

2	SITE ASPECTS	2.2 SITE PLANNING AND DESIGN	
		SA 7 LANDSCAPING AND PLANTERS	
	EXCLUSIONS	None.	
	OBJECTIVE	Encourage building development to preserve or expand urban greenery to enhance the quality of living environment, reduce surface runoff to drainage systems and minimise impacts on fresh water and ground water systems during building use.	
	CREDITS ATTAINABLE	3	
	PREREQUISITES	For residential premises with site area larger than 1,000 m <sup>2</sup> , it is required to demonstrate compliance with appropriate planting on site equivalent to at least 20% of the site area.	1
	CREDIT REQUIREMENT	a) Hard landscaping	
		1 credit for using pervious materials for a minimum of 50% of hard landscaped areas.	A1
		b) Soft landscaping	
		1 credit for providing appropriate planting on site equivalent to at least 30% of the site area.	B1
		2 credits for providing appropriate planting on site equivalent to at least 40% of the site area.	
	ASSESSMENT	<p>The Client shall provide a report prepared by a suitably qualified person that outlines the Master Landscape Plan for the site and provides a dialogue that demonstrates how soft landscaping has addressed the guidelines and recommendations provided in the Hong Kong Planning Standards and Guidelines Chapter 4 Section 2 Greenery [1] &amp; PNAP APP-152 Sustainable Building Design Guidelines [2], appropriate to the type and scale of the building development and the immediate surroundings. The report shall detail the landscape treatment of the development including the planting and hard finishes of all landscaped areas, slopes and retaining structures, including but not limited to details of:</p> <ul style="list-style-type: none"> <li>• compliance with existing legislation and administrative measures relevant to preservation of vegetation, including the felling of trees;</li> <li>• trees retained, replanted or removed, and work undertaken to protect existing trees both during construction and permanently;</li> <li>• site formation with specific details of slope treatment;</li> <li>• the choice of finishes in qualitative terms for all hardworks elements, indicating any perceived or quantifiable environmental benefits;</li> <li>• planting plans with the character and planting densities for all softworks elements, details of the species used, and assessment of environmental benefits;</li> <li>• the adequacy of soil depth and drainage for all planted areas;</li> <li>• the method of irrigation used and source of water supply; and</li> <li>• future maintenance provisions.</li> </ul>	B2

1 Hong Kong Planning Standards and Guidelines, Chapter 4 – Recreation, Open Space and Greening.  
[http://www.pland.gov.hk/pland\\_en/tech\\_doc/hkpsg/full/ch4/ch4\\_text.htm](http://www.pland.gov.hk/pland_en/tech_doc/hkpsg/full/ch4/ch4_text.htm)

2 Buildings Department - PNAP APP-152 - Sustainable Building Design Guidelines

a) Hard landscaping

Where it can be demonstrated that a minimum 50% of hard landscaped area (e.g. roadways, surface parking, plazas, pathways, but excluding Emergency Vehicular Access), are pervious and measures are taken to restrict the contamination of ground waters by oil and similar contaminants, the credit shall be awarded.

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b) Soft landscaping

It is expected that due account shall be taken of the plant type and planter designs to minimise watering and maintenance requirements. The species, density, topsoil, fertiliser, pesticide, planting maintenance, etc. should comply with the General Specification for Building Section 25: Landscape, or at least equal equivalent.

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The Client shall demonstrate compliance through quantification of the areas of greenery on the site and any building, including sky gardens, podium areas, roofs and other parts of the building. The soft landscaped calculation method shall follow the criteria set out in PNAP APP-152 [2]. Where the target percentage can be achieved, the credit(s) shall be awarded.

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**BACKGROUND**

In addition to mitigating any damage to site ecology, landscaping strategies can:

- enhance a site's microclimate (trees for shade and windbreaks, ponds and fountains, acoustic barriers, podium with gardens, etc.);
- provide for efficient irrigation (efficient use of direct rainfall, plant selection, water retention, materials in walkways allowing percolation to sub-soil, using well water, drip irrigation systems, etc.); and
- control surface run-off (roof ponds, holding tanks, semi-permeable surfaces on open areas, etc.)

Large expanses of greenery are difficult to secure in densely built city centres. However, the provision of plants on the outside and on rooftops contributes to making the city greener. For example, a building rooftop covered with greenery can significantly reduce surface temperature in summer, compared with bare asphalt or concrete rooftops. Roof greenery also can reduce peak roof runoff and alleviate storm drainage pressure. To protect and improve the built and natural environment, the Government in promoting the construction of green and innovative buildings has identified communal sky gardens and communal podium gardens [3,4].

Water pollution in Hong Kong remains a problem. Measures that mitigate against pollution will help reduce the environmental loading. Criteria for protection of the aquatic environment against water pollution include consideration of all the aquatic components: water quality, hydrology, bottom sediments, and ecology.

