



Buildings Department



Lands Department



Planning Department

Joint Practice Note No. 8

Incentive to Promote Green and Innovative Buildings

Enhanced Facilitation Measures for Buildings Adopting Modular Integrated Construction

Introduction

Following the issue of the Joint Practice Note (JPN) Nos. 1 and 2, this is the third JPN promoting green and innovative buildings. This JPN details enhanced facilitation measures for buildings adopting Modular Integrated Construction (MiC).

2. MiC is a construction method that employs the technique of having freestanding volumetric modules (with finishes, fixtures, fittings, etc.) manufactured off-site and then transported to site for assembly. MiC enables better quality control, shortens construction period, reduces disturbance and nuisance to the neighbourhood etc.; being a green/ innovative feature, it also helps simplify the construction process and reduce waste.

3. This JPN promulgates enhanced facilitation measures for promoting wider adoption of MiC in new buildings by (a) granting of gross floor area (GFA) and site coverage (SC) concessions and (b) supporting applications for minor relaxation of building height (BH) restriction amongst the Buildings Department (BD), Planning Department (PlanD) and Lands Department (LandsD).

/GFA ...

GFA and SC Concessions

4. Under current technology, MiC normally involves repetitive double walls between MiC modules, thicker enclosure walls to cater for rigging and hoisting during transportation and assembly on site, as well as lengthened common corridors and internal doorways due to the double or thickened MiC walls. In recognition of the additional floor area needed in MiC, GFA and/ or SC concessions may be granted to facilitate the adoption of MiC.

Under the Buildings Ordinance

5. Under the building regime, BD is prepared to grant the following GFA and/ or SC concessions upon submission of an application for exemption under section 42 of the Buildings Ordinance (BO):

- (a) 10% of the MiC floor area of a new building may be disregarded from calculation of GFA of the development. The granting of such GFA concession is not subject to the overall GFA cap of 10% stipulated in the Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers (PNAP) APP-151; and
- (b) 10% of the MiC floor area at each floor level need not be counted for SC.

6. For the purpose of this JPN, the MiC floor area is the floor area contained within the external walls of the combined MiC modules, together with the floor areas of associated construction joints and including the thickness of such walls. If MiC is adopted for plant room or similar services, or green/ amenity features such as balcony, utility platform, common corridor and lift lobby, or non-structural prefabricated external wall, the floor areas of such rooms or features which may already have been exempted or disregarded from GFA calculations under the BO may also be included in the MiC floor area for the purpose of working out the concessions under paragraph 5 above. For the avoidance of doubt, features not forming part of the MiC floor, for example minor projecting features as described in paragraph 3 of PNAP APP-19¹, acoustic fin, noise barrier, curtain wall and cladding, should be excluded from the calculation of MiC floor area.

/Under ...

¹ Air-conditioner platforms under PNAP APP-19 should be excluded from the calculation of MiC floor area even if they are combined with balconies and utility platforms.

Under the Town Planning Ordinance

7. Under the planning regime, PlanD will follow BD's exemption of the MiC floor area from GFA and/ or SC calculations, subject to there being no contravention with any specific restrictions on the same stipulated on the relevant statutory plans (i.e. Outline Zoning Plan/ Development Permission Area Plan).

Under the Government Lease

8. Under the land administration regime, for leases² containing GFA and/ or SC restrictions and a specific clause allowing the same exemption from calculations of GFA and/ or SC for floor area exempted by the Building Authority (BA) in respect of green and innovative features without the payment of a premium and administrative fee, for instance Conditions of Sale, approval following BD's exemption of the MiC floor area from GFA and/ or SC calculations will be given to such features on the building plans during the building plans checking stage.

9. On the other hand, for leases with GFA and/ or SC restrictions and without the specific clause as mentioned in paragraph 8 above, exemption from calculations of GFA and/ or SC would be subject to consideration of the Director of Lands, who may allow the exemptions subject to such terms and conditions as may be determined by him at his sole and absolute discretion. A fast track approach will be adopted for the necessary lease modification³ and/ or consent for such GFA and/ or SC exemptions for adoption of MiC, including payment of premium (where applicable) to be charged at standard rates for such modification/ consent to streamline the process. To facilitate the processing of the application for the necessary lease modification and/ or consent, LandsD will issue a practice note on this matter shortly.

Relaxation of BH Restriction

10. Under current technology, the adoption of MiC normally involves thickened/
/double ...

² Unless stated otherwise, all reference to "lease" in this JPN shall include Government Lease or Conditions of Sale/Grant/Exchange, etc. (as the case may be) and "leases" shall be construed accordingly.

³ Lease modification would be needed for leases without the specific clause for exemption from calculations of GFA and/or SC in respect of provision of green and innovative features as mentioned in paragraph 8 above, subject to such terms and conditions as may be imposed by LandsD.

double slabs between MiC modules, resulting in an increase in storey height of MiC floor and hence in the overall BH of the building. To facilitate the adoption of MiC, favourable consideration may be given to an increase of BH up to 4% of the total storey height⁴ of MiC floors. In this regard, MiC floor is taken as a floor of a building where the MiC floor area is not less than 50% of the total area on that floor⁵.

Under the Town Planning Ordinance

11. Under the planning regime, where the BH of a building exceeds the BH restriction permitted under the relevant statutory plan, a s.16 application to the Town Planning Board (TPB) will be required for minor relaxation of the BH restriction (if such provision is available under the statutory plan). Each case will be considered by TPB on its individual merits. PlanD is prepared to support such applications arising from adoption of MiC. If the site is already zoned for development and the minor relaxation of BH restriction is solely for adoption of MiC, the application would need no more than a simple visual appraisal as support. Air ventilation assessment is not required except for sites on major breezeways where a simple review of the air ventilation impacts might be required. In general, if no increase in plot ratio/ GFA is involved⁶, the concerned departments normally will not require assessments on traffic, environmental and infrastructure aspects. In the same spirit, PlanD is prepared to support such minor amendments to approved schemes⁷ through s.16A application.

