

GOULD WEATHER CAMPING



The following advice is my personal experience. Do your own research before trying any of the following to prove or disprove my recommendations and to make your own judgments. I accept no responsibility if you should try the following!

I started to write this because I read a number of posts on forums about how cold weather camping was not possible, even with preparation. One went as far to say that at -10C you would die if you were camping, and in any case, your vehicle would not start at those temperatures. Another said that at -20C nothing will work including vehicles or power. So I started to write this article to show that it was possible and this is what came of it, a lot more than I planned on writing but enough to prove that it can be done.

Yes the temperatures are in C, if this bothers you too bad! Get a calculator.

I could go a lot more in-depth talking about modifications like installing catalytic heaters, spacers under mattresses to help reduce mold, adding more solar panels to compensate for the lower amounts of light, etc. But this was not to cover off every possible situation and preparation just to clear up many misconceptions and to give quick and easy advice if you should find yourself in some cold or you want to try a night or two in the cold.



Cold weather camping is one of those areas that many people think they have knowledge of but few have actually done it. I have camped in some insanely cold conditions and most times in my early life it was because my Dad wanted to go camping and I was crazy enough to go with. But like the saying goes “that which does not kill you makes you stronger” and I did manage to survive.

When I hear campers talk about cold weather camping, I am shocked at how much bad information is out there. People from places like Mexico or the southern US are trying to give advice for when it gets cold, and while that advice may be free, it is also very wrong. So let's take a look at cold weather camping and things you should be doing to ensure that you stay safe, have a great time, and don't damage yourself or your RV unit if you have one.

The following is from my experience, not from a book, not off the Internet or from something I read or things I have heard. Like when I teach photography, I will not teach anything that I have not tried and proven.

First the temperatures. In my book there are 4 sets of temperatures to consider when we are talking cold weather camping. They are:

Level

1. 0C to -5C
2. -5C to -10C
3. -10C to -20C
4. -20C colder

I broke up the 0 to -5 and the -5 to -10 as two separate categories only for those that have RV's as there are a couple differences for how you would treat your RV. Also you can find yourself in a level 1 even in the summer in the mountains without warning, most times a level 2 will be expected. Myself, I do not find much difference from 0 down to -10 on my body or my enjoyment outside.

Your Accommodations

You can camp in cold weather in anything from a tent, the back of a car, a Class A, B or C motor home or any type of trailer including a tent trailer. If you want, you can even make a lean-to or a snow cave to sleep in. If you are not prepared for the temperatures and the situation that you are putting yourself in, your sleep may not be enjoyable, and in very cold temperatures you could be risking your health or your life so I recommend preparing for the way you will be camping! Some types of campers do work better for keeping yourself warm so most of my information is going to be directed to RV's – motor homes, trailers & vans.

Tent

If you want to camp in a tent in the winter, invest in one of the 4 season tents designed for that. You will find they are amazing in so many different ways like a vestibule to store your snow covered gear, vents that not only vent but they can be closed when you want to keep heat in. Also the fabric used in a four season tent is better to keep wind out than the flimsy summer tents that most people have.

Vehicle

I am not talking about a camperized vehicle but rather a standard vehicle that you climb in the back of and go to sleep. Sleeping in a vehicle is fun but you are limited to your heat sources. DO NOT run the car for long periods to get your heat, you run the risk of carbon monoxide poisoning. The best thing I have found for a night or two in a vehicle is a warm sleeping bag or some blankets. If you want to do more camping like this consider a small van and add a heater that can run at night and is properly vented.

RV

Before we get started, you really need to know your RV. I am not talking about tearing it down to the frame and rebuilding it but simple things like where is the water supply tank located, where the water lines run (inside the RV or outside). How large is the battery and where is it located and how does it charge as well as what condition is it in. What type of furnace do you have, is the furnace vented to the bathroom and storage compartments or just pouring the heat into the living area. How insulated is your RV and how good are the windows. Even if you are not planning on camping in cold weather, knowing these things can really help with the enjoyment of your RV all year long. The lower the temperature that you plan to camp in, the more you should know, and the more you should tweak your system to have it work without issues. After -10C, if you are heading out to camp, you really need to take extra precautions. Seldom in the spring, summer or fall will you have temperatures drop to these levels and stay there without warning so if the forecast says cold go prepared.

One of the best ways to prepare for cold weather camping is to camp in your driveway or backyard. If you plan on camping without plugins do that in your home test. Not planning on fresh water in the RV in the winter? Then drain the freshwater tank for your test. Make your test at home as close to the real thing as possible. I have done this many times and it really helps! You think that comforter is warm in 0 C but when you try it at -25C you may quickly realize that it is useless. If you are camped at home, you can go inside and get a better comforter. If you come up against a major issue, it is better to call off the test and walk into the house then to be out in the wilderness trying to survive.

