

Technical Bulletin: Ekotrope Guide

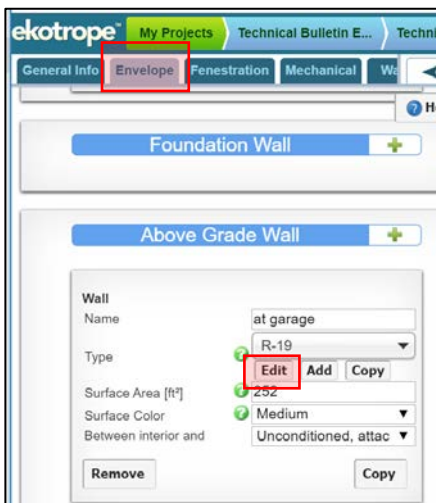
Residential New Construction Program

The RNC Program’s new whole-house incentive submission process requires using Ekotrope to determine HERO compliance, calculate savings and incentives, and submit homes for processing. This Technical Bulletin serves as a basic guide for using Ekotrope and understanding the results for determining RNC Program compliance.

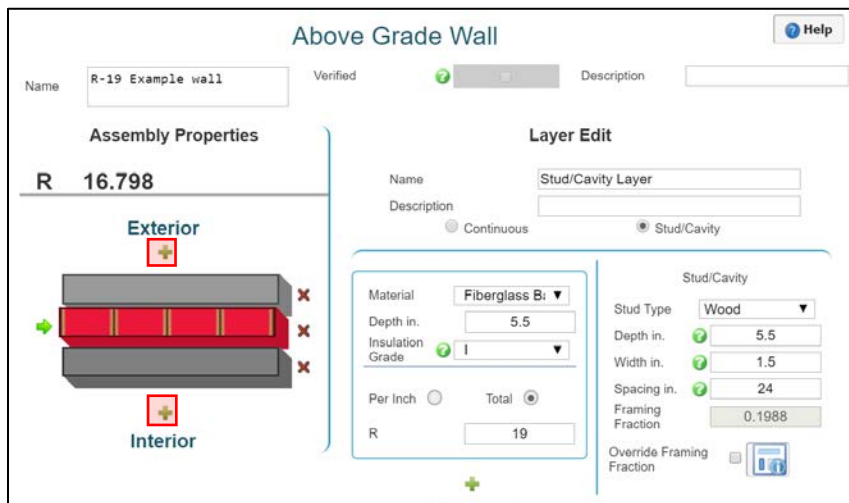
In the new Ekotrope-based system, the energy model also serves as the application. There is no need to complete a separate application, as was the case in the previous system. This means that the first step in the process is to start a new Ekotrope project. New projects are either started in Ekotrope or uploaded using an XML file from REM/Rate. A detailed guide on the process for uploading an XML is found [here](#).

Navigation and Editing Components

After creating a project in Ekotrope, the overall navigation of the software is similar to REM/Rate. The tabs at the top of the page are used to switch to the various sections of the project. The images below include examples of an above grade wall component and instructions for editing the component. Edit any component while working in a project or by opening the Component Library located at the top right on Ekotrope’s main page. When importing XML files from REM/Rate to Ekotrope, always remember to check the various sections and components of the model to ensure everything transferred correctly. Below is an example of an Above Grade Wall entry in the Envelope tab and the menu to edit the Above Grade Wall Library.



Example of the Above grade wall entry in the Envelope tab. Click on the “Edit” button (highlighted with the square box) to open the menu shown at right.



Example of a wall component. Select the layers on the left to edit their thermal properties and add layers by clicking on the green pluses highlighted with a red box.

Results

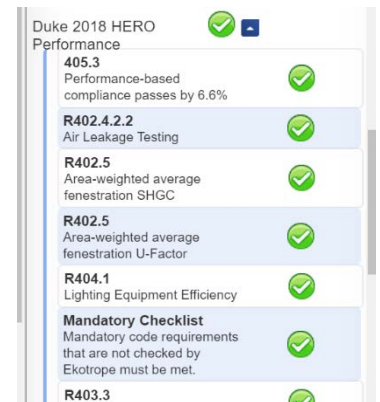
Like REM/Rate, Ekotrope includes a quick results panel located at the right which shows the results, an overview of the areas, energy usage information, and QA checks for the project. Each section includes a symbol representing the status of various codes. Note that the yellow triangle is only a warning and does not indicate a failure. Only a red triangle indicates a failure. The location of the Duke HERO results

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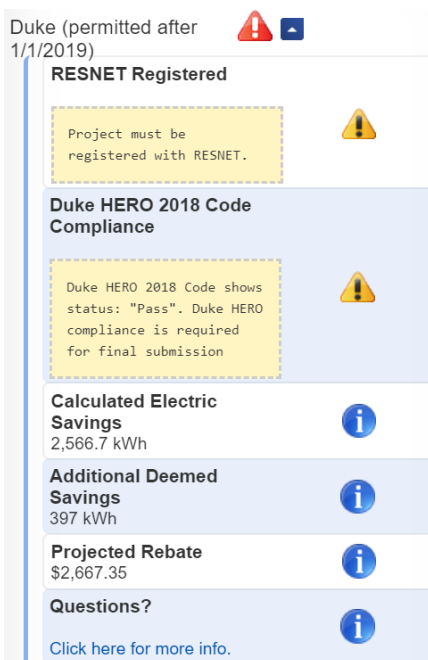
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is near the bottom of the quick results panel. Three to four sections will show depending on the project’s permit date. The sections and their descriptions are below.

- “Duke HERO Performance” (2012 Code) and “Duke 2018 HERO Performance” (2018 Code) – These sections display the house’s status for HERO code performance. Specific reasons for HERO failures will display here, such as a high blower door result. An example of this section is on the right.
- Duke (permitted before 1/1/2019) and Duke (permitted after 1/1/2019) – These sections display the house’s Program performance and incentives. Information on the electric savings, rebate, and warnings regarding the application for the RNC program is in this section. Below are images of an example Duke (permitted after 1/1/2019) section.



Example of the Duke 2018 HERO Performance Section



Duke (permitted after 1/1/2019) example 1 highlighting the savings and a warning for RESNET registration and passing the 2018 HERO Code.



Duke (permitted after 1/1/2019) example 2 highlighting the errors in the application for the RNC Program.

For further guidance on Ekotrope, please click on the links below which leads to Ekotrope’s support page, a Tech bulletin on diagnosing HERO compliance, and an in-depth guide to Ekotrope.

[Ekotrope Support Page](#)

[Diagnosing HERO Compliance Technical Bulletin](#)

[Ekotrope’s New User Tour](#)