12. If such BH relaxation is sought, the applicant is required to identify the floor(s) that could be regarded as MiC floor(s) (see paragraph 10 above) and the corresponding storey height(s). Support to such minor relaxation of BH restriction /would ...

⁴ Storey height of MiC floor should be measured from the lowest level of the MiC module to the highest level of the MiC module, including the thickness of slab(s), on that MiC floor together with the associated construction joints below.

⁵ The total area on that floor means the area of the site on which the building is erected that is covered by that floor. For the avoidance of doubt, features which do not form part of the floor, for example, minor projecting features as described in paragraph 3 of PNAP APP-19, acoustic fin, noise barrier, curtain wall and cladding should be excluded from the calculation of the total area of the floor.

⁶ For avoidance of doubt, GFA excluded, exempted or disregarded under this JPN/ other JPNs do not constitute as increase in plot ratio/ GFA.

⁷ In such cases, the general requirements as set out in the TPB Guidelines for Class A and Class B Amendments to Approved Development Proposals will apply. In particular, if maximum BH was not specified as an approval condition of the planning permission, the adoption of MiC is a Class A amendment if the proposed change does not result in the development exceeding the BH restrictions on the extant statutory plan and in the planning brief, if applicable. For Class B amendments, the considerations in this JPN are relevant.

would be up to 4% of the total storey height of MiC floors, irrespective of the actual additional vertical space taken up arising from the adoption of MiC.

13. During building plans submission stage, in order to substantiate that the proposed BH is in accordance with the approved scheme, an applicant is required to engage an authorized person (AP) to certify the MiC floor(s) identified and the corresponding storey height(s) per the form in **Appendix A** for submission together with the building plans to PlanD through the centralised processing system. The AP should demonstrate on the building plans submitted to the BA the floor(s) that could be regarded as MiC floor(s) and the corresponding storey height.

Under the Government Lease

14. Similarly, under the land administration regime, if the BH of a building adopting MiC would render a breach of the BH restriction under lease, a lease modification would be required to permit the BH in excess of the BH restriction up to 4% of the total storey height of MiC floors as with that stipulated under paragraph 10 above. Such modification, if approved, will be subject to such terms and conditions as may be imposed by LandsD. A fast track approach will also be adopted for the necessary lease modification, including payment of premium (where applicable) to be charged at standard rates as mentioned in paragraph 9 above. Similar certification through the one as set out in **Appendix A** and the requirement to demonstrate on building plans, as detailed in paragraph 13 above, to be submitted to LandsD through the centralised processing system, would apply.

Application

15. It must be noted that BD, PlanD and LandsD are acting in different capacities and exercising different functions, powers and rights under the respective Ordinances and Government Lease under their respective purview. Any functions, powers or rights exercised by any one of these departments shall not in any way affect the functions, powers and rights of any of the others. This JPN (including its Appendices) is meant to serve as general guidelines and as such it may not adequately cater for specific circumstances of individual cases. Nothing in this JPN (including its Appendices) shall in any way fetter, affect or prejudice the rights of the Government, the Director of Lands and their officers under the Government Lease or the Government's rights as lessor/ landlord, and all such rights are hereby reserved.

/Nothing ...

Nothing in this JPN (including its Appendices) including any words and expressions used shall in any way be construed as any waiver of any provisions under the Government Lease or affect or bind the Government regarding the interpretation or enforcement of the terms and conditions of the Government Lease or otherwise.

16. The GFA and/ or SC concessions as approved for each case will be revoked at any time if MiC is not adopted in the building proposed to be built or be adjusted if there is a subsequent reduction in the MiC floor area. Similarly, the planning permission granted under the Town Planning Ordinance and/ or the relevant permission under lease for minor relaxation of the BH restriction for the MiC floors will no longer be applicable if MiC is not adopted as submitted in the proposed building granted with planning permission and/ or the relevant application for lease modification.

Effective Date

17. This JPN takes effect from 1 August 2022. It will apply to all new building plans or major revision of building plans for development proposals submitted to the BA for approval on or after 1 August 2022.

18. Building plans for buildings adopting MiC as approved by the BA prior to the implementation of this JPN may make reference to the “September 2019” version of JPN No. 2 and the repealed PNAP APP-161 (**Appendices B and C**). In tandem with issue of this JPN, JPN No. 2 has been updated (“July 2022” version refers) with references on MiC adoption removed. All rights to modify the whole or any part of this JPN are hereby reserved.



(YU Po-mei, Clarice)
Director of Buildings



(Andrew LAI)
Director of Lands



(Ivan CHUNG)
Director of Planning

Ref.: BD/GR/1-125/126 (IV)
LD BP/7-4/5/3
TPB/C/TPB/35

First issued July 2022

(For Planning Department and/ or Lands Department)

Certification of the information included in General Building Plans Submission
for Minor Relaxation in Building Height Restriction

(to be submitted together with the General Building Plans)

Lot No.:

Address:

Planning Application No.:

BD Reference No.:

To: DPO/_____, Planning Department and/ or _____, Lands Department
(Please delete as appropriate)

I, (_____), hereby confirm that I am an Authorized Person (AP)
(Certificate of Registration Number: _____; Date of Expiry of Registration:
_____) registered under the Buildings Ordinance, authorized by the owner(s)
of the above lot to act on his/ their behalf to submit this Certification for the captioned
minor relaxation in building height (BH) restriction.

I hereby certify that the information included in the GBP for minor relaxation in BH
restriction are true and complete. I understand that any false certification or
declaration may be subject to legal action.

