**INDOOR WATER USE**

**PRESCRIPTIVE APPROACH**

Each fixture must not exceed the maximum flow rates in CalGreen Table 5.303.2.2. and 5.303.2.3 summarized below:

City and County of San Francisco Green Building Submittal:

**“Other” Non-residential Additions, Alterations, or “Other” New Construction**

**REQUIREMENTS**

|  |  |  |
| --- | --- | --- |
| **Fixture Type** | **Maximum Prescriptive Flow**  **Rate** | **Referenced Standard from California Plumbing Code Table 1401.1** |
| **Showerheads2** | 2 gpm @ 80 psi | n/a |
| **Lavatory faucets - nonresidential** | 0.4 gpm @ 60 psi | ASME A112.18.1/CSA B125.1 |
| **Kitchen faucets** | 1.8 gpm @ 60 psi | n/a |
| **Wash fountains** | 1.8 [rim space (in.)/20 gpm @  60 psi] | n/a |
| **Metering faucets** | .20 gallons/cycle | ASME A112.18.1/CSA B125.1 |
| **Metering faucets for wash fountains** | .20 [rim space (in.)/20 gpm @  60 psi] | n/a |
| **Tank-type water closets** | 1  EPA WaterSense Certified | U.S. EPA WaterSense Tank-Type High-Efficiency Toilet Specification |
| **Flushometer valve water closets** | 1.28 gallons/flush1 | ASME A112.19.2/CSA B45.1  - 1.28 gal (4.8 L) |
| **Urinals** | 0.5 gallons/flush | ASME A112.19.2/CSA B45.1  – 0.5 gal (1.9 L) |

**VERIFICATION**

1.28 gallons/flush and

**Instructions to applicant:**

Check the box by each measure to indicate that you intend to comply with the listed requirement. For each requirement, use the “Plan Set Location” column to indicate where in the submittal documents compliance with the requirement can be verified. (If items in the “Reference” column are not applicable, indicate “N/A.”)

An abbreviated summary of each requirement is included for reference. Projects seeking LEED certification may use the C-3 “Submittal for LEED Projects” as an alternative to this form. Projects required to meet a

LEED standard must use C-3 “Submittal for LEED Projects”.

**Instructions:**

Indicate below which professional(s) are responsible for ensuring green building requirements are met. **FINAL COMPLIANCE VERIFICATION form will be required prior to Certificate of Completion**.

