

Erection of Signboards

Introduction

Erection of signboards, inclusive of display surfaces and fixings thereof, which are solely for the purpose of displaying any advertisement, making any announcement or notification, or displaying any visual image or other information, are “building works” subject to the control of the Buildings Ordinance (BO). This practice note provides guidance on compliance with the planning, design and construction requirements under the BO and its subsidiary regulations, procedures under a fast-track processing system and requirements of other departments for the erection of signboards.

Planning, Design and Construction Requirements

Signboards over streets

2. A proposed signboard may be permitted to fully or partly project over a street under section 31(1)(aa) of the BO if its location and dimensions do not constitute:
- (a) a danger to the structure of any building;
 - (b) a hazard to traffic;
 - (c) a fire hazard;
 - (d) an obstruction of any traffic signs, traffic light signals, road markings, or any other equipment or facilities for the monitoring or control of traffic condition;
 - (e) an obstruction or reduction of the width or height of any means of escape or means of access for fire fighting and rescue;
 - (f) an obstruction of the lighting or ventilation of any building in such a manner as to reduce the quality of light and air available to the building below that required under the regulations; or
 - (g) a danger to the public.

3. To meet the requirements under the BO and its subsidiary regulations, including the performance requirements mentioned in para.2 above, the signboard should comply with the construction requirements, the positional and dimensional requirements for a wall signboard¹ and projecting signboard², as well as the relevant requirements of the Fire Services Department (FSD), the Transport Department (TD) and the Highways Department (HyD) as set out in Appendices A to E respectively. In addition, the height restriction imposed under the Hong Kong Airport (Control of Obstructions) Ordinance (Cap. 301) and the relevant Outline Zoning Plan, and the requirements of other relevant authorities concerning railway protection, illuminated signboard facing the harbour or near Hong Kong International Airport, and monuments should also be complied with. Reference should be made to the checklist of documents to be included in a signboard submission in Appendix F.

Signboard within site boundaries

4. A signboard to be erected wholly within the site boundaries should comply with the applicable requirements in paragraph 3 above. In addition, a wall signboard or projecting signboard exceeding the requirements in Appendix B on dimensions or extent of projection are regarded as a building for the purpose of the BO and should comply with the relevant provisions of the BO applicable to a new building including the accountability for gross floor area (GFA) and site coverage (SC) calculations.

5. A signboard higher than 3m erected on ground or roof of a building should not create an enclosed or partially enclosed floor space unless such signboard together with the enclosed or partially enclosed floor space are included in the GFA and SC calculations or such floor space is occupied by machinery or ductwork.

Approval and Consent under the BO

6. Where the simplified requirements under the Minor Works Control System (MWCS) in paragraph 16 below are not applicable or adopted, or where the works are not designated exempted works under Schedule 2 of the Building (Minor Works) Regulation, the erection of a signboard requires prior approval and consent from the Building Authority (BA). Sufficient details, information and supporting documents should be submitted in accordance with Appendix G to demonstrate compliance with the provisions of the BO and requirements for erection of a signboard as described in paragraph 3 above. In addition, the erection of the signboard including the fabrication and installation of the fixing, supporting frame and display surface of the signboard should be carried out by a registered general building contractor (RGBC). A typical elevation showing the fixing of the vinyl display surface is given in Appendix H.

/Site

¹ A wall signboard means a signboard fixed to the external wall of a building permitted under Appendix B.

² A projecting signboard means a signboard fixed to the external wall of a building and projecting more than 600mm from the wall permitted under Appendix B.

Site Safety Supervision

7. Taking into account the nature of the building works involved, unless a signboard is regarded as a new building under paragraph 4 above, a site supervision plan is generally not required for its erection. However, the authorized person (AP), registered structural engineer (RSE), and RGBC as appropriate should ensure that sufficient measures for assuring public safety are provided during the course of works. For instance, precautionary measures should be taken during the erection of the signboards and the display surfaces by the provision of adequate temporary shoring, platform or otherwise, to prevent, so far as is practicable, the accidental collapse or falling down of any part of the signboard and its supporting frame, which may endanger any person and traffic or cause any hindrance or disturbance to the pedestrian and/or vehicular traffic flow underneath.

Fast-track Processing

8. The Buildings Department (BD) operates a fast-track processing service for applications to erect signboards. Under this system, the AP and RSE are required to ensure and certify that the provisions of the BO and the requirements as described in paragraph 3 above for the erection of signboards are complied with. The AP should submit a minimum of 11 sets of plans with a certificate as at Appendix I and a checklist as at Appendix F to the BD for centralized processing in accordance with Practice Note for APs, RSEs and Registered Geotechnical Engineers (PNAP) ADM-2. Additional sets of plans may be required in accordance with Part 2 of Appendix F to facilitate referral.

9. APs and RSEs wishing to take advantage of the fast-track processing procedures should ensure that the above submission requirements are fully met. The BA will place emphasis on the AP and RSE's certification as mentioned in paragraph 8 above and take into account any advice given by FSD, TD, HyD, PlanD and other relevant authorities.

10. Provided that sufficient information as specified in Appendix G has been submitted, the building and structural plans will be processed within 30 days of the date of receipt of the submission in the BD. However, cases involving unconventional signboards, which may require more indepth consideration of the BD, or submissions not conforming to the relevant requirements as specified in this practice note will not be included in the fast-track processing system. For such cases, the AP will be advised of the position within 28 days upon receipt of the submission.

11. To further streamline the vetting process, application for consent to the commencement of the works may also be submitted together with the plan submission for concurrent processing. In this connection, the relevant criteria and procedures for concurrent applications for approval and consent stipulated in PNAP ADM-19 shall apply.

/General

General Reminder

12. If a signboard is to be fixed to the common parts of a building, the AP should advise the applicant to pay attention to the civil liabilities and the relevant provisions under the deed of mutual covenant of the building and the Building Management Ordinance (Cap. 344). Furthermore, the AP should also advise the applicant to seek consent from the management office of the building and, as the case may be, the Owners' Corporation or building owners concerned.

Sanctions

13. The BA will take a serious view on any misrepresentation in the plan submissions or misconduct in the carrying out of the works. APs and RSEs are strongly reminded of their statutory duties under section 4 of the BO and the sanctions under sections 7 and 40 thereof.

Compliance with Lease Conditions and Requirements of Other Departments

14. The approval given by the BA should not be deemed to confer any title to land or to act as a waiver of any term in any lease or licence pursuant to section 14(2) of the BO. Hence, it may also be necessary to seek the permission of the respective District Lands Officer of the Lands Department (LandsD) under the lease conditions, particularly for projection over government land. In this connection, the requirements of the LandsD at Appendix J should be observed. The AP should consult other relevant authorities and ensure compliance with their requirements. In this regard, requirements of the Electrical and Mechanical Services Department (EMSD) and a list of other legislation relating to signboard is attached at Appendices K and L respectively for general reference.

15. To minimise light pollution and reduce energy consumption arising from the lighting of the signboards, the AP and the applicant are advised to make reference to the Guidelines on Industry Best Practices for External Lighting Installations jointly issued by the Environment Bureau (ENB), Environmental Protection Department and EMSD, which can be downloaded from the ENB's website http://www.enb.gov.hk/entxt/resources_publications/guidelines/files/guidelines_ex_lighting_install_eng.pdf

Minor Works Relating to Signboards

16. Under the MWCS, certain works relating to signboards have been designated as minor works which may be carried out under the simplified requirements as an alternative to obtaining prior approval and consent from the BA. For the list of minor works items and the simplified requirements, please refer to Schedule 1 of the Building (Minor Works) Regulation (B(MW)R) and PNAP APP-147 respectively.

Display of BD Reference Numbers on Signboards Erected or Altered with Prior Approval and Consent of the BA

17. Similar to the recommendation to display BD reference numbers as stated in paragraph 12 and Appendix D of PNAP APP-147 on signboards erected under the simplified requirements of the MWCS as well as paragraph 7 of PNAP APP-155 on signboards validated under the Validation Scheme for Unauthorised Signboards, the BD reference numbers [e.g. BD 2/9876/10 or BD 2-3/9876/10(6)] for signboards erected or altered with prior approval and consent of the BA are also strongly recommended to be displayed.