Signature of AP: _____

Name of AP: _____

Date: _____

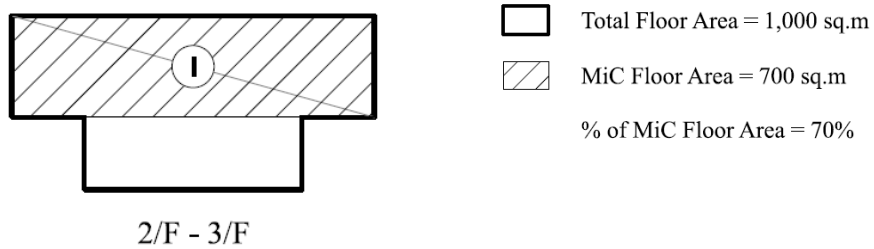
Personal Information Collection Statement

PLEASE READ THE FOLLOWING BEFORE COMPLETING THE FORM

- 1. The information provided in this form will be used by PlanD and/ or LandsD for the purposes of considering and processing your application for relaxation of BH restriction and for purposes related to such submission.*
- 2. The provision of all the information provided in this form (including its attachments, its enclosures or any documents submitted in support of or in relation to such submission) may be disclosed to other government Bureaux/ Departments for the purposes mentioned in paragraph 1 above. The above information may also be disclosed to any third party (whether individual, corporate body, members of the public or other organizations) whether in response to enquiry from members of the public or media alike.*
- 3. You have the right of access and correction with respect to personal data as provided for in Sections 18 and 22 and Principle 6 of Schedule 1 to the Personal Data (Privacy) Ordinance (Cap. 486). Such right of access includes the right to obtain a copy of the personal data provided in this submission on payment of the applicable charge.*
- 4. Enquiries on the personal data collected, including the request for access to and correction of the data, should be addressed to the Technical Services Section, Planning Department, 17/F., North Point Government Offices, 333 Java Road, North Point, Hong Kong and/ or Departmental Personal Data Controlling Officer at Lands Department, 20/F., North Point Government Offices, 333 Java Road, North Point, Hong Kong.*

**Information to be included in General Building Plans Submission for
Minor Relaxation in Building Height Restriction**

- I. The percentage of MiC floor area of each floor adopting MiC should be demonstrated in the following format-



- II. The total storey height of MiC floors* and the maximum eligible relaxation of Building Height (BH) restriction# should be demonstrated in the following format-

	Percentage of MiC Floor Area	Respective Storey Height[^]
G/F	100%	5m
1/F	100%	5m
2/F-3/F	70%	4m x 2 storeys =8m
4/F-10/F	50%	4m x 7 storeys =28m
11/F-15/F	30%	N.A.
(a) Total storey height of MiC floors*		46m
(b) Maximum eligible relaxation of BH restriction#		1.84m

* Where the MiC floor area is not less than 50% of the total area on that floor.

4% of the total storey height of MiC floors.

[^] Measuring from the lowest level of the MiC module to the highest level of the MiC module including the thickness of slab(s) on that MiC floor together with the associated construction joints below.



Buildings Department



Lands Department



Planning Department

Joint Practice Note No. 2

Second Package of Incentives to Promote Green and Innovative Buildings

Introduction

Following the issue of the Joint Practice Note No.1 (JPN1), this is the second joint practice note issued to promote the construction of green and innovative buildings. The objective, application and conditions for submission as promulgated in JPN1 remain unchanged.

Exemption of the Second Package of Green and Innovative Features from Gross Floor Area and/or Site Coverage Calculations

Under the Buildings Ordinance

2. The following green/innovative features may upon application and subject to conditions be exempted from Gross Floor Area (GFA) and/or Site Coverage (SC) calculations under the Buildings Ordinance:

- (a) Non-structural prefabricated external walls;
- (b) Utility platforms for residential buildings;
- (c) Noise barriers;
- (d) Communal sky gardens for non-residential buildings; and
- (e) Modular Integrated Construction.

3. Criteria and conditions for exempting the above green features are listed in Appendix A.

4. 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 the Government Lease.

/Under ...

Under the Government Lease

5. For new auction and tender sites with GFA and/or SC restrictions, a suitable clause may be included in the Government Lease allowing the same GFA and/or SC exemptions in respect of the green features being granted by the Building Authority (BA) under paragraphs 2 and 3 above to be excluded from GFA and/or SC calculations under the Government Lease, without the payment of a premium, subject to the conditions set out in Appendix A and provided that their design and disposition are acceptable to the Director of Lands.

6. For existing leases with GFA and/or SC restrictions, the same GFA and/or SC exemptions in respect of the green features being granted by the BA under paragraphs 2 and 3 above may be exempted from GFA and/or SC calculations under the Government Lease. Where the Government 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 application would need to be submitted by the lessee.

7. 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 normally be directed to the relevant District Lands Office (DLO) of the LandsD and a reply may normally be given within 30 days. Alternatively, an AP may be informed directly by the DLO within 8 weeks (for non-BC III cases) or 10 weeks (for BC III cases) from the receipt of a formal plan submission through the centralized processing system.

8. For any GFA and/or SC exemptions which may be granted under the Government Lease, it is a pre-requisite that such exemptions must first be granted by the BA. 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 an in-principle no-objection to the proposed green features is established. Once approval of the building plans with GFA and/or SC exemptions in respect of such green features has been granted by the BA, 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 the Town Planning Ordinance

9. 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 2 and 3 above and Appendix A, subject to there being no contravention with restrictions on building height and/or SC, if any, stipulated on the relevant Outline Zoning Plan (OZP)/

Development Permission Area Plan (DPAP). There may be situations where the provision of sky garden may result in building height and/or SC exceeding that permitted under the OZP/DPAP. In such cases, an application to the Town Planning Board for minor relaxation (if such a provision is available under the OZP/DPAP) will be required. Each case will be considered by the TPB on individual merits.

