



Circular Letter No.: 2019.162

Issue Date: 11 September 2019

Application: BEAM Plus NB Version 1.1 & 1.2

Effective Date: All first assessment submission¹ made on or after 11 March 2020

IEQ P1 – Minimum Ventilation Performance

1. It is observed that more developers have opt for the option in developing new buildings with bare shell spaces (i.e. the responsibility of providing the fresh air equipment to supply fresh air into indoor space will rest on the future users/tenants). Under the current assessment guideline, projects with bare shell spaces may not be completely assessed under the current assessment criteria, given that there are no clear guideline on how the ventilation quality and quantity of outdoor air supplying into indoor space can be assessed for these projects.
2. BEAM Society has always taken a pragmatic approach in assessing the minimum ventilation performance of indoor space. To ensure projects with bare shell space meet the objective of the credit and to avoid excessive requirement being applied onto these projects, this Circular Letter hereby provides a clarification on the design and submittal needed for these projects to comply with the credit.
3. On the design requirement, the project proponent shall ensure that there will be adequate fresh air louvre(s) to draw outdoor air into the project's indoor space. The project proponent shall make reference to an authoritative sources, such as the criteria for louvre sizing specified under ASHRAE Fundamentals Handbook, when determining the actual number and size of louvre(s) to be provided at the façade of the development.
4. As for the submittal requirement, the project proponent shall provide the submittal outlined in the chart below:

	<u>Provisional Assessment</u>	<u>Final Assessment</u>
a.	Layout drawing showing the location and size of the fresh air louvre(s) for future duct connection.	
b.	Fresh air calculation ^{2,3} showing that the proposed design of fresh air louvre(s) will be adequate for drawing fresh air into the indoor spaces.	

¹ First assessment submission refers to the date when the initial assessment is formally accepted by BSL. For example, if the project has both PA and FA, then it would be the date when BSL formally accepts the project for PA submission. If the project has only FA, then it will be the date when BSL formally accepts the project for FA submission

² The quantity of fresh air shall be computed based on the criteria stipulated in ASHRAE 62.1

³ A reasonable assumption on occupancy shall be applied when calculating the fresh air quantity.

	<u>Provisional Assessment</u>	<u>Final Assessment</u>
c.	<p>Contract specification detailing the requirements on outdoor air quality measurement for the outdoor air pollutants carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃) and respirable suspended particulate (RSP).</p> <p><i>or</i></p> <p>Outdoor air quality measurements report conducted by a suitably qualified persons to substantiate that the outdoor air pollutants carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃) and respirable suspended particulate (RSP) could conform the IAQ Certification Scheme Good Air Quality level.</p>	<p>Outdoor air quality measurements report conducted by a suitably qualified persons to substantiate that the outdoor air pollutants carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃) and respirable suspended particulate (RSP) could conform the IAQ Certification Scheme Good Air Quality level.</p>
d.		<p>Declaration letter endorsed by the project proponent declaring that the project will <u>NOT</u> be provided with fresh air equipment and only louvre(s) for fresh air intake will be provided.</p> <p><i>or</i></p> <p>Tenant guideline specifying the recommended amount of fresh air⁴ to be provided into the indoor space.</p>

5. Approved PA Projects: For projects that have already completed PA and have certain design and assessment approach approved, the Applicant may opt to adopt the same assessment criteria for FA or voluntarily comply with this Technical Circular. For the avoidance of doubt, the Applicant shall provide PA evidences (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.

Mr KM So
Chairperson of Standards Sub-committee

⁴ The recommended amount of fresh air shall be calculated based on ASHRAE 62.1.