Maintenance

18. Signboards should be properly maintained at all times. After a signboard is erected, a maintenance manual should be issued to the owner of the signboard to undertake maintenance inspections of the signboard annually and after typhoons. APs should make reference to Appendix M for items to be included in the maintenance manual.

Provision of Anchorage for Future Signboards in a New Building

19. Every signboard should be structurally adequate and securely fixed to the parent building. It is therefore desirable for building professionals to provide where appropriate anchorages for signboards at the design and construction stages of new buildings. Such anchorages, if proposed, should be shown on the building plans and structural plans for approval under the BO.

(AU Choi-kai)
Building Authority

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Construction Requirements for Signboards

Structural Requirements

A. Design

General

1. The signboard display surface and its fixing shall form part of the signboard structure.
2. All signboards should, except as stated in paragraphs 3 and 4 below, be fixed to approved structural members of building and should in no case be fixed to or supported by unauthorized structures. No signboard should be affixed to or take support from another signboard.
3. Regardless of the size of signboards, cantilevered slab should not be used as structural supporting members for any part of the signboard or its supporting frame due to its sensitivity to additional load.
4. Except as provided in paragraph 2(c) of Appendix G to PNAP APP-126, Projecting structures / balconies shall not be used as structural supporting members for any part of the signboard or its supporting frame.
5. The structural adequacy of the signboard inclusive of its supporting frame, display surface and its fixings should be justified with structural calculations.
6. The determination of dead loads, wind loads and imposed loads should be in accordance with the Building (Construction) Regulations. Full design wind pressure should be adopted for the design of signboard supporting frame. The signboard and parts thereof should be capable of sustaining the most adverse combination of dead, wind and imposed loads. A structural assessment should also be made to ensure that there are no adverse effects to the overall stability of the parent building for those projecting signboards with an area equal to or greater than 10% of the wind exposure area of the building, normal to the wind direction that is under consideration.
7. Reference should be made to the current edition of the Code of Practice on Wind Effects in Hong Kong for the effect of the wind load on the structural analysis of the supporting frame, display surface and fixing of signboards.
8. The allowable permissible stresses of materials to be used for the design of the supporting frame and display surface materials may be increased by 25% due solely to wind loading.

Supporting frames

9. Supporting frames of the signboard shall be fixed to structural elements of the building in such a way that it will not impair the structural integrity or behaviour of the supporting structural members. The fixing so provided should not overstress the signboard and should be able to safely sustain and transmit all loading including wind load acting upon the signboard.
10. The supporting structural members of the building to which the signboard is to be fixed should be structurally sound. The assessment of the structural integrity of such members including in-situ verification of structural strength and site photographs should be submitted for reference and record purposes except for those smaller signboards as stated in paragraph 2(c) of Appendix G to PNAP APP-126.
11. The supporting frames of the signboard should be structurally tied to provide for adequate lateral stability. Guy wires should not be treated as structural members of the supporting frame although they are very useful in restraining lateral movement of the signboard.
12. Through bolts should be used in place of anchor bolts whenever practical for fixing of signboards.

Display surfaces and their fixings

13. The display surface of the signboard shall be fixed to the supporting frame in such a way that it will not impair its structural integrity or behaviour. The fixing so provided should not overstress both the display surface materials and the supporting frame. The fixings should be able to safely sustain and transmit all loading including wind load acting on the display surface.
14. Vinyl is a commonly used material for display surfaces of signboards. The design information for the vinyl display surface materials should comprise the dimensions of the display surface; the elongation properties, the breaking strength, the adhesive strength and unit weight of the vinyl materials; the tensile capacity and spacing of the ties respectively. With respect to the allowable tensile resistances of these vinyl materials and ties, which are solely used for display purpose, a factor of safety of 2 is considered sufficient.
15. A wind load of 70% of the design wind pressure as given in the Code of Practice on Wind Effects in Hong Kong could be adopted for checking the structural adequacy of the vinyl display surface material as well as its fixings, whereas full design wind pressure should be adopted for the design of other display surfaces including Light Emitting Diode (LED) display board.

B. Materials & Workmanship

General

16. Materials used for the construction of signboards shall be of such quality and grade as specified for building works in the Building (Construction) Regulations.

17. Bi-metallic corrosion should be avoided at any time during the service life.
18. The following minimum corrosion protection to structural steelwork should be provided:-
 - (a) Blast cleaning or wire-brushing should be used to ensure that the surface is free of rust, mill scales and harmful materials such as oil and paint; and
 - (b) Protective coating of primers, undercoat and finish coat of paint should be applied to the cleaned surface immediately in accordance with manufacturer's recommendations.

Supporting frames

19. All structural steel used should have a minimum yield strength of 250 MPa and possess such chemical compositions and mechanical properties as specified in recognized standards.
20. All connections by welding should be carried out by qualified welders. All welded connections and electrodes should comply with recognized standards.
21. Anchor bolts, if used, should be preferably of stainless steel and mechanical types. Installation of anchor bolts shall be strictly in accordance with the manufacturer's instructions. At least one of each type of anchor bolts being used should be tested on site by pull-out test up to 1.5 times the safe tensile capacity of the bolts. The tested anchor bolts should not show any signs of separation, plastic deformation or deleterious effects. The records of pull-out test should be submitted to the Buildings Department upon completion of works.
22. Structural steelwork to be covered up with external cladding shall be clean, free from grease, loose rust and scale. They should be corrosion protected before being cladded.

Display surfaces and their fixings

23. All materials of the display surface and its fixings should have adequate mechanical strength. For vinyl display surface material, it should also be verified with valid manufacturer's certificate.
24. Vinyl display surface materials are usually joined together with adhesives to form a large surface area for display purpose. The adhesion should be carried out in accordance with the manufacturer's recommendations.
25. All design material properties should be verified with design specifications as recommended by the manufacturer.

Fire Safety Requirements

26. The supporting frame of the signboard should be made of non-combustible material.

27. The display surface of the signboard and its fixings should be made of metal, aluminium, or any other materials that are non-combustible and non-brittle. If they are not made of non-combustible materials, the requirements specified in the following paragraphs should be complied with.
28. All plastics, vinyl fabric sheeting, and LED display boards should have a surface spread of flame characteristic of not worse than Class 2 determined in accordance with BS 476 : Part 7 : 1997 or equivalent. For vinyl fabric sheeting used as display surface, Test Method 2 of NFPA 701:2004 (*Standard Methods of Fire Tests for Flame Propagation of Textiles and Films*) is also an acceptable standard for fire spread control.
29. Wood, wood laminates and fibreboard should have a surface spread of flame characteristic of not worse than Class 3 determined in accordance with BS 476 : Part 7 : 1997 and be protected in accordance with BS EN 1995-1-2:2004.
30. For display surface or fixing materials which are not non-combustible and not covered in paragraphs 28 and 29 above, the acceptability of such materials for the display and fixing purposes would be considered on the merit of each case upon submission of their material specifications and test reports relating to the reactions of the materials to fire, such as flame spread characteristics.
31. Where paints and inks are applied to the surfaces of materials which are not non-combustible, e.g. acrylics, the resulting surface should have a spread of flame characteristic not worse than that of the underlying substrate.
32. Without prejudice to any requirement on provision of natural lighting or ventilation, where the display surface or its fixings of a wall signboard is not made of non-combustible material, any external wall opening behind the signboard should be protected by fixed light or blocked up by material having a fire resistance rating of not less than that required for the elements of construction of the floor where the external wall opening is located. In this situation, the non-combustible infill required under Clause C10.2 of the Code of Practice for Fire Safety in Buildings (FS Code) can be dispensed with.
33. The non-combustibility of the supporting frame should comply with Part E of the FS Code. Materials tested or conforming to other standards or criteria may be accepted if they can be shown to achieve the performance requirements set out in Regulation 90 of the Building (Construction) Regulations, i.e. such standards are equivalent or not inferior to the international or the national standards stipulated in Part E of the FS Code.

