## NOW THAT YOU HAVE ORDERED A PARK MODEL, WHAT CAN YOU EXPECT?

## 1) THE DESIGN PROCESS

- a) Your Park Model is yours. No one else's. We're going to build it the way that you want it. You get up to (3) three versions of the floor plan for free. After that, you may incur drawing and/or CAD fees. If we can do anything to help you visualize your design, let us know.
- b) After you finalize the design, we'll ask you to "sign off on it." Typically a customer will send an email or initial the design.
- c) At this point we will produce 14 plant drawings that show our associates what you want us to build.
- d) Change Orders? A change AFTER you have signed off on the floor plan is considered a change order. If we can accommodate the change, we will. The fees are \$75 for administration of each change order + the cost of the modification.

## 2) THE PAYMENT SCHEDULE

- a) We pride ourselves on identifying the total cost up front. We also line item the cost of every single choice that you make so you can make a completely informed decision on your cabin.
- b) Some items may be shown as allowances because we cannot readily determine the actual cost. In these cases, the amount shown is an <u>allowance only and extra charges</u> <u>may apply.</u>
- c) In 95% of the line items, we lock in the price. If we make a mistake estimating this cost we eat the cost. We think that's the right way to do business.
- d) The first payment is \$2000. This also puts your project on our production schedule. If you cancel the project before we draw plans, the deposit is FULLY refundable. After we start drawing, the cost is \$1 per square foot. This means that if you have to cancel for some reason after we started the plans on a 400 sq foot cabin, you would get back \$1600 + the floor plan. Once we buy the frame for your cabin or incur other similar expenses, the deposit is no longer refundable.
- e) The second payment is 50% of the balance prior to starting the cabin.
- f) The third payment is the remaining project balance when the cabin is complete.

#### 3) LEGALLY SPEAKING - WHAT IS THIS THING YOU CALL A PARK MODEL?

- a) The federal government passed a law in 1980 defining park models. In 1982, the regulations were promulgated by the Housing, Urban Development Agency (HUD). A short, detailed definition is below:
- b) Park Models are 320 400 square foot recreation vehicles known as "Park Models." These units are exempt from meeting the Manufactured Housing Standard. Rather, the Recreational Park Trailer is to be built to meet or exceed ANSI Standard A119.5 the full code can be found here: http://www.rvia.org/?ESID=ANSI
- c) The current HUD regulation, which was put in place on June 22, 1982, reads as follows:

Part 3282.8 Applicability (g) Recreational vehicles: Recreational Vehicles are not subject to this Part, Part 3280, or Part 3283. A recreational vehicle is a vehicle which is: (1) built on a single chassis; (2) 400square feet or less when measured at the largest horizontal projections; (3) self propelled or permanently towable by a light duty truck; and (4) designed primarily not to be used as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

- d) It should also be noted, when Congress passed this law they made it preemptive of all state and local laws, effectively barring any state or local unit of government from passing more stringent building requirements.
- e) HUD also states that they retain the authority to promulgate a unique and separate standard for recreational park trailers should they deem such a standard to be necessary and appropriate.
- f) North Carolina has a wonderfully specific memo that governs the installation process. If your park model is to be installed in NC, you must have this memo.

#### 4) PERMITS

- a) In some cases, the most challenging process is the permitting process. Since counties don't see a lot of park models, a customer can get a lot of confusing direction from counties.
- b) We have defined what we would expect but, please know, some counties have different procedures and many customers have simply said, "yes sir" and have done what they were told by the inspections offices.
- c) The process below is typical and what we would expect.
  - i) SEPTIC:
    - (1) If septic does not exist on your property, then you must go to the correct county office, complete the application for septic, pay fee and follow their directions. They will give you the septic design. The septic design is specific and the septic installer(s) bid right off that design. Once you contract with septic installer, they handle installation and inspections. Make sure that you have the septic installer run drain pipe so that the connection to the septic is within the perimeter of the cabin.
    - (2) If the septic does exist, then it may need to be re-inspected in order to be declared "good." In any case, the line from the septic to the cabin must be run to within the perimeter of the cabin.

## ii) FRESH WATER

- (1) Your water "service" will either be through a well contractor or city.
- (2) The well or city water must be run within the perimeter of the cabin. This work can be done by the well contractor or a plumber.
- (3) A well contractor typically handles all permits and inspections.
- (4) If a plumber is required to run the line, they can handle all permits and inspections.
- (5) If a plumbing permit is pulled, the county MAY require the drains to be handled by the plumber too.

## iii) ELECTRICITY

- (1) First determine who the electric utility is.
- (2) Set up account with Utility.
- (3) Contract with the electrician to handle service and pull permit.
- (4) Since this is a park model, the Electric Meter cannot be installed on the CABIN itself. It must be installed on a pole adjacent to the cabin. The electrician will know how to do this.
- (5) Detail if your panel is 100 or 50 amps, the electrician must wire the panel to the 100 amp breaker. Put another way, on these smaller panels, do not wire to the "lugs" that a 200 amp panel typically has, instead wire to the main service direct to the 100 or 50 amp breaker. See photo below - do not wire at top of panel, rather wire to the 100 amp break on the top left.



