Office Design Learnings

General:

1. What really matters for a successful office:
    a. Locational connectivity for the workforce (all levels of the workforce)
    b. Entrance Lobby (and any other KCA) quality
    c. Landscape quality
    d. F&B + entertainment options and quality
    e. Mobility within the building/campus (including parking)
    f. MEP, connectivity and security being designed and delivered to a high standard
2. We will focus on making our development highly sustainable with aim to:
    a. Lower use of natural (non-renewable) resources by > 30% over conventional buildings
    b. Lower operating costs for occupants and building owner
    c. Improve productivity through focus on elements which improve human health eg. natural cooling (where feasible), natural light to max. % of work spaces, encouraging users to use stairs rather than elevators etc.
    MEP will take the lead on this but all parts of the Operations team will need to push towards this goal.
3. The design of the KCAs + landscape + typical lift lobby will focus on:
    a. Sustainability (eg. green walls, passive cooling where feasible, informing users about how their actions impact environment and what they can do to reduce negative impact + how building is performing on sustainability across various parameters (see 2. Above)
    b. Collaboration (eg. encouraging usage of lobby of discussion / ideation, having F&B in/near the lobby to facilitate chance meetings, having walking paths in larger development to facilitate chance meetings, landscape design (eg. seating spaces with shading) which encourages people to spend time outside, preferably in groups)
    c. Luxury feel (Excelus and Supremus)
    The examples above are indicators and not must haves or a complete list. These are thought starters and each development should aim to do what they can best do to set higher standards for the aforesaid 3 parameters.
4. Given strategic importance of Palava, KCA's and landscape of all office buildings at Palava are to be as per Excelus standards (wrt size, volume, budget psf etc.). This may be reviewed in 2020 by HoD-Design along with RCEO Palava.
5. All office buildings (other than those that are exclusively Supremus) to have LEED rating. Excelus to have min. Gold level rating. Maximize use of renewable power (solar etc.) to lower operational costs and CAM.
6. Buildings have to be designed to have construction completed in <2 years from Date of Start of Construction (DSC). This can be extended to 3 years is building height is > 20 floors.
7. All key infra and KCAs to be ready for the first possession in the campus.
8. F&B is important to success of office. Determine of independent/branded F&B is likely to be feasible and earmark space for multiple outlets. If unlikely to be feasible, earmark space for food court <sizing based on served population between 10,000-25,000 sft carpet>.
9. Spend on the 'for lease' buildings thinking not of today but atleast 10 years out - façade quality and capex v. opex to be reviewed accordingly.

10. Amenities required in any office building > 500,000 sft leaseable (if not available within 10 min walking distance):
    - Gym - ~3000 sft carpet area. Should have shower areas/changing rooms. Should be accessible by outsiders (i.e. on ground level or security systems should allow access to external members/guests). Will be operated by 3rd party on chargeable basis
    - Creche: ~2,000 sft carpet for office buildings with > 500,000 sft leasebale and ~3000 sft carpet for office buildings with > 1,000,000 sft leaseable. On the ground floor or lower floors (operators prefer this since evacuation of kids during fire hazard/emergencies will be a challenge from higher floors). Will be operated by 3rd party on chargeable basis
    - Multiple F&B options / Foodcourt (FC):
        - ~1.5-2% of the carpet area of the building should be earmarked for this purpose. Can be higher % of area if the location has retail viability.
        - Should be located in a manner which permits easy access post office hours and for outsiders i.e. ground floor and/or first floor with external access. Also some of the F&B retail should be located within the lobby and other collaboration spaces since collaboration requires F&B.
        - A reasonable % of the F&B tenants should be able to cater to the target lunch spend of 20% and higher percentile of people working in the building – if this is not feasible due to the rents in the location, food court/similar option will be required which will have very low rents for the operator(s) and in turn, will have low food costs. Sizing for this to be calculated @ 1 sft carpet per person x 50% of the planned population of the building (max. 20,000 sft carpet) - we can load proportional rent loss onto each tenant who wants to use it.
        - Try to plan storage space of ~200-300 sft carpet area for each restaurant in low value locations like basement. This will be monetized @ ~50% of the restaurant rent.
    - Good quality convenience store / grocery (with health emphasis): ~1500-3000 sft carpet. Should be located in a manner which permits easy access post office hours and for outsiders i.e. ground floor and/or first floor with external access. To be operated by 3rd party on chargeable basis with access for office users and external members/guests (clarify with appropriate ^ in amenity list for marketing and agreement).
    - Standard disclaimer for all the aforesaid amenities + similar (eg. Co-working) – to be put in amenity list and agreement: *"^Operated by 3rd party on chargeable basis and with access for external members/guests; operational continuity dependent on market conditions & operator performance."*
    - In case of any conflict with the 'livability retail norms', the provisions of this policy shall prevail.
11. Security and access control provisions to be upgraded from time-to-time with best in class international features. 2017 examples (security policy to be updated):
    a. Company can send visitor schedule and phone no, which generates code on visitor's phone and visitor can pass through security by scanning his phone.
    b. All registered users can go through security by scanning their phones.
    c. Security kiosks are efficiently run with average wait time of <= 2 min. Repeat visitors can walk through security using their phone (registered earlier).
12. Lift wait times are minimized and strictly adhere to policy.
13. Easy and weather proof access from parking to lobby.