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Positional and Dimensional Requirements for Signboards

General Requirements

1. No part of a signboard shall obstruct or reduce the required width of the means of escape, emergency vehicular access and means of access for firefighting and rescue for any building.
2. No part of a signboard shall obstruct or reduce the required natural lighting and ventilation or open space provided to any building.
3. If a signboard is within 1 m of the outer edge of a footpath, or projects over a carriageway, it shall have a clear space of not less than 5.8 m beneath every part of the signboard.
4. If a signboard projects over a footpath, it shall have a clear space of not less than 3.5 m beneath every part of the signboard, provided that if the signboard projects not more than 600 mm over a footpath, it shall have a clear space of not less than 2.5 m beneath every part of it.
5. If a signboard projects over a tramway, it shall have a clear space of not less than 7 m beneath every part of it.
6. No portion of a signboard shall be within 1.5 m, measured horizontally, of a line drawn vertically from a point in the centre line of a street nearest to such portion of the signboard. Where there is another signboard opposite to it, there shall have a clear space of not less than 3 m between them measured horizontally.
7. Where any portion of a signboard projects more than 600 mm from the external wall¹ of a building to which it is attached, any portion of it including its guy wires, supporting frames and lateral struts shall have a minimum distance of 2.4 m from any part of any adjacent projecting signboard, measured laterally and throughout the height of the building. No portion of such signboard including its guy wires, supporting frames and lateral struts shall be within a distance of less than 1.2m from the common site boundary of any adjoining lot.
8. No signboard shall obstruct or affect any trees.

¹ For the avoidance of doubt, projections under Regulation 7 of the Building (Planning) Regulations; canopies; the outer walls of projecting structures such as balconies and verandahs outside site boundaries; air-conditioning platforms under paragraph 3(iii) of PNAP APP-150; and curtain walls under paragraph 7 of PNAP APP-2 are not regarded as the external walls of a building for the purposes of this Appendix.

9. Where a building has been set back for the purpose of compliance with the Sustainable Building Design Guidelines stipulated in PNAP APP-152, no signboard projecting more than 600mm from the external wall shall be erected within the setback area up to a level of 15m above the street level.

Wall Signboard

10. For the purpose of this Appendix, a wall signboard means a signboard that is fixed to the external wall¹ of a building and no part of which projects more than 600 mm from the wall.
11. A wall signboard at the head of a shopfront shall be structurally independent from any roller shutter or air-conditioning unit and any space enclosed by such signboard should not be used for storage.

Projecting Signboard

12. For the purpose of this Appendix, a projecting signboard means a signboard projecting more than 600 mm from the external wall¹ of a building to which it attached.
13. No portion of a projecting signboard shall project more than 4.2 m from the external wall.
14. Subject to paragraph 15 below, a projecting signboard shall be contained within a virtual prism with the following measurement:-
 - (a) the surface area of the vertical planar of the prism perpendicular to the wall shall not be more than 40 m²; and
 - (b) the horizontal width of the prism shall not be more than 600 mm.

Some illustrations of calculating the rectangular planar area of the virtual prism are shown in Annex 1.

15. Where there are other projecting signboards in the same vertical plane:-
 - (a) the aggregate surface area of the vertical planar of all the virtual prisms within which they are contained shall not be more than 40 m²; and
 - (b) the aggregate length of the height of all the virtual prisms shall not be more than 20 m.

These requirements are illustrated in Annex 2.

16. For the avoidance of doubt, the restriction on aggregate surface area and aggregate length as stated in paragraph 15 above includes both the existing and the proposed signboards in the same vertical plane.
17. For the purposes of paragraphs 14 and 15 above, “virtual prism” means the smallest virtual rectangular prism within which a projecting signboard (including its supporting structure except the structural elements solely for preventing lateral movement of the signboard) shall be contained.

Signboard on the Roof

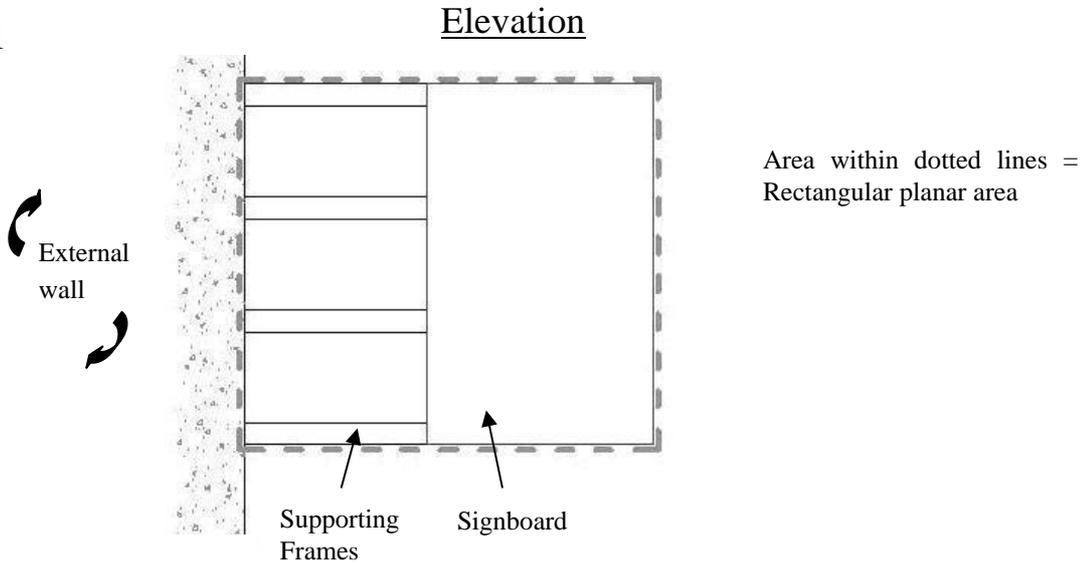
18. No portion of a signboard erected on the roof of a building shall be within a distance of 1.5m from the inside face of the roof parapet or curb. Such set back area shall be accessible from other part of the roof.

Some of the above requirements are diagrammatically shown in Annex 3.

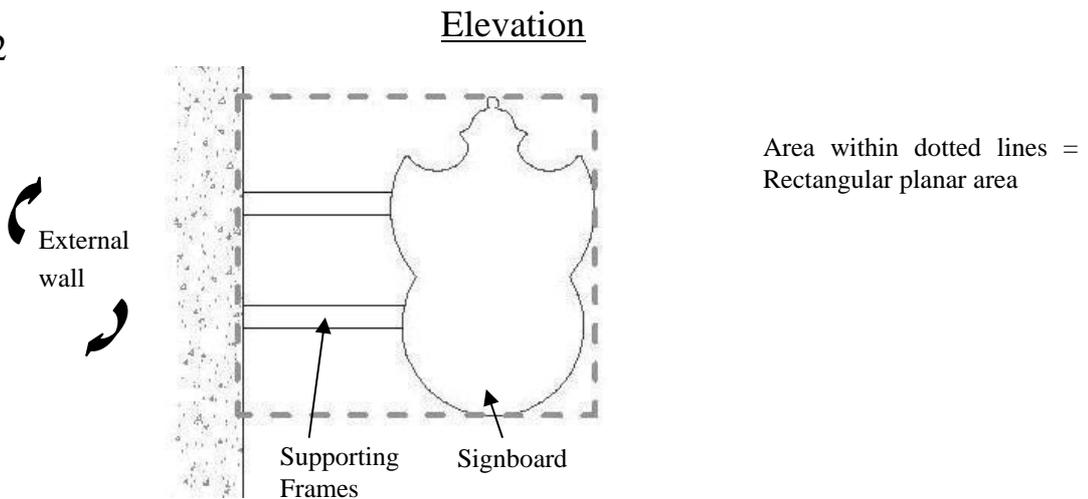
(Rev. 9/2013)

Diagrams Showing Virtual Prism of Signboards
Rectangular Planar Area (Display Area), Max. $\leq 40m^2$
Thickness of Signboard, Max. $\leq 600mm$

