



# CITY OF NEWPORT BEACH

## COMMUNITY DEVELOPMENT DEPARTMENT BUILDING DIVISION

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### 2019 CALGREEN NEW BUILDINGS - COMMERCIAL PLAN REVIEW COMMENTS

Project Description:

**Project Address:**

**Plan Check No.:**

Permit App. Date:

Plan Check Expires:

Use:

No. Stories:

Permit Valuation:

Architect/Engineer:

Phone:

Applicant/Contact:

Phone:

**Plan Check Engineer:**

**Phone:**

1<sup>st</sup> Review: (date)

2<sup>nd</sup> Review:  
*Italic comments*

3<sup>rd</sup> Review:  
**By Appointment**

**The code section references are from the 2019 California Green Building Standards Code (CALGreen), unless otherwise stated.**

- **TO EXPEDITE PROJECT APPROVAL:** Please provide a written response indicating how and where each comment was resolved on the plans.
- Resubmit all previously reviewed plans, updated plans and supporting documents with each subsequent review.
- **AFTER 2<sup>nd</sup> PLAN REVIEW:** Please call the plan check engineer listed above to schedule a plan review appointment, to expedite project approval.
- For clarification of any plan review comment, please call the plan check engineer listed above.
- Plan review status is available online at [www.newportbeachca.gov](http://www.newportbeachca.gov). Project status is also available using the interactive voice response system at 949-644-3255, or by speaking with a permit technician at 949-718-1888 during business hours.

**Division 5.1-Planning and Design:**

1. New construction projects shall meet all of the requirements of Division 5.1 through 5.5. Incorporate CALGREEN NEW BUILDING-NONRESIDENTIAL MINIMUM REQUIREMENT to plan. Verify that the design complies with these standards.
2. Develop SWPPP for newly constructed projects of which disturb less than one acre of land through best management practices (BMP) plan in Section 5.106.1.2. **(5.106.1.)**
3. **Short-term bicycle parking.** Provide permanently anchored bicycle racks within 200 feet from the entrance, readily visible to passers-by, for 5% of new visitor motorized vehicle parking capacity but with a minimum of one two-bike capacity rack. **(5.106.4.1.1)**
4. **Long-term bicycle parking.** For buildings with over 10 tenant-occupants, provide secure bicycle parking for 5% of tenant-occupied motorized vehicle parking spaces being added, with a minimum of one space. **(5.106.4.1.2)**
5. Acceptable parking facilities shall be convenient from the street and shall meet one of the following (5.106.4.1.5):
  - a. Covered, lockable enclosures with permanently anchored racks for bicycles;
  - b. Lockable bicycle rooms with permanently anchored racks;
  - c. Lockable, permanently anchored bicycle lockers.
6. Provide designated parking for any combination of low-emitting, fuel efficient and carpool/van pool vehicle per Table 5.106.5.2. **(5.106.5.2)**

<b>TABLE 5.106.5.2</b>	
<b>TOTAL NUMBER OF PARKING SPACES</b>	<b>NUMBER OF REQUIRED SPACES</b>
0–9	0
10–25	1
26–50	3
51–75	6
76–100	8
101–150	11
151–200	16
201 and over	At least 8 percent of total

7. 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 visible beneath a parked vehicle: CLEAN AIR/VANPOOL/EV. (5.106.5.2.1)
8. Provide the number of charging spaces per Table 5.106.5.3.3 for future installation of electric vehicle supply equipment (EVSE). Number of charging spaces shall be rounded up to the nearest whole number.

TOTAL NUMBER OF ACTUAL PARKING SPACES	NUMBER OF REQUIRED EV CHARGING SPACES
0-9	0
10-25	1
26-50	2
51-75	4
76-100	5
101-150	7
151-200	10
201 and over	6 percent of total

