



HVAC CERTIFIED LOAD CALCULATIONS

Version 2022-05-01

NOTE: This form is to be used by licensed mechanical contractors, architects or engineers registered in Virginia. This form is only to be used on residential, one and two family dwelling units. If there is more than one zone per dwelling unit, submit separate sheets for each. A copy with an original signature of these approved Certified HVAC load calculations is to remain on the job site for the inspector's reference. Failure to have a copy with an original signature on the job site may result in a rejected inspection. Homeowners performing calculations for their own home shall complete this form and submit it for review by PWC Plan Review.

MEC Permit # _____ BLD Permit # _____

1. Owners Name: _____ House Type/Model: _____

Subdivision: _____ Total Area: _____ SF

Site Address: _____ Lot #: _____

Contractor: _____ Tele. #: _____

Designed under IRC 20__ Code

2. Winter Design Conditions:
Outside 0°F Inside 70°F Total heat loss (calculated) = _____ BTUH

3. Summer Design Conditions:
Outside _____°F DB _____°F WB Inside _____°F DB

Sensible Heat Gain (calculated) = _____ BTUH

Total Heat Gain (calculated) = _____ BTUH

4. Equipment Data:

A. Heating

Input _____ BTUH

Output _____ BTUH

Type Fuel _____

Type Flue _____

B. Cooling

Coil Capacity Sensible _____

Coil Capacity Total _____

Type Equipment _____

Model # _____

C. Fan

Air Quantity _____ CFM

Static Press _____

CFM per Ton _____

Staff Use Only



Owner's Name: _____

Site Address: _____

Air Distribution Data (continued)

Main Duct Sizes:

Supply _____	Location _____
Supply _____	Location _____
Supply _____	Location _____
Supply _____	Location _____
Return _____	Location _____ Grill _____
Return _____	Location _____ Grill _____
Return _____	Location _____ Grill _____
Supply Riser _____	Location _____
Supply Riser _____	Location _____
Return Riser _____	Location _____ Grill _____
Return Riser _____	Location _____ Grill _____
Outside Air Duct _____	Location _____ Size _____

I certify that all of the above information given will meet all Virginia Uniform Statewide Building Code Requirements.

Signed: _____

By checking this box, I agree to electronically signing this form.

Name Print/Type: _____

Please check and complete whichever of the following applies to you:

- Master Mechanical Tradesman License #: _____
- Virginia Registered Professional Engineer (stamp below)
- Virginia Registered Architect (stamp below)
- Homeowner

Notes: The County reserves the right to request a full HVAC heat loss, heat gain and energy envelope calculations and plans where they deem it necessary, as per the current Virginia Uniform Statewide Building code.

Heat Factor = $\frac{\text{CFM Capacity of Equipment in Heating Mode}}{\text{Total Heat Loss of the House}}$

Cooling Factor = $\frac{\text{CFM Capacity of Equipment in Cooling Mode}}{\text{Total Sensible Heat Gain of the House}}$

Architect/Engineer Seal

Signature: _____

Date: _____

By checking this box, I agree to electronically signing this form