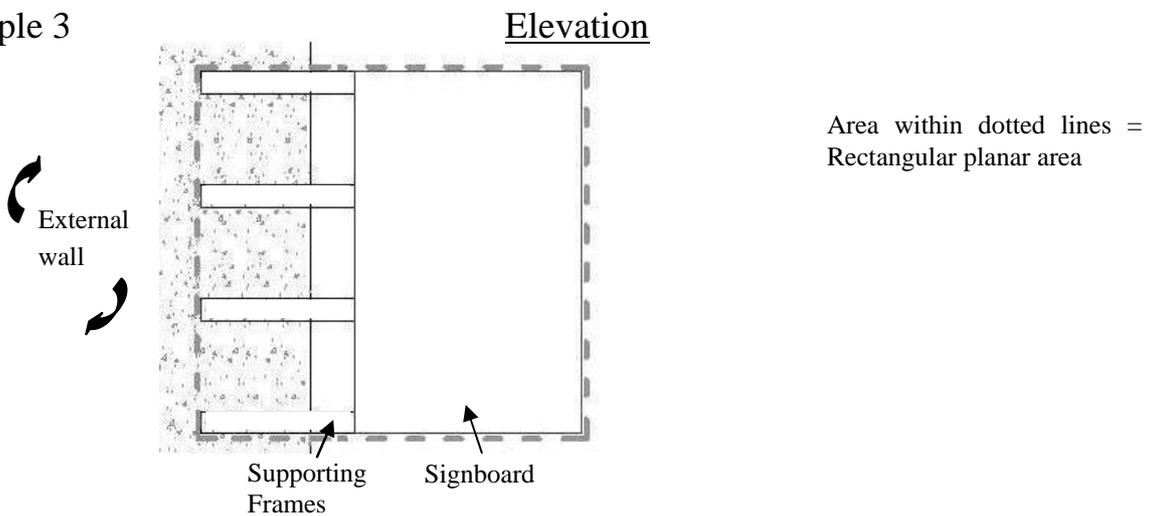
Example 1



Example 2

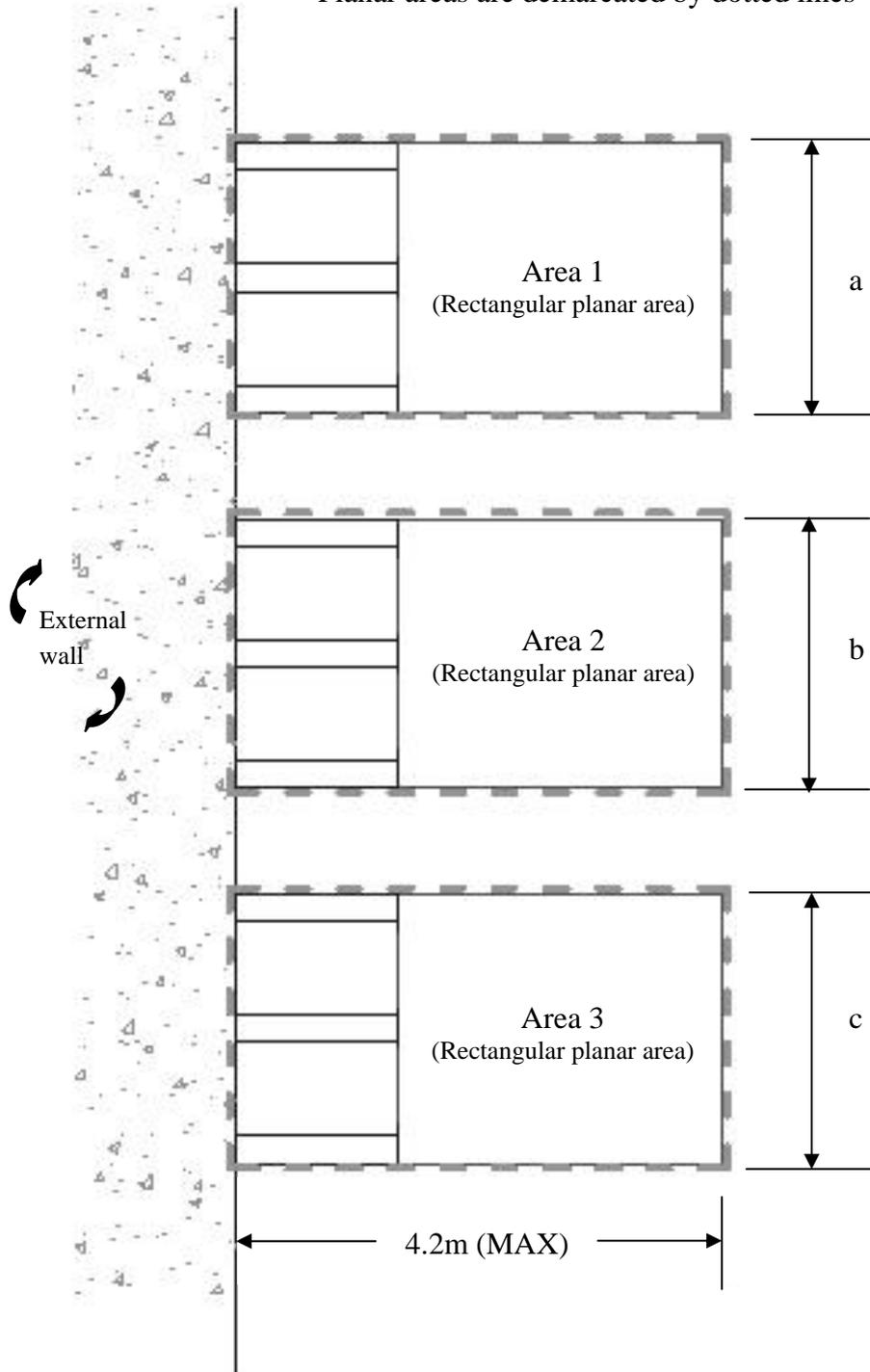


Example 3



Diagrams Showing Computation of Planar Area

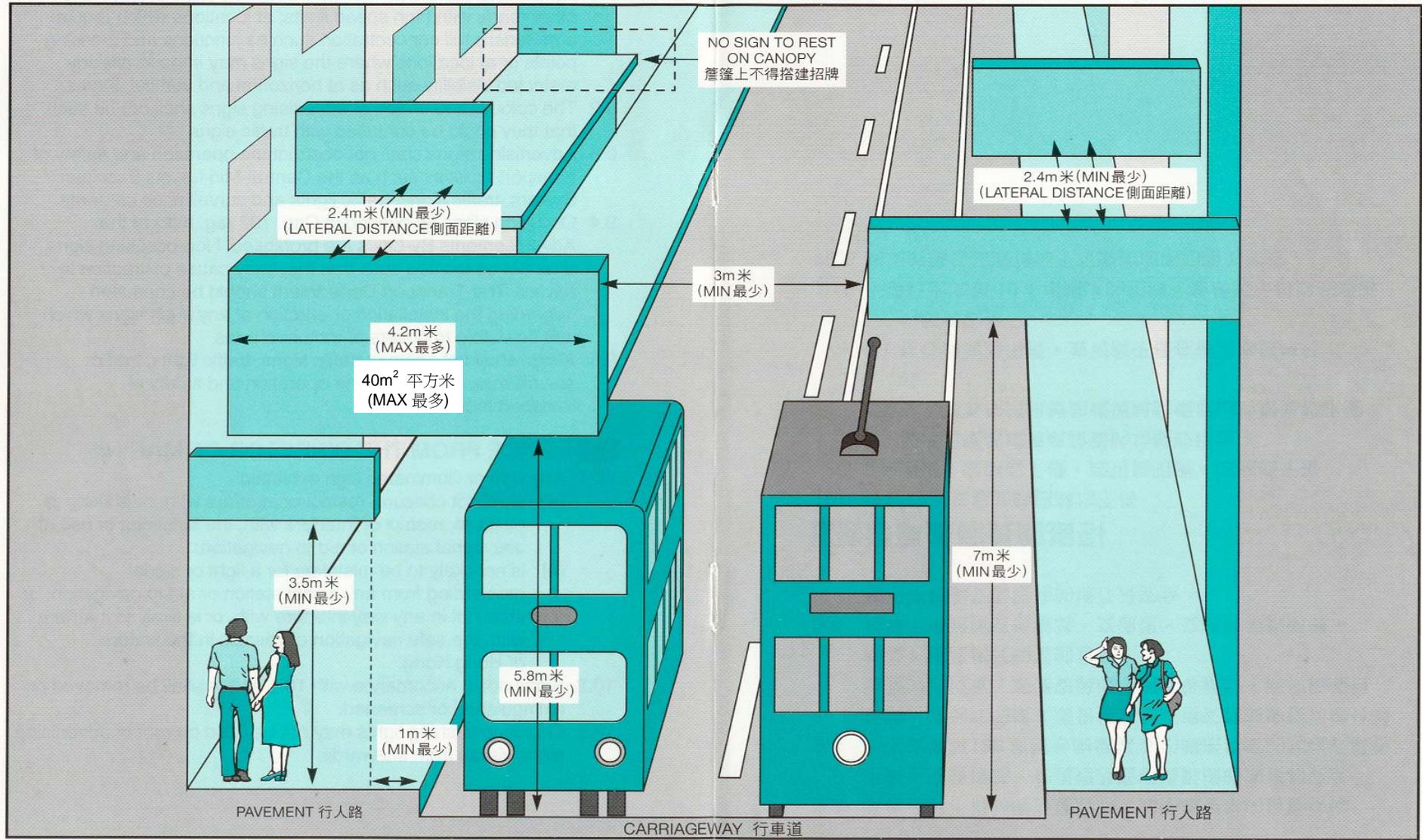
Planar areas are demarcated by dotted lines



$$\text{Area 1} + \text{Area 2} + \text{Area 3} \leq 40\text{m}^2$$
$$a + b + c \leq 20\text{m}$$

