Circular Letter No.: 2024.214

Issue Date: 21 June 2024

Application: BEAM Plus NB Version 2.0

Effective Date: 2 October 2024

HWB 12 Biological Contamination

1. The Technical Circular Letter hereby announces an update to the credit content for **HWB 12 Biological Contamination** under BEAM Plus NB v2.0.

2. The aim of the update is to refine the submittal requirement related to contract specifications and drawings for Provisional Assessment (PA) stage.

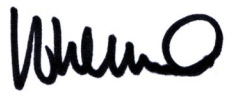
3. The requirements given in Section 1.3 and Section 7.3 of the BEAM Plus NB v2.0 Manual (2023 Edition) are hereby updated with the enclosures in Annex A and Annex B of this Technical Circular Letter:

    - Page Annex A-1 shall replace all contents in Section 1.3 Summary of Credits specified in Page 36 of the Manual; and

    - Pages Annex B-1 to B-2 shall replace all contents in Section 7.3 on HWB 12 specified in Pages 386 to 387 of the Manual.

4. Approved PA projects: For projects that have already completed PA and have certain assessment approach approved, the Applicant may opt to adopt the same assessment criteria for FA or voluntarily comply with this Technical Circular Letter. For the avoidance of doubt, the Applicant shall provide PA evidence (e.g., extract of the PA report, documents submitted for assessment in PA, etc.) in subsequent assessments to support the intention of using the same assessment methodology as in PA.

5. For the ease of reading, the credit content in Pages Annex B-1 to B-2 of this Technical Circular Letter has incorporated the previously published FAQ #204 for HWB 12. The Applicant shall observe the respective FAQ for the issue date.



Ir Victor Cheung
Chairperson of Standards Sub-committee

Annex A:
Updated Credit Content for Section 1.3 under BEAM Plus NB v2.0

	Section	Credit Requirement	Extent of Application	Credit
HWB 10	Artificial Lighting	(a) Artificial lighting in normally occupied spaces 1 credit for achieving the prescribed lighting performance in normally occupied spaces. (b) Artificial lighting in not normally occupied spaces and unoccupied spaces 1 credit for achieving the prescribed lighting performance in not normally occupied spaces and unoccupied spaces.	All buildings	2
HWB 11	Daylight	2 BONUS credits for demonstrating at least 55% of the total area of the studied normally occupied spaces achieves spatial Daylight Autonomy$_{300/50\%}$ ($sDA_{300/50\%}$) and no more than 10% of the same area receives Annual Sunlight Exposure$_{1000,250}$ ($ASE_{1000,250}$).	Residential, office and education buildings	2 BONUS
HWB 12	Biological Contamination	1 credit for complying with the recommendations given in the Code of Practice for Prevention of Legionnaires' Disease 2016/ 2021 Edition in respect of Water Supply Systems, HVAC Systems and other Water Features.	All buildings	1
8	**Innovations and Additions (IA)**			**Maximum 10 BONUS**
IA 1	Innovations and Additions	Present evidence of the application of new practices, technologies and/ or techniques that are (1) not described in this manual; or (2) not market mainstream implementation; or (3) multiple aspect achievement; and the associated benefits in addressing sustainability objectives for new buildings.	All buildings, for innovations that have not been addressed in respective categories of the NB certification	Maximum 10 BONUS

Annex B:
Updated Credit Content for Section 7.3 under BEAM Plus NB v2.0

7 Health and Wellbeing 7.3 Indoor Environmental Quality

HWB 12 Biological Contamination

Extent of Application All buildings

Objective To reduce the risk of biological contamination by adopting appropriate design precautions of the water supply systems, HVAC systems and other water features.

Credits Attainable 1

Credit Requirement 1 credit for complying with the recommendations given in the Code of Practice for Prevention of Legionnaires' Disease 2016/ 2021 Edition [1, 2] in respect of Water Supply Systems, HVAC Systems and other Water Features.

Assessment

1. Water Supply Systems

   Demonstrate compliance, if relevant items are present, with the following sections of the Code of Practice for Prevention of Legionnaires' Disease 2016/ 2021 Edition:

   1.1. Centralised Hot Water Supply Systems – Section 4.4.1.1

   1.2. Cold Water Supply Systems – Section 4.5.1

2. HVAC Systems

   Demonstrate compliance, if relevant items are present, with the following sections of the Code of Practice for Prevention of Legionnaires' Disease 2016/ 2021 Edition.

   2.1. Cooling Tower – Section 4.2.1;

   2.2. Air Handling Unit/ Fan Coil Unit [3] – Section 4.3.1 Items (a) – (d);

   2.3. Air Duct and Air Filters – Section 4.3.2 Items (a) – (c);

   2.4. Humidifiers – Section 4.3.3 Items (a) – (c); and

   2.5. Air Washers – Section 4.3.4 Items (a), (b) and (d).

1 Prevention of Legionnaires' Disease Committee, Hong Kong – Code of Practice for Prevention of Legionnaires' Disease 2016 Edition [ONLINE]. Available at: http://www.emsd.gov.hk/filemanager/en/content_645/COP-PLD_2016.pdf. [Accessed April 2021].

2 Prevention of Legionnaires' Disease Committee, Hong Kong – Code of Practice for Prevention of Legionnaires' Disease 2021 Edition [ONLINE]. Available at: https://www.emsd.gov.hk/filemanager/en/content_645/COP-PLD_2021_en.pdf. [Accessed June 2024].

3 It is noticed from recent submissions that there are several misinterpretations regarding configuration of air break for the drain pipe of AHU/ PAU. For example, many Applicants falsely adopt a U trap to function as an air break. This type of condensate drain in many cases consists of a continuous pipework without any gaps connecting to condensate drainage stacks which however cannot prevent any siphoning or backflow of water.

In order to comply with the COP for Prevention of Legionnaires' Disease, it is essential that the condensate drain-pipe includes an "air break" which serves the purpose of curtailing the spread of Legionella bacteria. In this connection, the Applicant has to submit detailed drawing (e.g. installation details) clearly illustrating the design/ provision of such "air break". Applicants may refer to Figure 6 of the COP for Prevention of Legionnaires' Disease (2016/ 2021 Edition) which displays exemplary designs in this context.

3. Other Water Features

Demonstrate compliance, if relevant items are present, with the following sections of the Code of Practice for Prevention of Legionnaires' Disease 2016/ 2021 Edition:

3.1. Architectural Fountains – Section 4.6.1; and

3.2. Spa Pools (Whirlpools) – Section 4.7.2.

Submittals

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**CA**	**FA/ RFA**
HWB_12_00	BEAM Plus NB submission template for HWB 12	✓	✓	✓
HWB_12_01	/	/	/	/
HWB_12_02	Drawings (e.g. General Notes, schematic diagram, layout) of Water Supply Systems with highlights showing compliance and narratives for the non-applicability of sub-item(s)	✓	✓	✓
HWB_12_03	/	/	/	/
HWB_12_04	Drawings (e.g. General Notes, schematic diagram, layout) of HVAC Systems with highlights showing compliance and narratives for the non-applicability of sub-item(s)	✓	✓	✓
HWB_12_05	/	/	/	/
HWB_12_06	Drawings (e.g. General Notes, schematic diagram, layout) of Other Water Features with highlights showing compliance and narratives for the non-applicability of sub-item(s)	✓	✓	✓
HWB_12_07	Drawing of installation details with highlights showing compliance	✓	✓	✓

Remarks

(a) Additional Information

None

(b) Related Credit

None

