

Bid Addendum No. 2

The Center - Adaptive Reuse and Tenant Infill

DATE: 4/4/2023

OWNER/AGENT: Butte County Office of Education (BCOE) 1859 Bird Street Oroville, CA 95965

ARCHITECT: Ty Yurkovic

PROJECT:

NORTHSTAR PROJECT No. 19-022

A. This Addendum shall be considered part of the bid documents for the above mentioned project as though it had been issued at the same time and shall be incorporated integrally therewith. Where provisions of the following supplementary data differ from those of the original bid documents, this Addendum shall govern and take precedence.

B. Bidders are hereby notified that they shall make any necessary adjustments in their estimates as a result of this Addendum. It will be construed that each bidder's proposal is submitted with full knowledge of all modifications and supplemental data specified herein.

C. All changes in the documents are clouded and noted with Delta #4.

See attached drawings clarifying and adding the following:

<u>Architecture:</u> Missing sheets CG-1, CG-2, and CG-3 as previously indicated on the A000 title sheet index.

See attached Specification Sections clarifying and adding the following: <u>Architecture:</u> Revised Accessories Schedule for missing/incorrect items.

Attachments:

Drawings: CG-1, CG-2, and CG-3 Specification Sections: 10 28 13

Sincerely,

Ty Yurkovic, AIA Senior Architect

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Provide toilet accessories with attachment hardware and rough-in frames as required for complete, operational installation.
- B. Related Requirements:
 - 1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
 - 2. Section 06 10 00: In wall wood backing for support of accessories.
 - 3. Section 10 81 10 Electric Hand Dryers.

1.2 SUBMITTALS

All submittals shall be submitted under the provisions of Section 01 33 00.

- A. Submittal No. 10 28 13A (#) Product Data: Provide product data on accessories describing size, finish, details of function, attachment methods and blocking requirements and locations prior to wall framing.
- B. Submittal No. 10 28 13B (#) –Installation Instructions: Submit manufacturers installation instructions for all specified products.

1.3 QUALITY ASSURANCE

- A. Access for Persons with Disabilities: Comply with California Building Code and Americans with Disabilities Act Accessibility Guidelines (ADAAG).
- B. ASTM C-1503-01 Silvered Flat Glass Mirror
- 1.4 DELIVERY, STORAGE AND HANDLING
 - A. Deliver inserts and rough-in frames to jobsite at appropriate time for building in.
 - B. Do not deliver accessories to site until rooms in which they are to be installed are ready to receive them.
 - C. Pack accessories individually, protect each item and its finish.

1.5 PROJECT CONDITIONS

- A. Protect adjacent or adjoining finished surfaces from damage during installation of work of this section.
- B. Before starting work notify Architect in writing of conditions detrimental to installation or operation of units.
- C. Verify with Architect exact location of accessories.
- D. Coordinate the work of this Section with the placement of internal wall reinforcement and reinforcement to receive anchor attachments.

SECTION 10 28 13 TOILET ACCESSORIES

1.6 WARRANTY

- A. Special Warranty: Replace mirrors that exhibit signs of desilvering or distortion.
 - 1. Special Warranty Period: Two years.
- B. Special Warranty: Mirror Silver Spoilage Warranty.
 - 1. Special Warranty Period: Ten years

PART 2 - PRODUCTS

- 2.1 MANUFACTURERS
 - A. Bobrick Washroom Equipment, Inc.
 - B. Bradley Corporation.
 - C. American Specialties, Inc.
 - D. Substitutions: Refer to Section 01 25 00.

2.2 MATERIALS

- A. Stainless Steel Sheet: ASTM A666, commercial grade, Type 302/304, gages as standard with manufacturer of specified items.
- B. Stainless Steel Tubing: ASTM A269, commercial grade, seamless welded.
- C. Sheet Steel: ASTM A1008, cold rolled stretcher leveled; minimum G90 galvanized coating, ASTM A924 and A653.
- D. Adhesive: Epoxy type contact cement as recommended by accessory manufacturer.
- E. Fasteners, Screws, and Bolts: Hot dip galvanized; as recommended by accessory manufacturer for component and substrate.
- F. Keys: Provide universal keys for access to toilet accessory units requiring internal access for servicing and supply.
 - 1. Provide minimum six keys to Owner representative.
- G. Mirror Glazing: Mirror quality Number 1 clear float glass; 1/4" thick; full silver back coating, factory treated and sealed after cutting and finishing, sized as shown on drawings.
- H. Miscellaneous Metal Hangers: Provide manufacturer's standard concealed stainless-steel wall hangers.

2.3 FABRICATION

- A. Weld and grind smooth joints of fabricated components.
- B. Form exposed surfaces from one sheet of stock, free of joints.
- C. Fabricate units with tight seams and joints, exposed edges rolled; hang doors and access panels with continuous piano hinges; provide concealed anchorage where possible.
- D. Provide steel anchor plates and anchor components for installation on building finishes.

- E. Form surfaces flat without distortion; maintain flat surfaces without scratches and without dents; finish exposed edges eased, free of sharp edges where potential exists for physical contact.
- F. Back paint components where contact is made with building finishes, to prevent electrolysis.
- G. Hot dip galvanized ferrous metal anchors and fastening devices.
- H. Assemble components in shop; package complete with anchors and fittings.
- 2.4 FINISHES
 - A. Exposed Finishes: Stainless steel, number 4, satin finish; satin chrome finish acceptable where stainless steel not available for accessory item listed or scheduled.
 - B. Concealed Surfaces: Treat and clean, spray-apply one coat primer and baked enamel finish.

PART 3 - EXECUTION

- 3.1 PREPARATION
 - A. Provide templates and rough-in measurements.
- 3.2 INSTALLATION
 - A. Install accessories in accordance with manufacturer's printed instructions using fasteners appropriate to substrate.
 - B. Install true, plumb and level, securely and rigidly anchored to substrate.
 - C. Use tamper-proof, security type fasteners.
 - D. Adjust accessories for proper operation and verify mechanisms function smoothly.
 - E. Replace damaged and defective items.
 - F. Clean and polish exposed surfaces after removing temporary labels.

3.3 ACCESSORIES SCHEDULE

| FRAMED MIRROR SIZE / ROOMS | Bobrick | Bradley | ASI |
|---|----------------------------------|-----------------|--|
| Standard: 18" wide x 3'-0" high See interior elevations | B-290-1836 | SPR | Substitution pe requirements (SPR) |
| TOILET ACCESSORIES: | Bobrick | Bradley | ASI |
| Paper Towel Dispenser/Waste Combo (Recessed) | B-3940 | SPR | SPR |
| Paper Towel Dispenser (Surface Mount) | B-262 | SPR | SPR |
| Soap Dispenser (Surface Mount) | B-2012 | SPR | SPR |
| Toilet Paper Dispenser Multi-roll (Surface Mount) | B-2888 | SPR | SPR |
| Toilet Paper Dispenser Multi-roll, semi-recessed | B-3888 | 5412 | SPR |
| Toilet Paper Dispenser Multi-roll, partition recessed, double side access | B-386 d | 5422 | SPR |

655 Oleander Ave NorthStar Project: 19 - 022

SECTION 10 28 13 TOILET ACCESSORIES

| (Sizes as indicated on the drawings)Sanitary Napkin Disposal (Surface Mount)B-254SPRSPRToilet Seat Cover DispenserB-221SPRSPRBaby Changing StationKB311-SSWMSPRSPRBaby Changing StationKB310-SSWMSPRSPRSPECIMAN_TURNTABLE_PASS_BOXBobrickBradleyASISize/ROOMSSPRSPR0515 | Grab Bars (Surface Mount) 1 1/2" diameter, peened finish, straight length. | B-6806.99 | GB812-001 | |
|---|--|------------|----------------|-----------------|
| Toilet Seat Cover DispenserB-221SPRSPRBaby Changing StationKB311-SSWMSPRSPRBaby Changing StationKB310-SSWMSPRSPRSPECIMAN_TURNTABLE_PASS_BOXBobrickBradleyASISIZE/ROOMS- Standard: 13 ¾"" wide x 14" highSPRSPR0515 | (Sizes as indicated on the drawings) | | | |
| Baby Changing StationKB311-SSWMSPRSPRBaby Changing StationKB310-SSWMSPRSPRSPECIMAN_TURNTABLE_PASS_BOX SIZE/ROOMS- Standard: 13 ¾"" wide x 14" highBobrickBradleyASISPRSPR0515 | Sanitary Napkin Disposal (Surface Mount) |) B-254 | SPR | SPR |
| Baby Changing StationKB310-SSWMSPRSPRSPECIMAN_TURNTABLE_PASS_BOXBobrickBradleyASISIZE/ROOMS- Standard: 13 ¾"" wide x 14" highSPRSPR0515 | Toilet Seat Cover Dispenser | B-221 | SPR | SPR |
| SPECIMAN TURNTABLE PASS BOXBobrickBradleyASISIZE/ROOMS- Standard: 13 ¾"" wide x 14" highSPRSPR0515 | Baby Changing Station | KB311-SSWM | SPR | SPR |
| SiZE/ROOMSStandard: 13 ¾"" wide x 14" highSPRSPR0515 | Baby Changing Station | KB310-SSWM | SPR | SPR |
| Standard: 13 ¾"" wide x 14" highSPRSPR0515 | | - Bobrick | Bradley | ASI |
| Pharmacy and Urinalysis Toilet | | SPR | SPR | 0515 |

