

## ANNEXURE "D"

GENERAL SPECIFICATION FOR**Construction of 112/816 (G+3) Flats under Deendayal Awas Yojana at Kourinbhata, Rajnandgaon (C.G.)**

01	Structural Design	:	Design shall be submitted by contractor duly approved by Govt. Technical Institute with earthquack resistant design (Board reserve right to alter/change the design submitted by contractor if necessary)
02	Foundation & Structure	:	<p>1. R.C.C. column footing and beam with 20 cm thick brick work in cement mortar 1:6 with D.P.C 1:2:4 with 20 mm graded metal of 4 cm thick with bitumen.</p> <p>2. Plinth height – Minimum 0.90 mtr. From Average CC Road top level and adequate steps be provided as per requirement for front and back entry as per design to be decided by Engineer-in-Charge.</p> <p>3. Plinth filling - from available excavated earth &amp; 0.30 m thick Hard Moorum/ stone dust (Extra excavated stuff shall be removed from the site or has to bring from out side as the case may be.) at contractor's cost Plot shall also be leveled up to 0.45 mtr. below plinth level.</p> <p>Steel-FE-415 of make Fortune,G.K,Kore,Nakoda,Goel, Nirman. Cement-J.K Laxmi,Double Bull and other make approved by housing board.</p>
03	Superstructure	:	20 cm thick second class Fly ash bricks masonry (crushing strength shall not be less than 40 Kg. per Sq.cm.) in C.M. 1:6 for outer wall and 10 cm thick for partition wall in C.M. 1:4 with R.C.C. bend of 10cm thick with main bar of 8mm 4 bars and 6 mm dia. ring @20cm C/C at sill and lintel level chhajjas as per design & drawing shall be provided.
04	Slab	:	<p>1. Nominal mix reinforced cement concrete with crushed stone aggregate using concrete mixer in all works upto plinth level excluding cost of form work.1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20mm nominal size).</p> <p>2. Grading roof for water proofing treatment with: Cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)</p> <p>3. Providing gola 75x75 mm in cement concrete 1:2:4 (1 cement : 2 coarsesand : 4 stone aggregate 10mm and down grade) including finishing with cement mortar 1:3 (1 cement : 3 fine sand) as per standard design</p>
05	Sunken Portion	:	Water Proofing treatment to be done in all sunkenn portion.
06	Ceiling height	:	3.0 Mt. from floor level to slab bottom level and as per Instruction of Engineer-in-charge.

07	Doors frames & Shutters	:	<p>1.Angle iron door frame section 40x40x5 mm i/c hold fast / fastner.</p> <p>2.Providing and fixing PVC membrane foil coated (laminated) flush door shutters, made with core of block board with frame of first class hard wood, coated with 0.30mm membrane pasted with resin using vacuum treatment process complete all but excluding hinges. 35 mm thick (single leaf).with all S.S. fittings (for Rooms) &amp; 30mm thick (single leaf) with all S.S. fittings (for Toilet &amp; Bathroom)(Make:-Bhimsaria/ National/ Century or Equivalent)</p>
08	Windows	:	<p>MS Windows / Ventilators Grill &amp; Staircase railing to be provided with primer coat. Fixing three track powder coated aluminium (1.5mm thick) windows/ ventilators and partition etc. with stainless wire gauge of average width of aperture 1.56mm with wire of 0.35mm to existing steel door, window shutter frames with necessary M.S. strip beading etc. complete. (Make Hindalco/Galco) with 4 mm thick clear float glass both side having 12 mm air gap i/c providing EPDM gasket. perforated aluminium spacers desiccants etc. complete &amp; as per Instruction of Engineer-in-Charge</p>
09	Flooring	:	<p>1. Providing and laying vitrified floor tiles with double charge/ multi charge printing with water absorption less than 0.5% and conforming to IS :15622 of approved make in all colours and shades and size mentioned below (+/- 10mm), laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching pigments etc. complete Size 600x600mm with 100mm skirting. (For Living Room,Bedroom,kitchen,verandah etc.) (Make:- Varmora/ Kajariya/ Orient/ Johnson or Equivalent)</p> <p>2. Providing and laying ceramic glazed floor tiles conforming to IS : 15622 of approved size, make, colour, shade laid on 20 mm thick Cement Mortar 1:4 (1 cement : 4 coarse sand) including pointing the joints with white cement mixed with matching pigment etc., complete. Size 300x300mm (At Toilet/Bathroom). (Make:- Varmora/ Kajariya/ Orient/ Johnson or Equivalent)</p> <p>3. Providing and fixing ceramic glazed wall tiles conforming to IS : 15622of approved make, colours, shades and size on wall and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with matching pigment complete Size upto 200x300mm (Height in Toilet/Bathroom 2.1 mtr. Kitchen Platform 0.6 mtr) (Make:- Varmora/ Kajariya/ Orient/ Johnson or Equivalent)</p>




