A New Norris House
Energy Data Report
NNH | HERS Index Report
Error/Warnings

Warnings:
- Total Duct Leakage is set to 0. If this is not correct, please go to the Duct Summary Screen and enter Total Duct Leakage. Certain energy codes require total duct leakage testing.
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RE/MV Rate v12.97 - Norris appnRM 08.01.2011.jpg

Site Information:
- Climate Location: Knoxville, TN
- Utility:
  - Electricity: Clinton Utility
  - Gas: None
  - Propane: None
  - Oil: None
  - Kerosene: None
  - Wood: None

Analysis
- Updated: 03:48:12 PM
- Total Area (sq ft):
  - Conditioned: 768
  - Shell Area: 3075
  - Foundation: 560.0
  - Slab Floors: 0
  - Frame Floors: 768
  - Roof and Band: 112.0
  - Above-Grade: 1594.5
  - Windows: 206.0
  - Doors: 45.0
  - Ceilings: 836
  - Skylights: 17.3
  - Ducts: 245.3
- Ratios
  - Window-To-Wall: 0.132
  - Window-To-R: 0.268
- Window Area By Orientation:
  - North: 70.0
  - Northeast: 0.0
  - East: 30.0
  - Southeast: 0.0
  - South: 60.0
  - Southwest: 0.0
  - West: 46.0
  - Northwest: 0.0

Errors/Warnings
- WARNING:
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### General Building Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area of Conditioned Space (sq ft)</td>
<td>788</td>
</tr>
<tr>
<td>Volume of Conditioned Space (cu ft)</td>
<td>9930</td>
</tr>
<tr>
<td>Year Built</td>
<td>2011</td>
</tr>
</tbody>
</table>

### Housing Type
- **Type**: Single-family detached

### Level Type
- **Apartment Only**: None

### Number of Units
- Total: 1

### Floor on or Above Grade
- Total: 1

### Number of Bedrooms
- Total: 2

### Foundation Type
- **Enclosed crawl space**

### Enclosed Crawl Space Type
- **Unvented**

### Thermal Boundary Location
- **Foundation Wall**

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**Errors/Warnings**

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Foundation Wall Properties Summary:

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Type</th>
<th>Length</th>
<th>Height</th>
<th>Depth</th>
<th>Hot AG</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Crawl</td>
<td>UT-NN</td>
<td>112.0</td>
<td>5.0</td>
<td>2.0</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**New**  **Delete**  **Copy**

Foundation Wall Properties:

- **Name**: Crawl
- **Type**: UT-NN
- **Length (ft)**: 112.0
- **Height Above Grade (ft)**: 3.0
- **Height (ft)**: 5.0
- **Depth Below Grade (ft)**: 2.0
- **Location**: Between enclosed crawl space and ambient/ground

**Errors/Warnings**

- **WARNING**: Total Duct Leakage is set to 0. If this is not correct, please go to the Duct Summary Screen and enter Total Duct Leakage. Certain energy codes require total duct leakage testing.
Frame Floor Properties Summary:

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Type</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1st</td>
<td>Uninsulated</td>
<td>768</td>
</tr>
</tbody>
</table>

Frame Floor Properties:

Name: 1st
Type: Uninsulated
Location: Between conditioned space and enclosed crawl space

Errors/Warnings:

WARNINGS
• Total Duct Leakage is set to 0. If this is not correct, please go to the Duct Summary Screen and enter Total Duct Leakage. Certain energy codes require total duct leakage testing.
### Door Properties Summary

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Type</th>
<th>Area</th>
<th>Wall #</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>W</td>
<td>UT/NN</td>
<td>23.0</td>
<td>AGW4</td>
</tr>
<tr>
<td>2</td>
<td>E</td>
<td>UT/NN</td>
<td>22.0</td>
<td>AGW3</td>
</tr>
</tbody>
</table>

### Door Properties

- **Name**: W
- **Type**: UT/NN
- **Opaque Area (sq ft)**: 23.0
- **RVal Opaque**: 7.00

### Errors/Warnings

**WARNINGS**
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HERS Index Report | NNH

Ceiling Properties Summary

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Type</th>
<th>Area</th>
<th>Style</th>
<th>Radiant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Main</td>
<td>UT/NN</td>
<td>836</td>
<td>Vaulted</td>
<td>Yes</td>
</tr>
</tbody>
</table>

New  | Delete | Copy |

Ceiling Properties

- Name: Main
- Type: UT/NN
- Gross Area (sq ft): 836

Roof Properties

- Exterior Color: Reflective
- Clay or Concrete Roofing Tiles: No
- Radiant Barrier: Yes
- Sub-Tile Ventilation Present: No

Errors/Warnings

WARNING
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### Mechanical Equipment Properties Summary

<table>
<thead>
<tr>
<th></th>
<th>Type</th>
<th>Htg Eff</th>
<th>Clg Eff</th>
<th>Dhw Eff</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>UT/NH Multi-split</td>
<td>10.0 HSPF</td>
<td>16.0 SEER</td>
<td>0.38 EF</td>
</tr>
<tr>
<td>2</td>
<td>Rheem HP30RH</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Mechanical Equipment Properties

