































DICOR ROOF INSTALLATION



TRAINING OBJECTIVES

- Provide Dicor roof installation training
- Prepare technicians for RVTI certification training exam







SEC























Tools and Materials







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An AIRXCEL Brand



Water based adhesive (901BA-1 or 917BA-5)

Applied to a wood substrate with a roller.
DiFlex II is applied while the adhesive is still wet.



Water based adhesive (935BA-1 or 935BA-5)

Applied to a wood substrate with a roller. Tufflex is applied while the adhesive is still wet.



Water based adhesive (901BA-1 or 917BA-5)

Applied to a wood substrate with a roller. EPDM Plus is applied while the adhesive is still wet.































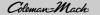


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2. Butyl tape (BT-1834) must be under all vents and accessories on the roof and termination moldings that contact the roof. Butyl tape should also be used under the membrane where it comes in contact with the unit body at the front, rear and side terminations.





























Water based Adhesive

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This material is to be used on porous substrates only.

- Stir thoroughly before use and keep covered when not in use.
- Surface Preparation: Clean, dry surfaces are required for optimum bond strength.
- **Application Methods:** Apply adhesive evenly at a rate of one gallon for every 160-180 square feet to the substance by short nap roller.
- Open Time: Membranes should be immediately rolled onto the adhesive. No waiting time is necessary. Care should be taken to minimize the air trapped between substrates
- **Bonding:** Mate the surfaces with only enough pressure, evenly applied, to insure good contact between the substrates. Excessive pressure can redistribute the adhesive in an uneven manner.
- **Empty containers:** When "empty" this package may contain harmful vapor and residue. Do not reuse container or remove labels. Follow label warning even when "empty". Disposal should be in accordance with applicable regulations.
- **Keep From Freezing**. Store products at 50° F to 60° F for maximum storage life. Do not store below 40° F.

TPO or EPDM Plus	PVC
901BA/917BA	935BA































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 Lap Sealant (501LS) is a self-leveling caulk used to seal screw-type fasteners and termination moldings, formulated for Dicor roofing membranes.

Compatible with EPDM, TPO and PVC membranes. It adheres firmly to aluminum, mortar, wood, vinyl, galvanized metal and fiberglass.



For EPDM Plus membranes, we recommend using our 610SASLW-1 Ultra Sealant.

Ultra Sealant Primer (RP-USP) is a bonding agent primer that is to be used on Dicor's EPDM membrane and some plastics prior to sealing with 610SASL.

DO NOT APPLY ULTRA SEALANT OR PRIMER TO POLYCARBONATE OR POLYETHYLENE PLASTIC ACCESSORIES. DICOR'S 501, 502 OR 551 SEALANTS SHOULD BE USED ON POLYCARBONATE AND POLYETHYLENE ACCESSORIES.































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4. Paint roller (not supplied) should be a 9" wide short nap type. Used to apply water-based adhesive(901BA-1, 917BA-5, 935BA).

5. Push broom or squeegee (not supplied) used to remove air pockets and ensure that the membrane is completely in contact with the adhesive.





6. Caulking gun (not supplied) used to apply lap sealant (501-LS).





























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7. Roof decking (substrate, not supplied), depending on the roof load requirements, should be at least 1/8" lauan plywood. If the load requirements are heavy (storage pods or consistent traffic)a minimum of ½" is recommended. In most new unit applications, ¼" luan or plywood is the minimum material used, while 3/8" material is more prevalent.

NOTE: Dicor does not warrant selection of substrate material. Feel free to contact Dicor with any questions.





























Installation Preparation





























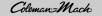
PREPARING THE EXISTING ROOF

• Remove all appliances, vents, moldings, etc. that may inhibit the current roofing material from being removed.



Inspect and repair or replace if necessary. Evaluate the old roof.
Membranes must have a sturdy foundation. Determine if the
entire roof should be removed, or if the addition of decking
(substrate) will be sufficient. Remember that the substrate must
be securely fastened on all edges and seams.





























PREPARATION

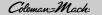
 Either remove the old roof or apply the substrate over the old roof if removal will create structural damage.