10	Kitchen Platform & Shelves	:	15 mm thick Table rubbed polished Granite stone slab flooring laid over 20mm (Average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with grey cement slurry including rubbing and polishing etc. complete. Granite stone black. (In Kitchen platform, Door dado & Window Sill) and as per Instruction of Engineer-in-charge.
11	Kitchen Sink	:	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink without drain board as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required. As per site Condition and as per Instruction of Engineer-in-charge. 560x410 mm bowl depth 215 mm. (Make - Sincore/Nirali/ Neel kanth / Kiran or Equivalent)
12	Plaster	:	12 mm /15 mm thick cement plaster in C.M. 1:5 for outer and inner side 6mm thick plaster in cm 1:4 on ceiling as required. and as per Instruction of Engineer-in-charge.
13	Drip Course & Concrete Gola	:	Drip course 5.00 cm x 1.3 cm. to be done on exposed R.C.C. work and concrete gola 3.00cm thick 7.00cm x 7.00cm also to be done at junctions of wall slab & chhajjas. and as per Instruction of Engineer-in-charge.
14	Finishing / Painting	:	<ol style="list-style-type: none"> <li>1. Synthetic Enamel Paint of approved make (Asian, Berger, ICI) 1st Quality 3 coats including priming coat for doors and window's grill &amp; staircase railing. (Make - Asian / ICI Dulux/ Nerolac/ Berger or Equivalent)</li> <li>2. Two Coat 2 mm thick ready mix putty for inner as well as outer front side. (Make - Asian / ICI Dulux/ Nerolac/ Berger or Equivalent)</li> <li>3. Two coat of acrylic smooth exterior paint for outer finish. (Make - Asian / ICI Dulux/ Nerolac/ Berger or Equivalent)</li> <li>4. Two coat of acrylic premium emulsion plastic paint at inner finish. &amp; as per Instruction of Engineer-in-Charge. (Make - Asian / ICI Dulux/ Nerolac/ Berger or Equivalent)</li> </ol>
15	Chicken Mesh	:	30cm. wide strip will be provided at each junction of brick masonry and RCC work. In inner & outer sides and as per Instruction of Engineer-in-charge.
16	Staircase i/c Landing & Skirting finishing	:	KOTA stone slab 25mm thick in risers and treads of steps, skirting dado and pillar laid in 12mm (Average) thick cement mortar 1:3 (1 cement : 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete. (single stone is to be used for riser and treads of steps and the width of stone for skirting and dado shall be equal to the height of skirting/ dado up to length of 1.0 M.). and as per Instruction of Engineer-in-charge.

17	Sanitary (Internal)	:	<p>1) Providing and fixing vitreous china water closet (European type W.C. pan) with white ISI marked plastic seat and lid, 10 litre low level white P.V.C. flushing cistern (same colour), conforming to IS : 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required : White pedestal type. (Make -Hindware / Parryware / Jaguar or Equivalent)</p> <p>2) Providing and fixing vitreous china wash basin with C.I. brackets, 32 mm C.P. brass waste of standard pattern, including painting of brackets, cutting and making good the walls wherever required. As per site Condition and as per Instruction of Engineer-in-charge. White Size 550x450 mm. and as per Instruction of Engineer-in-charge. (Make -Hindware / Parryware / Jaguar or Equivalent)</p>
18	Manhole Chamber	:	Brick masonry manhole chamber Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) : to be provided and as per Instruction of Engineer-in-charge.
19	Water Supply	:	<p>1. 15 mm/ 20 mm/ 25 mm dia G.I pipes (Make-Surya/Jindal) Exterior work.</p> <p>2. 15 mm/ 20 mm/ 25 mm dia CPVC pipes (Make Plasto), Interior work.</p> <p>3. 1 Nos. S.S.Bib cock,(Make-Parryware/Hindware)</p> <p>4. 2 Nos. S.S. Long Nose Bib cock.(Make-Parryware /Hindware)</p> <p>5. 1 Nos. Piller Cock. (Make-Parryware /Hindware)</p> <p>6. 3 Nos. Stop Cock, (Make-Parryware /Hindware)</p> <p>7. 1 Nos wall mixer with elegant knob. (Make-Parryware /Hindware)</p> <p>8. 1 Nos. Shower rose. (Make-Parryware /Hindware)</p> <p>9. 1 Nos. Health foscet (hand jet) with flexible connection pipe of best quality</p> <p>10. Water tank H.D.P.E. Four layer 500 liter (duly approved) to be provided. (Make Sintex / Vertex/ CG Plast) As per Instruction of Engineer-in-charge.</p>
20	Sewerage System	:	<p>1. P.V.C. pipe (Duly approved by Engineer-in-charge) line with necessary fittings upto gully trape, manhole chamber &amp; disposal through 150 mm Pipe line laid upto outter chamber.</p> <p>2. Providing and laying nominal mix plain cement concrete with crushed stone aggregate using concrete mixer in all works upto plinth 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40mm nominal size).all round pipes including bed concrete 150mm thick as per standard design.</p>


