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**Access Facilities for Telecommunications and Broadcasting Services**

**Introduction**

The world is undergoing a technological revolution and entering the Information Age. Hong Kong is well placed to reap the benefits and maintain our competitive edge in this new era. It is the Government's policy objective to develop Hong Kong into a telecommunications, broadcasting and Internet hub in the Asia Pacific region.

2. To enable occupiers of a building to gain access to the full range of quality broadcasting, telecommunications and Internet services, the Telecommunications Authority has, under section 14 of the Telecommunications Ordinance, granted authorization to fixed telecommunications network services operators and fixed carrier licensees (hereafter referred to as the "Network Operators") to place and maintain telecommunications and broadcasting facilities and cables in the common parts of buildings in private ownership. New Network Operators may be licensed from time to time to provide new telecommunications and broadcasting services.

3. In order to accommodate the telecommunications and broadcasting facilities and cables in buildings, Regulation 28A of the Building (Planning) Regulations (B(P)R) requires the provision of access facilities for telecommunications and broadcasting services in every commercial building, industrial building, residential building (other than a building for residence of a single family) and hotel building in accordance with the design requirements specified by the Building Authority.

4. As there are a number of Network Operators who will provide telecommunications and broadcasting services, it is advisable to consolidate the requirements of access facilities for telecommunications and broadcasting from all the Network Operators during the building planning stage and appoint more than one Network Operator to install block wiring cables in new buildings. The list of Network Operators is given in the Annex to the "*Code of Practice for the Provision of Access Facilities in Buildings for the Supply of Telecommunications and Broadcasting Services*" (CoP) issued by the Office of the Telecommunications Authority (OFTA), which can be downloaded from OFTA's web site at <http://www.ofa.gov.hk>.

**Access Facilities for Telecommunications and Broadcasting Services**

5. Pursuant to B(P)R 28A, the design requirements for access facilities for telecommunications and broadcasting services to be provided in buildings are specified in paragraphs 6 to 9 below.

6. The number and size of lead-in ducts, Telecommunications and Broadcasting (TBE) Rooms and vertical riser slots shall be provided in accordance with the requirements specified in Appendix A.

17. ....

7. The lead-in ducts shall be properly sealed up to guard against the ingress of water and gases and the sealing materials should be of a type that can be easily removed by the Network Operators.

8. The TBE Room should be placed at a location not susceptible to flooding. For development comprising of separate tower blocks on top of a commercial podium, separate TBE Rooms to serve each tower block and the commercial podium respectively should be provided.

9. In addition, the TBE Room should also comply with the following requirements :-

- (i) the room should be linked up with the vertical block wiring system of the buildings;
- (ii) no water pipes, sewage pipes, water drainage, water sprinklers, high voltage power supply (exceeding 600V between phase and earth for three-phase, or 1,000V for single-phase, or 1,500V dc) cables, power transformers should be installed inside the TBE Rooms;
- (iii) sufficient lighting, electricity supply and ventilation should be provided;
- (iv) separate telecommunications earth electrode should be provided; and
- (v) minimum clear height as stipulated in Appendix A should be provided.

10. A schematic diagram of the arrangement of the access facilities is attached at Appendix B for general reference.

11. All the new requirements set out in this practice note shall apply to new or major revision general building plans approved on or after 1 November 2006. For the avoidance of doubt, new or major revision general building plans approved before 1 November 2006 may continue to adopt the requirements set out in the practice note issued in September 2000.

