

High-level overview of the ResStock Workflow

Housing characteristic database

- A list of building and housing characteristics distribution files
- The distributions of the characteristics are conditionally dependent on one another.

Sampled set of representative dwelling units

- A table of representative residential samples with columns corresponding each characteristic and rows corresponding to individual samples.
- The "buildstock.csv" file

Building Energy Model Articulation

- Translating the buildstock.csv file into building energy models using options_lookup.tsv file and the ResStock Arguments measure to comply with inputs for OpenStudio-HPXML.

Batch Simulation

- Simulate all the samples and upgrades using high-performance or cloud computing using BuildStock-Batch
- Collecting the large amount of output data and uploading data to the cloud

Results aggregation and publication

- Transforming the outputs into a format for the website.
- Performing useful aggregations of the data
- Publish the data on OEDI