		<p>3. Providing and fixing square-mouth S.W. gully trap grade 'A' complete with C.I. grating brick masonry chamber with well burnt modular clay bricks crushing strength not less than 35kg/cm<sup>2</sup>, water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design : 100x100 mm size P type</p> <p>4. Providing and constructing brick masonry road gully chamber 50x45x60 cm with well burnt modular clay bricks crushing strength not less than 35kg/cm<sup>2</sup> in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm precast R.C.C. horizontal grating with frame complete as per standard design. &amp; as per Instruction of Engineer-in-charge.</p> <p>5. Providing and constructing brick masonry chamber for underground pipe and bends with well burnt modular clay bricks crushing strength not less than 35kg/cm<sup>2</sup> in cement mortar 1:4 (1 cement : 4 coarse sand) RCC cover of suitable size and 75mm thick with 1:1.5:3 mix (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size) including reinforcement 8mm dia bars at 150mm both ways and MS hooks for lifting, including foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design :</p>
21	Internal Electrification	: Enclosed

**Note-**

1. All Materials to be got approved before use/ Installation by Engineer In-charge.
2. Contractor shall have to follow elevation of building strictly & No Extra payment will be made for Developing elevation.
3. Approved Materilas/make in CGHB must be used .

  
 Sub Engineer  
 C.G. housing Board  
 Division Rajnandgaon

  
 Assistant Engineer  
 C.G. housing Board  
 Division Rajnandgaon

  
 Executive Engineer  
 C.G. housing Board  
 Division Rajnandgaon



# GENERAL SPECIFICATION (FOR INTERNAL ELECTRIFICATION)

(FOR DDAY AT KAURINBHATHA, RAJANANDGAON (C.G.))

Internal Electrification	: Detailed Specification for Internal Electrification work For 01 no. LIG Type House
	<p>1. <b>POINT WIRING:-</b> Point wiring for Light, Fan, Call Bell 1.5 Sqmm FR PVC Insulated standard copper conductor <b>Polycab (ISI) / Havells (ISI)/ Maitri (ISI) Make</b> single core in concealed ,PVC Conduit / PVC Conduit ( 2 mm thick Heavy <b>Sarswati (ISI) / Polycab (ISI) / Riga (ISI) Make</b> ) with 5 Pin Piano type switch, socket and other necessary required material i.e. <b>Klick (ISI)/Riga (ISI)/Havells (ISI) Make</b> Phenolic Laminated Sheet suitable size MS Box and Earthing the point with same size cable etc. as required.</p> <p>A. Light Point – 12 Nos B. Fan/Exhaust Fan Point - 05 Nos C. Call Bell – 01 Nos D. 5 Pin 6 Amps Socket Outlet (same board) – 04 Nos. E. Separate board- 05 nos.</p> <p>2. <b>Circuit / Submain wiring :-</b> Wiring for FR PVC insulated <b>Polycab (ISI) / Havells (ISI)/ Maitri (ISI) Make</b> circuit / submain wiring along with earth wire with the 3 x 2.5 Sqmm in ( 2 mm thick Heavy <b>Sarswati (ISI) / Polycab (ISI) / Riga (ISI) Make</b> ) 20 mm dia. PVC Conduit and 3 x 4 Sqmm. FR PVC insulated <b>Polycab (ISI) / Havells (ISI)/ Maitri (ISI) Make</b> wire in ( 2 mm thick Heavy <b>Sarswati (ISI) / Polycab (ISI) / Riga (ISI) Make</b> ) 25 mm dia. Conduit. Length of Circuit &amp; Submain wiring is as per required of the work decided by site engg. Incharge.</p> <p>3. <b>MCBDB, SPN &amp; SP MCB :-</b> Supplying and fixing on surface / recess 6 way Double Door - 01 nos., <b>Klick (ISI)/ABB (ISI)/ Havells (ISI) Make</b> , surface/ recess following way, 240 volts SP&amp;N MCB distribution board consumer unit of sheet steel phosphatized and powder painted, complete with tinned copper busbar, neutral busbar, earth bar, din bar, detachable gland plate, including interconnections, earthing etc. as required. Also</p>

