

6	IEQ	6.2 HYGIENE
		IEQ 3 BIOLOGICAL CONTAMINATION
	EXCLUSIONS	Residential buildings.
	OBJECTIVE	Ensure that the design, installation and facilities for operation and maintenance of air conditioning systems, and water systems and features, are such as to reduce the risk of biological contamination.
	CREDITS ATTAINABLE	1
	PREREQUISITES	None.
	CREDIT REQUIREMENT	1 credit for complying with the recommendations given in the Code of Practice - Prevention of Legionnaires Disease, in respect of air-conditioning and ventilation systems, and water systems.
	ASSESSMENT	<p>The Client shall submit a report prepared by a suitably qualified person detailing how the design and installation of the air-conditioning and ventilation systems and equipment meet with the requirements and recommendation contained in the Code of Practice - Prevention of Legionnaires Disease [1], or at least equal equivalent code. The report shall also detail how water supply, particularly hot water supply, and water use in features such as spas, fountains, etc., are designed and installed in compliance with the Code or Practice.</p>
	BACKGROUND	<p>Most cases of legionnaires' disease (LD) are caused by the bacterium <i>Legionella pneumophila</i>. There are many other species of the organism which have been implicated in human disease, but other milder illnesses may be caused by these organisms. All illnesses due to legionella species are known collectively as 'legionellosis'; Pontiac Fever is one of the milder conditions. <i>Legionella pneumophila</i> is found in natural water supplies and in soil. It is also found in many recirculating and water supply systems.</p> <p>Measurements in a newly completed building are unlikely to reveal problems with biological contamination caused by either air-conditioning and ventilation systems, or water systems. Consequently, BEAM requires the confirmation on the design and installation of systems and equipment to reduce the possibility of problems arising during use of the building.</p>

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1 Prevention of Legionnaires' Disease Committee, Electrical and Mechanical Services Department, Hong Kong Government. Code of Practice for the Prevention of Legionnaires' Disease in Hong Kong. 2007.
http://www.emsd.gov.hk/emsd/e_download/pps/code.doc



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Updated Exclusion Clauses for IEQ Credits

1. **Technical Circular Letter No. 2016.134 dated 09 August 2016 will be withdrawn on the effective date.**
2. This Circular Letter clarifies the exclusion clause for the following credits:

Credits	New Exclusions
IEQ P1 IEQ 9	Residential premises, or Premises designed to utilise natural ventilation and without any fresh air provision ¹ .
IEQ 3	Residential premises, or Premises without any provision of air-conditioning equipment.
IEQ 5	Residential premises, or Premises without HVAC system.
IEQ 6	Residential premises, or Premises without any fresh air provision ¹ .
IEQ 7a IEQ 7b	Residential premises without any interior decoration, or Premises without any fresh air provision ¹ and interior decoration.
IEQ 10	Premises with fresh air provision ¹ .
IEQ 11b	Residential premises, or Premises without any future tenant (for example, single owner occupier premises).
IEQ 12	Premises without any enclosed common area in the main circulation route.
IEQ 13a	Normally occupied premises ² without any air-conditioning equipment installed and provided by the project proponent, or without any fresh air provision ¹ .
IEQ 13b	Normally occupied premises ² without any installation of air diffuser in the air-conditioning system.

¹ Fresh air provision means any fresh air equipment such as PAU, AHU, FAU, FAP, FAF, etc.; and/or premises with fresh air louvers, etc.

² Normally occupied premises are enclosed spaces / areas where people normally stay there for more than 1 hour per person per day on average.

Credits	New Exclusions
IEQ 14a	Normally occupied premises ² with fresh air provision ¹ .
IEQ 14b	Normally occupied premises ² with fresh air provision ¹ , or without any air-conditioning equipment installed and provided by the project proponent.
IEQ 16	Residential premises, hotels, apartment and premises where lighting installation will be provided by future tenant such as Retail and F&B ³ .
IEQ 21	Not normally occupied premises ² .



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Chairperson of Standards Sub-committee

³ The clause “For premises to be fitted out by tenants, compliance shall be confirmed if the technical details and contractual arrangements with tenants in respect of lighting installation are deemed to meet the assessment criteria.” in BEAM Plus Manual IEQ 16 becomes not applicable.



FAQ (HWB/ IEQ)

New FAQ

#204. IEQ 3, For BEAM Plus New Buildings Version 1.1 and 1.2 / HWB 12, For BEAM Plus New Buildings Version 2.0, how can the Applicant design the air break along the drain pipe of AHU/ PAU in order to comply with the COP for Prevention of Legionnaires' Disease?

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.

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(Released on 15 December 2023)