



INFORMATION SHEET

NO. M-03

DATE : August 28, 2024
SUBJECT : Mechanical, Electrical, and Plumbing
TITLE : **Title-24 California Energy Code and San Francisco Green Building Code Inspection Checklists for Single-Family Residential Buildings**

PURPOSE : The purpose of this Information Sheet is to provide energy efficiency and green building requirements inspection checklists for single-family residential buildings.

REFERENCE : California Energy Code (CEC), Current Edition
California Green Building Standards Code (CAL Green), Current Edition
San Francisco Green Building Code (SFGBC), Current Edition
Administrative Bulletin 093 (AB-093): Implementation of Green Building Regulations
DBI Information Sheet M-06: Title-24 California Energy Code Certificate of Installation, Verification, and Acceptance Compliance Requirements and San Francisco Green Building Code Compliance Verification Requirements

DISCUSSION :

Prior to permit approval, the applicable CEC and SFGBC inspection requirements shall be specified by the responsible designer by filling out the appropriate inspection checklists. The CEC and SFGBC inspection checklists specifying the required inspections shall be completed and affixed to the drawings for permit application submittal. The appropriate checklists depend on the project type. For single-family residential buildings, the CEC and SFGBC inspection checklists are contained in Attachments 1 through 3 of this information sheet as follows:

IS M-03 Attachment 1: Title-24 California Energy Code & San Francisco Green Building Code Inspection Checklist Single-Family Residential (Building)

IS M-03 Attachment 2: Title-24 California Energy Code Inspection Checklist Single-Family Residential (Electrical)

IS M-03 Attachment 3: Title-24 California Energy Code Inspection Checklist Single-Family Residential (Plumbing)

Refer also to Information Sheet M-06 for energy efficiency and green building inspection checklists for other project types. To obtain CEC installation, verification, and acceptance compliance and SFGBC final compliance verification, refer to the procedures outlined in Information Sheet M-06.



Effective Date of the Provisions of this Information Sheet

The provisions of this information sheet became effective for building permit applications submitted on or after January 1, 2023. The provisions of the AB-093 Attachment E form are required for new construction and major alteration permits that have a final certificate of occupancy after January 1, 2019.

A handwritten signature in blue ink, appearing to read "Patrick O'Riordan".

08/29/2024

Patrick O'Riordan, C.B.O.

Date

Director

Department of Building Inspection

This Information Sheet is subject to modification at any time. For the most current version, visit our website at sfdbi.org.

NOTICE

Title-24 California Energy Code & San Francisco Green Building Code Inspection Checklist SINGLE-FAMILY RESIDENTIAL (BUILDING)

Certificates of Installation, Verification, and/or Acceptance are required for this project, as indicated on the checklist issued with this permit. Ensuring the accurate completion of this documentation is the direct responsibility of the Responsible Designer. This documentation is required in addition to site inspections performed by the Department of Building Inspection.

For questions regarding the details or extent of required documentation or testing, and if there are any field problems regarding documentation or testing, please contact your district building inspector or call (628) 652-3400.

Before the final building inspection is scheduled, documentation of California Energy Code (CEC) compliance "Certificate of Installation, Verification, and/or Acceptance" and San Francisco Green Building Code (SFGBC) compliance "Administrative Bulletin AB-093 Attachment E" must be completed and signed by the Responsible Designer. The permit will not be finalized without compliance with the energy inspection requirements.

Energy Inspection Services contact information:

1. Telephone: (628) 652-3407
2. Email: dbi.energyinspections@sfgov.org
3. In person: 49 South Van Ness Ave., 4th floor

Please submit all special inspection submittals, including final letters, to:
dbi.energyinspections@sfgov.org

Installation, Acceptance, and Verification certificates can be found on the California Energy Commission website at energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency.

Information Sheet M-06 provides submittal instructions for the Title-24 CEC and SFGBC certificates of installation, verification, and acceptance. M-06 may be found on the SFDBI website at sf.gov/resource/2022/information-sheets-dbi.