END OF SECTION



AIA California 2019 CALIFOR NONRESIDENTIAL

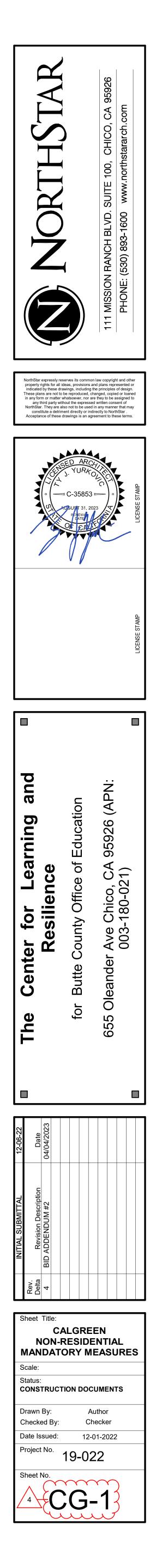
| Y N/A RESPON. PARTY | Y N/A RESPON. PARTY | Y N/A RESPON. PARTY 1. Where there is insufficient electrical supply. | V N/A RESPON. PARTY |
|--|--|--|--|
| CHAPTER 3 GREEN BUILDING | Image: State in the state | Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 5.106.5.3, may adversely impact the construction cost of the project. | 5.106.10 GRADING AND PAVING. Construction plans shall indicate how site grading or a drainage system water and a system water include, but are not limited to, the following: Swales. |
| SECTION 301 GENERAL | Note: Projects that (1) disturb one acre or more of land, or (2) disturb less than one acre of land but are part of the larger common plan of development or sale must comply with the post-construction requirements detailed in the applicable National Pollutant Discharge Elimination System (NPDES) General permit for Stormwater Discharges | TABLE 5.106.5.3.3 | Water collection and disposal systems. French drains. |
| 301.1 SCOPE. Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and construction of structures covered by this code, | Associated with Construction and Land Disturbance Activities issued by the State Water Resources Control Board or the Lahontan Regional Water Quality Control Board (for projects in the Lake Tahoe Hydrologic Unit). | TOTAL NUMBER OF PARKING SPACES NUMBER OF REQUIRED SPACES | Water retention gardens. Other water measures which keep surface water away from buildings and aid in groundwater recharge Exception: Additions and alterations not altering the drainage path. |
| but are not required unless adopted by a city, county, or city and county as specified in Section 101.7. | The NPDES permits require postconstruction runoff (post-project hydrology) to match the preconstruction runoff (pre-project hydrology) with the installation of postconstruction stormwater management measures. The NPDES | 0-9 0 10-25 2 | 5.106.12 SHADE TREES [DSA-SS]. Shade Trees shall be planted to comply with Sections 5.106.12.1, 5.106. and 5.106.12.3. Percentages shown shall be measured at noon on the summer solstice. Landscape irrigat |
| 301.3 NONRESIDENTIAL ADDITIONS AND ALTERATIONS. [BSC-CG] The provisions of individual sections of Chapter 5 apply to newly constructed buildings, building additions of 1,000 square feet or greater, and/or building alterations with a permit valuation of \$200,000 or above (for occupancies within a structure) | permits emphasize runoff reduction through on-site stormwater use, interception, evapotranspiration, and infiltration through nonstructural controls, such as Low Impact Development (LID) practices, and conversation design measures. Stormwater volume that cannot be addressed using nonstructural practices is required to be captured in structural | 26-50 4 | necessary to establish and maintain tree health shall comply with Section 5.304.6. |
| the authority of California Building Standards Commission). Code sections relevant to additions and alterations shall only apply to the portions of the building being added or altered within the scope of the permitted work. | practices and be approved by the enforcing agency. Refer to the current applicable permits on the State Water Resources Control Board website at: | 51-75 7 76-100 9 | 5.106.12.1 Surface parking areas. Shade tree plantings, minimum #10 container size or equal, shall be i to provide shade over 50 percent of the parking area within 15 years. |
| A code section will be designated by a banner to indicate where the code section only applies to newly | www.waterboards.ca.gov/constructionstormwater. Consideration to the stormwater runoff management measures should be given during the initial design process for appropriate integration into site development. | 101-150 13 151-200 18 | Exceptions: The surface parking area covered by solar photovoltaic shade structures, or shade structures, with roofing materials that comply with Table A5.106.11.2.2 in Appendix A5, are not included in the total area calculations. |
| constructed buildings [N] or to additions and/or alterations [A]. When the code section applies to both, no banner will be used. 301.3.1 Nonresidential additions and alterations that cause updates to plumbing fixtures only: | Image: With the section 103, comply with Section 5.106.4.1. For buildings within the authority of California Building Standards Commission as specified in Section 103, comply with Section 5.106.4.1. Image: With the section 103, comply with Section 5.106.4.1. For buildings within the authority of the Division of the State Architect pursuant to Section 105, comply with Section 5.106.4.2 | 131-200 13 201 AND OVER 10% of total ¹ | 5.106.12.2 Landscape areas. Shade tress plantings, minimum #10 container size or equal shall be instal provide shade of 20% of the landscape area within 15 years. |
| Note: On and after January 1, 2014, certain commercial real property, as defined in Civil Code Section 1101.3, shall have its noncompliant plumbing fixtures replaced with appropriate water-conserving | 5.106.4.1 Bicycle parking. [BSC-CG] Comply with Sections 5.106.4.1.1 and 5.106.4.1.2; or meet the applicable local ordinance, whichever is stricter. | 1. Calculation for spaces shall be rounded up to the nearest whole number. | Exceptions: Playfields for organized sport activity are not included in the total area calculation. |
| plumbing fixtures under specific circumstances. See Civil Code Section 1101.1 <i>et seq.</i> for definitions, types of commercial real property affected, effective dates, circumstances necessitating replacement of noncompliant plumbing fixtures, and duties and responsibilities for ensuring compliance. | X Owner 5.106.4.1.1 Short-term bicycle parking. If the new project or an addition or alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5% of new visitor motorized vehicle parking spaces being | 5.106.5.3.4 [N] Identification. The service panel or subpanel(s) circuit directory shall identify the reserved overcurrent protective device space(s) for future EV charging as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE". 5.106.5.3.5 [N] Future charging spaces qualify as designated parking as described in Section 5.106.5.2 | 5.106.12.3. Hardscape areas. Shade tree plantings, minimum #10 container size or equal shall be instal provide shade over 20 percent of the hardscape area within 15 years. Exceptions: Walks, hardscape areas covered by solar photovoltaic shade structures, and hard |
| 301.3.2 Waste Diversion. The requirements of Section 5.408 shall be required for additions and alterations whenever a permit is required for work. | added, with a minimum of one two-bike capacity rack. Exception: Additions or alterations which add nine or less visitor vehicular parking spaces. | Designated parking for clean air vehicles. Note: Future electric vehicle charging spaces shall count towards the total parking spaces required by | areas covered by shade structures with roofing materials that comply with Table A5.106.11.2.2 i Appendix A5, are not included in the total area calculation. |
| 301.4 PUBLIC SCHOOLS AND COMMUNITY COLLEGES. (see GBSC) 301.5 HEALTH FACILITIES. (see GBSC) | X 5.106.4.1.2 Long-term bicycle parking. For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5 percent of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility. | the local enforcing agencies. Image: Imag | DIVISION 5.2 ENERGY EFFICIENCY |
| SECTION 302 MIXED OCCUPANCY BUILDINGS | x 5.106.4.1.3 For additions or alterations that add 10 or more tenant-occupant vehicular parking spaces, provide secure bicycle parking for 5 percent of the tenant vehicular parking spaces being added, with a | with the following: 1. The minimum requirements in the California Energy Code for Lighting Zones 0-4 as defined in Chapter 10, | SECTION 5.201 GENERAL 5.201.1 Scope [BSC-CG]. California Energy Code [DSA-SS]. For the purposes of mandatory energy efficient |
| 302.1 MIXED OCCUPANCY BUILDINGS. In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy. | × 5.106.4.1.4 For new shell buildings in phased projects provide secure bicycle parking for 5 percent of the | Section 10-114 of the California Administrative Code; and 2. Backlight (B) ratings as defined in IES TM-15-11 (shown in Table A-1 in Chapter 8); 3. Uplight and Glare ratings as defined in California Energy Code (shown in Tables 130.2-A and 130.2-B in | standards in this code, the California Energy Commission will continue to adopt mandatory building standards. |
| SECTION 303 PHASED PROJECTS | anticipated tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility. 5.106.4.1.5 Acceptable bicycle parking facility for Sections 5.106.4.1.2, 5.106.4.1.3, and 5.106.4.1.4 shall | Chapter 8) and 4. Allowable BUG ratings not exceeding those shown in Table 5.106.8, [N] or Comply with a local ordinance | DIVISION 5.3 WATER EFFICIENCY AND CONSERVATION |
| 303.1 PHASED PROJECTS. For shell buildings and others constructed for future tenant improvements, only those code measures relevant to the building components and systems considered to be new | be convenient from the street and shall meet one of the following: | lawfully enacted pursuant to Section 101.7, whichever is more stringent. Exceptions: [N] | SECTION 5.301 GENERAL 5.301.1 Scope. The provisions of this chapter shall establish the means of conserving water use indoors, outco and in wastewater conveyance. |
| construction (or newly constructed) shall apply. 303.1.1 Initial Tenant improvements. The provisions of this code shall apply only to the initial tenant | Covered, lockable enclosures with permanently anchored racks for bicycles; Lockable bicycle rooms with permanently anchored racks; or Lockable, permanently anchored bicycle lockers. | Luminaires that qualify as exceptions in Sections 130.2 (b) and 140.7 of the California Energy Code. Emergency lighting. | SECTION 5.302 DEFINITIONS |
| improvements to a project. Subsequent tenant improvements shall comply with the scoping provisions in Section 301.3 non-residential additions and alterations. | Note: Additional information on recommended bicycle accommodations may be obtained from Sacramento Area Bicycle Advocates. | Building facade meeting the requirements in Table 140.7-B of the California Energy Code, Part 6. Custom lighting features as allowed by the local enforcing agency, as permitted by Section 101.8 | 5.302.1 Definitions. The following terms are defined in Chapter 2 (and are included here for reference) |
| ABBREVIATION DEFINITIONS: HCD Department of Housing and Community Development | X 5.106.4.2 Bicycle parking. [DSA-SS] For public schools and community colleges, comply with Sections | Alternate materials, designs and methods of construction. 5. Luminaires with less than 6,200 initial luminaire lumens. | EVAPOTRANSPIRATION ADJUSTMENT FACTOR (ETAF) [DSA-SS]. An adjustment factor when applied to reference evapotranspiration that adjusts for plant factors and irrigation efficiency, which ae two major influence the amount of water that needs to be applied to the landscape. |
| BSC California Building Standards Commission DSA-SS Division of the State Architect, Structural Safety OSHPD Office of Statewide Health Planning and Development | 5.106.4.2.1 and 5.106.4.2.2 5.106.4.2.1 Student bicycle parking. Provide permanently anchored bicycle racks conveniently | | FOOTPRINT AREA [DSA-SS]. The total area of the furthest exterior wall of the structure projected to natural |
| LR Low Rise HR High Rise | accessed with a minimum of four two-bike capacity racks per new building. 5.106.4.2.2 Staff bicycle parking. Provide permanent, secure bicycle parking conveniently accessed with a minimum of two staff bicycle parking spaces per new building. Acceptable bicycle parking facilities | TABLE 5.106.8 [N] MAXIMUM ALLOWABLE BACKLIGHT, UPLIGHT AND GLARE (BUG) RATINGS 1,2 | not including exterior areas such as stairs, covered walkways, patios and decks. METERING FAUCET. A self-closing faucet that dispenses a specific volume of water for each actuation cycle |
| AA Additions and Alterations N New | shall be convenient from the street or staff parking area and shall meet one of the following: | | volume or cycle duration can be fixed or adjustable. GRAYWATER. Pursuant to Health and Safety Code Section 17922.12, "graywater" means untreated wastewa |
| CHAPTER 5 NONRESIDENTIAL MANDATORY MEASURES | Covered, lockable enclosures with permanently anchored racks for bicycles; Lockable bicycle rooms with permanently anchored racks; or Lockable, permanently anchored bicycle lockers. | ALLOWABLE RATING ZONE LZ0 ZONE LZ1 ZONE LZ2 ZONE LZ3 ZONE LZ4 MAXIMUM ALLOWABLE BACKLIGHT RATING 3 | has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhe bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. "Graywater" includes, but is not limited to wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines and laundry tubs, but does not include waste water from kitchen sinks |
| DIVISION 5.1 PLANNING AND DESIGN | 5.106.5.2 DESIGNATED PARKING FOR CLEAN AIR VEHICLES. In new projects or additions or alterations that add 10 or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as follows: | Decision Refines Luminaire greater than 2 mounting heights (MH) from N/A No Limit No Limit No Limit | dishwashers. |
| SECTION 5.101 GENERAL 5.101.1 SCOPE The provisions of this chapter outline planning, design and development methods that include environmentally | TABLE 5.106.5.2 - PARKING | property line | MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO). The California ordinance regulating land design, installation and maintenance practices that will ensure commercial, multifamily and other developer installation and scapes greater than 2500 square feet meet an irrigation water budget developed based on landscaped are |
| responsible site selection, building design, building siting and development to protect, restore and enhance the environmental quality of the site and respect the integrity of adjacent properties. | TOTAL NUMBER OF PARKING SPACES NUMBER OF REQUIRED SPACES | 1-2 MH from property line N/A B2 B3 B4 B4 | climatological parameters. MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO). [HCD] The California model ordinance |
| SECTION 5.102 DEFINITIONS 5.102.1 DEFINITIONS | 0-9 0 10-25 3 | Luminaire back hemisphere is 0.5-1 MH from property line N/A B1 B2 B3 B3 | (California Code of Regulations, Title 23, Division 2, Chapter 2.7), regulating landscape design, installation and maintenance practices. Local agencies are required to adopt the updated MWELO, or adopt a local ordinance as effective as the MWELO. |
| The following terms are defined in Chapter 2 (and are included here for reference) | 25-50 6 | Luminaire back hemisphere is less than 0.5 MH from property N/A B0 B0 B1 B2 | POTABLE WATER. Water that is drinkable and meets the U.S. Environmental Protection Agency (EPA) Drink |
| CUTOFF LUMINAIRES. Luminaires whose light distribution is such that the candela per 1000 lamp lumens does not numerically exceed 25 (2.5 percent) at an angle of 90 degrees above nadir, and 100 (10 percent) at a vertical angle of 80 degrees above nadir. This applies to all lateral angles around the luminaire. | 51-75 9 76-100 12 | MAXIMUM ALLOWABLE UPLIGHT RATING (U) | Water Standards. See definition in the California Plumbing Code, Part 5. POTABLE WATER. [HCD] Water that is satisfactory for drinking, culinary, and domestic purposes, and meets |
| LOW-EMITTING AND FUEL EFFICIENT VEHICLES. Eligible vehicles are limited to the following: | 101-150 18 | For area lighting 3 N/A U0 U0 U0 | U.S. Environmental Protection Agency (EPA) Drinking Water Standards and the requirements of the Health Au Having Jurisdiction. |
| Zero emission vehicle (ZEV), including neighborhood electric vehicles (NEV), partial zero emission vehicle (PZEV), advanced technology PZEV (AT ZEV) or CNG fueled (original equipment manufacturer | 151-200 21 201 AND OVER AT LEAST 12% OF TOTAL ¹ | For all other outdoor Ighting,including decorative N/A U1 U2 U3 UR | RECYCLED WATER. Water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur [Water Code Section 13050 (n)]. Simply put, recycled water is water a treatment of a suitable to use the water are in |
| only) regulated under Health and Safety Code section 43800 and CCR, Title 13, Sections 1961 and 1962. 2. High-efficiency vehicles, regulated by U.S. EPA, bearing High-Occupancy Vehicle (HOV) car pool lane | 1.Calculation for spaces shall be rounded up to the nearest whole number. | MAXIMUM ALLOWABLE GLARE RATING 5 (G) | treated to remove waste matter attaining a quality that is suitable to use the water again. SUBMETER. [HCD 1] A secondary device beyond a meter that measures water consumption of an individual i |
| stickers issued by the Department of Motor Vehicles. NEIGHBORHOOD ELECTRIC VEHICLE (NEV). A motor vehicle that meets the definition of "low-speed vehicle" | Note: Designated parking for clean air vehicles shall count towards the total parking spaces required by the local enforcing agencies. | Luminaire greater than 2 MH from property line N/A G1 G2 G3 G4 | unit within a multiunit residential structure or mixed-use residential and commercial structure. (See Civic Code 1954.202 (g) and Water code Section 517 for additional details.) |
| either in Section 385.5 of the Vehicle Code or in 49CFR571.500 (as it existed on July 1, 2000), and is certified to zero-emission vehicle standards. | 5.106.5.2.1 - Parking stall marking . Paint, in the paint used for stall striping, the following characters such that the lower edge of the last word aligns with the end of the stall striping and is | Luminaire front hemisphere is 1-2 MH from property line N/A G0 G1 G1 G2 | WATER BUDGET. Is the estimated total landscape irrigation water use which shall not exceed the maximum water allowance calculated in accordance with the Department of Water Resources Model Efficient Landscape Ordinance (MWELO). |
| TENANT-OCCUPANTS. Building occupants who inhabit a building during its normal hours of operation as permanent occupants, such as employees, as distinguished from customers and other transient visitors. | visible beneath a parked vehicle: CLEAN AIR / VAN POOL / EV | Luminaire front hemisphere is 0.5-1 MH from property line N/A G0 G0 G1 | SECTION 5.303 INDOOR WATER USE |
| VANPOOL VEHICLE. Eligible vehicles are limited to any motor vehicle, other than a motortruck or truck tractor, designed for carrying more than 10 but not more than 15 persons including the driver, which is maintained and used | Note: Vehicles bearing Clean Air Vehicle stickers from expired HOV lane programs may be considered eligible for designated parking spaces. | Luminaire back hemisphere is less than 0.5 MH from property N/A G0 G0 G0 G1 | 5.303.1 METERS. Separate submeters or metering devices shall be installed for the uses described in Section 503.1.1 and 503.1.2. |
| primarily for the nonprofit work-related transportation of adults for the purpose of ridesharing. Note: Source: Vehicle Code, Division 1, Section 668 | □ ☑ 5.106.5.3 Electric vehicle (EV) charging. [N] Construction shall comply with Section 5.106.5.3.1 or Section 5.106.5.3.2 to facilitate future installation of electric vehicle supply equipment (EVSE). | 1. IESNA Lighting Zones 0 and 5 are not applicable; refer to Lighting Zones as defined in the | 5.303.1.1 Buildings in excess of 50,000 square feet. Separate submeters shall be installed as follows |
| ZEV. Any vehicle certified to zero-emission standards. | When EVSE(s) is/are installed, it shall be in accordance with the California Building Code, the California Electrical Code and as follows: | California Energy Code and Chapter 10 of the Callifornia Administrative Code. 2. For property lines that abut public walkways, bikeways, plazas and parking lots, the property | For each individual leased, rented or other tenant space within the building projected to consu more than 100 gal/day (380 L/day), including, but not limited to, spaces used for laundry or cle restaurant or food service, medical or dental office, laboratory, or beauty salon or barber shop. |
| SECTION 5.106 SITE DEVELOPMENT 5.106.1 STORM WATER POLLUTION PREVENTION FOR PROJECTS THAT DISTURB LESS THAN ONE ACRE | 5.106.5.3.1 Single charging space requirements. [N] When only a single charging space is required per Table 5.106.5.3.3, a raceway is required to be installed at the time of construction and shall be installed in accordance with the California Electrical Cade | line may be considered to be 5 feet beyond the actual property line for purpose of determining compliance with this section. For property lines that abut public roadways and public transit | Where separate submeters for individual building tenants are unfeasible, for water supplied to following subsystems: |
| OF LAND. Newly constructed projects and additions which disturb less than one acre of land, and are not part of a larger common plan of development or sale, shall prevent the pollution of storm water runoff from the construction activities through one or more of the following measures: | and shall be installed in accordance with the California Electrical Code. Construction plans and specifications shall include, but are not limited to, the following: | corridors, the property line may be considered to be the centerline of the public roadway or public transit corridor for the purpose of determining compliance with this section. | a. Makeup water for cooling towers where flow through is greater than 500 gpm (30 L/s). b. Makeup water for evaporative coolers greater than 6 gpm (0.04 L/s). c. Steam and hot water boilers with energy input more than 500,000 Btu/h (147 kW). |
| 5.106.1.1 Local ordinance . Comply with a lawfully enacted storm water management and/or erosion control ordinance. | The type and location of the EVSE. A listed raceway capable of accommodating a 208/240 -volt dedicated branch circuit. The raceway shall not be less than trade size 1". | 3. General lighting luminaires in areas such as outdoor parking, sales or storage lots shall meet these reduced ratings. Decorative luminaries located in these areas shall meet <i>U</i> -value limits for "all other outdoor lighting" | 5.303.1.2 Excess consumption. A separate submeter or metering device shall be provided for any ten within a new building or within an addition that is projected to consume more than 1,000 gal/day. |
| 5.106.1.2 Best Management Practices (BMPs). Prevent the loss of soil through wind or water erosion by implementing an effective combination of erosion and sediment control and good housekeeping BMPs. | The raceway shall originate at a service panel or a subpanel serving the area, and shall terminate in close proximity to the proposed location of the charging equipment and listed suitable cabinet, box, enclosure or equivalent. | 5.106.8.1 Facing- Backlight Luminaries within 2MH of a property line shall be oriented so that the nearest property line is behind the fixture, | 5.303.3 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures (water closets ar urinals) and fittings (faucets and showerheads) shall comply with the following: |
| Soil loss BMPs that should be considered for implementation as appropriate for each project include, but are not limited to, the following: | 5. The service panel or subpanel shall have sufficient capacity to accommodate a minimum 40-ampere dedicated branch circuit for the future installation of the EVSE. | and shall comply with the backlight rating specified in Table 5.106.8 based on the lighting zone and distance to the nearest point of that property line. | 5.303.3.1 Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons |
| a. Scheduling construction activity during dry weather, when possible. b. Preservation of natural features, vegetation, soil, and buffers around surface waters. c. Drainage swales or lined diches to control stormwater flow. | 5.106.5.3.2 Multiple charging space requirements. [N] When multiple charging spaces are required per Table 5.106.5.3.3 raceway(s) is/are required to be installed at the time of construction | Exception: Corners. If two property lines (or two segments of the same property line) have equidistant point to the luminaire, then the luminaire may be oriented so that the intersection of the two lines (the corner) is directly behind the luminaire. The luminaire shall still use the distance to the nearest points(s) on the property | flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-Type toilets. |
| c. Drainage swales or lined ditches to control stormwater flow. d. Mulching or hydroseeding to stabilize disturbed soils. e. Erosion control to protect slopes. | and shall be installed in accordance with the California Electrical Code. Construction plans and specifications shall include, but are not limited to, the following: | lines to determine the required backlight rating. | Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume two reduced flushes and one full flush. |
| f. Protection of storm drain inlets (gravel bags or catch basin inserts). g. Perimeter sediment control (perimeter silt fence, fiber rolls). h. Sediment trap or sediment basin to retain sediment on site. i. Stabilized construction exits. | The type and location of the EVSE. The raceway(s) shall originate at a service panel or a subpanel(s) serving the area, and shall terminate in close proximity to the proposed location of the charging equipment and | For luminaires covered by 5.106.8.1, if a property line also exists within or extends into the front hemisphere within 2MH of the luminaire then the luminaire shall comply with the more stringent glare rating specified in Table 5.106.8 based on the lighting zone and distance to the nearest point on the nearest property line within the front | 5.303.3.2 Urinals. 5.303.3.2.1 Wall-mounted Urinals. The effective flush volume of wall-mounted urinals shall not 0.125 gallons per flush. |
| j. Wind erosion control. k. Other soil loss BMPs acceptable to the enforcing agency. 2. Good housekeeping BMPs to manage construction equipment, materials, non-stormwater discharges | into listed suitable cabinet(s), box(es), enclosure(s) or equivalent. 3. Plan design shall be based upon 40-ampere minimum branch circuits. | Note: [N] | 5.303.3.2.2 Floor-mounted Urinals. The effective flush volume of floor-mounted or other urinals not exceed 0.5 gallons per flush. |
| and wastes that should be considered for implementation as appropriate for each project include, but are not limited to, the following: | 4. Electrical calculations shall substantiate the design of the electrical system, to include the rating of equipment and any on-site distribution transformers and have sufficient capacity to simultaneously charge all required EVs at its full rated amperage. | 1.See also <i>California Building Code</i> , Chapter 12, Section 1205.6 for college campus lighting requirements for parking facilities and walkways. 2.Refer to Chapter 8 (Compliance Forms, Worksheets and Reference Material) for IES TM-15-11 Table | X 5.303.3.3 Showerheads. [BSC-CG] 5.303.3.3.1 Single showerhead. Showerheads shall have a maximum flow rate of not more that |
| a. Dewatering activities. b. Material handling and waste management. c. Building materials stockpile management. | 5. The service panel or subpanel(s) shall have sufficient capacity to accommodate the required number of dedicated branch circuit(s) for the future installation of the EVSE. | A-1, California Energy Code Tables 130.2-A and 130.2-B. 3. Refer to the California Building Code for requirements for additions and alterations. | gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U. WaterSense Specification for Showerheads. |
| d. Management of washout areas (concrete, paints, stucco, etc.). e. Control of vehicle/equipment fueling to contractor's staging area. f. Vehicle and equipment cleaning performed off site. | 5.106.5.3.3 EV charging space calculations. [N] Table 5.106.5.3.3 shall be used to determine if single or multiple charging space requirements apply for the future installation of EVSE. | | 5.303.3.3.2 Multiple showerheads serving one shower. When a shower is served by more that showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlle |
| f. Venicle and equipment cleaning performed off site. g Spill prevention and control. h. Other housekeeping BMPs acceptable to the enforcing agency. | Exceptions: On a case-by-case basis where the local enforcing agency has determined EV | | single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to allow only one shower outlet to be in operation at a time. Note: A hand-held shower shall be considered a showerhead. |
| DISCLAIMER: THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALLED | Charging and infrastructure is not feasible based upon one or more of the following conditions: | T IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER | |

