SADHGRAHA

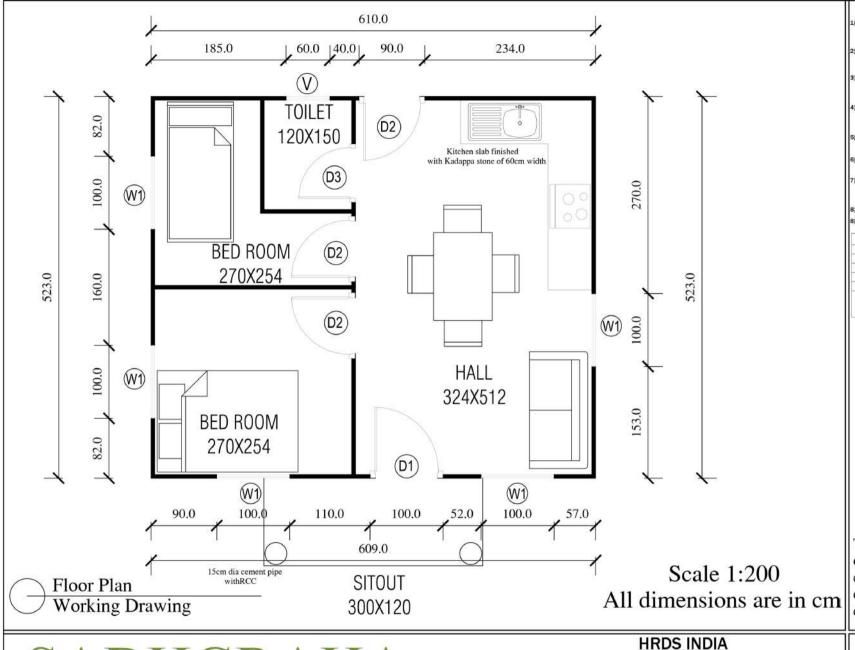
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To build Cost Free houses for the Tribal people of our Nation



ENVISIONS SAFE AND SECURE HOMES FOR THE DEPRIVED





NOTE

- Before PCC the bottom should be compact PCC should be of 5cm thickness
- The block should be wetted before begining block work At every block joint motor should be filled motor ratio 1:6
- Back filling Soil back fill should be done in a manner of layer by layer of 20 cm Each layer should be made compac
- Flooring concrete ratio 1:2:4 Surface should be compact Floor tiles - 300 v 300 mm cerai
- Walls 18mm fibre cement board (V board)
- Roof powder coated GI roofing sheet 0.45 GU including frame wor colour - white (Refer drawing for details)
- Painting All metal item should be coated with epoxy primer. Wall should be coated with water proof exterior primer 2 layer of painting of mushroom colour .
- Doors and windows Rf.drawing (colour white)
- Ceiling 2 ft x 2 ft gypsum pannel / Pvc sheet

D1	DOOR	SIZE	100 x 200 cm	1 No
D2	DOOR	SIZE	90 x 200 cm	3 No
D3	DOOR	SIZE	80 x 200 cm	1 No
W2	WINDOW	SIZE	100 x 120 cm	5 No
٧	VENTILATOR	SIZE	60 x 45 cm	1 No.

