



INFORMATION SHEET

NO. M-03

DATE : January 23, 2020
SUBJECT : Mechanical (and Electrical & Plumbing)
TITLE : **2019 Title-24 Energy/Green Forms for Low-rise Residential Buildings**

PURPOSE : The purpose of this Information Sheet is to provide Title-24 energy inspection forms for low-rise residential buildings based on the 2019 California Energy Code (CEC) and green building compliance per 2019 San Francisco Green Building Code (SFGBC) and Administrative Bulletin 093 (AB-093).

REFERENCE : 2019 California Energy Code
2019 San Francisco Green Building Code
Administrative Bulletin 093 (AB-093)
Information Sheet GB-01

DISCUSSION : The 2019 California Energy Code (CEC) will take effect on January 1, 2020. 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.


2019 California Energy/Green Code Form Requirements for Low-Rise Residential

Low-Rise 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 Low-Rise Residential Energy/Green Inspection forms are included in the following attachments.

Effective Date of the Provisions of this Information Sheet

The provisions of the Title-24 energy inspection forms become effective for building permit applications submitted on or after January 1, 2020. The provisions of the AB-093 Attachment E form is 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.


Tom C. Hui, S.E., C.B.O., Director
Department of Building Inspection

 1/23/2020
Date

Attachment RB: Title-24 Energy/Green Inspection Reqs Low-Rise Residential (Building)
Attachment RE: Title-24 Energy Inspection Reqs Low-Rise Residential (Electrical)
Attachment RP: Title-24 Energy Inspection Reqs Low-Rise Residential (Plumbing)

This Information Sheet is subject to modification at any time. For the most current version, visit our website at <http://www.sfdbi.org>



NOTICE

TITLE-24 LOW-RISE 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 415-558-6570.

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: (415) 558-6132
2. Fax: (415) 558-6474
3. Email: dbi.energyinspections@sfgov.org
4. In person: 3rd floor at 1660 Mission St.

Note: We are moving towards a 'paperless' mode of operation. All special inspection submittals, including final letters, may be emailed (preferred) or faxed. We will also be shifting to a paperless fax receipt mode.

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/2019-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 <http://sfdbi.org/information-sheets>

TITLE-24 LOW-RISE 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. Green Building Attachment E shall be completed as per Administrative Bulletin 093 (AB-093).

In accordance with the requirements of the 2019 California Energy Code, 2019 SFGBC and AB-093, the following documentation is required for the **building** elements in this project:

1. Installation*Addition and Alternation*

- ☐ CF2R-ADD-02-E Non HERS – Prescriptive Additions Simple **(IB53)**
☐ CF2R-ALT-05-E Non HERS – Prescriptive Alterations Simple **(IB54)**

Envelope

- ☐ CF2R ENV-01-E Non HERS – Fenestration Installation **(IB1)**
☐ CF2R ENV-03-E Non HERS – Insulation Installation **(IB3)**
☐ CF2R ENV-04-E Non HERS – Roofing-Radiant Barrier **(IB4)**
☐ CF2R ENV-20-H HERS – Building Envelope Air Leakage Test **(IB56)**
☐ CF2R-ENV-21-H HERS – Quality Insulation Installation (QII) - Framing Stage **(IB64)**
☐ CF2R-ENV-22-H HERS – Quality Insulation Installation (QII) - Insulation Stage **(IB65)**

Solar Ready

- ☐ CF2R-SRA-01-E – Solar Ready Buildings – New Constructions **(IB68)**
☐ CF2R-SRA-02-E – Minimum Solar Zone Area Worksheet – New Constructions **(IB69)**

Mechanical

- ☐ CF2R-MCH-01-E Non HERS – Space Conditioning Systems **(IB57)**
☐ CF2R-MCH-02-E Non HERS – Whole house fan **(IB13)**
☐ CF2R-MCH-20-H HERS – Duct Leakage **(IB58)**
☐ CF2R-MCH-21-H HERS – Duct Location **(IB18)**
☐ CF2R-MCH-22-H HERS – Space Conditioning System Fan Efficacy **(IB59)**
☐ CF2R-MCH-23-H HERS – Space Conditioning System Airflow Rate **(IB60)**
☐ CF2R-MCH-24-H HERS – Building Envelope Air Leakage Worksheet **(IB61)**
☐ CF2R-MCH-25-H HERS – Refrigerant Charge Verification **(IB62)**
☐ CF2R-MCH-25f-E Non HERS – Refrigerant Charge Verification - New Package Unit with Factory Charge **(IB26)**
☐ CF2R-MCH-26-H HERS – Verified EER or SEER **(IB27)**
☐ CF2R-MCH-27-H HERS – IAQ **(IB63)**
☐ CF2R-MCH-28-H HERS – Return Duct Design and Air Filter Grille Device Sizing According to Tables 150.0-B or C **(IB31)**
☐ CF2R-MCH-29-H HERS – Duct Surface Area Reduction; R-Value; Buried Ducts Compliance Credit **(IB32)**
☐ CF2R-MCH-30-E HERS – Ventilation Cooling Compliance Credit **(IB55)**
☐ CF2R-MCH-31-H HERS – Whole house fan **(IB66)**
☐ CF2R-MCH-32-H HERS – Local Mechanical Exhaust **(IB67)**