| | | | NIA GREE MANDATORY | | | | | | |
|-----|--------|------------------|---|---|---|---|---|--|--|
| Y I | | RESPON. PARTY | 5.106.2 STORMWATER POLLUTION PREVENTION FOR LAND. Comply with all lawfully enacted stormwater dischar more of land, or (2) disturb less than one acre of land but a Note: Projects that (1) disturb one acre or more of land, or | PROJECTS THAT DISTURB ONE OR MORE Irge regulations for projects that (1) disturb one re part of a larger common plan of developmer | E ACRES OF acre or th sale. | οΝ. TY 1. Where there 2. Where there additional log | e is insufficient el e is evidence suit cal utility infrastru ion of Section 5.1 | ectrical supply. able to the loca icture design re | al enforc |
| | | | larger common plan of development or sale must comply w applicable National Pollutant Discharge Elimination System Associated with Construction and Land Disturbance Activit the Lahontan Regional Water Quality Control Board (for pre- The NPDES permits require postconstruction runoff (post- (pre-project hydrology) with the installation of postconstruc- permits emphasize runoff reduction through on-site stormw through nonstructural controls, such as Low Impact Develor Stormwater volume that cannot be addressed using nonstr practices and be approved by the enforcing agency. Refer to the current applicable permits on the State Water www.waterboards.ca.gov/constructionstormwater. Conside should be given during the initial design process for appropri | with the post-construction requirements detailed in (NPDES) General permit for Stormwater Disc ies issued by the State Water Resources Contro opjects in the Lake Tahoe Hydrologic Unit). Project hydrology) to match the preconstruction tion stormwater management measures. The N rater use, interception, evapotranspiration, and opment (LID) practices, and conversation design uctural practices is required to be captured in s Resources Control Board website at: pration to the stormwater runoff management m | in the harges rol Board or runoff NPDES infiltration n measures. tructural | TABLE 5.106.5.3 TOTAL NUMBER OF 0-1 10-2 26-1 51-1 76-1 101-1 | PARKING SPAC 9 25 50 75 00 | CES NU | MBER |
| 5 | | Owner | 5.106.4 BICYCLE PARKING. For buildings within the auth specified in Section 103, comply with Section 5.106.4.1. F | nority of California Building Standards Commiss | | 151-1 201 AND | | | |
| | | | Architect pursuant to Section 105, comply with Section 5.1 5.106.4.1 Bicycle parking. [BSC-CG] Comply with | 06.4.2 | | 1. Calculation for space | ces shall be round | ded up to the ne | earest v |
| × | | Owner | to generate visitor traffic, provide permanently entrance, readily visible to passers-by, for 5% added, with a minimum of one two-bike capac | the new project or an addition or alteration is an anchored bicycle racks within 200 feet of the v of new visitor motorized vehicle parking space ity rack. ich add nine or less visitor vehicular parking sp | visitors' s being | 5.106.5.3.4 [N] Ident reserved overcurrent p termination location s 5.106.5.3.5 [N] Future Designated parking fo | protective device shall be permanen e charging spaces r clean air vehicle | space(s) for fui ntly and visibly s qualify as des es. | ture EV marked |
| | x | | | new buildings with tenant spaces that have 10 sing for 5 percent of the tenant-occupant vehicu | Ilar parking | Note: Future electric v the local enforcing ag | encies. | | |
| | x x | | 5.106.4.1.3 For additions or alterations that ad provide secure bicycle parking for 5 percent o minimum of one bicycle parking facility. 5.106.4.1.4 For new shell buildings in phased | Id 10 or more tenant-occupant vehicular parkin f the tenant vehicular parking spaces being add projects provide secure bicycle parking for 5 pe spaces with a minimum of one bicycle parking | ercent of the | with the following: 1. The minimum requiremen Section 10-114 of the Cal 2. Backlight (B) ratings as do 3. Uplight and Glare ratings Chapter 8) and | its in the Californi ifornia Administra efined in IES TM- as defined in Cali | a Energy Code tive Code; and 15-11 (shown ir fornia Energy C | for Ligh n Table Code (st |
| | | | be convenient from the street and shall meet of | ermanently anchored racks for bicycles; ently anchored racks; or |)6.4.1.4 shall | 4. Allowable BUG ratings no lawfully enacted pursuant Exceptions: [N] 1. Luminaires that qu 2. Emergency lighting | to Section 101.7 alify as exception | , whichever is n s in Sections 13 | nore stri 30.2 (b) |
| | x | | Sacramento Area Bicycle Advocates. 5.106.4.2 Bicycle parking. [DSA-SS] For public so 5.106.4.2.1 and 5.106.4.2.2 5.106.4.2.1 Student bicycle parking. Provid | de permanently anchored bicycle racks conven | ections | Building facade me Custom lighting facade me Custom lighting facade me Alternate materials Luminaires with les | atures as allowed s, designs and me ss than 6,200 initi | by the local en ethods of constr al luminaire lun | forcing uction. nens. |
| | | | | ermanent, secure bicycle parking conveniently aces per new building. Acceptable bicycle park | | TABLE 5.106.8 [N] MAX AND GLARE (BUG) RAT | | DWABLE B | ACKL |
| | | | | ermanently anchored racks for bicycles; | | ALLOWABLE RATING | LIGHTING ZONE LZ0 | LIGHTING ZONE LZ1 | LIG |
| | | | 3. Lockable, permanently anchored bic 5.106.5.2 DESIGNATED PARKING FOR CLEAN A that add 10 or more vehicular parking spaces, provio fuel-efficient and carpool/van pool vehicles as follow | IR VEHICLES. In new projects or additions or le designated parking for any combination of lo | | MAXIMUM ALLOWABLE BACKLIGHT RATING 3 Luminaire greater than 2 mounting heights (MH) from property line | N/A | No Limit | No |
| | | | TABLE 5.106.5.2 - PARKING TOTAL NUMBER OF PARKING SPACES | NUMBER OF REQUIRED SPACES | | Luminaire back hemisphere is 1-2 MH from property line | N/A | B2 | |
| | | | 0-9 10-25 | 0 3 | | Luminaire back hemisphere is 0.5-1 MH from property line | N/A | B1 | |
| | | | 25-50 | 6 | | Luminaire back hemisphere is less than 0.5 MH from property line | N/A | B0 | |
| | | | 51-75 76-100 | 9 12 | | MAXIMUM ALLOWABLE UPLIGHT RATING (U) | | | |
| | | | 101-150 | 18 | | For area lighting ₃ | N/A | U0 | |
| | | | 151-200 201 AND OVER | 21 AT LEAST 12% OF TOTAL ¹ | | For all other outdoor lighting,including decorative luminaires | N/A | U1 | |
| | | | 1.Calculation for spaces shall be rounded up | to the nearest whole number. | | MAXIMUM ALLOWABLE GLARE RATING ₅ (G) | | | |
| | | | Note: Designated parking for clean air vehicles shall count enforcing agencies. | towards the total parking spaces required by the | ne local | Luminaire greater than 2 MH from property line | N/A | G1 | |
| | | | | t word aligns with the end of the stall striping a | nd is | Luminaire front hemisphere is 1-2 MH from property line | N/A | G0 | |
| | | | visible beneath a parked vehicle: CLEAN AIF Note: Vehicles bearing Clean Air Vehicle stick | | | Luminaire front hemisphere is 0.5-1 MH from property line | N/A | G0 | |
| | | | considered eligible for designated parking spa 5.106.5.3 Electric vehicle (EV) charging. [N] Cons | aces. | or | Luminaire back hemisphere is less than 0.5 MH from property | N/A | G0 | |
| | | | Section 5.106.5.3.2 to facilitate future installation of When EVSE(s) is/are installed, it shall be in accordated | electric vehicle supply equipment (EVSE). | | line 1. IESNA Lighting Zones 0 and 5 California Energy Code and Chap | | | |
| | | | required per Table 5.106.5.3.3, a raceway is r | nents. [N] When only a single charging space is required to be installed at the time of constructio California Electrical Code. Construction plans a I to, the following: | on | For property lines that abut pulline may be considered to be 5 fer compliance with this section. For corridors, the property line may be transit corridor for the purpose of | blic walkways, bil et beyond the act property lines tha e considered to b | keways, plazas ual property lin t abut public ro e the centerline | and pa e for pu adways e of the |
| | | | The raceway shall not be less than The raceway shall originate at a ser | vice panel or a subpanel serving the area, and roposed location of the charging equipment and | shall | General lighting luminaires in a these reduced ratings. Decorative "all other outdoor lighting" 5.106.8.1 Facing- Backlight | luminaries locat | ed in these area | as shall |
| | | | The service panel or subpanel shall 40-ampere dedicated branch circuit 5.106.5.3.2 Multiple charging space required required per Table 5.106.5.3.3 raceway(s) is/a | have sufficient capacity to accommodate a mir for the future installation of the EVSE. Ements. [N] When multiple charging spaces ar are required to be installed at the time of constr California Electrical Code. Construction plans a | re la | Luminaries within 2MH of a pro and shall comply with the back the nearest point of that proper Exception: Corners. If two to the luminaire, then the lu- directly behind the luminai lines to determine the requ | light rating specifi ty line. o property lines (d uminaire may be re. The luminaire | ed in Table 5.1 or two segments oriented so that shall still use th | 06.8 ba s of the t the inte |
| | | | specifications shall include, but are not limited The type and location of the EVSE. The raceway(s) shall originate at a shall terminate in close proximity to into listed suitable cabinet(s), box(ex | to, the following: service panel or a subpanel(s) serving the area the proposed location of the charging equipme s), enclosure(s) or equivalent. | , and | 5.106.8.2 Facing-Glare. For luminaires covered by 5.10 2MH of the luminaire then the l 5.106.8 based on the lighting z hemisphere. | 6.8.1, if a propert uminaire shall co | y line also exist mply with the m | nore stri |
| | | | rating of equipment and any on-site simultaneously charge all required E 5. The service panel or subpanel(s) sh | iate the design of the electrical system, to inclu distribution transformers and have sufficient ca | apacity to | Note: [N] 1.See also <i>California Building</i> parking facilities and walkwa 2.Refer to Chapter 8 (Compli A-1, <i>California Energy Code</i> 3. Refer to the <i>California Bu</i> | ys. ance Forms, Woi Tables 130.2-A a | ksheets and Rend Rend Rend Rend | eferenc |
| | | | · | . [N] Table 5.106.5.3.3 shall be used to determ | nine if | | | | |
| | | | Exceptions: On a case-by-case basis wh | ere the local enforcing agency has determined sed upon one or more of the following condition | | | | | |
| - 1 | | | | 5 | | 1 | | | |

