

**Projections in relation to Site Coverage and Plot Ratio
Building (Planning) Regulations 20 & 21**

In accordance with regulation 2 of the Building (Planning) Regulations (B(P)R), site coverage (SC) means the area of a site that is covered by the buildings erected thereon. Hence all components of a building, including all projections, should be accountable for SC. SC is also a measure to control the building bulk.

Minor projecting features

2. In the case of plot ratio (PR), the definition of gross floor area (GFA) uses the term “external wall”. Clearly “wall” does not just mean concrete or brick material, and windows and parapet railings should obviously also be included. For projections from a building, it is accepted that if the projections are not at a floor level, or potential floor level, and do not dominate the face of a building, measurement as accountable GFA is not required.

3. It follows from the above that the following projections from the face of a building, having no significant impact on building bulk, need not be counted for SC and PR:

- (a) **pitched roof eaves and flat roof overhangs** complying with the projection and clear height limits in regulation 7(1) of the B(P)R (provided they are not contained within parapet walls as part of an accessible flat roof);
- (b) **individual air-conditioner boxes and platforms** of reasonable size and projecting not more than 750 mm, which have a built-in system for condensate disposal;
- (c) **air-conditioner platforms** complying with Appendices B and C of the Code of Practice on Access for External Maintenance;
- (d) **individual projections / window hoods** complying with B(P)R and porches having projection not exceeding 2 m;
- (e) **window cills and window surrounds** projecting not more than 100 mm;
- (f) **string courses, fins and architectural mouldings** complying with the projection and clear height limits in regulation 7(1) of the B(P)R (but not structural beams and columns);

/(g) ...

- (g) **window flower boxes** projecting not more than 500 mm and complying with the design requirements as illustrated in Diagram 1 in Appendix A;
- (h) **external drainage pipes and gutters** complying with the projection and clear height limits in regulation 7(2) of the B(P)R;
- (i) **sunshades** solely used for the purpose of energy conservation projecting not more than 1.5m from the external wall complying with the criteria set out in Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers (PNAP) APP-67 and PNAP APP-156;
- (j) **reflectors** projecting not more than 1.5 m from the external walls, subject to submission of quantitative assessment of environmental benefits to the Building Authority (BA) for consideration in case they project over 0.5 m from the external walls;
- (k) **canopies** projecting not more than 3.5 m over an entrance to a building;
- (l) **drying racks and supporting frames for light fittings, antennas or transceivers for public telecommunications services** complying with the projection and clear height limits in regulation 7(3) of the B(P)R;
- (m) **retractable awnings for external wall openings** complying with the projection and clear height limits in regulation 7(4) of the B(P)R and applicable positional, projection and clear height requirements under minor works item 2.43 in Schedule 1 of the Building (Minor Works) Regulation; and
- (n) **metal supporting frames for growing of plants** (including vertical frame for climbing and/or weeping plants and panel/modular planters) projecting not more than 300 mm from the external walls within lot boundary. A sample is provided in Diagram 2 in Appendix A.

4. It is emphasised that, notwithstanding paragraph 3 above, if any of the listed features is so exaggerated, excessive in scale, or defeats the provisions of the Buildings Ordinance (BO) (for example, a structural beam doubling as a flower box) or is provided or designed in an unusual way, that feature will be counted for SC and, if appropriate, also for PR.

Projecting windows

5. It follows from the above that all other projections must be included in SC and PR calculations. However projecting windows will not be regarded as GFA and will be accepted as not counting for SC and PR, if they satisfy all the following criteria within the storey from which they project:

/(a) ...

- (a) the projecting window is from living room, dining room or bedroom of domestic accommodation only;
- (b) only one such projecting window is allowed per room and it should be located on one external wall only;
- (c) the elevational area¹ of the projecting window does not exceed 50% of the area¹ of the external wall where the projecting window is located;
- (d) the extent of the projection is not more than 100 mm from the outer face of the main external wall;
- (e) the base is not less than 500 mm above finished floor level;
- (f) the window complies fully with regulation 3A of the B(P)R. For the purposes of this requirement, the height of 1 100 mm protective barrier will be measured from floor level and any part of the window within this dimension should be fixed or otherwise suitably protected in line with paragraph (2) of the said Regulation; and
- (g) the projecting windows will not form a piecemeal addition to existing buildings.