PROJECTION and CLEARANCE of SIGNBOARDS

招牌的相距空間及位置



Fire Services Department's Requirements for Signboards

1. A signboard if projecting over a street shall have a minimum horizontal clearance of not less than 4.5 m from central divider, adjacent highway structures or pavement curb at the opposite side whichever is nearer to the signboard.
2. A signboard shall have a minimum headroom clearance of 5.8 m if projecting over a carriageway and shall have a minimum vertical clearance of 5 m above the elevated road level of any adjacent highway structure.
3. Two adjacent projecting signboards shall have a minimum lateral clearance of 2.4 m. No signboard shall be allowed within this lateral clearance at a level higher or lower than the two signboards.
4. Signboards erected from the opposite sides of a street shall not project within 1.5 m from the geometrical centerline of the street.
5. Guy wires tied to secure signboards shall not run laterally or diagonally on either side of signboards to minimize the possible obstruction to access to upper floors by fire services ladders.
6. No light tubing, electrical circuits or lamps shall be installed on woodwork or other combustible material.
7. The transformer, light tubing and other parts of high voltage circuit shall be located out of reach of the public.
8. No roof exit shall be obstructed by the signboard or any of the steelwork used in the construction of the signboard.
9. A signboard shall not cause any obstruction to openable windows.
10. A fireman's emergency switch of an approved type shall be provided if the signboard has been connected to an electricity supply. The switch shall be situated in a conspicuous position, not more than 3m but not less than 2.5m from ground level. It shall either be as nearly as possible vertically below the signboard or near the main entrance to the building, where appropriate. Notwithstanding this, it shall be positioned at a point out of reach of the general public. Where more than one fireman's emergency switch is installed on any one building, such switches shall be clearly marked to distinguish one from another.
11. The 'ON' and 'OFF' position of the fireman's emergency switch shall be conventional (i.e. push upward – 'OFF'; push downward – 'ON').

12. The switch is to be affixed on a board approximately 300 mm long by 250 mm wide, which is painted white and edged with a 50 mm red border. The inscription 'SIGNBOARD - FIREMAN'S SWITCH' in English is to be painted on the top and '招牌 - 消防員開關掣' in Chinese at the bottom of the board in black. The switch is to be positioned in the middle of the board.
13. Precautionary measures should be taken to prevent the sparks generated from electric welding in the process of erecting signboards from igniting nearby combustibles.
14. For signboards not wholly made of non-combustible materials, the following fire service installations and equipment required for the buildings in accordance with the Code of Practice for Minimum Fire Service Installations and Equipment should be extended to protect the signboards where applicable:-
 - (a) Fire hydrant / hose reel system
 - (b) Portable hand-operated approved appliance
 - (c) Sprinkler system

The above fire services requirements are not required for signboards classified as minor works or designated exempted works under the Building (Minor Works) Regulation.

(Rev. 9/2013)

Transport Department's Requirements for Signboards

1. Signboards shall not be erected on or above expressways except with the written permission of the Commissioner for Transport under Regulation 15 of the Road Traffic (Expressways) Regulations.
2. Signboards, in general, should not be erected over roads with a speed limit of 70 km/h or above.
3. The illumination, colours and shape of signboards shall not be such that they could be confused with traffic signs including all traffic management facilities, such as traffic lights, direction signs, variable message signs, etc. Signboards shall not be located too close to traffic signs so as to avoid causing confusion.
4. Signboards shall not obstruct traffic signs, traffic lights, traffic surveillance cameras and transport information systems/ variable message signs or affect the operation and safety of transport facilities. If necessary, relevant parties should be consulted, for example, if CCTVs are likely to be affected/obstructed, Transport Department should be consulted.
5. TV screens and any signboards or lighting that change or show moving images shall not be located such that they may cause distraction to drivers. The Transport Department should be consulted regarding installation, erection or alteration of any such signboards that will be visible to drivers of motor vehicles.
6. Signboards shall not be erected at locations which require road users' full concentration such as junctions, roundabouts and pedestrian crossing points or at locations where the signs may impede already restricted visibility such as at horizontal and vertical curves.

Highways Department's Requirements for Signboards

1. Signboards and its associated supports and guy wires shall not be fixed to or cause obstruction to street lighting, traffic signs/signals, highway structures, trees, street furniture etc. and shall not obstruct the operation and maintenance work of the same. In case of doubt, the Highways Department must be consulted.
2. No signboard shall be erected above expressway and trunk roads. A minimum clearance of 2m to highway structures and 3m to street lighting should be maintained in order to avoid obstruction to maintenance access.
3. In order not to affect the illumination of the street lights, any proposed signboard should not encroach into the space bounded by the main beams from the lantern of an adjacent street light which are about 72° from the vertical, i.e. an angle of cone of 144° . The AP is required to carry out a site visit/survey to ascertain the as-surveyed location of any lamp post which is required for verification of vertical clearance provided and its compliance with the above requirement.

**Checklist of Documents to be included in
Plan Submission for Signboard**

PART 1 – DOCUMENTS TO BE SUBMITTED

	Yes	No/NA
2 sets of signed and coloured plans, calculations and supporting documents to BD		
1 set of plans with development schedule to the District Lands Office, Lands Department		
1 set of plans to the District Planning Office, Planning Department for signboard erected on rooftop subject to height restriction under the OZP or signboard facing the harbour		
2 sets of plans to the Fire Services Department		
1 set of plans to the Transport Department for signboard projecting over a public street or for signboard facing on-coming traffic		
4 sets of plans to the Highways Department for signboard projecting over a public street (i) Chief Highway Engineer; (ii) Senior Landscape Architect/Landscape Unit; (iii) Chief Highway Engineer/Bridges & Structures and (iv) Chief Engineer/Lighting		
Request Form for Fast-Track Processing and Self-Certification (Appendix I to PNAP APP-126)		
Form BA 4 (Appointment of AP/RSE)		
Form BA 5 (Application for approval)		
Form BA 6 (Stability Certificate of AP/RSE)		
Form BA8 (Application for consent to the commencement and carrying out of building works)		
Form BA 16 (Application for modification/exemption)		
Site photographs showing the building facades and the vicinity		
Name and address of the Owners' Corporation and/or the management company		
Other supporting document (please specify)		

PART 2 – ADDITIONAL SETS OF PLANS FOR REFERRAL TO RELEVANT AUTHORITIES

Does proposal involve or affect the following?	Relevant Authorities	Yes	No
Area No. 3 of the scheduled areas in Schedule 5 to the BO, Railway Protection Area & Work Sites (PNAP APP-24)	Mass Transit Railway Corporation Ltd		
Proposed rail routes	Railway Development Office, Highways Department		
Light Rail Transit Railway route or reserves	Light Rail Division, Mass Transit Railway Corporation Ltd		
Illuminated signboards facing the harbour	Marine Department Civil Aviation Department		
Illuminated signboards near Hong Kong International Airport	Civil Aviation Department		
Others (e.g. Monuments or Graded Buildings)	(e.g. Antiquities and Monuments Office, Leisure & Cultural Services Department)		