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| Include L 25-60 4 31-75 7 76-100 9 101-150 13 151-200 18 201 AND OVER 10% of total Calculation for spaces shall be rounded up to the nearest whole number. 065.3.4 [N] Hardington. The space space (s) for fuure EV charging as "EV CAPABLE". The raceway minitation location shall be premanent with a with whole number. 1065.3.4 [N] Future charging space quality as designated parking as designed and installed to comply in class and solution premanent with a with whole number. 1065.3.4 [N] Future charging spaces shall ount towards the total parking spaces required by local efforting farmers. 106.3.4 [N] Hardington Administrative Code and "signated parking as designed and installed to comply (rg) information receives shown in Table 5.106.8, [N] or Camply with a local ordinance big enable parking as a defined in CBTM-16-11 (above in Table 3.102.4 and 130.2 h in missibili Di antigo as defined in CBTM-16-11 (above in Table 3.102.4 and 130.2 h in missibili Di antigo as defined in CBTM-16-11 (above in Table 1.102.7 h in the Calfornia Energy Code, part 6. 11 and Clasma Table parking as exceptions in Sections 130.2 (b) and 140.7 of the Calfornia Energy Code, part 8. 12 and MDA VILLOWABLE BACKLIGHT, UPLIGHT Image the start of the calfornia Energy Code, part 8. 12 and MDA MA MA MA MA 12 and MA | | manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following: |
|---|--------------|--|
| LEF. 106.5.3.3 Tuber OF FARKING SPACES NUMBER OF REQUIRED SPACES 10.23 2 28-60 4 10.75 7 7.4.100 0 10.75 7 7.4.100 0 10.75 7 7.4.100 0 10.75 7 7.4.100 0 10.77 10% of total 201.4AD OVER 10% of total 653.4 01 Median EV charged and the state of the s | | 1. Swales. |
| 0-4 0 0-55 2 0-550 4 0-1-75 7 7-100 9 0101-150 13 1011-150 13 0101-150 14 0101-150 13 0111-150 13 0111-150 13 0111-150 14 </td <td></td> <td> Water collection and disposal systems. French drains. </td> | | Water collection and disposal systems. French drains. |
| 10.25 2 11.75 7 76-100 9 101-150 13 11.151.200 16 201 AND OVER 10% of total* Addition of spaces shall be rounded up to the nearest whole number. 86.3.3 (I) View charging as EV CAPABLE*. The nearest interference of the cartiform of the cartifo | 1 1 1 | Water retention gardens. Other water measures which keep surface water away from buildings and aid in groundwater recharge. Exception: Additions and alterations not altering the drainage path. |
| 51-75 7 72-100 9 101-1500 13 201 AND OVER 10% of total* Aculation for spaces shall be rounded up to the nearest whole number. 65.3-14 [M Jedmittalion. The service spaces guality as designated parking as described in Section 5.108.5.2 granted parking for dena in vehicle. 65.3-14 [M Jedmittalio be promoving with a visibly marked as "EV CAPABLE". The use decirit vehicle changing spaces quality as designated parking as described in Section 5.108.5.2 granted parking for dena in vehicle. 65.3-16 [M Jedmittalio be promoving with a value of the total parking spaces required by collaring for dena in vehicle. Collaring total and the collaring total and total of the collaring spaces required by collaring agencies. 0.01.0110 He CollECTION. [Np.1 Outdoor lighting systems shall be designed and installed to comply "immore agring as colling to collaring total and to | | 5.106.12 SHADE TREES [DSA-SS]. Shade Trees shall be planted to comply with Sections 5.106.12.1, 5.106.12.2, and 5.106.12.3. Percentages shown shall be measured at noon on the summer solstice. Landscape irrigation |
| Initial Initia Initia Initia Initial Initia Ini | | necessary to establish and maintain tree health shall comply with Section 5.304.6. 5.106.12.1 Surface parking areas. Shade tree plantings, minimum #10 container size or equal, shall be installed |
| Isi 1200 18 201 AND OVER 10% of trait aduation for spaces shall be rounded up to the nearest whole number. 6.5.3 (M) (Meritalicature. The sorticity opan) of analyzaneo() consil directory shall identify the nearest variable marked as EV CAPABLE. The neareway inside that the observe spaces shall be derived spaces in EV CAPABLE. 8.5.3 (M) Future charging spaces qualify as designed and hinding as described in Section 5.106.5.2 (and the observed spaces shall count towards the total parking spaces required by cool and origing agencies. 0.0.1 (J) future charging spaces shall count towards the total parking spaces required by cool and origing agencies. 0.0.1 (J) of the California Administrative Code (and the california Administrative Code) and (by antipa as description in State 5.10 (Advant in Table A.1 in Chapter 9): and Gate reading in State State 1.1 (down in Table A.1 in Chapter 9): and Gate reading in State State 1.1 (down in Table A.1 in Chapter 9): and Gate reading in State State 1.1 (down in Table A.1 in Chapter 9): and Gate reading in State State 1.1 (down in Table A.1 in Chapter 9): and Gate reading in State State 1.1 (down in Table A.1 in Chapter 9): and Gate reading in State State 1.1 (down in Table A.1 in Chapter 9): and Gate reading in State State 1.1 (down in Table A.1 in Chapter 9): and Gate reading in State State 1.1 (down in Table A.1 in Chapter 1.1 (d | | to provide shade over 50 percent of the parking area within 15 years. Exceptions: The surface parking area covered by solar photovoltaic shade structures, or shade |
| Includent for spaces shall be rounded up to the nearest whole number: 5.3.5.1(N) Identification. The service panel or subpanel(s) circuit directory shall identify the weed overcurrent protective dovice spaces) for fulture EV charging as EV CAPABLE. The recovery number is than the beginnermetry and value, marked as EV CAPABLE. The recovery number is electric value be permanetry and value, marked as EV CAPABLE. 5.3.5.1(N) Future charging spaces shall count towards the total parking spaces required by including and the California Energy Code for Lighting Zones 0-4 as defined in Chapter 10, 10, 10, 110, 20, 11, 10, 20, 20, 20, 20, 20, 20, 20, 20, 20, 2 | | structures, with roofing materials that comply with Table A5.106.11.2.2 in Appendix A5, are not included in the total area calculations. |
| 5.3.1 NJ identification. The service panel of subpanel(s) circuit directory shall identify the readeway includes and service APAILE. 5.3.3 LV identification. The service panel of subpanel(s) circuit directory shall identify the readeway includes and includes and service APAILE. 5.3.3 LV identification. The service panel of subpanel(s) circuit directory shall identify the readeway includes and includes are used APAILE. 5.3.3 LV identification. The service panel of subpanel(s) circuit directory shall identify the readeway includes and installed to comply and endorming agencies. SULUTION REDUCTION. [N] I Outdoor lighting aystems shall be designed and installed to comply in the California Energy Code for Lighting Zones 0.4 as defined in Charler 11 (Boom in Table A-1 in Chapter 8); and Gao exceeding these shown in Table 5.106 8, [N] or Comply with a local ordinance installed pursuant to Section 10.17, whichever is more stringent. (E) California Administrative Code; and the California Energy Code, Ref 0. Submit and the Section 10.17, whichever is more stringent. (E) California Administrative Code; California Energy Code, Ref 0. Submit and the california Energy Code, Ref 0. Submit and the california Energy Code. Ref 0. Submit and the california Energy Code. Ref 0. Submit and the california Energy Code (Stown in California Energy Code, Ref 0. Submit and the california Energy Code (Stown in California Energy Code) (Stown i | | 5.106.12.2 Landscape areas. Shade tress plantings, minimum #10 container size or equal shall be installed to provide shade of 20% of the landscape area within 15 years. |
| ved overcurrent protective device space(s) for thure EV charging as "EV CAPABLE". The raceway instant location and all be permanently and visibly marked as "EV CAPABLE". The raceway instant of the observation of the observ | | Exceptions: Playfields for organized sport activity are not included in the total area calculation. |
| parted parking for clean air vehicles. : Fubure electric vehicle charging spaces shall count towards the total parking spaces required by a cluster electric vehicle charging spaces shall count towards the total parking spaces required by the parking and effect in Early Voldeor lighting zones 0.4 as defined in Chapter 10, 11 11 at that charge the cluster and the parking and effect in Early Voldeor lighting zones 0.4 as defined in Chapter 10, 11 11 at that charge the cluster and the Diarba space set defined in California Energy Code (shown in Table A.1 in Chapter 8); and Clarge ratings as defined in California Energy Code (shown in Table A.1 in Chapter 8); and Clarge ratings as defined in California Energy Code (shown in Table A.1 in Chapter 8); and Clarge ratings as defined in California Energy Code (shown in Table A.1 in Chapter 8); and Clarge ratings as defined in California Energy Code (shown in Table A.1 in Chapter 8); and Clarge ratings as defined in California Energy Code, Part 8. Light factor from the clarge the requirements in Table 140.7-B of the California Energy Code, Part 8. Light factor from the factor for onstruction energency lighting. Light factor from the factor for onstruction energing factor factor for the clarge the requirements in Table 140.7-B of the California Energy Code, Part 8. Light factor factor for the clarge the requirements in Table 140.7-B of the California Energy Code, Part 8. Light factor factor for the clarge the requirements in Table 140.7-B of the California Energy Code, Part 8. Light factor factor factor factor for the clarge the part 100 min 100 | | 5.106.12.3. Hardscape areas. Shade tree plantings, minimum #10 container size or equal shall be installed to provide shade over 20 percent of the hardscape area within 15 years. |
| Sciel and comparison Sciel and comparison DLUTION REDUCTION. [N]. 1 Outdoor lighting systems shall be designed and installed to comply (1) 114 of the California Administrative Code; and (10) 114 of the California Administrative Code; and (10) 114 of the California Administrative Code; and (10) 114 of the California Energy Code (Edwon in Table 51 30.2.4 and 130.2.8 in a comparison of the Sciel Complex (Edwon in Table 51 30.2.4 and 130.2.8 in a comparison of the Sciel Complex (Edwon in Table 51 30.2.4 and 130.2.8 in a comparison of the Sciel Complex (Edwon in Table 51 30.2.4 and 130.2.8 in a comparison of the Sciel Complex (Edwon in Table 51 30.2.4 and 130.2.8 in the California Energy Code. Part 6. Use Complex (Edwon in Table 51 40.7.6 of the California Energy Code. Part 6. Use Complex (Edwon in Table 51 40.7.6 of the California Energy Code. Part 6. Use Complex (Edwon in Table 51 40.7.6 of the California Energy Code. Part 6. Use Complex (Edwon in Table 51 40.7.6 of the California Energy Code. Part 6. Use Complex (Edwon in Table 51 40.7.6 of the California Energy Code. Part 6. Use Complex (Edwon in Table 51 40.7.6 of the California Energy Code. Part 6. Use Complex (Edwon in Table 51 40.7.6 of the California Energy Code. Part 6. Use Complex (Edwon in Table 51 40.7.6 of the California Energy Code. Part 6. Use Complex (Edwon in Table 51 40.7.6 of the California Energy Code. Part 6. Use Complex (Edwon in Table 51 40.7.6 of the California Energy Code. Part 6. Use Complex (Edwon in Table 51 40.7.6 of the California Energy Code. Part 6. Use Complex (Edwon in Table 51 40.7.6 of the California Energy Code. Part 6. Use Complex (Edwon in Table 51 40.7.6 of the California Energy Code. Part 6. Use Complex (Edwon in Table 51 40.7.6 of the California Energy Code. Part 6. Use Complex (Edwon in Table 51 40.7.6 of the California Energy Code. Part 61 (Edwon in Table 51 40.7.6 of the California Energy Code. Part 61 (Edwon in Table 51 40.7.6 of the Califor | | Exceptions: Walks, hardscape areas covered by solar photovoltaic shade structures, and hardscape areas covered by shade structures with roofing materials that comply with Table A5.106.11.2.2 in Appendix A5, are not included in the total area calculation. |
| With the california Administrative Code; and (B) ratings as defined in IEST M-IEST M-IEST (B) (B) mon Table A-1 in Chapters 3); (B) ratings and exceeding those shown in Table 5.106.8, (N) or Comply with a local ordinance anced oursearch oursea | | |
| 10-114 of the California Administrative Code; and (B) ratings and defined in ICS TM-511 (shown in Table A-1 in Chapter 8); and Glara ratings as defined in California Energy Code (shown in Tables 130.2-A and 130.2-B in a BUG ratings not exceeding these shown in Table 5.108.8, [N] or Comply with a local ordinance insected pursuants to Section 101.7, whichever is more attingent: IST IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII | | DIVISION 5.2 ENERGY EFFICIENCY |
| (1) Tatings as defined in LES TM-15-11 (shown in Table A-110 Chapter 8): (1) Galars ratings as defined in California Energy Code (shown in Table 310.2-A and 130.2-B in an addition of the california Energy Code (shown in Table 310.7-A and 130.2-B in an addition of the california Energy Code. (1) Table state unable of the california Energy Code (shown in Table 7.10-B of the California Energy Code. (1) Table state unable of the california Energy Code. (1) Table state unable of the california Energy Code. (1) Table state state unable of the california Energy Code. (1) Table state state unable of the california Energy Code. (1) Table state state allowed by the local enforcing agency, as permitted by Section 101.8. (1) Table state | | SECTION 5.201 GENERAL 5.201.1 Scope [BSC-CG]. California Energy Code [DSA-SS]. For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory building standards. |
| a BUG ratings not exceeding those shown in Table 5.108.8, [N] or Comply with a local ordinance increated pursuant to Section 101.7, whichever is more stringent. STM minares that qualify as exceptions in Sections 130.2 (b) and 140.7 of the California Energy Code. Part 6. using figade meeting the requirements in Table 140.7.8 of the California Energy Code. Part 6. Usiom lighting features as allowed by the local enforcing agency, as permitted by Section 101.8. ternate materials, designs and methods of construction. Invariants with less than 6.200 initial luminarie lumens. 3.8 [N] MAXIMUM ALLOWABLE BACKLIGHT, UPLIGHT [UGHT (BUG) RATINGS 1.2 ALE RATING 2.00E 1.00F 1.00F | | |
| mergency lighting. An analysis of the california Energy Code, Part 6, ustom lighting feadures as allowed by the local enforcing agency, as permitted by Section 101.8 termate materials, designs and methods of construction. with less than 6.200 initial luminaire lumens. Image: Comparison of the california Energy Code, Part 6, ustom lighting feadures as allowed by the local enforcing agency, as permitted by Section 101.8 termate materials, designs and methods of construction. Sign (I) MAXIMUM ALLOWABLE BACKLIGHT, UPLIGHT (BUG) RATINGS 12 LiGHTING LIGHTING ZONE L21 ZONE L22 ZONE L23 ZONE L23 ZONE L24 ZONE L23 ZONE L24 ZONE L23 ZONE L24 (MH) from N/A No Limit No Limit No Limit No Limit (MH) from N/A NA B2 B3 B4 B4 WABLE (MH) from N/A B1 B2 B3 B4 B4 B4 emisphere is N/A B1 B2 B3 B3 B3 errisphere is N/A B0 B0 B1 B2 WABLE (GU) UU UU UU (a) N/A UU UU UU UU UU bcr (G) UU UU UU operty line N/A G1 G2 G3 G4 G4 misphere is N/A G0 G0 G0 G0 G1 G1 G1 c(G) UU UU UU amisphere is N/A G0 G0 G0 G0 G1 G1 c(G) UU UU UU amisphere is N/A G0 G0 G0 G0 G1 G1 c(G) UU UU UU amisphere is ONA G0 G0 G0 G0 G1 G1 g Zones 0 and 5 are not applicab | | DIVISION 5.3 WATER EFFICIENCY AND CONSERVATION SECTION 5.301 GENERAL 5.301.1 Scope. The provisions of this chapter shall establish the means of conserving water use indoors, outdoors and in wastewater conveyance. |
| IIIIIng facade meeting the requirements in Table 140.7-8 of the California Energy Code, Part 6. Issemiliphing factures as allowed by the local enforcing agency, as permitted by Section 101.8 ternate materials, designs and methods of construction. IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII | | SECTION 5.302 DEFINITIONS |
| uninaires with less than 6,200 initial luminaire lumens. Si [N] MAXIMUM ALLOWABLE BACKLIGHT, UPLIGHT Si [SI] Si [SI] Si E RATING LIGHTING ZONE LIGHTING ZONE LIGHTING ZONE LIGHTING ZONE LIGHTING ZONE WABLE ING : I LIGHTING LIGHTING LIGHTING ZONE LIGHTING WABLE ING : I I No LIGHTING LIGHTING ZONE LIGHTING WHALE I No LIGHTING LIGHTING LIGHTING LIGHTING WABLE ING : N/A No LIGHTING LIGHTING No LIGHTING orgenty line N/A B2 B3 B4 B4 emisphere is operty line N/A B0 B0 B1 B2 WABLE G (U) N/A U0 U0 U0 U0 oor decorative N/A G1 G2 G3 G4 emisphere is operty line N/A G0 G0 G1 G1 G2 oor G G0 G0 G1 G1 G2 G3 G4 </td <td></td> <td>5.302.1 Definitions. The following terms are defined in Chapter 2 (and are included here for reference) EVAPOTRANSPIRATION ADJUSTMENT FACTOR (ETAF) [DSA-SS]. An adjustment factor when applied to</td> | | 5.302.1 Definitions. The following terms are defined in Chapter 2 (and are included here for reference) EVAPOTRANSPIRATION ADJUSTMENT FACTOR (ETAF) [DSA-SS]. An adjustment factor when applied to |
| (BUG) RATINGS 1:2 LIGHTING ZONE IZ1 LIGHTING ZONE IZ1 LIGHTING ZONE IZ2 LIGHTING ZONE IZ2 LIGHTING ZONE IZ2 LIGHTING ZONE IZ2 WABLE ING : I I I I I I WABLE ING : I I I I I I WABLE ING : I I I I I I I WABLE interval N/A No Limit No Limit No Limit No Limit No Limit Interval N/A B2 B3 B4 B4 emisphere is from property N/A B1 B2 B3 B3 emisphere is from property N/A B0 B0 B1 B2 WABLE for morporety N/A U1 U2 U3 UR WABLE so (0) N/A U1 U2 U3 UR WABLE for morporety N/A G1 G2 G3 G4 ensiphere is from property inc N/A G0 G0 G1 G1 granes 0 and 5 are not applicable; refer to Lighting Zones as defined in the Code and Chapter | | reference evapotranspiration that adjusts for plant factors and irrigation efficiency, which ae two major influences on the amount of water that needs to be applied to the landscape. FOOTPRINT AREA [DSA-SS]. The total area of the furthest exterior wall of the structure projected to natural grade, |
| LE RATING LIGHTING ZONE LIGHTING LIGHTING ZONE LIGHTING LIGHTING <thlighting< th=""> <thlighting< th=""> <th< td=""><td></td><td>not including exterior areas such as stairs, covered walkways, patios and decks. METERING FAUCET. A self-closing faucet that dispenses a specific volume of water for each actuation cycle. The</td></th<></thlighting<></thlighting<> | | not including exterior areas such as stairs, covered walkways, patios and decks. METERING FAUCET . A self-closing faucet that dispenses a specific volume of water for each actuation cycle. The |
| LE RATING ZONE | | volume or cycle duration can be fixed or adjustable. |
| (MH) from N/A No Limit No Limit No Limit No Limit No Limit No Limit amisphere is orbytine N/A B2 B3 B4 B4 amisphere is from property N/A B1 B2 B3 B3 amisphere is from property N/A B0 B0 B1 B2 WABLE g (U) N/A U0 U0 U0 U0 MAR U1 U2 U3 UR WABLE (G) N/A G1 G2 G3 G4 wrisphere is from property N/A G0 G1 G1 G2 wrisphere is from property N/A G0 G0 G1 G1 ozces 0 and 5 are not applicable; refer to Lighting Zones as defined in the Code and Chapter 10 of the California Administrative Code. | | GRAYWATER. Pursuant to Health and Safety Code Section 17922.12, "graywater" means untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. "Graywater" includes, but is not limited to wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines and laundry tubs, but does not include waste water from kitchen sinks or |
| erty line N/A B2 B3 B4 B4 emisphere is from property N/A B1 B2 B3 B3 emisphere is from property N/A B0 B0 B1 B2 WABLE 6 (U) N/A U0 U0 U0 U0 or N/A U1 U2 U3 UR WABLE 6 (G) N/A U1 U2 U3 UR WABLE 6 (G) N/A G1 G2 G3 G4 misphere is erty line N/A G0 G1 G1 G2 amisphere is erty line N/A G0 G0 G1 G1 g Zones 0 and 5 are not applicable; refer to Lighting Zones as defined in the Code and Chapter 10 of the California Administrative Code. | | dishwashers. MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO). The California ordinance regulating landscape design, installation and maintenance practices that will ensure commercial, multifamily and other developer installed landscapes greater than 2500 square feet meet an irrigation water budget developed based on landscaped area and |
| operty line N/A B1 B2 B3 B3 emisphere is from property N/A B0 B0 B1 B2 DWABLE (G (U) N/A U0 U0 U0 U0 a N/A U0 U0 U0 U0 oor decorative N/A U1 U2 U3 UR DWABLE (a (G) Image: Comparison of the compar | | climatological parameters. MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO). [HCD] The California model ordinance |
| from property N/A B0 B0 B1 B2 WMABLE G (U) N/A U0 U0 U0 U0 oor decorative N/A U1 U2 U3 UR oor decorative N/A U1 U2 U3 UR WABLE a (G) Image: Comparison of the co | | (California Code of Regulations, Title 23, Division 2, Chapter 2.7), regulating landscape design, installation and maintenance practices. Local agencies are required to adopt the updated MWELO, or adopt a local ordinance at leas as effective as the MWELO. |
| IG (U) N/A U0 U0 U0 U0 oor decorative N/A U1 U2 U3 UR own decorative N/A U1 U2 U3 UR WABLE is (G) III U2 U3 UR WABLE is (G) IIII U2 U3 UR WABLE is (G) IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII | | POTABLE WATER. Water that is drinkable and meets the U.S. Environmental Protection Agency (EPA) Drinking Water Standards. See definition in the California Plumbing Code, Part 5. |
| loor decorative N/A U1 U2 U3 UR DWABLE or than 2 MH N/A G1 G2 G3 G4 emisphere is N/A G0 G1 G1 G2 G3 G4 emisphere is N/A G0 G1 G1 G2 G3 G4 emisphere is N/A G0 G0 G1 G1 G2 G3 G4 insphere is N/A G0 G0 G1 G1 G2 G3 G4 inf com property N/A G0 G0 G1 G1 G1 G2 igzones 0 and 5 are not applicable; refer to Lighting Zones as defined in the / Code and Chapter 10 of the California Administrative Code. ines that abut public walkways, bikeways, plazas and parking lots, the property lines that abut public roadway or public transit operty line may be considered to be the centerline of the public roadway or public transit operty line may be considered to be the centerline of the public roadway or public transit operty line may be considered to be the centerline of the public roadway or public or r the purpose o | | POTABLE WATER. [HCD] Water that is satisfactory for drinking, culinary, and domestic purposes, and meets the U.S. Environmental Protection Agency (EPA) Drinking Water Standards and the requirements of the Health Authority |
| decorative N/A U1 U2 U3 UR DWABLE 6 • (G) Image: Construction of the second se | | Having Jurisdiction. |
| is (G) Image: Constraint of the series of the same property line is behind the fixture, ply with the backlight rating specified in Table 5.106.8 based on the lighting zone and distance to shall be oriented so that the intersection of the two lines (the comer) is shall be oriented so that the intersection of the two lines (the comer) is shall be oriented so that the intersection of the two lines (the comer) is shall be the distance to the nearest property line. | | RECYCLED WATER. Water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur [Water Code Section 13050 (n)]. Simply put, recycled water is water treated to remove waste matter attaining a quality that is suitable to use the water again. |
| e N/A G1 G2 G3 G4 remisphere is perty line N/A G0 G1 G1 G2 remisphere is roperty line N/A G0 G0 G1 G1 G1 remisphere is 1 from property N/A G0 G0 G0 G1 G1 remisphere is 1 from property N/A G0 G0 G0 G1 G1 remisphere is 1 from property N/A G0 G0 G0 G1 G1 remisphere is 1 from property N/A G0 G0 G0 G1 G1 remisphere is 2 (Code and Chapter 10 of the Callifornia Administrative Code. | | SUBMETER. [HCD 1] A secondary device beyond a meter that measures water consumption of an individual rental unit within a multiunit residential structure or mixed-use residential and commercial structure. (See Civic Code Section 1954 202 (g) and Water and Section 517 for additional details) |
| remisphere is roperty line N/A G0 G0 G1 G1 hemisphere is I from property N/A G0 G0 G0 G0 G1 ng Zones 0 and 5 are not applicable; refer to Lighting Zones as defined in the V Code and Chapter 10 of the Callifornia Administrative Code. | | 1954.202 (g) and Water code Section 517 for additional details.) WATER BUDGET. Is the estimated total landscape irrigation water use which shall not exceed the maximum applied water allowance calculated in accordance with the Department of Water Resources Model Efficient Landscape Ordinance (MWELO). |
| If from property N/A G0 G0 G0 G0 G1 Ing Zones 0 and 5 are not applicable; refer to Lighting Zones as defined in the y Code and Chapter 10 of the Callifornia Administrative Code. | | SECTION 5.303 INDOOR WATER USE 5.303.1 METERS. Separate submeters or metering devices shall be installed for the uses described in Sections |
| Code and Chapter 10 of the Callifornia Administrative Code. ines that abut public walkways, bikeways, plazas and parking lots, the property idered to be 5 feet beyond the actual property line for purpose of determining this section. For property lines that abut public roadways and public transit perty line may be considered to be the centerline of the public roadway or public r the purpose of determining compliance with this section. g luminaires in areas such as outdoor parking, sales or storage lots shall meet tings. Decorative luminaries located in these areas shall meet <i>U</i> -value limits for lighting" -Backlight thin 2MH of a property line shall be oriented so that the nearest property line is behind the fixture, ply with the backlight rating specified in Table 5.106.8 based on the lighting zone and distance to oint of that property lines (or two segments of the same property line) have equidistant point inaire, then the luminaire shall still use the distance to the nearest points(s) on the property etermine the required backlight rating. Glare. | | 503.1.1 and 503.1.2. 5.303.1.1 Buildings in excess of 50,000 square feet. Separate submeters shall be installed as follows: |
| Sidered to be 5 feet beyond the actual property line for purpose of determining this section. For property lines that abut public roadways and public transit operty line may be considered to be the centerline of the public roadway or public or the purpose of determining compliance with this section. Ing luminaires in areas such as outdoor parking, sales or storage lots shall meet atings. Decorative luminaries located in these areas shall meet <i>U</i>-value limits for r lighting" Ind Backlight Ithin 2MH of a property line shall be oriented so that the nearest property line is behind the fixture, noly with the backlight rating specified in Table 5.106.8 based on the lighting zone and distance to on of that property line. In: Corners. If two property lines (or two segments of the same property line) have equidistant point ninaire, then the luminaire may be oriented so that the intersection of the two lines (the corner) is ehind the luminaire shall still use the distance to the nearest points(s) on the property etermine the required backlight rating. | | For each individual leased, rented or other tenant space within the building projected to consume more than 100 gal/day (380 L/day), including, but not limited to, spaces used for laundry or cleaners, |
| and luminaires in areas such as outdoor parking, sales or storage lots shall meet atings. Decorative luminaries located in these areas shall meet <i>U</i>-value limits for r lighting" Backlight Backlight Backlight ating specified in Table 5.106.8 based on the lighting zone and distance to ont of that property line. Corners. If two property lines (or two segments of the same property line) have equidistant point ninaire, then the luminaire may be oriented so that the intersection of the two lines (the corner) is ehind the luminaire. The luminaire shall still use the distance to the nearest points(s) on the property etermine the required backlight rating. | | restaurant or food service, medical or dental office, laboratory, or beauty salon or barber shop. 2. Where separate submeters for individual building tenants are unfeasible, for water supplied to the following subsystems: a. Makeup water for cooling towers where flow through is greater than 500 gpm (30 L/s). |
| Backlight ithin 2MH of a property line shall be oriented so that the nearest property line is behind the fixture, apply with the backlight rating specified in Table 5.106.8 based on the lighting zone and distance to ont of that property line. corners. If two property lines (or two segments of the same property line) have equidistant point ninaire, then the luminaire may be oriented so that the intersection of the two lines (the corner) is ehind the luminaire. The luminaire shall still use the distance to the nearest points(s) on the property etermine the required backlight rating. | | b. Makeup water for evaporative coolers greater than 6 gpm (0.04 L/s). c. Steam and hot water boilers with energy input more than 500,000 Btu/h (147 kW). 5.303.1.2 Excess consumption. A separate submeter or metering device shall be provided for any tenant within a new building or within an addition that is projected to consume more than 1,000 gal/day. |
| apply with the backlight rating specified in Table 5.106.8 based on the lighting zone and distance to bint of that property line. n: Corners. If two property lines (or two segments of the same property line) have equidistant point ninaire, then the luminaire may be oriented so that the intersection of the two lines (the corner) is ehind the luminaire. The luminaire shall still use the distance to the nearest points(s) on the property etermine the required backlight rating. | X C Engineer | - 5.303.3 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures (water closets and |
| n: Corners. If two property lines (or two segments of the same property line) have equidistant point ninaire, then the luminaire may be oriented so that the intersection of the two lines (the corner) is ehind the luminaire. The luminaire shall still use the distance to the nearest points(s) on the property etermine the required backlight rating. Glare. | | 5.303.3.1 Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per |
| | | flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-Type toilets. Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume of |
| minaire then the luminaire shall comply with the more stringent glare rating specified in Table | | two reduced flushes and one full flush. 5.303.3.2 Urinals. 5.303.3.2.1 Wall-mounted Urinals. The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush. |
| d on the lighting zone and distance to the nearest point on the nearest property line within the front | | 5.303.3.2.2 Floor-mounted Urinals. The effective flush volume of floor-mounted or other urinals shall |
| <i>California Building Code</i> , Chapter 12, Section 1205.6 for college campus lighting requirements for ilities and walkways. Chapter 8 (Compliance Forms, Worksheets and Reference Material) for IES TM-15-11 Table | | not exceed 0.5 gallons per flush. 5.303.3.3 Showerheads. [BSC-CG] 5.303.3.3.1 Single showerhead. Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA |
| rnia Energy Code Tables 130.2-A and 130.2-B. the California Building Code for requirements for additions and alterations. | | gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Showerheads. 5.303.3.3.2 Multiple showerheads serving one shower. When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a |