DO NOT CONNECT SERVICE WIRE TO THE TOP LUGS IF YOU HAVE A 50 OR 100 AMP PANEL.

INSTEAD, CONNECT THEM TO THE MAIN 50 OR 100 AMP BREAKER.

#### 5) INSURANCE

- a) In the event of major damage to the cabin during shipping, GRC is insured for each cabin. The cabin is insured as freight and is shipped at our risk. In the event of minor damage as a result of the site or driving to the site, this may or may not be GRC's responsibility to fix. It depends on how the unit was damaged. If tree limbs hit the side of the cabin to scratch the finish or break a window, if the damage was unavoidable during shipping GRC MAY CHOOSE to warranty the damage, otherwise it is not warranted by GRC.
- b) Unless you are specifically notified in writing or email, the unit is your responsibility when GRC completes the contracted work order. This can mean when the cabin is unhooked from the truck or it may mean when the cabin is delivered and blocked up. Your spreadsheet will detail our work on site.
- c) Obtaining insurance for the park model:
  - i) Your finance company may require insurance or you may prefer to have it.
  - ii) We recommend insuring the Park Model. The owner of the insurance company below owns a park model and is very acquainted with insuring them. Please contact Barbara A. Light, Manager, Personal Insurance, AssureSouth, barbara.light@assuresouth.com, (864) 541-0162

iii) You may need a VIN to get the insurance issued - if so, let us know and we'll get it to you asap.

#### 6) How to Title a Park Model Cabin in North Carolina - and other states

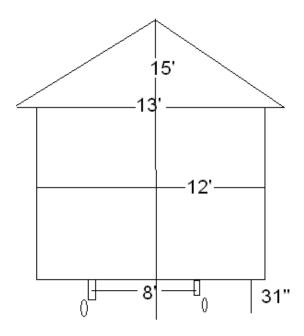
- a) These instructions are to assist customers of Green River Cabins with the process of obtaining a title for a park model cabin located in North Carolina. But the system is very similar in other states.
- b) SALES TAX: GRC is required to collect SALES TAX for cabins that are delivered to North and South Carolina. Sales tax and property tax are 2 different things. When you buy the cabin, there may be sales tax due. Property tax is the annual amount that the state may charge after you get your title.
- c) If GRC has collected the SALES TAX, this is clearly identified in your spreadsheet. In the states of North Carolina and South Carolina, RV Park Model Cabins are taxed 2% sales tax on the first \$15,000 of the purchase price of a unit. The balance is exempt. 2% of \$15,000 = \$300. As the majority of the units are in excess of \$15,000, the North Carolina Sales tax is typically \$300. Green River Cabins collects sales tax from its North Carolina customers and pays N.C. sales tax on a monthly basis. The NC sales tax account no. is 600598966.
- d) Titles may be obtained through the Department of Motor Vehicles (DMV). Customer should provide a copy of the Bill of Sale showing NC or SC Sales tax of \$300 has been paid, the Manufacturer's Statement of Origin (MSO), and if it is NC, the DMV form Title Application (MVR-1). SC cabin customers will receive SC DMV Form 400 from Green River Cabins with manufacturer information completed.
- e) Our experience has been that some DMV locations are unfamiliar with how to process the title. Customers are occasionally asked to pay sales tax and/or 3% Highway Use Tax. If NC or SC, sales tax has been paid through the manufacturer. Highway use tax does not apply to these cabins because they are not self-propelled and size of the unit requires a state permit to move on state roads. If this happens to you, call us immediately and we will give you the State's opinion regarding Highway use tax which exempts these units from the tax. Historically these units have been titled through NCDMV as Mobile Homes. No tax is collected by the DMV. As of the date of this communication, the title fee is \$40.

#### 7) SHIPPING INFORMATION

- a) The park model is delivered with a semi truck mostly because we need the extra horsepower and weight to help set the cabin. We own some specialty equipment that allows us to deliver in some tight and seriously graded curves. We have NEVER built a cabin and been unable to deliver it.
- b) If your site requires, we'll visit the site prior to delivery. We generally charge \$100 for this unless your site is more than 100 miles away.

- c) When it's time to deliver, we produce a Work Order that introduces you to the delivery person and details the nature of the work that he is supposed to complete. This is typically done via email. Your contract with us may include delivery and set up. In this case, you'll see where we have instructed the delivery person to, for example, deliver, block, level, tie down, plumb, etc.
- d) If the driver gets stuck or is otherwise delayed, there could be a charge to get him out or for lost time. If we get a bill, we'll pass it on <u>at cost</u>. There should be no surprises about this. Most customers are on site for delivery and you'll see first-hand what's happening.
- e) There are occasions where branches will reach out and scratch the cabin. We have included a quart of your stain in the cabin so you can touch up the exterior finish as needed.