Submission of Building Plans, Structural Plans and Calculations

Building Plans

The following details, information and supporting documents should be provided in the building plan submission:

- (a) Plans, sections and elevations of the parent building and the proposed signboard¹, with information showing whether the signboard is a wall signboard, a projecting signboard, or other types of signboards (e.g. a signboard that is erected on the roof top or stands alone);
- (b) Details of the proposed signboard including materials of the supporting framework and the display surface thereof, showing full dimensions, height, projection from lot boundary and over street, horizontal and vertical clearances from ground or street and relative positions of adjacent signboards within 5 metres;
- (c) Proposed ties including guy wires and struts;
- (d) Widths of the carriageway and pavement;
- (e) Position of any adjacent highway structure, tramway cable, street lighting, street furniture, existing tree, traffic signal, traffic sign, traffic surveillance camera, and traffic management facilities;
- (f) An assessment demonstrating that the parent and adjoining buildings will not be adversely affected with regard to the following aspects:
 - (i) provision of natural lighting and ventilation and open space;
 - (ii) fire-resisting construction;
 - (iii) means of escape; and
 - (iv) means of access for fire-fighting and rescue;

¹ Contents of advertisement, image or other information to be announced, notified or displayed need not be shown.

- (g) Sequence and procedures for carrying out the works (for concurrent application of consent);
- (h) Precautionary measures for the protection of the public (for concurrent application of consent);
- (i) Details of proposed illumination and lighting (for road, marine or aviation safety consideration); and
- (j) Photographs showing clearly the building façade, the condition of supporting structural elements, and marked up photographs showing the location and size of the proposed signboard, the abutting street and any existing signboards in the vicinity.

Structural Plans and Calculations

2. The following plans and supporting documents / information are required to be submitted:

- (a) Structural plan containing :
 - (i) layout of the signboard supporting frame and its fixings;
 - (ii) layout of the structural frame of the part of the parent building where the signboard is affixed to;
 - (iii) typical connections and supporting fixing details, including details of fixing of the display surface to the signboard supporting frame and fixing of supporting frame to the parent building; and
 - (iv) design standard(s), material and workmanship specification adopted for the proposed signboard structural works and the display surfaces.
- (b) Supporting calculations for structural works in item (a) above in accordance with PNAP APP-117.
- (c) In addition to the above, depending on the type, size and location of the signboard, the following additional information/assessments may be required to be submitted : -
 - (i) **Wall Signboards²**

For wall signboards with display area exceeding 10 m², additional information / assessments shown in the table below are required to be submitted:-

² Wall signboard is defined in Appendix B to PNAP APP-126.

Information / Assessment Required	Case A	Case B
Checking of the adequacy of the structural elements of the parent building affected by the proposed work	NR	Yes
Relevant structural information of the part of the parent building supporting the signboard	NR	Yes
Assessment of the effect of the proposed work on the overall stability of the building	NR	NR

NR – Not required to be submitted. However, for buildings with any visible dilapidation or defect, an assessment of the structural integrity of supporting members of the existing parent building including in-situ verification of structural strength and site photographs should be submitted for reference and record purpose.

In the table above: -

Case A refers to a wall signboard that is affixed to load-bearing walls or columns (i.e. not inducing any load on any cantilevered structure).

Case B refers to a wall signboard that is affixed to edge beams (i.e. the edge beams may be part of a cantilevered structure with beams).

(ii) **Projecting Signboards³**

Additional information / assessments shown in the table below are required to be submitted:-

Information / Assessment Required	Display Area of Signboard ⁴	
	>10 m ²	≤ 10 m ² Case C
Checking of the adequacy of the structural elements of the parent building affected by the proposed work	Yes	NR
Relevant structural information of the part of the parent building supporting the signboard	Yes	NR
Assessment of the effect of the proposed work on the overall stability of the building	When the area of the new signboard(s) ≥ 10% of the wind exposure area of the building concerned, normal to the wind direction that is under consideration	

NR – Not required to be submitted. However, for buildings with any visible dilapidation or defect, an assessment of the structural integrity of supporting members of the existing parent building including in-situ verification of structural strength and site photographs should be submitted for reference and record purpose.

³ Projecting signboard is defined in Appendix B to PNAP APP-126.

⁴ Display area of signboard has the same meaning as that depicted in Annexes 1 & 2 of Appendix B to PNAP APP-126.

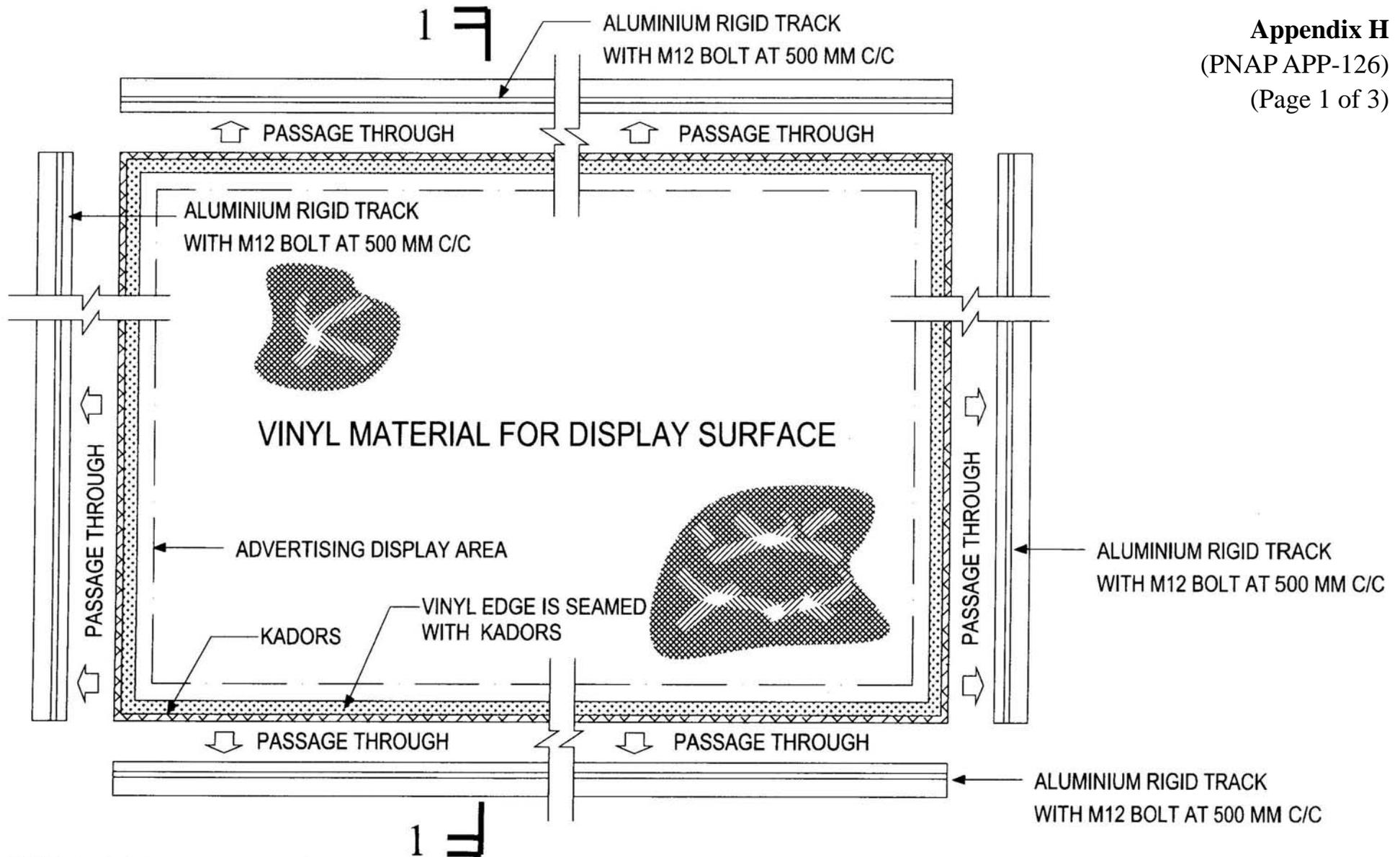
In the table above: -

Case C refers to a signboard that is affixed to the structural elements of the parent building and where the floors are not of pure cantilevered slab construction.

