

**DIRECTORATE GENERAL: ALL INDIA RADIO
(PLANNING & DEVELOPMENT UNIT)**

Requirements of site for Studio projects.

I. M.P. Studio set up

- a) Studios and Receiving facilities:
 - Minimum : 1.25 acres
 - Preferable : 1.50 acres
- b) Staff Quarters:
 - Minimum : 1.0 acres
 - Preferable : 1.5 to 2.0 acres.
 - At difficult stations: 2.0 to 2.5 acres

II. Type-I(R) Studio set up

- a) Studios and Receiving facilities:
 - Minimum : 1.75 acres
 - Preferable : 2.0 acres
- b) Staff Quarters:
 - Minimum : 2.0 acres
 - Preferable : 3-4 acres
 - At difficult stations: 4.0 acres

III. Co-sited Transmitters:

- FM Transmitter : 0.25 acres
- 1 KW MW Transmitter: 2.50 acres

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NORMS FOR STUDIO, OFFICE & ANCILLARY STRUCTURES

NORMS - STUDIO AREA

S.NO	STUDIO BLOCK ROOMS	CARPET AREA IN SQ. MTR.			REMARKS
		TYPE-I	TYPE-II	TYPE-III	
1.	Talks-cum-discussion studio	20.0	20.0	20.0	
2.	Talks-sound lock	5.0	5.0	5.0	
3.	Talk-Announcer room	14.0	14.0	14.0	
4.	Music Studio	37.0	37.0	37.0	
5.	Music sound lock	5.0	5.0	5.0	
6.	Music Announcer room	14.0	14.0	14.0	
7.	Drama studio	-	37.0	37.0	
8.	Drama sound lock	-	5.0	5.0	
9.	Drama Announcer room	-	14.0	14.0	
10.	Transmission studio	-	-	18.5	
11.	Transmission sound lock	-	-	5.0	
12.	Musical instrument room	18.5	18.5	18.5	
13.	Read over room(ROR)	18.5	18.5	18.5	
14.	Booth for R.O.R	15.0	15.0	15.0	
15.	Sound lock for ROR	5.0	5.0	5.0	
16.	Tape-cum-disc library	37.0	55.0	74.0	
17.	Control room(Non co-sited transmitter)	32.0	32.0	32.0	
18.	Editing/dubbing room	15.0	15.0	30.0	
19.	Waiting room	18.5	18.5	18.5	
20.	Duty room	18.5	18.5	23.0**	**18.5 in case there is only one channel
21.	Air handling unit room	55.0	80.0	80.0	
22.	Pump/compressor room	40.0	50.0	50.0	
23.	Low tension switchgear room	10.0	10.0	10.0	
24.	Battery room	10.0	10.0	10.0	
25.	Service room	18.5	18.5	18.5	
26.	Engineer's room	18.5	18.5	18.5	
27.	Trans.staff(Prog.) room	11.0	11.0	11.0	

28.	Emergency store-cum-O.B. equipment room	15.0	15.0	15.0	
	Total carpet area	451.0	560.0	627.0	
	Total plinth area	766.7	952.0	1065.0	

Note:

1. The above mentioned areas do not include the areas of the room which will be required for accommodating CES, server room, low power transmitter and receiving facilities, if any. Each of these facilities will require a room each of carpet area 18.5 sq.m. wherever they are to be provided.
2. Plinth area above will include other useful areas, not accounted for in the table above, such as corridor, toilets, entrance, foyer, emergency exit zone, areas occupied by walls, etc. depending on the architectural requirements. Expected plinths to carpet ratio would be about 1.7:1, which has been adopted for calculating the plinth area.

NORMS – OFFICE BLOCK AREA

S.NO	STUDIO BLOCK ROOMS	CARPET AREA IN SQ. MTR.		
		TYPE-I	TYPE-II	TYPE-III
1.	Supervisory staff	88	110	110
2.	Ministerial staff	77	113	113
3.	Programme staff	80	92	92
4.	Staff for special units	-	38	38
5.	Library (Books)	30	30	30
6.	Engineering stores	19	19	19
7.	Stationery stores	15	20	20
8.	Old record room	-	10	20
9.	Conference room	22	22	22
10.	(a) Staff artist room	19	19	19
	(b) Cloak room	-	10	10
	(c) Recreation room	19	19	19
11.	V.I.P Longe	19	19	19
12.	Space for shift Eng.'s desk work	11	11	11
13.	EPABX (Eqpt. & Operator)	19	19	19
14.	Teletype room	-	5	5
15.	Visiting officers room	19	19	19
16.	Ladies room	11	11	11
17.	CCW staff	11	11	11
	Total Carpet area	459	597	607
	Total plinth area	918	1194	1214

