



Buildings Department



Lands Department



Planning Department

Joint Practice Note No. 1

## Green and Innovative Buildings

### Introduction

To protect and improve the built and natural environment, the Buildings Department (BD), the Lands Department (LandsD) and the Planning Department (PlanD) promote the construction of green and innovative buildings. The objective is to encourage the design and construction of buildings that encompass the following features:

- (a) Adopting a holistic life cycle approach to planning, design, construction and maintenance;
- (b) Maximizing the use of natural renewable resources and recycled/green building material;
- (c) Minimizing the consumption of energy, in particular those non-renewable types; and
- (d) Reducing construction and demolition waste.

2. This is the first of a series of practice notes to be issued jointly by BD, LandsD and PlanD on the subject. The joint practice note sets out the incentives we would provide to encourage the incorporation of these features in building development, and the procedures for application for them under the Buildings Ordinance, the Lease Conditions and the Town Planning Ordinance, where relevant.

### Incentives

3. We wish to encourage the industry to explore ways to improve environmental performance during the construction and throughout the life cycle of new buildings by incorporating initially the features in items (a) to (d) in paragraph 1. The first package of incentives which are effective from the issuance of this joint practice note, includes a list of green features that may, subject to the conditions specified in subsequent paragraphs, be exempted from Gross Floor Area (GFA) and Site Coverage (SC) calculations. This list will be continuously reviewed and revised in pace with the ongoing development of green buildings and new incentives to encourage the provision of new green features in buildings.

/Exemption...

## **Exemption of the First Package of Green and Innovative Features from GFA and SC Calculations**

### **Under Buildings Ordinance**

4. The following green features may upon application and subject to conditions be excluded from GFA and/or SC calculations under the Buildings Ordinance:

- (a) Balconies;
- (b) Wider common corridors and lift lobbies;
- (c) Communal sky gardens;
- (d) Communal podium gardens;
- (e) Acoustic fins;
- (f) Sunshades and reflectors;
- (g) Wing walls, wind catchers and funnels.

5. Criteria and conditions for exempting the above green features are listed in Appendix A. To contain the effect on the building bulk resulting from the provision of these incentives, the cumulative GFA exemption for all the green features, excluding sky and podium gardens, should not exceed 8% of the total permitted GFA for the development.

6. Subject to compliance with the requirements of the Town Planning Ordinance, the above exemptions under the Buildings Ordinance may be given prior to completion of any lease modification and payment of premium as may be required under lease conditions.

### **Under Lease Conditions**

7. For new leases to be granted, suitable clauses will be inserted allowing LandsD to exempt the features listed at paragraph 4 above from calculation of GFA and/or SC if such leases provide for a maximum GFA and/or SC. LandsD may when allowing the exemption impose additional conditions to ensure that such features will be properly used and maintained.

8. For existing leases with GFA and/or SC restrictions, the features as listed at paragraph 4 above may be exempted from calculation of GFA and/or SC. Where the lease contains a condition restricting the number of storeys or height of the building to be erected on the lot and the feature will cause such restriction to be breached, a lease modification will be required.

9. Balconies will be exempted from calculation of GFA and/or SC only after the completion of a lease modification and subject to payment of premium and an administrative fee. The exemption of wider common corridors and lift lobbies from GFA and/or SC calculation will not require a lease modification. The exemption of features other than balconies and wider common corridors and lift lobbies from GFA and/or SC calculation may have to be covered by a modification letter at nil premium and an appropriate administrative fee. The exemption of sky gardens from GFA calculation at nil premium is only applicable to sites with a recreational clause in the lease. For sites without a recreational clause in the lease, no premium will be charged if the sky gardens are designed for sitting out purpose only without other recreational facilities. LandsD may impose additional conditions to ensure that the exempted features are properly used and maintained.