14. Traffic planning to ensure that there is proper traffic flow and sufficient space earmarked for different types of vehicles (refer *Norms for Entry and Drop Off Design*). Ensure no congestion at entry due to security procedures or lack of waiting space.
15. Digital signage at the Lobby which can show tenant ads etc (revenue generator) (not applicable for Supremus).
16. TV screen within elevator – ticket/financial/business news. Information about key occupant(s) of the arriving floor.
17. Adequate and clearly visible signage opportunity for key tenants (refer *Signage Policy for Office Building*) (not applicable for Supremus).
18. High quality, not difficult to maintain landscape which serves as a hangout/recreational area. Size may be moderate for Supremus. Can also consider terrace use.
19. Separate smoking zone (with weather protection) on mid-landing / landscape areas. Properly segregated to ensure that smoke remains contained and doesn't affect non-users. Appropriate signage.
20. Good quality building lighting (applicable to 'for lease' buildings/developments).
21. Façade to core distance of max. 18 m (preferably 13-15 m). No (other than BoH/Storage/Service) part of the floorplate should be further away from a naturally lit façade.
22. In 'for lease' buildings ensure that MEP+OEMS equipment purchase decisions are made on NPV of lifetime costs i.e. Capex + OpEx, not just CapEx. Competive operational costs and high reliability are essential to long-term rental appreciation.
23. Client relationship management (BU to lead):
    a. Lodha to provide fitout coordination if needed.
    b. Lodha to provide warm shell / fitted out offices if client requirement and adequate compensation (NPV basis) with reasonably long lease tenure which minimizes break risk.
    c. Lodha to have RM for each client.
    d. HFM to focus on efficient, hassle free operations with immediate problem resolution.
24. The KCAs have to be exceptional, especially the entrance lobby and landsape.
    a. Excelus – ref: 5-star hotel but with right focus on sustainability and collaboration
    b. iThink – ref: Tech office space in Bay Area
    c. Supremus – either of the above basis the location and target audience
25. Design and systems to ensure minimum time and effort to move from entry to development (main gate) to target office floors. This will cover detailed flow study of drop-off, parking, registeration and security systems, along with elevatoring (see below).
26. Elevatoring efficiency (low wait time and high reliability) is critical for high quality office. For all office developments (excluding those with <=10 habitable floors), detailed elevator analysis and simulation to be carried out to ensure that prescribed standards are being met (ref: 'Standards for Elevators'). Also once may consider elevators serving limited floors in the building – this can even help with early (part) OC.
27. Key MEP systems in Excelus and iThink development have to be designed for operations outside peak hours (second/third shift OR weekend) – this includes HVAC and elevator systems.
28. Where land is scarce i.e. sales/capital value at time of design > 10,000 psf (2017, adjust for inflation), the terrace of office buildings should be used for something which adds value to the building. Can be:

a. Sports fields like football (can be 5-a-side size), basketball, volleyball, tennis (with night lighting and changing room/toilets)
b. Open air observatory/terrace/party area with landscape and seating (preferably with toilets and pantry on same level, or if not feasible, one level below)
c. Private terrace for the adjacent or below floor office(s).