 Add new substrate to old roof routing out opening and secure making sure screws are flush or below wood surface.































SUBSTRATE INSTALLATION

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- When applying the substrate, make sure it extends to the edges of the roof.
- Make sure all seams are tight and as level as possible. The substrate should be applied using screw-type fasteners with screw heads level or slightly below the surface of the substrate.
- All substrate seams should be on a rafter for necessary support and to reduce the possibility of "seam separation".





























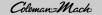
SUBSTRATE INSTALLATION

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- If seams are wider than 1/16" you may want to bridge seams with Dicor Fleece Tape 511FT.
- If on the roof edge, the membrane will be going over a sharp edge, you should either bevel the edge of the substrate with a sander or place the Dicor Fleece Tape 511FT over the edge to protect the membrane from the edge.
- Broom or blow-off of substrate all foreign materials and check entire roof for exposed screw heads or sharp objects that may prematurely wear the membrane.





























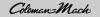


PREPARATION

- Route-out or cut all vent and appliance openings.
- Sand any sharp edges around the roof and A/C and vent cover opening to avoid any roofing material product stress or damage.































Roof Installation

- Measuring and Cutting the New Roof Material
- Applying Adhesive
- Positioning the New Roof Material
- Securing the Roof Material
- Sealing the Edges and Seams





























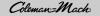


MEASURING & CUTTING

- IMPORTANT: ALWAYS roll out your roofing material to make sure it is the correct size and inspect for any damage PRIOR TO APPLYING THE ADHESIVE.
- Once the adhesive is applied the roofing material can not be returned for replacement or credit.































APPLYING ADHESIVE

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Fold the roof back to the middle of the coach in 3 - 4 foot folds (3"-4" folds on work station).

































APPLYING ADHESIVE

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- Apply the glue 3-4 feet at a time in front of the material and fold the roofing material in place using a squeegee or roller removing all air pockets.
- Remember the roofing material should go under the front cap and over the back cap if there is one on the coach.































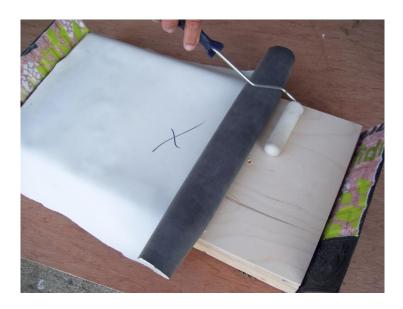




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APPLYING ADHESIVE

- Repeat the procedure on the other side of the coach.
- Be sure to mark location of any cutouts required.











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APPLYING MEMBRANE MATERIAL

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- When applying roof membrane and working with side rounded corners on roofs to make a clean installation it is best to apply the glue to both the bottom side of the membrane and to the non-porous rounded side mold and let the water evaporate.
- The glue should be sticky but not wet (like contact cement).
- Smooth out the membrane onto the rounded corners.

































APPLYING BUTYL TAPE

 Apply butyl tape to your termination and transition strips.

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 ONLY remove the paper when you are ready to install the mounting strips.





























SECURING THE ROOF MATERIAL

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Secure the transition strips on the edge of the roof caps with the longer lip on the roof side and the shorter lip over the roof cap with screws.



When securing termination strips, it sometimes may be recommended using a sliding template working from the middle of the coach out towards back then to the front.



































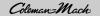
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Trim off any excess roofing material with a razor knife without damaging the roof caps.

































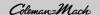


INSTALLATION OVER VENT COVER

 Cut X cut ¼ - ½" from vent cover edges to center of opening.































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INSTALLATION OVER VENT COVER

- Using a hole punch, push the punch into each vent cover corner to make a punch hole "tear stop."
- This prevents tearing of the material and makes a cleaner corner cut.





























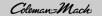


INSTALLATION OVER VENT COVER

 Secure roofing material in vent hole frame and cut off excess.































 Add Butyl tape to vent cover piece and screw in place for self-leveling lap sealant.























