

Coolerado Cools 3,700-Square-Foot Boulder, Colorado Home on Less Than 10 Cents an Hour

When Nick and Megan Wilder moved to sunny Boulder, CO, they found the perfect spot – a stunning mountain location with out-the-door access to Colorado’s outdoor playground.

They also had the opportunity to build a green home from the ground up.



Working with a Boulder green architect, the Wilders designed a 3,700-square-foot home maximized for energy efficiency. Floor-to-ceiling, south facing windows produce a significant amount of passive solar gain during the winter, minimizing the demands on the home’s radiant floor heating.

“Cooling a home this size with traditional air conditioning would take at least three to four times more power than we could produce. Coolerado helps us use a lot less power than we generate from solar panels.”

– Nick Wilder

CUSTOMER

Nick and Megan Wilder

LOCATION

Boulder, CO

PROPERTY TYPE

Residence

SQUARE FOOTAGE

3,700

COOLERADO SOLUTION

R600, 5-ton unit

RESULTS

- Running non-stop in the summer, Coolerado air conditioning costs no more than \$2.20 per day – if they had to purchase power.
- Coolerado consumes about one-eighth as much power as traditional A/C.
- 100% fresh air is continuously provided without adding humidity.

They installed a 3 kilowatt solar panel system on the flat roof, which generates 1500 to 3000 watts depending on sunlight. In the summer the panels produce twice as much as the couple uses.

1/8th the Energy of Traditional A/C

Summer temperatures regularly reach into the 90s and occasionally crest 100°F in Boulder. To reduce solar gain in the summer the Wilders installed awnings, UV filtering on windows, and blinds.

The couple needed a way to cool the home further, but they knew they would not be content with the available options. A traditional air conditioner recirculates the air and would consume much more solar power than the home generates. An evaporative cooler would add humidity and odors to the clean, mountain air.

The Wilders' architect suggested they look at the Coolerado air conditioner, the most energy efficient air conditioner available. "Coolerado was really the only thing available besides regular air conditioning and swamp coolers," Nick said. "I'm from South Carolina and I didn't want swamp air or to just blow around a lot of stale air."

The Coolerado team recommended two Coolerado air conditioners for a home of that size and amount of solar gain. However, the Wilders chose to install just one Coolerado R600, which delivers five tons of cooling capacity while using just 600 watts of power.



A traditional air conditioner requires about eight times that much power. Coolerado also cools to much lower temperatures than a swamp cooler.

For the active couple, the Coolerado air conditioner draws 100 percent fresh air from outside and cools it without adding humidity or chemical refrigerants to the environment. It's also free of allergens that can grow in evaporative coolers.

"Fresh air is continuously cycling in, which is huge for me," Nick said. "We just open a window if we need to direct the fresh cooled air to a certain part of the house."



Nick Wilder enjoying a ride near his home near Boulder, Colorado.

1/8th the Cost

Nick Wilder tracks outside and inside temperatures, allowing him to see how Coolerado performs as temperatures rise. During the summer, the single Coolerado air conditioner maintains the temperature in their home at 76-77°F, which is comfortable for them and where they set their thermostat.

The cost to run Coolerado adds up to about one-eighth that of traditional air conditioning. During the hottest part of the summer, running nonstop, the Coolerado air conditioner would cost less than 10 cents per hour if the Wilders had to purchase electricity. Compare that to a traditional air conditioner which would cost over \$1 per hour.

With Coolerado the home owners enjoy the best of Colorado – clean air, sunlight and views – while minimizing their footprint on the environment. It also helps them stay net energy positive, producing more power than they consume in the summer.

"Cooling a home this size with traditional air conditioning would take at least three to four times more power than we could produce. Coolerado helps us use a lot less power than we generate from solar panels." Nick said.

ABOUT COOLERADO

Coolerado Corporation produces and sells the most efficient air conditioners made. Coolerado products create a healthier living environment by providing fresh, filtered, ideal humidity air. Coolerado air conditioners are used for commercial, industrial and residential applications throughout the world. For more information, visit www.coolerado.com.