29. Consider following systems in Excelus and Supremus (where sales/capital value at time of design > 10,000 psf (2017, adjust for inflation)):
    a. Automatic vents in façade which open in case of fire
    b. Controllable AC systems where AC can be adjusted in 50-100 sq. ft. 'zones' (generally floor mounted)
30. All offices shall be delivered on bare shell basis i.e. KCAs, lift lobby and shared toilets finished and everything else on bare shell basis. Refer to 'Exception wrt bare shell buildings'. In select cases, BU may ask for upgrade to warm shell or even finished offices and the costs for these shall be separately budgeted and BU will ensure that these costs are covered above the basic rental.
31. Co-working:
    a. This is a growing trend (2018) and one which is likely to shape the future of office buildings.
    b. Not just start-ups and SMEs but even larger corporates are attracted by having co-working spaces in the building (which they can use and hence, reduce what they need in their office) + give their teams better collaboration and learning opportunities + the option of having their own office space designed / managed by a co-working company. This will lead to 'office as a service' in the next 5-7 years.
    c. We aim to have co-working spaces in all our long-term (i.e. significantly leased) office buildings. We enable this we intend to have co-working partnership with a reputed player (2018).
    d. Sizing of the co-working space will evolve over time till the phenomenon stabilizes. This has to be discussed with the Commercial BU at time of design brief.
    e. Location of co-working space can be the balance of 'least valuable' from leasing perspective and 'most convenient' from design perspective. Other factors to consider while determining co-working location:
        i. Co-working spaces benefit significantly from open areas being attached to them (eg. refuge or terrace).
        ii. Co-working is expected to generate significant higher elevator utilization (on per sq. ft. basis) (assume 1.5x higher than norm).
32. (to be read along with pt. 21 above) – Column free span of 12.5-14 m (min. 12.5 m) from core to next set of columns <mandatory for Excelus and desireable for iThink; not applicable for Supremus>.
33. <Applicable for Supremus & Excelus, desirable for Supremus> Ideal column grid of 8.1 m-9m: Should not be less than 8.1 m (also provides 3 car park slots if parking is in the same footprint), can go upto 8.4 m (6 façade panels of 1400 mm each), 9 m (6 façade panels of 1500 mm each) or more, ideally in multiples of 1400/1500 mm (depending on the façade grid).
34. Fire Fighting & Life Safety provisions - We will follow International Building Code (IBC) (or India's National Building Code (NBC), whichever is more stringent) for Excelus and iThink. Also fire stair to be reasonable distantly located from each other, to truly provide multiple means of escape. For Excelus with leasebale area > 500,000 sft, life safety review to be got

done by a 3rd party expert and report (including the fact that building complies to a great degree) given to Marketing/Sales for use in leasing.

35. Goods movement to be carefully planned – parking bay for service vehicles, wide enough (min. 1.5 m clear with + 0.3 m clear at turnings) service corridor to service elevators at ground/drop-off level, waiting space in front of the service elevator to have min. clear dimensions >= clear dimensions of the service lift cabin.
36. Façade related:
    a. Fritted glass to be avoided in façade on office levels. Façade glass to be full size (finished floor to finished ceiling) with no concrete/other obstructions blocking the same as far as possible.
    b. Louvers/fins which obstruct vision line (i.e, upto 7 feet from FFL) to be minimized/avoided so that the views from the buildings are not compromised.
37. MEP related:
    a. Ceiling mounted AHUs to be considered so that the floor space can be used by tenant.
    b. Tenant/floor lobby services to be planned in a manner that does not reduce the FTC height of the lobby significantly (min. clear FTC height of 2700 mm, ideally 3000 mm or more).
    c. <Excelus & iThink> Provide space and routing for ODU in open to sky area for 24x7 operational areas only like server rooms (Else chiller will have to be remain on just for server room).
    d. The exhaust and fresh air provisions for kitchens/pantry of tenant to be planned for (not just electric and water point).

38. Retail (this can include the requirements as per pt. 10 above) to be maximized on ground floor of the building (subject to business feasibility). In select cases, even 1st floor can be considered. Size of retails unit (atleast 90% by no.) to be <= 900 sft carpet (depending on the location and market needs, these units will generally range between 150 sft carpet to 900 sft carpet and a variety of sizes should be considered with combinations kept possible).
39. Select policies to refer to:
    a. Entrance and Typical lobby guidelines
    b. Security Design Guidelines
    c. Livability Retail Provisions
    d. Standards for Elevators
    e. Key Conveniences in Parking & Other Common Areas
    f. Norms for Entry and Drop Off Design
    g. Signage Policy for Office Building
    h. 3 yr 9 month Project Completion Guideline
    i. Retail Design guidelines

Supremus Office considerations:

a. Carpet area of all offices should be <= 1200 sft carpet. Of these, atleast 20% (by area) should be between 300-400 sft carpet, 20% (by area) between 400-600 sft carpet and 20% (by area) between 600-800 sft carpet.
b. There will be shared toilets as per NBC norms on each floor – these shall be finished by us.

