Brings Outdoor Equipment to the Northeast and Gets Protection from A Name as Recognizable as Its Own

Founded in 1961, Cabela’s is the world’s largest direct marketer, and a leading specialty retailer, of hunting, fishing, camping and related outdoor merchandise. Cabela’s is a shining example of the classic “American success story,” where an idea, hard work, timing and just a hint of luck culminated in one of the most prosperous companies within its industry.

Long recognized as the World’s Foremost Outfitter, Cabela’s has put increasing emphasis on retail expansion in recent years. Featuring the company’s trademark look and feel of the great outdoors, every Cabela’s retail store is highlighted with impressive architecture and interior design.

East Hartford, Conn., an area known for its rugged yet outdoor-friendly terrain, is home to one of Cabela’s new retail stores. Similar to its commitment to sell the most durable and dependable outdoor products on the market, Cabela’s wanted its East Hartford store to be constructed from only the finest materials. Selecting quality roofing materials for the building was a priority for Cabela’s. The store is outfitted with a combination of flat roofs and trademark green, standing-seam metal, steep-slope rooftops, mansards and dormers common to virtually every Cabela’s retail outlet.

Due to the extreme temperatures experienced underneath metal rooftops, a specialized, heat-resistant underlayment was required beneath the panels. The project’s architect specified a material, however the roofing contractor, R&S Construction, submitted a substitution request incorporating WIP® 300HT, a self-adhesive, high-temperature underlayment manufactured by Carlisle WIP Products.

Part of the Carlisle Construction Materials (CCM) family of companies, Carlisle WIP Products offers a variety of underlayments designed for use under a number of roofing materials. Carlisle WIP Products also offers insulations and flashing materials that help reduce air leaks and lower a building’s energy consumption.

“We have been installing Carlisle’s WIP line of self-adhesive underlayments for nearly a decade, so we are familiar with them and we are confident in their performance,” commented Tom Brunetti, steep-slope roofing project manager for R&S Construction. “There are a lot of self-adhesive options out there, but none of them offer the same levels of dependability or competitive pricing as Carlisle’s WIP product line, which is why we submitted the substitution request on its behalf.”

Cabela’s Retail Store

<table>
<thead>
<tr>
<th>Project Location:</th>
<th>East Hartford, CT</th>
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<tr>
<td>Product Used:</td>
<td>Carlisle’s WIP 300HT Roofing Underlayment</td>
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<tr>
<td>Square Footage:</td>
<td>65,000 square feet</td>
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For this project, WIP 300HT was an obvious choice among Carlisle WIP Products’s line of self-adhesive underlayments. A rubberized asphalt laminated to an impermeable polyethylene film, Carlisle’s WIP 300HT offers dual-barrier moisture protection and can withstand temperatures up to 250°F, often commonplace underneath heat-retaining metal roof panels. WIP 300HT is available in black or white and features new skid-resistant surfaces, so its versatility allows it to be used in virtually any location. Offering excellent adhesion and self-sealing properties, WIP 300HT also meets ASTM D 1970 code approvals.

Metal roof underlayments weren’t the only portion of this project to have a Carlisle flare however. In addition to the use of Carlisle’s WIP 300HT underlayment beneath the metal rooftops, R&S Construction also installed Hunter Panels’ Cool-Vent™ insulation to the steep-sloped roofs and Carlisle SynTec’s 60-mil, non-reinforced Sure-Seal® EPDM roof system on the building’s three flat roof sections. Hunter Panels and Carlisle SynTec are also divisions of CCM, making the Cabela’s rooftops a conglomeration of proven and dependable Carlisle-manufactured materials.

The CCM name is known throughout the construction industry for providing long-lasting roofing and waterproofing solutions for the entire building envelope. R&S is quite familiar with Carlisle’s strong reputation and the dependable performance of its products, and they quickly, and rather easily, sold those qualities to Cabela’s.

“When we saw the need for both steep-slope and low-slope roofing materials, we knew that the Carlisle family of products would be an ideal solution for this project,” said Brunetti. “The building owners and project architect were very receptive to the idea of installing products that came from related businesses. Carlisle is a household name in the roofing industry, so everyone knew that these products were durable, dependable, and because they’re related organizations, we knew that they would be compatible with one another as well.”

The building was constructed utilizing a combination of precast concrete panels, cultured stone and logs, which help create a sense of the great wide open that many visiting shoppers and outdoor sports enthusiasts travel great distances to experience. After the building’s exterior shell was upright, two different roof decks were installed overtop of steel roof trusses: a tongue and groove wood deck around the building’s large, central skylight and a 22-gauge metal deck that covered the remaining roof surfaces.

When the decks were firmly set in place, R&S began installing the roofing materials. For the steep-sloped metal sections, the process began by mechanically fastening a layer of Hunter’s Cool-Vent, a vented insulation product consisting of polyiso insulation, wood spacers and a nailable OSB top surface, directly to the roof decks. Cool-Vent helps increase air circulation in a roof assembly, resulting in lower roof surface temperatures and increased service life.

