

## A03.1 - Option 2: Naturally ventilated spaces

### Technical Document

WELL Building Standard™ version 2 (WELL v2™), Q1 2022 addenda



#### HOW TO USE THIS DOCUMENT:

This document is intended to serve as a guide on how to create a project **technical document** to **minimize indoor air quality issues through the provision of adequate ventilation**.

This document is meant to demonstrate an acceptable degree of detail for

- documentation submission
- precertification documentation submission

The Feature cannot be demonstrated solely through a confirmation that the requirements have been or will be implemented. The level of detail is up to the discretion of the project team, but the documents must include specific details demonstrating that the actual policies/protocols have been enacted in the project boundary.

This document and similar tools are intended to assist projects in their pursuit of WELL v2 but use of this document and/or similar tools are in no way a guarantee of achievement of any rating, certification or other designation, and no representation or warranty is made regarding the likelihood of achieving any rating, certification or other designation, and IWBI shall have no liability resulting from the use or content of this document or similar tools or resources or from any action taken or inaction occurring in reliance on this document or similar tools or resources.

Note: The below document is based on the Q1 2022 addenda of the WELL Building Standard™ version 2 (WELL v2™). Project teams are required to implement the feature requirements from the addenda version assigned to their project or any more recent addenda version.

## FEATURE PART REQUIREMENTS:

### *For All Spaces*

For naturally ventilated projects with no mechanical ventilation, the following requirements are met:

- a. *One or more of the following design criteria, which must describe ventilation rates for at least 90% of the project area:*
  1. *Natural Ventilation Procedure in ASHRAE 62.1-2010 or any more recent version.*
  2. *CIBSE AM10: Natural Ventilation in Non-Domestic Buildings (2005 or any more recent version) Section 2.4 – Natural ventilation strategies and Chapter 4 – Design Calculations.*
  3. *AS 1668.4-2012 or any more recent version.*
  4. *Any reference in Option 1, which describes natural ventilation procedures.*
- b. *Vents and windows used to meet the ventilation requirements in one of the standards mentioned above are permanently open or have controls to prevent their closure during periods of occupancy. (Operable windows not used in ventilation calculations may be user operated.)*
- c. *Outdoor air meets the following thresholds as an average for the previous year:*
  1.  *$PM_{2.5}$  less than  $15 \mu\text{g}/\text{m}^3$ .*
  2.  *$PM_{10}$  less than  $30 \mu\text{g}/\text{m}^3$ .*

### WELL Core Guidance:

Meet these requirements in the whole building.

The below sample documentation is intended to provide guidance in creating Naturally Ventilated Spaces technical document. It is not a template. You may note included components that are not required to demonstrate compliance with this Feature.

#### Example document for Feature Part 1, Option 2

EPA Outdoor Air Quality – Cities and Counties (<https://www.epa.gov/air-trends/air-quality-cities-and-counties>)

Project location: Napa, California, USA

Avg Annual PM2.5: 5.9 µg/m<sup>3</sup> (< 15 µg/m<sup>3</sup> threshold)

Avg Annual PM10: 29 µg/m<sup>3</sup> (< 30 µg/m<sup>3</sup> threshold)

	Core Based Statistical Area (CBSA)	2010 Popula	CBSA C	CO	Pb	NO2	NO2	O3	PM10	PM2.5	PM2.5	SO2
59	Muskegon, MI	172188	34740	ND	ND	ND	ND	0.068	ND	IN	IN	ND
60	Muskogee, OK	70990	34780	ND	ND	ND	ND	ND	173	IN	IN	IN
61	Myrtle Beach-Conway-North Myrtle Beac	376722	34820	ND	ND	ND	ND	0.064	ND	IN	IN	60
62	Napa, CA	136484	34900	1	ND	5	29	0.06	29	5.9	14	ND
63	Naples-Immokalee-Marco Island, FL	321520	34940	ND	ND	ND	ND	0.059	ND	ND	ND	ND
64	Nashville-Davidson--Murfreesboro--Frank	1670890	34980	1	ND	14	51	0.066	32	9.2	18	IN
65	Natchez, MS-LA	53119	35020	ND	ND	ND	ND	ND	ND	IN	IN	ND

#### TIPS FOR MULTIPLE LOCATIONS

- For organizations participating in WELL at Scale, this technical document is categorized as Shareable. It may be shared across multiple projects, as long as they all meet the strategies that are outlined in the document.