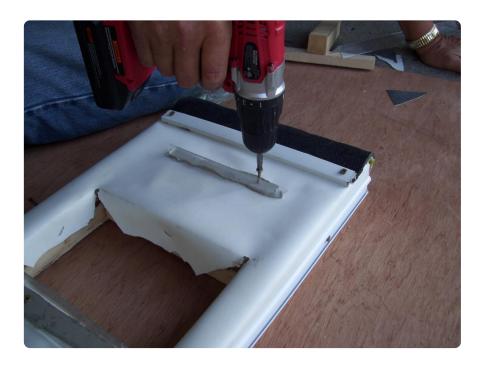




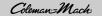




 Add Butyl tape and install simulated antenna bracket in place to apply non-sag lap sealant.









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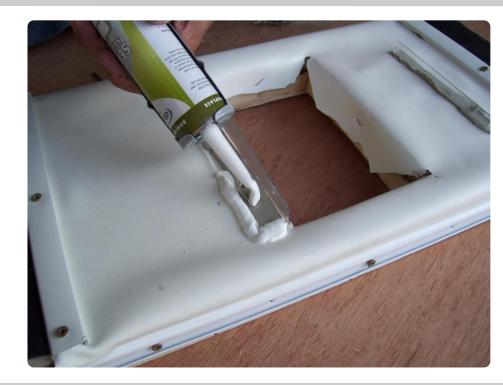




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INSTALLATION

- Apply self-leveling lap sealant using a 1/4" to 3/8" bead starting on the top edge of the simulated vent cover working a slow even flow around the flange edge and roofing material.
- Apply lap sealant to all screws.
- Any horizontal flange higher than ¼"
 you should apply non-sag lap sealant.
- Reinstall nut cover back onto sealant.



























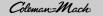




- Apply non-sag lap sealant on the higher flange mid way between the roofing material and the corner flange.
- Three layers is recommended like a weld.
- Put nut cover back on to sealant.



























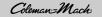




 Apply self-level lap sealant around transition strips.







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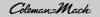




 Apply non-sag lap sealant to termination strips.































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Roof Installation Complete

Questions?































Finishing Touches

- Reinstalling Roof Fixtures
- Inspecting for Leaks
- Final Cleanup





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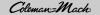


REINSTALLATION OF ROOF FIXTURES

- Using a utility knife "X" cut all roof openings.
- Make sure all openings are cut the same size as previous openings.
- Round all 90-degree cuts to eliminate "running cuts".
- Surplus membrane should be stapled inside vent openings.
- Do not stretch the membrane.
- Trim all excess material.

































REINSTALLATION OF ROOF FIXTURES

- Apply butyl tape (BT-1834) to all appliances, vents, etc.
- Re-install using screw-type fasteners.
- When installing the vents, appliances, etc., you may notice that the membrane near the screws begins to "creep" and small air pockets form. Simply "Walk" the bubble toward the opening and hold-in-place while installing screw-type fasteners.
- Caulk all screw heads, front and rear termination bar and all accessories.



Note: Only Butyl Tape can be used with membrane to assure proper seal.































REINSTALLATION OF ROOF FIXTURES

Install lap sealant (501-LS) using a 1/4" to 3/8" bead, as follows:

- Bridging the membrane on all appliances
- Both ends of the front and rear termination molding
- Top edge of side roof edge molding.
- All screw heads located on the roof.

NOTE: 551LS Non-Leveling Sealant may be more suitable for use on accessories with taller flanges such as TV antennas, some skylights, etc.

NOTE: Do not use silicone. Clean all surplus caulk and debris from the roof. Note: If the unit has a fiberglass or metal side radius cap, a bonding adhesive may be used in these areas. Normally, pulling the membrane tight under the side edge roof molding will be sufficient. If you determine a bonding adhesive is necessary please call Dicor for additional information.