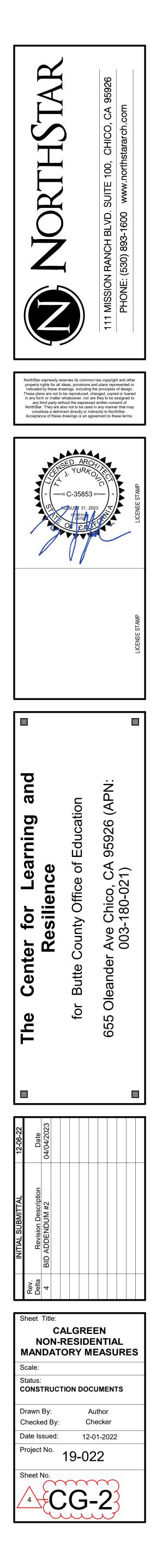


| PON. RTY | Y N/ | A RESPON. | Y N/A RESPON. |
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| | SECTION 5.407 WATER RESISTANCE AND MOISTURE MANAGEMENT | 5.410.2 COMMISSIONING. [N] New buildings 10,000 square feet and over. For new buildings 10,000 square feet and over, building commissioning shall be included in the design and construction processes of the building project to | 5.410.4.4 Reporting. After completion of testing, adjusting and balancing, provide a final report of te |
| 5.303.3.4 Faucets and fountains. ineer 5.303.3.4.1 Nonresidential Lavatory faucets. Lavatory faucets shall have a maximum flow rate of not margin than 0.5 goldene per minute at 60 pair | California Building Code Section 1402.2 (Weather Protection), manufacturer's installation instructions or local ordinance, whichever is more stringent. | verify that the building systems and components meet the owner's or owner representative's project requirements. Commissioning shall be performed in accordance with this section by trained personnel with experience on projects of comparable size and complexity. For I-occupancies that are not regulated by OSHPD or for I-occupancies and | signed by the individual responsible for performing these services. 5.410.4.5 Operation and maintenance (O & M) manual. Provide the building owner or representation |
| more than 0.5 gallons per minute at 60 psi. sineer 5.303.3.4.2 Kitchen faucets. Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, X | 5.407.2 MOISTURE CONTROL. Employ moisture control measures by the following methods. Owner 5.407.2.1 Sprinklers. Design and maintain landscape irrigation systems to prevent spray on structures. | L-occupancies that are not regulated y the California Energy Code Section 100.0 Scope, all requirements in Sections 5.410.2 through 5.410.2.6 shall apply. | detailed operating and maintenance instructions and copies of guaranties/warranties for each system instructions shall be consistent with OSHA requirements in CCR, Title 8, Section 5142, and other relations. |
| but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi. | Architect 5.407.2.2 Entries and openings . Design exterior entries and/or openings subject to foot traffic or wind-driven rain to prevent water intrusion into buildings as follows: | Note: For energy-related systems under the scope (Section 100) of the California Energy Code, including heating, ventilation, air conditioning (HVAC) systems and controls, indoor lighting systems and controls, as well as water heating systems and controls, refer to California Energy Code Section 120.8 for commissioning requirements | 5.410.4.5.1 Inspections and reports. Include a copy of all inspection verifications and reports by the enforcing agency. |
| 5.303.3.4.3 Wash fountains. Wash fountains shall have a maximum flow rate of not more than1.8 gallons per minute/20 [rim space (inches) at 60 psi]. | 5.407.2.2.1 Exterior door protection. Primary exterior entries shall be covered to prevent water intrusion by using nonabsorbent floor and wall finishes within at least 2 feet around and perpendicular to explain the set least one of the following: | Commissioning requirements shall include: | DIVISION 5.5 ENVIRONMENTAL QUALITY |
| 5.303.3.4.4 Metering faucets. Metering faucets shall not deliver more than 0.20 gallons per cycle. 5.303.3.4.5 Metering faucets for wash fountains. Metering faucets for wash fountains shall have a | such openings plus at least one of the following: 1. An installed awning at least 4 feet in depth. 2. The door is protected by a roof overhang at least 4 feet in depth. | Owner's or Owner representative's project requirements. Basis of design. Commissioning measures shown in the construction documents. Commissioning plan. | SECTION 5.501 GENERAL 5.501.1 SCOPE. The provisions of this chapter shall outline means of reducing the quantity of air contamin are odorous, irritating, and/or harmful to the comfort and well-being of a building's installers, occupants and |
| maximum flow rate of not more than 0.20 gallons per minute/20 [rim space (inches) at 60 psi]. Note: Where complying faucets are unavailable, aerators or other means may be used to achieve reduction | The door is protected by a root overhang at reast 4 reet. The door is recessed at least 4 feet. Other methods which provide equivalent protection. | 5. Functional performance testing. 6. Documentation and training. 7. Commissioning report. | SECTION 5.502 DEFINITIONS 5.502.1 DEFINITIONS. The following terms are defined in Chapter 2 (and are included here for reference) |
| 5.303.3.4.6 Pre-rinse spray value When installed, shall meet the requirements in the <i>California Code of Regulations</i> , Title 20 (Appliance | Contractor 5.407.2.2.2 Flashing. Install flashings integrated with a drainage plane. | Exceptions: | ARTERIAL HIGHWAY. A general term denoting a highway primarily for through traffic usually on a continu- A-WEIGHTED SOUND LEVEL (dBA). The sound pressure level in decibels as measured on a sound level |
| Efficiency Regulations), Section 1605.1 (h)(4) Table H-2, Section 1605.3 (h)(4)(A), and Section 1607 (d)(7), and shall be equipped with an integral automatic shutoff. | SECTION 5.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING Contractor 5.408.1 CONSTRUCTION WASTE MANAGEMENT. Recycle and/or salvage for reuse a minimum of 65% of the | Unconditioned warehouses of any size. Areas less than 10,000 square feet used for offices or other conditioned accessory spaces within unconditioned warehouses. | using the internationally standardized A-weighting filter or as computed from sound spectral data to which A adjustments have been made. |
| FOR REFERENCE ONLY: The following table and code section have been reprinted from the <i>California</i> <i>Code of Regulations</i> , Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)(4) and Section 1605.3 (h)(4)(A). | non-hazardous construction and demolition waste management ordinance, whichever is more stringent. | Tenant improvements less than 10,000 square feet as described in Section 303.1.1. Open parking garages of any size, or open parking garage areas, of any size, within a structure. Note: For the purposes of this section, unconditioned shall mean a building, area, or room which does not | 1 BTU/HOUR. British thermal units per hour, also referred to as Btu. The amount of heat required to raise of water one degree Fahrenheit per hour, a common measure of heat transfer rate. A ton of refrigeration is the amount of heat required to melt a ton (2,000 pounds) of ice at 32 ⁰ Fahrenheit. |
| TABLE H-2 | 5.408.1.1 Construction waste management plan. Where a local jurisdiction does not have a construction and demolition waste management ordinance, submit a construction waste management plan that: | provide heating and or air conditioning. | COMMUNITY NOISE EQUIVALENT LEVEL (CNEL). A metric similar to the day-night average sound level except that a 5 decibel adjustment is added to the equivalent continuous sound exposure level for evening h |
| STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY | Identifies the construction and demolition waste materials to be diverted from disposal by efficient usage, recycling, reuse on the project or salvage for future use or sale. Determines if construction and demolition waste materials will be sorted on-site (source-separated) or | IAS AC 476 is an accreditation criteria for organizations providing training and/or certification of commissioning personnel. AC 476 is available to the Authority Having Jurisdiction as a reference for | to 10pm) in addition to the 10 dB nighttime adjustment used in the Ldn. COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and |
| VALUES MANUFACTURED ON OR AFTER JANUARY 28, 2019 PRODUCT CLASS MAXIMUM FLOW RATE (gpm) | bulk mixed (single stream). 3. Identifies diversion facilities where construction and demolition waste material collected will be taken. 4. Specifies that the amount of construction and demolition waste materials diverted shall be calculated | qualifications of commissioning personnel. AC 476 des not certify individuals to conduct functional performance tests or to adjust and balance systems. | density fiberboard. "Composite wood products" does not include hardboard, structural plywood, structural pastructural composite lumber, oriented strand board, glued laminated timber, timber, prefabricated wood I–joi finger–jointed lumber, all as specified in California Code of Regulations (CCR), Title 17, Section 93120.1(a) |
| [spray force in ounce force (ozf)] MAXIMUM FLOW RATE (gpm) Product Class 1 (≤ 5.0 ozf) 1.00 | by weight or volume, but not by both. 5.408.1.2 Waste Management Company. Utilize a waste management company that can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill | Functional performance testing for heating, ventilation, air conditioning systems and lighting controls must be performed in compliance with the California Energy Code. | Note: See CCR, Title 17, Section 93120.1. DAY-NIGHT AVERAGE SOUND LEVEL (Ldn). The A-weighted equivalent continuous sound exposure level |
| Product Class 2 (> 5.0 ozf and ≤ 8.0 ozf)1.20 | complies with this section. Note: The owner or contractor shall make the determination if the construction and demolition waste material | 5.410.2.1 Owner's or Owner Representative's Project Requirements (OPR). [N] The expectations and requirements of the building appropriate to its phase shall be documented before the design phase of the project begins. This documentation shall include the following: | 24-hour period with a 10 dB adjustment added to sound levels occurring during nighttime hours (10p.m. to 7 DECIBEL (db). A measure on a logarithmic scale of the magnitude of a particular quantity (such as sound p |
| Product Class 3 (> 8.0 ozf) 1.28 | will be diverted by a waste management company. Exceptions to Sections 5.408.1.1 and 5.408.1.2: | Environmental and sustainability goals. Building sustainable goals. Indoor environmental guality requirements. | sound power, sound intensity) with respect to a reference quantity. ELECTRIC VEHICLE (EV). An automotive-type vehicle for on-road use, such as passenger automobiles, but |
| 5.303.4 COMMERCIAL KITCHEN EQUIPMENT. | Excavated soil and land-clearing debris. Alternate waste reduction methods developed by working with local agencies if diversion or recycle | Project program, including facility functions and hours of operation, and need for after hours operation. Equipment and systems expectations. | trucks, vans, neighborhood electric vehicles, electric motorcycles, and the like, primarily powered by an elect that draws current from a rechargeable storage battery, fuel cell, photovoltaic array, or other source of elect Plug-in hybrid electric vehicles (PHEV) are considered electric vehicles. For purposes of the <i>California Elect</i> |
| 5.303.4.1 Food Waste Disposers. Disposers shall either modulate the use of water to no more than 1 gpm when the disposer is not in use (not actively grinding food waste/no-load) or shall automatically shut off after no more than 10 minutes of inactivity. Disposers shall use no more than 8 gpm of water. Note: This code section does not affect local jurisdiction authority to prohibit or require disposer | facilities capable of compliance with this item do not exist. 3. Demolition waste meeting local ordinance or calculated in consideration of local recycling facilities and markets. | Building occupant and operation and maintenance (O&M) personnel expectations. 5.410.2.2 Basis of Design (BOD). [N] A written explanation of how the design of the building systems meets | off-road, self-propoelled electric vehicles, such as industrial trucks, hoists, lifts, transports, golf carts, airline support equipment, tractors, boats, and the like, are not included. ELECTRIC VEHICLE CHARGING STATION(S) (EVCSj). One or more spaces intended for charging electric |
| neer 5.303.5 AREAS OF ADDITION OR ALTERATION. For those occupancies within the authority of the California | 5.408.1.3 Waste stream reduction alternative. The combined weight of new construction disposal that does not exceed two pounds per square foot of building area may be deemed to meet the 65% minimum requirement as approved by the enforcing agency. | the OPR shall be completed at the design phase of the building project. The Basis of Design document shall cover the following systems: | ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE). The conductors, including the ungrounded, grounded equipment grounding conductors and the electric vehicle connectors, attachment plugs, and all other fittings |
| Building Standards Commission as specified in Section 103, the provisions of Section 5.303.3 and 5.303.4 shall apply to new fixtures in additions or areas of alteration to the building. | 5.408.1.4 Documentation. Documentation shall be provided to the enforcing agency which demonstrates compliance with Sections 5.408.1.1, through 5.408.1.3. The waste management plan shall be updated as | Renewable energy systems. Landscape irrigation systems. Water reuse system. | power outlets, or apparatus installed specifically for the purpose of transferring energy between the premise and the electric vehicle. |
| actor 5.303.6 STANDARDS FOR PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures and fittings shall be installed in accordance with the California Plumbing Code, and shall meet the applicable standards referenced in Table 1701.1 of the California Plumbing Code and in Chapter 6 of this code. | necessary and shall be accessible during construction for examination by the enforcing agency. Notes: | 5.410.2.3 Commissioning plan. [N] Prior to permit issuance a commissioning plan shall be completed to document how the project will be commissioned. The commissioning plan shall include the following: 1. General project information. | ENERGY EQUIVALENT (NOISE) LEVEL (Leq). The level of a steady noise which would have the same en the fluctuating noise level integrated over the time of period of interest. |
| SECTION 5.304 OUTDOOR WATER USE | Sample forms found in "A Guide to the California Green Building Standards Code (Nonresidential)" located www.dgs.ca.gov/BSC/Resources/Page-Content/Building-Standards-Commission- | Commissioning goals. Systems to be commissioned. Plans to test systems and components shall include: An explanation of the original design intent. | EXPRESSWAY. An arterial highway for through traffic which may have partial control of access, but which r not be divided or have grade separations at intersections. |
| 5.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS. Nonresidential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent. | Resources-List-Folder/CALGreen may be used to assist in documenting compliance with the waste management plan. 2. Mixed construction and demolition debris processors can be located at the California Department of Department of Department (Cal Department). | b. Equipment and systems to be tested, including the extent of tests.c. Functions to be tested.d. Conditions under which the test shall be performed. | FREEWAY. A divided arterial highway with full control of access and with grade separations at intersections GLOBAL WARMING POTENTIAL (GWP). The radiative forcing impact of one mass-based unit of a given gas relative to an equivalent unit of carbon dioxide over a given period of time. Carbon dioxide is the reference |
| Notes: 1. The Model Water Efficient Landscape Ordinance (MWELO) is located in the California Code of Regulations, | Contractor C | e. Measurable criteria for acceptable performance. 4. Commissioning team information. 5. Commissioning process activities, schedules and responsibilities. Plans for the completion of | GLOBAL WARMING POTENTIAL VALUE (GWP VALUE). A 100-year GWP value published by the |
| Title 23, Chapter 2.7, Division 2. 2. MWELO and supporting documents, including a water budget calculator, are available at: https://www.water.ca.gov/. | items such as fluorescent lamps and ballast and mercury containing thermostats as well as other California prohibited Universal Waste materials are disposed of properly and are diverted from landfills. A list of prohibited Universal Waste materials shall be included in the construction documents. | commissioning shall be included. 5.410.2.4 Functional performance testing. [N] Functional performance tests shall demonstrate the correct installation and operation of each component, system and system-to-system interface in accordance with the | Intergovernmental Panel on Climate Change (IPCC) in either its Second Assessment Report (SAR) (IPCC, its Fourth Assessment A-3 Report (AR4) (IPCC, 2007). The SAR GWP values are found in column "SAR (10) Table 2.14.; the AR4 GWP values are found in column "100 yr" of Table 2.14. |
| 5.304.6 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS. For public schools and community colleges, landscape projects as described in Sections 5.304.6.1 and 5.304.6.2 shall comply with the California Department of Water Resources Model Water Efficient Landscape Ordinance (MWELO) commencing with Section 490 of Chapter | Note: Refer to the Universal Waste Rule link at: http://www.dtsc.ca.gov/universalwaste/ | approved plans and specifications. Functional performance testing reports shall contain information addressing each of the building components tested, the testing methods utilized, and include any readings and adjustments made. | HIGH-GWP REFRIGERANT. A compound used as a heat transfer fluid or gas that is: (a) a chlorofluorocarb hdrochlorofluorocarbon, a hydrofluorocarbon, a perfluorocarbon, or any compound or blend of compounds, |
| 2.7, Division 2, Title 23, <i>California Code of Regulations</i> , except that the evapotranspiration adjustment factor (ETAF) shall be 0.65 with an additional water allowance for special landscape areas (SLA) of 0.35. | Contractor 5.408.3 EXCAVATED SOIL AND LAND CLEARING DEBRIS. 100 percent of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed. | 5.410.2.5 Documentation and training. [N] A Systems Manual and Systems Operations Training are required, including Occupational Safety and Health Act (OSHA) requirements in <i>California Code of Regulations</i> (CCR), | GWP value equal to or greater than 150, or (B) any ozone depleting substance as defined in Title 40 of the G Federal Regulations, Part 82, sec.82.3 (as amended March 10, 2009). |
| Exception : Any project with an aggregate landscape area of 2,500 square feet or less may comply with the prescriptive measures contained in Appendix D of the MWELO. | Exception: Reuse, either on or off-site, of vegetation or soil contaminated by disease or pest infestation. | Title 8, Section 5142, and other related regulations. 5.410.2.5.1 Systems manual. [N] Documentation of the operational aspects of the building shall be | with a radius 1.5 times the pipe diameter. |
| 5.304.6.1 Newly constructed landscapes. New construction projects with an aggregate landscape area equal to or greater than 500 square feet. | If contamination by disease or pest infestation is suspected, contact the County Agricultural Commissioner and follow its direction for recycling or disposal of the material. | completed within the systems manual and delivered to the building owner or representative. The systems manual shall include the following: 1. Site information, including facility description, history and current requirements. | 150, and (B) is not an ozone depleting substance as defined in Title 40 of the Code of Federal Regulations, sec.82.3 (as amended March 10, 2009). |
| 5.304.6.2 Rehabilitated landscapes. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 1,200 square feet. | For a map of know pest and/or disease quarantine zones, consult with the California Department of Food and Agriculture. (www.cdfa.ca.gov) | Site information, including facility description, instory and current requirements. Site contact information. Basic operations and maintenance, including general site operating procedures, basic troubleshooting, recommended maintenance requirements, site events log. | MERV. Filter minimum efficiency reporting value, based on ASHRAE 52.2–1999. MAXIMUM INCREMENTAL REACTIVITY (MIR). The maximum change in weight of ozone formed by adding |
| DIVISION 5.4 MATERIAL CONSERVATION AND RESOURCE | Owner SECTION 5.410 BUILDING MAINTENANCE AND OPERATIONS 5.410.1 RECYCLING BY OCCUPANTS. Provide readily accessible areas that serve the entire building and are identified for the denosition statume and collection of non-beginning including including (et a minimum) | Major systems. Site equipment inventory and maintenance notes. A copy of verifications required by the enforcing agency or this code. | compound to the "Base REactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundreths of a gram (g O ³ /g ROC). |
| EFFICIENCY | identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive. | 7. Other resources and documentation, if applicable. | PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gr product (excluding container and packaging). |
| SECTION 5.401 GENERAL 5.401.1 SCOPE. The provisions of this chapter shall outline means of achieving material conservation and resource efficiency through protection of buildings from exterior moisture, construction waste diversion, employment of | Exception : Rural jurisdictions that meet and apply for the exemption in Public Resources Code 42649.82 (a)(2)(A) et seq. shall also be exempt from the organic waste portion of this section. | 5.410.2.5.2 Systems operations training. [N] A program for training of the appropriate maintenance staff for each equipment type and/or system shall be developed and documented in the commissioning report and shall include the following: | PSIG. Pounds per square inch, guage. REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute |
| techniques to reduce pollution through recycling of materials, and building commissioning or testing and adjusting. | 5.410.1.1 Additions. All additions conducted within a 12-month period under single or multiple permits, resulting in an increase of 30% or more in floor area, shall provide recycling areas on site. | System/equipment overview (what it is, what it does and with what other systems and/or equipment it interfaces). Review and demonstration of servicing/preventive maintenance. | ozone formation in the troposphere. SCHRADER ACCESS VALVES. Access fittings with a valve core installed. |
| SECTION 5.402 DEFINITIONS 5.402.1 DEFINITIONS. The following terms are defined in Chapter 2 (and are included here for reference) ADJUST. To regulate fluid flow rate and air patterns at the terminal equipment, such as to reduce fan speed or adjust | Exception: Additions within a tenant space resulting in less than a 30% increase in the tenant space floor area. | Review of the information in the Systems Manual. Review of the record drawings on the system/equipment. | SHORT RADIUS ELBOW. Pipe fitting installed between two lengths of pipe or tubing to allow a change of d with a radius 1.0 times the pipe diameter. |
| a damper. BALANCE. To proportion flows within the distribution system, including sub-mains, branches and terminals, | 5.410.1.2 Sample ordinance. Space allocation for recycling areas shall comply with Chapter 18, Part 3, Division 30 of the <i>Public Resources Code</i> . Chapter 18 is known as the California Solid Waste Reuse and Recycling Access Act of 1991 (Act). | 5.410.2.6 Commissioning report. [N] A report of commissioning process activities undertaken through the design and construction phases of the building project shall be completed and provided to the owner or representative. | SUPERMARKET. For the purposes of Section 5.508.2, a supermarket is any retail food facility with 8,000 so or more conditioned area, and that utilizes either refrigerated display cases, or walk-in coolers or freezers control to remote compressor units or condensing units. |
| according to design quantities. BUILDING COMMISSIONING. A systematic quality assurance process that spans the entire design and construction | Note: A sample ordinance for use by local agencies may be found in Appendix A of the document at the CalRecycle's web site. | 5.410.4 TESTING AND ADJUSTING. New buildings less than 10,000 square feet. Testing and adjusting of systems shall be required for new buildings less than 10,000 square feet or new systems to serve an addition or | VOC. A volatile organic compound broadly defined as a chemical compound based on carbon chains or ring vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically co |
| process, including verifying and documenting that building systems and components are planned, designed, installed, tested, operated and maintained to meet the owner's project requirements. | | alteration subject to Section 303.1. 5.410.4.2 (Reserved) | hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a) Note: Where specific regulations are cited from different agencies such as SCAQMD, ARB, etc., the VOC of |
| ORGANIC WASTE. Food waste, green waste, landscape and pruning wste, nonhazardous wood waste, and food soiled paper waste that is mixed in with food waste. | | Note: For energy-related systems under the scope (Section 100) of the California Energy Code, including heating, ventilation, air conditioning (HVAC) systems and controls, indoor lighting system and controls, as well | included in that specific regulation is the one that prevails for the specific measure in question. SECTION 5.503 FIREPLACES |
| TEST. A procedure to determine quantitative performance of a system or equipment | | as water heating systems and controls, refer to California Energy Code Section 120.8 for commissioning requirements and Sections 120.5, 120.6, 130.4, and 140.9(b)3 for additional testing requirements of specific systems. | Image: Signed state S.503.1 FIREPLACES. Install only a direct-vent sealed-combustion gas or sealed wood-burning fireplace, or woodstove or pellet stove, and refer to residential requirements in the California Energy Code, Title 24, Part Subchapter 7, Section 150. Woodstoves, pellet stoves and fireplaces shall comply with applicable local ordin |
| | | 5.410.4.2 Systems. Develop a written plan of procedures for testing and adjusting systems. Systems to be included for testing and adjusting shall include at a minimum, as applicable to the project: | 5.503.1.1 Woodstoves. Woodstoves and pellet stoves shall comply with U.S. EPA New Source Perf Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are to meet the emission limits. |
| | | Renewable energy systems. Landscape irrigation systems. | SECTION 5.504 POLLUTANT CONTROL |
| | | Callescape inigation systems. Water reuse systems. 5.410.4.3 Procedures. Perform testing and adjusting procedures in accordance with manufacturer's | 5.504.1 TEMPORARY VENTILATION. The permanent HVAC system shall only be used during construction necessary to condition the building or areas of addition or alteration within the required temperature range for material and equipment installation. If the HVAC system is used during construction, use return air filters within the influence of the temperature of tempe |
| | | 5.410.4.3.1 HVAC balancing. In addition to testing and adjusting, before a new space-conditioning | Minimum Efficiency Reporting Value (MERV) of 8, based on ASHRAE 52.2-1999, or an average efficiency o 30% based on ASHRAE 52.1-1992 Replace all filters immediately prior to occupancy, or, if the building is occupied during alteration, at the conclusion of construction. |
| | | | Image: Markow Contractor 5.504.3 Covering of duct openings and protection of mechanical equipment during construction. At the rough installation and during storage on the construction site until final startup of the heating, cooling and very equipment, all duct and other related air distribution component openings shall be covered with tape, plastic |
| | | Council National Standards or as approved by the enforcing agency. | sheetmetal or other methods acceptable to the enforcing agency to reduce the amount of dust, water and de may enter the system. |

