Can you build a cost effective Passive House? One that you would actually LOVE to live in? We think so.
Passive House Specs
(Nerd Stuff)

• R-25 foam under concrete slab, 6”
• R-40 walls w/ dense pack fiberglass insulation in 2x6, & 5” foam on outside
• R-75 fiberglass in trusses
• Zehnder Comfo Air 350 HRV
• Mini Split air to air heat pump
• Electric domestic hot water tank
• Zola UPVC windows, 0.15 U-value average (0.13 low and 0.19 high)
• Approx. 5000 heating degree days
• Blower door @ 50 pascals ACH 0.06
## Specific building demands with reference to the treated floor area

<table>
<thead>
<tr>
<th></th>
<th>Treated floor area</th>
<th>Requirements</th>
<th>Fulfilled?*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space heating</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heating demand</td>
<td>17.3 kWh/(m²a)</td>
<td>15 kWh/(m²a)</td>
<td></td>
</tr>
<tr>
<td>Heating load</td>
<td>6.9 W/m²</td>
<td>10 W/m²</td>
<td>yes</td>
</tr>
<tr>
<td>Space cooling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall specif. space cooling demand</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Cooling load</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency of overheating (&gt; 25 °C)</td>
<td>0.2 %</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Primary energy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heating, cooling, dehumidification, DHW, auxiliary electricity, lighting, electrical appliances</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>DHW, space heating and auxiliary electricity</td>
<td>117 kWh/(m²a)</td>
<td>120 kWh/(m²a)</td>
<td>yes</td>
</tr>
<tr>
<td>Specific primary energy reduction through solar electricity</td>
<td>67 kWh/(m²a)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Airtightness</td>
<td>Pressurization test result n_{50}</td>
<td>0.06 1/h</td>
<td>0.6 1/h</td>
</tr>
</tbody>
</table>

* empty field: data missing; **: no requirement

**Passive House?**

yes
Finch Haus is currently priced at $135.00 a square foot in the Olympia Market with modest yet hardy finishes.
1942 TFA, 21% Glazing

Designed to be built on site or prefabricated in cubes
TYPICAL FOUNDATION

1" = 1'-0"

SHEARWALL PER PLAN

P.T. 2x6 PLATE W/ 5/8" A.B. PER SHEARWALL SCHEDULE

4" CONCRETE SLAB SEE FOUNDATION PLAN

VISQUEEN UNDER SLAB

COMPACTED SAND

1' - 2"

0' - 11"

1/2"

3"

6"

PANEL EDGE NAILING OVER HOLDOWN STUDS

HOLDOWN PER PLAN

VERTICAL FOAM INSULATION (VERTICAL WALL). SEE ARCH FOR FOAM THICKNESS.

(1) #4

(2) #4 CONT

STRUCTURAL FOAM TO MEET ASTM D6817 TYPE EPS39 (UNDER FOOTING). SEE ARCH FOR FOAM THICKNESS.

STRUCTURAL FOAM TO MEET ASTM D6817 TYPE EPS15 (UNDER SLAB). SEE ARCH FOR FOAM THICKNESS.
Moment of Glory
Siding and Insulation
You should know I believe there is such a thing as a stupid question...