INSPECTING FOR LEAKS

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Inspecting your RV roof for leaks is essential to prevent water damage and maintain the integrity of your vehicle. Here's a step-by-step guide to help you:

Visual Inspection:

- Exterior: Climb up on the RV's roof and carefully examine the entire surface for any signs of tears, cracks, or seam separation. Pay special attention to areas around vents, skylights, and other roof penetrations.
- Interior: Check for any discoloration, soft spots, or wrinkles on the walls, especially around doors, windows, slide-outs, and vents.

Check Seals and Caulking:

o Inspect the seals and caulking around roof seams, vents, and other penetrations. Look for cracks, voids, or areas where the sealant is peeling away.

Pressure Test:

If you have access to a pressure test machine, you can use it to detect leaks. This involves
pressurizing the interior of the RV and applying a soapy water solution to the exterior. Bubbles will form
at the site of any leaks.































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INSPECTING FOR LEAKS



Water Test:

 Use a garden hose to gently spray water over the roof, focusing on seams and penetrations. Have someone inside the RV to check for any signs of water ingress.

Regular Maintenance:

 Make roof inspections a regular part of your RV maintenance routine. Inspect the roof at least twice a year, and more frequently if the RV is used more often or it's exposed to harsh weather.





























FINAL CLEANUP

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After replacing an RV roof, a thorough cleanup is essential to ensure everything is in order and to prevent any future issues.

- Remove Debris: Collect and dispose of all old roofing materials, nails, screws, and any other debris from the replacement process.
- Clean the Roof Surface: Sweep and wash the new roof to remove any dust, dirt, or adhesive residue. Use Dicor's roof cleaner.
- Inspect the Roof: Check the new roof for any missed spots, loose edges, or areas that need additional sealing. Ensure all seams and edges are properly sealed.
- Check Vents and Fixtures: Make sure all vents, skylights, and other fixtures are securely reinstalled and sealed. Look for any gaps or potential leak points.
- Clean Up Tools and Equipment: Clean and store all tools and equipment used during the replacement. This includes brushes, rollers, and any other items.
- Dispose of Hazardous Materials: Properly dispose of any hazardous materials like old sealants or adhesives according to local regulations.
- Final Inspection: Do a final walk-around and inspection to ensure everything is clean and secure. Check for any leftover debris or tools.

































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Finishing Touches Complete

Questions?































Roof Repair Seal-Tite Tape





























ROOF REPAIR - SEAL-TITE TAPE

How to repair a cut in roofing material:

Make a cut in roof









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ROOF REPAIR – SEAL-TITE TAPE

How to repair a cut in roofing material:

Prepare cut area by cleaning with Dicor roof cleaner and denatured alcohol by applying with a clean cloth































ROOF REPAIR - SEAL-TITE TAPE

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How to repair a cut in roofing material:

- Cut the Seal-Tite repair to 2" longer on each side past the damaged roofing material.
- Be sure to trim around any obstacles prior to applying the tape.































ROOF REPAIR – SEAL-TITE TAPE

An AIRXCEL Brand

How to repair a cut in roofing material:

 Catching the corner of the Seal-Tite gray side, start to remove the protective adhesive strip.































ROOF REPAIR - SEAL-TITE TAPE

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How to repair a cut in roofing material:

- Line up and start the tape 2"
 past one side of the cut and
 slowly remove the protective
 strip while using a roller or putty
 knife pull remove any air or folds
 securing the tape in place or the
 damaged area.
- Use a roller or putty knife start from center of the tape and work out towards all the edges to complete attachment.











GEGI























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Roof Repair Seal-Tite Tape

Questions?































Seal-Tite Corner Seal Installation

























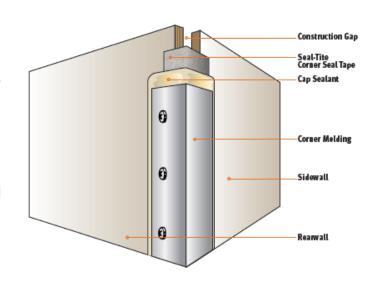






SEAL-TITE CORNER SEAL INSTALLATION

- Begin by removing the insert trim, screws and molding from the desired area. Remove the molding carefully so that it will be in the best condition possible when you reinstall at the end of the process. Avoid kinking or bending.
- Carefully scrape away all conventional putty and sealants on the inside of the corner molding.
- Clean the area on the RV where the Corner Seal Tape will be applied, first with soapy water and then with denatured alcohol on a clean cloth.
- Replace any rusty or damaged staples in the corner area to hold the metal pieces together as tightly as possible.
- To ensure the Corner Seal Tape is applied as accurately as possible, temporarily hold the corner molding on the RV corner being repaired and mark along edge of the molding with a pencil to form a guideline for the tape. Set corner molding aside.

































