

T01.1 - Option 1: Performance verified environmental conditions

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 provide a thermal environment that the majority of building users find acceptable.

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 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 except Commercial Kitchen Spaces:

The following requirements are met, as applicable:

- Mechanically conditioned regularly occupied spaces maintain thermal comfort conditions of PMV +/- 0.5 for at least 90% of regularly occupied spaces.
- Naturally conditioned regularly occupied spaces meet all the following conditions:

	Prevailing Mean Outdoor Temperature, $t_{pma(out)}$	Indoor Operative Temperature	Notes
Minimum	50 °F	$t_{pma(out)} \times 0.31 + 47.9$ °F	N/A
Maximum	92 °F	$t_{pma(out)} \times 0.31 + 60.5$ °F	Occupant-controlled elevated air speed may be used to increase this maximum per ASHRAE 55-2013

- Mixed-mode-conditioned spaces meet the requirements for both mechanically and naturally conditioned spaces, when each is in operation

Note:

Spaces with multiple occupant types may use the occupant characteristics of PMV—metabolic rate and clothing value—for the majority occupant type (e.g., a space with 30 diners and 5 servers may use the diners' metabolic rates and clothing values to determine the PMV for that space).

WELL Core Guidance:

Meet these requirements in the whole building. Mechanically conditioned or mixed-mode ventilated spaces must provide heating and cooling capacity in leased spaces but are not required to install ducts in leased spaces. Performance testing will be conducted in regularly occupied non-leased spaces, if present.



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 1 Part 1 – Option 1

[Project name] Performance Verified Environmental Conditions

Project description: A 4-story office building.

Project location: San Francisco, CA, USA

Ventilation: Mixed mode

Modes of Conditioning: Cooling and heating.

PMV targets when mechanical ventilation is being used in all spaces:

- PMV range: -0.5 to 0.5
- At least 90% of occupied hours
- At least 90% of regularly occupied spaces

Temperature thresholds when natural ventilation is being used in all spaces:

Temperatures must remain within the ranges set in the table in [T01.1 Option 1.b](#) (which gives formulas for temperatures relative to the outdoor temperature.)

Assumptions:

Location	Season	Clo value	Met value
Office	Heating	1.0	1.1
Office	Cooling	0.7	1.1

Source of outdoor air temperature data: www.weather.com

[Note, this section is optional]

For the Performance Testing Agent in regards to temperatures on the day of testing:

Outdoor design temperatures for meeting PMV requirements if mechanical system is being used during testing:

- Maximum: *[PROVIDE MAXIMUM]*
- Minimum: *[PROVIDE MINIMUM]*
- Data is taken from: *[PROVIDE SOURCE OF DATA]*

If natural ventilation system is being used during testing, please use guidance specified in the [“Verification Tab” of T01.1 Option 1](#): *The average of the mean daily outdoor temperature of the previous 7 days. (The mean daily outdoor temperature is the average of at least two temperatures, measured at evenly spaced intervals over a 24-hr period.)*

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.