



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	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







Reduced Energy Demand



Less PV Solar Needed





Making Net Zero Achievable & Affordable

Single Family



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

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