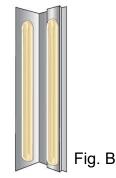
SEAL-TITE CORNER SEAL INSTALLATION

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 Apply Corner Seal Tape from the top of the seam down to the bottom, keeping the tape as straight as possible, and pressing firmly to make sure the tape conforms to the siding. Fig. A



 Place a ½" bead of Dicor Cap Sealant along the inside of corner molding. Fig. B

































SEAL-TITE CORNER SEAL INSTALLATION

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- Inspect and replace any rusty screws or damaged molding to ensure a tight seal. Replace the corner molding with the screws.
 Do not overtighten screws. Tighten until sealant just begins to ooze out from under the edges of the molding. Do not overtighten screws. See Fig. C.
- Clean sealant from edges of molding using a putty knife and clean cloth with soapy water. See Fig. D.
- Apply a small finishing bead of Cap Sealant to the exterior seams of the molding. Using clean water, fill the spray bottle.
 Mist the finishing bead of sealant and tool smooth using a clean wet cloth.
- · Re-install insert trim from first step.

You have successfully applied Seal-Tite Corner Seal to an RV, creating a virtually impermeable seal that will last!

Fig. C



Disclaimer: If the Corner Seal roll is shipped during the warm summer months, it is possible the roll can become sticky. Simply place Corner Seal roll in the freezer for a few minutes to regain firmness.

































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Seal-Tite Corner Seal Installation

Questions?

































Seal-Tite Window Foamcore Kit





























An **AIRXCEL** Brand



- This Seal-Tite[™] Window Foamcore Kit is designed to provide you with everything you need to seal a new window or repair a leaking window!
- The kit contains 88' of foamcore butyl tape, enough to reseal 6-8 windows, depending on size.
- The Seal-Tite Foamcore requires no trimming, it will not sag or ooze, and it has excellent temperature resistance in warm and cold climates
- The round shape of the foamcore butyl allows precise placement around the window radiuses.































How to reseal with the Seal-Tite Window Foamcore Kit

 Begin by locating the screws on the interior window frame that secure the clamp ring. Remove all screws using correct screwdriver.





























 Remove the clamp ring and then the window from the unit.

NOTE: Removing the window requires 2 people. One person on the inside of the unit, pushing the window out. The other on the outside of the unit to help take the window out safely.





Med





















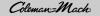




 Clean the old sealant from the exterior metal or fiberglass of the unit and from the window once it is removed. Use the putty knife in the Seal-Tite Foamcore Kit.



























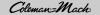




- After the removal of the old sealant, clean the exterior surface of the unit and window with denatured alcohol.
- On metal units, check the exterior for staples around the window opening. You may have to replace old staples that have rusted with new staples.































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Starting at the bottom of the window, install
the new Seal-Tite Foamcore tape around the
window frame leaving no gaps. Position the
Foamcore approximately 1/8" in from the
window's edge while simultaneously
removing the plastic film. Once tape is placed
all along the window, overlap the tape by 3/8"
at the bottom.

NOTE: Seal-Tite Foamcore requires no trimming, as it is an advanced foam coated elastomer that does not sag and has excellent memory characteristics.































An AIRXCEL Brand

- When reinstalling the window, have one person outside the unit and another inside to assist. Make sure the window component is right side up with the weep holes in the window at the bottom.
- Install the interior clamp ring. Do not over tighten the screws. Gradually tighten each screw using a diagonal pattern, i.e. upper right, lower left, upper left, lower right. Proceed around the trim ring until all screws are secure.
- Finish the process by applying Dicor Clear Cap Sealant on top of the exterior window frame and around the top window radius.































