State of California-Natural Resources Agency Gavin Newsom, Governor
California Energy Commission
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Sacramento, Ca, 95814-5512
www.energy.ca.gov

Instructions for Commercial Refrigerators Multiple Compartments Appliance Data

(Last Updated June 2021)

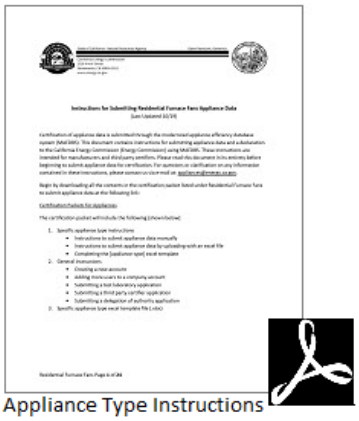
Introduction

Certification of appliance data is submitted through the modernized appliance efficiency database system (MAEDBS). This document contains instructions for submitting appliance data and a declaration to the California Energy Commission (Energy Commission) using MAEDBS. These instructions are intended for manufacturers and third party certifiers. Please read this document in its entirety before beginning to submit appliance data for certification. For questions or clarification on any information contained in these instructions, please contact us via e-mail at: appliances@energy.ca.gov.

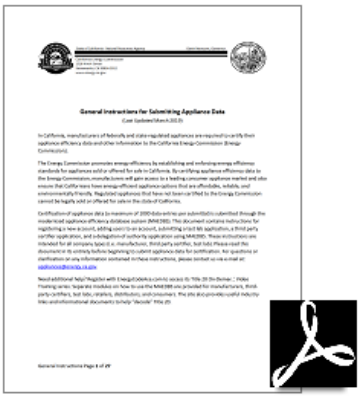
To submit data, begin by downloading all the contents in the certification packet named Commercial Refrigerators Multiple Compartments listed under the Refrigeration Products category at the following link: https://www.energy.ca.gov/files/certification-packets-appliances?fid=363#block-symsoft-page-title.

The certification packet you have downloaded includes the following (shown below):

1. These specific appliance type instructions
    - Instructions to submit appliance data manually
    - Instructions to complete and submit the Commercial Refrigerators Multiple Compartments excel template
2. General instructions
    - Creating a new account
    - Adding additional users to a company account
    - Submitting a test laboratory application
    - Submitting a third-party certifier application
    - Submitting a delegation of authority application
3. Specific appliance type excel template file (.xlsx)



Appliance Type Instructions



General Instructions

Appliance Type Template

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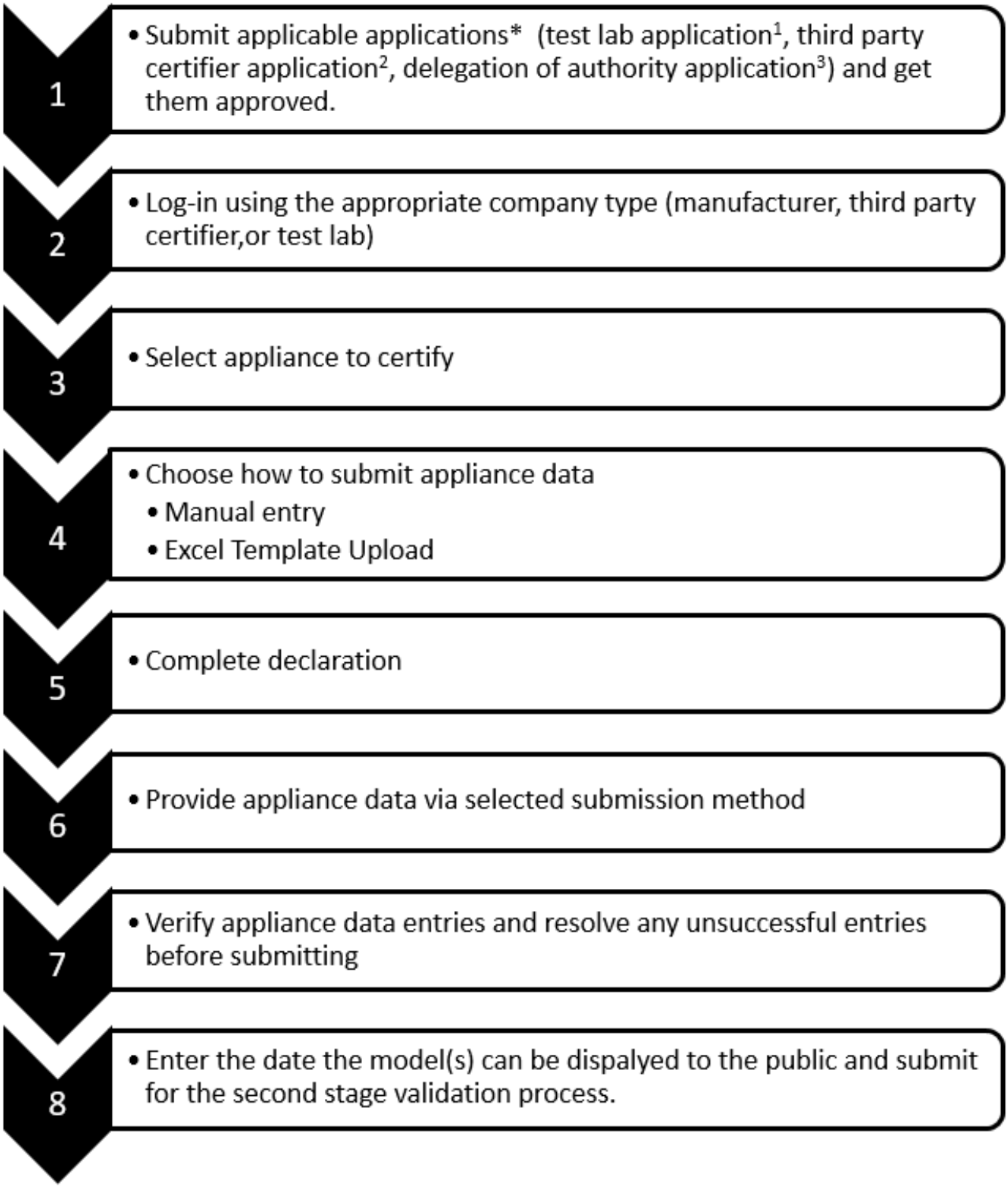
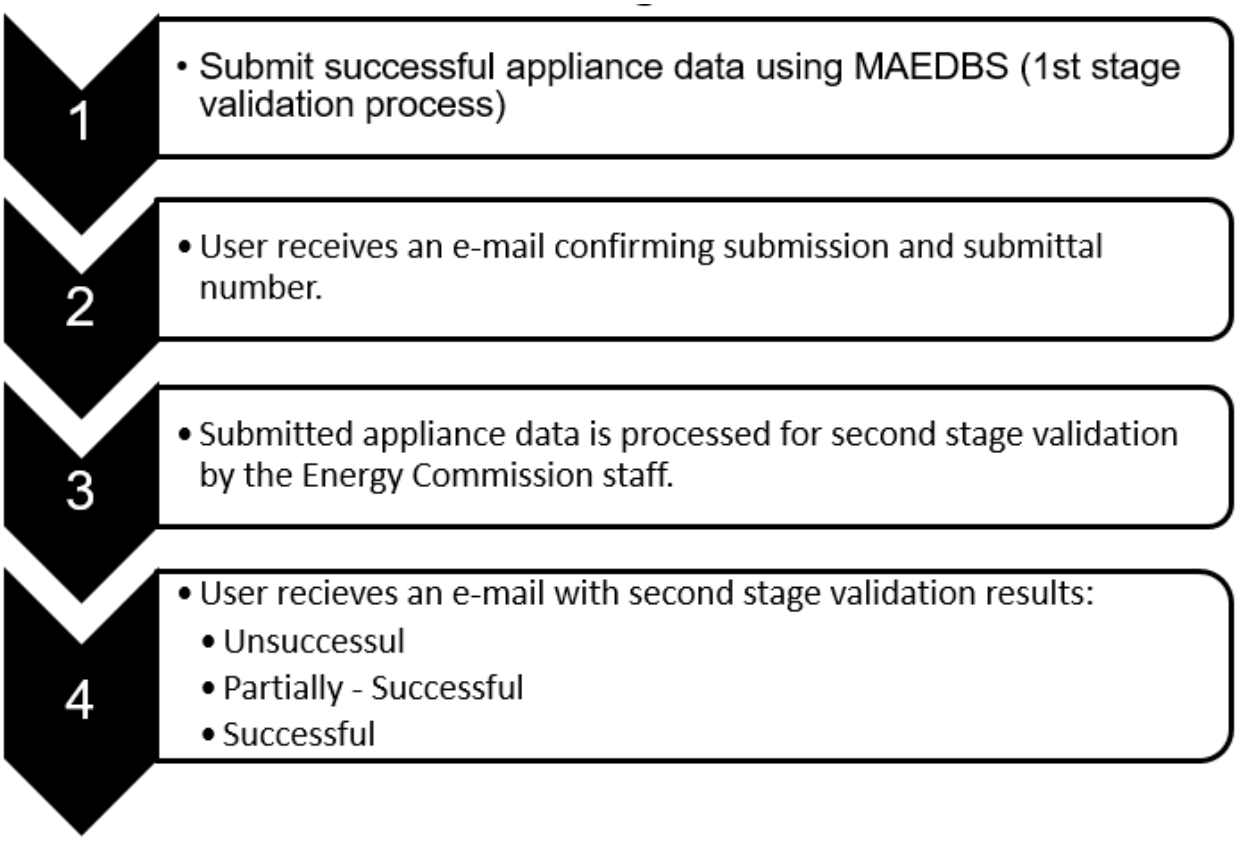
Process Overview of Submitting Appliance Data using MAEDbS (1st Stage)



