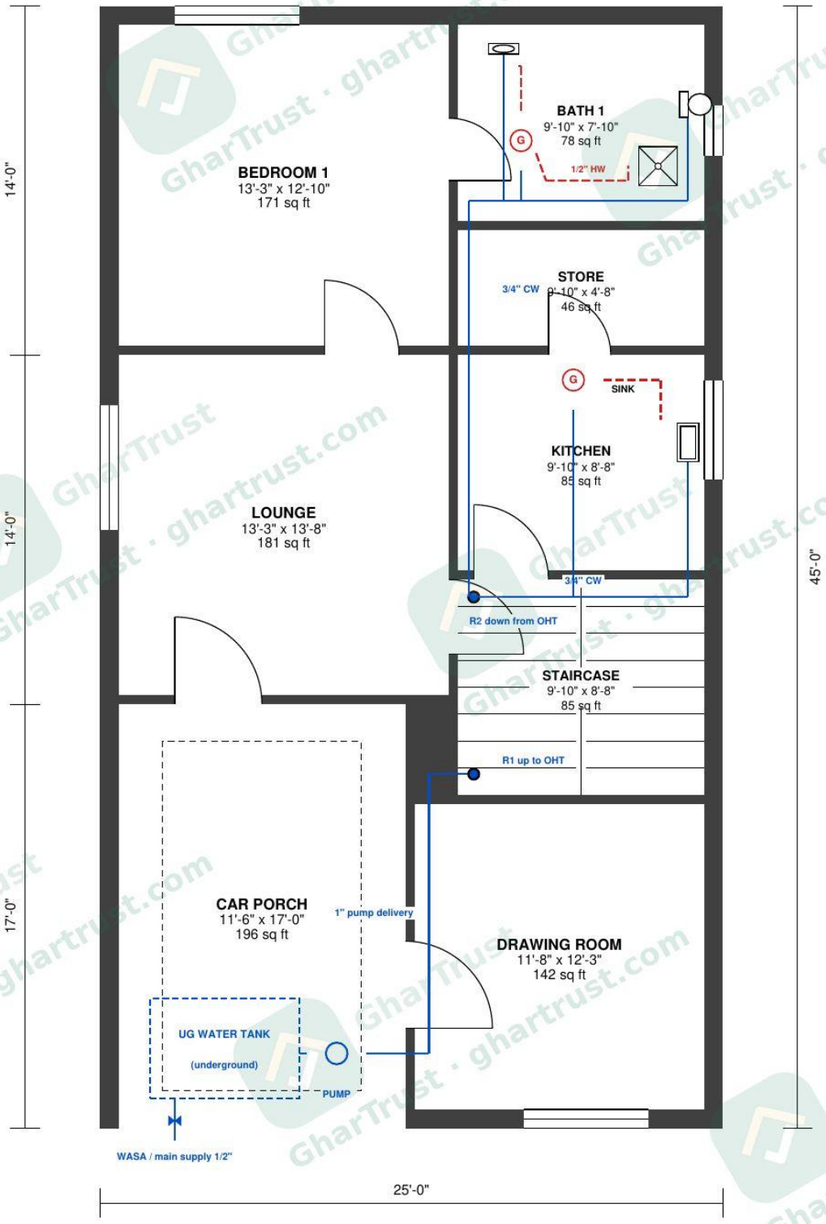
GharTrust – ghartrust.com – +92 321 4335539 – Sample design, copying not allowed