PLINTH AREA = 34.32 M.sq / 369 sq.ft

Chief Functionary Founder - Secretary: Aji Krishnan



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Floor Plan Rendered Drawing

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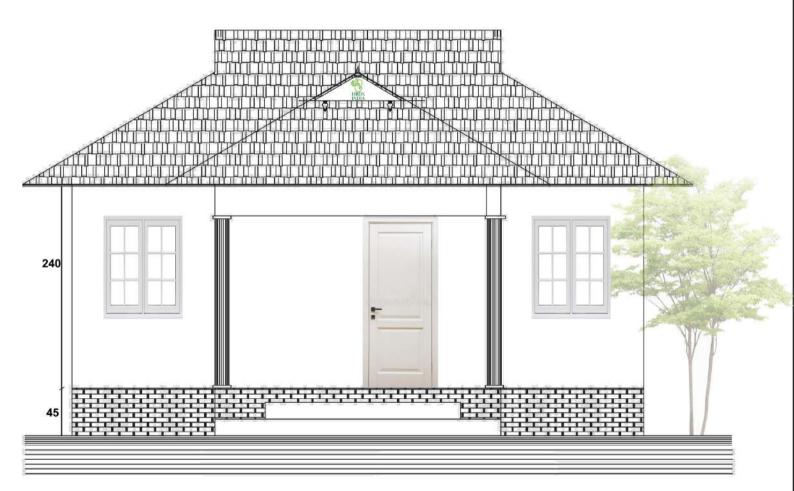
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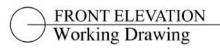
Chief Functionary

Founder - Secretary: Aji Krishnan



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All dimensions are in cm

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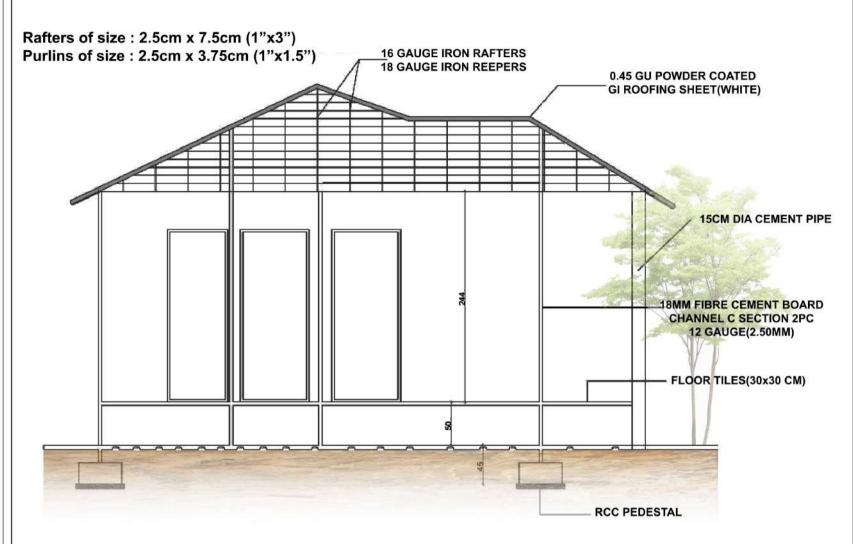
SCHEDULE OF DOORS AND WINDOWS					
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D3	DOOR	SIZE	80 x 200 cm	1 No.	
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CROSS SECTION
Working Drawing

All dimensions are in cm

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- PCC Ratio 1:5:10
 Before PCC the bottom should be compac
 PCC should be of 5cm thickness.
-) Block work
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- Back filling
 Soil back fill should be done in a manner of layer by layer of 20 cm
 Each layer should be made compact
- Flooring concrete ratio 1:2:4
 Surface should be compact
 Floor tiles 300 x 300 mm ceramic
- Walls 18mm fibre cement board (V board)
- Roof powder coated GI roofing sheet 0.45 GU including frame wor
- Painting All metal item should be coated with epoxy primer
 Wall should be coated with water proof exterior primer.
 I layer of painting of mushroom colour.
- B) Doors and windows Rf.drawing (colour white)
- 8) Ceiling 2 ft x 2 ft gypsum pannel / Pvc sheet