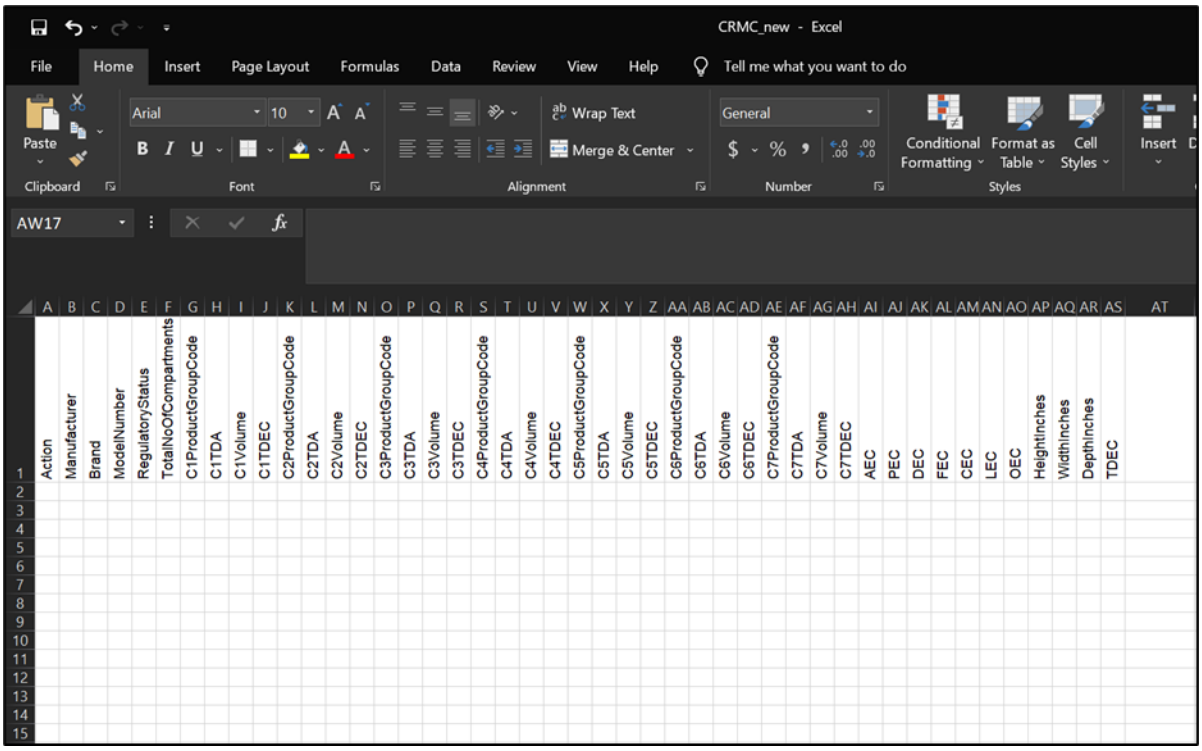
[1]The CEC must list a test laboratory before appliance data gathered by them may be certified. To do this the test lab must complete the test laboratory application.
[2]A third-party Certifier application must be approved by the CEC before a Third-party Certifier may submit on a manufacturer's behalf.
[3]If a manufacturer elects to provide data through a Third-party certifier, the manufacturer must submit a delegation of authority application giving the Third-party certifier permission to submit appliance data on behalf of the manufacturer.
*For more information on applications, refer to the general instructions in the certification packet.

Overview of the 2nd Stage Validation Process



Completing the Excel Template & Manual Entry Page

To upload your data using the excel template, begin by downloading and completing the provided spreadsheet in the Commercial Refrigerators Multiple Compartments (RFMC) certification packet. The excel template included in the certification packet should look like this:

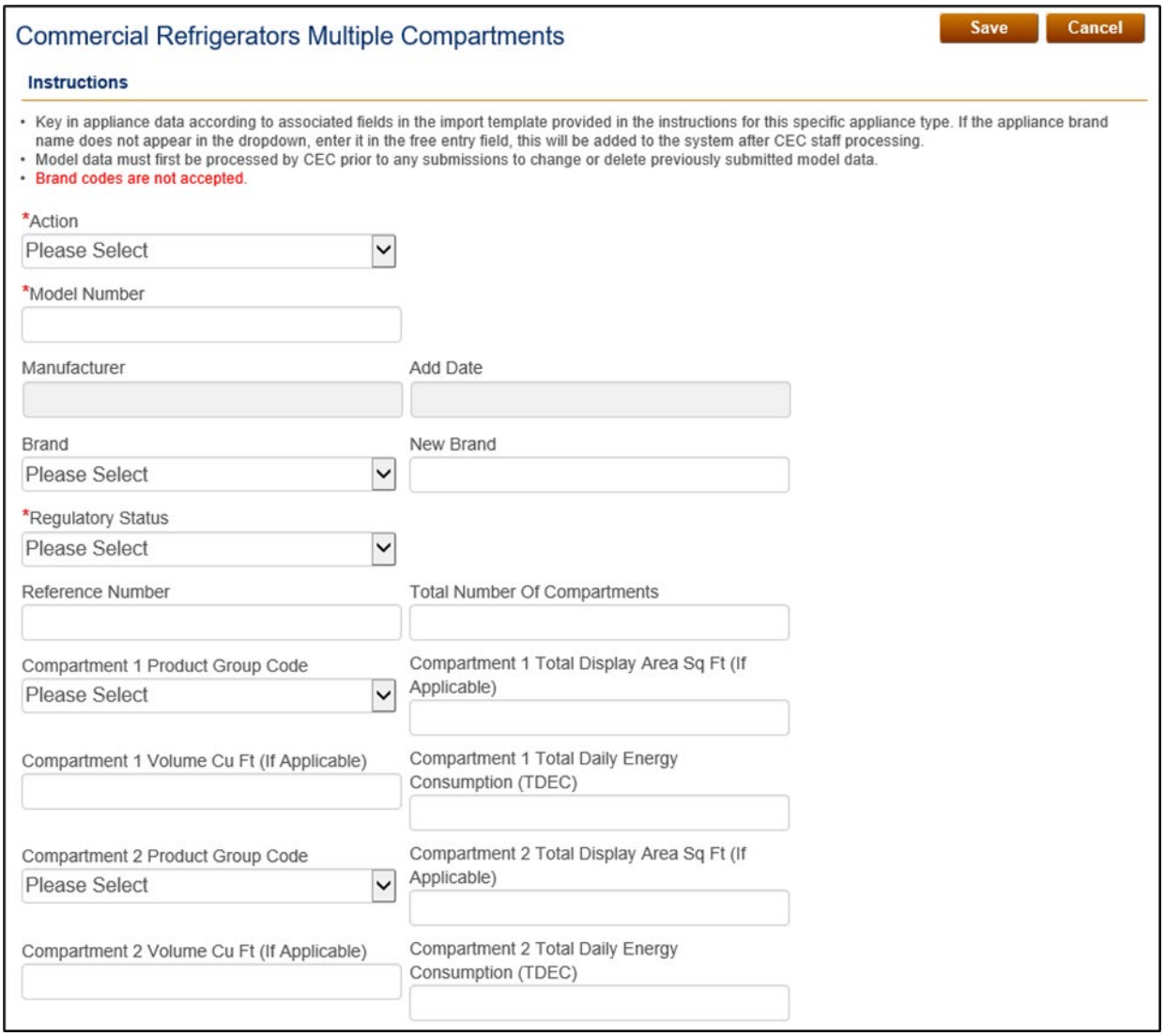


Note: Excel submittal template name cannot exceed 75 characters in length.

Appliance data submitted to the MAEDBS must adhere to the following rules:

- The file format must be Excel 2010 or higher (.xlsx) file.
- **Only one model per row is permissible**. Multiple models submitted in a single row will fail the entire submission.
- Only 1000 models per excel template file are permitted.
- Do not leave any blank rows between rows containing data.
- The top row (Row 1) must contain the prefilled column titles, starting at the top-left cell (cell A1).
- Do not change the column titles in the spreadsheet.
- All column titles must be present in the spreadsheet or the submission will fail.
- For numeric values, do not format the cell to 'round' to meet a desired number length, enter the value as described in the instructions below.
- Do not include any special characters (i.e. `!@#$%^&*/;?+-) unless otherwise indicated in the instructions.
- If you are adding and deleting the same model, do not include both the add and delete submissions in the same excel file. They must be submitted separately.

For manual entries, the manual data entry page should look like the image below for the appliance type.



The following instructions are for completing the excel spreadsheet **and** the manual data entry page by entering the data needed to certify your appliance. These instructions are for the Commercial Refrigerators Multiple Compartments appliance type only. Please read all these instructions carefully.

KEY: **Manual Entry Field Title [Excel Template Column Heading]:**

E: Excel template specific instructions

M: manual entry specific instructions

- ## Action [Action]:

  E: Enter the appropriate code in the column representing the action you are performing. Other entries not shown in the table below will be unsuccessful.

  M: Select the appropriate code from the dropdown menu of options in the table below.

Code	Action	Description
A	Add	Adding a new model to the database
D	Delete	Deleting a model currently in the database
C	Change	Changing a model currently in the database

  Important: For changes, the manufacturer name, model number, brand name, and all unchanged fields must match the original submission. Only fields with actual changes should differ from the original submission. For deletions, all unique fields are required and must match the original data submission. Unique fields will be identified with an asterisk (*) in the instructions.

- ## Manufacturer [Manufacturer]*:

  E: Enter the full name of the manufacturer as it appears in the database or in the company account.

  M: The manufacturer name is populated automatically using the information from the declaration.

- **Brand [Brand]*:**

  E: Enter the full name of the brand which will appear on the appliance and under which the appliance is sold. If both the manufacturer name and the brand name are identical, do not leave the brand field blank.

  M: Locate the brand name from the dropdown menu. If it does not appear, enter the full name of the brand which will appear on the appliance and under which the appliance is sold in the 'New Brand' field box.

- **Model Number [ModelNumber]*:**

  Enter the model number of the appliance as it will appear on the appliance itself (or on its packaging). Model numbers can have a maximum of thirty (30) characters. Do not include information that is not part of the model number.

  Using asterisks as wildcards:

  Models that have identical data but different model numbers due to features unrelated to energy use can be certified with a single listing through the use of asterisks.

  An asterisk in a model number can represent any single character, including special characters and blanks. Note, though, that asterisks are the only wildcard that our system is able to recognize.

  If you choose to use asterisks, use one asterisk for each character being replaced. Asterisks may not be used for the first four characters; the first four characters of a model number must always be entered. Lastly, asterisks should only replace the characters that are different between model numbers.

  For example, if your model comes in three different exterior finishes, it may have three different model numbers:

  ZZ-179853-WHT

ZZ-179853-BLK
ZZ-179853-RED

You could use a single listing to cover all three colors by using asterisks for the characters that change, but that do not reflect energy use:

ZZ-179853-***

Remember, asterisks are appropriate only for models with identical data, and that one asterisk must be used for each character in the model number that can change.

- **Regulatory Status [RegulatoryStatus]:**

E: Enter the appropriate code representing the regulatory status. Other entries not shown in the table below will be unsuccessful.

