# MEP's Letter of Assurance

## Instructions

Education Facilities

WELL Certification is determined by onsite Performance Verification and documentation, including Letters of Assurance from the appropriate professionals overseeing the implementation of a specific WELL feature and component parts during design, construction or operations. The template should be completed, signed and submitted as part of the documentation package.

1. Place a checkmark at every part completed and leave blank those that are not being pursued or being completed by another team member.
2. Initial every feature completed and leave blank those that are not being pursued or being completed by another team member.
3. Sign and date at the bottom of this letter.

If an individual other than the MEP is responsible for any of the requirements contained in this Letter of Assurance, he/she is permitted to sign off on the respective requirements but must complete a separate Letter of Assurance for those specific requirements. This individual should submit a different copy of this form and check the boxes as it pertains to his/her own responsibility. On his/her own Letter of Assurance form(s), this individual should sign and complete the final page and include a description of his/her role on the project next to his/her signature.

| AIR | *Check* | *Initials* |
|---|---|---|
| 03 Ventilation effectiveness | | |

This project is designed to meet the parts selected below (reproduced from the WELL Building Standard):

### PART 1: Ventilation Design ☐

One of the following requirements is met for all spaces:

a. Ventilation rates comply with all requirements set in ASHRAE 62.1-2013 (Ventilation Rate Procedure or IAQ Procedure).

b. Projects comply with all requirements set in any procedure in ASHRAE 62.1-2013 (including the Natural Ventilation Procedure) and demonstrate that ambient air quality within 1.6 km [1 mi] of the building is compliant with either the U.S. EPA's NAAQS or passes the Air Quality Standards feature in the WELL Building Standard for at least 95% of all hours in the previous year.

### PART 2: Demand Controlled Ventilation ☐

For all spaces 46.5 m² [500 ft²] or larger with an actual or expected occupant density greater than 25 people per 93 m² [1,000 ft²], one of the following requirements is met:

a. A demand controlled ventilation system regulates the ventilation rate of outdoor air to keep carbon dioxide levels in the space below 800 ppm (measured at 1.2-1.8 m [4-6 ft] above the floor).

b. Projects that have met the Operable windows feature demonstrate that natural ventilation is sufficient to keep carbon dioxide levels below 800 ppm at maximum intended occupancies (measured at 1.2-1.8 m [4-6 ft] above the floor).

### PART 3: System Balancing ☐

After the HVAC system is installed, the following requirement is met:

a. After substantial completion and prior to occupancy, the HVAC system has (within the last 5 years), or is scheduled to, undergo testing and balancing.

## AIR

*Check* *Initials*

### 05 Air filtration

This project is designed to meet the parts selected below (reproduced from the WELL Building Standard):

#### PART 1: Filter Accommodation

If recirculated air is used, the following requirements are met in ventilation assemblies in the main air ducts for recirculated air:

a. Rack space is available and rack location identified for future implementation of carbon filters or combination particle/carbon filters.

b. The mechanical system is sized to accommodate the additional filters.

#### PART 2: Particle Filtration

One of the following requirements is met:

a. MERV 13 (or higher) media filters are used in the ventilation system to filter outdoor air.

b. Project demonstrates that for 95% of all hours in a calendar year, ambient outdoor $PM_{10}$ and $PM_{2.5}$ levels measured within 1.6 km [1 mi] of the building are below the limits set in the WELL Air Quality Standards feature.

### 11 Fundamental material safety

This project is designed to meet the parts selected below (reproduced from the WELL Building Standard):

#### PART 1: Asbestos and Lead Restriction

All newly-installed building materials meet the following materials composition requirements:

a. No asbestos.

b. Not more than a weighted average of 0.25% lead in wetted surfaces of pipes, pipe fittings, plumbing fittings, and fixtures, and 0.20% for solder or flux used in plumbing for water intended for human consumption.

c. Not more than 100 ppm (by weight) added lead in all other building materials. For door hardware, project teams must document attempt to meet the requirement and demonstrate a petition or a formal request has been filed with manufacturers who were unable to meet their needs.