<table>
<thead>
<tr>
<th>Library Type</th>
<th>Air Source Heat Pump</th>
<th>Number of Units:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment</td>
<td>UT/NH Multi-split</td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>Conditioned area</td>
<td></td>
</tr>
<tr>
<td>Performance Adj. (%)</td>
<td>100.0</td>
<td>Load Served (%)</td>
</tr>
<tr>
<td>Heating</td>
<td>100.0</td>
<td>Cooling</td>
</tr>
<tr>
<td>Dhw</td>
<td>0.0</td>
<td></td>
</tr>
</tbody>
</table>

### System-Wide Properties

<table>
<thead>
<tr>
<th>Sopt Temperature (F)</th>
<th>Heating</th>
<th>Cooling</th>
<th>Dhw</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>68.0</td>
<td>78.0</td>
<td></td>
</tr>
</tbody>
</table>

### Errors/Warnings

- WARNING: Total Duct Leakage is set to 0. If this is not correct, please go to the Duct Summary Screen and enter Total Duct Leakage. Certain energy codes require total duct leakage testing.
### Duct System Selector

<table>
<thead>
<tr>
<th>Name</th>
<th>None</th>
</tr>
</thead>
</table>

#### Duct Leakage

- **Use Default Leakage:**
  - N/A

- **Use Measured Leakage:**
  - CFM @ 25 Pa

#### Duct System Area

- **Duct Surface Area:**
  - Supply: 207.4
  - Return: 36.4

#### Ducts

<table>
<thead>
<tr>
<th>Location</th>
<th>Supply Area</th>
<th>Supply P-Value</th>
<th>Return Area</th>
<th>Return P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100</td>
<td>0.0</td>
<td>100</td>
<td>0.0</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

#### Errors/Warnings

- Total Duct Leakage is set to 0. If this is not correct, please go to the Duct Summary Screen and enter Total Duct Leakage. Certain energy codes require total duct leakage testing.

### Analysis

- **Programs**
  - V2.0 ENERGY... Passes
  - V2.5 ENERGY... Passes
  - V3.0 ENERGY... Passes
  - Tax Credit Passes
  - HERS Index 49
  - NY HERS Score N/A

### Code

- IECC 2012 En... Passes
- IECC 2009 En... Passes
- IECC 2006 En... Passes
- IECC 2004 En... Passes
- IECC 2003 En... Passes
- IECC 2001 En... Passes
- IECC 2000 En... Passes
- IECC 1988 En... Passes
- ECHC 2015 2010 Passes
- ECC of South... Passes
- MEC 1998 En... Passes
- MEC 1993 En... Passes
- MEC 1992 En... Passes
- ASHRAE 90.2... Passes
### Refrigerator
- Total Consumption: 450 kWh/yr
- Location: Conditioned

### Dishwasher
- Energy Factor: 0.46
- Place Setting Capacity: 12

### Range/Oven
- Fuel: Electric
- Induction Range: Off

### Clothes Dryer
- Fuel: Electric
- Efficiency Factor: 2.01
- Moisture Sensing: Off

### Clothes Washer
- Location: Conditioned
- Label Energy Rating: 7.04 kWh/yr
- Capacity: 2.874 cu.ft.
- Electric Rate: 0.0805
- Gas Rate: 0.59
- Annual Gas Cost: $22.00

### Lighting
- CFL (%): 0.0
- Incandescent FL (%): 100.0
- Exterior Fixtures: 0.0
- Garage Fixtures: 0.0

### Ceiling Fan(s)
- CFM / Watt: 140.0
- Operate: Medium speed

---

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![HERS Index Report Interface](image-url)

**Drawal Thickness (in.):** 0.63

**Interior Mass Properties Summary**

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Type</th>
<th>Area (sq ft)</th>
<th>Thickness</th>
</tr>
</thead>
</table>

**Interior Mass Properties**

- **Name:**
- **Type:**
- **Location:**

**Errors/Warnings**

- **WARNINGS**
  - Total Duct Leakage is set to 0. If this is not correct, please go to the Duct Summary Screen and enter Total Duct Leakage. Certain energy codes require total duct leakage testing.

**Programs**

- V2.0 ENERGY...: Passed
- V2.5 ENERGY...: Passed
- V3.0 ENERGY...: Passed
- Tax Credit: Passed
- HERS Index: 49
- NY HERS Score: N/A

**Code**

- IRCC 2012 En...: Passed
- IECC 2009 En...: Passed
- IECC 2006 En...: Passed
- IECC 2004 En...: Passed
- IECC 2003 En...: Passed
- IECC 2001 En...: Passed
- IECC 2000 En...: Passed
- IEC 1999 En...: Passed
- ECCCYS-2010: Passed
- ECC of Sourhe...: Passed
- MEC 1995 En...: Passed
- MEC 1985 En...: Passed
- MEC 1993 En...: Passed
- MEC 1992 En...: Passed
- ASHRAE 90.2...: Passed

**Detailed**

- Knoxville, TN
- 01/20/12