#### f) THE MAXIUMUM EXTERNAL DIMENSIONS OF MOST PARK MODELS



## 8) WHAT WILL YOU NEED TO COMPLETE ON SITE?

- a) The site should have the fresh water already plumbed so that the water line is within the perimeter of the cabin. The inbound water is identified by a label
- b) The site should have the drain line already plumbed so the connection can be made within the perimeter of the cabin.
- c) Your cabin will have a 50, 100, or 200 amp service.
  - i) a state licensed electrician should be contracted to install the electrical service.
  - ii) If it is 50 amps and if you have paid for it, you will have a 50 amp RV Cord shipped with the cabin and can be plugged into the service.
  - iii) If the cabin has 100 or 200 amp service, the meter base should be installed on a separate pole and the 100/200 amp service run from the pole to the panel.
- d) The Green Tag by your entry door legally identifies your cabin as an RV Park Model and shows its serial number. This tag is required by federal law to stay on the cabin.

- e) All information, keys, and warranties are in top drawer in the kitchen or in the owner's package which is typically in the sink.
- f) To install the few things left, you'll need:
  - (1) a phillips screw driver. A drill with a phillips bit is really useful.
  - (2) a step stool or 4' high ladder
  - (3) a pocket knife
  - (4) a little patience (if you're short on this one, you're in good company.)
- g) Some things do NOT ship well. And we've learned this the hard way. My favorite was an outside fan that was mounted on a porch and then shipped 260 miles. The fan was submitted to 70 mph + winds for about 4 hours. It had spun itself to death by the time it arrived. So now, we remove fan blades on external fans or otherwise arrest their movement.
- h) Keys to your cabin are typically with the driver.
- i) There is a "Locator" document in your Owners Packet. The Locator document will tell you where everything was when it left the factory.
- j) Here is a list of minor components that you will have to install on the Park Model:
  - (1) Use a pocket knife to remove strings and/or plastic ties on the cabinet doors and drawers.
  - (2) The ladder to the loft is typically in the loft (use a step ladder or a tall friend.)
  - (3) Fan Lights: On the inside you must install the globes for the fan lights and the bulbs. We have learned that the road vibrations will sometimes "unscrew" them and throw them to the floor.
  - (4) A Swag light or upgraded pendant lightis the light typically over a breakfast bar or a dining area. The globe and bulb must be installed.
  - (5) Bathroom lights screw in the bulbs
  - (6) Put the toilet lid on back of the toilet.
  - (7) Window screens the screens are above the bathroom or in the loft. You install them by opening the lower sash and seating them down in the frame. Simply drop the screen into the frame (with the little square tabs on the top and facing the inside of the window.) Then close the lower sash and admire your work.
  - (8) The HVAC remote is in the top drawer of the kitchen cabinets. There is a wall mount for it in there too. Place it where ever you'd like using the hanging plastic receptacle and the provided Phillips-head screw.
  - (9) There are a few access panels built into the cabin.
    - (a) There are access panels that are relatively small and cover access holes to plumbing. These are easy to remove w a Phillips-head screwdriver.
    - (b) There may be an access panel in the bathroom to allow access to the water heater. Remove the screws to the panel and floor trim and you have full access.
    - (c) There may be an access panel to the water heater in the breakfast bar. Remove the screws to the panel and floor trim and you have full access.
    - (d) There may be a removable wall/panel on the washer dryer/pantry in the kitchen. This slides out so you can access behind the washer dryer.

## 2) PIERS:

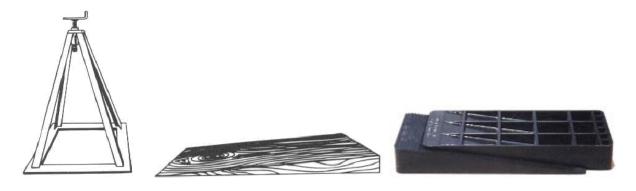
Piers should be supported with 16"x16"x4" concrete pads or ABS plastic pads.



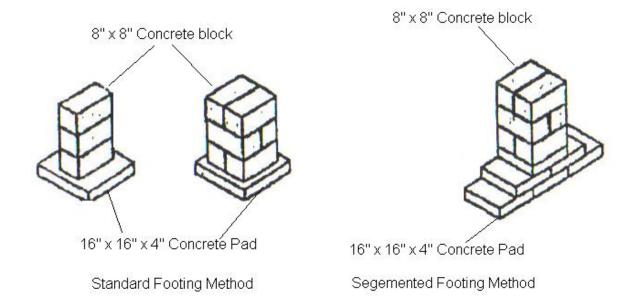


Piers may be concrete blocks, adjustable metal piers similar to those shown below, or other commercially available products suitable for the cabin's weight. 34' cabins weigh 18,500 lbs - 26,000 lbs depending on your design. You may use wood or plastic shims.

