FM 3.10 Space allocation in facilities management

FM.4.18 Understanding space management for facilities managers

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SPACE
Not your final frontier
Aims of this presentation
This relates to BIFM 3.10 and 4.18

At the end of this presentation you will understand:
> Some Purposes of Space Management
> Common Definitions
> Space Allocation Concepts and Considerations
> Some Effects of Structure and Services
> Tools and Techniques for Preparing Plans, Briefs and Layouts
> Considerations When Undertaking Relocations and Office Moves
> Some Examples of Innovative Ways of Using Space
PURPOSE OF SPACE MANAGEMENT
Effective Use Of Space In The Workplace
To Provide A:

> Safe
> Secure
> Comfortable and
> Efficient

Working Environment
A Comfortable Working Environment
A Safe and Secure Working Environment
NB These are my definitions:

> Where shall we live? Shall we buy or rent? Do we want a house, a bungalow, an apartment? – **Estate Management**.

> Who is going to get the best bedroom? What shall we store in the garage? Where will the family giraffe live? – **Space Management**.

> Where shall I put the bed, the bookcase, the life-size statue of Boris Johnson? – **Space Planning**.
> **Gross External Area** – also known as **Reduced Covered Area**, or the **Building Footprint**. The area of the building measured from the OUTSIDE walls. Easy to measure from plans, or from outside of the building. Sometimes used for Rating or to estimate building costs.

> **Gross Internal Floor Area** is the area of a building measured to the internal face of the perimeter walls at each floor level, which includes: **Areas** occupied by internal walls and partitions. Columns, piers chimney breasts, stairwells, lift-wells, other internal projections, vertical ducts, and the like. (RICS)
Net Useable Area

> Also known as **Net Internal Area, Net Lettable Area, Occupiable Area, Useable Area**

> **Gross Internal Area** less lobbies, plant rooms, stairs and escalators, mechanical and electrical services, lifts, columns, toilets, ducts, and risers.

> **This is the area that is used to calculate rents**
Net and Gross Internal Areas

Gross Internal Area

Figure 1: Gross Floor Area (GFA). The hatched areas delineate the GFA of a building.

Net Internal Area

Figure 2: Assignable Floor Area (AFA). The hatched areas delineate the AFA of a building.
Circulation Area can be broken into two types: primary and secondary.

Primary circulation is the main route connecting the building core and common spaces, such as elevator lobbies, exit stairs, and core toilets.

Secondary circulation is the aisles between individual and support spaces.

- GSA
  http://www.gsa.gov/portal/mediaId/190511/fileName/Circulation_-_Defining_and_Planning
Primary and Secondary Circulation

Figure 2: Assignable Floor Area (AFA). The hatched areas delineate the AFA of a building.

Figure 3: Net Floor Area (NFA). The hatched areas delineate the NFA of a building.
Summary

- Gross external area (GEA)
- Gross internal area (GIA)
- Net internal area (NA)
- Net occupiable area (NOA)
- “Productive space”
- Workspace

Internal areas:
- Core and plant
- Primary circulation
- Support
- Ancillary

External areas:
- External walls
The ratio between Gross and Net areas is important.

Have to **build** the Gross area – costs

Can only **use** the Net area

Consider circulation space
  > How much space are we renting?
  > How much of that are we using?

NB Circulation space may also be useful for informal meetings, breakout areas.
SPACE ALLOCATION

> Offices
  > Hierarchical – Space standards - office size depends on seniority – less common now
  > Functional – More common. Space allocated according to need.

> Various types of office layouts.
Office Layouts
Activity 1
Any comments? Anyone work in an office like this?
The Modern? Open Plan Office
Space Allocation Considerations

> Offices
> Front (public) and “back-office” activities
> Communication flows
> Need for privacy
> Need for collaboration
> Security
Space Allocation Considerations

- Manufacturing
- Eaves height
- Floor loading
- Access
- Retail
- Sales area
- Window area
- Shelf space
> Follow organisational strategy. What sort of offices would suit the following organisations?