#### PART 5: Mercury Limitation

Mercury-containing equipment and devices are restricted in accordance with the below guidelines:

a. Project does not specify or install new mercury containing thermometers, switches and electrical relays.

b. Project does not install any lamps not compliant with the low-mercury limits specified in Appendix C, Table A5. Project develops a plan to upgrade any existing non-compliant lamps to low-mercury or mercury-free lamps.

c. Illuminated exit signs only use Light-Emitting Diode (LED) or Light-Emitting Capacitor (LEC) lamps.

d. No mercury vapor or probe-start metal halide high intensity discharge lamps are in use.

### 16 Humidity control

This project is designed to meet the parts selected below (reproduced from the WELL Building Standard):

#### PART 1: Relative Humidity

At least one of the following is required:

a. A ventilation system with the capability to maintain relative humidity between 30% to 50% at all times by adding or removing moisture from the air.

b. Modeled humidity levels in the space are within 30% to 50% for at least 95% of all business hours of the year. Buildings in climates with narrow humidity ranges are encouraged to pursue this option.

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### PART 2: Shower Moisture Barrier

The following is required between showers and changing rooms, if present:

a. An airlock or ventilation barrier.

## 18 Air quality monitoring and feedback

This project is designed to meet the parts selected below (reproduced from the WELL Building Standard):

### PART 1: Indoor Air Monitoring

Monitors measure 2 of the following pollutants in a regularly occupied or common space (minimum one per floor) within the building, at intervals no longer than once an hour (measured at 1.2-1.8 m [4-6 ft] above the floor), and results are annually transmitted to the IWBI:

a. Particle count (resolution 35,000 counts per $m^3$ [1,000 counts per $ft^3$] or finer) or particle mass (resolution 10 $\mu g/m^3$ or finer).

b. Carbon dioxide (resolution 25 ppm or finer).

c. Ozone (resolution 10 ppb or finer).

## 20 Outdoor air systems

This project is designed to meet the parts selected below (reproduced from the WELL Building Standard):

### PART 1: Dedicated Outdoor Air Systems

Dedicated outdoor air systems are used for heating and/or cooling systems and verified as being adequate through one of the following:

a. The system complies with local codes or standards regarding dedicated outdoor air systems.

b. A detailed design review of the proposed system is conducted by an independent, qualified and registered professional mechanical engineer (not employed or compensated by the mechanical engineer on record). The review addresses thermal comfort (temperature, humidity, air velocity, etc.) and ventilation rates, as well as overall serviceability and system reliability. Report must demonstrate satisfactory compliance with ventilation standards used in Feature 03 Ventilation effectiveness.

## 21 Displacement ventilation

This project is designed to meet the parts selected below (reproduced from the WELL Building Standard):

### PART 1: Displacement Ventilation Design and Application

Projects implement a displacement ventilation system for heating and/or cooling in which one of the following is met:

a. Low side wall air distribution with the air supply temperature slightly cooler or warmer than the desired space temperature. The system must use the System Performance Evaluation and ASHRAE Guidelines RP-949 as the basis for design.

b. Underfloor Air Distribution (UFAD) with the air supply temperature slightly cooler or warmer than the desired space temperature. This system must use ASHRAE's UFAD Guide (Design, Construction and Operations of Underfloor Air Distribution Systems) as the basis of design. Displacement ventilation applied as part of an underfloor air distribution system must be installed at a raised floor height whereby the underfloor area can be cleaned on an annual basis.

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### PART 2: System Performance

The following requirements are met:

a. A Computational Fluid Dynamics (CFD) analysis is conducted for the displacement ventilation system.

b. The displacement ventilation system meets ASHRAE 55-2013 (Thermal Environmental Conditions for Human Occupancy) for comfort for at least 75% of all regularly occupied space.

## 23 Advanced air purification

This project is designed to meet the parts selected below (reproduced from the WELL Building Standard):

### PART 1: Carbon Filtration

To reduce VOCs in the indoor air, buildings which recirculate air use one of the following methods:

a. Activated carbon filters or combination particulate/carbon filters in the main air ducts to filter recirculated air. Replacement is required as recommended by the manufacturer.

b. A standalone air purifier with a carbon filter used in all regularly occupied spaces. Purifiers must be sized appropriately to the spaces they are serving. Filter replacement is required as recommended by the manufacturer.

