

MCGM AUTODCR PROJECT



**MUNICIPAL CORPORATION
OF GREATER MUMBAI(MCGM)**



DRAWING PROTOCOL DOCUMENT

AUTODCR: AUTOMATING BUILDING PLAN APPROVAL

Prepared by:

SoftTech Engineers Pvt. Ltd.

About The Document

MCGM has planned to automate the building plan approval process by introducing AutoDCR system. AutoDCR software reads the CAD drawings submitted by architects and automatically produce the deviation report based on the control regulations prescribed by MCGM.

The purpose of this document is to establish a set of guidelines to Architects for preparation of drawings to be submitted for taking Planning Permit and Building Permit from MCGM. Uniformity in the process of drafting of the drawings to be submitted for approval is required for automation of building approval system by introducing AutoDCR system.

The consultants/Architects should prepare the drawings keeping specific objects in specific layers with specific colors and text. The layers required to create with explanation of what is required to be drawn on which layer is described in this document.

How to Read this Document

This document should be read in conjunction with the building bye-laws which will be applicable for approval of a proposal. The reader of this document should have understood the applicable bye laws for scrutiny of a proposal as well as should be familiar with AutoCAD terminology and environment for better understanding.

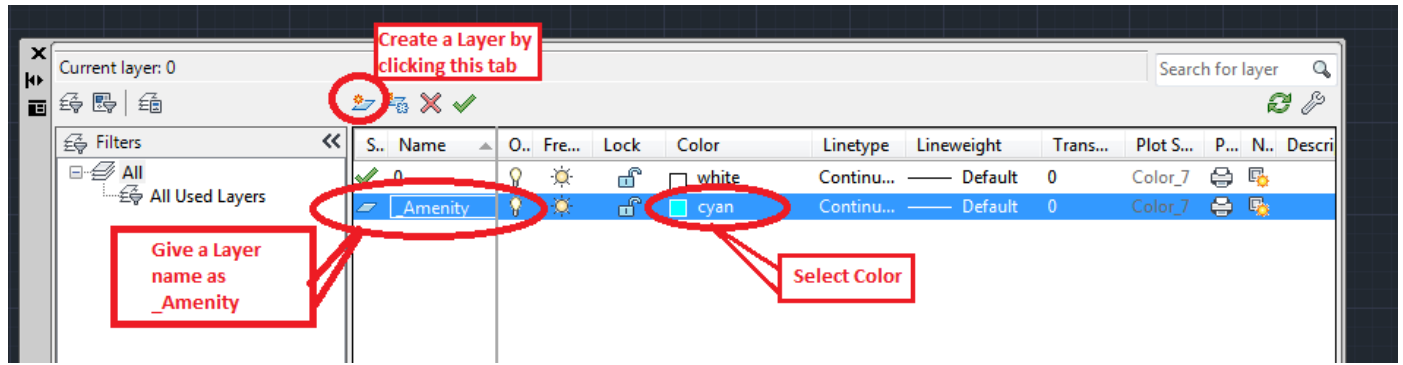
How to Refer following Table

User can prepare drawing in any Computer aided design software which file extension would be “.dwg” by using this document few steps are given below.

If user is using an AutoCAD:

Step 1: Open AutoCAD on your desktop

Step 2: open layer dialog to create layer like this

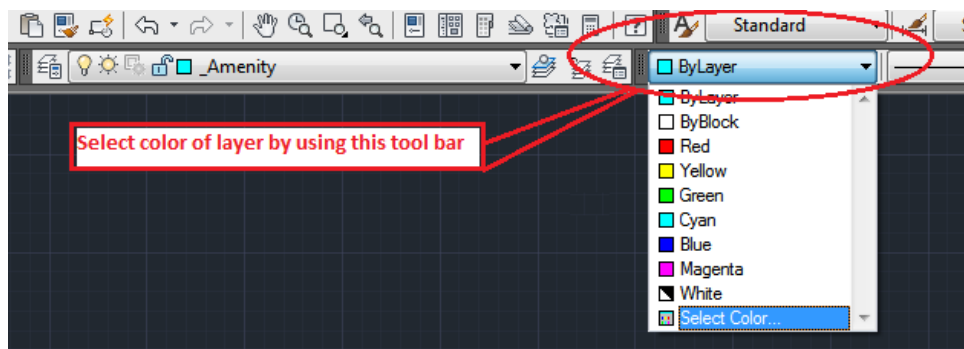


Note: In above dialog selected color would be by default color of this layer

Once create layer then need to draw in drawing



Step 3: If Color need to change any entity then goes to AutoCAD tool bar and select color



Step 4: Type required text by referring 'Text' column from table below, Select line type mentioned in the line type table below. Refer remarks column to avoid pre-formatting errors.