M: Select the appropriate code from the dropdown menu of options in the table below.

Code	Regulatory Status
I	Federally-regulated non-hybrid commercial and industrial equipment.
N	Non-Federally Regulated

- **Total Number of Compartments [TotalNoOfCompartments]:**

Note: If the model has more than 7 compartments, please email us at Appliances@energy.ca.gov.

Enter the total number of compartments for the commercial refrigerator. Enter a numeric value and report it as a whole number.

- **Compartment Product Group Code, Total Display Area Sq Ft, Volume Cu Ft, and Total Daily Energy Consumption (TDEC) [4 data fields per compartment]:**

  Note: The following 4 fields will be required or should be left blank in accordance with the total number of compartments reported. For example: a commercial refrigerator with 7 compartments would potentially require entries in all 28 fields. Additionally, the applicability of the Total Display Area and Volume fields pertains to the product codes entered for each compartment.

- **Compartment * Product Group Code [C*ProductGroupCode]:**

  Note: The asterisks (*) in the header above represent each compartment number (from 1 - 7).

  E: Enter the appropriate code representing the product group code of the compartment's refrigeration system being certified. Other entries not shown in the table below will result as an unsuccessful entry.

  M: Select the appropriate option from the dropdown menu from the options in the table below.

Code	Product Group
1	Comm. Refrigerators and Comm. Freezers With Doors (Self-Contained) (Vertical Closed Solid) (Medium Temp.)
2	Comm. Refrigerators and Comm. Freezers With Doors (Self-Contained) (Horizontal Closed Solid) (Medium Temp.)
3	Comm. Refrigerators and Comm. Freezers With Doors (Self-Contained) (Vertical Closed Transparent) (Medium Temp.)
4	Comm. Refrigerators and Comm. Freezers With Doors (Self-Contained) (Horizontal Closed Transparent) (Medium Temp.)
5	Comm. Refrigerators with Transparent Doors (Self-Contained) (Pull-Down)

6	Comm. Refrigerators and Comm. Freezers With Doors (Self-Contained) (Vertical Closed Solid) (Low Temp.)
7	Comm. Refrigerators and Comm. Freezers With Doors (Self-Contained) (Horizontal Closed Solid) (Low Temp.)
8	Comm. Refrigerators and Comm. Freezers With Doors (Self-Contained) (Vertical Closed Transparent) (Low Temp.)
9	Comm. Refrigerators and Comm. Freezers With Doors (Self-Contained) (Horizontal Closed Transparent) (Low Temp.)
10	Comm. Refrigerators and Comm. Freezers With Doors (Self-Contained) (Service Over Counter) (Medium Temp.)
11	Comm. Refrigerators and Comm. Freezers With Doors (Self-Contained) (Service Over Counter) (Low Temp.)
12	Comm. Refrigerators and Comm. Freezers (Remote Condensing) (Vertical Open) (Medium Temp.)
13	Comm. Refrigerators and Comm. Freezers (Remote Condensing) (Vertical Open) (Low Temp.)
14	Comm. Refrigerators and Comm. Freezers (Remote Condensing) (Semivertical Open) (Medium Temp.)
15	Comm. Refrigerators and Comm. Freezers (Remote Condensing) (Semivertical Open) (Low Temp.)
16	Comm. Refrigerators and Comm. Freezers (Remote Condensing) (Horizontal Open) (Medium Temp.)
17	Comm. Refrigerators and Comm. Freezers (Remote Condensing) (Horizontal Open) (Low Temp.)
18	Comm. Refrigerators and Comm. Freezers (Remote Condensing) (Vertical Closed Transparent) (Medium Temp.)
19	Comm. Refrigerators and Comm. Freezers (Remote Condensing) (Vertical Closed Transparent) (Low Temp.)

20	Comm. Refrigerators and Comm. Freezers (Remote Condensing) (Horizontal Closed Transparent) (Medium Temp.)
21	Comm. Refrigerators and Comm. Freezers (Remote Condensing) (Horizontal Closed Transparent) (Low Temp.)
22	Comm. Refrigerators and Comm. Freezers (Remote Condensing) (Vertical Closed Solid) (Medium Temp.)
23	Comm. Refrigerators and Comm. Freezers (Remote Condensing) (Vertical Closed Solid) (Low Temp.)
24	Comm. Refrigerators and Comm. Freezers (Remote Condensing) (Horizontal Closed Solid) (Medium Temp.)
25	Comm. Refrigerators and Comm. Freezers (Remote Condensing) (Horizontal Closed Solid) (Low Temp.)
26	Comm. Refrigerators and Comm. Freezers (Remote Condensing) (Service Over Counter) (Medium Temp.)
27	Comm. Refrigerators and Comm. Freezers (Remote Condensing) (Service Over Counter) (Low Temp.)
28	Comm. Refrigerators and Comm. Freezers without Doors (Self-Contained) (Vertical Open) (Medium Temp.)
29	Comm. Refrigerators and Comm. Freezers without Doors (Self-Contained) (Vertical Open) (Low Temp.)
30	Comm. Refrigerators and Comm. Freezers without Doors (Self-Contained) (Semivertical Open) (Medium Temp.)
31	Comm. Refrigerators and Comm. Freezers without Doors (Self-Contained) (Semivertical Open) (Low Temp.)
32	Comm. Refrigerators and Comm. Freezers without Doors (Self-Contained) (Horizontal Open) (Medium Temp.)
33	Comm. Refrigerators and Comm. Freezers without Doors (Self-Contained) (Horizontal Open) (Low Temp.)

34	Comm. Ice-Cream Freezers (Remote Condensing) (Vertical Open)
35	Comm. Ice-Cream Freezers (Remote Condensing) (Semivertical Open)
36	Comm. Ice-Cream Freezers (Remote Condensing) (Horizontal Open)
37	Comm. Ice-Cream Freezers (Remote Condensing) (Vertical Closed Transparent)
38	Comm. Ice-Cream Freezers (Remote Condensing) (Horizontal Closed Transparent)
39	Comm. Ice-Cream Freezers (Remote Condensing) (Vertical Closed Solid)
40	Comm. Ice-Cream Freezers (Remote Condensing) (Horizontal Closed Solid)
41	Comm. Ice-Cream Freezers (Remote Condensing) (Service Over Counter)
42	Comm. Ice-Cream Freezers (Self-Contained) (Vertical Open)
43	Comm. Ice-Cream Freezers (Self-Contained) (Semivertical Open)
44	Comm. Ice-Cream Freezers (Self-Contained) (Horizontal Open)
45	Comm. Ice-Cream Freezers (Self-Contained) (Vertical Closed Transparent)
46	Comm. Ice-Cream Freezers (Self-Contained) (Horizontal Closed Transparent)
47	Comm. Ice-Cream Freezers (Self-Contained) (Vertical Closed Solid)
48	Comm. Ice-Cream Freezers (Self-Contained) (Horizontal Closed Solid)

49	Comm. Ice-Cream Freezers (Self-Contained) (Service Over Counter)

- **Compartment * Total Display Area Sq Ft (if applicable) [C*TDA]:**

  Note: The asterisks (*) in the header above represent each compartment number (from 1 - 7). This field is required for specific product group codes where the energy consumption limit is a function of the compartment's total display area. Otherwise, it may be left blank.

  Enter the compartment's total display area in square feet. The value can be reported up to two (2) decimal places.

- **Compartment * Volume Cu Ft (if applicable) [C*Volume]:**

  Note: The asterisks (*) in the header above represent each compartment number (from 1 - 7). This field is required for specific product group codes where the energy consumption limit is a function of the compartment's volume. Otherwise, it may be left blank.

  Enter the compartment's volume in cubic feet. The value can be reported up to two (2) decimal places.

- **Compartment * Total Daily Energy Consumption (TDEC) [C*TDEC]:**

  Note: The asterisks (*) in the header above represent each compartment number (from 1 - 7).

  Enter the compartment's total daily energy consumption in kWh. The value can be reported up to two (2) decimal places.

- **Anti-Condensate Energy Consumption (AEC) (kWh) [AEC]:**

  Enter the unit's anti-condensate energy consumption in kWh. The value can be reported up to two (2) decimal places.

- **Condensate Evaporator Pan Energy Consumption (PEC) (kWh) [PEC]:**

  Enter the unit's condensate evaporator pan energy consumption in kWh. The value can be reported up to two (2) decimal places.

- **Defrost Energy Consumption (DEC) (kWh) [DEC]:**

  Enter the unit's defrost energy consumption in kWh. The value can be reported up to two (2) decimal places.

- **Fan Energy Consumption (FEC) (kWh) [FEC]:**

  Enter the unit's fan energy consumption in kWh. The value can be reported up to two (2) decimal places.

- **Compressor Energy Consumption (CEC) (kWh) [CEC]:**

  Enter the unit's compressor energy consumption in kWh. The value can be reported up to two (2) decimal places.

- **Lighting Energy Consumption (LEC) (kWh) [LEC]:**

  Enter the unit's lighting energy consumption in kWh. The value can be reported up to two (2) decimal places.

- **Other Energy Consumption (OEC) (kWh) [OEC]:**

  Enter the unit's other energy consumption in kWh. The value can be reported up to two (2) decimal places.

- **Height Inches (Unit) [HeightInches]:**

  Enter the unit's height in inches. The value can be reported up to two (2) decimal places.

- **Width Inches (Unit) [WidthInches]:**

  Enter the unit's width in inches. The value can be reported up to two (2) decimal places.

- **Depth Inches (Unit) [DepthInches]:**

  Enter the unit's depth in inches. The value can be reported up to two (2) decimal places.

- **Total Daily Energy Consumption (kWh) [TDEC]:**

  Enter the unit's total daily energy consumption in kWh. The value can be reported up to two (2) decimal places and should be equal to the sum of all the compartment energy consumption entries.