10. For development schemes previously approved by the TPB, the incorporation of such green features may result in minor amendments to the approved schemes. In such cases, the general requirements as set out in the TPB Guidelines for Class A and Class B Amendments to Approved Development Proposals will apply.

11. 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

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

Formal Submissions and Enquiries on Green Features

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

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

15. Enquiries on any proposed green features for incorporation in a development may be directed to the respective Chief Building Surveyor of the BD.

Misuse of Incentives

16. An occupation permit will not be issued unless there is evidence indicating that the required undertaking as detailed in paragraph 2(a) of Appendix A is registered in the Land Registry.

17. 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) ...


- (a) Utility platforms and the areas underneath the utility platforms are not to be enclosed above parapet height, as detailed in paragraph 2(b) of Appendix A;
- (b) The exhaust outlets for internal bathrooms and lavatories are not to open into the utility platforms and the covered areas underneath the utility platforms, as detailed in paragraph 2(c) of Appendix A; or
- (c) Sky gardens are to be for the exclusive use of the owners, tenants and their visitors only as detailed in paragraph 2(d) of Appendix A.

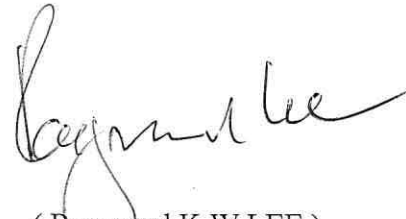
18. Developers should remind purchasers of the consequence of any misuse of the above incentives.

19. It must be noted that the BD, PlanD and LandsD are acting in different capacities and exercising different functions, powers and rights under the respective Ordinances and Government Lease under their respective purview. Any functions, powers or rights exercised by any one of these departments shall not in any way affect the functions, powers and rights of any of the others.

20. It must be further noted that nothing in this joint practice note (for the avoidance of doubt, including all its appendices) shall in any way fetter or affect the rights of the Government, the Director of Lands and their officers under the Government Lease or their rights as lessor/landlord, who are exercising such rights in the capacity of a lessor/landlord and who hereby reserve all such rights, and that nothing in this joint practice note (for the avoidance of doubt, including all its appendices) including any words and expressions used shall in any way affect the interpretation of the terms and conditions of the Government Lease.


(CHEUNG Tin-cheung)
Director of Buildings


(Thomas CHAN)
Director of Lands


(Raymond K W LEE)
Director of Planning

Ref.: BD GP/ENV/8
LD 2/1020/00
TPB/C/BLC/2

First issued February 2002

Last revision May 2019

This revision September 2019 (Paragraphs 1(b) and 2(a) of Appendix A amended)

Criteria and Conditions for Exempting the Second Package of Green and Innovative Features from GFA and/or SC Calculations

1. Specific criteria for exempting the second package of green and innovative features from GFA and/or SC calculations are detailed below. For the avoidance of doubt, application of incentives to residential buildings where described does not apply to the non-domestic portion of a composite building or residential accommodation for commercial use. Furthermore, hotels are considered as non-residential developments for the purpose of this joint practice note. Concessions for utility platforms are therefore not applicable to hotels.

(a) Non-structural prefabricated external walls

Application for exemption of non-structural prefabricated external walls from GFA and SC calculations will be favourably considered where such provision meets the following criteria:

- (i) It is non-load bearing and satisfies the design requirements of external wall as stipulated in Regulation 38 of the Building (Construction) Regulations¹;
- (ii) The maximum thickness of the wall to be exempted is 150mm;
- (iii) The wall, including its external finishes, does not project beyond the lot boundary;
- (iv) If a door opening is formed in the wall, that portion of the wall formed with the opening will be accountable for GFA and SC calculations;
- (v) Non-structural prefabricated external wall having prefabricated projecting window may also be exempted from GFA and SC calculations provided the maximum thickness of the wall to be exempted is 150mm as mentioned in (ii) above and the design of the projecting window satisfies the criteria stipulated under PNAP APP-19;
- (vi) The external wall finishes of nominal thickness or dry-fixed stone panels with overall thickness of not more than 75mm as the external wall finishes may be disregarded in the measurement of the thickness of such wall for the purpose of (ii) above as well as GFA and SC calculations; and

¹ The prefabricated external walls may be fixed to the load-bearing structure by:

- (a) in-situ reinforced concrete joints; or
- (b) cast-in anchorage in a structural concrete member; or
- (c) being welded to a structural steel member.

- (vii) The granting of GFA concessions set out in this paragraph is subject to compliance with the pre-requisites and the overall cap on GFA concessions stipulated in PNAP APP-151 on Building Design to Foster a Quality and Sustainable Built Environment.

See Appendix B for guidance on the interpretation of non-structural prefabricated external walls².

(b) Utility platforms for residential buildings

Application for exemption of utility platforms from GFA and SC calculations will be favourably considered where such provision meets the following criteria:

- (i) Only applicable to residential buildings;
- (ii) Not more than 50% of the area of the utility platform is to be exempted from GFA and SC calculations;
- (iii) The maximum area to be exempted for such platform including portion of such platform per residential unit is 0.75m²;
- (iv) The size of any utility platform, including part of which to be exempted from GFA and SC calculations, is not less than 1.5m² in area;
- (v) The utility platform³ is at least 1.5m away from a balcony⁴;
- (vi) There is no projecting window in the room which leads to the utility platform;
- (vii) Not less than 40% of the perimeter to the utility platform faces into the open air⁵ and is not enclosed above safe parapet height, or where the utility platform is attached laterally to another utility platform and the separation between them if provided is of parapet height only, its longer side faces into the open air⁵ and is not enclosed above safe parapet height;
- (viii) It is not located in a re-entrant with an unobstructed width less than 1,500mm or a light well;
- (ix) It does not adversely affect the natural lighting and ventilation provisions to other habitable space, kitchens, bathrooms and lavatories;
- (x) It does not project beyond the lot boundary;
- (xi) There is a minimum of 150mm drop in level from the adjacent

² Blown-up section for various profiles of non-structural prefabricated external walls should be submitted at the building plan stage.