Sr. No.	Layer Name	Color/ Color Index	Text	Line type	Drawing Domain	Remark(s)
1	_Amenity	cyan	AMENITY	ByLayer	Inside MainPlot Polyline	Text should be kept on same layer and color.
			AMENITY-SURRENDERED	ByLayer		If Amenity is Surrendered
2	_ArchProj	21	F.BED	HIDDEN	Inside Floor Polyline and overlapped with Outer Wall	All types' projection to drawn on same layer like chajja, Flower bed, cornice, loft, paragola, etc.
		21	CHAJJA	HIDDEN		
		21	CORNICE	HIDDEN		
		21	PARGOLA	HIDDEN		
		21	LOFT	HIDDEN		
		21	CANOPY	HIDDEN		
		21	GARBAGE SHAFT	HIDDEN		
		21	ORNAMENTAL PROJECTION	HIDDEN		
		21	ORNAMENTAL GLAZING	HIDDEN		
		21	PORCH	HIDDEN		
		21	OTTA	HIDDEN		
		21	STEPS	HIDDEN		
		204	REVAS PROJECTION	HIDDEN		
21	WEATHER SHADE	HIDDEN				
4	_Balcony	230	(ENC) BALCONY	ByLayer	Inside Floor and overlapped with Outer Wall	Balcony projection to be drawn on _balcony Layer with respective text and color.
		25	FIRE BALCONY	ByLayer		
		25	BALCONY	ByLayer		
5	_Building	52	A (BUILDING)	ByLayer	Outside MainPlot Polyline	Provide building name with matching with its proposed work which is shown in layout.
6	_BuildingLine	100	NA	ByLayer	Inside Floor /Outer Wall Polyline	No need of text for this layer.
7	_CarpetArea	191	101, 102, etc.	ByLayer	Inside Floor / Outer Wall Polyline	Give text of tenement no if normal tenements.
		233	101 (SALE)	ByLayer		Give text of tenement no if it is sale tenements.
		113	101 (REHAB)	ByLayer		Give text of tenement no if it is Rehab tenements.
		145	101 (PAP)	ByLayer		Give text of tenement no if it is Project Affected portion tenements.
		191	SPLIT 01, SPLIT 02, etc.	ByLayer		Give text of tenement no if it is split tenements.

8	_Chowk	180	CHOWK	ByLayer	Inside Floor / Outer Wall Polyline	Text should be kept on same layer and color.
9	_Column	101	NA	ByLayer	Inside Floor / Building Line Polyline	No need of text for this layer.
		29		ByLayer		
10	_CommOuterWall	150	NA	ByLayer	Inside Floor Polyline	No need of text for this layer.
11	_CompoundWall	252	1.50m High Comp Wall.	ByLayer	Overlap on MainPlot layer	Need to mention compound wall height in its text.
12	_CRZBoundary	91	CRZ Boundary	ByLayer	Inside MainPlot Polyline	Text should be on same layer and color.
13	_Deadwall	Yellow	Dead Wall	ByLayer	Inside MainPlot Polyline & overlap on PropWork layer	Give text on same layer and same color
14	_Door	114	D1, D2, D3, etc.	ByLayer	Inside Floor /Outer Wall /Substructure Polyline	Need to provide D1, D2, D3, text to calculate no of doors and its text should be inside door poly.
15	_ElectricLine	241	33 KV High Tension Line	ByLayer	Inside/in tersect MainPlot	Mentioned how much voltage line it is in its text.
16	_Elevation	44	Elevation	ByLayer	Inside Within building	Text should be kept on same layer and color.
17	_ExStructure	242	Existing building1, 2, etc.	ByLayer	Inside MainPlot Polyline	Text should be kept on same layer and color.
		143		ByLayer		
		Blue		ByLayer		
18	_Floor	153	GROUND FLOOR PLAN, FIRST FLOOR PLAN, Etc.	ByLayer	Inside building Polyline	Floor name must be matched with its section on floor in section layer.
19	_FloorInSection	132	GROUND FLOOR, FIRST FLOOR, Etc.	Bylayer	Inside Section/ building Polyline	Section floor name must be matched with its floor plans.
		163	SLAB THICKNESS	ByLayer		Draw slab thickness on same layer and give text