**TITLE-24 California Energy Code & San Francisco Green Building Code Inspection Checklist
SINGLE-FAMILY RESIDENTIAL (BUILDING)**

A COPY OF THIS DOCUMENT SHALL BE KEPT WITH THE APPROVED DRAWING SET

JOB ADDRESS _____ APPLICATION NO. _____ ADDENDUM NO. _____
RESPONSIBLE DESIGNER NAME _____ PHONE NO. _____

Installation, Acceptance, Verification, and/or Green Building compliance documentation shall be completed per Information Sheet M-06. In accordance with the requirements of the California Energy Code, San Francisco Green Building Code and SFDBI Administrative Bulletin AB-093, the following documentation are required for the **building** elements in this project:

1. Installation <i>Addition and Alteration</i> <input type="checkbox"/> CF2R-ADD-02-E Non HERS – Prescriptive Additions Simple (IB53) <input type="checkbox"/> CF2R-ALT-05-E Non HERS – Prescriptive Alterations Simple (IB54) <i>Envelope</i> <input type="checkbox"/> CF2R-ENV-01-E Non HERS – Fenestration Installation (IB1) <input type="checkbox"/> CF2R-ENV-03-E Non HERS – Insulation Installation (IB3) <input type="checkbox"/> CF2R-ENV-04-E Non HERS – Roofing-Radiant Barrier (IB4) <input type="checkbox"/> CF2R-ENV-20-H HERS – Building Envelope Air Leakage Test (IB56) <input type="checkbox"/> CF2R-ENV-21-H HERS – Quality Insulation Installation (QII) - Framing Stage (IB64) <input type="checkbox"/> CF2R-ENV-22-H HERS – Quality Insulation Installation (QII) - Insulation Stage (IB65) <i>Solar Ready</i> <input type="checkbox"/> CF2R-SRA-01-E – Solar Ready Buildings – New Constructions (IB68) <input type="checkbox"/> CF2R-SRA-02-E – Minimum Solar Zone Area Worksheet – New Constructions (IB69)		<i>Mechanical</i> <input type="checkbox"/> CF2R-MCH-01-E Non HERS – Space Conditioning Systems (IB57) <input type="checkbox"/> CF2R-MCH-02-E Non HERS – Whole House Fan (IB13) <input type="checkbox"/> CF2R-MCH-20-H HERS – Duct Leakage (IB58) <input type="checkbox"/> CF2R-MCH-21-H HERS – Duct Location (IB18) <input type="checkbox"/> CF2R-MCH-22-H HERS – Space Conditioning System Fan Efficacy (IB59) <input type="checkbox"/> CF2R-MCH-23-H HERS – Space Conditioning System Airflow Rate (IB60) <input type="checkbox"/> CF2R-MCH-25-H HERS – Refrigerant Charge Verification (IB62) <input type="checkbox"/> CF2R-MCH-26-H HERS – Verified Energy Efficiency Ratio (EER) or Seasonal Energy Efficiency Ratio (SEER) (IB27) <input type="checkbox"/> CF2R-MCH-27-H HERS – Indoor Air Quality (IAQ)(IB63) <input type="checkbox"/> CF2R-MCH-28-H HERS – Return Duct Design and Air Filter Grille Device Sizing According to Tables 150.0-B or C (IB31) <input type="checkbox"/> CF2R-MCH-29-H HERS – Duct Surface Area Reduction; R-Value; Buried Ducts Compliance Credit (IB32) <input type="checkbox"/> CF2R-MCH-30-E HERS – Ventilation Cooling Compliance Credit (IB55) <input type="checkbox"/> CF2R-MCH-31-H HERS – Whole House Fan (IB66) <input type="checkbox"/> CF2R-MCH-32-H HERS – Local Mechanical Exhaust (IB67) <input type="checkbox"/> CF2R-MCH-33-H HERS – Variable Capacity Heat Pump Compliance Credit (IB70)	
2. Verification <i>Existing Conditions</i> <input type="checkbox"/> CF3R-EXC-20-H HERS – HERS Verification of Existing Conditions for Residential Alterations (VB47) <i>Envelope</i> <input type="checkbox"/> CF3R-ENV-20-H HERS – Building Envelope Air Leakage Test (VB48) <input type="checkbox"/> CF3R-ENV-21-H HERS – Quality Insulation Installation (QII) - Framing Stage (VB56) <input type="checkbox"/> CF3R-ENV-22-H HERS – Quality Insulation Installation (QII) - Insulation Stage (VB57)		<i>Mechanical</i> <input type="checkbox"/> CF3R-MCH-20-H HERS – Duct Leakage Test (VB49) <input type="checkbox"/> CF3R-MCH-21-H HERS – Duct Location (VB12) <input type="checkbox"/> CF3R-MCH-22-H HERS – Space Conditioning System Fan Efficacy (VB50) <input type="checkbox"/> CF3R-MCH-23-H HERS – Space Conditioning System Airflow Rate (VB51) <input type="checkbox"/> CF3R-MCH-25-H HERS – Refrigerant Charge Verification (VB53) <input type="checkbox"/> CF3R-MCH-26-H HERS – Verified EER or SEER (VB21) <input type="checkbox"/> CF3R-MCH-27-H HERS – IAQ (VB54) <input type="checkbox"/> CF3R-MCH-28-H HERS – Return Duct Design and Air Filter Grille Device Sizing According to Tables 150.0-B or C (VB25) <input type="checkbox"/> CF3R-MCH-29-H HERS – Duct Surface Area Reduction; R-Value; Buried Ducts Compliance Credit (VB27) <input type="checkbox"/> CF3R-MCH-30-H HERS – Ventilation Cooling Compliance Credit (VB60) <input type="checkbox"/> CF3R-MCH-31-H HERS – Whole House Fan (VB58) <input type="checkbox"/> CF3R-MCH-32-H HERS – Local Mechanical Exhaust (VB59) <input type="checkbox"/> CF3R-MCH-33-H HERS – Variable Capacity Heat Pump Compliance Credit (VB64)	
3. Green Building (For New Construction and Major Alterations) <input type="checkbox"/> Green Building AB-093 Attachment E (GBC1)		4. All-Electric (For New Construction) <input type="checkbox"/> All-Electric Compliance AB-112 Attachment 2 (AEC1)	