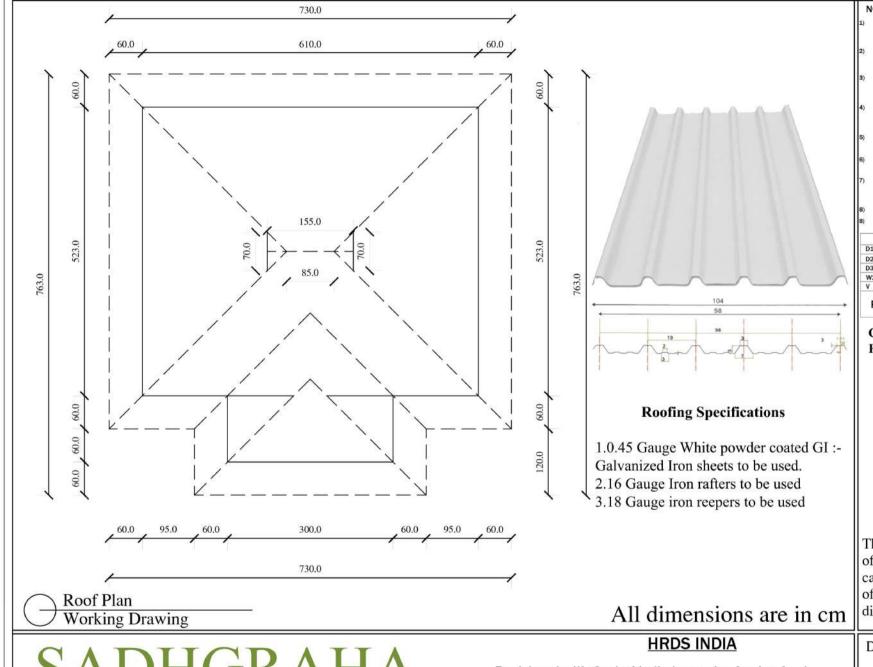
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V	VENTU ATOR	CITE	60 × 45 cm	1 No

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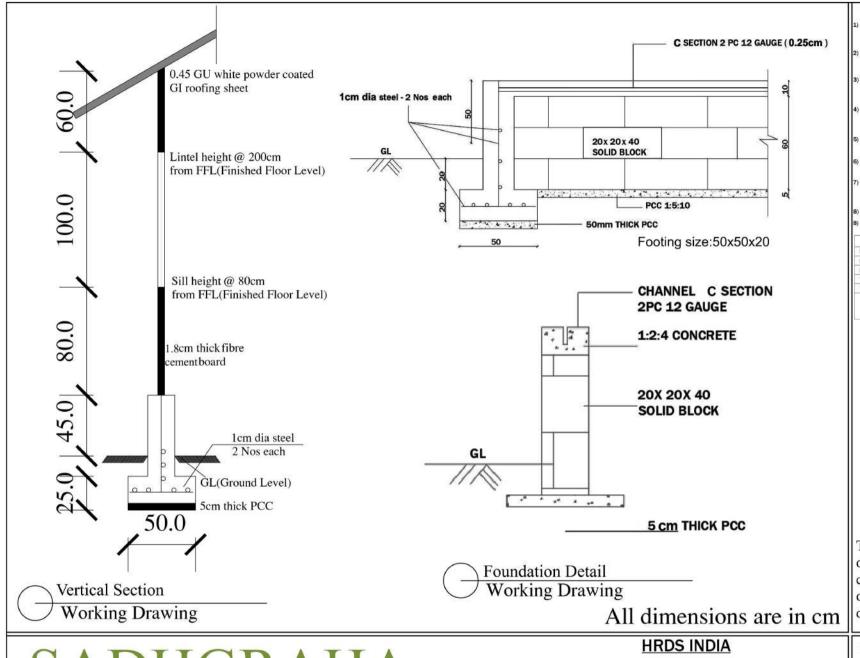


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Drawn by: Ar.Mahesh Kumar PP Registered Architect CA/2018/98421 Deputy Project Director HRDS INDIA