Project Name

|  |  |  |  |
| --- | --- | --- | --- |
| **Required Measures** | | | **Reference**  **(Indicate Plan Set Sheet & Detail, or Specification, where applicable)** |
| **Type of Project:** | **Other New**  **Non-Residential** | **Addition**  **≥1,000 sq ft**  **≥$200,0003** |  |
| **Construction Waste Management** – 100% of mixed debris must be transported by a registered hauler to a registered facility and be processed for recycling, in compliance with the San Francisco Construction & Demolition Debris Ordinance | ● | ● |  |
| **Recycling by Occupants:** Provide adequate space and equal access for storage, collection and loading of compostable, recyclable and landfill materials. - See Administrative Bulletin 088. | ● | ● |  |
| **Energy Efficiency:** Demonstrate compliance with California Energy Code, Title 24 Part 6 (2013). | ● | ● |  |
| **Construction Site Runoff Pollution Prevention:** Provide a construction site Stormwater  Pollution Prevention Plan (CalGreen 5.106.1) | ● | If applicable |  |
| **Stormwater Control Plan:** Projects disturbing ≥ 5,000 square feet must implement a Stormwater  Control Plan meeting SFPUC Stormwater Design Guidelines. | ● | If applicable |  |
| **Water Efficient Irrigation -** Projects that include ≥ 1,000 square feet of new or modified landscape must comply with the San Francisco Water Efficient Irrigation Ordinance. | ● | If applicable |  |
| **Bicycle parking:** Provide short-term and long-term bicycle parking for 5% of total motorized parking ca- pacity each, or meet San Francisco Planning Code Sec 155, whichever is greater. | ● | Applicable if 10 more more parking stalls are added. |  |
| **Fuel efficient vehicle and carpool parking:** Provide stall marking for low-emitting, fuel efficient, and carpool/van pool vehicles; approximately 8% of total spaces. | ● | Applicable if 10 more more parking stalls are added. |  |
| **Light pollution reduction:** Meet California Energy Code minimum requirements for Lighting Zones  1-4, with Backlight/Uplight/Glare ratings meeting CalGreen Table 5.106.8. Exemptions of California Energy  Code Section 147 apply. Emergency lighting exempt. | ● | n/r |  |
| **Water Meters:** Provide submeters for spaces projected to consume > 1,000 gal/day, or > 100 gal/day if in buildings over 50,000 sq. ft. | ● | Limited to area of addition only |  |
| **Indoor Water Efficiency:** Reduce use of potable water for newly installed fixtures and fittings as summarized in CalGreen Table 5.303.2.2 and 5.303.2.3 (See “Indoor Water Efficiency” at left.) Replace all noncompliant fixtures in project area. | ● | ● |  |
| **Commissioning:** For new buildings greater than 10,000 square feet, commissioning shall be included in the design and construction of the project to verify that the building systems and components meet the owner’s project requirements.  **OR** for buildings less than 10,000 square feet, as well as newly installed equipment in additions or altera- tions, testing and adjusting is required. | ●  *OR*  ● | ● (Testing & Adjusting) |  |
| **Protect duct openings and mechanical equipment during construction** Limit use of permanent HVAC during construction to conditioning necessary for material and equipment installation. If permanent HVAC is used during construction, install MERV-8 filters on returns, and replace all filters immediately prior to occupancy, or, if the building is occupied during alteration, at the conclusion of construction. | ● | ● |  |
| **Adhesives, sealants, and caulks:** Comply with VOC limits in SCAQMD Rule 1168 VOC limits and  California Code of Regulations Title 17 for aerosol adhesives. | ● | ● |  |
| **Paints and coatings:** Comply with VOC limits in the Air Resources Board Architectural Coatings  Suggested Control Measure and California Code of Regulations Title 17 for aerosol paints. | ● | ● |  |
| **Carpet:** All carpet must meet one of the following:  1. Carpet and Rug Institute Green Label Plus Program,  2. California Department of Public Health Standard Practice for the testing of VOCs (Specification 01350),  3. NSF/ANSI 140 at the Gold level,  4. Scientific Certifications Systems Sustainable Choice, OR  5. California Collaborative for High Performance Schools EQ 2.2 and listed in the CHPS High Performance  Product Database  AND carpet cushion must meet Carpet and Rug Institute Green Label,  AND indoor carpet adhesive & carpet pad adhesive must not exceed 50 g/L VOC content. | ● | ● |  |
| **Composite wood:** Meet CARB Air Toxics Control Measure for Composite Wood including meeting the emission limits in CalGreen Table 5.504.4.5. | ● | ● |  |
| **Resilient flooring systems:** For 80% of floor area receiving resilient flooring, install resilient flooring complying with:  1. Certified under the Resilient Floor Covering Institute (RFCI) FloorScore program,  2. Compliant with the VOC-emission limits and testing requirements of California Department of Public Health  2010 Standard Method for the Testing and Evaluation Chambers v.1.1,  3. Compliant with the Collaborative for High Performance Schools (CHPS) EQ2.2 and listed in the CHPS High Performance Product Database, OR  4. Certified under the Greenguard Children & Schools Program to comply with California Department of  Public Health criteria. | ● | ● |  |
| **Environmental Tobacco Smoke:** Prohibit smoking within 25 feet of building entries, outdoor air intakes, and operable windows. | ● | ● |  |
| **Air Filtration:** Provide at least MERV-8 filters in regularly occupied spaces of mechanically ventilated buildings. | ● | ● |  |
| **Acoustical Control:** Wall and roof-ceilings STC 50, exterior windows STC 30, party walls and floor-ceilings STC 40. | ● | (Limited to envelope alteration or addition) |  |
| **CFCs and Halons:** Do not install equipment that contains CFCs or Halons. (CalGreen 5.508.1) | ● | ● |  |
| **Additional Requirements for New A, B, I, OR M Occupancy Projects 5,000 - 25,000 Square Feet** | | | |
| **Construction Waste Management** – Source separate and recycle at least 10% of construction and demolition debris, AND 100% of *mixed debris* must be transported by a registered hauler to a registered facility and be processed for recycling, in compliance with the San Francisco Construction & Demolition Debris Ordinance | ● | Meet Construction  & Demolition Debris  Ordinance |  |
| **Renewable Energy or Enhanced Energy Efficiency:** Generate renewable energy on-site equal to  ≥1% of total annual energy cost (LEED EAc2),  OR demonstrate a10% energy use reduction compared to Title 24 Part 6 2013),  OR purchase Green-E certified renewable energy credits for 35% of total electricity use (LEED EAc6). | ● | n/r |  |

Notes:

1) For dual flush toilets, effective flush volume is defines as the average volume of two reduced flushes and one full flush. The referenced standard is ASME A112.19.14 and USEPA WaterSense Tank-Type High Efficiency Toilet Specification – 1.28 gal (4.8 L).

2) The combined flow rate of all showerheads in one shower stall not exceed the maximum flow rate for one showerhead, or the shower shall be designed to allow only one showerhead to be in operation at a time (5.303.2.1).

