

TRAILER LIFE

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WAYS TO BOOST POWER AND BOLSTER TOW-VEHICLE LONGEVITY

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HIGH AND DRY

CRAZY SEAL HAS DEVELOPED A NEW DO-IT-YOURSELF ROOF REPLACEMENT WITH A 50-YEAR WARRANTY

Water damage from leaky roofs can usually be traced to a lack of required maintenance. The result leaves an RV with structural damage, mold, mildew and a loss of value, and sometimes even a total loss. Once this type of damage becomes detected, owners have to make repair choices, often leading to a complete roof replacement. For those on the

handy side, there's Crazy Seal, a company that specializes in durable roofing products for RVs.

To verify practicality of using such a product, we installed two Crazy Seal roofs at Tim's RV in Erving, Massachusetts. The first went on a 2015 Keystone Montana fifth-wheel with the original EPDM roof, which had been maintained properly, so there were no decking issues.

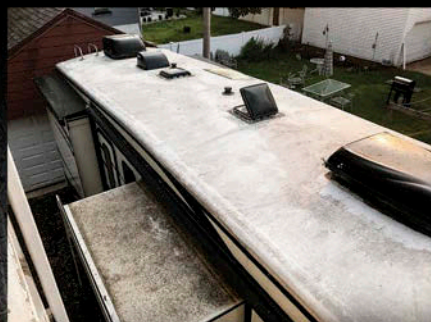


UPGRADE

SILICONE ROOF REPLACEMENT

Product	Crazy Seal
Difficulty	
Time to Install	10-20 hours
Cost	\$388-\$2,000

www.crazyseal.com



⊖ **Before:** The 2015 Keystone Montana fifth-wheel had been sitting under trees at a seasonal site, and while the seals had been maintained, the roof and accessories had suffered.

⊕ **After:** Crazy Seal's 50-year warranty for its silicone roof replacement will help to ensure that the fifth-wheel stays dry inside for a long time.



The second went on a 2008 Jayco Jay Feather where the roof had been removed. RV roofing materials are used for several reasons, most of which have to do with their ability to be installed efficiently on an assembly line and be cost-effective. These include glued-down membranes, aluminum and fiberglass.

Membranes (EPDM, TPO and PVC) are suitable in a commercial setting, but technology in this arena has come a long way. Where long rolls of EPDM roofing were once required, and for buildings with large roofs that are seamed together at numerous joints, liquid-based membranes can now be formed in place, making a seamless, robust one-piece roof. The problem with using liquid-based roofing products in the RV space is that they often take days to install because of curing time in different stages, making them unusable in most manufacturing settings.

While the RV world has embraced the use of EPDM, TPO and PVC membranes, one issue to deal with is the seams, which can stress over time. Unlike membranes on a fixed building that doesn't move (much), an RV gets shaken, twisted and blown around all the time, leading to seam inspections and renewal as frequently as every 90 days.

In the aftermarket, however, there are options for improved RV roofing materials that can be installed directly on top of an existing roof. Until recently, this process required a professional installer who would apply a commercial multilayered roofing product over the course of a couple of days.

The process is complicated enough that specialized equipment and training are required. However, the result is an excellent one-piece, virtually impenetrable membrane that covers every inch of the RV's roof and every seam, and is maintenance-free. And in the case of at least one provider, the roof comes with a lifetime warranty covering parts and labor that follows the vehicle identification number, not the owner.

There are some downsides to aftermarket roofing-renewal systems: namely, the cost and any repairs for damage caused by a branch. Such repairs require a company to come out and do the work. Many RVers needing new roofs for their RVs because of age, wear or lack of maintenance would like the benefits of an applied one-piece membrane but prefer not to spend several thousand dollars.

Crazy Seal, designed and marketed by longtime commercial- and RV-roofing expert Lee Thaxton,



INSPECTION AND PREPARATION 1-6 1) The Crazy Seal kit, sized for the length of the Montana's roof, comes with cleaner, caulk, patch and seal, as well as seam tape if the roof is stripped. Rollers, masking tape and paint trays are not included. 2) The first step is to carefully clean and inspect the roof using the kit's Crazy Clean product. Decking rot must be mitigated before continuing. Proper cleaning and initial preparation are essential. 3) While doing any roof makeover, replace plastics that are even slightly suspect. For this project, the skylight, all vent and sewer-vent covers, as well as the attic vent lids were replaced. 4) The nonpowered vent in the bedroom was replaced with a MaxxFan Deluxe with a remote control, since the original vent was not reachable without a ladder. 5) A smoke-colored skylight from IconDirect replaced the badly decayed original. The inner portion of the skylight was undamaged, so it was just cleaned. 6) Once the new vent and skylight were installed, anything we didn't want to get Crazy Seal on was covered and taped. Removing the air conditioners is optional and, in this case, the rear Dometic unit had just been replaced and the front seal recently inspected. The roof under the air conditioners was in good shape so they were left in place. If the air conditioners are removed for service in the future, this area of the roof can be easily treated. The side rails and front cap were taped off to allow for an attractive termination.

CRAZY SEAL APPLICATION 7-11 7) After taping, Crazy Caulk is used to seal the side seams. 8) Once the caulking is done, Crazy Patch is applied over all horizontal seams, patches and hardware bases on the roof. 9) Once the Crazy Patch is applied, the Crazy Seal product is used. At least two thick coats are recommended. Note that Crazy Caulk, Patch and Seal are all the same product but with viscosities for different applications. Once dried, the layered applications bond to become one roof membrane, according to the company. 10) After applying two coats of Crazy Seal and replacing the hardware, the Montana's roof looks new. The Xantrex solar panels were sealed on install with EternaBond tape, and Crazy Seal was applied to the edge of the tape. 11) The Montana's roof survived the harsh New England winter uncovered, and water beaded and ran off it. Roof cleaning is easy, and the company states that the product is stain-resistant.