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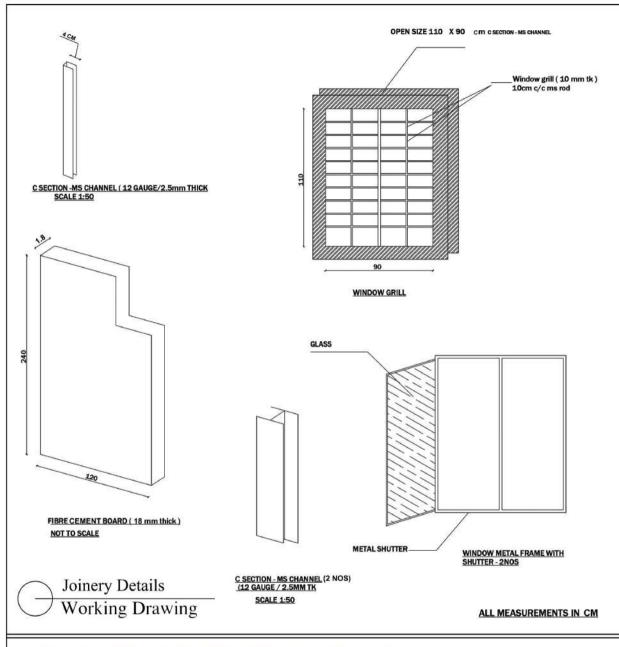


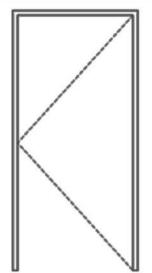
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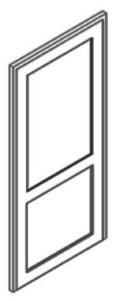
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MAIN DOOR 100cm X 200cm BEDROOM AND BACK DOORS 90cm X 200cm TOILET DOOR 80cm X 200cm

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SADHGRAHA TRIBAL HOUSING PROJECT LIST OF FURNITURE

Sl.No	Th	ings to Buy	Quantity
01.	Cot	(Double- size 3.5ft x 6ft)	1
02.	Ma	ttress(Double)	1
03.	Bed	d Sheet	2
04.	Pill	ow with cover	2
05.	Cha	airs (Plastic- with handrest)	2
06.	Sto	ols for Dining Table	4
07.	Din	ing Table (4ft x 2ft steel framed)	1
08.	Kit	chen Needed Things	Some
	a.	Fibre Plates	6
	b.	Steel Glasses	6
	c.	Bucket & Mug set	2
	d. 3 Sizes of cooking pots set (Big, Medium and Small)		1
	e.	Vessel for Tea	1
	f.	Broom & Dust Pan	1
	g. Spoons (Big -6 Small-6)		12
	h.	Kitchen Containers Big -6 Small-6	12
	Tot	al	54

Budget for the Proposed House

 Uneven ground levelling, excavation for footings and block work, compaction with machinery, 50mm pcc below block work and footing, Rcc works for footing and above solid and block work (size 400mm x 200mm x200mm), backfilling and compaction, curing etc. (Drawing attached for ref.) Cement fibre Board for wall 8 ft x 4 ft x 18mm.(v board) Total no. of board 25 Nos Say 25 nos@2166/Board (Fibre Cement Board is composed of a composite matrix containing special grade cellulose fibres, ordinary Portland cement, fine silica, quartz, and some mineral additives.) Channel (HR Section) 2 (PC) 12GU x 20 x 40mm (575 Kg) 	Rs 46,475.00 Rs 54,150.00
Sav 575 kg@ 80 /kg	Rs 46,000.00
4. Supplying and fixing door frames with wooden shutters	
Say 4 No's @7000/E 5. Supplying and fixing steel window frames with metal shutters	Rs 28,000.00
Say 5Nos@6500/E	Rs 32,500.00
6. Roofing with GI Roofing sheet 0.45GU including frame work	The section of the se
Say 63m2@1500/m2	Rs 94,500.00
7. Flooring with 1: 5:10 PCC Say 28m2@1100/m2	RS30,800.00
8. Floor tiles (size ceramic 12 inch x 12) Say 370 @80/ sq.ft	Rs 29,600.00
9. White washing, Painting etc. (wall colour mash room) LS	Rs 25,000.00
10. Toilet, Indian Closet, ST Tank, Waste water tank, door	
(Tank size 5 feet x 4 feet dia)(2 feet x 2 feet dia)	Rs 20,000.00
11. Labour Charge	Rs 50,755.00
12. Planting trees	Rs 799.00
- CONTROL CONT	
13 Ceiling 370 sq.ft. (8mm gypsum board/ upvc sheet)	Rs 20,000.00
14 Furniture (details attached)	Rs 14,000.00
GRAND TOTAL Rs.4,9	<u>02,579.00/-</u>



Detailed Specification for the Tribal villa construction works to be executed

The structure will be of framed structure with a basement height of 2' from the Existing ground level with a Roof height of 8'.