When using a metal pier, the pier should be used as directed by the manufacturer. Do not extend the adjustable riser beyond the tolerance suggested by the manufacturer.

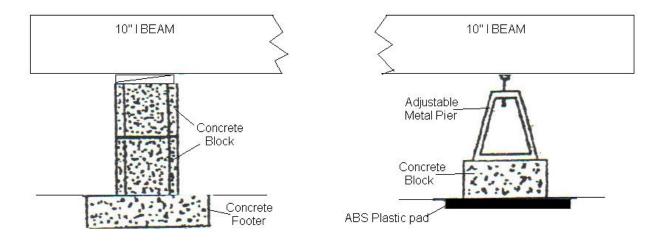


While it may be necessary to use a penetrometer to measure soil compaction at your site, the double block Standard Footing Method (see middle illustration below) is used in almost all installations. The Segmented Footing Method is used with very soft land and is used infrequently.



#### **LOCATING PIERS**

Piers must support <u>both</u> I-Beams that run the length of the cabin. Using the piers on left, unless you have particularly soft ground, use the 2 block stack Standard Footing Method on the (2) end piers and the single block stack method on other piers. With soft ground, use the Segmented Footing Method.



Piers should be placed no less than 2' from either end and no more than 10' on center thereafter.

#### **LOCATING ANCHORS AND ANCHOR STRAPS**

Anchor straps and anchors appropriate to the soil conditions should be placed every 7-8'. The maximum number of straps on a 34' Park Model will be 8.

#### **CONNECTING UTILITIES:**

#### IF YOU CHOSE TO HAVE GRC DO THE ON SITE PLUMBING:

- 1. Your cabin spreadsheet will show if you chose this service. In some states, GRC is allowed to plumb the Park Model but not ALL states.
- 2. If there is any doubt, give us a call and we'll go over it with you.
- 3. If contracted, GRC will plumb the drains to the septic connection and make the connection as long as the connection is located within the perimeter of the cabin. If it is outside of the perimeter there is a risk that we cannot make the connection or extra charges may apply.
- 4. If contracted, GRC will plumb the inbound fresh water line as long as the connection is located within the perimeter of the cabin. If it is outside of the perimeter there is a risk that we cannot make the connection or it is likely to result in extra charges.

# IF YOU CHOSE TO DO THE ON SITE PLUMBING PLEASE FOLLOW THIS PROCEDURE TO PLUMB THE PARK MODEL:

- 1. Plumb all drains first these are the white PVC pipes that come through the belly of the cabin. Check off this list as IT IS POSSIBLE THAT ONE OF THESE LINES IS HARD TO FIND OR DOES NOT PIERCE THE BELLY PLASTIC. A floor plan is in the top drawer of the kitchen that shows the drain locations. Please refer to this drawing when plumbing the cabin. The following is a list of possible drain lines:
  - a. Kitchen drain
  - b. Dishwasher drain
  - c. Bathroom lavatory drain
  - d. Toilet drain
  - e. Tub drain
  - f. Clothes washer drain
  - g. Vent pipe
- 2. Plumb the inbound water to the pipe that is labeled "FRESH WATER INLET". The inbound water pipe has a 3/4" male pipe thread (MPT) fitting to accept a rapid hose connection. You may prefer to cut that off and install a pex connection. Do not install a "Y" or other fitting anywhere on the inbound line. Plumb one incoming line to the inbound line.
- 3. FYI the other water lines that you may see are:
  - i. The hot water tank overflow (uncapped). DO NOT PLUMB ANYTHING TO THIS.
  - ii. The hot water side of the system drain is capped. DO NTO REMOVE THE CAP UNLESS YOU INTEND TO DRAIN THE SYSTEM.
  - iii. DO NOT CONFUSE AN HVAC CONDENSATE LINE LOCATED NEAR AN HVAC HEAD AS A PLUMBING LINE. THIS IS LABELED "HVAC".
  - b. Open ALL hot and cold water faucets in the kitchen, tub, and lavatory.
  - c. Turn on the water to the cabin via an EXTERNAL water shut-off valve. If there is no external water shut-off valve, install one.
  - d. When the water is running from the hot and cold faucets at each fixture, check all fittings in and below the cabin (to include toilet, lavatory supply lines and ice maker line if installed) to make sure there are no leaks.
  - e. Now turn off the hot water side, let the pressure build and check for leaks.

- f. Now turn off the cold water side, let the pressure build and check for leaks again.
- g. <u>Refrigerator:</u> Remove the shipping blocks. The fridge will lean backwards slightly so that the door closes "automatically".
- h. <u>Ice maker:</u> If you paid for the ice maker installation, the valve to the ice maker line is often in the cabinet under the kitchen sink or behind the fridge. Some floor plans do not allow this, so it will not be there in all cases.
  - i. Inspect the line to ensure that the valve is turned on so that water flows to the ice maker.
  - ii. Open the freezer and push the ice maker lever down so the ice maker has water and begins to be made.
  - iii. Run several trays of ice we've found that it may be best to toss the first several trays out.