What's nice about this product is that if you mess up, or if the roof gets damaged down the road, it's easy to fix, and the repairs will be seamless and invisible.



offers a different, more straightforward twist on a liquid-type roof product, which makes it installable by a capable DIYer but stout enough to be covered by a 50-year product warranty.

The basic building block of the patent-pending Crazy Seal system is polyester-fiber-infused pharmaceutical-grade silicone. According to Thaxton, as the product cures, molecular bonds are formed, which create a single membrane. Additionally, the various components in the install kit use the same building block, making them compatible and bondable.

Four products comprise the Crazy Seal system: Crazy Caulk, Crazy Patch, Crazy Seal and a self-adhesive seam tape. This system is versatile enough to be installed atop just about any RV-roofing product in use, or directly on the decking of a repaired roof, for instance, provided that the proper preparation procedures have been followed.

DUAL ROOF REPLACEMENTS

While Crazy Seal isn't technically challenging to install, the devil is in the details. First, of course, is spending a lot of time on the roof, often with stocking feet to keep the surface clean. If you don't have good ladders and clear space around the RV to work in, or if you don't like working at heights, then this project isn't for you. For this reason, Crazy Seal is recruiting dealers, like Tim's RV, to do the installations. Second, proper preparation is essential, as is following the directions to the letter.

If the roof decking has been damaged, removal of the existing substrate and repairing the decking will be required. While the gutter and trim moldings around the perimeter will not need to be stripped off, everything else on the roof, including air conditioners, skylights, vents and antennas should be removed. New gaskets must be used when reinstalling the air conditioners, and replacing

HIGH AND DRY

the vents, skylights and anything plastic should be considered, regardless of whether or not you're stripping off the old roof.

For the Montana project, the MaxxFan lids were replaced with new smoke-colored counterparts, and a new IconDirect smoke-colored shower skylight was installed. The bedroom vent, which was too high to be reachable, was replaced with a remote-controlled MaxxFan Deluxe with cover. The sewer vents were also replaced, and a Togo Roadlink C2 4G LTE and Wi-Fi extender was added.

The results? After some trial and error related to the initial surface preparation, it was necessary to redo a few spots on the roof. What's nice about this product is that if you mess up, or if the roof gets damaged down the road, it's easy to fix, and the repairs will be seamless

DIRECT-TO-DECK APPLICATION 12-14 12) The roof on this Jayco Jay Feather was severely checked and had seen better days. It was stripped down to the decking. 13) The roof was cut away around existing components, including outside gutters and moldings, before Crazy Tape was applied to cover all the seams. Anything metal or smooth must be sanded rough and adequately cleaned before product application. 14) The trailer had a complete roof replacement and is awaiting the new refrigerator vent cover and rooftop air conditioner. A smoke-colored IconDirect skylight was installed as an upgrade.

and invisible.

With both trailers, a tough finished membrane was created that will stay clean, according to Thaxton. "Being a high-solids silicone, virtually nothing sticks to it. Water beads up, and it pretty much washes itself every time it rains," he says.

ROOF CARE AND COSTS

On the 40-foot Montana, we opted for a double-layer system in tan (Crazy Seal is also available in white and gray), which prices out at \$1,664, plus the costs of miscellaneous supplies



HIGH AND DRY

like tape, rollers and cleaners. We spent about 20 hours on this install but were slowed a bit by replacing the aforementioned hardware and the photography necessary to illustrate the process. The Jay Feather was much smaller, but the roof rip-off led to a similar overall time for labor. The direct-to-deck kit for the Jayco ran \$1,376, plus supplies.

DIY savings are significant. A complete membrane replacement installed by a dealership repair shop costs anywhere from \$4,000 to \$6,000. One of the poured-on commercial roofs mentioned earlier could easily run \$6,000 or more for the 40-foot Montana without deck repairs. While not every aspect of the product and install is covered in this article, the company has numerous instructional resources on its website, including detailed videos, and a technical service team is available to provide ongoing support.

To be clear, don't expect a perfectly smooth roof like a new membrane or other roof-replacement product. It isn't supposed to be smooth. Rather, the product is installed using a roller and has fiber strands that give the finished product a

3D texture. If the original membrane is left in place, the Crazy Seal membrane will retain any wrinkles that were there at the start.

As Crazy Seal is a silicone-based product, the roof will be slippery when wet, which is predictable given the material's water-beading ability. When the roof is finished, best safety practices should be followed. As is the case with any roofing project, if you have to go up there, it's best to do so on a dry, sunny day. It's advised not to walk on a wet roof, but if you have to do so, wearing aggressive-tread shoes or boots is recommended. The texture of Crazy Seal does aid with shoe grip to some extent.

Washing the roof should be easy because this cured product will not let anything adhere to it. Everything is said to wash off, and there will be little to no streaking from the roof, except for ordinary dirt. Gone are the EPDM black streaks, and gone is roof-sealant maintenance. Of course, an occasional glance at the roof is a good idea, especially if you suspect something has breached the integrity of the surface.

With all said and done, the finished product looked good, and not having to deal with resealing the roof quarterly is welcome. And the 50-year warranty speaks for itself. **TL**

Special thanks to Tim's RV in Erving, Massachusetts. www.timsrvinc.com

ADDITIONAL SOURCES

Camco, www.camco.net
Dometic, www.dometic.com
IconDirect, www.icondirect.com
MaxxAir, www.airxcel.com
Togo RV, www.runswithtogo.com