'1. Setting Out:

- Marking the layout should be started before two days prior to execution
- Before starting the work contractor should be discuss with beneficiary for the facing of the house.
- Activity should be inspected by the client representative.

2. Foundation:

- ❖ Earthwork excavation for foundation to a depth of 45cm/25cm
- * P.C.C 1:2:4 in foundation of thickness 5cm
- After excavation, the trench should be compacted by using compactor.
- The compaction strength should be maintain above 95%
- If back filling is required, the trench should be compacted 20cm layer by layer.
- Activity should be inspected by the client representative.
- Anti-terminator treatment is needed for (370 sqft).
- Next activity should be started with in 12hrs of anti-terminated treatment.

3. Basement:

- ❖ 5cm P.C.C below block work.
- Solid brick work should be 3 layers.
- Block size is 40cm x 20cm x 20cm.
- . Before using the block, it should be wetted.
- While placing the block gap of 1cm should be maintain between them.
- . The gap should be filled by cement mortar.
- Ratio of the mortar is 1:6.
- Proper curing is required.
- Activity should be inspected by the client representative.

4. Footing and Column:

- All the corners of the house have a column footing.
- ❖ Footing size is 50cm x 50cm x 20cm.
- Excavation of footing should be done manually.
- . To fill the concrete the shuttering should not be done.
- . During concreting vibrator should be used.
- * 10mm steel rod should be used for footing.
- Concrete ratio is1:2:4.
- Footing, column and sill level of concreting should be done at the time.
- · Proper curing is required.
- Activity should be inspected by the client representative.

5. Back Filling:

- . Back filling material should be moisture free.
- . Back filling should be 20cm layer by layer.
- Each layer should compact by using compactor.
- The compaction strength should be maintain above 95%
- More than 15cm boulders should not be used for back filling.
- After compaction, anti-terminator process should be followed.
- Activity should be inspected by the client representative.

6. Superstructure:

- Superstructure with 18mm fibre cement board 8ft X 4ft and channel C section 2 PC.
- Before selecting the fibre cement board, the sample should be submitted for the client approval.
- . HR channel thickness should be 2.5mm.
- The board fixed in the channel should be tight.
- Wall should be straight and plumb bob.
- Shaking of wall is not accepted.
- All the door opening and window openings should be fitted by C channel sections (refer the drawing).
- All channels should be applied with zinc phosphate solution, 12hrs before applying primer.
- Epoxy coated primer is required for all steel structure.
- Rust formation should be avoided.
- After welding the structure, the welded area should be grinded and again coated with epoxy primer.
- Metal paste should be applied between the gap of all the steel structures(C-channels).
- . After completion of wall gaps are not acceptable.
- Activity should be inspected by the client representative.

7. Roof Ceiling:

- . Ceiling should cover the entire sqft of the building
- . There should not be any leakage in the ceiling.
- . Thickness of the ceiling board should be approved by the client.
- . Iron reepers should be designed for minimum 1sq.m. of roof ceiling.
- . Ceiling support should be strong and levelled.
- * Activity should be inspected by the client representative.

8. Roof:

- All the steel structure should be applied with epoxy primer, before lifting the material for roof work.
- After welding the structure, the welded area should be grinded and again coated with epoxy primer.
- Roofing sheet thickness is 0.45 GU of white colour
- Thoovanam should cover the entire border of roofing(refer the drawing).
- 3 Mopes should be placed(refer the drawing).
- Before selecting the roof sheet, the sample should be submitted for the client approval.
- After completing the roof work, contractor should be confirmed that the roof is leakage free.
- The roof screws should be tight and leak free.
- Iron rafters and reepers should be designed forminimum 1sqm below roofing sheet.
- Activity should be inspected by the client representative.