9. The service panel or subpanel(s) circuit directory shall identify the reserved overcurrent protective device spaces(s) for future EV charging as "EV CAPABLE." The raceway termination location shall be permanently and visibly marked as "EV CAPABLE." (5.106.5.3.4)
10. Single charging space requirements (5.106.5.3.1):
  - a. Provide minimum 1 inch raceway originating from a service panel or subpanel serving the area and terminating in close proximity to the proposed location of the charging equipment.
  - b. Raceway shall be capable of accommodating a 208/240 volt dedicated branch circuit.
  - c. Service panel or subpanel shall have sufficient capacity to accommodate a minimum 40 amp dedicated branch circuit for the future installation of the EVSE.
11. Multiple charging space requirements (5.106.5.3.2):
  - a. Provide a raceway originating from a service panel or subpanel serving the area and terminating in close proximity to the proposed location of the charging equipment.
  - b. Electrical design shall be based upon 40-ampere minimum branch circuits.
  - c. 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 EV's at its full rated amperage.
  - d. Service panel or subpanel shall have sufficient capacity to accommodate the required number of dedicated branch circuit for the future installation of EVSE.
12. **Grading and paving.** Construction plans shall indicate how site grading or site drainage system will manage surface water flows to keep water from entering buildings. Examples of methods to manage surface water include
  1. Swales
  2. Water collection and disposal systems,
  3. French drains
  4. Water retention gardens
  5. Other water measures which keep surface water away from buildings and aid in groundwater recharge. (5.106.10).

### **Division 5.4-Material Conservation and Resource Efficiency:**

13. 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 such openings plans at least one of the following (5.407.2.2.1):
  - a. An installed awning at least 4 feet in depth.
  - b. The door is protected by a roof overhang at least 4 feet in depth.
  - c. The door is recessed at least 4 feet.
  - d. Other methods which provide equivalent protection.
14. Provide readily accessible recycling storage areas that serve entire building and are identified for the depositing, storage and collection of non-hazardous materials for recycling. (5.410.1)
15. For new building 10,000 square feet and over, building commissioning for all building systems covered by T-24, part 6, process systems and renewable shall be included in the design and construction processes of the building project. (5.410.2)
  - a. Owners or Owner representative Project Requirements (OPR): The expectation and requirements of the building appropriate to its phase shall be documented before the design phase. (5.410.2.1)
  - b. Basis of Design (BOD): A written explanation of how the design of the building systems meets the OPR shall be completed at the design phase to cover the systems listed in Section 5.410.2.2. (5.410.2.2)
  - c. Submit commissioning plan to show how the building is commissioned including the following information (5.410.2.3):
    1. General project information
    2. Commissioning goals
    3. Systems to be commissioned
    4. Commissioning team information
    5. Commissioning process activities, schedules and responsibilities. Include plans for completion of commissioning

### **Division 5.5-Environmental Quality:**

16. Install only a direct-vent sealed-combustion gas fireplace or sealed wood-burning fireplace, or a sealed woodstove and refer to Section 150 of California Energy Code. (5.503.1)
17. Wood stoves shall comply with US 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. (5.503.1.1)
18. Acoustical control. Employ building assemblies and components with STC values determined in accordance with ASTM E90 and ASTM E413 or OITC determined in accordance with ASTM E1332, using either the prescriptive or performance method in Section 5.507.4.1 or 5.507.4.2. (5.507.4)
  - a. **Prescriptive method.** Wall and roof-ceiling assemblies exposed to the noise source making up the building envelope shall have exterior wall and roof ceiling assemblies meeting a composite STC rating of at least 50 or a composite OITC rating of no less than 40 with exterior windows of a minimum STC of 40 or OITC of 30 in the following locations (5.507.4.1):
    1. Within the 65 CNEL noise contour of an airport
    2. Within the 65 CNEL or L<sub>dn</sub> noise contour of a freeway, industrial source, etc.
  - b. **Noise exposure where noise contours are not readily available.** Building exposed to a noise level of 65 dB L<sub>eq</sub>-1-Hr during any hour of operation shall have exterior wall and roof-ceiling assemblies exposed to noise source meeting a composite STC rating of at least 45 (or OITC), with exterior windows of a minimum STC of 40 (or OITC 30)
  - c. **Performance method.** For buildings located as defined in Section 5.507.4.1 or 5.507.4.1.1, wall and roof-ceiling assemblies making up the building envelope shall be constructed to provide an interior noise environment attributable to exterior sources that does not exceed an hourly equivalent noise level (L<sub>eq</sub>-1Hr) of 50 dBA in occupied areas during any hour of operation. (5.507.4.2)