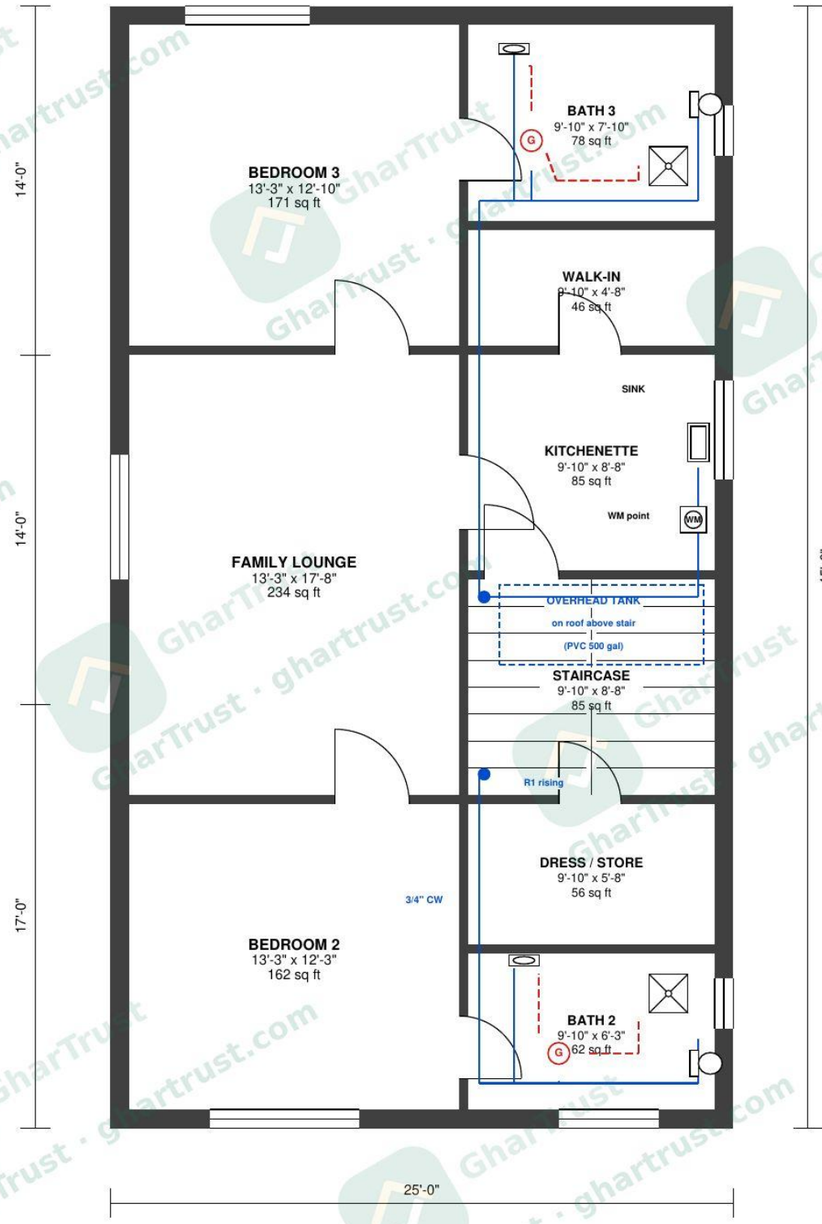
Sample drawing for illustration - final MEP design is prepared per client plot and certified by qualified engineers

SHEET 1/4 – WATER SUPPLY · REV 5



GROUND FLOOR

SCALE 1:75 (on A3) · FRONT / ROAD SIDE AT BOTTOM



FIRST FLOOR

SCALE 1:75 (on A3) · FRONT / ROAD SIDE AT BOTTOM

LEGEND – WATER SUPPLY

- Cold water line (CPVC/PPR)
- Hot water line (PPR, insulated)
- Vertical riser R1 / R2
- Stop valve / gate valve
- Electric geyser (G)
- WC (commode)
- Wash basin
- Shower area
- Kitchen sink
- Washing machine point (WM)

NOTES

1. Main 1/2" WASA line -> UG tank -> pump -> 1" riser R1 to OHT.
2. OHT feeds the house by gravity through down-riser R2 (3/4").
3. Branches to fixtures 1/2"; stop valve at each bath & kitchen.
4. Hot water from bath geysers, PPR pipe, kept 6" from cold.
5. Pipes concealed in wall chases, pressure-tested before plaster.

GharTrust

GharTrust – Sample MEP, 5 Marla (25' x 45')

Plumbing: water supply (hot & cold) layout

Sheet 1 of 4: WATER SUPPLY · Rev 5 (5 Nov 2026)

Call / WhatsApp: +92 321 4335539 · ghartrust.com

Scale 1:75 · A3 · Pipe / cable sizes INDICATIVE only.