#### INSTALLING ELECTRIC SERVICE ON A PARK MODEL

- 1. Our suggestion is to turn on the electric service AFTER the plumbing is complete.
  - a. TAKE CARE TO ENSURE THAT THE BREAKER FOR THE HOT WATER TANK IS OFF.
  - b. FILL THE TANK WITH WATER BEFORE YOU TURN ON THE ELECTRICITY. This will prevent the heating element from burning out.
  - c. After the tank is full of water, turn the breaker on.
  - d. If you turn on the hot water tank <u>before</u> you fill it with water, your heating element will look something like this:



- 2. Heat pumps: It is very likely that your HVAC compressor is installed already. If not, follow the instructions below:
  - a. Level the ground where the treated 4 x 4 base will sit.
  - b. Completely remove all shipping constraints from the compressor.
  - c. Gently set the compressor on the ground where the treated 4 x 4 base will sit.
  - d. Using the long screws and the screw bit attached to the base, drive the screws through each corner and into the ground.
- 3. **DO YOU HAVE A GAS RANGE**? THIS IS VERY IMPORTANT. The stove is delivered from the appliance factory set up for natural gas. If we have not covered this point with you and converted the range to propane, please see the owner's manual to convert it to propane use.
- 4. <u>DO YOU HAVE A FIREPLACE?</u> THIS IS VERY IMPORTANT. The fireplace model VERY LIKELY PROPANE. You can find the model number and related information on the metal plate behind the louvers on the bottom of the fireplace.

5. Connect all cable and phone jacks. If you have 2 cable jacks or 2 phone jacks, <u>both</u> must be connected to the incoming service.



#### **OPERATING THE HVAC**

- 1. It is very likely that your cabin has a Mitsubishi heat pump. These units are extremely well engineered, efficient, reliable and long lasting. Here are some tips for operating it.
- 2. After the electricity it turned on simply operate the unit with the remote. The images are small so bring your reading glasses. The first choice is to choose the MODE I typically use HEAT and COOL. These are shown as a SUN and a SNOWFLAKE. It's a little hard to tell them apart.
- 3. Set the fan using the FAN setting. Typically the unit should be set on automatic this is the icon that looks like the "triple swirly."
- 4. The vents should be automatic, unless you want to point the air in some direction.
- 5. In the picture at the right, the unit is set on snowflake COOL, ECONO COOL, with the fan on the highest 4 bar setting the next click of the FAN button will make this automatic and the temp is set on 21 degrees CENTIGRADE. Sorry about that, we could not find a Fahrenheit photo.
- 6. These are so inexpensive to operate it is better to leave them running year round. When you leave set the temp on the lowest or highest temperature to it the season and always allow it to condition the cabin. This is a much better idea than allowing the temperature and humidity to go up and down with the day and or the season.
- 7. VERY IMPORTANT After 2-3 weeks simply open the face of the indoor unit, remove the plastic filters and wash them off in the sink. They are the dirtiest on the top of the filter where you cannot see it but where the air is drawn into the unit. These filters are extremely tight -

10 microns - so the filters trap a lot of little dust and it is important to clean them. If you do not clean the filters when they need it, you will lose 30-50% of the units capacity and you could promote a condition so that the condensate line clogs up and the tray overflows down the wall. At least, that's what we did with our first one in the plant's office.

#### **WARRANTIES:**

- 1. Warranties for the cabin, roof, appliances, all other items are in the owners packet which is typically in the kitchen sink.
- 2. For all items and construction not otherwise covered by a third party, Green River Cabins, LLC guarantees the components and construction for 1 year from date of delivery.
- 3. In a small space as tightly as your cabin is built, high humidity and condensation can be a problem. Please read the article attached below on humidity. Condensation damage is not covered by any warranty. To ensure the best performance of your cabin, <u>always</u> use the bathroom fan when showering and dehumidify as appropriate.
- 4. Please make a special point of reading all materials that are included in your owner's kit especially the article on condensation.
- 5. <u>Problems caused by un-vented gas logs, propane heaters, and other sources of condensation are not covered by our warranty.</u> Un-vented gas logs produce high levels of humidity (up to a gallon

of water per hour) and are not approved for use in the cabin. Over the years we have seen unvented gas logs produce so much humidity that the roof panels buckle. Please do not install unvented gas logs or other appliances. Unvented gas logs or other appliances are dangerous and should never be installed.

#### **WINTERIZING:**

- 1. If you don't have access to a small air compressor, the suggested procedures is to open all the faucets and then open the drain cap that is a galvanized drain cap located under the water heater. In most cases, the siphon effect will clear the lines sufficiently to pull water past any low points in the lines but this cannot be guaranteed.
- 2. To protect p-traps in all of the drain lines, pour RV anti-freeze into them.
- 3. With the water off, flush the toilet. With the tank empty, pour RV anti-freeze in the tank and flush again.

