

About the Building Information Form

The information required in this form is used to meet Florida requirements and fully customize the HVAC design for your project.

Our Building Information Form is designed to provide the required data for building permitting in the state of Florida. The information you provide will be combined with the architect's permit-ready drawings to make up the 3d energy model that exactly matches your project.

The building envelope component materials, building geometry, and site plan with address make up the minimum required items to create the HVAC intelligent CAD energy model, perform the calculations, and provide the complete design package including the detailed code compliant HVAC drawings. If some of the building envelope component materials are not known, or not selected prior to permit acquisition, Energy Calc Services will perform the calculations and create the HVAC design based on Florida Energy Code Standard Reference Model Baseline Components.

All rooms served by the HVAC system(s) require a room-by-room heat load calculation to determine capacity and demand associated with new, existing, added or renovated rooms. This heat load calculation will also determine room-by-room air balance for the building. Adding rooms to an existing unit means removing the current amount of air delivered, to correctly design an HVAC system. A full energy study of the entire building is required to ensure comfort and equipment sizing.

HVAC Design Packages Include:

- Florida Energy Calculations (Residential, Commercial, and Public Buildings)
- Manual J 8th Edition / ACCA 183 Heat Load Calculations (Residential and Light Commercial)
- Manual S HVAC Equipment Selection Procedure
- Manual D Duct Pressure Loss Calculations
- Manual T Room Air Device Selection Procedure
- Manual ZR Residential Duct Zoning Design
- HVAC Intelligent Color CAD Drawings PDF format

Please Note:

In cases where the Energy Code Baseline Values do not pass code, we will select components to achieve a passing score. Check your form for accuracy. Changes made after submission will require a new project submission form

Minimum Architectural Drawing Requirements

For items not shown on the architectural permit ready drawings or not provided,

Be sure to include the following:

- Site plan or north arrow, scaled floor plan, building elevations, detailed wall section.
- List conditioned / living area square feet per level, garage area square feet and room names on the floor plans.
- Provide floor and framing plans on multi-level homes, along with detailed truss types and sizes .
- Each building envelope component's insulation r-value and glass nfrc ratings (floor, wall, door, glass and roof).
- Provide glass envelope component locations in addition to the shgc and u-values.
- Electrical floor plan preferred.
- Provide existing duct layout if re-using existing duct systems; show supply, return, ventilation/exhaust items, etc.

Building Information Form

Building Envelope Data Required For New, Existing / Renovations Or Additions

Changes made after submission will require a new project submission form.

Date: _____ Project Name: _____
Contact Person: _____ Project Address: _____
Company Name: _____ Project City: _____
Builder Name: _____ Project County: _____
Phone: _____ Zip Code: _____
Email: _____ Permit Office Name or Jurisdiction #: _____

Project Type: ☐ Commercial Existing ☐ Commercial New Construction ☐ Commercial Remodel/Addition
☐ Residential Existing ☐ Residential New Construction ☐ Residential Remodel/Addition

Building Front Door Faces Which Direction: ☐ N ☐ NE ☐ E ☐ SE ☐ S ☐ SW ☐ W ☐ NW

Existing Home Year Constructed: _____

Flooring

Floor(s): Slab on Grade? ☐ Yes ☐ No Raised Floor(s) Thermal Layer R-Value= _____
Interior Floor Covering Percentage: Tile: _____ % Wood/Vinyl: _____ % Carpet: _____ %

Roof

Roof Color: ☐ Light ☐ Medium ☐ Dark ☐ Galvanized ☐ Galvalum
Roof Type: ☐ Hot Vented Attic ☐ Cool Sealed Attic ☐ Flat Build Up ☐ Single Assembly Sloped ☐ Other: _____
Roof Cover: ☐ Barrel Tile ☐ Flat Tile/Slate ☐ Shingle ☐ Metal ☐ Concrete ☐ Gravel ☐ Membrane ☐ Other: _____
Roof / Ceiling Thermal Layer: R-Value= _____ Credits: ☐ Radiant Barrier ☐ Interior Radiation Control Coating
Roof Configuration: ☐ Full Hip ☐ Gable ☐ Shed ☐ Flat ☐ Other: _____ Roof Pitch= _____/12

Walls

Block Exterior Wall(s) Thermal Layer(s) R-Value= _____ Insulation Location: ☐ Exterior ☐ Interior ☐ Integral
Frame Exterior Wall(s) Thermal Layer R-Value= _____ Garage Wall R-Value= _____
Partition Wall R-Value= _____
Exterior Wall Color: ☐ Light ☐ Medium ☐ Dark or Solar Absorptance Fraction= _____

Doors

Exterior Door Type (For Glass Doors, See Window Selection): ☐ Solid Wood ☐ Metal Insulation ☐ Fiberglass Core

Windows

Existing Glass A) Frame: ☐ Metal ☐ Wood ☐ Vinyl B) Panes: ☐ Single ☐ Double ☐ Triple C) Coating: ☐ Clear ☐ Tinted ☐ Low-E
New Operable Windows U-Value= _____ Solar Heat Gain Coefficient= _____ Frame: ☐ Metal ☐ Clad ☐ Vinyl
New Fixed Windows U-Value= _____ Solar Heat Gain Coefficient= _____ Frame: ☐ Metal ☐ Clad ☐ Vinyl
New Sliding Glass Door(s) U-Value= _____ Solar Heat Gain Coefficient= _____ Frame: ☐ Metal ☐ Clad ☐ Vinyl
New French Glass Door(s) U-Value= _____ Solar Heat Gain Coefficient= _____ Frame: ☐ Metal ☐ Clad ☐ Vinyl

Water Heater

Storage Water Heater:
Gallons= _____ Type: ☐ Electric ☐ N. Gas ☐ P. Gas EFF= _____ Location: ☐ Garage ☐ Attic ☐ Interior ☐ Exterior
Instant Water Heater:
Type: ☐ Electric ☐ N. Gas ☐ P. Gas EFF= _____ Location: ☐ Garage ☐ Attic ☐ Interior ☐ Exterior

HVAC - Show Exact Locations of Equipment on Drawing

HVAC System(s): Condenser Location = Exterior
HVAC System(s): Air Handler Location= ☐ Garage ☐ Attic ☐ Interior ☐ Exterior