³ The utility platform may be accessible through a door opening and may be provided with a water supply point and sink.

⁴ Unless in compliance with Appendix B of the Code of Practice on Design for Safety – External Maintenance.

⁵ For the purpose of this joint practice note, ‘open air’ has the same meaning as defined under regulation 2 of the Building (Planning) Regulations.

- interior space which leads to the utility platform;
- (xii) Parapets are of open design such as railing, perforated sheet or mesh so as not to block natural ventilation⁶ and ⁷;
 - (xiii) Where modification of regulation 36 of the Building (Planning) Regulations in respect of bathrooms and lavatories is granted, the exhaust outlets for such bathrooms and lavatories do not open into the utility platform;
 - (xiv) The covered area underneath the lowest utility platform may be fully exempted from GFA and SC calculations provided that not less than 40% of the perimeter of the covered area is not enclosed above safe parapet height and faces the open air⁵ or where the covered area is attached laterally to the covered area beneath another utility platform, the separation between the covered areas if provided is of parapet height only and its longer side is not enclosed above safe parapet height and faces into the open air⁵; and
 - (xv) The granting of GFA concessions set out in this paragraph is subject to compliance with the pre-requisites and the overall cap on GFA concessions stipulated in PNAP APP-151 on Building Design to Foster a Quality and Sustainable Built Environment.

(c) Noise barriers

Application for exemption of noise barriers from GFA and SC calculations will be favourably considered where such provision meets the following criteria⁸:

- (i) It may be a stand-alone wall, with or without projection, and located away from the main tower, or in the form of cantilevered acoustic panel from external walls of the podium;
- (ii) Where it projects beyond the lot boundary, approvals from the relevant government departments are given;
- (iii) It is not to be used for other purposes including any commercial purposes;
- (iv) Its provision and size are justified by quantitative assessment as effective and reasonable; and
- (v) The granting of GFA concessions set out in this paragraph is subject

⁶ Not applicable to utility platform combined with balcony and air-conditioner platform in compliance with Appendix B of the Code of Practice on Design for Safety – External Maintenance.

⁷ Notwithstanding this criterion, the lowermost 400 mm of such parapets can be of solid construction. The overall design must comply with the relevant fire codes and the acceptance criterion is similar to that for a balcony as described in PNAP APP-123.

⁸ This exemption should not be taken as means to alleviate the need of combating noise at source. Reference can be made to the guidelines issued by the Environmental Protection Department and the Highways Department which are available from their respective websites: www.epd.gov.hk/epd/english/environmentinhk/noise/guide_ref/noise_guidelines.html and www.hyd.gov.hk/eng/public/publications/index.htm

to compliance with the pre-requisites stipulated in PNAP APP-151 on Building Design to Foster a Quality and Sustainable Built Environment.

GFA exemption is not accorded to a non-noise sensitive building used as a noise buffer.

(d) **Communal sky gardens for non-residential buildings**

Application for exemption of sky gardens from GFA calculation will be favourably considered where such provision meets the following criteria:

- (i) It provides natural ventilation, greenery and recreational garden space⁹ for communal use;
- (ii) In addition to any podium garden, the maximum number of sky gardens provided is equal to or less than the number of storeys divided by 20;
- (iii) Active recreational use is permissible except where the sky garden is located in an industrial building;
- (iv) It is open-sided above safe parapet height¹⁰ on at least two opposite sides to provide cross ventilation;
- (v) The net area of the sky garden occupies not less than 50% of the area of the floor plate, and where it is made up of more than one parcel on the same floor, the parcels are connected with each other by communal circulation areas on the same floor;
- (vi) Within such net garden area, not less than 15% of the area of the floor plate is the greenery area which is:
 - a. planted with vegetations¹¹; and
 - b. within a zone¹² which is not more than a horizontal distance “L” measured perpendicularly from the outer edge of any external wall which is open above safe parapet height⁸ and faces into the open air⁴, where ‘L’ equals to the clear vertical distance between the top of such external wall opening and the finished floor level of the garden.

See Appendix C for guidance on the interpretation of the greenery

⁹ It is recommended that the effective location and dimensions of a sky garden are to be provided by wind tunnel tests and/or computational fluid dynamics models to ensure the most favourable microclimate to the neighbourhood.

¹⁰ For the purpose of assessing the cross-ventilation and greenery area for the net garden area, no solid portion of the safe parapet at the external wall is above 1,250mm from the finished floor level of the garden, while the top of the external wall opening is at least 3,000mm above the top of the solid parapet. Where planters or sitting benches are attached to the internal side of the parapet, the parapet should be of highly permeable type (with not less than 2/3 free area) above 1,250mm from the finished floor level of the garden so as not to block the natural ventilation and lighting.

¹¹ The use of native trees and shrubs with adequate soil depth for the plants chosen is recommended.

¹² The zone may be extended laterally by 1.5m beyond such wall opening if the width of the wall opening is not less than 1.5m.