10. An Authorized Person (AP) is advised to check against the lease conditions to determine whether a lease modification is required. In case of doubt, an enquiry may be directed to the relevant District Lands Office (DLO) of the LandsD and a reply will be given within 30 days. Alternatively, an AP will be informed directly by the DLO within 13 weeks from the receipt of a formal plan submission through the central processing system.

11. For any exemption to be granted under the lease, it is a pre-requisite that such features must first be exempted by the Building Authority. However, to facilitate the preparation of the basic terms and a demand note for the payment of the initial administrative fee, an application for lease modification should be submitted to the DLO in parallel with the submission to BD at the earliest instance. BD will alert DLO as soon as a no-objection-in-principle to the proposed green features is established. Once approval of the building plans exempting such green features have been granted by the Building Authority, an AP is advised to submit a copy of the approved plans together with a copy of the demand note receipt to DLO such that the basic terms may be finalized as soon as possible.

### **Under Town Planning Ordinance**

12. PlanD will adopt the same criteria and conditions for the exemption of the green features from GFA and/or SC calculations as set out in paragraphs 4 and 5 above, subject to there being no contravention with the restrictions on building height and/or SC, if any, stipulated on the Outline Zoning Plan (OZP) / Development Permission Area Plan (DPAP). There may be situations where the GFA exemption may result in an increase in building height and/or SC above that stated on the OZP/DPAP. In such cases, an

application to the Town Planning Board (TPB) for minor relaxation (if such a provision is available under the OZP/DPAP) will be required.

13. For development schemes previously approved by the TPB, the incorporation of such green features may result in minor amendments to the approved schemes. In which case, the general requirements as set out in the TPB Guidelines for Minor Amendments to Approved-Development Proposals (TPB PG-No.19B) will apply.

14. Enquiries on whether a TPB approval is required or whether an approved scheme needs to be amended as a result of the incorporation of the green features may be directed to the respective District Planning Office of the PlanD.

#### **Application**

15. The above incentives are applicable to new projects for which occupation permits have not been issued.

16. For the avoidance of doubt, the amendment set out in paragraph 1 (b)(ii) of Appendix A is applicable to all new plans to be approved on or after 1 February 2005.

#### **Formal Submission and Enquiries on Green Features**

17. All formal submissions should be made through the normal channels to BD, LandsD or PlanD as appropriate.

18. Applications for exemption of the green features from GFA or SC calculations under the provisions of the Buildings Ordinance should be made by way of applications for modification with supporting documents and undertaking.

19. Enquiries on any proposed green features for incorporation in a development may be directed to the Building Innovation Unit of the BD.

#### **Misuse of Incentives**

20. An occupation permit will not be issued unless there is evidence indicating that the following conditions of exemption have been complied with:

- (a) The green features are separately listed in the sales brochure, as detailed in paragraph 2(a) of Appendix A, if the sales of the development takes place before the issuance of an occupation permit; and
- (b) The required undertaking as detailed in paragraph 2(b) of Appendix A is registered in the Land Registry.

21. The government will monitor the use of the features and will take enforcement action, including prosecution, against non-compliance with the following conditions of exemption:

- (a) The green features are separately listed in the sales brochure, as detailed in paragraph 2(a) of Appendix A, if the sales of the development takes place after the issuance of an occupation permit;
- (b) Balconies are not to be enclosed; or
- (c) Skygardens and podium gardens are for the exclusive use of the residents / tenants and their visitors only as detailed in paragraph 2(d) of Appendix A.

22. Developers should remind purchasers of the consequence of any misuse of the above incentives.

(Marco M. H. WU)  
Building Authority

(P. L. C. LAU)  
Director of Lands

(B. C. K. FUNG)  
Director of Planning

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Index under: BIU  
Green Buildings  
Incentives for Green Buildings

**Criteria and Conditions for Exempting the First Package of Green and Innovative Features from GFA / SC Calculation**

1. Specific criteria for exempting the first package of green and innovative features are detailed below. For the avoidance of doubt, application of incentives to residential buildings where described will not apply to the non-domestic portion of a composite building. Furthermore, domestic accommodation for commercial use such as hotels will not be qualified for the concessions.

