



*“Market acceptance has been nothing short of amazing.”*

*— VP of Marketing, Broan-NuTone*

**Broan-NuTone  
Revitalized  
New Product  
Development with  
Vyv Antimicrobial  
Light Technology**

## Broan tapped Vyv's technology — and team — to create an innovative new solution for fresher indoor air and cleaner surfaces.

# 90%

of North American homes have a Broan-NuTone product installed.

Source: Broan-NuTone, 2020

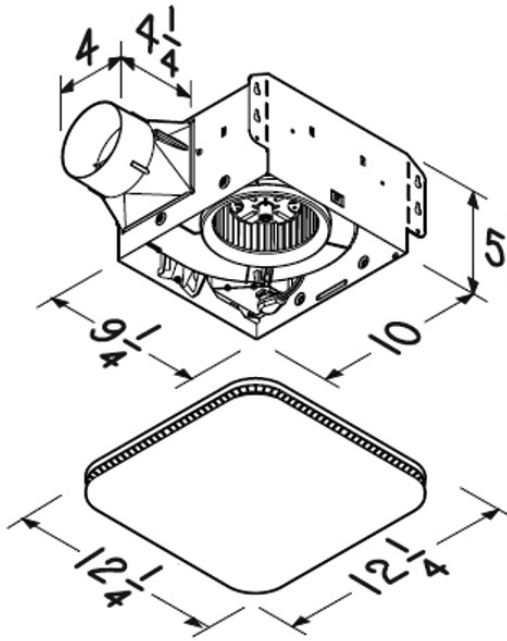
Innovation is nothing new at Broan-NuTone. The company's history of innovation dates back to the Great Depression when in 1932, Howard Broan developed an early kitchen ventilation fan called the 'Motordor' — a leap forward in technology at the time. Four years later, J. Ralph Corbett created the market for doorbells by replacing buzzers with a ringing doorbell, and NuTone was born. The Broan Group purchased NuTone in 1998, combining two longstanding American companies with cultures grounded in innovation. Today, 90% of North American homes have a Broan-NuTone product installed.

The company continues to be driven by its roots in innovation, but it's also a company with a remarkably successful and well-established legacy business. As a result, there's an ongoing balance to strike between protecting what worked in the past and finding new innovations to drive growth in the future.

Edwin Bender joined Broan-NuTone as VP of Marketing a few years ago, charged with focusing on new product development within the company's core business. Edwin saw that in some areas there was an over-reliance on legacy products. There was opportunity on the table.

He began to look beyond the company's product line-up to consider other tangential solutions that ideally complement its core business of better air circulation. Equally as interesting is the fact that its ceiling ventilation fans are rarely replaced, leaving a creative mind to consider how to create new opportunities that lay dormant in that enormous residential market share of 90%.





Broan-NuTone SurfaceShield™ exhaust fan in violet Enhanced Antimicrobial mode.

With its primary business in ventilation and indoor air quality products, Broan-NuTone has prime placement in kitchens and bathrooms. As such, many of its products are also sources of light. The company realized that it wasn't developing new product innovations at the desired rate, particularly when it came to lighting. Many products had older light technology like screw-in incandescent bulbs in bathroom fixtures or halogen bulbs in range hoods. With so many innovations happening in the lighting industry, Bender and his team shifted their focus to new light technologies.

*“The new SurfaceShield™ technology using Vyv antimicrobial LED technology, together with our ventilation product is a very, very powerful combination.”*

**Edwin Bender**  
VP of Marketing, Broan-NuTone

### Back On The Innovation Trail

The Broan team traveled to The Light Show, an international lighting conference in Chicago, to further educate themselves on what was happening in the field. There they saw the perfect opportunity to marry one of their core products with a 21st century technology when they discovered Vyv's non-UV antimicrobial light technology. It seemed like a match made in heaven.

“It was an opportunity for us to get back on the innovation trail,” Edwin explained. “It seemed like a natural fit. We often talk about our fans removing humidity from a bathroom to prevent the growth of mold and mildew. Vyv is killing\* bacteria and preventing the growth of mold and mildew. The product stories came together in a way that just made sense. The new SurfaceShield™ technology using Vyv antimicrobial LED technology, together with our ventilation product is a very, very powerful combination.”

