Bangalore specific Design Learnings

While we will generally follow Lodha policies, it is to be understood that the policies/guidelines have generally been written from an MMR point of view. Hence, there is need for adaptation in any other city (eg. Pune, Bangalore). These guidelines below are the nuances/exceptions that we will follow for a given city. In case of any clash between Lodha policies and these city specific Design learnings, the city specific design learnings will prevail.

Regulatory

1. For buildings above 50.0 M, The front, rear and side setbacks will have to be minimum 16.0 Meters. The following constructions may be permitted within the setback area without affecting the drive-way:
    a. Watchman's cubicle not more than 4Sq.M at the entry/exit point
    b. Certain projections are permissible in open space – see 'Projections' below
2. Projections:
    a. Projection into open spaces: Every open spaces provided either interior or exterior shall be kept free from any erection there on and shall be open to the sky and no cornice roof or weather shade more than 0.75 m wide or 1/3 rd of open space/setback whichever is less shall overhang or project over the said open space.
    b. No projection shall over hang/project over the minimum setback area either in cellar floor or at the lower level of ground floor.
    c. Cantilever Portico of 3.0 m width (maximum) and 4.50 m length (maximum) may be permitted within the side setback. No access is permitted to the top of the portico to use it as a sit out place and the height of the portico shall be not be less than 2.00 m from the plinth level. The portico is allowed only on the side where the setback/open space left exceeds 3.00 m width.
    d. Balcony: Balcony projection should not exceed 1/3 rd of the setback on that side subject to a maximum of 1.10m in the first floor and 1.75 m beyond the second floor. No balcony is allowed in the ground floor.
3. As per the notification (No. UDD255MNJ2018, dated 19.06.2019) The construction of the followings shall be excluded from Fsi Computation
    a. Area reserved for service such as electrical substation or panel room, generator, pump room, AC Plant room, solid waste management, fire control room, security or CCTV room etc.
    b. Refuge areas provided in high rise buildings as per fire norms.
    c. A separate public toilet block provided in the non-residential complex or plot.
    d. Building management or society room with a maximum size of 40 Sq.M
    e. Staircase / Staircase room
    f. Architectural features which are not usable for living or other purpose.
    g. Chimneys
    h. Ventilation ducts and Garbage shafts
    i. Ducts.
    j. Parking areas including driveways and ramps
    k. Swimming pools and toilets attached to swimming pools, constructed in open yard or in any floor for common use by the residents/users
    l. Overhead tanks

m. Escalators
n. Lift wells and lift machine room
o. Watchman's cubicle not exceeding 4 Sq.M
p. Sewerage treatment plant as specified by the Karnataka state pollution control board and pump rooms.
q. Triple height terraces but need to be considerably bigger in size.
r. Note: Lift lobbies (basement, ground and regular levels) are counted in FSI. Even double height lobby is counted @ FSI 1.

4. Two or more buildings on the site:
    a. For more than one building on a given site, the distance between the buildings shall be 1/2 the height of the tallest building, between the buildings under consideration - subject to max of 16 m
    b. ii. In case, two or more buildings with different heights are proposed on a single site, then setbacks shall be applied with reference to the tallest building.
5. Floor area for calculating Parking requirements: Floor area shall be the aggregate area of all the floors of a building including thickness of wall, staircase room, lift room, escalators, balconies, lobbies, corridors, foyers, and such other parts provided for common service. [Also refer Annexure 1: Table 23 (pg 48 of Zoning regulations)]
6. Basements
    a. Overall height of the basement under any circumstances should not exceed 4.5 m between the floor and the ceiling of the basement in case of normal parking. In case of stacked / mechanical parking the height of the basement may be permitted up to a maximum of 4.5m w.r.t discretion of authority
    b. Basement in a residential building shall be allowed without taking into FAR calculations subject to the condition that it will be used only for the purposes of Home Theatre or Gym or a combination of both for personal use of the occupant on a site which does not exceed 500sqm and should be in Residential (Main) area as per Revised Master Plan 2015. In such cases, it should be single dwelling unit only and the entry to the basement shall be from inside the main building itself.
    c. Lobbies in basement are counted in FAR.
    d. Permissible uses in the Basement for buildings other than 3 star and above category:
        i. Dark rooms for X ray and storage of light sensitive materials
        ii. Bank Safes/ Strong room included in the FAR
        iii. Air condition handling units/equipment, utilities and services connected with the building.
        iv. Parking
7. Ramps: Provision for ramp shall have a minimum width of 3.5 m and a slope of not less than 1 in 10 and 1 in 8 in special cases. The ramp and the driveway in the basement shall be provided after leaving a clear gap of minimum 2.0 m from the common property line. The slope of the ramp shall commence from 1.5 m of the edge of property line.
8. Cul – de – Sac: While developing a land, if for any reason, the road has to be stopped without continuation, and then Cul de Sac with turn around area of 9.0 Radius at the end shall be provided.
9. FIRE PROTECTION REQUIREMENTS AND SAFETY MEASURES AGAINST EARTH QUAKE
    a. Generally, NBC to be followed.