CODE

les July 2021 Supplement)

| les July 2021 Su | p | pl | em | ent Y = YES N/A = NOT APPLICABLE RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.) |
|--|--------------|-----|------------------|---|
| | Y | N/A | RESPON. PARTY | |
| d over. For new buildings 10,000 square feet onstruction processes of the building project to | | | | 5.410.4.4 Reporting. After completion of testing, adjusting and balancing, provide a final report of testing signed by the individual responsible for performing these services. |
| vner representative's project requirements. ained personnel with experience on projects of ed by OSHPD or for I-occupancies and ion 100.0 Scope, all requirements in Sections | | | | 5.410.4.5 Operation and maintenance (O & M) manual. Provide the building owner or representative with detailed operating and maintenance instructions and copies of guaranties/warranties for each system. O & M instructions shall be consistent with OSHA requirements in CCR, Title 8, Section 5142, and other related regulations. |
| California Energy Code, including heating, g systems and controls, as well as water 20.8 for commissioning requirements | | | | 5.410.4.5.1 Inspections and reports. Include a copy of all inspection verifications and reports required by the enforcing agency. |
| | | | | DIVISION 5.5 ENVIRONMENTAL QUALITY |
| nts. | | | | SECTION 5.501 GENERAL 5.501.1 SCOPE. The provisions of this chapter shall outline means of reducing the quantity of air contaminants that are odorous, irritating, and/or harmful to the comfort and well-being of a building's installers, occupants and neighbors. |
| | | | | SECTION 5.502 DEFINITIONS 5.502.1 DEFINITIONS. The following terms are defined in Chapter 2 (and are included here for reference) |
| | | | | ARTERIAL HIGHWAY. A general term denoting a highway primarily for through traffic usually on a continuous route. A-WEIGHTED SOUND LEVEL (dBA). The sound pressure level in decibels as measured on a sound level meter |
| onditioned accessory spaces within ed in Section 303.1.1. eas, of any size, within a structure. | | | | using the internationally standardized A-weighting filter or as computed from sound spectral data to which A-weighting adjustments have been made. 1 BTU/HOUR. British thermal units per hour, also referred to as Btu. The amount of heat required to raise one pound |
| a building, area, or room which does not | | | | of water one degree Fahrenheit per hour, a common measure of heat transfer rate. A ton of refrigeration is 12,000 Btu, the amount of heat required to melt a ton (2,000 pounds) of ice at 32 ⁰ Fahrenheit. COMMUNITY NOISE EQUIVALENT LEVEL (CNEL). A metric similar to the day-night average sound level (Ldn), |
| ing training and/or certification of | | | | except that a 5 decibel adjustment is added to the equivalent continuous sound exposure level for evening hours (7pm to 10pm) in addition to the 10 dB nighttime adjustment used in the Ldn. COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and medium |
| r Having Jurisdiction as a reference for rtify individuals to conduct functional | | | | density fiberboard. "Composite wood products" does not include hardboard, structural plywood, structural panels, structural composite lumber, oriented strand board, glued laminated timber, timber, prefabricated wood I–joists or finger–jointed lumber, all as specified in California Code of Regulations (CCR), Title 17, Section 93120.1(a). |
| ditioning systems and lighting controls Code. | | | | Note: See CCR, Title 17, Section 93120.1. DAY-NIGHT AVERAGE SOUND LEVEL (Ldn). The A-weighted equivalent continuous sound exposure level for a |
| ements (OPR). [N] The expectations and umented before the design phase of the | | | | 24-hour period with a 10 dB adjustment added to sound levels occurring during nighttime hours (10p.m. to 7 a.m.). DECIBEL (db). A measure on a logarithmic scale of the magnitude of a particular quantity (such as sound pressure, |
| | | | | sound power, sound intensity) with respect to a reference quantity. ELECTRIC VEHICLE (EV). An automotive-type vehicle for on-road use, such as passenger automobiles, buses, |
| of operation, and need for after hours | | | | trucks, vans, neighborhood electric vehicles, electric motorcycles, and the like, primarily powered by an electric motor that draws current from a rechargeable storage battery, fuel cell, photovoltaic array, or other source of electric current. Plug-in hybrid electric vehicles (PHEV) are considered electric vehicles. For purposes of the <i>California Electrical Code</i> , off-road, self-propoelled electric vehicles, such as industrial trucks, hoists, lifts, transports, golf carts, airline ground |
| M) personnel expectations. ow the design of the building systems meets roject. The Basis of Design document shall | | | | support equipment, tractors, boats, and the like, are not included. ELECTRIC VEHICLE CHARGING STATION(S) (EVCSj). One or more spaces intended for charging electric vehicles. |
| | | | | ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE). The conductors, including the ungrounded, grounded, and equipment grounding conductors and the electric vehicle connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle. |
| commissioning plan shall be completed to ning plan shall include the following: | | | | ENERGY EQUIVALENT (NOISE) LEVEL (Leq). The level of a steady noise which would have the same energy as the fluctuating noise level integrated over the time of period of interest. |
| nd components shall include: | | | | EXPRESSWAY. An arterial highway for through traffic which may have partial control of access, but which may or may not be divided or have grade separations at intersections. |
| he extent of tests. | | | | FREEWAY. A divided arterial highway with full control of access and with grade separations at intersections. |
| ed. | | | | GLOBAL WARMING POTENTIAL (GWP). The radiative forcing impact of one mass-based unit of a given greenhouse gas relative to an equivalent unit of carbon dioxide over a given period of time. Carbon dioxide is the reference compound with a GWP of one. |
| onsibilities. Plans for the completion of | | | | GLOBAL WARMING POTENTIAL VALUE (GWP VALUE). A 100-year GWP value published by the Intergovernmental Panel on Climate Change (IPCC) in either its Second Assessment Report (SAR) (IPCC, 1995); or its Fourth Assessment A-3 Report (AR4) (IPCC, 2007). The SAR GWP values are found in column "SAR (100-yr)" of Table 2.14.; the AR4 GWP values are found in column "100 yr" of Table 2.14. |
| n-to-system interface in accordance with the g reports shall contain information addressing zed, and include any readings and adjustments | | | | HIGH-GWP REFRIGERANT. A compound used as a heat transfer fluid or gas that is: (a) a chlorofluorocarbon, a hdrochlorofluorocarbon, a hydrofluorocarbon, a perfluorocarbon, or any compound or blend of compounds, with a GWP value equal to or greater than 150, or (B) any ozone depleting substance as defined in Title 40 of the Code of |
| and Systems Operations Training are required, nts in <i>California Code of Regulations</i> (CCR), | | | | Federal Regulations, Part 82, sec.82.3 (as amended March 10, 2009). LONG RADIUS ELBOW. Pipe fitting installed between two lengths of pipe or tubing to allow a change of direction, |
| perational aspects of the building shall be | | | | with a radius 1.5 times the pipe diameter. LOW-GWP REFRIGERANT. A compound used as a heat transfer fluid or gas that: (A) has a GWP value less than 150, and (B) is not an ozone depleting substance as defined in Title 40 of the Code of Federal Regulations, Part 82, |
| building owner or representative. The tory and current requirements. | | | | sec.82.3 (as amended March 10, 2009). MERV. Filter minimum efficiency reporting value, based on ASHRAE 52.2–1999. |
| neral site operating procedures, basic quirements, site events log. | | | | MAXIMUM INCREMENTAL REACTIVITY (MIR). The maximum change in weight of ozone formed by adding a compound to the "Base REactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to |
| s. agency or this code. e. | | | | hundreths of a gram (g O ³ /g ROC). PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of |
| for training of the appropriate maintenance oped and documented in the commissioning | | | | product (excluding container and packaging). PSIG. Pounds per square inch, guage. |
| oes and with what other systems and/or | | | | REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere. |
| ve maintenance. Il. | | | | SCHRADER ACCESS VALVES. Access fittings with a valve core installed. |
| uipment. | | | | SHORT RADIUS ELBOW. Pipe fitting installed between two lengths of pipe or tubing to allow a change of direction, with a radius 1.0 times the pipe diameter. |
| ompleted and provided to the owner or | | | | SUPERMARKET. For the purposes of Section 5.508.2, a supermarket is any retail food facility with 8,000 square feet or more conditioned area, and that utilizes either refrigerated display cases, or walk-in coolers or freezers connected to remote compressor units or condensing units. |
| 0 square feet. Testing and adjusting of et or new systems to serve an addition or | | | | VOC. A volatile organic compound broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a) |
| of the Colifornia Energy Code, including | | | | Note: Where specific regulations are cited from different agencies such as SCAQMD, ARB, etc., the VOC definition included in that specific regulation is the one that prevails for the specific measure in question. |
| of the California Energy Code, including s, indoor lighting system and controls, as well Code Section 120.8 for commissioning r additional testing requirements of specific | | | | SECTION 5.503 FIREPLACES 5.503.1 FIREPLACES. Install only a direct-vent sealed-combustion gas or sealed wood-burning fireplace, or a sealed woodstove or pellet stove, and refer to residential requirements in the California Energy Code, Title 24, Part 6, Subchapter 7, Section 150. Woodstoves, pellet stoves and fireplaces shall comply with applicable local ordinances. |
| ting and adjusting systems. Systems to be applicable to the project: | | | | 5.503.1.1 Woodstoves. Woodstoves and pellet stoves shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. |
| | الح ا | | Contractor | SECTION 5.504 POLLUTANT CONTROL 5.504.1 TEMPORARY VENTILATION. The permanent HVAC system shall only be used during construction if |
| s in accordance with manufacturer's | | | | necessary to condition the building or areas of addition or alteration within the required temperature range for material and equipment installation. If the HVAC system is used during construction, use return air filters with a Minimum Efficiency Reporting Value (MERV) of 8, based on ASHRAE 52.2-1999, or an average efficiency of 30% based on ASHRAE 52.1-1992 Replace all filters immediately prior to occupancy, or, if the building is |
| djusting, before a new space-conditioning use, the system shall be balanced in justing and Balancing Bureau National | X | | Contractor | occupied during alteration, at the conclusion of construction. 5.504.3 Covering of duct openings and protection of mechanical equipment during construction. At the time of rough installation and during storage on the construction site until final startup of the heating, cooling and ventilation |
| Procedural Standards; Associated Air Balance g agency. | | | | equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheetmetal or other methods acceptable to the enforcing agency to reduce the amount of dust, water and debris which may enter the system. |