**(a) Balconies**

The criteria for exempting balconies from GFA and SC calculations are:

- (i) Only applicable to residential buildings;
- (ii) Location of the balcony is restricted to the living room, dining room and bedroom;
- (iii) The balcony does not replace bay window design but provide a further design option. However if both a bay window and a balcony have been proposed within the same room, the balcony will be GFA/SC accountable;
- (iv) The balcony is open on at least 2 sides;
- (v) It does not project beyond the lot boundary;
- (vi) The summation of areas to be exempted for such balconies including portion of such balconies per residential unit is 2m<sup>2</sup> or 4% of the Usable Floor Space of the unit whichever is the greater subject to a maximum of 5 m<sup>2</sup>; and
- (vii) Any balcony to be exempted from GFA / SC either wholly or partially is equal to or not less than 2m<sup>2</sup>.

**(b) Wider common corridors and lift lobbies**

Subject to the condition that the need to provide a wider corridor or lift lobby is not resulting from any statutory requirement, the criteria for exempting such floor areas from GFA and SC calculations are:

- (i) Only applicable to floors other than the entrance hall(s) of residential buildings;
- (ii) Where not provided with natural ventilation but provided with mechanical ventilation, width of corridor between 1200mm and 1800mm and width of lift lobby between 1650mm and 2200mm may be exempted; and

/(iii) Where...

- (iii) Where provided with natural ventilation, width of corridor between 1200mm and 2200mm and width of lift lobby between 1650mm and 2500mm may be exempted.

See Appendix B for guidance on the interpretation of corridors and lift lobbies. The above measurements are based on structural dimensions of the corridors and lift lobbies.

**(c) Communal sky gardens**

The criteria for exempting sky gardens from GFA calculations are:

- (i) Only applicable to residential buildings;
- (ii) It provides natural ventilation, greenery and recreational garden space for communal use;<sup>1</sup>
- (iii) In addition to any podium gardens, the maximum number of sky gardens provided is equal to or less than the number of residential storeys divided by 15. However, such garden may be split into say 2 sky gardens each occupying 50% of the area of the floor plate; or 3 sky gardens each occupying 1/3 of the area of the floor plate;
- (iv) The sky garden occupies not less than 1/3 of the area of the floor plate;
- (v) Where more than one sky garden is provided and where there is no podium garden, the first sky garden is to be located at not more than 10 storeys above the lowest ground storey for improvement of the microclimate at street level;
- (vi) It is accessible from the common area only;
- (vii) It has a clear height of not less than 4.5m;
- (viii) It is open-sided above safe parapet height on at least two opposite sides to provide cross ventilation;
- (ix) Where the garden is coupled with refuge floor, the design complies with the relevant fire codes;
- (x) Exhaust from any ventilating system does not face the garden;
- (xi) Not less than 25% of the garden area is to be planted with greenery;<sup>2</sup> and
- (xii) Maintenance of the garden is financially viable.

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**Footnotes**

1. The effective location and dimensions of a sky garden is recommended to be provided by wind tunnel tests and/or computational fluid dynamics to ensure the most favourable microclimate to the neighbourhood.
2. The use of native trees and shrubs is recommended.

**(d) Communal podium gardens**

/(d) Communal...

The criteria for exempting podium gardens from GFA calculations are:

- (i) It is under the footprint of a commercial or industrial tower;
- (ii) The floor is for use as podium garden for sitting out purpose only;
- (iii) It has a clear height of not less than 4.5m;
- (iv) It is open-sided above safe parapet height on at least two opposite sides to provide cross ventilation;
- (v) Where cargo/service lifts are provided, the garden is not served by such lifts;
- (vi) Exhaust from any ventilating system does not face the garden;
- (vii) Not less than 25% of the garden area is to be planted with greenery;<sup>2</sup> and
- (vii) Maintenance of the garden is financially viable.