						accordingly which will be inside floor's section.
		121	BEAM	ByLayer		Draw Beam on same layer and give text accordingly which will be inside floor's section.
		240	TDR	ByLayer		Section floor name must be matched with its floor plans and color will be accordingly if whole floor BUA is from TDR or Road wideing.
		41	ROAD WIDENING	ByLayer		
20	_GroundLevel	63	GROUND LEVEL	ByBlock	Inside Section Polyline	Text should be kept on same layer and color.
21	_IndOuterWall	163	NA	ByLayer	Inside Floor Polyline	No need of text for this layer.
22	_IntDPRoad	61	10.0m Wide DP Road	ByLayer	Inside/in intersecting with MainPlot	Text should be start with its width.
23	_InternalRoad	Green	6.0m Wide Int. Road	ByLayer	Inside MainPlot Polyline	Text should be start with its width.
24	_LiftWell	110	LIFT (P)	ByLayer	Inside Floor /Outer Wall / Parking / Terrace Polyline	Lift if it is free from BUA with premium.
		171	LIFT	ByLayer		Lift if it is taken in BUA
		110	HYDRAULIC LIFT (P)	ByLayer		Lift if it is hydraulic and free from BUA with premium.
		171	HYDRAULIC LIFT	ByLayer		Lift if it is hydraulic taken in BUA.
		110	CAR LIFT (P)	ByLayer		Lift if it is for car and free from BUA with premium.
		171	CAR LIFT	ByLayer		Lift if it is for car and taken in BUA with premium.
		171	FIRE LIFT	ByLayer		Lift if it is for fire purpose.
25	_LocationPlan	211	LOCATION PLAN	ByLayer	Inside building Polyline	Text should be kept on same layer and color.
26	_MainPlot	White	MAIN PLOT	ByLayer	Outside of the building polyline	Main Plot Should overlap on either MainRoad/IntDPRoad/Right OfWay, etc.
27	_MainRoad	20	12.0 M Wide Main Road	ByLayer	Overlap on MainPlot layer	Text should be start with its width.
28	_MarginLine	253	NA	ByLayer	Should Overlap on MainPlot	No need of text for this layer.

					layer	
29	_Nala-WaterCourse	65	NALA	ByLayer	Overlap/inside with MainPlot layer	Text should be kept on same layer and color.
30	_NDZ	Blue	NDZ	ByLayer	Inside MainPlot Polyline	Text should be kept on same layer and color.
31	_NETPLOT	145	NA	ByLayer	Overlap on MainPlot layer	No need of text for this layer.
32	_NotInPossession	141	NOT IN POSSESSION	ByLayer	Inside MainPlot Polyline	Text should be kept on same layer and color.
33	_Parking	60	Parking	ByLayer	Inside Floor & MainPlot Polyline	If parking floor is present.
		62	CP-L	ByLayer		Individual Large Car is proposed then text and color should be accordingly
		63	CP-S	ByLayer		Individual Small Car is proposed then text and color should be accordingly
		52	SC	ByLayer		Individual Scooter is proposed then text and color should be accordingly
		53	Cy	ByLayer		Individual Cycle is proposed then text and color should be accordingly
		70	VCP-L	ByLayer		Individual Visitor Large Car is proposed then text and color should be accordingly
		70	VCP-S	ByLayer		Individual Visitor Small Car is proposed then text and color should be accordingly
		70	VSC	ByLayer		Individual Visitor Scooter is proposed then text and color should be accordingly
		70	VCY	ByLayer		Individual Visitor Cycle is proposed then text and color should be accordingly
		54	AMB	ByLayer		Individual Ambulance is proposed then text and color should be accordingly
		55	MINBUS	ByLayer		Individual minibus is proposed then text and color should be accordingly
		56	BIGBUS	ByLayer	Individual Big Bus is proposed then text and color should be accordingly	
34	_Passage	110	PASSAGE (P)	ByLayer	Inside Floor/Outer	If covered passage is free from BUA with premium.
		243	PASSAGE	ByLayer		If covered passage is taken