#### If you have access to a small air compressor:

- 1. Turn off the hot water tank by turning off the breaker.
- 2. Turn off the supply of water to the cabin.
- 3. Underneath the cabin, locate a water line that comes straight out of the belly and has a cap on the line. Stay uphill and remove the cap.
- 4. Drain the system.
- 5. To <u>completely</u> purge the lines of water, you must apply <u>some</u> air pressure at each fixture so that water in the line is forced back to the drain. If you equipped your cabin with the winterizing valve, connect the compressor to the valve and simply blow out each line.
- 6. Close all fixtures except for the one that you are clearing.
- 7. Check off the following:
  - a. Kitchen sink (hot and cold)
  - b. Dishwasher
  - c. Refrigerator ice maker
  - d. Lavatory sink (hot and cold)
  - e. Toilet
  - f. Shower (hot and cold)
- 8. To protect p-traps in all of the drain lines, pour RV anti-freeze into them.
- 9. With the water off, flush the toilet. With the tank empty, pour RV anti-freeze in the tank and flush again.

## Condensation

If you are spending a lot of time in a relatively small cabin, it is possible to generate enough water vapor to create problems. If this happens it has been our experience that it'll happen in the winter. Please read the article below. And, take these steps:

- A) Get "humidity test strips" from Lowes or hardware store. These are very inexpensive and you can get several for less than \$10.
- B) If you are getting readings above 40-45%, install a de-humidifier.

- C) Do NOT use unvented kerosene or LPG burners in the cabin ever.
- D) If this does not solve the problem, call us.

What is condensation? Winter is here and the outside temperature is below freezing. Your spouse has just finished doing the dishes in the kitchen, while you have been taking a long hot shower. When you have finished, and walk into the living room, you notice that the windows have steamed up.

What has happened? Why are your windows steamed up? Almost everything we do inside our homes puts water, in the form of water vapor or gas, into the air in our home. When you took your shower, you actually put a gallon or more of the water into the air. When you did the dishes you put water into the air. Water can be put into the air by drying clothes, cooking, even breathing. When this water (as a gas) hits a cold surface, it may return to a liquid state. If it does, you have condensation. Condensation is defined as the transformation of water from a gas or vapor state to water in either a liquid state (droplets) or into a solid state (frost or ice).

Why and when does condensation occur? You need two conditions for condensation to occur. You need enough moisture in the air and you need a cold surface. The greater than the temperature difference between inside and outside air, the greater the chance for condensation to occur.

The word humidity refers to water in the air. A humid climate is a damp, moisture-laden one. What is "enough" moisture? What is "too much" moisture?

Relative humidity is a way of measuring this. At a specific temperature a cubic foot of air will hold so much water. The hotter the air, the more water it will hold. Relative humidity is the amount of water in the air, compared to the amount the air could hold, at that temperature, if it was completely saturated (full). The measurement of relative humidity (RH) is expressed as a percentage. For example, let's say, it can be calculated that the air in your living room, heated to 72F, could hold four gallons of water (as vapor or gas). Then let's say that we know that there are only two gallons of water vapor in your living room right now.

If this condition existed, the air would only be holding 1/2 of the water vapor that it could hold. As a percentage, this would be 50%.

Warm air will hold more water than cold air. Now, what happens when a warm moist air hits a cold surface? The air at that cold surface cools down. It no longer can hold so much moisture. As a result, the water vapor in the air "falls out" on the cold surface, and appears on the surface as either droplets or water or as frozen water (frost-ice). Condensation has occurred because the air was heavily laden with water vapor and it came in contact with a cold surface. This is WHY and WHEN of our subject.

WHERE does condensation occur? As was first pointed out, it commonly appears as moisture or frost on your windows. Normally, it's not a problem, and it won't bother you. However, it may be a sign that the moisture level in your home could be too high. The real trouble of condensation appears when condensation occurs up in the roof cavity or on the underside of the sheathing.

Condensation, as moisture, can appear inside clothes, behind clothes on the walls, or even on walls behind pieces of furniture.

Moisture in any of these areas can be condensation. Again, do not let these examples frighten you. It may sound like a horror story, but I repeat, "It does not have to happen at all!"

Any well built home can have condensation, but you can prevent or eliminate it.

- 1. When cooking and washing dishes, run the wall fan. Keep it turned on the whole time and run five minutes after you have finished.
- 2. When taking a bath or shower, keep the bathroom door closed. If you have a bath ceiling fan, keep it running while in the tub or shower, and let it run for at least five minutes after you have finished.