3 Buildings Department et al. Joint Practice Note No. 1 Green and Innovative Buildings. October 2004. <http://www.bd.gov.hk/english/documents/joint/JPN01.pdf>

4 Buildings Department et al. Joint Practice Note No. 2 Second Package of Incentives to Promote Green and Innovative Buildings. February 2006. <http://www.bd.gov.hk/english/documents/joint/JPN02.pdf>



Circular Letter No.: 2018.145

Issue Date: 24 April 2018

Application: BEAM Plus NB Version 1.1 & 1.2

Effective Date: 24 April 2018

**SA 7a Landscaping and Planters - Hard Landscaping**

This Circular Letter is purposed to clarify the interpretation of the credit requirements of SA 7a, viz. “Hard landscaping”, which is considered as satisfied when the pervious materials are used:

(a) for at least 50% of the hard landscaped areas as expressly provided in the Manual, and

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(b) such areas with pervious materials must be on grade and constitute a reasonable percentage of the total site area. In this connection, 5% would be considered as meeting the minimum requirement for claiming this credit.

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A handwritten signature in blue ink, appearing to be "KM So", is positioned above a horizontal line.

Mr KM So  
Chairperson of Standards Sub-committee

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## FAQ - NB v1.1 and 1.2

### Site Aspects

#### [SA 2 Local Transport](#)

#### [SA 3 Neighbourhood Amenities](#)

#### [SA 4 Site Design Appraisal](#)

#### [SA 6 Cultural Heritage](#)

#### [SA 7 Landscaping and Planters](#)

**#22. SA 7a, For BEAM Plus New Buildings Version 1.1 and Version 1.2, can hard landscaped areas on top of basement be excluded from this credit?**

No, hard landscaped areas on top of basement cannot be excluded from this credit.

(Released on 23 June 2014)

**#23. SA 7a, For BEAM Plus New Buildings Version 1.1 and 1.2, can the covers for utility facilities (e.g. manholes, septic tanks, soak-away pits and the like) be excluded from the calculation of this credit?**

Yes.

(Released on 26 September 2018)

**#24. SA 7b, For BEAM Plus New Buildings Version 1.2, can the aggregated site coverage of greenery for the following greening features...**

SA 7b, For BEAM Plus New Buildings Version 1.2, can the aggregated site coverage of greenery for the following greening features 1) covered greenery areas accessible to public, occupiers or visitors from adjoining open space, 2) water features, 3) grass paving, 4) planters along the perimeter of an inaccessible roof, 5) vertical greening, 6) landscape-treated greening on slopes/ retaining structures with gradient steeper than 45°C, exceed 6% and 9% for developments with site areas of 1,000 m<sup>2</sup> – 20,000 m<sup>2</sup> and 20,000 m<sup>2</sup> respectively (i.e. shall not be more than 30% of the total required greenery areas as specified in Table 2 of Buildings Department's PNAP APP-152 "Sustainable Building Design Guidelines")?

No. The above greening features shall not be more than 30% of the total required greenery areas as specified in Table 2 of Buildings Department's PNAP APP-152 "Sustainable Building Design Guidelines".

(Released on 2 June 2017)

(Obsolete as of 30 June 2022)

**#25. SA 7b, For BEAM Plus New Buildings Version 1.1 and 1.2, is the credit applicable for project with site area less than 1000m<sup>2</sup> and how can I comply with credit requirements?**

Yes, the credit is applicable for project with site area less than 1000m<sup>2</sup>. The soft landscape provision shall comply with PNAP APP-152 requirements. However, the requirement under Appendix D, item 2 can be omitted (i.e. the requirement of having no more than 30% greening features of the total required greenery areas is not applicable).

(Released on 24 April 2018)

(Obsolete as of 30 June 2022)

#### [SA 8 Microclimate around Buildings](#)

#### [SA 9 Neighbourhood Daylight Access](#)

#### [SA 10 Environmental Management Plan](#)

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Circular Letter No.: 2022.181

Issue Date: 30 June 2022

Application: BEAM Plus NB Version 1.2

Effective Date: 30 June 2022

### **SA 7b Landscaping and Planters - Soft Landscaping**

1. To encourage building development to further preserve or expand urban greenery, this Circular Letter announces the updates on the calculation method of site coverage of greenery for SA 7b under BEAM Plus NB v1.2.
2. The site coverage of greenery that is required under PNAP APP-152 Sustainable Building Design Guidelines shall strictly follow the criteria set out in PNAP APP-152.
3. **For the additional greenery beyond the minimum total site coverage of greenery required under PNAP APP-152, the calculation method of site coverage of greenery shall be in accordance with PNAP APP-152, except otherwise stated below:**
  - i. The minimum site coverage of greenery in the primary zone required in the PNAP APP-152 is not assessed under this credit;
  - ii. The maximum accountable percentage of greening features stated in the PNAP APP-152 Appendix D is not assessed under this credit;
  - iii. Covered greenery areas above the primary zone (measured from 45° projected line taken from the edge of building) in communal areas accessible to the public, occupiers or visitors shall be counted (50% reduction factor applies);
  - iv. Vertical greening within 15m vertical zone from communal areas accessible to the public, occupiers or visitors shall be counted (no reduction factor applies but vertical frames with a height more than 7.5m are not accountable for vertical greening provided by climbing or weeping plants); and
  - v. Planters along the perimeter of an inaccessible roof above the primary zone but within 15m vertical zone from communal areas accessible to public, occupiers or visitors shall be counted (50% reduction factor applies).
4. **In case of residential development with site area less than 1000m<sup>2</sup> or development not for residential use, the credit shall be applicable.** All of the provided greenery shall be regarded as additional greenery when calculating the site coverage of greenery and the calculation method shall refer to paragraph (3) above.

Ir Colin Chung  
Chairperson of Standards Sub-committee

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