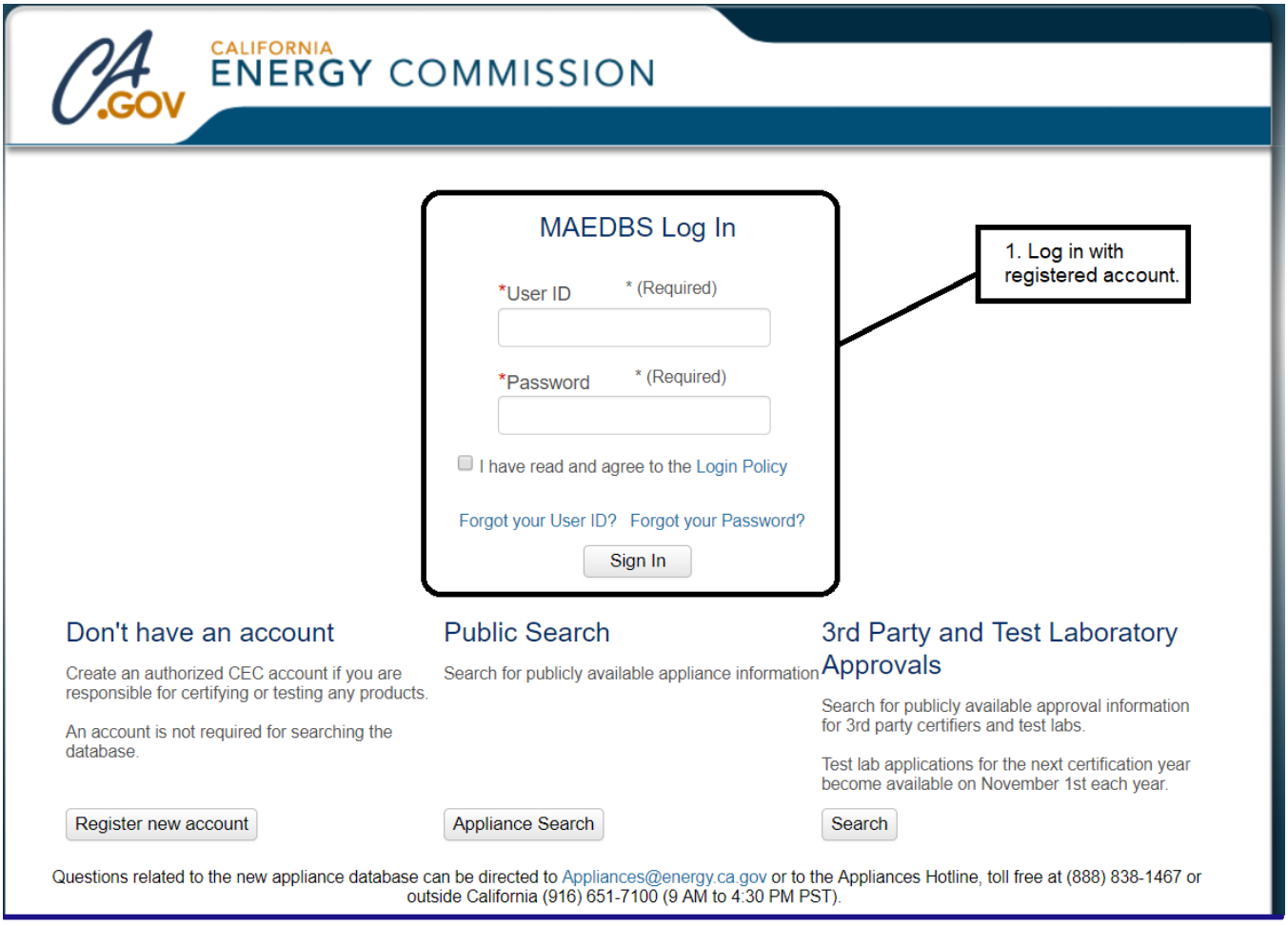
  Save the excel file as .xlsx format in a location where you will be able to find it when it is time to upload the data file.

Submitting Appliance Data

Log-in

To begin making data submittals, start by signing in to your MAEDbs account.

- If you have not created an account, refer to the general instructions on how to create an account.
- If you have already created an account and the CEC has approved it, log in. Once in your registered account, **select the appropriate company type (if applicable)** and continue to the next section.



Company Login

Company Type

Please select the company type you would like to proceed as:

(•) Manufacturer ( ) Test Lab ( ) 3rd Party Certifier

Company Login

Company Type

Please select the company type you would like to proceed as:

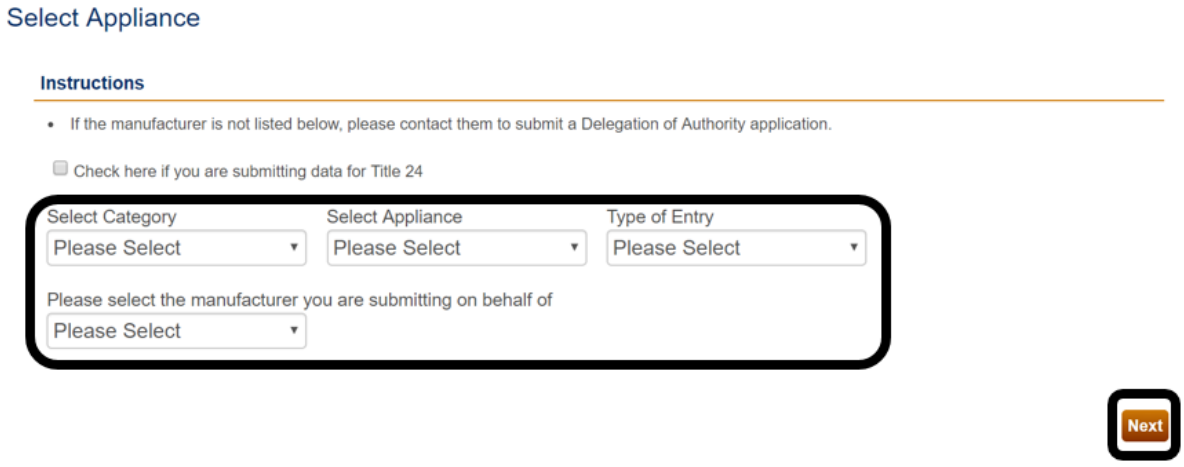
( ) Manufacturer ( ) Test Lab (•) 3rd Party Certifier

Selecting Appliance Type to Certify

After logging in, hover over the '**Applications**' tab and select the '**Submit Appliance Data**' link.

You will be redirected to the Select Appliance page (shown below).

Manufacturer User



Third-party Certifier User

Choose the following from the dropdown menus:

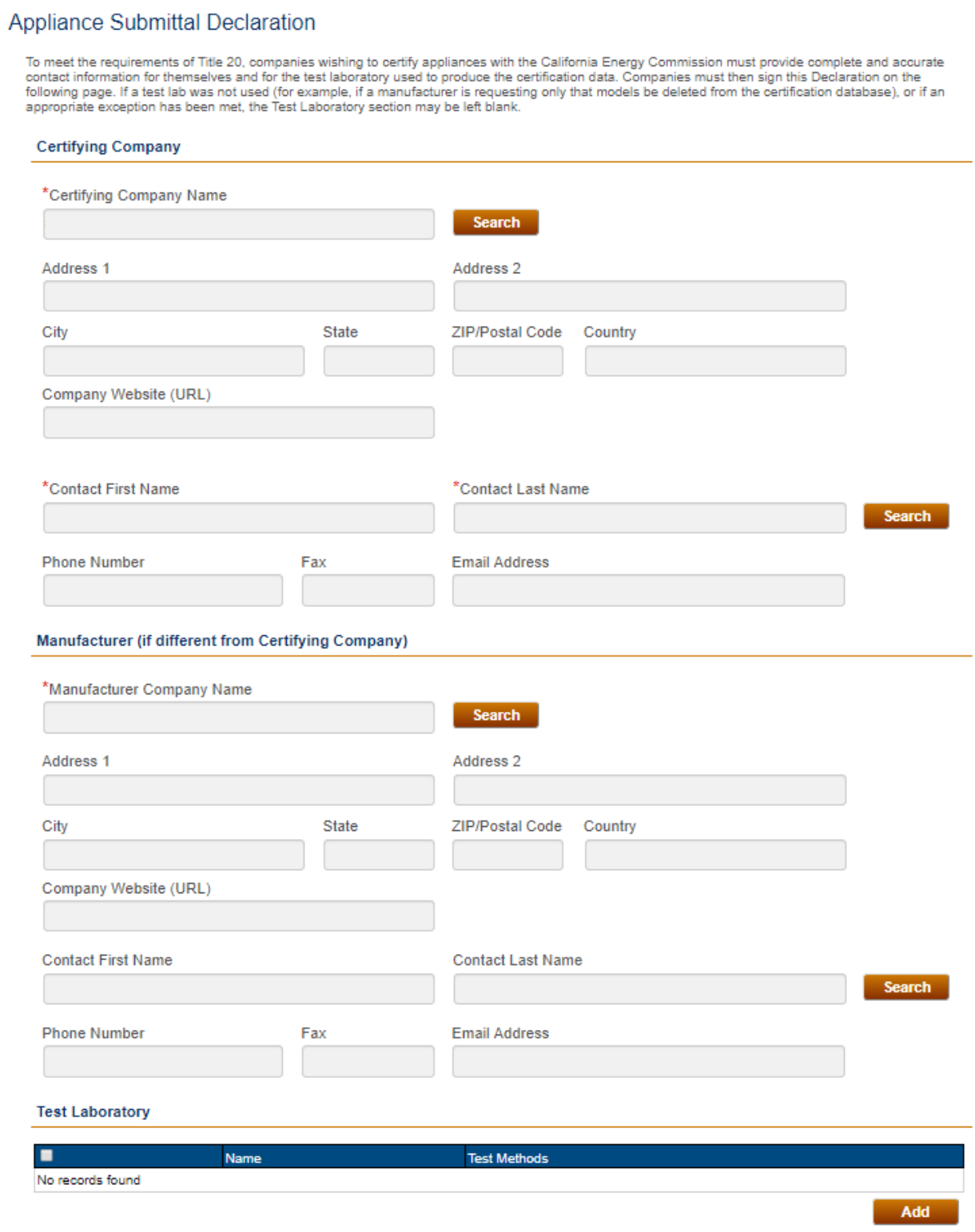
- **Category**: Refrigeration Products
- **Appliance**: Commercial Refrigerators Multiple Compartments
- **Type of Entry**: Choose either ‘Manual’ or ‘Upload Excel’
  Note: Choose ‘Manual’ if you would like to input the data you have collected using the MAEDBS data entry form. Alternatively, Choose ‘Upload Excel’ if you would like to upload your data using the excel spreadsheet template.

- **Manufacturer you are submitting on behalf of** (for third-party certifier user only): Select the manufacturer you are submitting appliance data on behalf of.
  Note: The manufacturer will only be available from the dropdown menu after the manufacturer has submitted a Delegation of Authority application in MAEDBS to allow the third-party certifier to submit appliance data on behalf of them.

