

SINGLE FAMILY / MULTIFAMILY / COMMERCIAL

# Net Zero Made Easy

Envelope air sealing with AeroBarrier is the most cost effective measure to make Net Zero Energy and Net Zero Ready homes and buildings both achievable and affordable.

- Easiest method to achieve air tightness required
- Less cost & labor
- No delay in schedule
- Net Zero can be offered as a standard feature
- Net Zero is affordable even for production homes

## PV Solar Panels Needed for Net Zero Energy\*

ACH50	Solar System Size	Average Annual kWh Production	Estimated # of Solar Panels	Premium Panels (SQ FT)
5.0	15 kW	21,234	60	672
3.0	7 kW	9,909	28	330
1.5	4 kW	7,161	20	224
0.6	3.5 kW	4,954	14	160

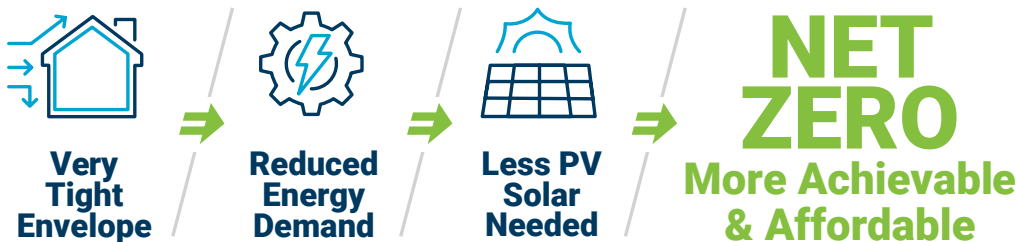
\*based on average U.S. home, or annual demand of 12,000 kWh  
Source: <https://news.energysage.com/how-many-solar-panels-do-i-need/>

67% - 77% cost savings on PV solar



The answer is simple, by reducing the envelope leakage, it reduces energy demand. We needed a solution to make zero energy affordable, and we have found it with the AeroBarrier sealing technology.

**Mandalay Homes**



# Making Net Zero Achievable & Affordable

## Single Family



**Mandalay Homes Achieves Net Zero for Homes as Low as \$240K**

### PROJECT

Mountain Gate Residential Community

### BUILDER

Mandalay Homes

### LOCATION

Clarkdale, AZ; Climate Zone 4

### RESULTS

- Pre Air Sealing Leakage: 1.4 ACH50
- Post Air Sealing Leakage: 0.6 ACH50
- Can now achieve Net Zero with only 8 solar panels on a typical 2,000 sq ft home compared to 60 solar panels. Savings of \$50k.

## Net Zero Affordability Analysis

	House 1	House 2	House 3	House 4 w/ AeroBarrier
ACH50	7.0 (Fail)	5.0	3.0	<b>0.6</b>
HERS Estimate	78 (Code Fail)	70	56	<b>47</b>
Insulation / Cost	Batt \$1,200	Batt \$1,200	Foam \$2,300	<b>Batt + AeroBarrier \$2,500</b>
Labor for Manual Sealing, Pre-Blower Door	\$800	\$1,000	\$1,000	<b>\$0</b>
Solar Panels Needed for Zero	Not Possible	60 (15kWh) \$50,000	30 (7.5kWh) \$25,000	<b>14 (3.5kWh) \$13,000</b>
LEED Points	0	0	1	<b>2</b>
Passive House Requirements	No	No	No	<b>Yes</b>
ACH Results Guaranteed	No	No	No	<b>Yes</b>
<b>Total Cost to Zero</b>	Not Possible	\$52,200	\$28,300	<b>\$15,500</b>

### Assumptions:

- Size of Home = 1,900 SF
- Location = Arizona
- Climate Zone = 5
- New Construction
- No Changes to Structure / Orientation

## Multifamily



**The Wasatch Group Achieves Net Zero via Sub 1ACH50 per Unit in Multifamily Project**

### PROJECT

Soleil Lofts, a 600-Unit Multifamily Building; PV Solar, All Electric

### BUILDER

The Wasatch Group

### LOCATION

Herriman, UT; Climate Zone 5

### RESULTS

- Pre Air Sealing Leakage: 10 ACH50 avg/unit
- Post Air Sealing Leakage: <1 ACH50 per unit
- 50% less energy use; 50% lower HVAC equipment costs
- Rebates added up to more than the cost of AeroBarrier – a 150% return on investment



We looked at other energy efficiency measures, including lighting and appliances, but energy modeling showed us they aren't as cost-effective as air sealing.

### The Wasatch Group

**AEROBARRIER.NET**

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