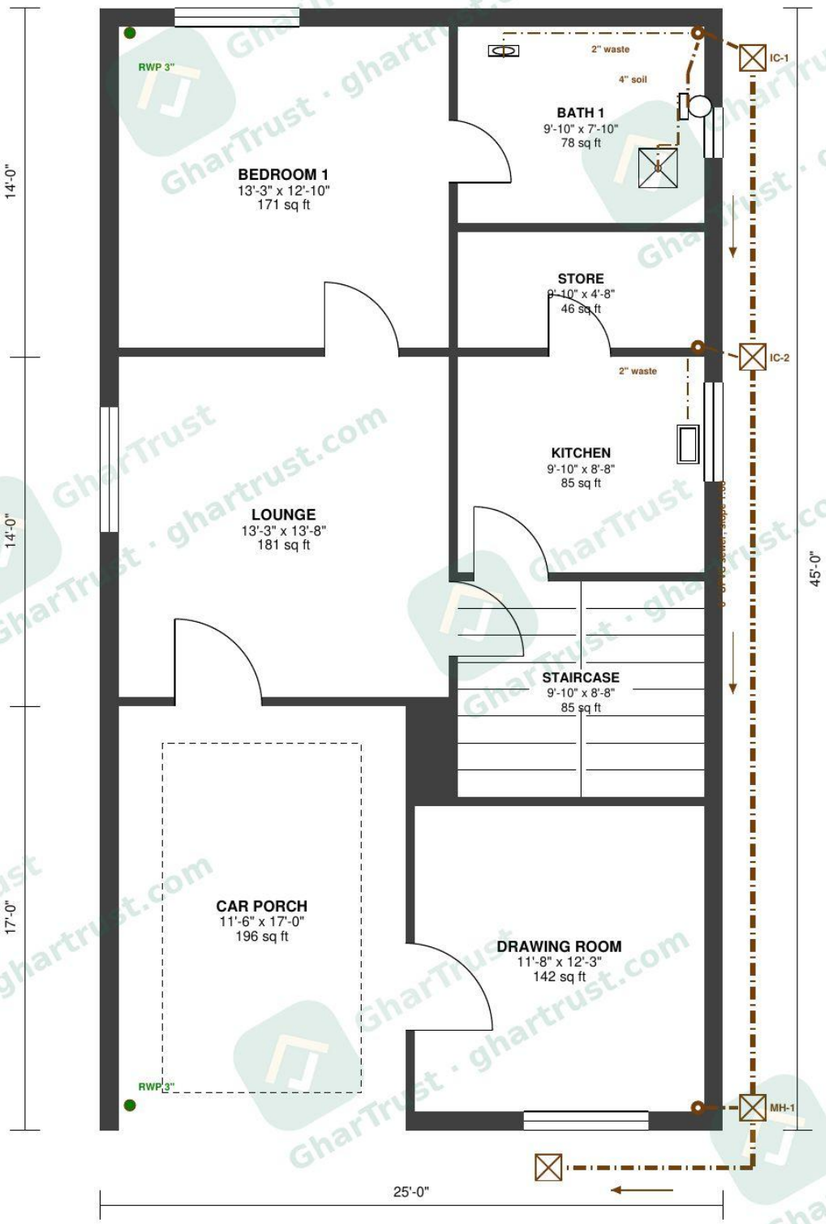
Sample drawing for illustration - final MEP design is prepared per client plot and certified by qualified engineers

