

Circular Letter No.: 2019.153

Issue Date: 21 January 2019

Application: BEAM Plus NB Version 1.2

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<u>EU 1, 2 and 6 - Appendix 8.1.2 Performance-based Approach –</u> <u>Baseline Air-Conditioning System</u>

This circular letter clarifies the simulation requirement on baseline air-conditioning system for credits EU 1, 2 and 6 under BEAM Plus New Building v.1.2:

1. Technical Circular Letter No. 2014.122 dated 22 September 2014 is hereby withdrawn.

2. Table below replaces the table in Appendix 8.1.2.

	Public Housing	Private Housing	Industrial, commercial, and other building types with air- conditioned floor area < 14,000sqm	Industrial, commercial, and other building types with air- conditioned floor area \geq 14,000sqm
Cooling Generation	Unitary air- conditioner, non-split-type	Unitary air- conditioner, split-type ¹	Unitary air- conditioner, split- type	Chiller ¹
Air Distribution System	N/A	N/A	Fresh Air Provisions ²	VAV ³
Heat Rejection	Air-cooled	Air-cooled	Air-cooled	Water-cooled ⁴

 TABLE 8.0
 Baseline Air-Conditioning System assessment

3. Footnote:

¹ For buildings with air-conditioned floor area less than 20,000sqm – 2 water-cooled screw chillers sized equally, for buildings with air-conditioned floor area more than 20,000sqm – 2 water cooled centrifugal chillers minimum with chillers added so that no chiller is larger than 2800 kW, all sized equally.

² Applicable if mechanical ventilation is the primary means of providing indoor ventilation for the designed building. The fan power and fresh air flow rate of the mechanical ventilation system should assume to be the same for both baseline and designed case.

³ Reference should be made under paragraph 6.7.2 of the Building Energy Code. The baseline system fan motor power required for a variable air volume air distribution system for a conditioned space should not exceed a limit of 2.1 W per L/s of supply system air flow.

⁴ For buildings with air-conditioned floor area \geq 14,000sqm, water-cooled chiller plus VAV air conditioning system must be used as the baseline building model, except when there is a strong supporting evidence to prove inappropriate application of such baseline, e.g. hygiene requirement in hospitals.

Mr KM So Chairperson of Standards Sub-committee