  
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Building Authority

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Requirements of Access Facilities for Telecommunications and Broadcasting Services

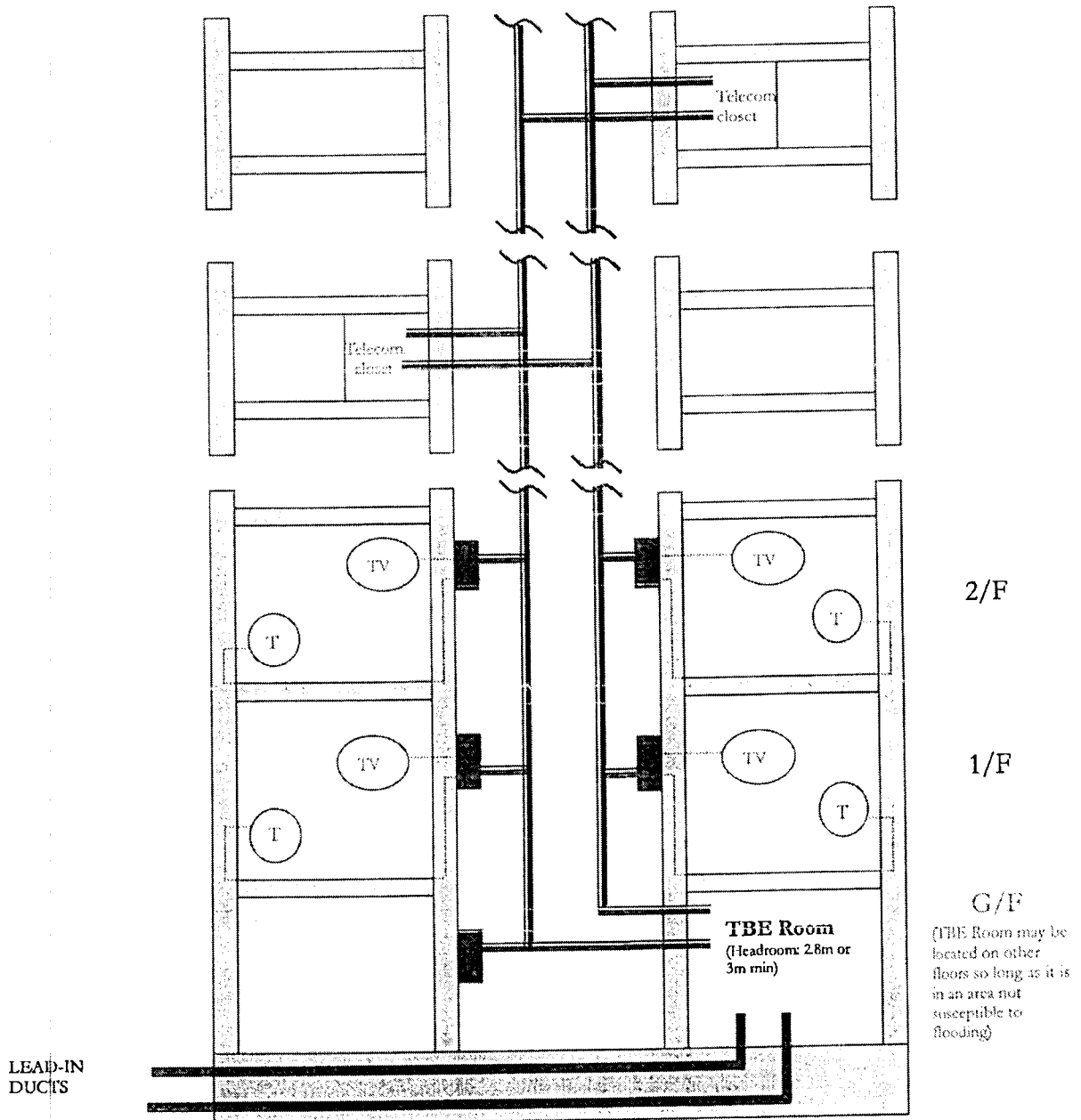
OFFICE/COMMERCIAL, INDUSTRIAL BUILDINGS AND SHOPPING ARCADES												
Usable floor space <sup>1</sup> , $\text{AE}$ ( $\times 1000 \text{ m}^2$ )	$\text{AE} \leq 2$	$2 < \text{AE} \leq 4$	$4 < \text{AE} \leq 12$	$12 < \text{AE} \leq 24$	$24 < \text{AE} \leq 48$	$48 < \text{AE} \leq 72$	$72 < \text{AE} \leq 96$	$96 < \text{AE} \leq 120$	$120 < \text{AE} \leq 144$			
No. of lead-in duct	2	3	3	4	4	8	8	8	8			
Inside diameter of lead-in duct (mm)	100	100	100	100	100	100	100	100	100			
Minimum Area of TBE Room ( $\text{m}^2$ ) required under B(P)R 28A	0	22	42	51	61	79	88	107	113			
Maximum Area of TBE Room ( $\text{m}^2$ ) that may be exempted under B(P)R 23(3)(b)	10	28	53	64	77	99	111	134	142			
Clear Height of TBE Room (m)	3	3	3	3	3	3	3	3	3			
Vertical riser (mm)	$100 \times 100$	$300 \times 200$	$300 \times 200$	$400 \times 200$	$400 \times 200$	$600 \times 250$	$650 \times 250$	$750 \times 250$	$900 \times 250$			
No. of vertical riser slot	2	2	2	2	2	2	2	2	2			