GharTrust – ghartrust.com – +92 321 4335539 – Sample design, copying not allowed

GharTrust – ghartrust.com – +92 321 4335539 – Sample design, copying not allowed

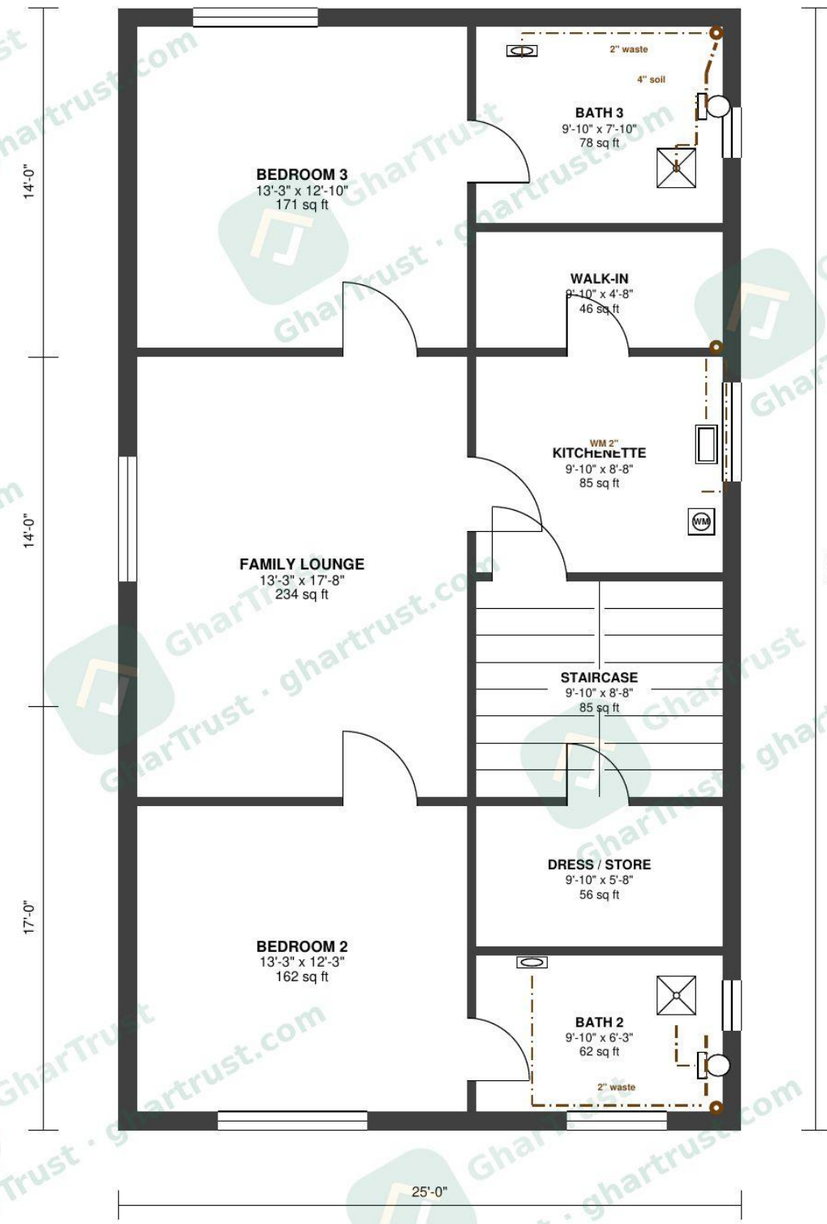
Sample drawing for illustration - final MEP design is prepared per client plot and certified by qualified engineers

SHEET 2/4 – DRAINAGE · REV 5



GROUND FLOOR

SCALE 1:75 (on A3) · FRONT / ROAD SIDE AT BOTTOM



FIRST FLOOR

SCALE 1:75 (on A3) · FRONT / ROAD SIDE AT BOTTOM

LEGEND – DRAINAGE

- Soil pipe 4" UPVC (WC)
- Waste pipe 2" UPVC (basin, sink, shower, WM)
- Underground sewer 6" UPVC
- Vertical stack: SVP-1/2 (4" soil), WP-1 (2")
- Inspection chamber IC / manhole MH
- Flow direction / slope
- Rain water pipe 3"

NOTES

1. Stacks run in right-side shaft, vented 2' above roof.
2. Min. slope: 4" soil 1:40, 2" waste 1:60, 6" sewer 1:60.
3. Floor trap (P-trap) at each shower, sink and WM point.
4. IC at every change of direction; MH-1 before street sewer.
5. Where no sewer: connect to septic tank + soakage pit.
6. Rain water kept separate from soil line.

GharTrust

GharTrust – Sample MEP, 5 Marla (25' x 45')

Drainage: soil, waste, stacks, manholes, sewer

Sheet 2 of 4: DRAINAGE · Rev 5 (5 Nov 2026)

Call / WhatsApp: +92 321 4335539 · ghartrust.com

Scale 1:75 · A3 · Pipe / cable sizes INDICATIVE only.