2. Verification*Existing Conditions*

- ☐ CF3R EXC-20-H HERS – HERS Verification of Existing Conditions for Residential Alterations **(VB47)**

Envelope

- ☐ CF3R ENV-20-H HERS – Building Envelope Air Leakage Test **(VB48)**
☐ CF3R-ENV-21-H HERS – Quality Insulation Installation (QII) - Framing Stage **(VB56)**
☐ CF3R-ENV-22-H HERS – Quality Insulation Installation (QII) - Insulation Stage **(VB57)**

Mechanical

- ☐ CF3R-MCH-20-H HERS – Duct Leakage Test **(VB49)**
☐ CF3R-MCH-21-H HERS – Duct Location **(VB12)**
☐ CF3R-MCH-22-H HERS – Space Conditioning System Fan Efficacy **(VB50)**
☐ CF3R-MCH-23-H HERS – Space Conditioning System Airflow Rate **(VB51)**
☐ CF3R-MCH-24-H HERS – Building Envelope Air Leakage Worksheet **(VB52)**
☐ CF3R-MCH-25-H HERS – Refrigerant Charge Verification **(VB53)**
☐ CF3R-MCH-26-H HERS – Verified EER or SEER **(VB21)**
☐ CF3R-MCH-27-H HERS – IAQ **(VB54)**
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☐ CF3R-MCH-32-H HERS – Local Mechanical Exhaust **(VB59)**

3. Green Building (For New Construction and Major Alterations)

- ☐ Green Building Attachment E **(GBC1)**

Required information:

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

Fax: _____ **Email:** _____

Review by: _____ **Phone** (415) 558-_____
 _____ 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 (415) 558-6132; or, dbi.energyinspections@sfgov.org ; or FAX (415) 558-6474



Attachment RE

NOTICE

TITLE-24 LOW-RISE RESIDENTIAL ENERGY INSPECTION REQUIREMENTS (ELECTRICAL)

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.

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Information Sheet M-06 provides submittal instructions for the Title-24 installation, verification, and acceptance energy certificates. M-06 may be found on the SFDBI website at <http://sfdbi.org/information-sheets>.

Energy Inspection Services

1660 Mission Street– San Francisco CA 94103

Office (415) 558-6132 – FAX (415) 558-6474 – www.sfgov.org/dbi (website)

Revised 1/23/2020

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ENGINEER/ARCHITECT NAME _____ PHONE NO. _____

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In accordance with the requirements of the 2019 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-LTG-02-E Lighting – Multi-Family Dwellings **(IE2)**

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:** (415) 558-_____
DBI Engineer or Plan Checker

APPROVAL (Based on submitted reports)

DATE DBI Electrical Inspector or Energy Inspection Services Staff

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TITLE-24 LOW-RISE RESIDENTIAL ENERGY INSPECTION REQUIREMENTS (PLUMBING)

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Energy Inspection Services

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ENGINEER/ARCHITECT NAME _____ PHONE NO. _____

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In accordance with the requirements of the 2019 California Energy Code, the following documentation is required for the **plumbing** work in this project:

1. Installation*Plumbing*

- ☐ CF2R-PLB-01-E DHW Non-HERS - Multifamily Central Hot Water System Distribution **(IP6)**
- ☐ 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-21-H DHW HERS - HERS Multifamily Central Hot Water System Distribution **(IP9)**
- ☐ 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-21-H DHW HERS - HERS Multifamily Central Hot Water System Distribution **(VP2)**
- ☐ 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:** (415) 558-_____

 DBI Engineer or Plan Checker

APPROVAL (Based on submitted reports)

 DATE DBI Plumbing Inspector or Energy Inspection Services Staff

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