

A03.1 - Option 3:

Naturally ventilated spaces in areas with elevated particulate matter

Technical Document

WELL Building Standard™ version 2 (WELL v2™), Q1 2021 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 a 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 requirements 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 or designation, and no representation or warranty is made regarding the likelihood of achieving any rating or designation.

Note: The below document is based on the Q1 2021 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

Certification note: Projects pursuing this strategy are limited in WELL Certification level to Silver, regardless of total points achieved.

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:*
 - a. *Natural Ventilation Procedure in ASHRAE 62.1-2010 or any more recent version.*
 - b. *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.*
 - c. *AS 1668.4-2012 or any more recent version.*
 - d. *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:*
 - a. *PM_{2.5} less than 35 µg/m³.*
 - b. *PM₁₀ less than 70 µg/m³.*

WELL Core Guidance:

Meet these requirements in the whole building.

The below sample documentation is intended to provide guidance in creating a 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 3

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

Project location: Charleston, South Carolina, USA

Avg Annual PM2.5: 6.9 µg/m³ (< 35 µg/m³ threshold)

Avg Annual PM10: 54 µg/m³ (< 70 µg/m³ threshold)

Core Based Statistical Area (CBSA)	2010 Popula	CBSA C	CO	Pb	NO2	NO2	O3	PM10	PM2.5	PM2.5	SO2
Cedar Rapids, IA	257940	16300	ND	ND	ND	ND	0.06	38	7.9	20	25
Centralia, WA	75455	16500	ND	ND	ND	ND	ND	ND	IN	IN	ND
Chambersburg-Waynesboro, PA	149618	16540	ND	ND	ND	ND	0.059	ND	ND	ND	ND
Champaign-Urbana, IL	231891	16580	IN	ND	ND	ND	0.062	ND	7.8	20	4
Charleston, WV	227078	16620	1	ND	ND	ND	0.065	ND	7.5	14	6
Charleston-North Charleston, SC	664607	16700	ND	ND	IN	IN	0.064	54	6.9	14	14
Charlotte-Concord-Gastonia, NC-SC	2217012	16740	1	ND	11	37	0.074	36	9.5	18	3
Charlottesville, VA	218705	16820	ND	ND	ND	ND	0.057	ND	6.4	13	ND
Chattanooga, TN-GA	528143	16860	ND	ND	ND	ND	0.065	ND	9	19	ND

TIPS FOR MULTIPLE LOCATIONS

- Organizations participating in WELL Portfolio or the multiple projects pathway can submit a Guideline for this feature part, as well as a technical document for each audited project. This Guideline must outline the feature requirements, at minimum, and it can be shared across multiple projects as a means to provide guidance for compliance. A subset of audited projects must also each submit their own technical document that demonstrates compliance with the feature requirements.