Covered areas under large projecting / overhanging features

6. For innovative building designs (excluding shopfront overhead, signboard and the like), the BA has been taking a pragmatic approach on the acceptance of different projecting/overhanging features. Save for the areas covered by projecting features which provide a weather-protected shelter capable of functional use, it is accepted that where there is no objection from the relevant government departments and the clear height of the projecting feature is more than 7.5 m above the covered areas, the covered areas satisfying the following criteria will not be regarded as GFA and thus are not required to be included in the GFA calculation:

- (a) The ratio of horizontal width of the covered area to the clear height of the projecting features above the covered area is not less than 1:8
- (b) Access to the covered area is not possible and abuse is unlikely.

7. For the covered area under special design of projecting/overhanging features which do not satisfy the requirements in paragraph 6 above, such as twisted building form, inclined external wall design, etc., justifications should be provided with the merits of the design for consideration of GFA exemption (please also see PNAP APP- 2).

/Air-conditioner ...

¹ For the avoidance of doubt, while the thickness of the enclosures of the window should be included in the elevation area of the window, the thickness of the enclosure walls and slabs (floor and ceiling) of the room where the projecting window is located should be discounted for the purpose of calculating the area of the external wall.

Air-conditioner boxes / platforms projecting over street

8. Except those complying with Part II of the B(P)R, no projections will normally be allowed over streets unless they can be justified in the public interest. In this context the projection of individual air-conditioner boxes / platforms not exceeding 750 mm and window hoods not exceeding 500 mm may be permitted, provided they are at a height of not less than 2.5 m above ground (please also see PNAP APP-42). For proposals relating to wholesale conversion of industrial buildings and other similar alteration and addition works, application for exemption from section 31(1) of the BO and / or modification of regulations 20 and 21 of the B(P)R for the erection of individual air-conditioner boxes / platforms with a projection of more than 750 mm from the external walls with or without projection over a street will be favourably considered only if there is sufficient justification to demonstrate that there are difficulties in placing the air-conditioners inside the premises due to the design and layout constraints in the existing building. As a condition for the granting of the exemption / modification, Grade 1 room air-conditioners as specified in the Code of Practice on Energy Labeling of Products issued by the Electrical and Mechanical Services Department should be installed upon completion of the proposed works.

Projecting greenery at common parts of building

9. To encourage the provision and proper maintenance of greenery at building exterior while controlling the impact on building bulk, the BA will consider favourably on application for exemption from PR and SC calculations of the following projecting features within lot boundary and located in and only accessible from the common parts of the building²:

- (a) Planters (with or without vertical frames for climbing and/or weeping plants) projecting not more than 600mm from the external walls as illustrated in Diagram 3 in Appendix A. The planters should comply with the relevant safety provisions under the Code of Practice on Access for External Maintenance and be provided with an automatic irrigation system and an adequate drainage system. The granting of GFA concession for such planters is NOT subject to compliance with the pre-requisites and the overall cap on GFA concessions stipulated in PNAP APP-151.

/(b) ...

² Undertaking letter should be submitted by the developer or owner to designate the features as common parts in the Deed of Mutual Covenant (DMC) with details of the use and location clearly indicated. Such DMC should contain binding and enforceable terms and conditions included for the control, management and maintenance of the facilities where applicable, of such features. Where no DMC is to be in force for a development, such designation should be incorporated into the Sales and Purchase Agreement, Assignment, Tenancy Agreement or conveyancing document such that the future owners or tenants are aware of their rights and liabilities (if applicable). The letter of undertaking should be registered in the Land Registry before applying for the occupation permit.

- (b) Maintenance walkway projecting from the external walls providing maintenance access to the planters in paragraph 9(a) above ³ or metal supporting frames for growing of plants in paragraph 3(n) above as illustrated in Diagram 4 in Appendix A. The maintenance walkway should satisfy the following criteria:
- (i) There is a minimum 150mm drop in level from the area which leads to the maintenance walkway;
 - (ii) Relevant safety provisions under the Code of Practice on Access for External Maintenance are complied with;
 - (iii) The width of the maintenance walkway should be not less than 400mm and not more than 600mm; and
 - (iv) The granting of GFA concession for the maintenance walkway is subject to compliance with the pre-requisites and the overall cap on GFA concessions stipulated in PNAP APP-151.