Note:

1. The economy cut of 10% as per W.H & S norms has been applied in arriving t total carpet area requirement for Sl.Nos. 1,2,3 & 4.
2. Provision for future requirements which is allowed under W H & S norms has not been shown separately but is expected to be achieved within the total plinth area.
3. Plinth area above will include other useful areas not accounted for in the table above, such as corridors, toilets, foyer, areas occupied by walls, etc. depending on architectural requirements. Expected plinth to carpet ratio would be about 2:1 which has been adopted for calculating the plinth areas mentioned above.
4. This is for guidance only. This may vary from place to place depending on staff and space available.

NORMS – ANCILLARY STRUCTURE

S.NO	STUDIO BLOCK ROOMS	CARPET AREA IN SQ. MTR.			REMARKS
		TYPE-1	TYPE-II	TYPE-III	
1.	Cycle/scooter shed	50	50	70	
2.	Garage	*42	*42	**63	* for 2 nos. **for 3 nos.
3.	Security Guard quarters(2 nos.)	56	56	56	To be taken as per required work norms.
4.	Sentry Post (1 no.)	10	10	10	One more sentry box will be needed if Tx. is cosited
5.	Reception room	15	15	15	
6.	Canteen	50	50	50	
7.	Diesel Generator room	31.5	31.5	31.5	
8.	Pump room for water supply	10	10	10	
9.	Stores for transport section and gardening tools & motor driver	12	12	12	
10.	Space for carpentry works	-	-	10	
11.	AGD	Wherever required this will be provided as per the area given in the note below.			
	Total	276.5	276.5	327.5	

Note:

- The area required for AGD will be as follows:

90 sq.m for 4 Guards + 1 Head Constable
125 sq.m. for 8 Guards + 2 Head Constable
200 sq.m for 16 Guards + 4 Head Constables

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GUIDELINES FOR JOINT INSPECTION OF STUDIO PROJECTS

Following are the salient points for checking:

1. CIVIL WORKS:

- i) Construction of the building in accordance with the working drawings issued by the Architect. Clear real ceiling height for technical areas should be checked.
- ii) Execution of special architectural features, if any and their get up.
- iii) Incorporation of technical requirements projected in the P&D Unit drawings and exterior and interior finish. Major points to be checked are as follows:-
 - a) Floor for areas where Marbled/Linoleum etc. are to be laid should have perfectly smooth finish. For wall/floor finishes and permissible variation in level, refer layout of studio block drawing.
 - b) Walls of technical areas should be in plumb.
 - c) Quality of wood work. Special attention should be paid to fixing of door/window leaves and finish.
 - d) Size and location of all technical wall openings with references to P&D Unit drawings.
 - e) Location, size and fixing of ceiling hooks.
 - f) Layout of trenches and conduits as per P&D Unit drawing. Flaring out of conduits in trenches, termination of EW pipes below ground level & beyond plinth protection, availability of fish wires, quality and provision of chequered plate trench covers in switchgear, AC plant and diesel generator rooms shall be especially checked.
 - g) Provision of structural isolation gap and its bridging, if any, the gap should have been filled with a damping material and sealed with a mastic compound.
 - h) Sanitary fittings and floor finishes in bath rooms.
 - i) Seepage on walls, ceiling, if any.
 - j) Cracks in walls, joints of columns/beams with brick work, joint of walls/floors etc.
 - k) Edges at window sills, door/window lintels etc.
 - l) Provision of plinth protection for all structures. Slope of plinth protection and crack at joint of walls and plinth protection should be checked.
 - m) Slope of garages and unloading platform.
- iv) Security provision like security fencing, security gate/wicket gate, sentry post, observation post, if any, AGD, security grilles and wire net for studios and office windows at ground floor.

