



INFORMATION SHEET

NO. M-03

DATE : January 1, 2023

SUBJECT : Mechanical (and Electrical & Plumbing)

TITLE : **2022 Title-24 Energy/Green Forms for Single-Family Residential Buildings**

PURPOSE : The purpose of this Information Sheet is to provide Title-24 energy inspection forms for single-family residential buildings based on the 2022 California Energy Code (CEC) and green building compliance per 2022 San Francisco Green Building Code (SFGBC) and Administrative Bulletin 093 (AB-093).

REFERENCE :

- 2022 California Energy Code
- 2022 San Francisco Green Building Code
- Administrative Bulletin 093 (AB-093)
- Information Sheet GB-01

DISCUSSION : The 2022 California Energy Code (CEC) will take effect on January 1, 2023. Additional and updated compliance, installation, and verification forms apply to the new Energy Code. Compliance with AB-093 Attachment E for new construction and major alterations.

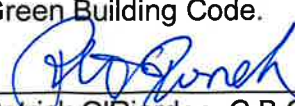
2022 California Energy Code Form Requirements for Single-Family Residential

Single-Family Residential Title-24 is comprised of Certificate of Compliance, Certificate of Installation, and Certificate of Verification forms. Compliance documentation of the AB-093 is comprised of Attachment E. The Single-Family Residential Energy/Green Inspection forms are included in the following attachments.

Effective Date of the Provisions of this Information Sheet

The provisions of this information sheet become 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.

Note: Refer to GB-01, Attachment H for projects required to exceed energy standards per San Francisco Green Building Code.


Patrick O'Riordan, C.B.O., Director
Department of Building Inspection


Date

Attachment Title-24 Energy Inspection Req. Single-Family Residential (Building)
Attachment Title-24 Energy Inspection Req. Single-Family Residential (Electrical)
Attachment Title-24 Energy Inspection Req. Single-Family Residential (Plumbing)



NOTICE

TITLE-24 SINGLE-FAMILY RESIDENTIAL ENERGY/GREEN INSPECTION REQUIREMENTS (BUILDING)

Please note that Certificates of Installation and/or Acceptance and/or Verification are required for this project, as indicated on this form issued with this permit. Ensuring the accurate completion of this documentation is the direct responsibility of the engineer/architect of record. This documentation is required *in addition to* the called 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 call your District Building Inspector or 628-652-3400.

Before final building inspection is scheduled, documentation of energy compliance "Certificate of Installation, Acceptance, and Verification" and green building "Attachment E" must be completed and signed by the responsible person in charge. ***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: 4th floor at 49 South Van Ness Ave.

Note: We are moving towards a 'paperless' mode of operation. All special inspection submittals, including final letters, may be emailed (preferred).

Installation, Acceptance, and Verification certificates can be found on the California Energy Commission website at <https://www.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 installation, verification, and acceptance energy certificates and Green Building Attachment E. M-06 may be found on the SFDBI website at <https://sf.gov/resource/2022/information-sheets-dbi>

TITLE-24 SINGLE-FAMILY RESIDENTIAL ENERGY/GREEN INSPECTION (BUILDING)

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

JOB ADDRESS _____ APPLICATION NO. _____ ADDENDUM NO. _____

ENGINEER/ARCHITECT NAME _____ PHONE NO. _____

Ensuring the completion of installation documentation as well as the required acceptance/verification testing is the direct responsibility of the undersigned. Installation documentation must be completed by the contractor performing the installation. Verification testing must be completed by a certified HERS rater. Verification testing must be completed by a certified HERS rater. Green Building Attachment E shall be completed as per SFGBC AB-093.

In accordance with the requirements of the 2022 California Energy Code, 2022 SFGBC and AB-093, the following documentation is required for the **building** elements in this project:

1. Installation <i>Addition and Alternation</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)	<i>Mechanical (continued)</i> <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 EER or SEER (IB27) <input type="checkbox"/> CF2R-MCH-27-H HERS – 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)	<i>Mechanical (continued)</i> <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 Attachment E (GBC1)	

Required information:

Prepared by: _____ Date: _____
Engineer/Architect of Record Signature

Fax: _____ Email: _____

Review by: _____ Phone: _____
DBI Engineer or Plan Checker

APPROVAL (Based on submitted reports)

DATE _____ DBI Building Inspector or Energy Inspection Services Staff

QUESTIONS ABOUT TITLE-24 ENERGY INSPECTION SHOULD BE DIRECTED TO:
Energy Inspection Services (628) 652-3407; or, dbi.energyinspections@sfgov.org



NOTICE

TITLE-24 SINGLE-FAMILY RESIDENTIAL ENERGY INSPECTION REQUIREMENTS (ELECTRICAL)

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TITLE-24 SINGLE-FAMILY RESIDENTIAL ENERGY INSPECTION (ELECTRICAL)

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ENGINEER/ARCHITECT NAME _____ PHONE NO. _____

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In accordance with the requirements of the 2022 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: _____ Date: _____
Engineer/Architect of Record Signature

Fax: _____ Email: _____

Review by: _____ Phone: _____
DBI Engineer or Plan Checker

APPROVAL (Based on submitted reports)

DATE _____ DBI Electrical Inspector or Energy Inspection Services Staff



NOTICE

TITLE-24 SINGLE-FAMILY RESIDENTIAL ENERGY INSPECTION REQUIREMENTS (PLUMBING)

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ENGINEER/ARCHITECT NAME _____ PHONE NO. _____

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In accordance with the requirements of the 2022 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: _____ Date: _____
Engineer/Architect of Record Signature

Fax: _____ Email: _____

Review by: _____ Phone: _____
DBI Engineer or Plan Checker

APPROVAL (Based on submitted reports)

DATE _____ DBI Plumbing Inspector or Energy Inspection Services Staff