c. Each office will have space earmarked on the same floor for its own pantry and 1 executive toilet (2 executive toilets if GW is > 5000 sft i.e. corporate offices in iThink and Excelus). This space can be within the office or in the core area with lockable units for pantry and toilets respectively (as seen in Singapore and Hong Kong offices).
d. To generally be sold, not leased.
e. Sale should be started asap once plans approved/construction started so that it can fund construction.
f. Ideally to be ~15-25% of the area of any office development – separate Supremus building is preferred but if same is not possible, can be part of the Excelus/iThink building (upto max. 25% of the carpet area of the said building) but preferably with separate lift core (and definitely on separate floors from the leased offices).
g. If part of Excelus /iThink building/Campus, special conditions to be incorporated into the Agreement for Sale:
    a. Automatic consent for sale of building (or any part thereof) to a 3rd party. Change of shareholding of the owning company or merger/demerger shall is permissible without any further reference or consent from the unit owner.
    b. Facility Management rights shall be with building owner/FMC forever and they will make payment of the CAM charges to such party from time to time.
    c. Society shall be formed only once 50.1% of the area of the building is sold. Even if society is formed by mutual agreement earlier, the Facility Management rights shall be with building owner/FMC forever.
    d. If redevelopment of building/campus is decided to be done by the building/campus owner at any time beyond 20 years from the date of OC, the unit owner's consent is automatic as long as they are given the same area on same or higher floor on ownership basis. They shall contribute to the cost of redevelopment in ratio to their carpet area out of the area being redeveloped.
h. Loss of carpet area should not be >7.5% (average across all floors of Supremus and large Supremus floors) when measuring Supremus on a given floor vis-à-vis full floor office.
i. In locations which are front office (Excelus like) in nature, parking access from office building should be covered and not feel like one has to step outside building, though can be separate parking structure which is well integrated with office building.

j. Marketing Nomenclature of offices:

Approx. GW (sq. ft.)	Type of Office	Approx. Capacity
<=1000	Growth offices (GO)	Carpet Area (in sft) / 60 (rounded to nearest range of 5 eg. if 750 sft carpet, 750/60 = 12.5, so range is 10-15).
1000-1500	Expansion Offices (EO)	
1500-3000	Large offices (LO)	
5000-8,000	Corporate Office (CO)	

k. Dedicated owner's toilet in each office. Structural and MEP system to be designed such that one shaft can serve 4 toilets and minimize no. of shafts (good example: Lodha Signet, Thane 2021). Toilet should be internal and not on façade as far as possible.
l. Vastu is important – rectangular / regular shape, no South facing entry, no toilet in NE (and ideally not in SW).
m. Retail on Ground floor and if market demand is there, also on first floor with external access so that the retail feels valuable and high street like even on the first floor.
n. If feasible, design terrace/garden offices on top level (try to have the garden/terrace area not counted in FSI). If terrace/garden area counted in FSI, same should not exceed 50% of the office's internal area and will be charged at full value. If the terrace/garden area is not counted in FSI, same can be upto 100% of the office's internal area and to be charged at a discount (50-100% of internal office value). In either case, area shall be given as EBVT.

iThink considerations:

a. ~15% carpet area to be designed to be gross weight of <= 8000 sft. each (Corporate Office) if BU wants the same (to be finalized prior to design brief); can be with their own internal toilets OR with shared toilet on floor + 2 x executive toilets for each unit(wrt location see pt. C under Supremus). Efficiency as per iThink standards. These will be for lease (not to be offered for sale, sale only in exceptional circumstances if demand comes for the same during the sale of a.). Generally, to not be located on same floor as a.
b. Balance to be designed to be one unit per floor (max. GW of 25,000 sft, else to be designed to be divisible into 2). In addition to male and female toilets for the floor, provision to be made for dedicated 'Director Toilet' (1 with WC + basin (like powder toilet) per 15,000 sft leaseable (rounded off) which can be located near but separate from the regular toilets.
c. Business team can decide to have offices fitted out as warm shell option in iThink developments (say 25% of area). These costs have to be suitably recovered through higher rentals for such units and the added construction costs will need to be suitably budgeted under 'upgrade to warm shell'.
d. Very high levels of commitment to sustainability, including 100% renewable power if feasible.
e. Design building for pandemic resilience (eg. IMMUNE Standard 2020) and get appropriate (pre-) certification prior start of leasing. Key feasture will include:
    a. Flow of people within building (including vertical flow) to minimize crowding and human touch.
    b. Well engineered air filteration systems to ensure that air is properly purified / treated.
    c. Emergency isolation + medical room in campus (for medical emergencies, including Covid).

d. Large amounts of external work spaces for entire building (landscape, terrace (can also be partly dedicated), refuge (can also be partly/fully dedicated)), suitably designed with ventilation, connectivity and shade (sun and if feasible (but not necessary), rain) and where feasible, leaseable outdoor space in offices (not to exceed 7.5% of the carpet area of the unit).