**OR**

**PERFORMANCE APPROACH**

**OR Alteration**

Block/Lot

Address

Primary Occupancy

**Instructions to applicant:**

Fill in all blank cells in both tables below. The number of occupants using each fixture type must be the same in both the Baseline and Design cases. If there are no fixtures of a type in your project, enter “0” for number of occupants. Multiply each row to determine the amount of water used in each fixture type, then sum the last column to determine the total daily water use. Take 80% of this baseline case to be the

maximum allowable water use (corresponding to the required 20% reduction). The Total Design Case Daily Water Usage use from Worksheet WS-2 must not exceed the Total Allowable Daily Water Usage from Worksheet WS-1.

Gross Building Area

**The Green Building Compliance Professional of Record for this project is:**

Name

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Worksheet WS-1 (summary) - Baseline & Allowable Water Use** | | | | | | | |
| **Fixture Type** | **Daily use** |  | **Occupants 2** |  | **Baseline**  **Flow Rate** |  | **Baseline Usage**  **(gallons per day)** |
| **Showerhead** | 5 min. | x |  | x | 2.0 gpm | = |  |
| **Showerhead - residential** | 8 min. | x |  | x | 2.5 gpm | = |  |
| **Lavatory faucets** | 0.25 min. | x |  | x | 0.5 gpm | = |  |
| **Lavatory**  **residential** | 0.25 min. | x |  | x | 2.2 gpm | = |  |
| **Kitchen faucets** | 4 min. | x |  | x | 2.2 gpm | = |  |
| **Metering faucets** | 3 | x |  | x | 0.25 gal | = |  |
| **Water closets**  **(all types)** | 1 male1  3 female | x |  | x | 1.28 gal | = |  |
| **Urinals** | 2 male | x |  | x | 0.5 gal | = |  |
| Total Baseline Case Daily Usage: | | | | | | |  |
| **Total Allowable Daily Water Usage (Baseline Usage x 80%):** | | | | | | |  |

**faucets -**

Firm

Notes:

1) The daily use number shall be increased to three if urinals are not installed in the room.

2) For non-residential occupancies, refer to table A, Chapter 4, 2010 California Plumbing Code for occupant load factors.

3) Fixtures and fittings must meet the standards referenced in **California Plumbing Code Table 1401.1**, see above.

Architectural or Engineering License

□ I am a LEED Accredited Professional

□ I am a GreenPoint Rater

□ I am an ICC Certified CalGreen Inspector

I have been retained by the project sponsor to assure that approved construction documents and construction fulfill the requirements of San Francisco Green Building Code. It is my professional opinion that the requirements of the San Francisco Green Building Code will be met. I will notify the Department of Building Inspection if the project will, for any reason, not substantially comply with these requirements, or if I am no longer the Green Building Compliance Professional of Record for the project.

Attachment C-5: “Other”

Non-Residential Additions, Alterations, or “Other” New Construction

Version: July 1, 2014

Insert Project Name / Titleblock here

Licensed Professional: Sign & Date

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Worksheet WS-2 (summary) - Design Water Use** | | | | | | | |
| **Fixture Type** | **Daily use** |  | **Occupants 2** |  | **Design Flow**  **Rate** |  | **Design Usage**  **(gallons per day)** |
| **Showerhead** | 5 min. | x |  | x |  | = |  |
| **Showerhead - residential** | 8 min. | x |  | x |  | = |  |
| **Lavatory faucets** | 0.25 min. | x |  | x |  | = |  |
| **Lavatory faucets - residential** | 0.25 min. | x |  | x |  | = |  |
| **Kitchen faucets** | 4 min. | x |  | x |  | = |  |
| **Metering faucets** | 3 | x |  | x |  | = |  |
| **Water closets**  **(all types)** | 1 male1  3 female | x |  | x |  | = |  |
| **Urinals** | 2 male | x |  | x |  | = |  |
| **Total Design Case Daily Usage:** | | | | | | |  |

Affix professional stamp:

**EXISTING NONCOMPLIANT FIXTURES**

All fixtures that are not compliant with the San Francisco Commercial Water Conservation Ordinance that serve or are located within the project area must be replaced with fixtures or fittings meeting the maximum flow rates and standards referenced above. For more information, see the Commercial Water Conservation Program Brochure, available at SFDBI.org. Noncompliant plumbing fixtures include:

(1) Any toilet manufactured for use more than 1.6 gallons of water per flush. (2) Any urinal manufactured for use more than 1 gallon of water per flush.

(3) Any showerhead manufactured to have a flow capacity of more than 2.5 gallons of water per minute. (4) Any interior faucet that emits more than 2.2 gallons of water per minute.

Exceptions to this requirement are limited to situations where replacement of fixture(s) would detract from the historic integrity of the building, as determined by the Department of Building Inspection pursuant to San Francisco Building Code Chapter 13A.