

Case Study – Black Forest Barndo Colorado Springs, CO

ColorGard[®] 2.0 | VersaClip[™] | SnoBracket[™]



At-A-Glance

Project Name

The BrookHouse

Location

Colorado Springs, CO

Building Manufacturer

ETAS, Mineola, TX

Roof Profile

ETAS R-Panel

Industry

Residential

The Situation

BrookHouse is a spectacular event venue. Its mountainous location makes it prone to harsh weather conditions, including snow, ice and wind. The barndominium needed a fully engineered, aesthetically pleasing snow retention solution that would both match the roof and last the life of the roof.

The Result

ColorGard 2.0 was custom engineered for this project to mitigate potential rooftop avalanches, which could pose a serious threat to pedestrians and property below.

Project Stats

Number of Roofs: 4

Roof Pitch:

3:12 (x 2); 4:12; & 7:12

S-5! Products Supplied:

- · ColorGard® 2.0 (244 linear ft.)
- VersaClip™ (150)
- SnoBracket[™] (150)



The Project

The BrookHouse is a unique 3,200-square-foot barndominium nestled on 5.5 scenic acres, just outside of Colorado Springs. Offering panoramic views of the Rocky Mountains, it serves as both a versatile event venue and a model for integrated rural living and sustainable design.

Located on the west end of the bardominium are two fully equipped short-term vacation rentals, each featuring a private entrance. On the south side, a private entrance opens to an Integrative Wellness Center that provides advanced BioScan health assessments and personalized supplement protocols based on European research and holistic care practices.

Built into the north hillside, the barndominium takes advantage of natural earth berming to help regulate interior temperatures year-round. Passive solar design maximizes winter warmth, with generous southern windows heating the epoxy floor's thermal mass.

A sunroom on the east side features an overhead door that welcomes the morning light and houses a therapeutic mineral soak with ozone filtration, used in wellness treatments. The space also supports a working aquaponics system producing leafy greens, herbs, tomatoes and tilapia. Designed as a prototype, this system is slated for deployment in Ghana to assist rural communities in developing sustainable food sources.

The Challenge

With a wide range of events hosted on the property – from seminars and receptions to parties, fitness sessions, music performances, and meetings – and the area's harsh weather conditions, including snow and ice, the homeowner required an effective snow retention system for her new metal roof.

The buildup of snow and ice on any roof can produce significant sliding forces, resulting in the sudden release of snow and ice, dumping the fallout below the eaves in a matter of seconds, posing serious risks to both patrons and property below.

A high-quality, long-lasting visually appealing solution was essential to ensure safety while preserving the integrity of the roof and maintaining the overall aesthetic of the barndominum.

The Solution

The homeowner chose the all new and improved next-generation **ColorGard® 2.0** snow retention system for her R-Panel Galvalume metal roof.

Designed and upgraded with contractor feedback in mind, ColorGard 2.0 features a true lay-and-play design, with no pre-assembly required.

The new **VersaClip** can now be installed at crossmember splice locations, eliminating the need to field cut at that instance. Cutting is now reduced to trimming only one section to length (if required) at the end of the assembly. With S-5!'s new enhancements, installation time has significantly decreased, allowing for faster and simpler installation!

Extensively tested for load-to-failure, ColorGard 2.0 dramatically reduces the risks associated with rooftop avalanches, offering enhanced safety. Its sleek, seamless appearance not only perfectly matches the color of the roof but also elevates the overall aesthetic with a visually appealing look.



How Did ColorGard 2.0 Help?

- No preassembly or field cutting required
- True lay-and-play system that saves time and boosts efficiency
- Provided safety measures to patrons and property below
- Eliminated the risk of a violated roof manufacturer warranty
- Provided the aesthetic low-profile solution the homeowner desired
- Reduced the amount of product and cost required due to S-5! documented holding strength and engineered system capacity



Long-Term Outlook

The owner was able to achieve the quality look she wanted with a snow retention system that maintains the roof integrity, mitigates potential rooftop avalanches and complements the look of the roof, providing a clean appearance and perfect color- and finishmatching, designed and engineered to last the life of the roof.

"I've been incredibly impressed with the S-5! ColorGard 2.0 snow retention system. I especially appreciate being able to confirm my own snow load calculations using the resources available on the S-5! website—it made determining proper bracket spacing straightforward and efficient. The system's sleek lines reflect its excellent design, and I have full confidence in its performance, thanks to the third-party accreditations. It's been a pleasure working with S-5!, a company with a stellar reputation and a true commitment to excellence."

-Nikki Upchurch, The BrookHouse, Black Forest, Colorado