After making your selections, click the ‘**Next**’ button to begin the appliance submittal declaration.

Completing the Appliance Submittal Declaration

After selecting the appliance type and the type of entry, you will be redirected to the Appliance Submittal Declaration page.



With each appliance data submission, the appliance submittal declaration application must be completed. By completing and submitting the Declaration application, you are certifying that the appliance efficiency data you have collected is a true and accurate statement of your product's performance. After the Declaration, you will continue to submit data either by entering the information manually or uploading an excel spreadsheet.

The following set of instructions is for completing each section in the appliance submittal declaration.

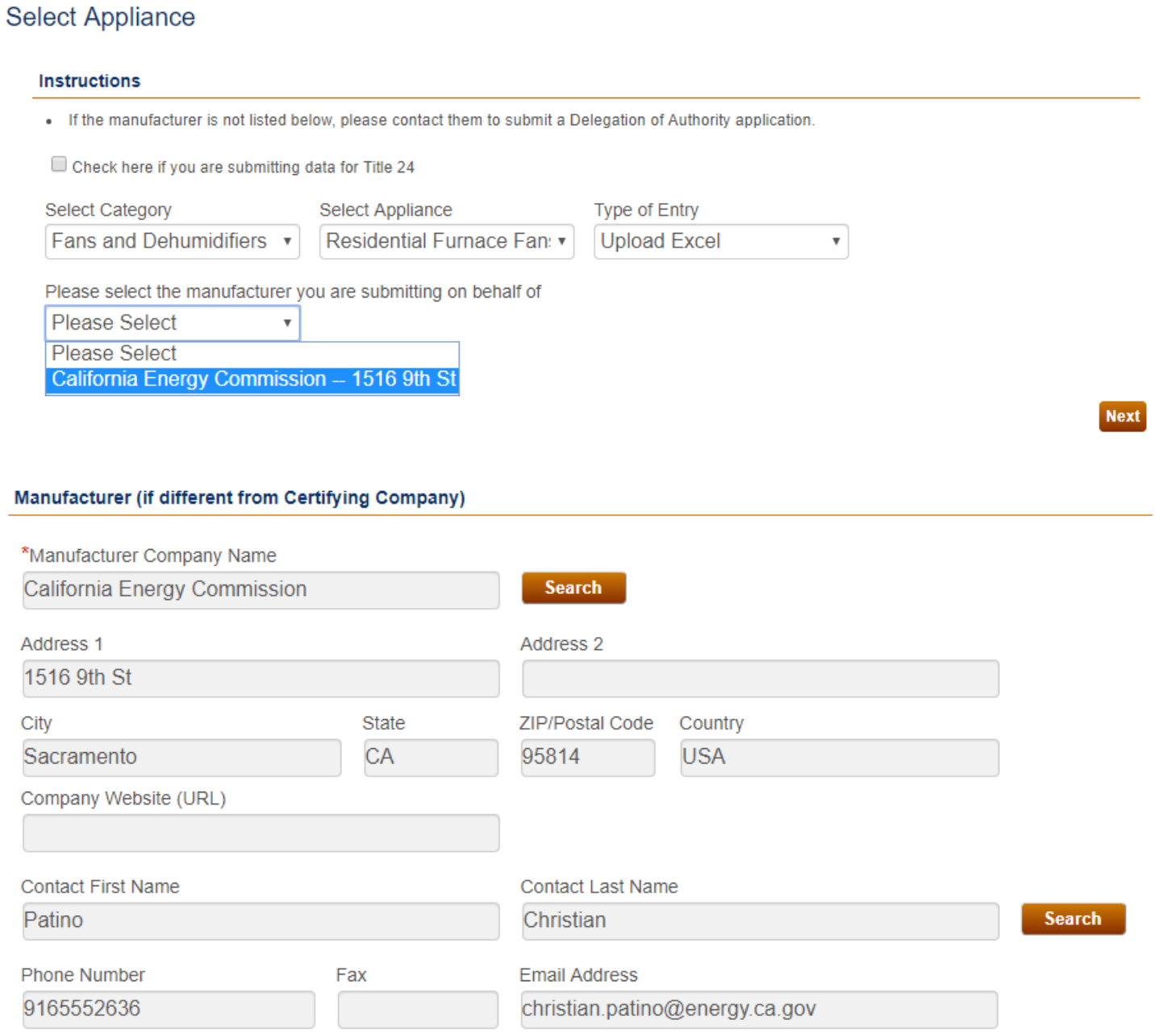
Section 1 – Certifying Company

- The certifying company name and location information will be pre-populated with the profile information of the user logged in.
  The contact person information will also be pre-populated with the profile information of the user logged in. To change the contact person to another user associated with the certifying company, click '**Search**' button and select the person from the list. Only approved contact personnel will be appear in the list.

Section 2 – Manufacturer (if different from Certifying Company)

This section applies to third-party certifiers' only.

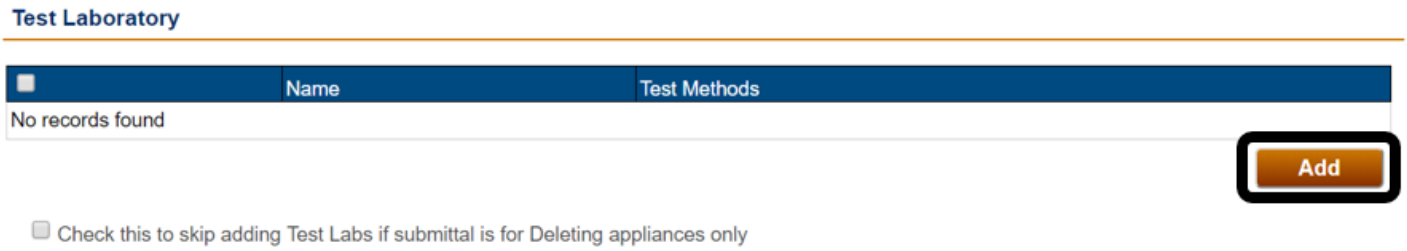
- The manufacturer name and location information will be pre-populated with the information of the manufacturer you selected when selecting your appliance type and type of entry. An example is shown below:



- The contact information is pre-populated to the default user associated with that company. To change the contact to another user associated with the company, click the '**Search**' button and select the person from the list. Only approved contact personnel will be appear in the list.

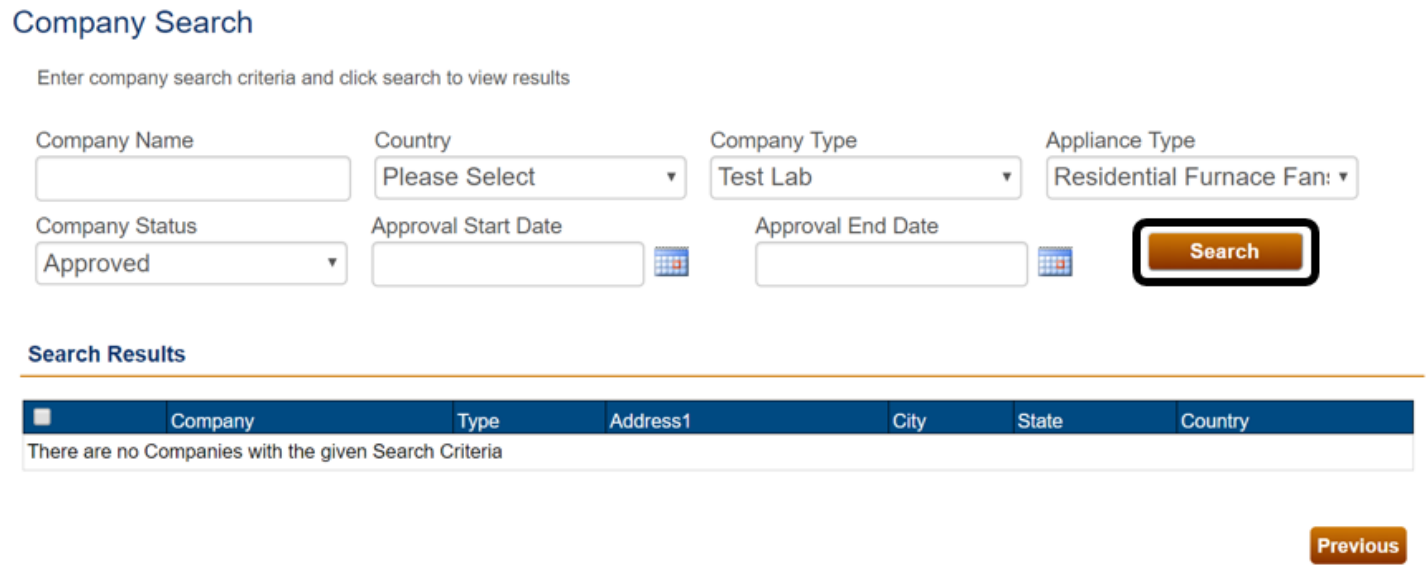
Section 3 – Test Laboratory

To add an approved test laboratory, click the '**Add**' button.

