 330,600
- 23 tonnes stone dust @ 2,500 per tonne = NGN 57,500
- 21 tonnes granite @ 2,750 per tonne = NGN 57,750
- Labour @ NGN 700 per cement bag = NGN 60,900

**The estimated cost of the foundation footing is NGN 506,750.**

### **Material Requirements For Blockwork in Foundation**

The mortar mix is in the ratio (1:6)

- 1 tonne sand @ NGN 2,500 per tonne = NGN 2,500

- 5 bags of cement @ NGN 3,800 each = NGN 19,000

Concrete for filling (1:4:8)

- 3 tonne sand @ NGN 2,500 per tonne = NGN 7,500
- 6 bags of cement @ NGN 3,800 each = NGN 22,800
- 3 tonnes granite @ 2,750 per tonne = NGN 8,250
- 290 pieces of 9-inch vibrated blocks (including 10 percent wastage) @ NGN 270 each = NGN 78,300
- Labour for blockwork @ NGN 60 per block = NGN 17,400
- Labor for filling concrete @ NGN 1,500

**The estimated cost of laying foundation blocks = NGN 157,250.**

### **Material Requirements for Ground Floor Slab**

Ground Floor Slab with the ratio (1:2:4)

- 173 bags of cement @ NGN 3,800 per bag = NGN 657,400
- 45 tonne stone dust @ NGN 2,500 per tonne = NGN 112,500
- 42 tonnes granite @ 2,750 per tonne = NGN 115,500
- Labour for casting concrete @ NGN 700 per bag = NGN 121,100
- 53 Length of 1" x 12" x 3.60m long plank @ NGN 1,200 each = NGN 63,600
- 1 bag Nail of Various Sizes (3", 4" & 5" Sizes) @ NGN 9,000 per bag = NGN 9,000
- Labor for carpenter on formwork @ NGN 28,125
- 6 roll BRC Mesh Ref 142 (15m x 2.1m) @ NGN 18,000 per roll = NGN 108,000

**The estimated cost of flooring = NGN 1,215,225**

### **Cost of Construction From Damp Proof Course (D.P.C) To Lintel Level**

This is the next stage in the construction process and begins where the German floor ends. It covers the main block work including wall partitions for the various spaces in the house. The materials listed below are just estimates of what you get in the 4-bedroom flat sample above. Again, ensure you get a Bill of Quantities for your building plan as that's the only way to know the exact material requirements for your house. This stage ends at the roof level.

### **Material Requirements and Labour for Block Work Above DPC**

- 1,650 nos 225mm Blocks @ NGN 270 per block = NGN 445,500

Mortar (1:6) mix for jointing

- 27 bags of Cement @ NGN 3,800 per bag = NGN 102,600
- 7 ton Stone dust @ NGN 2,500 per ton = NGN 17,500
- Labour for Blockwork @ NGN 45 per block = NGN 74,250

**The estimated cost of block work = NGN 639,850.**

### **Material Requirement for Lintel Casting**

Lintel is cast in the ratio (1: 2: 4)

- 18 bags Cement @ NGN 3,800 per bag = NGN 68,400
- 5-ton stone dust @ NGN 2,500 per ton = NGN 12,000

- 5-ton Granite @ NGN 2,750 per ton = NGN 12,375
- Labor for casting Concrete @ NGN 700 per bag = NGN 12,600

#### Formwork (to sides and soffit )

- 39 length 1" X 12" X 3.6m (Plank) @ NGN 1,200 per length = NGN 46,800
- 35 length 2" x 3" x 3.6m plank @ NGN 450 per length = NGN 15,750
- 39 length 2" x 2" x 3.6m plank @ NGN 350 per length = NGN 13,650
- 0.42 bag of Nail Various Sizes (3", 4" & 5" Sizes) @ NGN 9,000 per bag = NGN 3,780
- Carpenter on formwork (42 sqm) @ NGN 500 per sqm = NGN 21,000

#### Reinforcement

- 22 length 10mm diameter @ NGN 1,650 per length = NGN 36,300
- 22 length 12mm diameter @ NGN 3,400 per length = NGN 74,800
- 0.20 roll Binding Wire (25 kg/roll) @ NGN 11,500 per roll = NGN 2,300
- Iron benders on reinforcement (392 kg) @ NGN 50 per kg = NGN 19,600

**The Estimated cost for this stage is NGN 339,355**

### Cost of Roofing A 4 Bedroom Bungalow Stage

#### Material Requirements for Roof Covering And Carcassing

The following hardwood is treated before use.

