



Indoor Air & Water Quality Policy for 100 Federal Street

Effective Date: December 8, 2020

i. Management & Maintenance

1. Pollutant Source Management
 - a. Properly seal doors, floor and windows
 - b. Regularly check for and eliminate mold
 - c. Install appliances to vent outside
 - d. Dilute and remove pollutants through ventilation
 - e. Maintain positive pressure
2. Moisture Management
 - a. Use moisture tolerant materials
 - b. Set up systems to divert water away from building
3. Enforce Building-Wide Smoke Free Policy
4. Indoor Air Best Practices
 - a. Maintain interior plants (watering, pruning, etc.) where necessary
 - b. Regularly dispose garbage and other waste
 - c. Store foods hygienically, including refrigeration where necessary
 - d. Prohibit products/other sources of harmful or bothersome odors and contaminants
5. Management Closures & Reductions in Occupancy
 - a. The building will be assessed for mold, excess moisture, legionella and any identified issues will be remediated
 - b. If the HVAC system has not been active for two (2) weeks or more, it should be operated for 48-72 hours to “flush out” the system
 - c. After the “flush out” period, filters should be examined and replaced if necessary
 - d. If odors are detected during the “flush out” period, identify the source and remediate any residual mold
 - e. Develop a schedule for weekly inspection of the HVAC system for the first month of occupancy. Inspections can gradually be reduced to monthly or quarterly depending on maintenance needs

ii. Heating, Ventilation & Air Conditioning

- f. Ventilation
- g. A certified engineering professional shall assess each ventilation system in regards to the following:
- h. Ability to change ventilation needs based on CO2 levels
- i. Air changes/hour (ACH) capacity

- j. Opportunities to increase the outdoor air supply and decrease recirculation of air
- k. Impacts of ventilation adjustments on energy use, thermal comfort and maintenance needs
- l. Enhancements
- m. Ensure ventilation system implements 30% higher ventilation levels than those outlined in the relevant ASHRAE ANSI Standards, as applicable to the building:
- n. 62.1 – 2019 Commercial Buildings
- o. 62.2 – 2019 Residential Buildings
- p. If supporting 30% higher ventilation levels than those outlined in the relevant ASHRAE ANSI Standards is not possible, ensure that a minimum of one of the following ventilation levels are met:
- q. People Outdoor Air Rate (R_p): 10 cfm/person or 5L/s*person
- r. Area Outdoor Air Rate (R_a): 0.18 cfm/ft² or 0.9L/s*person
- s. Combined Outdoor Air Rate: 22cfm/person or 10.4L/s*person
- t. Avoid the blockage of ventilation supplies, exhausts and other grills
- u. Demonstrate prioritization of natural ventilation techniques, where applicable, that take into account location, climate and outdoor air quality, which can include any of the following:
- v. Operable windows
- w. Doors to the outside
- x. Other intentional devices in the building designed for ventilation through thermal, wind or diffusion effects
- y. Provide separate source ventilation for all areas that include the use or storage of chemical products that do not meet the below qualifying standards:
- z. Green Seal
- aa. California Code of Regulations
- bb. EcoLogo
- cc. Filtration
- dd. A certified engineering professional shall assess each filter in regards to the following:
- ee. The efficacy of current air filtration practices in removing particulates from the indoor air
- ff. Applicable strategies for increasing air filtration as needed
- gg. Base Building AHUs

hh. Upgrade all base building AHU filtration to minimum of MERV-13

iii. Control Systems

1. Automation System/BMS

- a. Establish an indoor air quality notification system to alert building management of potential issues

iv. Procurement

6. Product Categories & Applicable Standards

- a. Ensure all new products and materials procured within the building meet the required thresholds from at least five (5) of the product categories below. For each product category selected, ensure products and materials are either naturally low-emitting products (stones, ceramics, concrete, untreated solid wood) or meet the applicable certification and testing standards below:

i. Product Categories

1. Interior Insulation: 100% of insulation
2. **Flooring Systems:** 100% of all systems
3. **Ceiling Systems:** 90% of systems by square feet
4. **Wall Paneling:** 100% of all paneling, including but not limited to interior wall assemblies, gypsum board, doors, frames, wall coverings, window systems and interior surfaces of exterior walls
5. **Paints & Coatings:** 90% by volume for emissions and 100% for VOC content of paints and coatings applied on-site and used on the interior of the air barrier
6. **Furniture:** 90% by cost of furniture
7. **Composite Wood:** 100% of composite wood for cabinetry, excluding flooring, ceiling, wall panels or furniture

ii. Standards

1. UL GREENGUARD Gold (accepted for all categories' VOC emission requirements except Composite Wood)
2. California Department of Public Health Standard Method V1.2 2017 (accepted for all categories' VOC emissions requirements except Furniture and Composite Wood)
3. California Air Resources Board (CARB) 2007 Suggested Control Measure (SCM) for Architectural Coatings (accepted for Paints and Coatings VOC content requirements)
4. California Air Resources Board (CARB) requirements for ultra-low-emitting formaldehyde (ULEF) resins or no-added formaldehyde based resins (accepted for Composite Wood)

5. South Coast Air Quality Management District SCAQMD Rule 1113 (accepted for Paints and Coatings VOC content requirements)
6. South Coast Air Quality Management District SCAQMD Rule 1168 (accepted for Adhesives and Sealants VOC content requirements)
7. ANSI/BIFMA e3 2019 credits 7.6.1, 7.6.2 and 7.6.3 (accepted for Furniture)
8. EPA TSCA Title VI for ultra-low-emitting formaldehyde (ULEF) resins or no-added formaldehyde resins (NAF) (accepted for Composite Wood)

v. Construction & Renovations

- b. General
- c. All construction and renovation projects must manage indoor air quality prior to occupancy. Minimum air quality control categories and strategies include:
 - d. Moisture
 - e. Store all absorbent products and materials separately in areas that are protected from dust and moisture
 - f. Avoid enclosing wet materials during construction
 - g. Particulates
 - h. Protect permanently installed ventilation systems during construction
 - i. Employ entryway systems at all construction site entrances and exits
 - j. VOCs
 - k. Store VOCs separately from absorbent products and materials
 - l. Install all possible paints/coating and adhesives and sealants prior to absorbent products and materials
- m. Outdoor Emissions
- n. Develop a plan to protect occupied spaces from outdoor fumes generated by construction activities
- o. Tobacco
- p. Prohibit smoking within the construction site
- q. Noise & Vibrations
- r. Reduce noise and vibration from construction equipment
- s. Ensure construction crews wear PPE