- 3. Raise a window just a little bit in the kitchen, dining area or hall. Just a penny placed under the window will help let some of this vapor pressure out of your home.
- 4. Daily, air your home out! Open one or two windows and let some fresh air in! This will not only help prevent condensation, it is also just an old fashioned healthy thing to do.
- 5. Do not use a humidifier. A humidifier adds moisture to your home. USE A DE-HUMIDFIER FOR HUMIDITY CONTROL.
- 6. If you install a clothes dryer, be sure it is properly vented to the outside of the home.
- 7. DO NOT USE propane or kerosene heaters, (one gallon of kerosene burned puts more than one gallon of water vapor in the air).
- 8. Set the thermostat and leave it alone. Do not turn it down at night and up during the day. This only adds to the problem.
- 9. When the underneath of your home is enclosed, this enclosure wall should have a minimum of 1 square foot of ventilation for every 150 square feet of crawl space. These vents must be open in the winter. If a vapor barrier (usually polyethylene) is applied underneath the home, install on entire ground and leave at least 3 feet of exposed ground around the perimeter of the crawl space next to the enclosure wall. This will allow any moisture trapped by poly to escape through vents.
- 10. Do not block or remove any attic ventilation.
- 11. Open curtains and drapes as often as possible.
- 12. Do not store wood in the home or basement.
- 13. Limit the number of house plants kept in the home.

You may be interested in what is an "acceptable level" of relative humidity (RH) in your home. You should try to hold the RH below 35%. From experience and testing, it has been proven that when the RH reaches or exceeds 40%, you could be heading for condensation trouble. But why head for trouble? Just follow the thirteen steps pointed out and you will have no condensation. Now, how can you measure or keep track of the RH? Museums use small humidity strips to measure the humidity in cabins, these are very inexpensive and they work well

To be safe, experts agree that the limits should not be exceeding for humidity inside your home. The below is a good rule-of-thumb guide to follow FOR INSIDE TEMPERATURE OF 70F:

#### OUTSIDE AIR TEMPERATURE INSIDE RELATIVE HUMIDITY

-20F OR BELOW	NOT OVER 15%
-20F TO -10F	NOT OVER 20%
-10F TO ZERO	NOT OVER 25%
ZERO TO 10F ABOVE	NOT OVER 30%
10F TO 20F	NOT OVER 35%
20F TO 40F	NOT OVER 40%

#### GREEN RIVER LOG CABINS RV PARK MODEL MANUFACTURER'S LIMITED WARRANTY

All sales and purchases of RV Park Model units ("Units") manufactured, modified or sold by Green River Cabins, LLC ("Manufacturer") are expressly governed by the following limited warranty and the terms and conditions of sale (collectively, "Limited Warranty"). Manufacturer's sale and delivery of the Units is expressly conditional on Purchaser's acceptance of this Limited Warranty. For purposes of this Limited Warranty, "Purchaser" shall mean the initial purchaser of the Unit(s).

#### WHAT IS COVERED

1. <u>General Coverage</u>. Manufacturer warrants that: (i) the Manufacturer is the legal owner of the Units; (ii) the Units are free from all liens and encumbrances except any lien or encumbrance created for the benefit of Manufacturer upon transfer to the Purchaser; (iii) the Manufacturer has the right to sell the Units; (iv) the Units shall be free from material defects resulting from inferior materials or poor workmanship and shall comply with all written specifications Manufacturer provides to Purchaser with respect to the Units prior to delivery; (v) the Units will be free from Latent Defects (as hereafter defined) for a period of one (1) year after transfer of title to Purchaser; and (vi) the Units will be fit for the purpose for which such Units are ordinarily intended. No agent, sales representative or other employee of Manufacturer shall have any authority to modify or expand this express warranty.

For purposes of this Limited Warranty, a Latent Defect is a defect not apparent at the time of transfer of title, but which becomes apparent within one (1) year from the date of transfer of title, and such defect has been directly caused by Manufacturer's failure to construct in accordance with ANSI 119.5 (the standard of construction for RV Park Models published by the American National Standards Institute), as amended from time to time. Latent Defects do not include normal wear and tear, flaws or adverse conditions related to failure of the Purchaser to perform routine repairs or maintenance, or other issues related to the ordinary weathering or deterioration of construction materials.

2. <u>Notice of Minor Deficiencies</u>. Not later than thirty (30) days after the transfer of title to the Purchaser, or thirty (30) days after the date of delivery if later, the Purchaser shall create a written list of any minor omissions or deficiencies not previously made known in writing to the Manufacturer. If such items are a result of inferior materials, poor workmanship, or a failure to meet the specifications provided to the Purchaser by the Manufacturer, then the Manufacturer shall be responsible for repairing or, at its discretion, paying for the cost of repair of such items within a reasonable time after receipt of such notice.

#### WHAT IS NOT COVERED

- 1. <u>In General</u>. Manufacturer shall not be obligated to repair or replace, and Manufacturer's warranties shall be null and void as to, any Units which are not used for the purpose for which they are normally intended, are not used in accordance with applicable instructions and usage constraints, or are damaged by improper use, abuse or neglect.
- 2. <u>Specific Types of Non-Covered Items</u>. This Limited Warranty does not cover certain types of items or issues, such as, but not limited to, the following:
  - (a) Appliances or equipment which are covered by a third party manufacturer's warranty.
  - (b) Defects which are the result of characteristics common to the materials used, such as (but not limited to) warping and deflection of wood, mildew and fading, cracks due to drying and curing of concrete, stucco, plaster, bricks, stone and masonry; drying, shrinking and cracking of caulking and weather stripping; conditions resulting from condensation on, or expansion or contraction of materials.