		243	OPEN CORRIDOR	ByLayer	Wall Polyline	in BUA.
		243	PASSAGE	ByLayer		If passage is open to sky.
		243	FIRE PASSAGE	ByLayer		If normal passage proposed. If passage is for fire purpose
35	_Pathway	50	1.50 M wide pathway	ByLayer	Inside MainPlot Polyline	Text should be start with its width.
36	_PhasedProgram	154	Phased Program	ByLayer	Inside Floor & MainPlot Polyline	Enter name/number of Phased Program on same layer and color
37	_Podium	50	PODIUM	ByLayer	Inside MainPlot Polyline	Text should be kept on same layer and color.
38	_PrintAdditionDetail	223	NA	ByLayer	Inside Floor Polyline	No need of text for this layer.
39	_PropWork	210	A-1 (BUILDING)	ByLayer	Inside MainPlot Polyline	Text must be matched with building layer's text. If building is centrally air conditioned then color should be accordingly.
		Red	A-1 (BUILDING)	ByLayer		Text must be matched with building layer's text
40	_RailLine	170	RAILLINE	ByLayer	Should intersect MainPlot	Text should be kept on same layer and color while insertion point should be on RailLine.
41	_Ramp	135	10.20 M Long and 1.2 M High Ramp	ByLayer	Inside Floor & MainPlot Polyline	Length and height must be mentioned in its text.
42	_RecreationalGnd	Yellow	RECREATIONA L GROUND-PAVED	ByLayer	Inside MainPlot Polyline	If Paved Recreation ground is proposed
		Yellow	RECREATIONA L GROUND	ByLayer		Text should be kept on same layer and color
43	_RefuseArea	79	REFUSE AREA	ByLayer	Inside Floor Polyline	Text should be kept on same layer and color.
44	_RefuseChamber	184	REFUSE CHAMBER	ByLayer	Inside Floor Polyline	Text should be kept on same layer and color.
45	_RefuseChute	156	REFUSE CHUTE	ByLayer	Inside Floor Polyline	Text should be kept on same layer and color.
46	_ReservArea	62	RESERVE AREA	ByLayer	Inside MainPlot Polyline	Text should be kept on same layer and color.
47	_ResiOuterWall	190	NA	ByLayer	Inside Floor Polyline	No need of text for this layer.

48	_RightOfWay	181	1.20 M RIGHT OF WAY	ByLayer	overlap /Inside with MainPlot /MainRoad/IntDP Road	Width must be mentioned in its text on same layer and color.
49	_RoadWidening	232	ROAD WIDENING	ByLayer	Inside MainPlot Polyline & should overlap on MainRoad	If road widening area is taken in BUA
		67	ROAD WIDENING	ByLayer		Normal layer as well as text to be shown on same layer and color
50	_Room	72	LIVING (AC), KITCHEN (AC), etc.	ByLayer	Inside Floor / Carper Area Polyline	If room is air conditioned then AC word must be come in its text.
		72	LIVING, KITCHEN, etc.	ByLayer		If normal room without AC then text should be on same layer and color.
51	_Sanitation	119	URINAL, Water closet , Kitchen sink, etc.	ByLayer	Inside Floor Polyline	Text should be kept on same layer and color.
52	_Section	75	SECTION-A-A	ByLayer	Inside Building and Outside Floor Polyline	Text should be kept on same layer and color.
53	_ServiceDuct	112	SERVICE DUCT	ByLayer	Inside Floor /Outer Wall Polyline	Text should be kept on same layer and color.
54	_SewageLine	10	SEWAGE LINE	ByLayer	be inside MainPlot and intersect the same.	Text should be kept on same layer and color.
55	_SitePlan	50	SITE PLAN	ByLayer	Inside building Polyline	Text should be kept on same layer and color.
56	_SmokeVent	184	SMOKE VENT	ByLayer	Inside Floor Polyline	Text should be kept on same layer and color.
57	_SpecialUseOuterWall	213	NA	ByLayer	Inside Floor Polyline	Other than residential, commercial and industrial use of building to be drawn on same layer.
58	_StairCase	120	FIRE STAIR	ByLayer	Inside	If staircase is for fire