After that first meeting, the companies started down the road of co-developing Broan-NuTone's new product, which brought together the best of each company's technology, as well as a team of expert inventors who worked together to design what has become an entirely new approach to lighting and ventilation systems.

\*MRSA and *E. coli* showed 90%+ reduction in controlled laboratory testing in 24 hours.



*“We launched the Broan-NuTone SurfaceShield™ exhaust fan with Vyv antimicrobial light, providing both powerful and quiet air circulation and continuous, uninterrupted antimicrobial surface cleaning to the market in the first quarter of 2020 (pre-COVID).*

*The market acceptance has been nothing short of amazing.”*

**Edwin Bender, VP of Marketing, Broan-NuTone**

### **Secrets of Successful Partnership**

From the start, both teams focused on looking at every angle to consider the feasibility of the project and its likelihood of success. They had open, thorough, discussions of what it would take to engineer the product. They looked at all kinds of scenarios regarding price, cost, volumes, and what it would take to be a homerun in the marketplace.

The biggest challenge from Broan’s perspective was making sure they could implement the antimicrobial technology in a way that was viable and had measurable efficacy in the environments it would most likely be used. Edwin explained, “One of the difficulties is that no two bathrooms are exactly the same. You need a light that covers enough area to be effective. This is especially true when you’re adding more than light; you are adding antimicrobial action, too. So you need to consider where the light might be placed and the size of the bathroom. We couldn’t simply come up with a one-size-fits-all scenario. We approached the challenge by taking two or three sizes and shapes that represent the largest portion of the market and tested against them. At the end of the day, we understood what would offer the greatest value to the most people possible. The result is our new SurfaceShield™ ventilation system.”

This was the first big co-development project that Edwin led at Broan, though he had experience working on others prior to joining the company. Edwin noted that in terms of partnering on a complex project, the Vyv team was different in many ways. One, in particular, was how highly engaged Vyv was with the science. Vyv provided the resources and expertise needed to co-engineer, test the antimicrobial efficacy, clearly communicate the science, and establish the claims Broan-NuTone could take to the market. This included support from Vyv’s multi-disciplined engineers, their scientists, and a full microbiology lab. It’s one thing to license technology, but what really made SurfaceShield™ a success was having the complete wrap-around support from the Vyv team.

“We did a bit of a beta test because we weren’t 100% sure that the idea would work out in the market. To do this, we brought the new Vyv technology to the well-known building and construction industry show, IBIS, to get the market’s reaction. We brought builders off the conference floor to a ‘secret room’ to get their impressions. The result was 100% unanimous: *‘This is truly awesome.’*”



## Highly Favorable Market Response



100% recommendation rate among HomeDepot.com reviewers.

Qualified Remodeler  
Top 100 Most Requested Products, 2020



2020 Best In Innovation Award from the leading architects' and designers' building resource tool.

“Once we saw how the market responded to the new product, everything was a go,” continued Edwin. “We launched the Broan-NuTone SurfaceShield™ exhaust fan with Vyv antimicrobial light, providing both powerful and quiet air circulation and continuous, uninterrupted antimicrobial surface cleaning to the market in Q1 2020 (pre-COVID). The market acceptance has been nothing short of amazing.”

## Successful Launch During a Global Pandemic

There was already a movement towards healthy and green home trends in the building industry in early 2020, but it was very niche. COVID-19's arrival served as a catalyst, raising awareness and interest in the concept of a healthy home.

Homebuilding firm Taylor Morrison created “TM Live Well,” a set of healthy home features that come at no additional cost to home buyers. The package includes SurfaceShield™, odor-reducing paint, touchless faucets and other products. “As we adapt to the uncertainty of COVID, one thing is certain: ‘healthy’ is the new focus for the spaces in which we live, work and play,” commented Tim Sullivan, Senior Managing Principal at Meyers Research, a leading research and consulting firm that specializes in real estate. “Our national consumer research shows that home shoppers are looking first and foremost for air quality, clean water and antibacterial surfaces.”

The quality of this jointly engineered product reflects the quality of this unique partnership. Edwin Bender credits Vyv's full participation in every step of the process. “By far, Vyv was the most highly engaged in trying to find the right solution. Their people are wholly invested in the business and are so passionate about that business's mission that they're going to figure out what it takes to get things done. It makes it really easy to be their partner.”

Visit [www.vyv.tech](http://www.vyv.tech) to learn more.