- areas.
- (vii) Where more than one sky garden are 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;
 - (viii) The sky garden is at least 10 storeys above any lower sky garden or podium garden in the same building unless under exceptional circumstances where strong environmental justifications are given;
 - (ix) Required refuge floor(s) is located at the roof or coupled with sky garden(s), the design of which shall comply with the relevant fire codes¹³;
 - (x) It is accessible from the common area only;
 - (xi) Where service lifts are provided, the garden is not served by such lifts;
 - (xii) It has a clear height of not less than 4.5m;
 - (xiii) Exhaust from any ventilating system does not face the garden;
 - (xiv) All planters, furniture and equipment are fixed to floors, walls or similar permanent constructions¹⁴;
 - (xv) A notice specifying that the garden is for communal use and that commercial activities within the garden such as café and shops are strictly prohibited, is posted at a prominent location at the garden;
 - (xvi) Maintenance of the garden is financially viable and a maintenance and management manual for the greenery works should be made available for end-users to safeguard public hygiene and safety of the garden;
 - (xvii) There is no concern from PlanD on the overall building height; and
 - (xviii) The granting of GFA concessions set out in this paragraph is subject to compliance with the pre-requisites stipulated in PNAP APP-151 on Building Design to Foster a Quality and Sustainable Built Environment.

(e) **Modular Integrated Construction (MiC)**

Application for exemption from GFA calculations for buildings adopting MiC will be favourably considered where such provision meets the criteria stipulated in PNAP APP-161.

2. Upon granting a modification to exempt the green features from GFA and/or SC calculations, the BA shall, where appropriate, impose the following conditions in addition to the conditions that may be imposed in accordance with PNAP APP-151:

¹³ For example, a 55-storey building requiring two refuge floors may have two refuge-floor-cum-sky-gardens and one independent sky garden eligible for GFA exemption.

¹⁴ AP/RSEs are recommended to ensure that all trees, planters, furniture and equipment can withstand typhoon conditions.

- (a) The letter of undertaking submitted by the developer or owner 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 letter may include an undertaking to designate the following in the Deed of Mutual Covenant (DMC) with details of the use and location clearly indicated:
- (i) the utility platforms and the covered area beneath the utility platforms as ‘non-enclosed areas’;
 - (ii) the sky gardens as ‘common areas’; and
 - (iii) the air-conditioner (AC) platforms provided on utility platforms¹⁵ as ‘areas for air-conditioning’ and that individual AC platforms must not be erected at the external walls of the building.

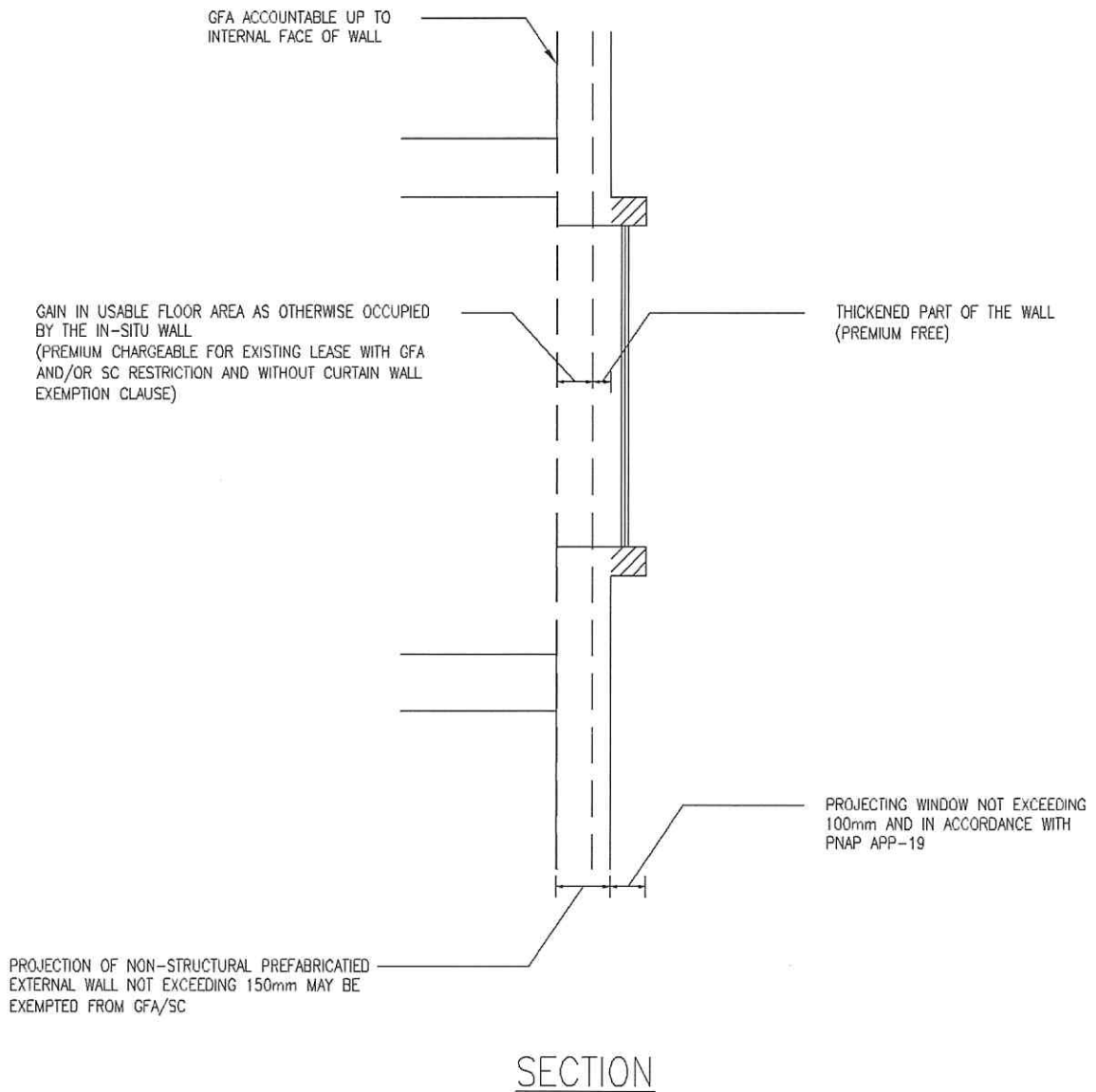
Such DMC should contain binding and enforceable conditions for the control, operation, financial support and maintenance for such features. Where no DMC is to be in force for a development, such designation shall be incorporated into the Sales and Purchase Agreement, Assignment or the Tenancy Agreement such that the future owners or tenants are aware of their rights and liabilities.