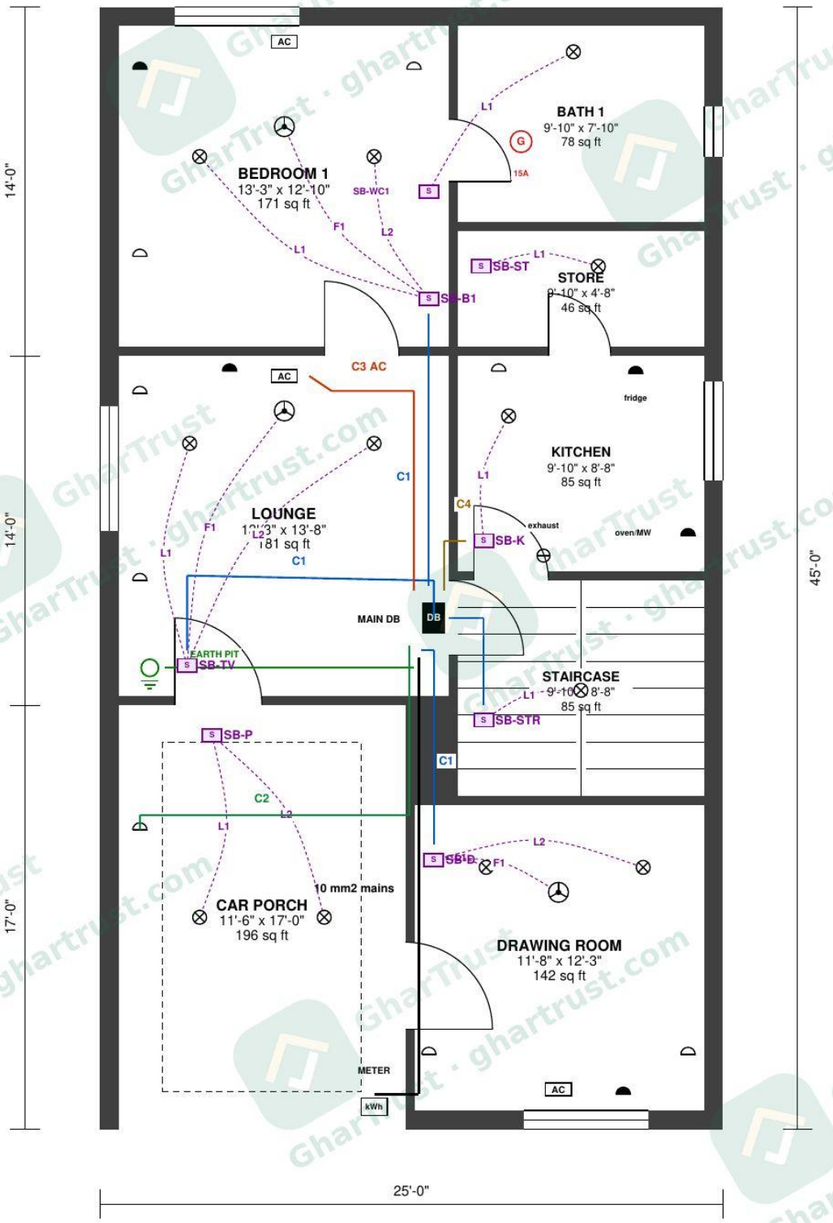
Sample drawing for illustration - final MEP design is prepared per client plot and certified by qualified engineers