Excelus considerations:

a. ~15% carpet area to be designed to be gross weight of <= 8000 sft. Each (Corporate Office) if BU wants the same (to be finalized prior to design brief); can be with their own internal toilets OR with shared toilet on floor + 2 executive toilets for each unit (wrt location see pt. C under Supremus). Efficiency as per Excelus standards. These will be for lease (not to be offered for sale, sale only in exceptional circumstances if demand comes for the same during the sale of a.). Generally, to not be located on same floor as a.
b. Balance to be designed to be one unit per floor (max. GW of 15,000 sft, else to be designed to be divisible into 2). In addition to male and female toilets for the floor, provision to be made for dedicated 'Director Toilet' (1 with WC + basin (like powder toilet) per 15,000 sft leaseable (rounded off) which can be located near but separate from the regular toilets.
c. Parking access from office building should be covered and not feel like one has to step outside building, though can be separate parking structure which is well integrated with office building.
d. Very high levels of commitment to sustainability, including 100% renewable power if feasible.
e. Design building for pandemic resilience (eg. IMMUNE Standard 2020) and get appropriate (pre-) certification prior start of leasing. Key feasture will include:
    a. Flow of people within building (including vertical flow) to minimize crowding and human touch.
    b. Well engineered air filteration systems to ensure that air is properly purified / treated.
    c. Emergency isolation + medical room in campus (for medical emergencies, including Covid).
    d. Large amounts of external work spaces for entire building (landscape, terrace (can also be partly dedicated), refuge (can also be partly/fully dedicated)), suitably designed with ventilation, connectivity and shade (sun and if feasible (but not necessary), rain) and where feasible, leaseable outdoor space in offices (not to exceed 7.5% of the carpet area of the unit).

Signet (formerly Boulevard) Office considerations:

a. This brand is for really small offices and linked retail. Total size of building will not exceed 100,000 sft carpet (basis market conditions in 2020, generally around 50,000 sft carpet)
b. Carpet area of all offices should between 150 sft carpet and 400 sft carpet (typical range is 200 to 300 sft carpet). The offices will be referred to as Gold, Diamond and Platinum (max. 3, ideally 2 categories basis CV).
c. Typical office width should be 11' or more (select atypical offices can be narrower or wider).
d. Ratio of width to depth for typical office should be no more than 1:3 (ideally 1:2.5).
e. There will be shared toilets as per NBC norms on each floor – these shall be finished by us (no toilets within the units).
f. Corridor width on floor will be between 1.8 – 2.4 m clear (depending on FSI norms and efficiency).
g. Some of the offices (preferably the smaller ones in the ranges) may not have direct light.

h. Façade to be kept simple.
i. Maximize small retail on the ground floor (and where there is market demand, 1st floor). Retail grid will normally follow office grid with deletion of passage on ground floor
j. To generally be sold, not leased.
k. Sale should be started asap once plans approved/construction started so that it can fund construction.
l. Should be kept separate from other office types and brand name shall be 'Lodha Signet'
m. The efficiency for such development maybe upto 5% worse than that of Supremus developments.
n. Parking to be provided on pay-and-park basis within 10 min walking distance – 4 wheeler x 25% of units (office and retail) + 2-wheeler x 100% of units (office and retail). No dedicated parking shall generally be provided.
o. Dedicated owner's toilet in each office. Structural and MEP system to be designed such that one shaft can serve 4 toilets and minimize no. of shafts (good example: Lodha Signet, Thane 2021). Toilet should be internal and not on façade as far as possible.
p. Vastu is important – rectangular / regular shape, no South facing entry, no toilet in NE (and ideally not in SW).
q. Retail on Ground floor and if market demand is there, also on first floor with external access so that the retail feels valuable and high street like even on the first floor.
r. Subject to market demand analysis, one or more levels can be dedicated as 'medical / doctors' floor. This floor(s) should be located on the lowest possible floor (generally above the 2nd office floor i.e. where the 3rd office floor would be, after adjusting for retail levels) This medical floor should have separate lobby and 2 elevators at the entrance level. The purpose of this floor is doctor's diagnostics and laboratories, not surgical treatment.