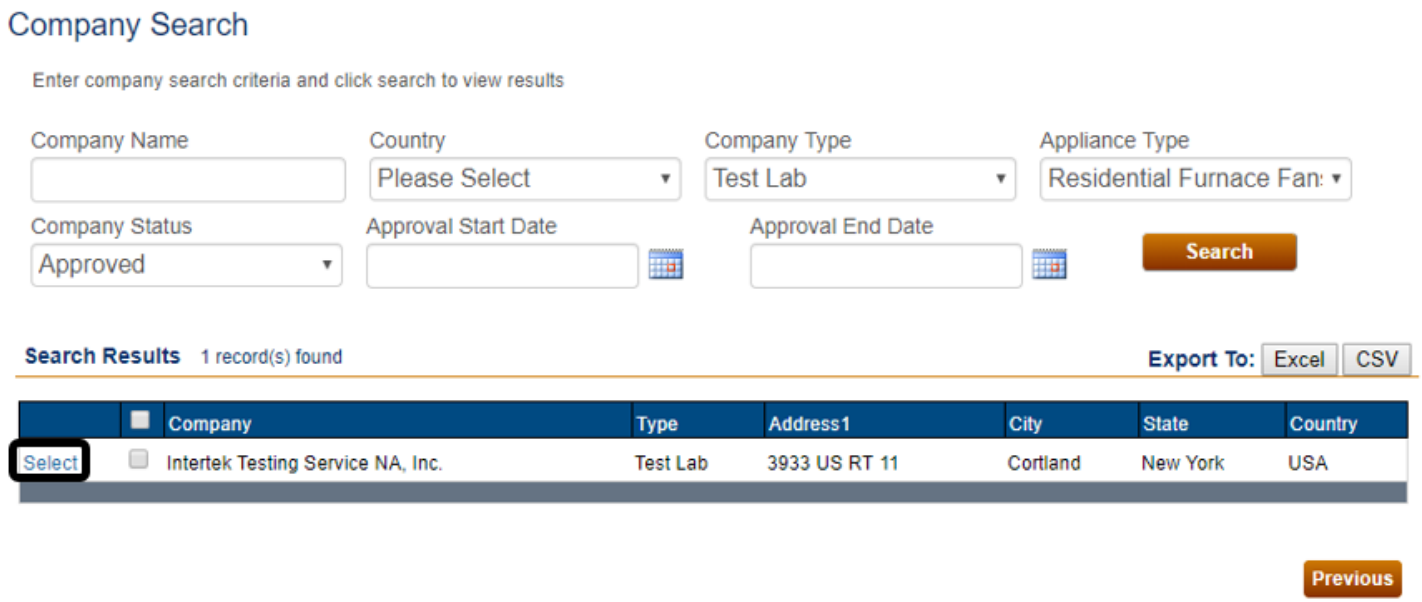


The Company Search page will appear:

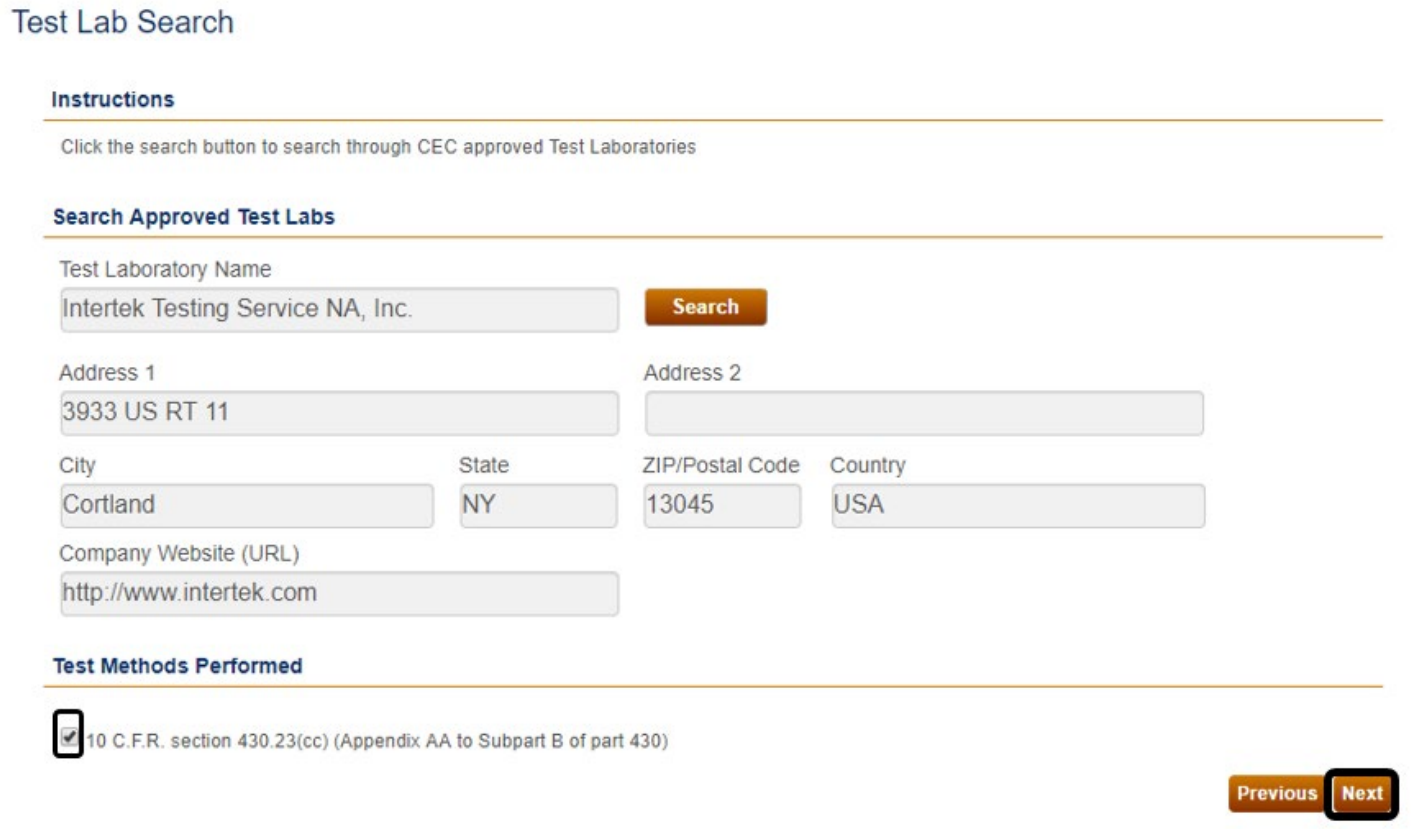
- Enter the name of the company or a variation of the company name in the Company Name box and click the '**Search**' button to locate the correct Test Laboratory.
- You can also narrow down your search by selecting the country and/or the appliance type.



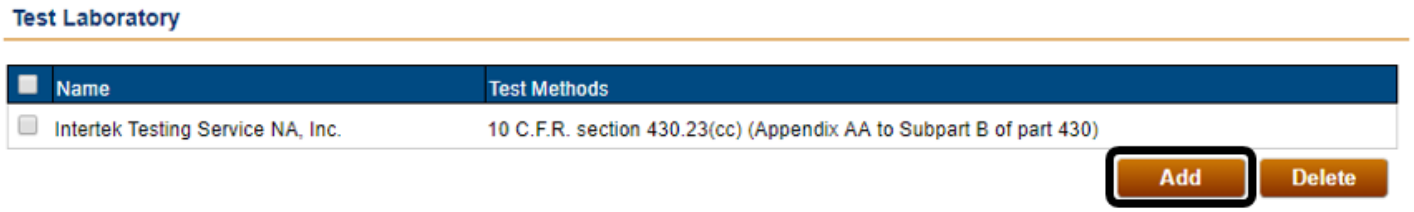
When you have located the approved test laboratory for the appliance data being certified click the '**Select**' link.



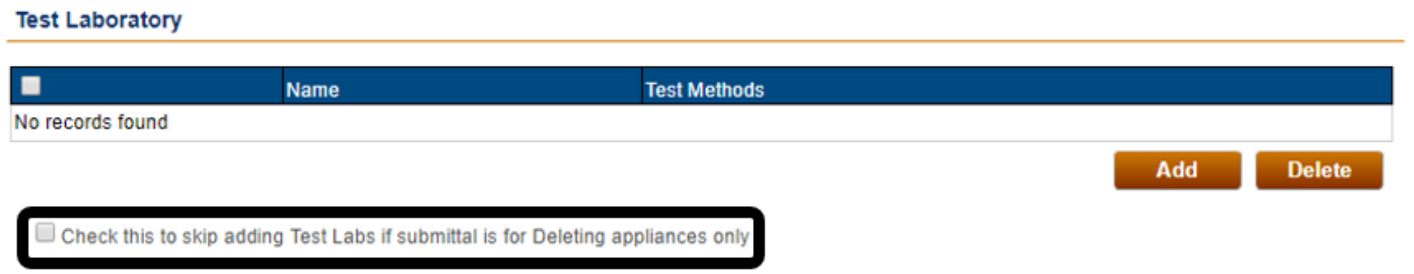
You will then be automatically redirected back to the Test Lab Search page. The test laboratory's information and the test method(s) they are listed for will appear. Select the appropriate test method in the Test Methods Performed section and the click '**Next**' button to continue.



The approved test laboratory that was selected will then appear in the test laboratory section in the appliance submittal declaration page. To add more than one approved test laboratory click the '**Add**' button and repeat the previous steps.



If your data submission is only for deleting appliance models currently in the database, a test laboratory is not required. Simply, check the box stating that you are deleting appliance models only.

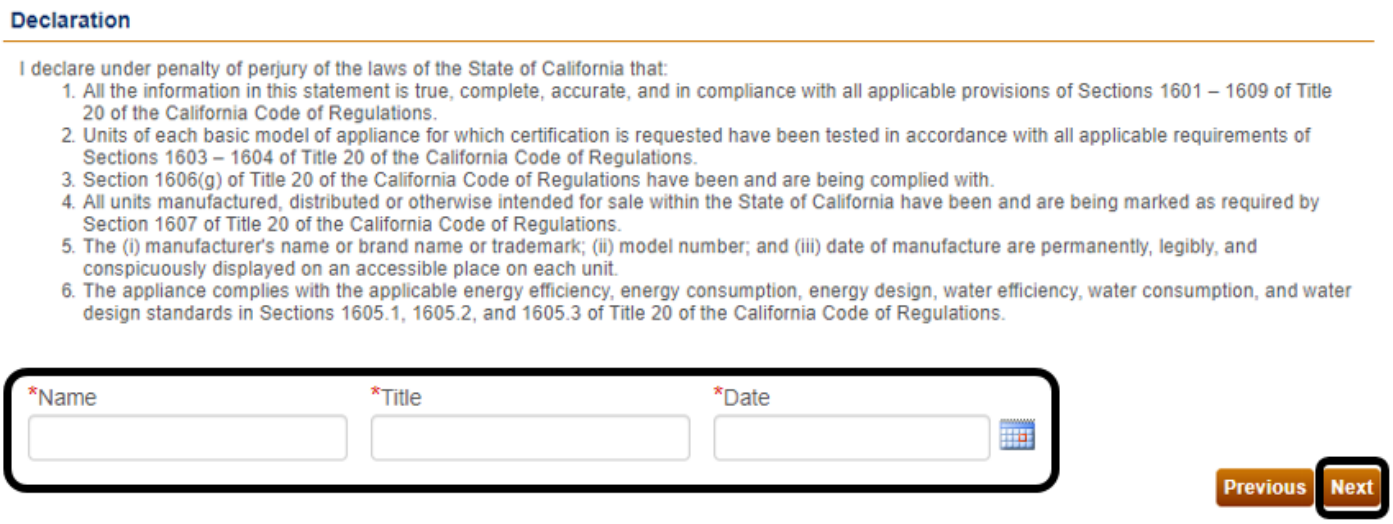


Section 4 – Declaration

To complete the appliance submittal declaration application:

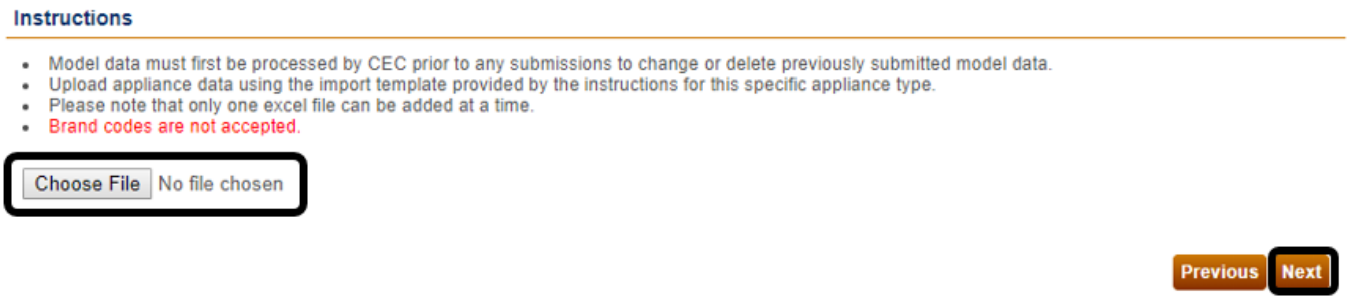
- Enter your full first name and last name
- Enter your job title
- Select the date

Then click the '**Next**' button to submit the appliance submittal declaration application and to begin submitting the appliance data.