GharTrust – ghartrust.com – +92 321 4335539 – Sample design, copying not allowed

GharTrust – ghartrust.com – +92 321 4335539 – Sample design, copying not allowed

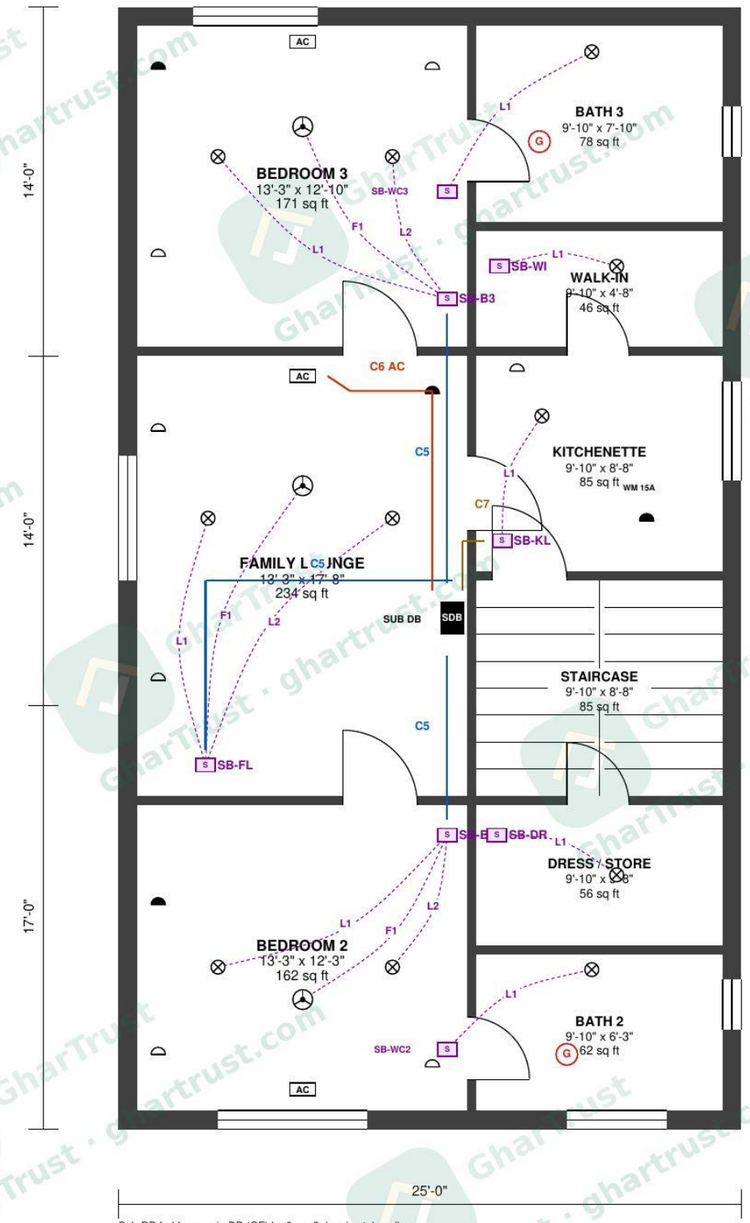
Sample drawing for illustration - final MEP design is prepared per client plot and certified by qualified engineers

SHEET 3/4 – ELECTRICAL · REV 5



GROUND FLOOR

SCALE 1:75 (on A3) · FRONT / ROAD SIDE AT BOTTOM



Sub-DB fed from main DB (GF) by 6 mm2 riser in stair wall.

FIRST FLOOR

SCALE 1:75 (on A3) · FRONT / ROAD SIDE AT BOTTOM

LEGEND – ELECTRICAL

- Light point (LED / tube)
- Ceiling fan point
- Switch board SB-xx, 4'-0" above floor
- Switch control: board -> light/fan it operates
- 5A socket, 1'-0" (beds 2'-6")
- 15A power socket (fridge, iron, WM, heater)
- AC point, 7'-0", own 20A circuit
- Geyser point 15A, 6'-0"
- Main DB / Sub DB, 5'-0" to top
- Conduit run DB -> board (colour = circuit)

Each SB is placed beside the room door. Dashed purple line shows which switch on that board runs which light (L1, L2) or fan (F1). Bath light switches are outside the bath door (SB-WC).

WIRE COLOUR CODE (single phase)

- Live / Phase = RED (3-phase: Red, Yellow, Blue)
- Neutral = BLACK
- Earth = GREEN / YELLOW (or Green)

CABLE CORES IN EACH CONDUIT (cross-section)



1.5 mm2 C1/C5 lights

2.5 mm2 C2/C5a sockets

4 mm2 C3/C4/C6/C7

GharTrust

GharTrust – Sample MEP, 5 Marla (25' x 45')

Electrical: lights, fans, switches, sockets, AC & DB circuits

Sheet 3 of 4: ELECTRICAL · Rev 5 (5 Nov 2026)

Call / WhatsApp: +92 321 4335539 · ghartrust.com

Scale 1:75 · A3 · Pipe / cable sizes INDICATIVE only.