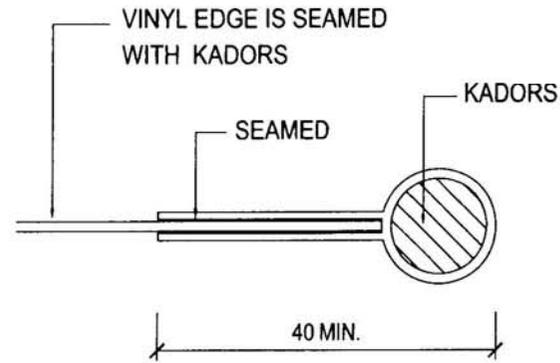
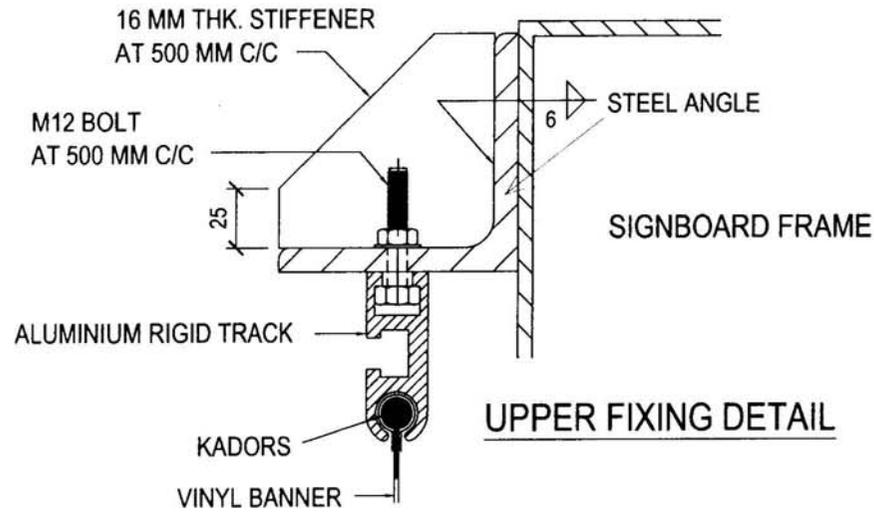
(iii) **Other Types of Signboards**

For signboards other than the above two types, structural assessments that are required to be submitted should be in accordance with PNAP APP-117.

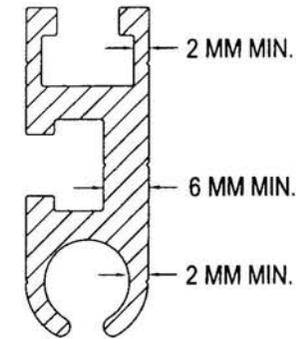
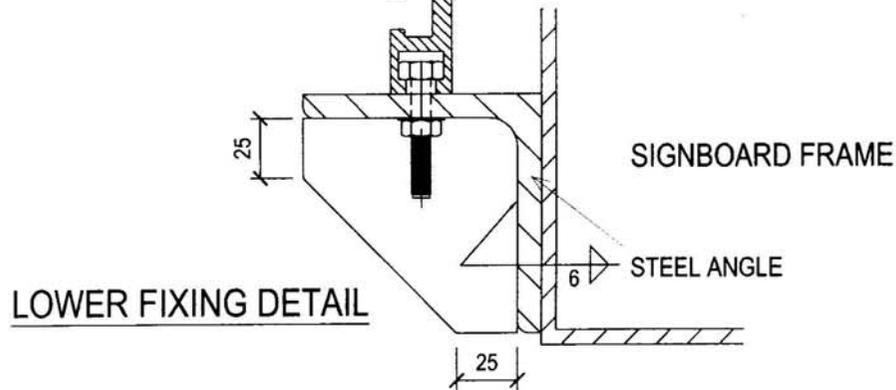
Detailed construction requirements are set out in Appendix A to PNAP APP-126.



SIGNBOARD : TYPICAL ELEVATION OF RIGID TRACK INSTALLATION METHOD (FOR INFORMATION ONLY)



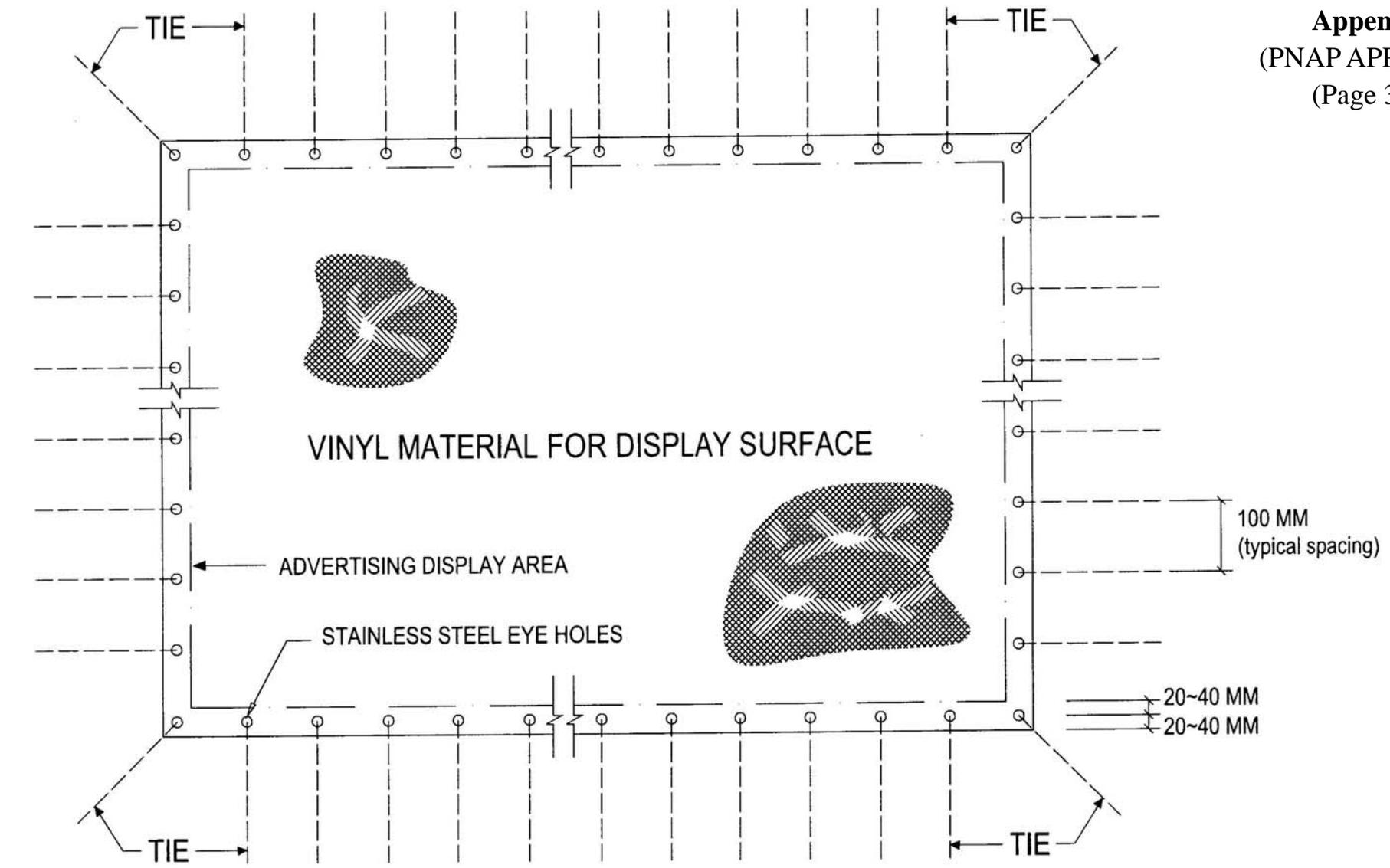
(FOR INFORMATION ONLY)



SIGNBOARD : RIGID TRACK CONNECTION DETAIL N.T.S.