RESIDENTIAL BUILDINGS												
No. of flats in a block, N	$N \leq 5$	$5 < N \leq 50$	$50 < N \leq 100$	$100 < N \leq 250$	$250 < N \leq 500$	$500 < N \leq 750$	$750 < N \leq 1000$	$1000 < N \leq 1500$				
No. of lead-in duct	2	3	3	3	4	4	4	4				
Inside diameter of lead-in duct (mm)	100	100	100	100	100	100	100	100				
Minimum Area of TBE Room ( $\text{m}^2$ ) required under B(P)R 28A	0	7	21	24	29	39	43	48				
Maximum Area of TBE Room ( $\text{m}^2$ ) that may be exempted under B(P)R 23(3)(b)	4	9	27	31	37	49	54	60				
Clear Height of TBE Room (m)	2.8	2.8	2.8	2.8	2.8	2.8	3	3				
Vertical riser (mm)	$75 \times 75$	$200 \times 100$	$200 \times 100$	$200 \times 200$	$300 \times 200$	$300 \times 200$	$300 \times 200$	$400 \times 200$				
No. of vertical riser slot	1	1	1	1	1	2	2	2				

HOTELS												
No. of rooms, N	$N \leq 200$	$200 < N \leq 400$	$400 < N \leq 600$	$600 < N \leq 800$	$800 < N \leq 1000$	$1000 < N \leq 1200$						
No. of lead-in duct	3	3	3	3	3	3	3	3				
Inside diameter of lead-in duct (mm)	100	100	100	100	100	100	100	100				
Minimum Area of TBE Room ( $\text{m}^2$ ) required under B(P)R 28A	24	24	26	28	28	35	35	37				
Maximum Area of TBE Room ( $\text{m}^2$ ) that may be exempted under B(P)R 23(3)(b)	30	30	33	36	36	44	44	47				
Clear Height of TBE Room (m)	3	3	3	3	3	3	3	3				
Vertical riser (mm)	$200 \times 200$	$300 \times 200$	$300 \times 200$	$300 \times 230$	$400 \times 200$	$400 \times 200$	$400 \times 200$	$400 \times 200$				
No. of vertical riser slot	1	1	2	2	2	2	2	2				

Note 1 : "Usable floor space" has the same meaning assigned to it in section 2(1) of the Building (Planning) Regulations (Rev. 6/2006)

**General Schematic Arrangement of Access Facilities**



- Legend :**
-  Telephone socket
  -  TV socket
  -  Distribution case
  -  Concealed conduit  
25mm dia typical for telephone  
32mm dia typical for TV
  -  Vertical riser/ horizontal trunking
- (Not to Scale)

- Notes :**
1. The size of TBE Room should conform to Table in Appendix A
  2. The construction of TBE Room should comply with the Building (Construction) Regulations
  3. The Network Operators should seal all the lead-in ducts after laying the underground cables.