Sample drawing for illustration - final MEP design is prepared per client plot and certified by qualified engineers

GharTrust – ghartrust.com – +92 321 4335539 – Sample design, copying not allowed

GharTrust – ghartrust.com – +92 321 4335539 – Sample design, copying not allowed

Sample drawing for illustration - final MEP design is prepared per client plot and certified by qualified engineers

CIRCUIT / WIRE SCHEDULE (INDICATIVE)

Ckt	Floor	Feeds	Cable (Cu PVC)	Core colours L / N / E	Conduit	Breaker
MAIN	-	Meter -> Main DB	10 mm2 + 6 mm2 E	Red / Black / Green-Yellow	1"	40A DP + 30mA RCCB
C1	GF	Lights & fans, all GF rooms	1.5 mm2	Red / Black / Green-Yellow	3/4"	10A SP MCB
C2	GF	5A sockets GF	2.5 mm2	Red / Black / Green-Yellow	3/4"	16A SP MCB
C3	GF	AC: Drawing, TV lounge, Bed 1	4 mm2 (1 run per AC)	Red / Black / Green-Yellow	1"	20A MCB each
C4	GF	Kitchen 15A, exhaust, geyser	4 mm2	Red / Black / Green-Yellow	1"	20A SP MCB
SDB	GF->FF	Main DB -> Sub DB	6 mm2	Red / Black / Green-Yellow	1"	32A DP MCB
C5	FF	Lights & fans, all FF rooms	1.5 mm2	Red / Black / Green-Yellow	3/4"	10A SP MCB
C5a	FF	5A sockets FF	2.5 mm2	Red / Black / Green-Yellow	3/4"	16A SP MCB
C6	FF	AC: Bed 2, Family lounge, Bed 3	4 mm2 (1 run per AC)	Red / Black / Green-Yellow	1"	20A MCB each
C7	FF	Kitchenette / WM, geysers B2 & B3	4 mm2	Red / Black / Green-Yellow	1"	20A SP MCB
E	All	Earth pit -> DB -> 15A / AC / geyser	6 mm2 / 2.5 mm2	Green-Yellow only	-	-

Colour code: Live/Phase RED (3-phase: Red, Yellow, Blue) · Neutral BLACK · Earth GREEN/YELLOW (or Green). Indicative sizes.

SWITCH BOARD SCHEDULE (which switch controls what)

Board	Location	Switches on board
SB-P	Porch, by lounge door	L1, L2 porch lights
SB-D	Drawing room door	L1, L2 lights, F1 fan + fan dimmer, AC socket
SB-TV	Lounge entry	L1, L2 lights, F1 fan + dimmer
SB-K	Kitchen door	L1 light, exhaust fan
SB-STR	Stair foot (2-way with top)	L1 stair light
SB-B1 / B2 / B3	Bedroom doors	L1, L2 lights, F1 fan + dimmer, bed-side 2-way
SB-WC1/2/3	Outside bath doors	L1 bath light, exhaust, geyser switch (with indicator)
SB-ST / DR / WI	Store / dress / walk-in	L1 light
SB-FL / KL	Family lounge / kitchenette	Lights, fan, 15A WM socket

MOUNTING HEIGHTS

Switch boards: 4'-0" from floor
5A sockets: 1'-0" (bedside 2'-6")
Kitchen 15A sockets: 3'-6" above counter
AC point: 7'-0" Geyser: 6'-0"
Main DB: 5'-0" to top, Meter: 5'-6"

GENERAL MEP NOTES

1. All wiring in concealed PVC conduit (3/4" / 1"), chased before plaster.
2. Separate circuits for lights, sockets, AC and kitchen.
3. Every 15A socket, AC & geyser earthed to earth pit.
4. RCCB 30mA protects all socket circuits.
5. Water pipes kept at least 6" from electrical conduits.
6. Plumbing pressure-tested and conduits checked before plaster.
7. Pipe/wire sizes are indicative; final design per load calculation and LESCO / WASA requirements.

GharTrust

GharTrust – Sample MEP, 5 Marla (25' x 45')

Electrical circuit schedule, switch schedule & MEP notes
Sheet 4 of 4: SCHEDULES · Rev 5 (5 Nov 2026)
Call / WhatsApp: +92 321 4335539 · ghartrust.com
Scale 1:75 · A3 · Pipe / cable sizes INDICATIVE only.

Sample drawing for illustration - final MEP design is prepared per client plot and certified by qualified engineers

GharTrust – ghartrust.com – +92 321 4335539 – Sample design, copying not allowed