California 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE NONRESIDENTIAL MANDATORY MEASURES, SHEET 1 (July 2021, Includes July 2021 Supplement)

Contractor 5.504.4 FINISH MATERIAL POLLUTANT CONTROL. Finish materials shall comply with Sections 5.504.4.1 through 5.504.4.6.

| TABLE 5.504.4.1 - ADHESIVE VOC LIMIT _{1,2} | | | | | | |
|---|-------------------|--|--|--|--|--|
| Less Water and Less Exempt Compounds in Grams per Liter | | | | | | |
| ARCHITECTURAL APPLICATIONS | CURRENT VOC LIMIT | | | | | |
| INDOOR CARPET ADHESIVES | 50 | | | | | |
| CARPET PAD ADHESIVES | 50 | | | | | |
| OUTDOOR CARPET ADHESIVES | 150 | | | | | |
| WOOD FLOORING ADHESIVES | 100 | | | | | |
| RUBBER FLOOR ADHESIVES | 60 | | | | | |
| SUBFLOOR ADHESIVES | 50 | | | | | |
| CERAMIC TILE ADHESIVES | 65 | | | | | |
| VCT & ASPHALT TILE ADHESIVES | 50 | | | | | |
| DRYWALL & PANEL ADHESIVES | 50 | | | | | |
| COVE BASE ADHESIVES | 50 | | | | | |
| MULTIPURPOSE CONSTRUCTION ADHESIVES | 70 | | | | | |
| STRUCTURAL GLAZING ADHESIVES | 100 | | | | | |
| SINGLE-PLY ROOF MEMBRANE ADHESIVES | 250 | | | | | |
| OTHER ADHESIVES NOT SPECIFICALLY LISTED | 50 | | | | | |
| SPECIALTY APPLICATIONS | | | | | | |
| PVC WELDING | 510 | | | | | |
| CPVC WELDING | 490 | | | | | |
| ABS WELDING | 325 | | | | | |
| PLASTIC CEMENT WELDING | 250 | | | | | |
| ADHESIVE PRIMER FOR PLASTIC | 550 | | | | | |
| CONTACT ADHESIVE | 80 | | | | | |
| SPECIAL PURPOSE CONTACT ADHESIVE | 250 | | | | | |
| STRUCTURAL WOOD MEMBER ADHESIVE | 140 | | | | | |
| TOP & TRIM ADHESIVE | 250 | | | | | |
| SUBSTRATE SPECIFIC APPLICATIONS | | | | | | |
| METAL TO METAL | 30 | | | | | |
| PLASTIC FOAMS | 50 | | | | | |
| POROUS MATERIAL (EXCEPT WOOD) | 50 | | | | | |
| WOOD | 30 | | | | | |
| FIBERGLASS | 80 | | | | | |
| | | | | | | |

| TABLE 5.504.4.2 - SEALANT VOC LIMIT | | | | | | |
|---|-------------------|--|--|--|--|--|
| Less Water and Less Exempt Compounds in Grams per Liter | | | | | | |
| SEALANTS | CURRENT VOC LIMIT | | | | | |
| ARCHITECTURAL | 250 | | | | | |
| MARINE DECK | 760 | | | | | |
| NONMEMBRANE ROOF | 300 | | | | | |
| ROADWAY | 250 | | | | | |
| SINGLE-PLY ROOF MEMBRANE | 450 | | | | | |
| OTHER | 420 | | | | | |
| SEALANT PRIMERS | | | | | | |
| ARCHITECTURAL | | | | | | |
| NONPOROUS | 250 | | | | | |
| POROUS | 775 | | | | | |
| MODIFIED BITUMINOUS | 500 | | | | | |
| MARINE DECK | 760 | | | | | |
| OTHER | 750 | | | | | |

| | Y N/A RESPON. PARTY | | Y N/A RESPO | N. | Y N/A RESP | ON. TY |
|---|---|---|-------------------|---|--------------|--|
| 5.504.4 FINISH MATERIAL POLLUTANT CONTROL. Finish materials shall comply with Sections 5.504.4.1 through 5.504.4.6. | TABLE 5.504.4.3 - VOC CONTENT LIMITS FOR | RARCHITECTURAL | | TABLE 5.504.4.5 - FORMALDEHYDE LIMITS | | 5.508.2.1 Refrigerant piping. Piping compliant with the California Mechanical Code shall be instal accessible for leak protection and repairs. Piping runs using threaded pipe, copper tubing with an c |
| 5.504.4.1 Adhesives, sealants and caulks. Adhesives, sealants, and caulks used on the project shall meet | COATINGS _{2,3} | | | MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION | | diameter (OD) less than 1/4 inch, flared tubing connections and short radius elbows shall not be us refrigerant systems except as noted below. |
| the requirements of the following standards: 1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall | GRAMS OF VOC PER LITER OF COATING, LESS WATER & LESS EXEMP | | | PRODUCT CURRENT LIMIT | | 5.508.2.1.1 Threaded pipe. Threaded connections are permitted at the compressor rack. |
| comply with local or regional air pollution control or air guality management district rules where | | | | HARDWOOD PLYWOOD VENEER CORE 0.05 | | |
| applicable, or SCAQMD Rule 1168 VOC limits, as shown in Tables 5.504.4.1 and 5.504.4.2. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds | FLAT COATINGS | 50 | | HARDWOOD PLYWOOD COMPOSITE CORE 0.05 | | 5.508.2.1.2 Copper pipe. Copper tubing with an OD less than 1/4 inch may be used in syster refrigerant charge of 5 pounds or less. |
| (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroethylene), except for aerosol products as specified in subsection 2, below. | NONFLAT COATINGS | 100 | | PARTICLE BOARD 0.09 | | 5.508.2.1.2.1 Anchorage. One-fouth-inch OD tubing shall be securely clamped to a r |
| 2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in | SPECIALTY COATINGS | 150 | | MEDIUM DENSITY FIBERBOARD 0.11 | | keep vibration levels below 8 mils. |
| units of product, less packaging, which do not weigh more than one pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including | ALUMINUM ROOF COATINGS | 400 | | THIN MEDIUM DENSITY FIBERBOARD2 0.13 | | 5.508.2.1.3 Flared tubing connections. Double-flared tubing connections may be used for controls, valve pilot lines and oil. |
| prohibitions on use of certain toxic compounds, of California Code of Regulations, Title 17, commencing | BASEMENT SPECIALTY COATINGS | 400 | | 1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E 1333. FOR | | |
| with Section 94507. | BITUMINOUS ROOF COATINGS | 50 | | ADDITIONAL INFORMATION, SEE CALIFORNIA CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH 93120.12. | | Exception: Single-flared tubing connections may be used with a multiring seal coate industrial sealant suitable for use with refrigerants and tightened in accordance with |
| | BITUMINOUS ROOF PRIMERS | 350 | | 2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16 INCHES (8 MM). | | recommendations. |
| TABLE 5.504.4.1 - ADHESIVE VOC LIMIT _{1,2} | BOND BREAKERS | 350 | | 5.504.4.6 Resilient flooring systems. Where resilient flooring is installed, at least 80 percent of floor area | | 5.508.2.1.4 Elbows. Short radius elbows are only permitted where space limitations prohib long radius elbows. |
| Less Water and Less Exempt Compounds in Grams per Liter | CONCRETE CURING COMPOUNDS | 350 | | receiving resilient flooring shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using | | 5.508.2.2 Valves. Valves Valves and fittings shall comply with the California Mechanical Code an |
| ARCHITECTURAL APPLICATIONS CURRENT VOC LIMIT | CONCRETE/MASONRY SEALERS | 100 | | Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specifications 01350) | | follows. |
| INDOOR CARPET ADHESIVES 50 | DRIVEWAY SEALERS | 50 | | | | 5.508.2.2.1 Pressure relief valves. For vessels containing high-GWP refrigerant, a rupture be installed between the outlet of the vessel and the inlet of the pressure relief valve. |
| CARPET PAD ADHESIVES 50 | DRY FOG COATINGS | 150 | | See California Department of Public Health's website for certification programs and testing labs. https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material | | |
| OUTDOOR CARPET ADHESIVES 150 | FAUX FINISHING COATINGS | 350 | | | | 5.508.2.2.1.1 Pressure detection. A pressure gauge, pressure transducer or other be installed in the space between the rupture disc and the relief valve inlet to indicate |
| WOOD FLOORING ADHESIVES 100 | FIRE RESISTIVE COATINGS | 350 | | 5.504.4.6.1 Verification of compliance. Documentation shall be provided verifying that resilient floorin materials meet the pollutant emission limits. | | rupture or discharge of the relief valve. |
| RUBBER FLOOR ADHESIVES 60 | FLOOR COATINGS | 100 | | | | 5.508.2.2.2 Access valves. Only Schrader access valves with a brass or steel body are permitted for use. |
| SUBFLOOR ADHESIVES 50 | FORM-RELEASE COMPOUNDS | 250 | | 5.504.5.3 Filters. In mechanically ventilated buildings, provide regularly occupied areas of the building with ai filtration media for outside and return air that provides at least a Minimum Efficiency Reporting Value (MERV) of | | |
| CERAMIC TILE ADHESIVES 65 | GRAPHIC ARTS COATINGS (SIGN PAINTS) | 500 | | 13. MERV 13 filters shall be installed prior to occupancy, and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual. | | 5.508.2.2.2.1 Valve caps. For systems with a refrigerant charge of 5 pounds or mo shall be brass or steel and not plastic. |
| VCT & ASPHALT TILE ADHESIVES 50 | HIGH-TEMPERATURE COATINGS | 420 | | Exceptions: Existing mechanical equipment. | | 5.508.2.2.2.2 Seal caps. If designed for it, the cap shall have a neoprene O-ring in |
| DRYWALL & PANEL ADHESIVES 50 | INDUSTRIAL MAINTENANCE COATINGS | 250 | | 5.504.5.3.1 Labeling. Installed filters shall be clearly labeled by the manufacturer indicating the MERV | | 5.508.2.2.2.1 Chain tethers. Chain tethers to fit ovr the stem are required |
| COVE BASE ADHESIVES 50 | LOW SOLIDS COATINGS1 | 120 | | rating. | | designed to have seal caps. |
| MULTIPURPOSE CONSTRUCTION ADHESIVES 70 | MAGNESITE CEMENT COATINGS | 450 | | 5.504.7 ENVIRONMENTAL TOBACCO SMOKE (ETS) CONTROL. Where outdoor areas are provided for smoking, | | Exception: Valves with seal caps that are not removed from the valve |
| STRUCTURAL GLAZING ADHESIVES 100 | MASTIC TEXTURE COATINGS | 100 | X 🗆 Owner | prohibit smoking within 25 feet of building entries, outdoor air intakes and operable windows and within the building a | | operation. |
| SINGLE-PLY ROOF MEMBRANE ADHESIVES 250 | METALLIC PIGMENTED COATINGS | 500 | | county, city and county, California Community College, campus of the California State University, or campus of the University of California, whichever are more stringent. When ordinances, regulations or policies are not in place, post | | 5.508.2.3 Refrigerated service cases. Refrigerated service cases holding food products contain salt shall have evaporator coils of corrosion-resistant material, such as stainless steel; or be coat |
| OTHER ADHESIVES NOT SPECIFICALLY LISTED 50 | MULTICOLOR COATINGS | 250 | | signage to inform building occupants of the prohibitions. | | corrosion from these substances. |
| SPECIALTY APPLICATIONS | | 420 | | | | 5.508.2.3.1 Coil coating. Consideration shall be given to the heat transfer efficiency of coil |
| PVC WELDING 510 | PRIMERS, SEALERS, & UNDERCOATERS | 100 | | | | maximize energy efficiency. |
| CPVC WELDING 490 | REACTIVE PENETRATING SEALERS | 350 | | SECTION 5 505 INDOOD MOISTURE CONTROL | | 5.508.2.4 Refrigerant receivers. Refrigerant receivers with capacities greater than 200 pounds with a device tha indicates the level of refrigerant in the receiver. |
| ABS WELDING 325 PLASTIC CEMENT WELDING 250 | | 250 | 🖾 🗆 Eng/Arc | | | 5.508.2.5 Pressure testing. The system shall be pressure tested during installation prior to evac |
| PLASTIC CEMENT WELDING 250 ADHESIVE PRIMER FOR PLASTIC 550 | | 50 | | CCR, Title 24, Part 2, Sections 1202 (Ventilation) and Chapter 14 (Exterior Walls). For additional measures, see Section 5.407.2 of this code. | | charging. |
| CONTACT ADHESIVE 80 | RUST PREVENTATIVE COATINGS SHELLACS: | 250 | | SECTION 5.506 INDOOR AIR QUALITY | | 5.508.2.5.1 Minimum pressure. The system shall be charged with regulated dry nitrogen a |
| SPECIAL PURPOSE CONTACT ADHESIVE 250 | CLEAR | 730 | 🖾 🗆 Enginee | | | appropriate tracer gas to bring system pressure up to 300 psig minimum. |
| STRUCTURAL WOOD MEMBER ADHESIVE 140 | OPAQUE | 550 | | requirements of Section 120.1 (Requirements For Ventilation) of the <i>California Energy Code</i> , or the applicable local code, whichever is more stringent, and Division 1, Chapter 4 of CCR, Title 8. | | 5.508.2.5.2 Leaks. Check the system for leaks, repair any leaks, and retest for pressure us gauge. |
| TOP & TRIM ADHESIVE 250 | | | 🖾 🗆 Eng/Col | 5.506.2 CARBON DIOXIDE (CO ₂) MONITORING. For buildings or additions equipped with demand control | | 5.508.2.5.3 Allowable pressure change. The system shall stand, unaltered, for 24 hours |
| SUBSTRATE SPECIFIC APPLICATIONS | SPECIALTY PRIMERS, SEALERS & UNDERCOATERS | 100 | | 5.506.2 CARBON DIOXIDE (CO₂) MONITORING. For buildings or additions equipped with demand control ventilation, CO ₂ sensors and ventilation controls shall be specified and installed in accordance with the requirements of the California Energy Code, Section 120(c)(4). | | than a +/- one pound pressure change from 300 psig, measured with the same gauge. |
| METAL TO METAL 30 | STAINS | 250 | | | | 5.508.2.6 Evacuation. The system shall be evacuated after pressure testing and prior to chargin |
| PLASTIC FOAMS 50 | STONE CONSOLIDANTS | 450 | | SECTION 5.507 ENVIRONMENTAL COMFORT 5.507.4 ACOUSTICAL CONTROL. Employ building assemblies and components with Sound Transmission Class | | 5.508.2.6.1 First vacuum. Pull a system vacuum down to at least 1000 microns (+/- 50 mi |
| POROUS MATERIAL (EXCEPT WOOD) 50 | SWIMMING POOL COATINGS | 340 | | (STC) values determined in accordance with ASTM E 90 and ASTM E 413, or Outdoor-Indoor Sound Transmission Class (OITC) determined in accordance with ASTM E 1332, using either the prescriptive or performance method in | | hold for 30 minutes. |
| WOOD 30 | TRAFFIC MARKING COATINGS | 100 | | Section 5.507.4.1 or 5.507.4.2. | | 5.508.2.6.2 Second vacuum. Pull a second system vacuum to a minimum of 500 microns minutes |
| FIBERGLASS 80 | TUB & TILE REFINISH COATINGS | 420 | | Exception: Buildings with few or no occupants or where occupants are not likely to be affected by exterior | | |
| | | 250 | | noise, as determined by the enforcement authority, such as factories, stadiums, storage, enclosed parking structures and utility buildings. | | 5.508.2.6.3 Third vacuum. Pull a third vacuum down to a minimum of 300 microns, and he with a maximum drift of 100 microns over a 24-hour period. |
| 1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, | WOOD COATINGS | 275 | | Exception: [DSA-SS] For public schools and community colleges, the requirements of this section and all | | |
| THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED. | WOOD PRESERVATIVES | 350 | | subsections apply only to new construction. | | |
| 2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE | ZINC-RICH PRIMERS 1. GRAMS OF VOC PER LITER OF COATING, INCLUDING WATER & EXE | | | 5.507.4.1 Exterior noise transmission, prescriptive method. Wall and roof-ceiling assemblies exposed to the noise source making up the building or addition envelope or altered envelope shall meet a composite STC | | |
| THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168, | 2. THE SPECIFIED LIMITS REMAIN IN EFFECT UNLESS REVISED LIMITS | | | rating of at least 50 or a composite OITC rating of no less than 40, with exterior windows of a minimum STC of | | CHAPTER 7 |
| www.arb.ca.gov/DRDB/SC/CURHTML/R1168.PDF | THE TABLE. | | | 40 or OITC of 30 in the following locations: | | INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS |
| | 3. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY ARCHITECTURAL COATINGS SUGGESTED CONTROL MEASURE, FEB. | | | 1. Within the 65 CNEL noise contour of an airport. | | 702 QUALIFICATIONS |
| | FROM THE AIR RESOURCES BOARD. | | | Exceptions: | X Contr | actor 702.1 INSTALLER TRAINING. HVAC system installers shall be trained and certified in the installation of HVAC systems including ducts and equipment by a nationally or regionally recognized tra |
| TABLE 5.504.4.2 - SEALANT VOC LIMIT | 5.504.4.3.2 Verification. Verification of compliance with th | nis section shall be provided at the request of | | 1. Lon or CNEL for military airports shall be determined by the facility Air Installation Compatible | | certification program. Uncertified persons may perform HVAC installations when under the direct super |
| Less Water and Less Exempt Compounds in Grams per Liter | the enforcing agency. Documentation may include, but is r 1. Manufacturer's product specification | | | Land Use Zone (AICUZ) plan. 2. L ^{dn} or CNEL for other airports and heliports for which a land use plan has not been developed | | responsibility of a person trained and certified to install HVAC systems or contractor licensed to install H Examples of acceptable HVAC training and certification programs include but are not limited to the follo |
| SEALANTS CURRENT VOC LIMIT | 2. Field verification of on-site product containers | | | shall be determined by the local general plan noise element. | | 1. State certified apprenticeship programs. |
| ARCHITECTURAL 250 | 5.504.4.4 Carpet Systems. | | | Within the 65 CNEL or L^{dn} noise contour of a freeway or expressway, railroad, industrial source or fixed-guideway source as determined by the Noise Element of the General Plan. | | Public utility training programs. Training programs sponsored by trade, labor or statewide energy consulting or verification or |
| MARINE DECK 760 | All carpet installed in the building interior shall meet the requirem Health, "Standard Method for the Testing and Evaluation of Volat | tile Organic Chemical Emissions from Indoor | | | | 4. Programs sponsored by manufacturing organizations. 5. Other programs acceptable to the enforcing agency. |
| NONMEMBRANE ROOF 300 | Sources Using Environmental Chambers." Version 1.2, January 2 Specifications 01350). | | | 5.507.4.1.1. Noise exposure where noise contours are not readily available. Buildings exposed to a noise level of 65 dB L _{eq} - 1-hr during any hour of operation shall have building, addition or alteration | | |
| ROADWAY 250 | | ation programs and testing labs | | exterior wall and roof-ceiling assemblies exposed to the noise source meeting a composite STC rating of at least 45 (or OITC 35), with exterior windows of a minimum STC of 40 (or OITC 30). | | 702.2 SPECIAL INSPECTION [HCD]. When required by the enforcing agency, the owner responsible entity acting as the owner's agent shall employ one or more special inspectors to provide in |
| SINGLE-PLY ROOF MEMBRANE 450 | See California Department of Public Health's website for certifica https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAC | | | 5.507.4.2 Performance Method. For buildings located as defined in Section 5.507.4.1 or 5.507.4.1.1, wall ar | , . | other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. |
| OTHER 420 | 5.504.4.4.1 Carpet cushion. All carpet cushion inst | | | roof-ceiling assemblies exposed to the noise source making up the building or addition envelope or altered envelope shall be constructed to provide an interior noise environment attributable to exterior sources that doe | | other certifications or qualifications acceptable to the enforcing agency, the following certifications or econsidered by the enforcing agency when evaluating the qualifications of a special inspector: |
| SEALANT PRIMERS | requirements of the California Department of Public Evaluation of Volatile Organic Chemical Emissions | from Indoor Sources Using Environmental | | envelope shall be constructed to provide an interior noise environment attributable to exterior sources that doe not exceed an hourly equivalent noise level (Leq-1Hr) of 50 dBA in occupied areas during any hour of operatio | | |
| ARCHITECTURAL | Chambers,"Version 1.2, January 2017 (Emission tes 01350). | | | 5.507.4.2.1 Site Features. Exterior features such as sound walls or earth berms may be utilized as | | Certification by a national or regional green building program or standard publisher. Certification by a statewide energy consulting or verification organization, such as HERS rate |
| NONPOROUS 250 | | to for portification programs and tastical t | | appropriate to the building, addition or alteration project to mitigate sound migration to the interior. | | performance contractors, and home energy auditors.3. Successful completion of a third party apprentice training program in the appropriate trade. |
| POROUS 775 | See California Department of Public Health's websit https://www.cdph.ca.gov/Programs/CCDPHP/DEOD | te for certification programs and testing labs. | | 5.507.4.2.2 Documentation of Compliance. An acoustical analysis documenting complying interior sound levels shall be prepared by personnel approved by the architect or engineer of record. | | 4. Other programs acceptable to the enforcing agency. |
| MODIFIED BITUMINOUS 500 | | | | | . | Notes: |
| MARINE DECK 760 | 5.504.4.4.2 Carpet adhesive. All carpet adhesive s | shall meet the requirements of Table 5.504.4.1. | | 5.507.4.3 Interior sound transmission. Wall and floor-ceiling assemblies separating tenant spaces and tena spaces and public places shall have an STC of at least 40. | | 1. Special inspectors shall be independent entities with no financial interest in the materia |
| | 5.504.4.5 Composite wood products. Hardwood plywood, part | | | Note: Examples of assemblies and their various STC ratings may be found at the California Office of | | project they are inspecting for compliance with this code. 2. HERS raters are special inspectors certified by the California Energy Commission (CE |
| NOTE: FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THESE TABLES, SEE SOUTH | composite wood products used on the interior or exterior of the b formaldehyde as specified in ARB's Air Toxics Control Measure (| (ATCM) for Composite Wood (17 CCR 93120 e | et | Noise Control: www.toolbase.org/PDF/CaseStudies/stc_icc_ratings.pdf. | | homes in California according to the Home Energy Rating System (HERS). |
| COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168. | seq.). Those materials not exempted under the ATCM must mee Table 5.504.4.5. | et the specified emission limits, as shown in | 🖾 🗖 Eng/Col | SECTION 5.508 OUTDOOR AIR QUALITY 5.508.1 Ozone depletion and greenhouse gas reductions. Installations of HVAC, refrigeration and fire suppression | | [BSC-CG] When required by the enforcing agency, the owner or the responsible entity acting as the or shall employ one or more special inspectors to provide inspection or other duties necessary to substant |
| 5.504.4.3 Paints and coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of | 5.504.4.5.3 Documentation. Verification of complia | ance with this section shall be provided as | | 5.508.1 Ozone depletion and greenhouse gas reductions. Installations of HVAC, refrigeration and fire suppression equipment shall comply with Sections 5.508.1.1 and 5.508.1.2. | | compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the |
| the ARB Architectural Coatings Suggested Control Measure, as shown in Table 5.504.4.3, unless more | requested by the enforcing agency. Documentation | | | 5.508.1.1 Chlorofluorocarbons (CFCs). Install HVAC, refrigeration and fire suppression equipment that do not | . | agency for the particular type of inspection or task to be performed. In addition, the special inspector s certification from a recognized state, national or international association, as determined by the local a |
| stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 5.504.4.3 shall be determined by classifying the coating as a Flat, Nonflat | 1. Product certifications and specifications. | | | contain CFCs. | | area of certification shall be closely related to the primary job function, as determined by the local ager |
| or Nonflat-High Gloss coating, based on its gloss, as defined in Subsections 4.21, 4.36 and 4.37 of the 2007 California Air Resources Board Suggested Control Measure, and the corresponding Flat, Nonflat or | | the Composite Wood Products regulation (see | , | 5.508.1.2 Halons. Install HVAC, refrigeration and fire suppression equipment that do not contain Halons. | | Note: Special inspectors shall be independent entities with no financial interest in the materials project they are inspecting for compliance with this code. |
| Nonflat-High Gloss VOC limit in Table 5.504.4.3 shall apply. | CCR, Title 17, Section 93120, et seq.). 4. Exterior grade products marked as meeting | | | 5.508.2 Supermarket refrigerant leak reduction. New commercial refrigeration systems shall comply with the | | |
| 5.504.4.3.1 Aerosol Paints and coatings. Aerosol paints and coatings shall meet the PWMIR Limits for POC in Section 94522(a)(3) and other requirements including prohibitions on use of certain toxic | Engineered Wood Association, the Austra standards. | | | provisions of this section when installed in retail food stores 8,000 square feet or more conditioned area, and that utilize either refrigerated display cases, or walk-in coolers or freezers connected to remote compressor units or | | 703 VERIFICATIONS |
| ROC in Section 94522(a)(3) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(c)(2) and (d)(2) of <i>California Code of</i> | 5. Other methods acceptable to the enforcin | ng agency. | | condensing units. The leak reduction measures apply to refrigeration systems containing high-global-warming potent (high-GWP) refrigerants with a GWP of 150 or greater. New refrigeration systems include both new facilities and the | | 703.1 DOCUMENTATION. Documentation used to show compliance with this code shall include but i construction documents, plans, specifications, builder or installer certification, inspection reports, or oth |
| <i>Regulations</i> , Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product | | | | replacement of existing refrigeration systems in existing facilities. | | acceptable to the enforcing agency which demonstrate substantial conformance. When specific docum special inspection is necessary to verify compliance, that method of compliance will be specified in the a |
| limits of Regulation 8 Rule 49. | | | | Exception: Refrigeration systems containing low-global warming potential (low-GWP) refrigerant with a GWP value loss than 150 are not subject to this section. Low GWP refrigerants are penazone depleting refrigerants | | section or identified applicable checklist. |
| | | | | value less than 150 are not subject to this section. Low-GWP refrigerants are nonozone-depleting refrigerants that include ammonia, carbon dioxide (CO ₂), and potentially other refrigerants. | | |
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| S DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNI | A GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUI | ILDING DEPARTMENT JURISDICTIONS. THIS CHEC | KLIST IS TO BE US | ED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END | JSER ASSUME! | SALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT. INCLUDING VERIFICATION WITH THE FULL |