Drainage provisions for cantilevered reinforced concrete structures

10. PNAP APP-68 has given guidance on the safe design and construction of cantilevered reinforced concrete structures. For projects incorporating cantilevered reinforced concrete structures, means to prevent the accumulation of water and corresponding surface water drainage provisions for such structures conforming to the recommendations of paragraph 4 in Appendix A of PNAP APP-68 should be shown on the general building plans and drainage plans respectively for approval.



(HO Chun-hung)
Building Authority

Ref. : BD GP/BREG/P/2 (V)

This PNAP is previously known as PNAP 68

First issue March 1980

Last revision September 2023

This revision June 2025 (AD/NB1) (Paragraph 3(c) and (k) amended)

³ It should be noted that if the overall projection of the maintenance walkway and planter exceeds 750mm, they will be regarded as causing obstruction to prescribed windows.

Window flower box design requirements

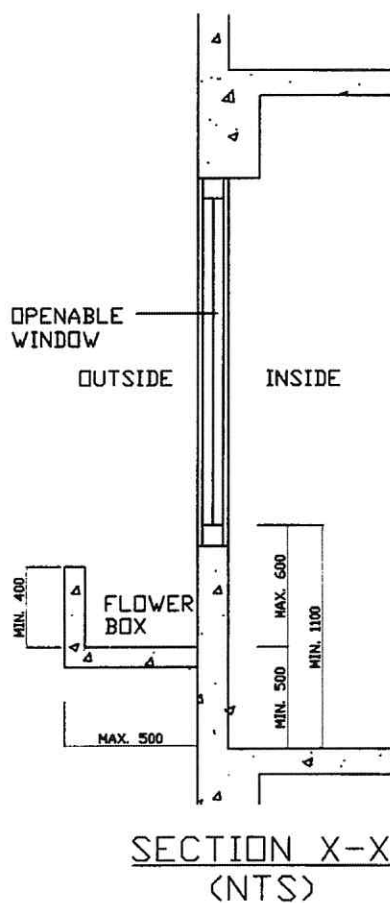
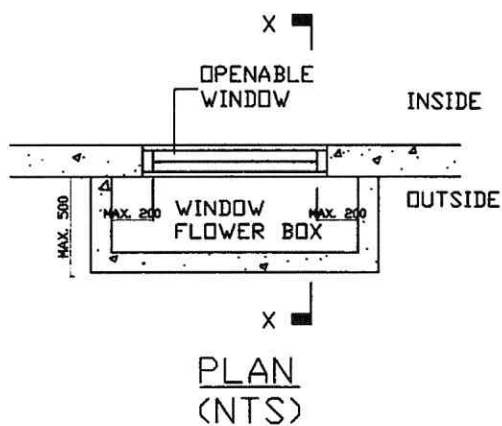
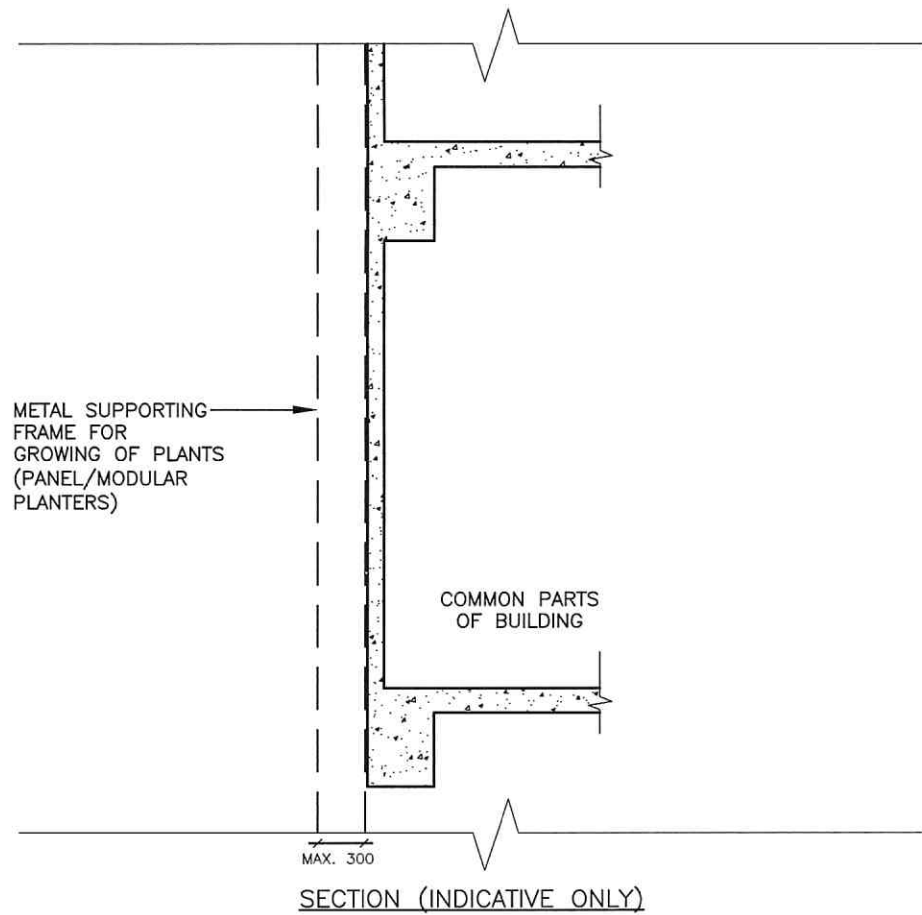