Required information:

Prepared by: _____ **Email:** _____ **Date:** _____
Responsible Designer Signature

Review by: _____ **Phone:** _____
DBI Engineer or Plan Reviewer

APPROVAL (Based on submitted reports)

DATE DBI Building Inspector or Energy Inspection Services Staff

NOTICE

TITLE-24 California Energy Code Inspection Checklist SINGLE-FAMILY RESIDENTIAL (ELECTRICAL)

Certificates of Installation, Verification, and/or Acceptance are required for this project, as indicated on the checklist issued with this permit. Ensuring the accurate completion of this documentation is the direct responsibility of the Responsible Designer. This documentation is required in addition to site inspections performed by the Department of Building Inspection.

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Information Sheet M-06 provides submittal instructions for the Title-24 CEC installation, verification, and acceptance energy certificates. M-06 may be found on the SFDBI website at: sf.gov/resource/2022/information-sheets-dbi.

**TITLE-24 California Building Code Inspection Checklist
SINGLE-FAMILY RESIDENTIAL (ELECTRICAL)**

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Installation, Acceptance, and/or Verification compliance documentation shall be completed per Information Sheet M-06. In accordance with the requirements of the California Energy Code, the following documentation is required for the **electrical** elements in this project:

1. Installation

Electrical

- CF2R-LTG-01-E Lighting – Single Family Dwellings (**IE1**)
- CF2R-ELC-01-E Electric Ready (**IE20**)

Solar

- CF2R-PVB-01-E Photovoltaic Systems (**IE18**)
- CF2R-PVB-02-E Battery Storage Systems (**IE19**)

Required information:

Prepared by: _____ **Email:** _____ **Date:** _____
Responsible Designer Signature

Review by: _____ **Phone:** _____
DBI Engineer or Plan Reviewer

APPROVAL (Based on submitted reports)

DATE

DBI Building Inspector or Energy Inspection Services Staff

NOTICE

TITLE-24 California Energy Code Inspection Checklist SINGLE-FAMILY RESIDENTIAL (PLUMBING)

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**TITLE-24 California Building Code Inspection Checklist
SINGLE-FAMILY RESIDENTIAL (PLUMBING)**

IS M-03 Attachment 3
Last Modified August 2024

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RESPONSIBLE DESIGNER NAME _____ PHONE NO. _____

Installation, Acceptance, and/or Verification compliance documentation shall be completed per Information Sheet M-06. In accordance with the requirements of the California Energy Code, the following documentation is required for the **plumbing** work in this project:

1. Installation

Plumbing

- CF2R-PLB-02-E DHW Non-HERS - Single Dwelling Unit Hot Water System Distribution **(IP5)**
- CF2R-PLB-03-E DHW Non-HERS - Pool and Spa Heating System **(IP7)**
- CF2R-PLB-22-H DHW HERS - HERS Single Dwelling Unit Hot Water System Distribution **(IP8)**

Solar

- CF2R-STH-01-E Solar Water Heating System **(IP1)**

Mechanical

- CF2R-MCH-04-E Non HERS – Evaporative Coolers **(IP2)**

2. Verification

- CF3R-PLB-22-H DHW HERS - HERS Single Dwelling Unit Hot Water System Distribution **(VP3)**

Required information:

Prepared by: _____ **Email:** _____ **Date:** _____
Responsible Designer Signature

Review by: _____ **Phone:** _____
DBI Engineer or Plan Reviewer

APPROVAL (Based on submitted reports)

DATE

DBI Building Inspector or Energy Inspection Services Staff