

# D.R. Nelson & Associates, Inc.

Building Science *Delivered*

## Eastbrook Homes Glenridge Plan 2088 Better *by Design* - Energy Star® *Plus* performance

	1960's-1970's Era Home <small>These values represent typical practices in the 1960' and 1970's.</small>	Michigan Uniform Energy Code <small>These values meet the current Michigan Uniform Energy Code<sup>2</sup>.</small>	Eastbrook Homes Energy Star® <i>Plus</i> <sup>1</sup> <small>These are the values for Eastbrook Homes – standard</small>
Ceiling Insulation	<b>R-19</b>	<b>R-30</b>	<b>R-38</b>
Wall Insulation	<b>R-11</b>	<b>R-13</b>	<b>R-13+OSB</b>
Windows (Fenestration)	<b>R-1.1 (U=.87)</b>	<b>R-1.9 (U=.53)</b>	<b>R-2.85 (U=.35)</b>
Basement Walls	<b>NONE Required</b>	<b>NONE Required</b>	<b>R-11 (Full Interior)</b>
Furnace	<b>78% AFUE</b>	<b>78% AFUE</b>	<b>+90% AFUE</b>
Air Conditioning	<b>6 SEER</b>	<b>13 SEER</b>	<b>13SEER</b>
Air Infiltration	<b>No Requirement</b>	<b>No Requirement</b>	<b>Nelson Energy Seal</b>
Duct Leakage	<b>No Requirement</b>	<b>No Requirement</b>	<b>&lt;100cfm@ 25 Pa</b>

### Predicted Annual Energy Costs<sup>4</sup>

Plan/ Model	1960's-1970's Era Home <sup>2</sup>	Michigan Uniform Energy Code <sup>3</sup>	Eastbrook Homes Energy Star® <i>Plus</i> <sup>1</sup>
Glenridge 2088	<b>\$ 2,978</b>	<b>\$ 2,535</b>	<b>\$ 1,134</b>

1. Energy Star *Plus* Homes have a HERS rating of 70 points or less and are at least 25% more energy efficient than an Energy Star Home. For more information go to: [www.energystar.gov](http://www.energystar.gov).
2. Typical values used to construct homes built in the Grand Rapids area in the 1960's and 1970's.
3. Built to values of the Michigan Uniform Energy Code (MUEC) Table 1074; "Prescriptive Compliance Approach".
4. Predicted Annual Heating, Cooling and Water Heating costs based on average climate data and:  
Electricity – Consumers Electricity @ 0.10 \$/kWh  
Natural Gas – Consumers Gas @ 1.10 \$/CCF

This information does not constitute any warranty of energy costs or savings.

This analysis was conducted using REMRate v12.5, the computer software program developed for the Energy Star® home program by the United States Environmental Protection Agency and the Department of Energy.

D.R. Nelson & Associates, Inc. is a licensed, certified Rater/Provider for the Energy Star® Program.

The energy costs above were calculated by comparing dimensionally identical homes with the values as expressed under worst case solar orientation. Your actual costs may be more or less depending upon such factors as; number of occupants, occupant behavior, temperature settings, window coverings and more.