Diagram 1

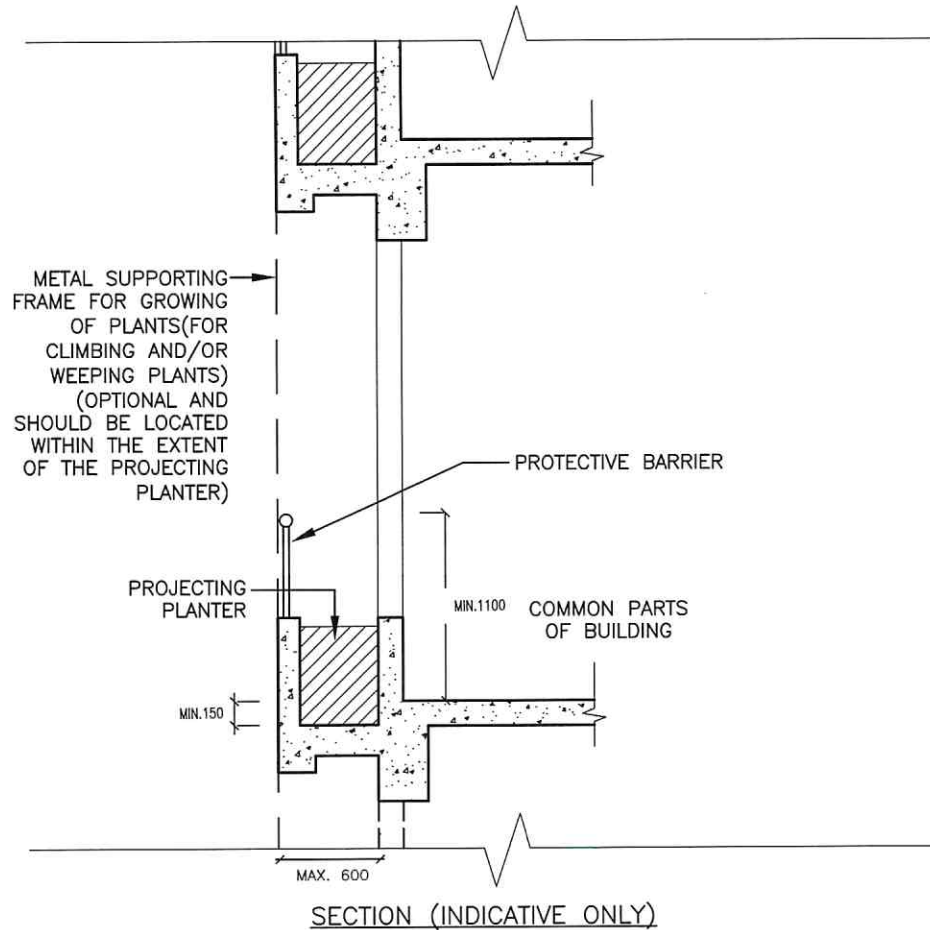
Sample of metal supporting frames for growing of plants



REMARKS:
Maintenance and repair access for the metal supporting frames for growing of plants shall be provided in accordance with the Code of Practice on Access for External Maintenance