- (b) Utility platforms and the covered areas underneath the utility platforms shall not be enclosed above parapet height.
- (c) Where modification of Regulation 36 of the Building (Planning) Regulations in respect of bathrooms and lavatories is granted, the exhaust outlets for such bathrooms and lavatories do not open into the utility platforms and the covered areas underneath the utility platforms.
- (d) Sky gardens shall be for the exclusive use of the owners, tenants and their visitors only as indicated on the approved plans and such areas shall not be used for any other purpose or by any other person without the prior consent of the BA.

(Rev. 9/2019)

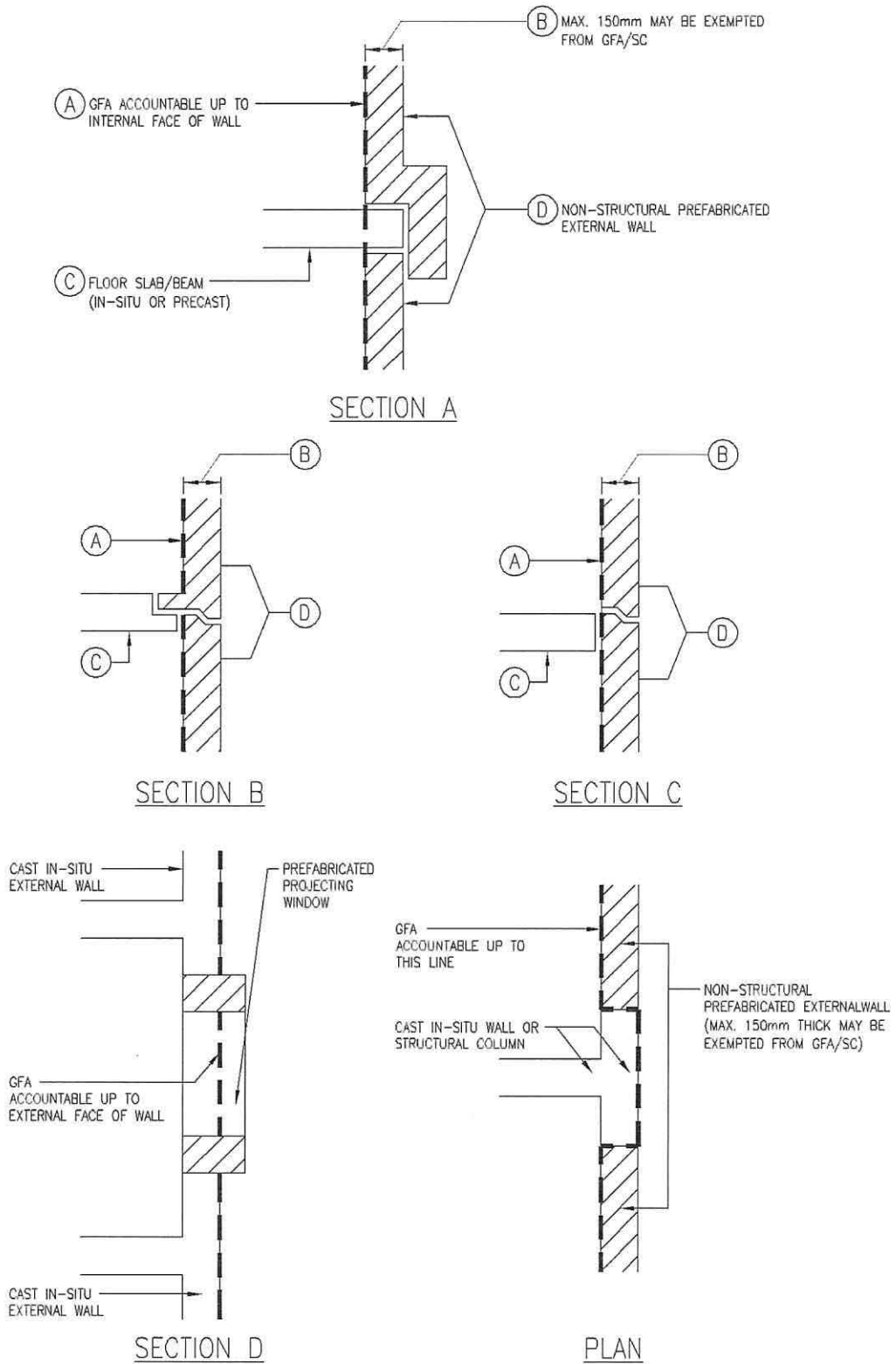
¹⁵ AC platforms complying with Appendix B of the Code of Practice on Design for Safety – External Maintenance.