SECTION 1-1

NOTE: All structural steels are of grade S275 to BS EN20025:2004
 All aluminium alloy extrusions are of grade 6063 - T5 to BS EN755-2:1997 and BS EN573-3:2003
 All bolts are ISO grade 8.8
 Kadors are heavy-duty plastic rope wrapped by seaming vinyl material



SIGNBOARD : TYPICAL ELEVATION OF EYE HOLE INSTALLATION METHOD (FOR INFORMATION ONLY)

NOTE: The designer should ensure the ties are strong enough such that tearing failure of vinyl material would first occur at eye hole locations.

**Request for Fast-track Processing of Plan Submission for Signboard &
Self-certification by Authorized Person and Registered Structural Engineer**

To the Building Authority

Part A (to be certified by AP)

In accordance with PNAP APP-126, I hereby request for fast-track processing of the plans (drwgs. no. _____ to _____) submitted for the proposed signboard to be erected at _____.

2. I undertake to comply with the provisions of the Buildings Ordinance and I certify that the proposed building works do not adversely affect the parent and adjoining buildings with regard to the following aspects:

- Fire safety – means of access for fire fighting and rescue, means of escape in case of fire and fire resisting construction (including Appendix A to PNAP APP-126)
- Health and environment – lighting, ventilation, open space

3. I also certify that the following requirements are fully complied with :

- Positional and dimensional requirements for signboards as specified in Appendix B to PNAP APP-126
- Requirements of the Fire Services Department as specified in Appendix C to PNAP APP-126
- Requirements of the Transport Department as specified in Appendix D to PNAP APP-126
- Requirements of the Highways Department as specified in Appendix E to PNAP APP-126
- The height restriction under the Hong Kong Airport (Control of Obstructions) Ordinance
- The height restriction under the Outline Zoning Plan
- Requirements of the other relevant authorities i.e. MTRC Ltd., Marine Department, Civil Aviation Department

Date _____

Signature of Authorized Person

(Name in full)

Certificate of Registration No. : _____

Date of expiry of registration : _____

Part B (to be certified by RSE)

4. I certify that the structural requirements as specified in Appendix A to PNAP APP-126 are fully complied with.

Date _____

Signature of RSE

(Name in full)

Certificate of Registration No. : _____

Date of expiry of registration : _____

5*. A Form BA8A applying for your consent to the commencement and carrying out of the works mentioned in paragraph 1 above is enclosed.

Tick box as appropriate

* Delete where inapplicable

(Rev. 9/2013)

Lands Department's Requirements for Signboards

1. A development schedule under the lease conditions should be accompanied with the building plans submission.
2. The building plan should clearly show the lot boundary and whether the proposed signboard would protrude over the Government land.
3. The AP should indicate in the submission the name of the signboard owner and the name of the property owner in which the signboard is to be erected.
4. Further information such as photographs showing the proposed location of the signboards and the Deed of Mutual Covenant of the property concerned may be required depending on individual cases.

Electrical and Mechanical Services Department's Requirements for Signboards

1. The fixed electrical installations of the signboards shall be in full compliance with the requirements as stipulated in the Electricity Ordinance (Cap. 406) and its subsidiary regulations, and the technical guidelines given under the latest edition of the Code of Practice for the Electricity (Wiring) Regulations¹.
2. A Registered Electrical Contractor² shall be employed to carry out electrical work (including new, addition, modification, checking, testing and repairing) on the fixed electrical installations of the signboards.
3. Upon completion of the electrical work, the Registered Electrical Contractor and Registered Electrical Worker shall issue a Work Completion Certificate (WR1) to confirm that the fixed electrical installations of the signboards meet the statutory requirements. The owner of the concerned fixed electrical installations shall properly keep the WR1 for future reference.
4. The fixed electrical installations of the signboards shall be properly designed and installed with appropriate measures taken so as to ensure the safe operation of the electrical installations in the environment concerned, such as high temperature, adverse weather, etc.
5. The installation of fireman's emergency switches for the signboards shall be in full compliance with the requirements of the Fire Services Department.
6. When the signboard is not required to be operated, the power supply for the concerned fixed electrical installations shall be switched off so as to enhance the efficient use of energy and minimise the risk of electrical incident.
7. In order to ensure electrical safety, proper maintenance including proper repairing work on the fixed electrical installations of the signboards by Registered Electrical Contractors/Workers shall be arranged.

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¹ The Code of Practice for the Electricity (Wiring) Regulations can be found in EMSD's web page: <http://www.emsd.gov.hk> > Protecting Public Safety > Electricity > Publications > Codes of Practice.

² The list of Registered Electrical Contractors can be found in EMSD's web page: <http://www.emsd.gov.hk> > Protecting Public Safety > Electricity > Registers > Registered Electrical Contractors > Enter district name (e.g. Shatin, Sham Shui Po, etc.) in the field "District" and then press "Search" button.

Other Legislation Affecting Erection of Signboards

1. Building Management Ordinance, Cap 344
2. Control of Obscene and Indecent Article Ordinance, Cap 390
3. Country Parks Ordinance, Cap 208 and Country Parks and Special Areas Regulations, Cap. 208A
4. Land (Miscellaneous Provisions) Ordinance, Cap 28
5. Electricity Ordinance, Cap 406
6. Fire Services Ordinance, Cap 95
7. Hong Kong Airport (Control of Obstructions) Ordinance, Cap 301
8. Public Health & Municipal Services Ordinance, Cap 132
9. Public Lighting Ordinance, Cap 105
10. Road Traffic Ordinance, Cap 374
11. Shipping and Port Control Ordinance, Cap 313
12. Smoking (Public Health) Ordinance, Cap 371
13. Summary Offences Ordinance, Cap 228
14. Undesirable Medical Advertisements Ordinance, Cap 231
15. Air Navigation (Hong Kong) Order 1995, Cap 448C

Items to be Included in Maintenance Manuals for Signboard Owners

Upon the completion of erection of a signboard, the AP and RSE are strongly advised to prepare a maintenance manual for the owner of the signboard. The following aspects should be covered by the maintenance manual with detailed guidelines and requirements commensurate with the size, complexity and location of the signboard:

- (a) Intervals of maintenance inspections (annually and after typhoons are recommended);
 - (b) Intervals of safety inspections (which may include opening up of parts of the signboard for the inspection of crucial structural elements);
 - (c) Qualification and experience of the inspector for maintenance and safety inspections;
 - (d) Scope of the maintenance and safety inspections for assuring public safety (e.g. identification of loose, rusty, defective, deformed or deteriorated parts and recommendations for repair and replacement);
 - (e) Qualification of contractors required to carry out maintenance and repair works (e.g. RGBC or Minor Works Contractors in the appropriate class) as well as the necessity to engage appropriate registered building professionals for supervision;
 - (f) Qualification of contractors required to remove the signboard when it is no longer in use and the necessity to engage appropriate registered building professionals for supervision;
 - (g) For the assurance of public safety, necessary precautionary and protective measures for the maintenance, repair or removal works of the signboard; and
 - (h) Statutory procedures required for alteration or removal of the signboard (e.g. simplified requirements under the MWCS or the approval and consent procedure).
2. Some examples of maintenance guidelines are listed below:
- (a) Worn and torn characters forming the inscription should be replaced;
 - (b) Broken or detached parts of display surfaces should be repaired or replaced;

- (c) Dangling and loose fluorescent tubes or other lighting installations should be taken down and replaced with new ones securely plugged in;
- (d) Loose electrical wires / installations should be re-connected to the circuit;
- (e) Heavily corroded steel sections should be replaced;
- (f) Slightly corroded steel sections should be cleaned before re-painting, all damaged paint surfaces after erection should be repaired in accordance with manufacturer's recommendations;
- (g) Fractured, buckled or missing members of the steel frames shall be replaced;
- (h) Dislocated, detached or heavily corroded fixing bolts should be replaced; and
- (i) Slightly corroded fixing bolts should be thoroughly cleaned and re-painted with anti-corrosion paint, e.g. zinc-rich primer.

3. To facilitate the owner's subsequent maintenance of the signboard, necessary information or materials such as documents, certificates, record drawings and photographs showing construction details, materials used, etc should be included in the maintenance manual.

4. Depending on the location, the removal of certain small signboards that fall within the parameter of designated exempted works may be required to be carried out by a competent and experienced contractor for assuring public safety.

(9/2013)