



CITY OF ATWATER

2010 CalGreen - Building Commissioning

Basis of Design (BOD)

<i>Property Address</i>	<i>Permit No.</i>	<i>Date</i>
	<i>Property Owner</i>	<i>Design Professional</i>

[Documentation of the Basis of Design (BOD) is a step required for compliance with 2010 CALGREEN Code, section 5.410.2.1, for newly constructed buildings greater than 10,000 sq. ft. This template is a guide for use by the design team.]

1 HVAC System

1.1 Narrative Description of System

- A. [System type(s), location, control type, efficiency features, outdoor air ventilation strategy, indoor air quality features, noise reduction features, environmental benefits, other special features]
- B. [Describe how system meets any special requirements listed in the Owner's Project Requirements document.]

1.2 Reasons for System Selection

- A. [Reasons that the selected system is a better choice than alternatives. E.g. comfort performance, efficiency, reliability, flexibility, simplicity, cost, owner preferences, site constraints, climate, availability of maintenance, acoustics]

1.3 Load Calculations

- A. Load calculation method/software [enter method/software]
- B. Summer outdoor design conditions: [°F drybulb, °F wetbulb]
- C. Winter outdoor design conditions: [°F drybulb]
- D. Indoor design conditions: [°F %RH cooling; °F heating]

E. Internal heat gain assumptions:

Space	Lighting Load	Plug Load	Occupant Load	Infiltration Load	Other:

F. Calculated cooling loads and system size:

System/Air Handler ID	Calculated Peak Cooling Load	Selected System Cooling Capacity	Reasons for difference between calculated load and selected system capacity Infiltration Load

- G. Other load calculation assumptions: [description of load calculations]



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1.4 *Sequence of Operations*

A. [Operating schedules, setpoints, etc. May refer to plans and/or specifications if sequence of operations is included there.]

2 Indoor Lighting Systems

2.1 *Narrative Description of System*

- A. Fixture type(s)
- B. Lamp and ballast type
- C. Control type
- D. [Describe how system meets any special requirements listed in the Owner's Project Requirements document.]

2.2 *Reasons for system selection*

A. [Reasons that the selected lighting system is a better choice than alternatives. E.g. visual comfort performance, efficiency, reliability, flexibility, simplicity, cost, owner preferences, color rendering, integration with daylighting, ease of maintenance, etc.]

2.3 *Lighting Design*

<i>Space ID</i>	<i>Space Type</i>	<i>Illumination Design Target (footcandles)</i>	<i>Source of Target (e.g. IES standard, owner requirement)</i>	<i>Other lighting design criteria: (e.g. CRI, CCT)</i>

2.4 *Lighting Power Design Targets*

<i>Space Type</i>	<i>Title 24 Lighting Power Allowance (watts/ft²)</i>	<i>Lighting Power Design Target (watts/ft²)</i>

3 Water Heating System

3.1 *Narrative Description of System*

- A. [System type(s), location, control type, efficiency features, environmental benefits, other special features]
- B. [Describe how system meets any special requirements listed in the Owner's Project Requirements document.]

3.2 *Reasons for System Selection*

A. [Reasons that the selected water heating system is a better choice than alternatives. E.g. performance, efficiency, reliability, simplicity, space constraints, cost, owner preferences, ease of maintenance, utility company incentives, etc.]

3.3 *Water Heating Load Calculations*

A. [Describe sizing calculation method, assumptions, and results]



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4 Renewable Energy Systems

4.1 *Narrative Description of System*

A. [System type(s), location, inverter type, control type, performance, efficiency, energy savings, payback period]

B. [Describe how system meets any special requirements listed in the Owner's Project Requirements document.]

4.2 *Reasons for System Selection*

A. [Reasons that the selected renewable energy systems are a better choice than alternatives. E.g. performance, efficiency, reliability, flexibility, simplicity, expandability, cost, payback period, utility company incentives, owner preference, space constraints, cost, owner preferences, ease of maintenance, etc.]

4.3 *Renewable Energy System Generation Calculations*

A. [Describe sizing calculation method, assumptions, and results]

5 Landscape Irrigation Systems

5.1 *Narrative Description of System*

A. [System type(s), location, control type, performance, efficiency, water savings]

B. [Describe how system meets any special requirements listed in the Owner's Project Requirements document.]

5.2 *Reasons for System Selection*

A. [Reasons that the selected landscape irrigation systems are a better choice than alternatives. E.g. performance, efficiency, reliability, flexibility, simplicity, expandability, cost, payback period, utility company incentives, owner preference, cost, owner preferences, ease of maintenance, etc.]

5.3 *Landscape Irrigation System Calculations*

A. [Describe sizing calculation method, assumptions, and results]

6 Water Reuse Systems

6.1 *Narrative Description of System*

A. [System type(s), location, space requirements, equipment requirements, control type, performance, efficiency, potable water savings, payback period]

B. [Describe how system meets any special requirements listed in the Owner's Project Requirements document.]

6.2 *Reasons for System Selection*

A. [Reasons that the selected water reuse systems are a better choice than alternatives. E.g. performance, efficiency, reliability, flexibility, simplicity, expandability, cost, payback period, utility company incentives, owner preference, space constraints, cost, owner preferences, ease of maintenance, etc.]

6.3 *Water Reuse System Calculations*

[Describe sizing calculation method, assumptions, and results]

¹ The Yosemite Chapter of The International Code Council represents the following jurisdictions in the State of California:

City of Angels Camp • City of Atwater • Calaveras County • City of Coalinga • City of Dos Palos • City of Emeryville • City of Escalon • City of Gustine • City of Hughson • City of Lathrop • City of Los Banos • Madera County • City of Manteca • Mariposa County • City of Merced • Merced County • City of Modesto • City of Newman • City of Oakdale • City of Ripon • City of Patterson • City of Riverbank • San Joaquin County • City of Sonora • Stanislaus County • City of Tracy • Tuolumne County • City of Turlock



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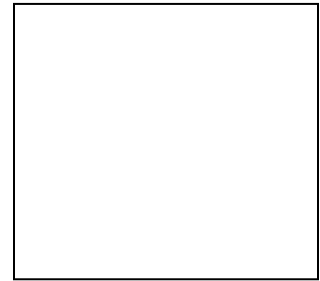
Compliance Statement

I certify that I, _____ am the design professional of record for the proposed structure and have completed the BOD in conjunction with the owner of record and project design team. Further, I certify that the BOD for this project meets the requirements of the OPR.

By signing below I am certifying that the above information is accurate and true and is in conformance with the intent of the 2010 CalGreen- Green Building Standards.

Design Professional of Record

Date



Design Professional Seal

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