**(e) Acoustic fins**

The criteria for exempting acoustic fins from GFA and SC calculations are:

- (i) It mitigates against unwanted or excessive sound and does not project more than 1.5m from the external wall. Oversized fin projecting more than 1.5m would require justification;
- (ii) It is not a load bearing element, that is, it does not bear any load other than that due to its own weight and to wind pressure on its own surface; and
- (iii) It does not project beyond the lot boundary.

**(f) Sunshades and reflectors**

The criteria for exempting sunshades and reflectors from GFA and SC calculations are:

- (i) It improves the energy efficiency of a building and does not project more than 1.5m from the external wall. Oversized sunshade and reflector projecting more than 1.5m would require justification;
- (ii) It is not a load bearing element, that is, it does not bear any load other than that due to its own weight and to wind pressure on its own surface; and
- (iii) It does not project beyond the lot boundary.



**(g) Wing walls, wind catchers and funnels**

The criteria for exempting wing walls, wind catchers and funnels from GFA and SC calculations are:

- (i) It promotes the natural ventilation of a building;
- (ii) The wing wall is a fin used to channel wind into the insides of the building and does not project more than 1.5m from the external wall. Oversized wing wall projecting more than 1.5m would require justification;
- (iii) The wing wall is not a load bearing element, that is, it does not bear any load other than that due to its own weight and to wind pressure on its own surface;
- (iv) The wind catcher captures the cooling breeze and makes deliberate use of buoyancy. The size of the wind catcher to be exempted from GFA and SC calculation will be assessed on a case by case basis with substantiating justification;
- (v) Funnel makes use of the building height to facilitate the stack/chimney effect in natural thermo-syphonic ventilation, especially during windless hours. Instances where admitting unmodified hot and humid ambient atmosphere to the interior do not provide comfort nor conserve energy, a combined mechanical and natural ventilation system using stack/chimney effect will be encouraged. The size of the funnel to be exempted from GFA and SC calculation will be assessed on a case by case basis with substantiating justification; and
- (vi) It does not project beyond the lot boundary.

2. Upon granting modification to exempt the green features from GFA and/or SC calculations, the Building Authority shall, where appropriate, impose the following conditions:

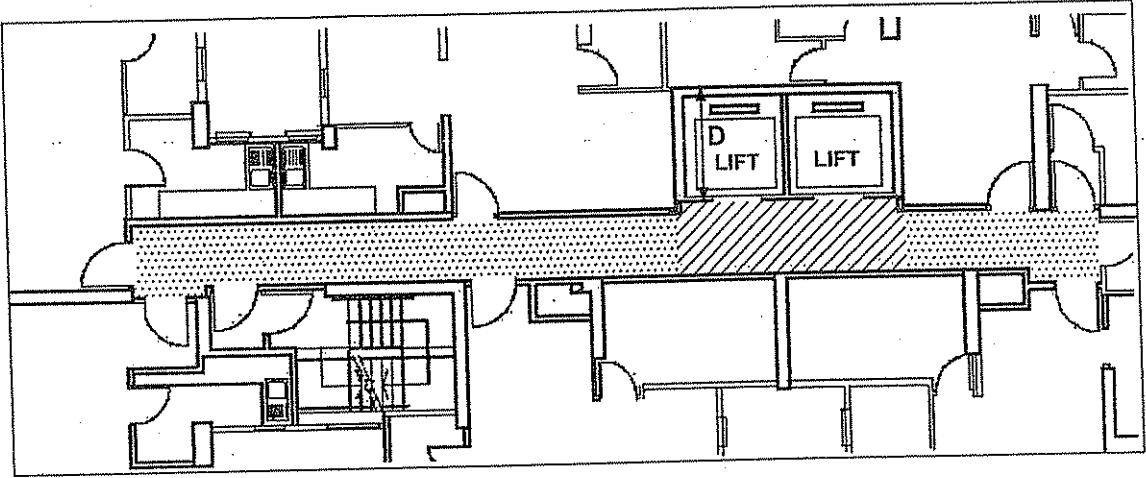
- (a) Where green and innovative features have been exempted from GFA calculation, such items and their use together with a schedule listing the corresponding areas so exempted must be clearly stated in the Sales Brochure. Where they are included in the saleable area of a property, such inclusion shall also be clearly stated in the Sales Brochure. On the day on which the Sales Brochure in respect of the development is made available for collection by the general public, a copy of the brochure shall be deposited with BD for record.
- (b) The undertaking required to be submitted in paragraph 18 in support of an application for exemption is to be registered in the Land Registry before the application for an occupation permit is submitted. Such undertaking may include:

- (i) A letter of undertaking from the Developer to separately list all the green features in the Sales Brochure;
  - (ii) A letter of undertaking from the Developer designating balconies as 'non-enclosed areas' and the sky gardens / podium gardens as 'common areas' in the Deed of Mutual Covenant (DMC) with details of the use and location clearly indicated. Such DMC should contain binding and enforceable conditions for the control, operation, financial support and maintenance for such features.
- (c) Balconies shall not be enclosed.
- (d) Skygardens and podium gardens shall be for the exclusive use of the residents / tenants and their visitors only as indicated on the approved plans and such areas shall not be used for any purpose or by any other persons without the prior consent of the Building Authority.

JPN1 – Appendix A

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straight-lined corridor / lift lobby arrangement

figure 1

In a straight-lined corridor / lift lobby arrangement, the “lift lobby” is the space contained within the core, immediately outside the lift shafts. Where it extends beyond the core walls by a distance which is equivalent to or more than the depth of the lift shaft, such space beyond the core walls will be considered as a “corridor”.

Legend:



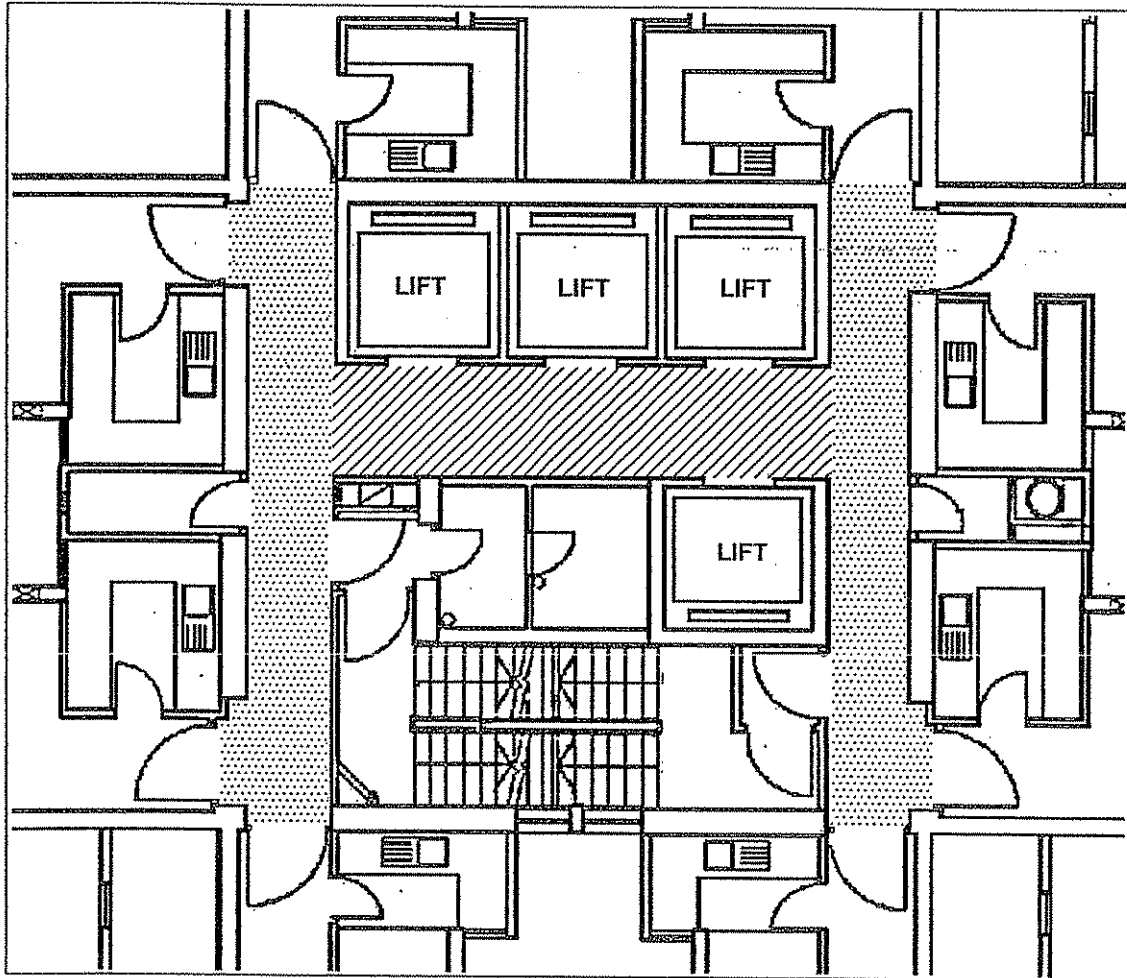
Lift Lobby



Corridor

“D”