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Seal-Tite Window Foamcore Complete

Questions?































How to Reseal RV Corner Molding Video

How To Reseal RV Corner Molding (youtube.com)





























How to Reseal & Replace RV Windows Video

How To Reseal & Replace RV Windows - YouTube































Maintenance Tips























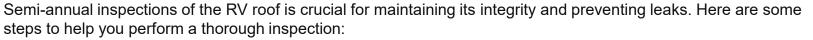






REGULAR INSPECTIONS

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- Identify the Roof Type: Determine if the RV has a walkable or non-walkable roof.
- **Safety First**: If the roof is walkable, use caution when climbing up. If it's not, use a telescoping ladder to inspect from the sides.
- Clean the Roof: Remove any debris, dirt, moss, or leaves. Washing the roof membrane with with Dicor's RP-RC-160C or RP-RC320S Rubber Roof Cleaner is recommended.
- Check for Damage: Check the membrane for possible damage and check the lap sealant used in all termination areas and around all accessories and fasteners. Look for cracks, tears, holes, or any signs of deterioration. Pay special attention to the seams and edges.
- **Inspect Seals and Caulking**: Examine the caulking around roof seams, vents, skylights, and other penetrations. Look for cracks, voids, or adhesion problems.
- The **lap sealant** has a limited life span, depending on the geographic region and conditions, and should be repaired or replaced as needed.
- Repair as Needed: Apply touch-up or rework lap sealant if needed.































ROOF CLEANING

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Cleaning Information:

- Dicor roofing can be cleaned with Dicor Rubber Roof Cleaner. For stubborn stains, a damp cloth with products containing mineral spirits are recommended. Do not use Acetone, Citrus Cleaners, harsh abrasives or products containing solvents.
- DO NOT SOAK (Do not apply mineral spirits directly to roof).
- Do not let any cleaning solvent come in contact with the membrane for extended periods of time.
- Because dust and dirt may collect on the roof, regular cleaning with Dicor's RP-RC-160C or RP-RC320S Rubber Roof Cleaner is recommended.
- When cleaning, rinse thoroughly with clean water to avoid residue build-up on the roof or sidewall of the vehicle.
- Do not park vehicle for extended periods where roof will be exposed to tree sap or fruit as staining may result.
- A medium bristle brush may be used during cleaning.







































CARE AND MAINTENANCE

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- Dicor's roofing membrane is specially formulated for exposure to the sun and natural elements.
- However, it can be cut or punctured by sharp objects.
- Use caution when placing any articles or walking on roof.
- If damage does occur, the membrane can easily be patched.
- Contact your local dealer or Dicor for additional information.
- Use caution when walking on a roof covered with membrane. The surface may be slippery when damp or wet.

























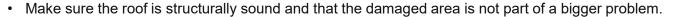




REPAIRING MINOR DAMAGE

An AIRXCEL Brand

For small punctures, cracks or tears, a sealing tape designed for RV roofs can do a nice job. First, some things to note:



- Do not patch over a previous patch
- · Trim any loose or protruding material from the roof.
- · Do not repair with multiple patches
- Patch needs to extend two inches beyond the hole in all directions.

Instructions:

- With the adhesive backing still on, position the patch and mark the edges in pencil or chalk for a positioning guide.
- Cut the patch to size, peel off the adhesive backing and, with great care (once it's down, if you pull it up you need to replace the patch with a new one), press it onto the roof surface using a wallpaper seam roller, and smooth it out from the center to the edges, making sure the entire patch is tightly bonded to the roof.
- Then apply a 5/16-inch bead of self-leveling lap sealant to the edges. Give it a couple hours to set up before
 moving the vehicle.































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MAINTENANCE TIPS COMPLETE

Questions?































CONTACT US

To reach our technical support team:

- 574-247-9235, option 5 for Dicor
- Email: contactus@dicor.com

Additional troubleshooting resources available at www.Airxcel.com