Uploading Data via the Excel Template

After completing the appliance submittal declaration, you will be redirected to the Upload Document page (shown below). This page only appears if you selected '**Upload Excel**' while selecting the appliance type (the step before completing the submittal appliance declaration). Click the '**Choose File**' button to locate and upload your completed excel template. After locating and selecting your excel file, click the '**Next**' button to upload the appliance data to the MAEDBS.

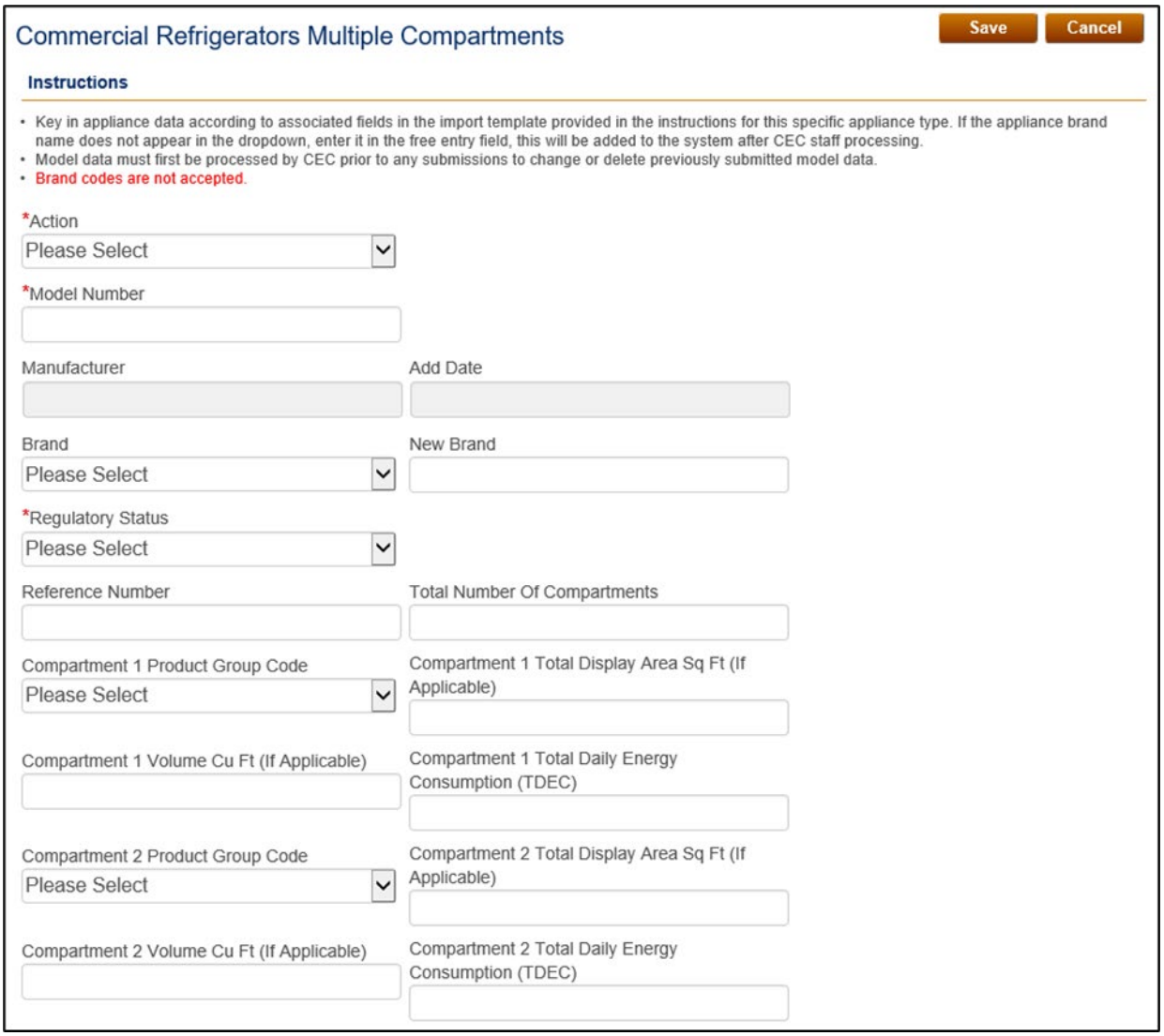


After clicking the '**Next**' button, the system will upload the appliance data, which could take several minutes depending on the amount of data being uploaded. Once uploaded, you will be redirected to the Appliance Data List page, which will list all the appliance models in the excel file.

Continue to the Results of the First Stage Validation Process section in this document.

Uploading Data Manually

After completing the appliance submittal declaration, you will be redirected to the Appliance Type page (shown below). This page only appears if you selected the type of entry to be '**Manual**' while selecting the appliance type (the step before completing the submittal appliance declaration).



Please refer to section Completing the Excel Template & Manual Entry Page in this document to complete the manual data entry page (shown above).

When the required entries are entered, click on the '**Save**' button to save the entry. You will then be redirected to the Appliance Data List page where you can continue to add more models.

Continue to the Results of the First Stage Validation Process section in this document.

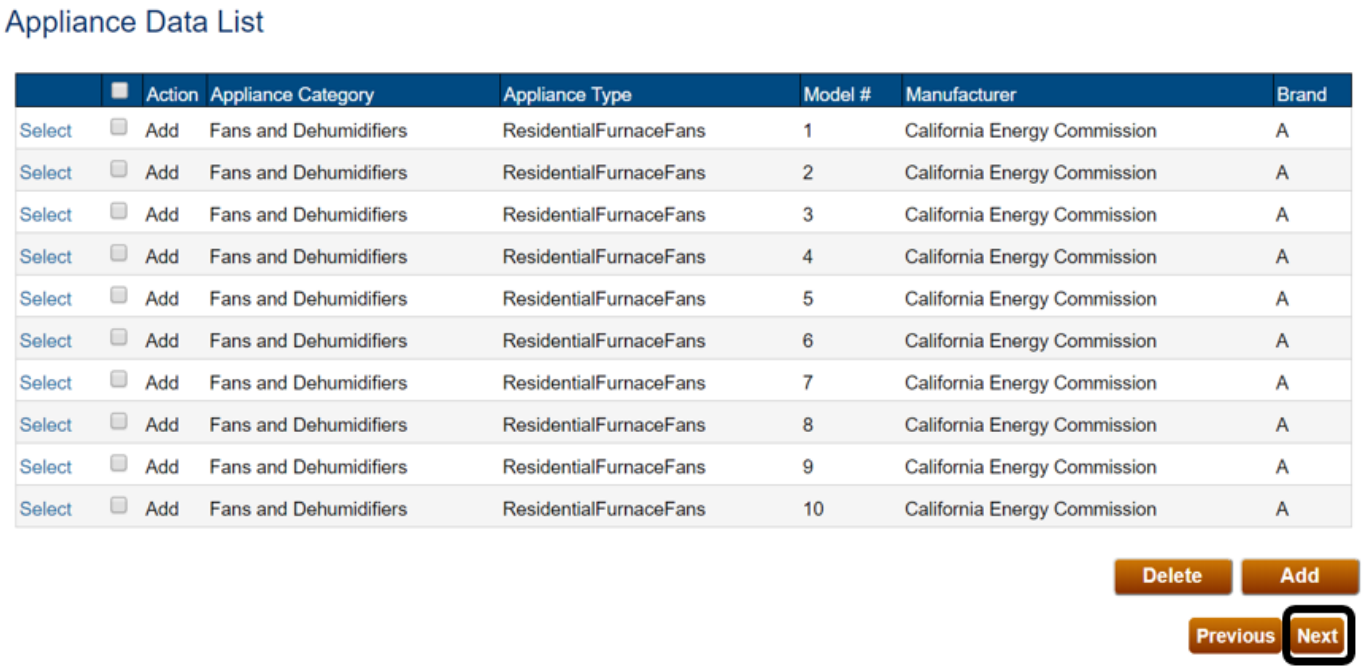
Results of the First Stage Validation Process

On the Appliance Data List page, you are able to:

- Review your data before submitting,
- Modify you data by clicking the '**Select**' link next to a specific model,
- Delete a specific model by checking the box next to the model and clicking the '**Delete**' button, and
- Add a new model to your submission by clicking the '**Add**' button (this redirects you to the manual entry page; see the previous section for instructions).

Note: Multiple excel files cannot be submitted simultaneously.