| | Y N/A RESPON. PARTY | _ |
|--|------------------------|--|
| | | 5.508.2.1 Refrigerant piping. Piping compliant with the California Mechanical Code shall be installed to be accessible for leak protection and repairs. Piping runs using threaded pipe, copper tubing with an outside diameter (OD) less than 1/4 inch. flared tubing connections and short radius allows shall not be used in |
| CURRENT LIMIT | | diameter (OD) less than 1/4 inch, flared tubing connections and short radius elbows shall not be used in refrigerant systems except as noted below. |
| 0.05 | | 5.508.2.1.1 Threaded pipe. Threaded connections are permitted at the compressor rack. 5.508.2.1.2 Copper pipe. Copper tubing with an OD less than 1/4 inch may be used in systems with a |
| 0.05 | | refrigerant charge of 5 pounds or less. |
| 0.11 | | 5.508.2.1.2.1 Anchorage. One-fouth-inch OD tubing shall be securely clamped to a rigid base to keep vibration levels below 8 mils. |
| 0.13 DRNIA AIR RESOURCES BOARD, | | 5.508.2.1.3 Flared tubing connections. Double-flared tubing connections may be used for pressure controls, valve pilot lines and oil. |
| DANCE WITH ASTM E 1333. FOR SECTIONS 93120 THROUGH CHES (8 MM). | | Exception: Single-flared tubing connections may be used with a multiring seal coated with industrial sealant suitable for use with refrigerants and tightened in accordance with manufacturer's recommendations. |
| I, at least 80 percent of floor area | | 5.508.2.1.4 Elbows. Short radius elbows are only permitted where space limitations prohibit use of long radius elbows. |
| partment of Public Health,"Standard ions from Indoor Sources Using ethod for California Specifications | | 5.508.2.2 Valves. Valves Valves and fittings shall comply with the <i>California Mechanical Code</i> and as follows. |
| ams and testing labs. OC.aspx#material | | 5.508.2.2.1 Pressure relief valves. For vessels containing high-GWP refrigerant, a rupture disc shall be installed between the outlet of the vessel and the inlet of the pressure relief valve. |
| ovided verifying that resilient flooring | | 5.508.2.2.1.1 Pressure detection. A pressure gauge, pressure transducer or other device shall be installed in the space between the rupture disc and the relief valve inlet to indicate a disc rupture or discharge of the relief valve. |
| ccupied areas of the building with air | | 5.508.2.2.2 Access valves. Only Schrader access valves with a brass or steel body are permitted for use. |
| Efficiency Reporting Value (MERV) of ations for maintenance with filters of I. | | 5.508.2.2.2.1 Valve caps. For systems with a refrigerant charge of 5 pounds or more, valve caps shall be brass or steel and not plastic. |
| anufacturer indicating the MERV | | 5.508.2.2.2.2 Seal caps. If designed for it, the cap shall have a neoprene O-ring in place. 5.508.2.2.2.2.1 Chain tethers. Chain tethers to fit ovr the stem are required for valves designed to have seal caps. |
| oor areas are provided for smoking, | | Exception: Valves with seal caps that are not removed from the valve during stem |
| ble windows and within the building as gulations or policies of any city, State University, or campus of the ons or policies are not in place, post | | operation. 5.508.2.3 Refrigerated service cases. Refrigerated service cases holding food products containing vinegar and salt shall have evaporator coils of corrosion-resistant material, such as stainless steel; or be coated to prevent |
| | | corrosion from these substances. 5.508.2.3.1 Coil coating. Consideration shall be given to the heat transfer efficiency of coil coating to maximize energy efficiency. |
| | | 5.508.2.4 Refrigerant receivers. Refrigerant receivers with capacities greater than 200 pounds shall be fitted with a device tha indicates the level of refrigerant in the receiver. |
| ovisions of California Building Code,). For additional measures, see | | 5.508.2.5 Pressure testing. The system shall be pressure tested during installation prior to evacuation and charging. |
| es in buildings, meet the minimum | | 5.508.2.5.1 Minimum pressure. The system shall be charged with regulated dry nitrogen and appropriate tracer gas to bring system pressure up to 300 psig minimum. |
| ergy Code, or the applicable local | | 5.508.2.5.2 Leaks. Check the system for leaks, repair any leaks, and retest for pressure using the same gauge. |
| ipped with demand control n accordance with the requirements | | 5.508.2.5.3 Allowable pressure change. The system shall stand, unaltered, for 24 hours with no more than a +/- one pound pressure change from 300 psig, measured with the same gauge. 5.508.2.6 Evacuation. The system shall be evacuated after pressure testing and prior to charging. |
| ts with Sound Transmission Class | | 5.508.2.6.1 First vacuum. Pull a system vacuum down to at least 1000 microns (+/- 50 microns), and |
| utdoor-Indoor Sound Transmission scriptive or performance method in | | hold for 30 minutes. 5.508.2.6.2 Second vacuum. Pull a second system vacuum to a minimum of 500 microns and hold for 30 minutes. |
| ot likely to be affected by exterior iums, storage, enclosed parking | | 5.508.2.6.3 Third vacuum. Pull a third vacuum down to a minimum of 300 microns, and hold for 24 hours with a maximum drift of 100 microns over a 24-hour period. |
| quirements of this section and all | | |
| roof-ceiling assemblies exposed to nvelope shall meet a composite STC tterior windows of a minimum STC of | | CHAPTER 7 INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS |
| he facility Air Installation Compatible and use plan has not been developed | X Contracto | 702 QUALIFICATIONS 702.1 INSTALLER TRAINING. HVAC system installers shall be trained and certified in the proper installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or certification program. Uncertified persons may perform HVAC installations when under the direct supervision and responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems. Examples of acceptable HVAC training and certification programs include but are not limited to the following: |
| ent. ssway, railroad, industrial source or the General Plan. | | State certified apprenticeship programs. Public utility training programs. Training programs sponsored by trade, labor or statewide energy consulting or verification organizations. Programs sponsored by manufacturing organizations. |
| ily available. Buildings exposed to a ve building, addition or alteration ce meeting a composite STC rating of of 40 (or OITC 30). | | 5. Other programs acceptable to the enforcing agency. 702.2 SPECIAL INSPECTION [HCD]. When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or |
| ction 5.507.4.1 or 5.507.4.1.1, wall and ng or addition envelope or altered ributable to exterior sources that does | | other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition to other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be considered by the enforcing agency when evaluating the qualifications of a special inspector: |
| ed areas during any hour of operation. or earth berms may be utilized as | | Certification by a national or regional green building program or standard publisher. Certification by a statewide energy consulting or verification organization, such as HERS raters, building performance contractors, and home energy auditors. |
| sound migration to the interior. is documenting complying interior ect or engineer of record. | | Successful completion of a third party apprentice training program in the appropriate trade. Other programs acceptable to the enforcing agency. |
| separating tenant spaces and tenant | | Notes: 1. Special inspectors shall be independent entities with no financial interest in the materials or the |
| d at the California Office of | | Special inspectors shall be independent entities with no infancial interest in the materials of the project they are inspecting for compliance with this code. HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate homes in California according to the Home Energy Rating System (HERS). |
| AC, refrigeration and fire suppression | | [BSC-CG] When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing |
| re suppression equipment that do not | | agency for the particular type of inspection or task to be performed. In addition, the special inspector shall have a certification from a recognized state, national or international association, as determined by the local agency. The area of certification shall be closely related to the primary job function, as determined by the local agency. |
| ent that do not contain Halons. | | Note: Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code. |
| n systems shall comply with the r more conditioned area, and that to remote compressor units or | | 703 VERIFICATIONS |
| ontaining high-global-warming potential is include both new facilities and the | | 703.1 DOCUMENTATION. Documentation used to show compliance with this code shall include but is not limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which demonstrate substantial conformance. When specific documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate |
| | | special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate section or identified applicable checklist. |

= YES = NOT APPLICABLE

ESPON. PARTY