- i. **Site features.** Exterior features such as sound walls or earth berms may be utilized as appropriate to the project to mitigate sound migration to the interior. **(5.507.4.2.1)**
  - ii. **Documentation of compliance.** An acoustical analysis documenting complying interior sound levels shall be prepared by personnel approved by the architect or engineer of record. **(5.507.4.2.2)**
- 19. **Interior sound transmission.** Provide minimum STC 40 at wall and floor-ceiling assemblies separating tenant spaces and tenant spaces and public places. **(5.507.4.3)**
- 20. **Supermarket refrigerant leak reduction.** New commercial refrigeration systems (including both new facilities and replacement of existing refrigeration systems in existing facilities) 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 condensing units shall comply with this section. **(5.508.2)**
  - Exception:** Refrigeration systems containing low-global warming potential refrigerant with a GWP value less than 150 are not subject to this section.
  - a. **Refrigerant piping** runs using threaded pipe, and short radius elbows shall not be used in refrigerant system except as noted below. **(5.508.2.1)**
    - i. **Threaded connections** are permitted at the compressor rack. **(5.508.2.1.1)**
    - ii. **Copper tubing** with an OD less than ¼ inch may be used in systems with a refrigerant charge of 5 pounds or less. **(5.508.2.1.2)**
      - 1. **Anchorage.** ¼ inch OD tubing shall be securely clamped to a rigid base to keep vibrating levels below 8 mils. **(5.508.2.1.2.1)**
    - iii. **Flared tubing connections:** Double-flared tubing connections may be used for pressure controls, valve pilot lines and oil. **(5.508.2.1.3)**
      - Exception:** Single-flared tubing connections may be used with a multiring seal coated with industrial sealant suitable for used with refrigerants and tightened.
    - iv. **Elbows.** Short radius elbows are only permitted where space limitations prohibit use of long radius elbows. **(5.508.2.1.4)**
  - b. **Valves.** Valves and fittings shall comply with as follows. **(5.508.2.2)**
    - i. **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. **(5.508.2.2.1)**
      - 1. **Pressure detection.** A pressure gauge, pressure transducer or other device shall be installed between the outlet of the vessel and the inlet of the pressure relief valve. **(5.508.2.2.1.1)**
    - ii. **Access valves.** Only Schrader access valves with a brass or steel body are permitted for use. **(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. **(5.508.2.2.2.1)**
      - 2. **Seal caps.** If designed for it, the cap shall have a neoprene O-ring in place. **(5.508.2.2.2.2)**
        - a. Chain tethers. Chain tethers to fit over the stem are required for valves designed to have seal caps.
          - Exception:** Valves with seal caps that are not removed from the valve during stem operation.
  - c. **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)**
    - i. **Coil coating.** Consideration shall be given the heat transfer efficiency of coil coating to maximize energy efficiency. **(5.508.2.3.1)**
  - d. **Refrigerant receivers.** Refrigerant receivers with capacities greater than 200 pounds shall be fitted with a device that indicates the level of refrigerant in the receiver. **(5.508.2.4)**

- e. **Pressure Testing.** The system shall be pressure tested during installation prior to evacuation and charging. **(5.508.2.5)**
  - i. **Minimum Pressure.** The system shall be charged with regulated dry nitrogen and appropriate tracer gas to bring system pressure up to 300 psig minimum. **(5.508.2.5.1)**
  - ii. **Leaks.** Check the system for leaks, repair any leaks, and retest for pressure using the same gauge. **(5.508.2.5.2)**
  - iii. **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. **(5.508.2.5.3)**
- f. **Evacuation.** The system shall be evacuated after pressure testing and prior to charging. **(5.508.2.6)**
  - i. **First vacuum.** Pull a system vacuum down to at least 1000 microns (+/- 50 microns) and hold for 30 minutes. **(5.508.2.6.1)**
  - ii. **Second vacuum.** Pull a second system vacuum to a minimum of 500 microns and hold for 30 minutes. **(5.508.2.6.2)**
  - iii. **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. **(5.508.2.6.3)**