



CASE STUDY

Creating a safer, fun experience  
at Bull Valley Golf Club with the  
**Climatix RTU Solution**

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## **Bull Valley Golf Club** faced a primitive HVAC system in great need of efficiency improvements.

In Woodstock, Illinois, you will find Bull Valley Golf Club, a private club that's consistently ranked among the top courses in America.

Although the course is designed for golf purists, General Manager Brad Hisel says that his primary goal for Bull Valley is "to make it fun. We want our members and our staff to have a good time when they're here."

With that in mind, Hisel has committed himself and the entire Bull Valley team to building a culture and environment in which everyone gets involved to create a family-friendly atmosphere. In addition to hosting the club's 250 members for 14,000 rounds per season, Bull Valley accommodates about 50 weddings every year for as many as 200 guests at a time—all from their 37,000 square foot clubhouse.

Hisel admits, however, that the 32-year-old clubhouse needed some attention: "We definitely had our fair share of deferred maintenance, and we've been tackling these projects, such as improvements for the sprinkler and electrical systems, as we can. But one area that really is important to us is comfort."



With dozens of events and thousands of people visiting the clubhouse every year, Bull Valley needed to address some deficiencies within the HVAC system and the rooftop units in particular. "In the summer especially, the office would get really hot, practically unbearable," he says. In those situations, an employee would often adjust the thermostat to try to make the space more comfortable. "They'd set it to 62°F to force it to be cooler, but then the next day, we'd be locked out of the air conditioning completely. It was a really primitive system," he notes.



## The Climatix rooftop unit solution is a “no-brainer” for Bull Valley



### Automatic indoor air quality maintenance

Climatix RTU monitors carbon dioxide and increases fresh air supply when CO<sub>2</sub> reaches certain levels of concentration (demand-controlled ventilation).



### Fresh air purge

Created in response to the COVID-19 pandemic and in alignment with ASHRAE62.1 guidelines, this feature enables maximum fresh air intake into buildings without using mixed or return air.

The good news for Hisel was that one of Bull Valley’s own members – Mark Stranges of Rabine Mechanical – happened to work in the HVAC industry. “The clubhouse at Bull Valley is built like a labyrinth, which creates issues when it comes to managing comfort. And, no one had visibility into those issues. Whenever something would come up, a technician would have to physically visit the property and react to things that could have been analyzed, and maybe even addressed, remotely,” says Stranges.

Those two challenges combined with a desire to make a range of energy savings improvements at Bull Valley led Stranges to recommend that the club consider the Siemens Climatix Rooftop Unit (RTU) solution to replace the clubhouse’s existing and aging equipment—and Hisel jumped at the opportunity.

“Once Climatix was explained to me, it was a no-brainer to do. We knew it would save us money on our energy bills, but what really sold us was the safety factor,” Hisel says.

### A healthier clubhouse for peace of mind

In short, Bull Valley was evaluating the Climatix RTU solution at the height of pandemic-related closures in

the spring of 2020. And like many building owners, Bull Valley recognized the importance of maintaining good indoor air quality (IAQ) as one way to help minimize transmission and exposure to viruses and other airborne particulates. The Climatix RTU solution was designed to help create healthy and productive indoor environments, including features that minimize and help eliminate indoor air-recirculation and maximize fresh outdoor air to the greatest extent possible.

“The fresh air purge feature was huge for us,” says Hisel. “When we first installed Climatix RTU, we weren’t allowing people into the clubhouse even to use the washrooms. But once we installed the Siemens solution, we felt we could at least open. In fact, in 2020, we didn’t have any COVID-19 cases that could be traced back to us.”

Stranges concurs: “The air purge function is really great in terms of peace of mind, too. We have it set to run once a week during an unoccupied time, and then Brad can also use the Climatix Mobile App to run the purge on demand, like after a wedding reception.”

Hisel also says that he gets plenty of compliments about how comfortable the clubhouse is now that Climatix RTU Solution is up and running. “Even on the hottest days in August, the offices upstairs are cool. And the mobile app is great for when you’ve got 200 people here for a wedding and the room suddenly gets hot – I can go in there and make an adjustment right then.”



The controls are in the palm of my hand. When I’m here during the summer busy season, I can focus on making sure our members, guests, and staff are having a good experience. It literally lets me do my job.”

**Brad Hisel, General Manager**  
Bull Valley Golf Club





Bringing fresh outdoor air into a room can dilute and/or displace present airborne contaminants, which reduces the probability that someone who breathes enough contaminated air could become infected with an illness.



## Rabine Mechanical finds a better way to install and maintain rooftop units

In addition to improving ventilation at Bull Valley, Stranges says that his main priority was to gain more visibility and better insights into what was happening with the equipment. The Climatix RT controller and mobile app create a combined, cloud-based solution that enables remote monitoring, which means Rabine can reduce unnecessary truck rolls associated with service and maintenance.

And, when a truck roll is necessary, Stranges explains that the technicians are more prepared for troubleshooting. For example, once the Climatix RTU solution was installed at Bull Valley, Stranges says they had an alert about unusually high carbon dioxide levels in the building during the offseason. The high levels registered all the way upstairs – a situation that could have been deadly if not for the remote monitoring and alerting.

“We have remote access to all the data points,” he says. “If there are any issues we can see the outside damper position, filter quality, fan speed, air quality. All of that gives us the insights we need before we get out there. We can prepare the technician if they have to go onsite, but sometimes we can handle it remotely.”

That doesn’t just mean it’s more efficient for Rabine Mechanical; their customers are happier too. “We have a lot of clients who do quarterly maintenance, which is necessary when you don’t know what’s going on with the equipment. But when you add in Climatix, you get that visibility. We have one account we’ve been able to reduce to semiannual preventive maintenance, which is a savings right there.”

Likewise, Hisel credits the Climatix Mobile App for saving him time and effort all season long. “The controls are in the palm of my hand. When I’m here during the summer busy season, I can focus on making sure our members, guests, and staff are having a good experience. It literally lets me do my job.”

### **Performance – and business growth – made easy with the Climatix RTU solution**

Another aspect of customer satisfaction is the ease of installation and commissioning for contractors like Stranges. The Climatix RTU controller is pre-engineered with predefined applications designed specifically for rooftop units and paired with Siemens sensors, Climatix VFD, and OpenAir™ damper actuators. And when it’s time to commission a new unit, the mobile app’s guided wizard simplifies the setup procedure, making it easy to commission an entire system seamlessly.

"It's plug and play. You don't need to be a seasoned technician with tons of controls experience. You just work through the steps on the app, which is fairly intuitive. They're quick too. **We can do each one in about two to three hours. It's fair to say it's at least a 50% reduction in labor.**"

Stranges says that the Climatix RTU solution is ideal for building owners and customers who have packaged rooftop units and need better insights and control with a cloud-based solution. And for contractors: "The long-term benefit for us is the ability to expand our reach to customers nationally that we'd never been able to service before and to do so in a way that's repeatable and scalable."

Rabine isn't the only business that can credit the Climatix RTU Solution with creating growth

opportunities. Bull Valley grew their membership by 100% in 2020, due in part to the peace of mind afforded by the Climatix fresh air purge functionality.

Hisel concludes with a strong recommendation for other building owners and managers: "Climatix will make your life easier and your guests more comfortable. It will also save you money on your utility bills. Even if we can save 10% over the course of the year, that means we can take on another project or hire another part time employee to grow our business."



We have not seen anything else on the market that is as easy to use as this product. It is something we can train our people on at a national level, making it a very good fit for our business model."

**Mark Stranges, Contractor / Owner**  
Rabine Mechanical



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