9. Doors:

- . The entire door frame should be covered with C section.
- Door frame should be steel structure and it should be withstand the weight of the door.
- As per the size of the door, the frame should be designed.
- ❖ Both side and top of doors gap of 2.5mm is to be acceptable.
- Hinges and other fittings of doors samples should be submitted for client approval.
- Locking and opening the door should be smooth.
- Strength and quality of the door should be maintained.
- Wherever hinges will come wooden piece should be used inside the frame.
- . Door and frame colour should be white.
- Activity should be inspected by the client representative.



10. Window:

- Size of the window should be followed as per drawing.
- Window frame should be steel structure and it should withstand the weight of the window door.
- ❖ All side of window doors should have of gap of 2.5mm.
- Hinges and other fittings of window doors samples should be submitted for client approval.
- Locking and opening the window door should be smooth.
- Strength and quality of the door should be maintained.
- . Door and frame colour should be white.
- Window glass thickness is 4mm and also avoid plain glass.
- Activity should be inspected by the client representative.

11. Floor Finishing:

- All the internal room floors will be finished with ceramic tiles at cost of Rs.50 per sqft.
- The tile should be fixed after floor concrete of 10cm.
- Placing of tiles should be straight and also maintain minimum gap.
- The gap should be filled with white cement.
- By fixing tiles using cement mortar.
- Slight slope required for water drain in toilet.
- The wall surface must be smooth, level and clean.
- Skirting of 10cm should be cover to wall and floor joint.
- * Activity should be inspected by the client representative.

12. Toilet:

- * white colour Indian closet will be provide.
- Size of the ventilation is 30cm x 30cm.
- Provision of water tap should be given to rightside of the closet.
- * Toilet floor level should be 10cm below the floor level.
- Activity should be inspected by the client representative.

13.Plumbing:

- A water tap should be provided for the kitchen
- Both kitchen pipe and toilet pipe should be connected with T joint connector and use end cap.
- * 4"dia UPVC pipe should be used for connecting toilet and septic tank.

14.Painting:

- Windows and doors should be painted with white colour.
- V board should be painted with mushroom colour.
- Water proof Primer should be applied to wall before painting.
- Paint should be approved by the client before painting.
- Activity should be inspected by the client representative

15. Septic Tank:

- . The diameter of the septic tank is 4ft.
- 5 concrete rings should be placed.(each ring having 1ft height)
- The septic tank should be closed by concrete slab.
- 4inch dia vent pipe should be provided 6ft height with end cap.
- Activity should be inspected by the client representative.



16.Benficiery Agreement

The client or the owner of the house should possess a minimum of 3 cents of land with his/her ownership for construction of the house.

General:

- Earthwork excavation for foundation to a depth of 45cm/25cm.
- After excavation, the trench should be compacted by using compactor.
- The compaction strength should be maintain above 95%.
- Anti-terminator treatment is needed for (370 sqft).
- Next activity should be started with in 12hrs of anti-terminated treatment.
- Proper curing is required after the block work.
- 2 steps should be constructed on both sides(front and back) of the house
- . If any electrical work needed it should be done after client approval.
- All channels should be applied with zinc phosphate solution, 12hrs before applying primer.
- Epoxy coated primer is required for all steel structure. Rust formation should be avoided.
- After welding the structure, the welded area should be grinded and again coated with epoxy primer. The roof screws should be tight and leak free.
- Iron rafters and reepers should be designed for minimum 1sqm below roofing sheet
- Kitchenslab (kadapa) 60cm at height of 80cm should be provided at corner of the hall (refer drawing).
- · Furniture's provided as per the list given by the client.
- Plantation should be done after client discussion.
- Before each and every activity inspection request should be given to inspection team 1 day prior.
- After completion of work, copy of all inspection request form should be submitted along with invoice.
- * These should be followed for each and every individual Tribal villa.



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