## GENERAL SPECIFICATON (FOR INTERNAL ELECTRIFICATION)


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	<p>Supplying and fixing <b>ABB (ISI) / Havells (ISI)</b> Make , 6 amps to 32 amps SPN &amp; SP MCB, 240 volts, 'C' Curve, suitable for inductive load in the MCB DB complete with connections, testing and commissioning etc. as required.</p> <p>A. SPN- 01 Nos B. SP- 04 Nos</p> <p>4. <b>EARTHING;-</b> GI plate earthing as per IS specifications (02 nos. for each block) with required length of 25 x 6 mm GI strip.</p> <p>5. <b>SERVICE CABLE &amp; G.I. GUARD WIRE:-</b> Supplying and laying 3.5x50 sqmm and 2 X 6 sq mm <b>Polycab (ISI) / Havells (ISI)/Gloster (ISI)</b> make, one number PVC insulated, PVC sheathed, steel armoured, aluminum conductor power cable of 1.1 KV grade direct in air or ground with Supplying and erection G.I. guard wire/ earth wire/ bearer wire 13 sq.mm (4mm dia) including stringing, binding at required angle/ channel iron cross arm/ other fitting requied with MV shackle insulator ( 75 x 90 mm with G.I. Nut &amp; Bolt) or bracket, jointing, jumpering connection etc. as required and clearing of obstacles as required. (if required).</p> <p>6. Meter room should be contracted below stair case. It should be proper protaction/ fancing with proper locking arrangement. Also provide lock with 03 nos. keys.</p> <p>7. <b>TESTING AND TEST REPORT:-</b> All the work relaed to Internal Electrification work is to be necessary testing after completed the work. Contractor must have Also Provided Test Report (For Electrical Serives connection from CSPDCL) from elegiable electrical Linces Holder (Valid) Person for Each Unit.</p> <p><b>NOTED:-</b> Every Item for Electrical work is specified but if any item not mentioned above specification and it also required complete the Internal Electrification work shud be used by Contractor and no any extra payment made</p>
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(FOR DDAY AT KAURINBHATHA, RAJANANDGAON (C.G.))

	for this All the work is completed as per instruction of engg. Incharge.
Panel Board (Each Block) :	<p>Design manufacturing supplying and fixing outdoor type floor mounted weather dust and vermine proof of IP54 type LT sub feeder pillar distribution box made of 14 gauge MS sheet with clamping arrangement lockable hinged door duly On all sides with red oxide, anti rust and corrosion treatment, two coat of synthetic enamel paint of approved make and shade consisting of following fittings.</p> <ol style="list-style-type: none"><li>4 strip copper bus bars of 100 Amps supported on epoxy insulator 1 set,</li><li>100 Amps 35KA , TPN MCCB <b>Havells (ISI)/ABB (ISI)/L&amp;T (ISI) make</b> for Incomer 1 No., 3 set of LED indicating lamp with fuse protection.</li><li>40 Amps SPN MCB <b>Havells (ISI)/ABB (ISI)/L&amp;T (ISI) make</b> for Outgoing 16 No.</li><li>GI earth terminal 2 Nos.</li><li>7 Lever godrej pad lock with 2 keys. 1 Nos.</li><li>16 Nos Empty Space with 8 mm thick backlight sheet of required size for fixing of energy meter.</li><li>Connecting cables <b>Polycab (ISI)/ Finolex (ISI) / Havells (ISI) make</b> as required. (Minimum 10.00 Sqmm cable Used for Interconnection work )</li><li>Numbering in incoming outgoing cable and SPN</li></ol>

  
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