David Bourke has built a number of dream homes in his career as an architect in the mountains surrounding Lake Tahoe. But this year he designed the Dream Home — the 2014 HGTV Dream Home, a modern mountain retreat the network awarded to a lucky viewer in April.

Bourke is no regular on television’s thriving home design scene — he sheepishly admits that he doesn’t own a TV. “I had to ask a friend if I could come over and watch the special showcasing the completed home,” he said. He hasn’t even seen the “Behind the Build” program in which he has some screen time.

But the opportunity came knocking when the show’s producer was scouting sites around Truckee for this year’s installment of the series. He was struck by a fire station Bourke’s firm, Ward-Young Architecture and Planning, had designed. The producer contacted the firm and ended up hiring Bourke as his Dream Home architect.

Construction began just a few months later, in May, and finished in October, a fast build for the area. Considering the tight time frame, Bourke focused on creating simple forms that could be put together easily but creatively and then elevating them with elegant details.

“By pulling the two wings of the house apart and connecting them with the entry way, you create really great outdoor space,” Bourke said. “We created a pretty interesting house that had a very straightforward structural diagram to it.”

The house has been splashed on the cable network and its websites (HGTV.com and FrontDoor.Com) in a parade of shows, specials, photo galleries and tours, both virtual and in person. It has certainly gained Bourke and Ward-Young, where Bourke has worked for 20 years since graduating, some national exposure, though Bourke notes the firm is locally focused.

His portfolio includes a hotel, a Catholic Church and a number of notable residences, including one for the CFO of Cisco Systems, all in the Truckee/Tahoe area. But he is most proud of some of his environmentally conscious commercial projects: the first LEED-certified building in Truckee and the ranger station for the U.S. Forest Service’s Truckee district, which is LEED Gold certified and exceeds California’s energy efficiency standards by 60 percent.

Bourke has loved drawing since he was a kid growing up near Pasadena. His mom was artistic, and his dad was an astronautical engineer. Those influences led him to architecture early. He had already taken two years of drawing and two years of drafting in high school, and Cal Poly’s architecture program was the next natural step.

His early focus, however, was interrupted when he took his sophomore winter quarter off to go skiing in Tahoe. He didn’t come back for six years.

He did eventually get a job drafting for a local architect for a couple years and then decided to return to Cal Poly to finish his education.

That education, he now says, gave him what he needed to feel competent and confident in his career-to-come, in both the technical and design realms.

“Architecture school is all about Learn by Doing,” Bourke said. “You’re not writing papers; you’re actually producing things, pretty much from day one. So it was a pretty smooth transition from that into the real world.”

Bourke recalls one student project he worked on, a project that required balancing the aesthetics, the many functions it had to accommodate — sleeping, eating, congregating and other activities — and eco-friendly solutions for lighting, water, sewer, heating and cooling.

To succeed, the students needed to collaborate with technical, environmental and design professors in a holistic approach.

“One of the real strengths of Cal Poly is getting different disciplines working together,” Bourke said.

That holistic approach resonates in Bourke’s design philosophy today: that a building needs to fit where it is, both culturally and physically, that it needs to both fit nicely into the specific site and relate to the surrounding region.

Bourke, who is married with two teenage sons, also has a strong environmental ethic developed over years of backpacking, skiing, mountain biking, windsurfing and other outdoor pursuits. And he credits the strong technical education he gained at Cal Poly for teaching him how to translate those environmental sensibilities into his designs.

“Cal Poly taught me real ways to incorporate that into architecture,” Bourke said, “how to make it actually work.”