> Case 1: Web and marketing design agency. Very “creative”. Lot of collaboration. “Funky” image is important.

> Case 2: Barrister’s chambers. An old-established firm of barristers specialising in family trusts and inheritance.
Barrister’s Chambers
Legal requirements may cover such aspects as:

> Fire safety
> Permitted working space
> Ventilation
> Lighting
> Temperature
> Hygiene and sanitary arrangements
> Occupiers Indemnity insurance
> EU Legislation (NB this presentation prepared 2 days before the referendum!)
STRUCTURE AND SERVICES

> Structural columns
> Shell buildings
> Electrical service outlets
> Trunking and ducting
> Demountable partitions
> Raised floors and/or suspended ceilings, etc.
> Acoustics and noise levels
> Flexibility for working practices.
Examples of effect of structural columns

> Intrusion or feature?
PREPARING PLANS, BRIEFS AND LAYOUTS

> Use a Floor Plan Grid – squared plan helps with scale

> Or use Excel

> Or a free online package
Preparing briefs and layouts – techniques and technology

> Various commercial packages

> BIM “Building Information Modelling. A process involving the generation of digital representations of the physical and functional components of a facility. The resulting building information models become shared knowledge resources to support decision-making about the facility from the conception stage, through design, construction and operational life up to eventual decommissioning. The Government requires collaborative 3D BIM (with all project and asset information, documentation and data in electronic form) on its projects by 2016.” - BIFM
Preparing briefs and layouts – techniques and technology

> CAFM “Computer-aided facilities management. Any software package or system designed to support facilities management. Well-known examples include Concept from FSI and QFM from Service Works.” – BIFM

Royal Hobart Hospital - Blocking and layouts
Block K-1 and K-2

[Diagram showing the layout of K-1 and K-2 blocks with various departments and areas labeled.]
RELOCATION AND ACCOMMODATION CHANGES

Churn “the continuous cycle of moves and changes within the workspace.” – FMGuru. Moving people

> Why are we relocating?
> Assemble team to manage the relocation – roles and responsibilities incl. external advisors
> Lines and means of reporting and communicating
> Identify target location- research location, available properties.
> Surveys, Quotes, budgets – many “hidden” costs e.g. stationery
> Legal & lease
> Design & Fit out
> Storage, decanting
> Planning the move & minimise disruption
> Snagging & POE
London's Ropemaker Place has "meeting tree rooms," staff pantries on every floor, and open work areas to promote collaboration. Clive Wilkinson Architects
Shoffice is a garden pavilion with a small office in St John's Wood, England. The space provides a backdrop for creative work without distractions. Platform 5 Architects
Innovative ways of working

> Internal mobile – no fixed desk, touch down wherever
> External mobile – on site or on the road, touch down for periodic meetings
> Distance – work anywhere, no face to face contact.
> The next slide shows the plan of an area office for a sheltered housing project.
> The client group is mainly elderly, infirm, or in need of care.
> Tenants call in to the office to collect mail, pay rent, liaise with staff.
> There is cash handling on the premises.

> Any comments?
PLAN WITH NOTES

AREA OFFICE HOUSING ASSOCIATION
GROUND FLOOR - FINANCE AND RENT PAYMENT
FIRST FLOOR - STAFF WCS, ENQUIRIES
SECOND FLOOR - REPAIRS

SEALLED FOR SECURITY

FILING CABINETS

PRINTER & COPIER

SAFE

INTERVIEW AREA

LIFT UP FLAP

COUNTER

STAIRS UP

TARMAC PATH

OVERGROWN AREA

PAVED AREA

MANAGER'S OFFICE

STORES

DERELICT OUTBUILDING

QUEUEING AREA

STAFF KITCHEN

REVOLVING DOOR

BINS

TARMAC PATH

MAIN ROAD

NOT TO SCALE
SPACE MANAGEMENT

THANK YOU

ANY QUESTIONS?