Diagram 2

Sample of projecting planters

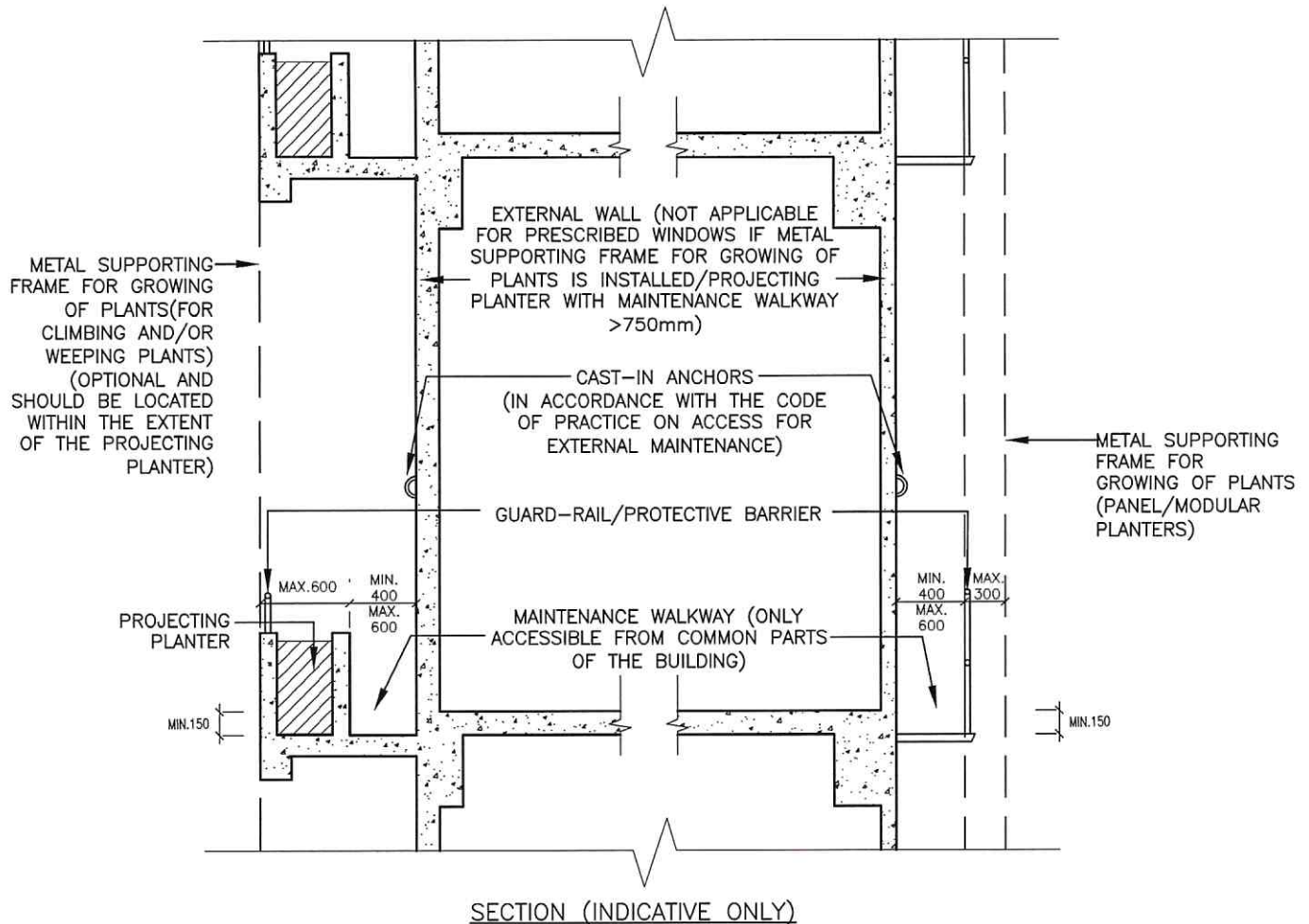


REMARKS:

Maintenance and repair access for the metal supporting frames for growing of plants/ projecting planters shall be provided in accordance with the Code of Practice on Access for External Maintenance

Diagram 3

Sample of metal supporting frames for growing of plants and projecting planters with maintenance walkway



REMARKS:

Maintenance and repair access for the metal supporting frames for growing of plants/ projecting planters shall be provided in accordance with the Code of Practice on Access for External Maintenance

Diagram 4

(Rev. 9/2023)