					Floor / Outer Wall/ Parking/ Terrace Polyline	purpose. If stair case if Spiral or fabricated. If stair case taken in BUA If staircase is free from BUA with premium. If staircase free from BUA without premium.
		120	FAB/SPIRAL STAIR	ByLayer		
		120	STAIR	ByLayer		
		110	STAIR (P)	ByLayer		
		110	STAIR (U)	ByLayer		
		Treads to be drawn as open poly line inside main staircase poly and stair case intermediate landing should open poly with color 161 and floor landing should be the same with color 231.				
59	_SubStructure	32	ELECTRIC METER ROOM	ByLayer	Inside Floor & MainPlot Polyline	If Electric Meter Room is proposed then draw it on same layer and provide text accordingly.
		32	WATCHMAN CABIN	ByLayer		If Watch Man Cabin is proposed then draw it on same layer and provide text accordingly.
		32	SOCIETY OFFICE	ByLayer		If Society office is proposed then draw it on same layer and provide text accordingly.
		32	SERVANT ROOM	ByLayer		If Servant Room is proposed then draw it on same layer and provide text accordingly.
		32	SANITARY BLOCK	ByLayer		If Sanitary Block is proposed then draw it on same layer and provide text accordingly.
		32	COVERED	ByLayer		If Covered Garage Block is proposed then draw it on same layer and provide text accordingly.
		32	OPEN GARAGE	ByLayer		If Open Garage is proposed then draw it on same layer and provide text accordingly.
		32	RAIN WATER HARVESTING	ByLayer		If Rain Water Harvesting is proposed then draw it on same layer and provide text accordingly.
		32	AC PLANT ROOM	ByLayer		If AC Plant Room is proposed then draw it on same layer and provide text accordingly.
		32	COVERED SWIMMING POOL	ByLayer		If Covered Swimming Pool is proposed then draw it on same layer and provide text accordingly.
		32	FIRE CONTROL	ByLayer		If Fire Control Room is proposed then draw it on

			ROOM			same layer and provide text accordingly.
		32	BOILER ROOM	ByLayer		If Boiler Room is proposed then draw it on same layer and provide text accordingly.
		32	PUMP HOUSE	ByLayer		If Pump House is proposed then draw it on same layer and provide text accordingly.
		32	SEPTIC TANK	ByLayer		If Septic Tank is proposed then draw it on same layer and provide text accordingly.
		32	TELEPHONE INSTALLATION RM	ByLayer		If Telephone Installation Room Block is proposed then draw it on same layer and provide text accordingly.
		32	MILK/TELEPHONE BOOTH	ByLayer		If Milk/Telephone Booth is proposed then draw it on same layer and provide text accordingly.
		32	LETTER BOX	ByLayer		If Letter Box is proposed then draw it on same layer and provide text accordingly.
		32	STORE ROOM	ByLayer		If Store Room is proposed then draw it on same layer and provide text accordingly.
		32	CHIMNEY	ByLayer		If Chimney is proposed then draw it on same layer and provide text accordingly.
		32	AHU	ByLayer		If AHU is proposed then draw it on same layer and provide text accordingly.
		32	WELL	ByLayer		If Well is proposed then draw it on same layer and provide text accordingly.
		32	ENTRANCE GATE	ByLayer		If Entrance gate is proposed then draw it on same layer and provide text accordingly.
		32	CLUB HOUSE	ByLayer		If club house is proposed then draw it on same layer and provide text accordingly.
60	_SurrenderToCorpo	130	SURRENDER TO CORP	ByLayer	Inside of Either MainPlot /Floor polyline	Text should be kept on same layer and color.

61	_SurrenderToMHADA	210	SURRENDEE TO MHADA	ByLayer	Inside of Either MainPlot /Floor polyline	Text should be kept on same layer and color.
62	_Tank	133	TANK (O/H)	ByLayer	Inside Floor & MainPlot Polyline	Over head Water tank text should be accordingly.
			TANK(U/G)			Over head Water tank text should be accordingly.
Water Tank must be provided in floor plan as well in section and both text should be same.						
63	_TempStructure	53	TEMP STRUCTURE	ByLayer	Inside MainPlot Polyline	Text should be kept on same layer and color.
64	_Terrace	96	TERRACE	ByLayer	Inside Floor Polyline	Text should be kept on same layer and color.
		30	1.50 SLOPPING TERRACE	ByLayer		If terrace to be free from BUA above on sops then its slop must be mentioned in its text.
65	_Tree	Green	TREE	ByLayer	Inside MainPlot Polyline	Text should be kept on same layer and color.
66	_UpperSetBack	80	FIRST UPPER SETBACK	ByLayer	Inside of Either	Text should be kept on same layer and color.
		203	SECON UPPER SETBACK	ByLayer	PropWor k/Floor polyline	Text should be kept on same layer and color.
67	_Void	111	VOID	ByLayer	Inside Floor /Outer Wall/ Parking / Terrace Polyline	Text should be kept on same layer and color.
68	_WaterLine	131	WATERLINE	ByLayer	Inside MainPlot Polyline	Text should be kept on same layer and color.
69	_Window	115	W1, W2, V1, V2, etc.	ByLayer	Inside Floor /Outer Wall / Substruct ure Polyline	Need to provide W1, W2, V1, V2, text to calculate no of windows and its text should be inside window poly.