b. Types. – Exits should be horizontal or vertical. A horizontal exit may be a door-way, a corridor, a passage-way to an internal stairway or to an adjoining building, a ramp, a verandah, or a terrace which has access to the street or to the roof of a building. A vertical exit may be a staircase or ramp, but not a lift.
c. be so located that the travel distance on the floor does not exceed the following limits : Residential, educational, institutional and hazardous occupancies: 22.5mtrs. If sprinklers are provided, travel distance can b increased by 1.5 times.
d. The travel distance to an exit from the dead end of a corridor shall not exceed half the distance specified above.
e. When more than one exit is required on a floor, the exits shall be as remote from each other as possible.
f. Provided that for all multi-Storeyed high rise and special buildings, a minimum of two enclosed type staircases shall be provided, at least one of them opens directly to the exterior to an interior open space or to any open place of safety
g. Sprinklers to be added in every room if height of building exceeds 45 mtrs

10. Staircase
    a. Irrespective of the building height, the required flight width for the required two staircases, is clear 1.25 M (and maximum 13 risers).
    b. For building above 15 m height, one of the staircase will be fire tower.
11. REFUGE AREA
    a. High rise apartment buildings with apartments having balcony, need not be provided with refuge area, however apartment building without balcony shall provide refuge area as given below. Refuge areas for apartment buildings of height above 60 m while having balconies shall be provided at 60 m and thereafter at every 30 m. The refuge area shall be an area equivalent to 0.3 Sq.M per person for accommodating occupants of two consecutive floors, where occupant load shall be derived on the basis of 12.5 Sq.M of gross floor area and additionally 0.9 Sq.M for accomodating the wheel chair requirement or shall be 15 Sq.M, whichever is higher.
12. Fire Tender movement:
    a. Upto 60 mtr height, 6 mtr wide road to be provided around all sides.
    b. Beyond 60 mtr 8mtr wide fire tender movement to be provided around all sides.
    c. Fire tender path can be grass pavers.
    d. Path can be in straight line (need not zig zag) upto 1.5 m from outermost face of the building.
13. Generally, if the electricity requirement of our project exceeds 7.5 Megawatts, we need to provide additional area for the substation" (~30 x 40 m). It is possible toget exemption on case-to-case basis (to be confirmed through electrical liaison) if there is sub-station within 1 km radius with surplus power.
14. 10% EWS units (by no. of units) is to be provided. These units can have area upto 60 sm. This can be in form of staff room, home office etc. or ‘for sale’ units. Sales will be done in a manner (eg. can be restricted to internal owners) such that it does not affect the social mix of the development. If social mix of buyers is likely to be different, design as a separable building from rest of development including wrt amenities.

Design related:

1. When we are trying to learn something / don't have internal policy or clarity, benchmark (and ensure, same or better) from following developers:
    a. Product design & delivered product quality: Goyal & Co
    b. Delivered product quality: Sobha
    c. Scale & Infra: Prestige
2. Residential segments:

Segment	Approx. price psf saleable at project launch (2022, subject to inflation)	Recommended FTF height
Casa	<6000	3 m
Aspi	6000-10,000	3 m
Premium	10,000-15,000	3.3 m
Luxury	15,000+	3.6-3.9 m