Next, the contractors adhered the 300HT underlayment directly to the OSB on top of the insulation, beginning at the bottom of the roof and working upward. R&S overlapped each subsequent layer of material five inches in order to prevent future leakage if water managed to slip through the finished metal roof panels.

After the underlayment was adhered, Brunetti’s crew fastened clips through the underlayment directly into the OSB on Hunter’s Cool-Vent, which was attached to the roof deck with separate fasteners. These clips are responsible for holding the metal roof panels in place. Carlisle’s 300HT, and its entire line of self-adhering underlayments, are self-healing, so they quickly seal themselves around any fasteners and penetrations. This quality helps eliminates the likelihood of future leakage. When all the clips were secured, R&S completed the installation by attaching the standing seam panels onto the clips.

Because of 300HT’s self-adhesive and self-healing properties, R&S easily and quickly installed the underlayment and metal panels to the 65,000-square-foot rooftops with little complications. “Our guys love Carlisle’s 300HT because it is so easy to work with,” commented Brunetti. “Simply peel off the poly film backing and lay it down. It doesn’t get any easier than that.”

Marc Berger, R&S’ low-slope roofing project manager for the Cabela’s project, may have to disagree with Brunetti. Berger’s crew was in charge of installing 60,000 square feet of single-ply EPDM membrane on the building and with the help of some recent Carlisle innovations, beginning with Factory-Applied Tape (FAT™), the installation was a breeze.

“Carlisle SynTec’s EPDM membranes with Factory-Applied Tape are great to work with,” commented Berger. “Because the membrane is manufactured with a uniform layer of tape already on the sheet a number of installation steps are eliminated and the chances for error are dramatically reduced.”
Carlisle’s FAT is a unique seaming system that drastically increases installation speed. Applied under Carlisle’s strict, factory-controlled environment, FAT provides uniform adhesive width and thickness and reduces the risk of human error during seam installation. In side-by-side comparisons, Carlisle membranes featuring FAT seam technology have been proven to reduce seaming time by 75 percent, while cutting labor requirements by one-third, when compared to other tapes available in the marketplace. FAT also reduces the risk of seam failure by delivering 30 percent greater peel strength and 32 percent greater shear strength.

Another Carlisle innovation that R&S used on this job was Carlisle’s self-adhesive, prefabricated accessories, included pipe boots and corners. According to Berger, the pipe boots were essential to flashing in a roof that was loaded with heating and cooling equipment as well as a number of rooftop machines that served the store’s in-house restaurant.

“This roof was extremely cut up, and there’s no way we would have been able to finish it on time without using Carlisle’s accessories,” said Berger.

Carlisle’s prefabricated accessories feature a pre-applied adhesive that enhances the products’ performance while increasing installation speeds. Like FAT, they are relatively new to the marketplace, having been introduced within the past few years, however they have continued to grow in popularity, replacing standard flashing details on many projects.

For the low-sloped roof installation, R&S began by mechanically fastening a layer of 1.5-inch thick polyiso topped with another two-inch layer of the same insulation. The seams were staggered between the two layers to eliminate heat loss and reduce thermal bridging, resulting in superior insulating value and increased energy savings for the property. R&S also installed tapered polyiso around all rooftop drains to help facilitate water removal from the system.

Next they began adhering the 60-mil EPDM membranes into place with Carlisle’s Sure-Seal 90-8-30A Bonding Adhesive, running them up and over all parapet walls to ensure adequate waterproofing protection across the entire rooftop. The adhesive was applied directly to the insulation and the 10-foot by 100-foot sheets were simply laid into it and rolled over with a 100-pound roller to initiate adhesion.

To complete the installation, R&S utilized the prefabricated accessories and capped all parapet walls and roof edges with Kynar®-coated metal fascia and coping. Even with the large size of the roof and the significant amount of penetrations, R&S was able to complete the entire low-sloped installation ahead of schedule, a testament to the advantages that Carlisle’s FAT and prefabricated accessories provide.

“The FAT system combined with Carlisle’s prefabricated accessories provides us with significant labor savings of at least 20%, which allows us to complete jobs more quickly and pass the savings on to our customers,” said Berger. “Plus, these products offer better performance and durability than field-fabricated flashings, providing building owners with a greater sense of security and protection.”

To date, 28 Cabela’s stores have been built and more are expected in the future. Cabela’s has been providing outdoor enthusiasts with the best in service and supplies for nearly 50 years, and its popularity continues to grow. Carlisle Construction Materials is committed to doing the same for Cabela’s and all of its clients.

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- Tom Brunetti
About Carlisle WIP Products

As a division of Carlisle Construction Materials, Carlisle WIP Products manufactures premium construction products for steep-slope and low-slope residential and commercial applications.

For more information about the products and services offered by Carlisle WIP Products, call 888.717.1440 or visit their web site at www.carlislewip.com.