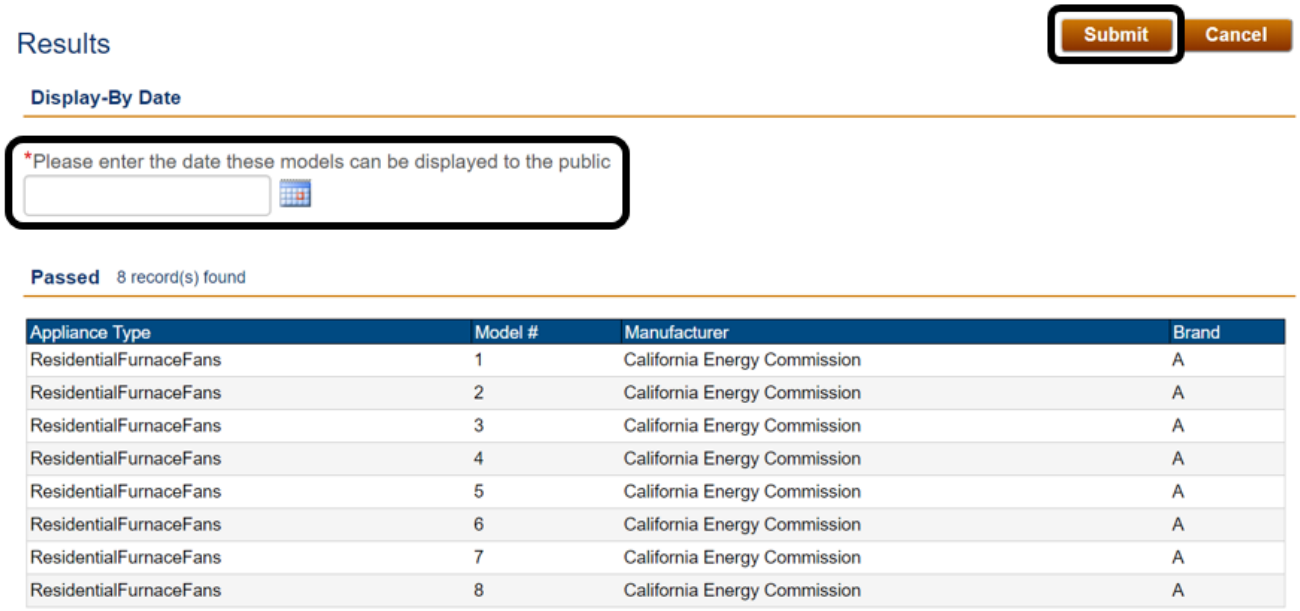
When you are finished, click the '**Next**' button to submit the data for the first stage validation process.



After the system processes the appliance data, you will be redirected to the results page. If all entries pass first stage:

- Select the date the models can be displayed to the public

- Then click the '**Submit**' button to submit the appliance data for the second stage validation process.



Appliance Type	Model #	Manufacturer	Brand
ResidentialFurnaceFans	1	California Energy Commission	A
ResidentialFurnaceFans	2	California Energy Commission	A
ResidentialFurnaceFans	3	California Energy Commission	A
ResidentialFurnaceFans	4	California Energy Commission	A
ResidentialFurnaceFans	5	California Energy Commission	A
ResidentialFurnaceFans	6	California Energy Commission	A
ResidentialFurnaceFans	7	California Energy Commission	A
ResidentialFurnaceFans	8	California Energy Commission	A

For cases that result in failed appliance data, please refer to the Troubleshooting section in this document.

First Stage vs. Second Stage Validation

First Stage Validation

- The first stage validation process is the process of submitting data through MAEDBS for quality check of the appliance data.

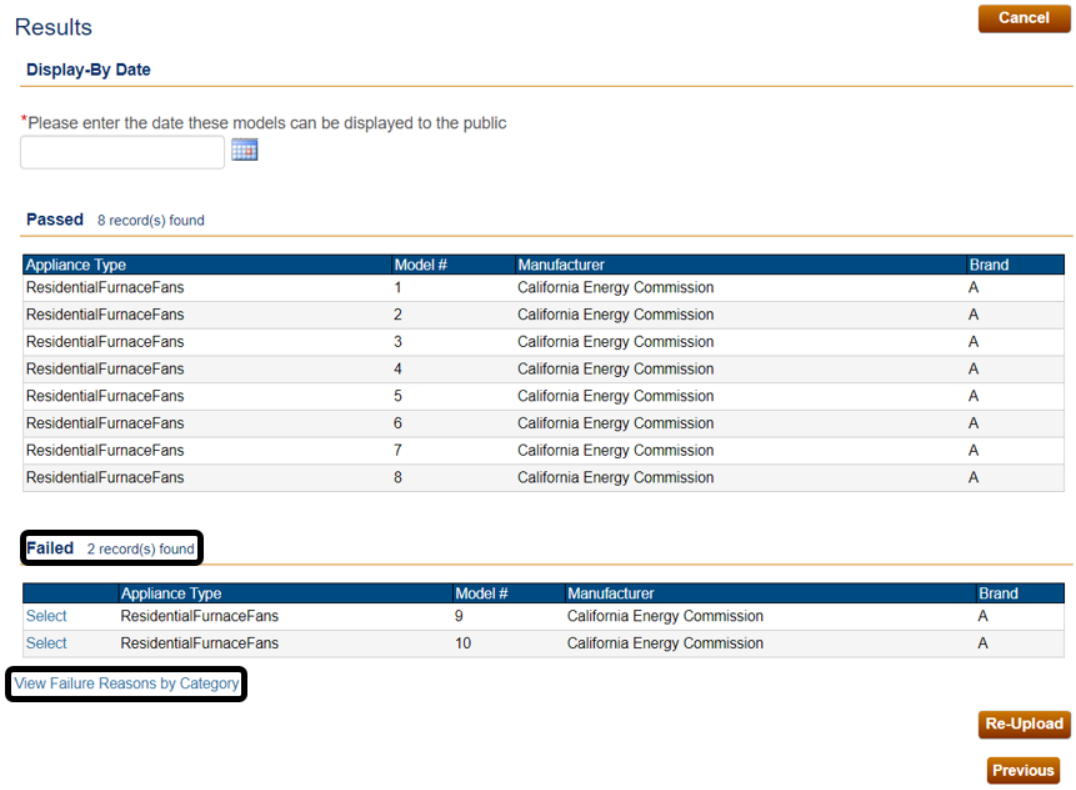
Second Stage Validation

- CEC staff next process successful submissions to the MAEDBS.
- The second stage validation process verifies if the appliance data meets federal and state standards.

Troubleshooting

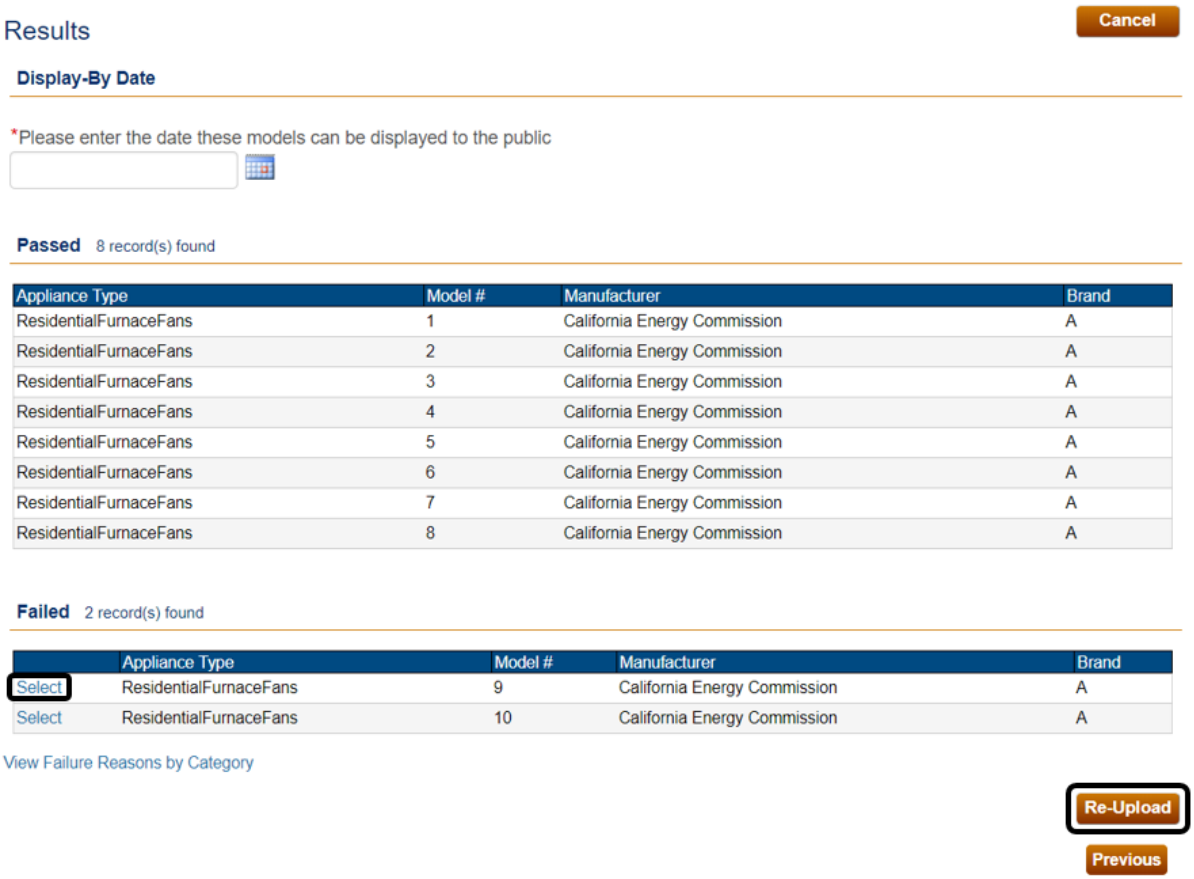
If some or all models fail, they will appear in the Failed section in the results page (shown below). The reasons for failing are applicable to both types of

entries. To view the reasons why the model(s) failed, click the '**View Failure Reasons by Category**' link.



The Failure Reasons List page will appear (shown below) showing the reason(s) why a specific model was unsuccessful. After determining the reason of failure, if the data can be corrected, click the '**Previous**' button (bottom right of the page) to return to the '**Results**' page.

From the Results page, select '**Re-Upload**' to upload the corrected version of your excel file or click the '**Select**' next to the model you wish to correct. Using the latter will open the manual data entry page.



Many ‘reasons of failure’ can be corrected by following the instructions in the Completing the Excel Template & Manual Entry Page section in this document.

For more help you can also view our most frequently asked questions document at http://energy.ca.gov/appliances/forms/index.html.

Contact Information

For any questions, assistance, or clarification, please contact us via email at appliances@energy.ca.gov or by calling our Appliances Hotline toll free at (888) 838-1467 or outside California at (916) 651-7100. Our normal operating hours are from Monday-Friday from 9am to 12pm and 1pm to 4:30pm.