- v) Finish of water proofing on the terrace.
- vi) Provision and execution of heat proofing treatment on the entire studio block.
- vii) Completion and quality of roads, pathways and flagmast.
- viii) Completion of horticultural works.
- ix) Completion of leveling/dressing and storm water drains. Effectiveness of storm water drains should be assessed.
- x) Site area left for future expansion to be checked for provision of any roads, pathways, drains, cables etc.
- xi) Future expansion provisions inside the buildings to be checked.
- xii) Clearance of surplus material, if any.
- xiii) List of pending civil works to be given, if any.

2. WATER SUPPLY

- i) Availability of adequate water supply. Source of supply should be indicated. If water source is bore-well, pot ability of water should be ascertained. If water is not potable, alternative arrangements for drinking water should be ascertained.
- ii) Construction of sump well and overhead tank. Following points will be checked in particular.
 - a) Provision of level indicator for the overhead tank. It should be easily possible to read water level from the ground level.
 - b) Extension of overflow pipe of overhead tank to the ground level.
 - c) Provision of scour pipe. Outlet of the scour pipe should have been extended to the nearest storm water drain.
 - d) Isolation of vent pipe and overflow pipe for sump well.
 - e) Provision of steps and cleaning pit inside the sump well.
 - f) Locking arrangement for the cover of sump well.
- iii) Provision of terrace tanks. Float valves in the terrace tanks should be in good working condition. Cover of the tanks should have locking arrangement. Overflow of terrace tanks should have been guided to the nearest rain water outlet.
- iv) Water supply to the water coolers in the office block should be given directly from the overhead tank line (not from the terrace tank).

3. FIRE FIGHTING ARRANGEMENT:

- i) To check whether the installation has been inspected by the local fire officer and fire fighting equipment installed as per his recommendations.
- ii) If the inspection is likely to be unduly delayed, whether minimum fire fighting equipment as per P&D Unit instructions have been provided.
- iii) To check whether all appliances have been properly charged.
- iv) Working of early fire alarm system/fire gong.
- v) To check whether fire hydrants have been provided at convenient locations, with standard couplers and with suitable markers for easy identification. Hose

pipe for the fire hydrant shall be mounted in a steel box with glass cover at a suitable location.

4. ELECTRICAL WORKS:

Points to be checked especially are as follows:

- a) Neatness or execution.
- b) LT switchgear and sub-distribution boards in technical areas as per P&D Unit drawings. Fuse ratings to be checked.
- c) Working of all meters, indicators and switches.
- d) Balancing of load on three phases.
- e) Fixing of lugs and crimping of cables.
- f) Joints in cables. There should be no unnecessary joints in wires and cables and wherever joints are needed, they should have been provided properly.
- g) Route of cables and ease of replacement of cables. No cables shall be embedded in the walls, floor or plinth protection. Extra length should have been left at both ends of underground cables for use in future.
- h) Neatness of plaster for any chases made after finishing.
- i) Neatness of exhaust fan openings including their painting/colour washing.
- j) Noise of exhaust fans provided in technical areas and toilets.
- k) Provision of compound light and gate lights. Adequacy of compound lights to be examined. Flood lights should have been fixed and earthed properly.
- l) Provision of lightning arresters for the main building and the overhead tank. Lightning arrester spikes and earthing strips should be made of galvonised iron. Earthing strip joints should be riveted. The strip should have been earthed properly.
- m) GI pipe connections from sump well/borewell to the pump room to be checked for neatness. The pipe lines should not obstruct the passage. Water outlet from the sump well should have been taken through the side wall (not through the top slab).
- n) Working of water pumps. The pumps should be able to fill the overhead tank in less than two hours.
- o) Provision of single phasing preventor for the pump sets.
- p) Provision of call bell system from sentry post to the AGD and control room and from the transmission booth to the control room, duty room and AGD as per security instructions.
- q) Provision of one light and one exhaust fan in diesel generator room on diesel generator supply only.
- r) Finish of earth pits for electrical installation and its construction as per standard design.
- s) Provision of double earthing for all motors, switchgears etc.

- t) Provision of conduits for loud-speakers and telephones in office block as per P&D Unit drawing. Provision of a light point for amplifiers close to the loud-speaker point shall also be checked.
- u) Mounting and wiring work in the ballast niches. Heat dissipation from the ballast niche shall be given special attention.
- v) Provision of power factor correction, if necessary.
- w) Any special provisions made to be noted.

A detailed report of the joint inspection to be sent to the concerned Executive Engineer(Civil) and (Electrical) for compliance.