### PART 2: Air Sanitization

Spaces with more than 10 regular occupants, within buildings that recirculate air, use one of the following treatments or technologies to treat the recirculated air, either integrated within the central ventilation system or as a standalone device:

a. Ultraviolet germicidal irradiation.

b. Photocatalytic oxidation.

## 24 Combustion minimization

This project is designed to meet the parts selected below (reproduced from the WELL Building Standard):

### PART 2: Low-Emission Combustion Sources

All combustion equipment used in the project for heating, cooling, water-heating, process heating or power generation (whether primary or back-up) must meet California's South Coast Air Quality Management District rules for pollution:

a. Internal combustion engines.

b. Furnaces.

c. Boilers, steam generators and process heaters.

d. Water heaters.

| WATER | Check | Initials |
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## 36 Water treatment

This project is designed to meet the parts selected below (reproduced from the WELL Building Standard):

### PART 1: Organic Chemical Removal

All water being delivered to the project area for human consumption is treated with the following:

a. Activated carbon filter.

## WATER

*Check* *Initials*

### PART 2: Sediment Filter ☐

All water being delivered to the project area for human consumption is treated with the following:

a. Filter rated to remove suspended solids with pore size 1.5 µm or less.

### PART 3: Microbial Elimination ☐

All water being delivered to the project area for human consumption is treated with one of the following:

a. UVGI water sanitation.

b. Filter rated by the NSF to remove microbial cysts.

## LIGHT

*Check* *Initials*

### 60 Automated shading and dimming controls ☐

This project is designed to meet the parts selected below (reproduced from the WELL Building Standard):

### PART 1: Automated Sunlight Control ☐

All windows larger than 0.55 $m^2$ [6 $ft^2$] have the following:

a. Shading devices that automatically engage when light sensors indicate that sunlight could contribute to glare at workstations and other seating areas.

### PART 2: Responsive Light Control ☐

The following requirements are met in all major workspace areas:

a. All lighting except decorative fixtures is programmed using occupancy sensors to automatically dim to 20% or less (or switch off) when the zone is unoccupied.

b. All lighting except decorative fixtures has the capacity and is programmed to dim continuously in response to daylight.

## COMFORT

*Check* *Initials*

### 76 Thermal comfort ☐

This project is designed to meet the parts selected below (reproduced from the WELL Building Standard):

### PART 1: Ventilated Thermal Environment ☐

All spaces in mechanically-ventilated projects (including circulation areas) meet the design, operating and performance criteria:

a. ASHRAE Standard 55-2013 Section 5.3, Standard Comfort Zone Compliance.

### PART 2: Natural Thermal Adaptation ☐

All spaces in naturally-conditioned projects meet the following criteria:

a. ASHRAE Standard 55-2013 Section 5.4, Adaptive Comfort Model.

## COMFORT

*Check* *Initials*

### 83 Radiant thermal comfort

This project is designed to meet the parts selected below (reproduced from the WELL Building Standard):

#### PART 1: Lobbies and Other Common Spaces ☐

All lobbies and other common spaces meet the requirements set forth in ASHRAE Standard 55-2013 for thermal comfort through the use of one of the following systems:

a. Hydronic radiant heating and/or cooling systems.

b. Electric radiant systems.

#### PART 2: Offices and Other Regularly Occupied Spaces ☐

At least 50% of the floor area in all offices and other regularly occupied spaces meets the requirements set forth in ASHRAE Standard 55-2013 for thermal comfort through the use of one of the following systems:

a. Hydronic radiant heating and/or cooling systems.

b. Electric radiant systems.

By signing below, I represent that, to the best of my knowledge, all of the responses provided on this form are accurate and made in good faith.

Printed Name: _____ Company: _____

Signature: _____ Date: _____

If the individual using this form is not in the role of MEP, provide a description of the individual's project role, including justification of their ability to sign off on the above requirements, here:

Project Role: _____

Explanation: _____

_____