

VACUSEAL™
Vent Secured Roofing Systems

CASE STUDIES



VacuSeal Project Profiles



**Learn more about Carlisle's
VacuSeal Vent Secured
Roofing System today.**



Carlisle's VacuSeal Vent Secured Roofing System is a revolutionary assembly that uses specially engineered vents that harness the power of the wind to lock the roof securely in place without adhesives or fasteners. By creating negative air pressure to remove excess air beneath the roof membrane, the VacuSeal system creates a suction effect that strengthens the entire roof and locks the membrane in place. The system has been certified with uplift performance at 195 psf negative pressure and is compatible with any of Carlisle's membrane options. In addition, VacuSeal systems are quick and easy to install, do not require special equipment or adhesives, and offer an ideal option for re-roofing and retrofit applications.



PROJECT PROFILE

PROJECT:

Mann+Hummel – Allen Plant

LOCATION:

Gastonia, NC

SIZE:

86,300 square feet

ROOFING SYSTEM:

VacuSeal system with 60-mil
Sure-Weld® TPO

WARRANTY:

20 Year

Mann+Hummel is a leading global manufacturer and supplier of filtration technology. The German-based company operates several plants in the US. Its Allen Plant in Gastonia, NC, produces a variety of automotive and truck air and oil filters for both OEM and aftermarket applications. When the existing 86,300-square-foot built-up roof on the facility was at the end of its service life, the recommendation was to install a Carlisle VacuSeal System, which would not require any mechanical fastening into the gypsum deck.

After vacuuming off the gravel, Radco Roofing of Mt. Holly, NC, installed a half-inch cover board over the old roof, with a 60-mil Carlisle Sure-Weld TPO membrane on top. The innovative VacuSeal system, designed to utilize the power of the wind to secure the roof in place, provided significant savings in installation time and material costs. It was installed efficiently, eliminating the need for mechanical fastening into the gypsum deck.

“Carlisle’s **VacuSeal Vent Secured Roofing System** is a revolutionary assembly.”



PROJECT PROFILE

PROJECT:

Dog House Harley-Davidson

LOCATION:

Rock Hill, SC

SIZE:

15,200 square feet

ROOFING SYSTEM:

VacuSeal system with 60-mil Sure-Weld TPO

WARRANTY:

20 Year

Dog House Harley-Davidson, formerly known as Cox’s Harley-Davidson of Rock Hill, SC, is on a mission to become the premier volume dealer in the Carolinas. With its new name and continued commitment to excellence, the company offers an extensive selection of new and pre-owned motorcycles. When the 30-year-old TPO roofing system on the facility’s 15,200-square-foot roof was at the end of its service life, Radco Roofing of Mt. Holly, NC, was hired to install a new roof that would protect the company’s valuable inventory of new and used motorcycles as well as parts and accessories.

The challenge was to find the best option to avoid mechanically fastening into the steel deck, due to the congestion of wires and cables fastened to the underside. The solution was to install a Carlisle VacuSeal System with 60-mil Sure-Weld TPO. The advanced system harnesses the wind to hold the roof in place and eliminates the need for fasteners and adhesives in the field of the roof. Now Dog House Harley-Davidson has a roof that will endure the local weather and protect its valuable inventory for years to come.

CASE STUDY



PROJECT PROFILE

PROJECT:

Johnson C. Smith University

LOCATION:

Charlotte, NC

SIZE:

15,300 square feet

ROOFING SYSTEM:

60-mil Sure-Weld TPO

WARRANTY:

20 Year

Johnson C. Smith University (JCSU) is a private liberal arts college with a rich history that dates to its founding in 1867. The college ranks as one of the best small colleges in the nation, offering 25 undergraduate degree programs to nearly 1,100 students. Radco Roofing of Mt. Holly, NC, was hired to replace the failing built-up roof on the school's Myer & Sanders Dormitory. The dorm facility has a concrete deck, which made it an ideal candidate for Carlisle's VacuSeal System. VacuSeal is an advanced system that harnesses the wind to secure the roof in place and eliminates the need for fasteners and adhesives. For the project, Radco first vacuumed gravel off the 15,300 square foot roof and fully adhered a half-inch coverboard over the top. The final step was to install the VacuSeal Air Distribution Strips, a 60 mil Sure-Weld TPO membrane, and of course, the VacuSeal Vents. Since they did not have to fasten into the concrete deck, the installation was fast and efficient, and JCSU now has a new roof to protect its facility and students for the next few decades.