- 19 length of 100 x 150mm hardwood timber (wall plate) @ NGN 320 per length = NGN 6,080
- 55 length of 50 x 150mm hardwood timber (tie beam) @ NGN 400 per length = NGN 22,000
- 61 length of 50 x 150mm hardwood timber (Rafter) @ NGN 400 per length = NGN 24,400
- 75 length of 50 x 100mm hardwood timber (kingpost/struts) @ NGN 400 per length = NGN 30,000
- 242 length of 50 x 75mm hardwood timber (purlins) @ NGN 300 per length = NGN 72,600
- Labour on carcass (1618 m) @ NGN 45 per m = NGN 72,810
- Roof covering + capping (316 m<sup>2</sup>) @ NGN 5,000 per m<sup>2</sup> = NGN 1,580,000
- 62 nos Hip plate and trimmer @ NGN 900 per plate = NGN 56,000
- 798 nos Roof nails (Galvanised nails) @ NGN 35 per nail = NGN 27,930
- Labour for roof covering (316 m<sup>2</sup>) @ NGN 500 per m<sup>2</sup> = NGN 158,000

**Total Estimated Cost for the roofing stage = NGN 2,049,820.**

### Cost of Finishing Stage

This stage includes plastering, wiring, plumbing, and fixing of windows, doors, tiles, and other essentials. The cost here varies on the quality of materials you use. Below is an estimate for a very modest finishing of the design above.

#### Material Requirements For Floor Finishing

##### Tiling (Floor)

- 450 x450 x10mm thick Vitrified floor tiles (144 m<sup>2</sup>) @ NGN 2,100 per m<sup>2</sup> = NGN 302,400
- 889 NOS Ditto skirting tiles @ NGN 50 each = NGN 44,450
- 23 bags of Cement for fixing tiles @ NGN 4,600 per bag = NGN 105,800
- Labour for Tiling (164 m<sup>2</sup>) @ NGN 400 per m<sup>2</sup> = NGN 65,600

## Screeding (floor)

25 mm screeded bed C & S (1:4)

- 36 bag of Cement @ NGN 3,800 per bag = NGN 136,800
- 6 ton Stone dust @ NGN 2,500 per ton = NGN 15,000
- Labour for screeding (164 m2) @ NGN 400 per m2 = NGN 65,600

## Material Requirements For Wall Finishing

### Plastering (wall)

13mm screeded bed C & S (1:4)

- 58 bags of cement @ NGN 3,800 per bag = NGN 220,400
- 6 ton stone dust @ NGN 2,500 per ton = NGN 15,000
- Labour for plastering (561 m2) @ NGN 450 per m2 = NGN 252,450

### Tiling (wall)

- 200 x 400 vitrified tiles (115 m2) @ NGN 3,500 per m2 = NGN 402,500
- 16 bags of Cement for fixing tiles @ NGN 4,600 per bag = NGN 73,600
- Labour for Tiling (115 m2) @ NGN 400 per m2 = NGN 46,000

### Screeded backing (wall)

20 mm screeded bed C & S (1:6)

- 14 bags of Cement @ NGN 3,800 per bag = NGN 52,440
- 3 ton of Sand @ NGN 2,500 per ton = NGN 7,500
- Labour for screeding (115 m2) @ NGN 400 per m2 = NGN 46,000

## Material Requirements For POP Ceiling

- 100 bags of P.O.P Cement @ NGN 4,000 per bag = NGN 400,000
- 11 packs of Concrete nails @ NGN 2,500 per pack = NGN 27,500
- 75kg sponge @ NGN 1,650 per kg = NGN 123,750
- 3 rolls of Binding wire @ NGN 10,000 per roll – NGN 30,000
- 3 roll imperial soap @ NGN 1,500 per roll = NGN 4,500
- 9 litres groundnut oil @ NGN 3,000 per litre = NGN 27,000
- Labour on ceiling (179 m2) @ NGN 1,700 @ NGN 304,300

**The total Estimated Cost for the Finishing Stage is NGN 2,768,590**

## Cost Of Painting Stage

### Material Requirements For Painting Work

#### Wall Screeding (To Receive Paint)

- 2 bags of Screeding cement (white cement) @ NGN 4,600 per bag = NGN 9,200
- Labour for screeding (561 m2) @ NGN 200 per m2 = NGN 112,200

## Floating

- 2 bags of P.O.P Cement @ NGN 4,600 per bag = NGN 9,200
- Labour for floating (561 m<sup>2</sup>) @ NGN 200 per m<sup>2</sup> = NGN 112,200

## Painting and Decoration

- 8 drum of Dulux Emulsion/texcote paint (20Litres Drum) @ NGN 20,000 per drum = NGN 160,000
- Labour for Painting (561 m<sup>2</sup>) @ NGN 180 per m<sup>2</sup> = NGN 100,980

**Total Estimated Cost for the Painting Stage = NGN 503,780**

## Cost Of Doors, Windows, Burglary

### Material Requirements For Doors And Windows

#### Steel Doors

- 2 nos 900 x 2100mm high @ NGN 50,000 each = NGN 100,000

#### Wooden Doors

- 5 nos Overall size 900 x 2100mm high @ NGN 37,800 each = NGN 189,000
- 5 nos Overall size 750 x 2100mm high @ NGN 31,500 each = NGN 157,500