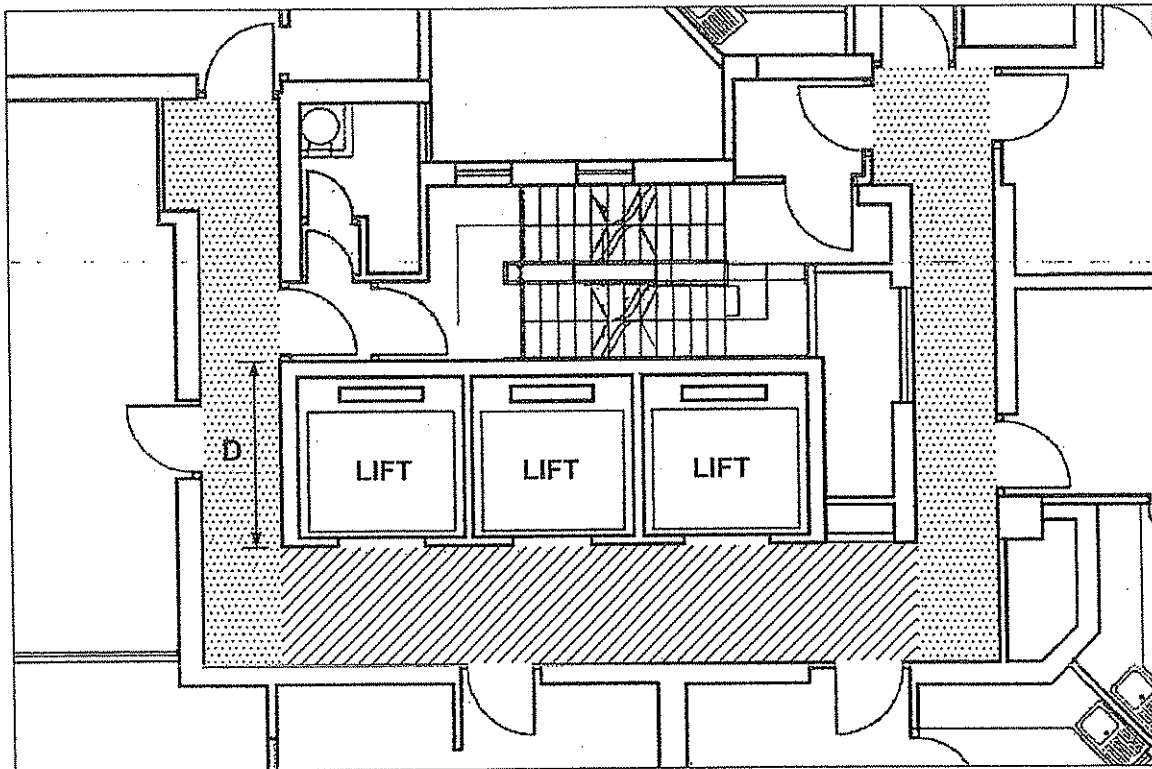
Depth of the lift shaft



H-shaped corridor / lift lobby arrangement

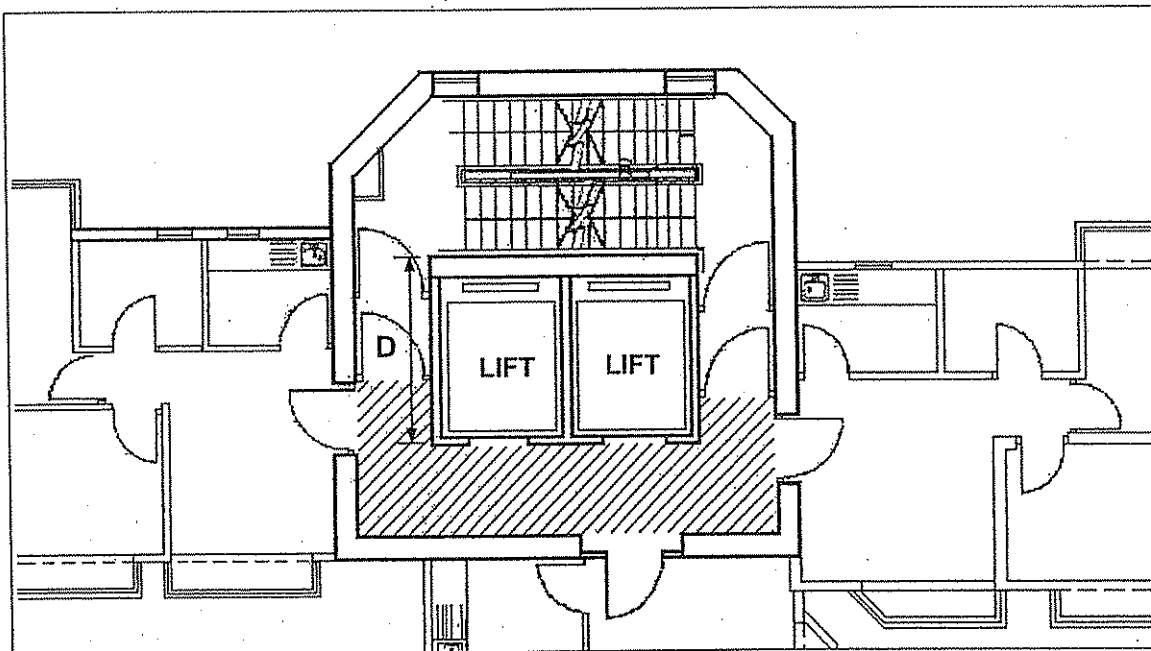
figure 2

In an H-shaped corridor / lift lobby arrangement, the "lift lobby" is the space immediately outside the lift shafts and it stops where it meets the "corridor" at either ends.



U-shaped corridor / lift lobby arrangement

figure 3



U-shaped corridor / lift lobby arrangement

figure 4

In a U-shaped corridor / lift lobby arrangement, the "lift lobby" is the space immediately outside the lift shafts. It may turn directions and extend beyond up to a maximum length which is equivalent to the depth of the lift shaft. If the space extends beyond this depth, it will be considered as a "corridor".