Previous Appendix B
(JPN No. 2)



Diagrams for Non-Structural Prefabricated External Walls

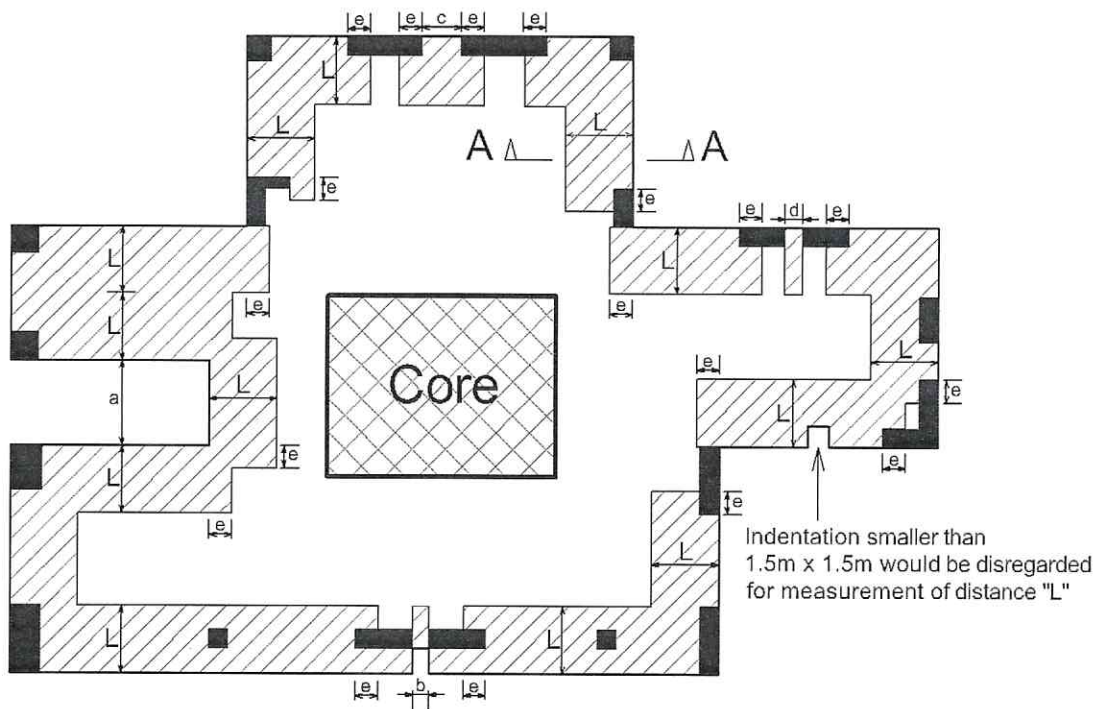
Figure 1



Diagrams for Non-Structural Prefabricated External Walls

Figure 2

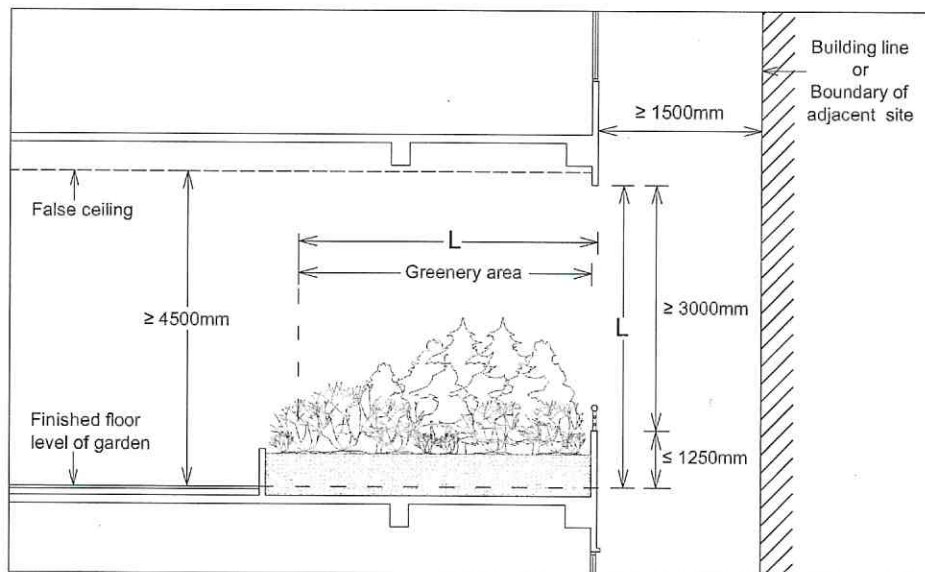
(Rev. 1/2011)



Diagrammatic Plan for Communal Sky Garden / Podium Garden

Figure 1

- zone accountable for greenery area calculation if planted with vegetations
- a : width $\geq 1.5\text{m}$
- b : width $< 1.5\text{m}$
- c : width of wall opening $\geq 1.5\text{m}$
- d : width of wall opening $< 1.5\text{m}$
- e : maximum 1.5m lateral extension



Section A – A for figure 1

Figure 2

Buildings Department	Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers	APP-161
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**Exemption of Gross Floor Area for
Buildings adopting Modular Integrated Construction**

Modular Integrated Construction (MiC) is a construction method that employs the technique of having freestanding volumetric modules (with finishes, fixtures, fittings, etc.) manufactured off-site and then transported to site for assembly. MiC has proven benefits on more efficient and better quality control, less construction waste, shortened construction period, etc. However, MiC will involve repetitive double walls between MiC modules and thicker enclosure walls to cater for rigging and hoisting during transportation and assembly on site.

2. To encourage wider use of MiC in new buildings, the Building Authority is prepared to grant the following gross floor area (GFA) exemptions:

- (a) 6% of the MiC floor area¹ of a new building may be disregarded from the GFA of the development upon submission of an application for exemption under section 42 of the Buildings Ordinance; and
- (b) The disregarded GFA under item (a) above is not subject to the overall GFA cap of 10% under PNAP APP-151.

3. The GFA exemptions will be revoked if MiC is no longer adopted in the proposed buildings or adjusted if there is a reduction in the MiC floor area.



(CHEUNG Tin-cheung)
Building Authority

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¹ MiC floor area is the floor area contained within the external walls of the combined MiC modules, together with the areas of MiC balconies and associated construction joints (including the thickness of such walls).