#### Windows

- 2 nos Window size 750mm x 1500mm high @ NGN 16,875 each = NGN 33,750
- 4 nos Window size 750mm x 750mm high @ NGN 8,437.50 each = NGN 33,750
- 4 nos Window size 1500mm x 1500mm high @ NGN 32,400 each = NGN 129,600
- 1 nos Window size 3600mm x 1800mm high @ NGN 97,200 each = NGN 97,200
- 5 nos Window size 2000mm x 1500mm high @ NGN 45,000 each = NGN 225,000

#### Steel burglary bars

- 2 nos Window size 750mm x 1500mm high @ NGN 7,875 each = NGN 15,750
- 4 nos Window size 750mm x 750mm high @ NGN 3,937.50 each = NGN 15,750
- 4 nos Window size 1500mm x 1500mm high @ NGN 15,120 each = NGN 60,480
- 1 nos Window size 3600mm x 1800mm high @ NGN 45,360 each = NGN 45,360
- 5 nos Window size 2000mm x 1500mm high @ NGN 21,000 each = NGN 105,000
- Other ancillaries sum budget @ NGN 57,000
- Labor sum budget @ NGN 40,000

**Total Estimated Cost for Doors and Windows = NGN 1,305,140**

## Cost Of Mechanical And Pipeline Services

### Material Requirements for Mechanical Works

#### Mechanical Installations

- 5 nos Water Closet; Approve WC, 7.5 cisterns, complete with fittings for installation @ NGN 27,500 each = NGN137,500

- 5 nos Approved (WHB) wash hand basin, complete with installation accessories @ NGN 15,000 each = NGN 75,000
- 2 nos Approved double drainer, double bowl, stainless steel sink with mixer tap, with installation accessories complete @ NGN 25,000 each = NGN 50,000
- 5 nos Shower tray + shower head @ NGN 20,000 each = NGN 100,000
- 4 nos Ariston water heater containing 20 liters capacity @ NGN 50,000 each = NGN 200,000
- 5 nos 50mm diameter stainless trapped floor drains @ NGN 2,500 each = NGN 12,500
- 4 nos Stainless steel soap dishes fixed to wall @ NGN 3,500 each = NGN 14,000
- 5 nos Stainless towel rail fixed to wall NGN 3,500 each = NGN 17,500
- 5 nos Stainless toilet roll holders fixed to wall @ NGN 2,500 each = NGN 12,500
- 4 nos Mirror; 4mm silvered float glass; 460 x 610mm with pressed edges and mounted on wall @ NGN 15,000 each = NGN 60,000

## Material Requirements for Pipeline Works

### Inspection Chamber

- 4 nos Construction of Inspection chamber size 450 x 450 x 450mm deep complete with earthwork and other associated work @ NGN 15,000 each = NGN 60,000

### Man Hole

- 2 nos Construction of Manhole size 600 x 600 x 600mm deep complete with earthwork and other associated work @ NGN 17,000 each = NGN 34,000

### Soak Away Pit

- Construction of Soak away pit of approved size @ NGN 200,000

### Septic Tank

- Construction of Septic tank of approved size, complete with associated works @ NGN 200,000
- The provisional sum for all piping and builders work (sum budgeted) @ NGN 400,000

**Estimated Cost of Mechanical and Plumbing Services = NGN 1,573,000**

## Cost Of Electrical Services

### Installations

Allow a provisional sum for electrical installations in connection with Electrical Installations @ NGN 500,000

**Estimated Cost of Electrical Services = NGN 500,000**

## Summary Of Cost Of Building A 4 Bedroom Bungalow In Nigeria

- Excavation And Earthwork —————NGN 705,360
- Earthwork Support —————NGN 373,800
- Blinding —————NGN 56,700
- Foundation Footing—————NGN 506,750
- Blockwork In Foundation —————NGN 157,250

- Ground Floor Slab —————-NGN 1,215,225
- Lintel —————-NGN 339,355
- Blockwork Above DPC————-NGN 639,850
- Roof Covering and Carcass————-NGN 2,049,820
- Finishing Work————-NGN 2,768,590
- Painting Work————-NGN 503,780
- Doors/Windows & Metal Work————-NGN 1,305,140
- Mechanical Installation —————-NGN 1,573,000
- Electrical Installation —————-NGN 500,000
- **Sub total**————-**NGN 12,694,620**

As you can see from the calculations, we arrived at a **total cost of building a 4-bedroom bungalow that is below NGN 13,000,000**. This involves just the construction of the 4-bedroom bungalow in Nigeria. As for the furniture fittings, you have a variety of options you can choose from. Also, clearing the site after the construction was not factored into the cost. However, the amount is not so much when put into the cost of building a 4-bedroom bungalow in Nigeria.