

Utah Ski Chalet

Brighton, Utah



This home was built in 2006 and is located in the Wasatch National Forest and Wasatch Mountain Range. When built it was intended to be a vacation home, for vacation renters, and later a retirement home for the owners. Since the home is built in the forest, law states that for every tree taken down on the property there must be another planted, so homeowners chose to be very environmentally friendly with the home. Also, the rock on the property was used to create the beautiful landscaping seen during the Summer and Fall. Once the rock was moved into place, that cleared the way for the vertical loop field. The homeowner hobbies include snow skiing/snowboarding, snow shoeing, hiking, and slow evenings after playing hard all day.

Since the home is nestled in the mountains and near the ski slopes, cooling is actually not needed at all in the home so the homeowners chose to use radiant heating in the home only. This really saves humidity in the home as the mountains in UT are actually in the desert. The radiant tubing is run throughout

the home using a light concrete material called “gyp-crete” or in the concrete slabs themselves (basement, garage, and driveway landing trough).

The home is insulated extremely well with closed cell spray foam in all the wall and running to the roof deck.

With the crazy amounts of 500” plus average snow fall per year; the temperature can get to subzero degrees frequently. A generator is needed in case the homeowner would get snowed in and be without power. Propane is used to fuel the generator and the three fireplaces in the home. Then the variable speed geothermal unit can also be powered by the generator.

The mechanical space of the home is uniquely fit into the home’s lower level switch back staircase for a clean, tight, and space saving approach.

Utah Ski Chalet



Project Details

Building Size:	4,000 sq. ft. finished space
Geothermal Equipment:	GeoComfort WV Water-to-Water
Loop Type:	Vertical loop
Installation Date:	June, 2016
Installation Details:	Also installed are HBX Controls and Wifi thermostats, TurboMax Indirect Hot Water Heater
Other Features:	Insulated envelope with closed cell foam
Geothermal Contractor:	Central Valley Mechanical , Nephi, UT • 435-623-4121

 CONSTRUCTION TYPE
New Construction

 SYSTEM TYPE
Radiant System

 LOOP TYPE
Vertical Loop



West facing common living area of the home.



Left: Exterior of the home.



Right: The GeoComfort Variable Speed Water-to-Water unit, nestled under the lower level switch back staircase of the home.