- (c) Defects due to design or materials supplied by Purchaser or installed at Purchaser's direction, or defects caused by anything not built into, or installed as part of the Unit pursuant to contract between Manufacturer and Purchaser.
- (d) Damages due to ordinary wear and tear, abusive use or lack of proper maintenance of the Unit.
- (e) Loss or injury due to the elements or insects or varmints.
- (f) Non-uniformity of appearance of used construction materials.
- (g) Chips, scratches, or mars in flooring, woodwork, walls, porcelain, plumbing fixtures, plastic laminate, and glass not expressly identified to Manufacturer prior to transfer of title.
- (h) Minor toilet adjustments.
- (i) Minor door adjustments.
- (j) Defects or damage caused by settling, back filling, slumping, movement, shifting, expansion, or plasticity of the soils beneath the Unit once the Unit has been delivered to Purchaser.
- (k) Lost income or revenue for any reason included but not limited to the following:
  - i. Revenue
  - ii. Profit
  - iii. Fixed Costs
  - iv. Temporary Relocation

#### **GENERAL DISCLAIMER OF WARRANTIES**

EXCEPT AS EXPRESSLY PROVIDED IN PARAGRAPH 1 ABOVE, MANUFACTURER DISCLAIMS ALL WARRANTIES AND REPRESENTATIONS OF ANY KIND, EITHER EXPRESS OR IMPLIED, AS TO THE UNITS AND THEIR CONTENTS. IF A TYPE OF DEFECT, A PART OF THE UNIT, OR OTHER CATEGORY OR TYPE OF ANY PORTION OF THE UNIT IS NOT EXPRESSLY COVERED HEREIN, THEN SUCH IS NOT WARRANTED HEREUNDER.

NOT WITHSTANDING THE FOREGOING, NOTHING IN THIS IMPLIED WARRANTY SHALL LIMIT THE IMPLIED WARRANTY OF MERCHANTABILITY, EXCEPT THAT SUCH WARRANTY SHALL BE LIMITED TO ONE (1) YEAR FROM THE DATE TITLE IS ISSUED TO PURCHASER. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

#### **CLAIMS PROCEDURE**

- 1. Should it appear that a possible Latent Defect (non-emergency nature) has developed, Purchaser shall outline pertinent details in writing and deliver the same to Manufacturer. Following receipt of such notice, Manufacturer may choose to make an inspection. If a Latent Defect exists, the Manufacturer will (at the Manufacturer's sole option) either 1) repair, 2) replace, or 3) pay to Purchaser the reasonable cost of such repair or replacement due to such Latent Defect(s); however, Manufacturer shall not be obligated to spend more than the purchase price of the Unit(s).
- 2. All warranty work shall be scheduled during normal weekday working hours except in emergencies.

## **LIMIT OF LIABILITY**

- 1. The Manufacturer shall not be liable under this Limited Warranty unless written notice of the Latent Defect shall have been given by Purchaser to Manufacturer within one (1) year warranty period. Steps taken by the Manufacturer to correct any defect or defects shall not act to extend the warranty period described hereunder.
- 2. The Purchaser shall have ninety (90) days after the expiration of the one (1) year warranty period to bring any legal action hereunder.
- 3. Under no circumstances shall the Manufacturer be obligated to spend more on repairs under this warranty than the total purchase price of the Units.

- 4. In no event shall Manufacturer be liable for consequential or incidental damages.
- 5. IN NO EVENT SHALL MANUFACTURER BE LIABLE FOR LOST REVENUE, INCOME OR PROFITS DERIVED FROM THE SALE, RENTAL OR OTHER USE OF THE CABIN.
- 6. The manufacturer may charge reasonable fees for travel to a customer's site.

## **PURCHASER'S RESPONSIBILITY**

- 1. To receive the full benefits of the Warranty, Purchaser must at Purchaser's expense:
- a. Have the Units serviced regularly as recommended by the Manufacturer.
- b. Keep a record of maintenance and keep receipts and work orders showing date and service performed. For services done by Purchaser, keep personal maintenance record with date and services performed including any receipts for products purchased to carry out that aforementioned maintenance.

#### **TRANSFER OF RIGHTS**

- 1. Manufacturer shall assign to Purchaser all of Manufacturer's rights, if any, under third party manufacturer's warranties on appliances and items of equipment included as part of the Units. Manufacturer shall assume no responsibility for such manufacturer's warranties and Purchaser shall follow the procedures in these warranties if defect appear in such appliances and items of equipment.
- 2. This Limited Warranty is extended only to the Purchaser named herein. It is not transferable to subsequent purchaser of the Units.