   If within 5% of the end of the range specified, consider project to be in lower/upper segment as relevant.
3. Avoid more than 4 units per perceived core (i.e. separate lift bank) – can be upto 6 units in case of Casa developments.
4. Special units: Try to provide garden units on Ground floor (or can also be duplex over G+1, good example is Serenity Palava (2021)). Similarly try to use top habitable level for terrace apartments/penthouses and if market can support, also the level below penthouse for sub-penthouses. This can also allow some façade differentiation ('crown'). However, keep constructability in mind and ensure that cycle time is not significantly impacted due to these special units.
5. Façade – keep it simple with focus on large window, balconies and decent finishes.
6. Unit sizes should be ~15-20% larger than comparable unit in MMR, with emphasis on having balcony, larger bedrooms and then larger living/dining (In order of priority for area distribution).
7. Vastu is to be applied as per Mumbai segment wise norms (not Hyderabad norms).
8. Due to climatic conditions, softscape grows well and should be encouraged. This will improve the feel and also reduce landscape costs (since hardscape costs much higher than softscape).
9. Maximize neighbourhood retail (generally G or G+1) in every development – this is highly cashflow generating.
10. Wherever feasible without affecting residential circulation, earmark 20-25 K sft for city-centre logistics (most likely in the parking basements). This will be counted in FSI.
11. Saleable area is generally RERA net area (carpet + EBVT) x 1.425 (70.2% efficiency).
12. Generally, stay at home staff, is not common in Bangalore. Hence, we will typically provide staff toilet at mid-landing (alternate floor, toilet and shower). In case of units with CV > 5 cr., we will provide one staff bedroom (toilet + bedroom) – either at midlanding/in core or attached to unit and for units between 2.5 cr – 5 cr., we will provide one staff bedroom (toilet + bedroom) for every 2-3 units at midlanding/in core.
13. General trend in Bangalore is to give DG backup for 3kva in each apartment. There is power cut for about 2 hours every day. Prestige developer gives 100% DG back up. Considering the prevailing trend in the Bangalore, If, we have to provide 100% DG backup to all the flats than we must find out, "how to meter, each apartment for the power consumed via the DG Backup".
14. Car parking is generally = n (no. of bedrooms) /2.

15. We will generally not have 1 BHK / studio units in our product mix (except, if planned for sale to internal owners of larger units).
16. AC norms – Air-conditioning provisions to be given in each apartment i.e. providing the electrical power point, sleeves and platform/appropriate space for ODUs.
17. Security norms – CCTV monitoring and Intercom in each apartment to be provided. This is derived from benchmarking study referring to Point no 1. Additional features like E- based visitor authorization system, frisking and baggage scanning for non-residents to be given.

Annexure 2



Bangalore - Key Project Benchmarking

152 Anx 2 Bangalore Key Project Benchmarking.xlsx

Annexure 1

CHAPTER 8.0: PARKING REQUIREMENTS AND NORMS

Table 23: Parking requirements for various uses:

Sl. No	Type of use	One car parking of 2.5m x 5.5m each shall be provided for every
1	Theaters and Auditoriums except Educational Institutions.	25 seats of accommodation subject to minimum of 20
2	Retail Business (shops, Shopping complexes, Malls, etc)	50sqm of floor area
3	Multiplex integrated with shopping	40sqm of floor area plus requirement of parking according to Cinematographic act
4	Wholesale and Warehouse buildings	150sqm plus 1 lorry parking space measuring 3.5 m x 7.5 m. 1 additional for every 500sqm or part thereof
5	Restaurant establishment servicing food and drinks and such other establishment	75sqm of Floor area
6	Lodging establishments, hotels and Tourist homes	80 sq.m of Floor area.
7	For star hotels	For every 2 rooms. Additional 10% of the total requirement shall be reserved as parking for visitors.
8	Office buildings (Govt/Semi-Govt.& Pvt)	50sqm of Floor area
9	Hostels	Professional college hostels: 1 for every 5 rooms and others: 1 for every 10 rooms.
10	Industrial Buildings	100sqm of floor area plus 1 lorry space measuring 3.5 m x 7.5 m for every 1000 sq.mt or part thereof
11	Nursing homes	50sqm of Floor area
12	Hospitals	100sqm of Floor area
13	Multi- dwellings Units	A. Dwelling unit measuring more than 50 sq.m up to 150 sq.m of floor area. Additional 1 car park for part thereof, when it is more than 50% of the prescribed limit. B. Additional car parking for each two Dwelling units, if the DU is less than 50 sq.mt C. 10 % of additional parking shall be kept for visitors car parking.
15	Kalyana mantaps, Convention centers	50sqm of Floor area.
16	Recreational clubs	50sqm of Floor area.
17	Educational buildings	150sqm of Floor area
18	Other Public and Semi-Public Buildings	100sqm of Floor area

Note: Additional parking for part area shall be provided when the part area exceeds 50% of the prescribed limits/standards.

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