A couple years ago I went to one of my favourite winter camping spots in my truck camper. The temperature was around -12C and was expected to get to -15C that night. A few minutes after pulling in, an older gentleman pulled in and came into the shelter where I had a fire. He was in his 80's and had slept in the back of his car for over 200 nights that year. His system was to go to a local pool before supper and swim and take a hot shower. He then cooked a hot meal and would sit around a fire until he retired to the back of his station wagon for the night. He had a real winter sleeping bag (not one that was good to 0, but was rated to -40) and he found it more comfortable than sleeping in a bed in a house. In the morning he would have breakfast and head back to the pool to swim and shower then go out cross country skiing or snowshoeing for the day. He was having a great time and was well prepared. About 10 minutes after he came into the shelter a young man about 10 years old came into the shelter. His mother brought him winter camping and they were going to sleep in a tent. His mother was back at the campsite making supper and he was out exploring. We invited them to come over and a few minutes later they joined our little group. This was their first time camping - EVER!!! I was concerned that they would freeze as it was going to be cold that night but they had brought a pile of blankets and comforters for their tent, probably more than anyone needed, but they were well prepared. Around 10 pm I headed back to my heated camper and the others went to their spots. When I woke in the morning the older gentleman

was already gone to start his routine. I had breakfast and was cleaning up when I saw the mom and son get up and pack up their things. They looked fine, but before I could get out of my camper, they had packed up and hit the road for the day. Proof that a little preparation can conquer a lot!!

LONG nights!!

One thing that many do not expect when they camp in cold weather is how long the nights are. The early darkness sends many inside trying to stay warm for 4 or 5 hours longer than they would be inside in the summer. During the winter, the nights are longer than the days and it can really affect how you camp and what you do when camped. During the summer, sitting around a fire for a couple hours may be fun on a warm night. In the winter, a fire out in the cold for a couple hours can be a challenge to enjoy. So what do you do? Books and games can be a great way to pass the time but you have to understand that if you are planning on being inside for more time, it will take more energy to heat the inside and to power your lights. If you think you will spend time on a computer or watch TV, this also takes power. When I am talking about power needs I DO NOT take into account these extra needs as they vary greatly with each person. I love to take pictures at night so I pass the night shooting pictures of stars or painting with light. If I am done that, I will head to bed early so I can get an early start the next day.

Solar Power – yes there is free power (once you pay for the equipment)

Solar power is AMAZING to help keep your RV batteries topped up. If the sun is out, it works and it really is as close to free power as you can get. The BIG issue with solar and cold weather camping is that in the winter the sun is up for less time and it is lower in the sky causing more shadows so less power is generated. Also, we tend to get more cloudy days in the winter, reducing again the power you will get from a solar set-up. My recommendation if you are using solar in the winter is to install more solar than you would need in the summer, and add more battery power so when the sun is working for you, it is able to top up more storage batteries giving you more time to wait for the next nice day to charge.

Generator

I am not a fan of generators!!!! I find them noisy and like outside TV's and stereos, are not needed for camping in my opinion. You are in nature so enjoy nature!!! That being said, if you are planning on a lot of cold weather camping you may find a generator a benefit in your daily routine or in an emergency. Unlike a solar system, a generator is a sure fire way to get power in darker, cloudy, short days. But before I get into any more, PLEASE respect your neighbours and keep your run time to a minimum! A built in generator in your RV has a number of benefits for cold weather camping like being able to run a 110V heater in an emergency, recharging your batteries or for powering entertainment devices during the long cold nights all with the flick of a button and no setting up. They also have some drawbacks like if they are fed by propane or even diesel in extreme cold they may not work. A portable generator is a possibility or even a better choice than a built in for many reasons. A huge benefit of a portable generator is that you can transport it inside a warm area and in extreme cold, being already warm will aid in it starting easier. If you do transport your generator and/or fuel inside any closed area, please take necessary precautions for your safety. If you are worried about leaving a generator outside at night, they make locks for them or a good bicycle lock will work to secure to a tree or post. I prefer a portable as there are other uses for them that you can use even when not camping like emergency power at home or power for working on location.

Moisture

In the summer, you do not notice the moisture as much in your RV as you will notice it in the winter. In the summer, you can open vents and windows 24 hours a day if you like to let air blow through and dry the RV out. In the winter, moisture is an issue! In some types of RV's it is less of an issue, in others more. One thing that I started in my RV years ago is a dry out routine. First I try not to add more moisture to the RV than happens with your living in it. Don't try drying bath towels by hanging them in the RV. Wet clothes again will add moisture so don't dry inside. Bang off all the snow you can from boots before coming in. Cook with the vent fan on (if it vents outside) or open windows when cooking. Finally, pick a time to open all the windows and vents to air the RV out for 15 or 30 minutes. Move that wet air out and bring in drier air, I actually will turn my furnace up to help move the air and heat the new air as it comes in – a little bit of wasted power but the drier RV is so nice!!

So how do you deal with all the wet clothes or towels if you are on the road for a long time? Find a laundry and dry them there! Most towns and many ski hills and resorts have a laundry. A couple minutes in the dryer and you are ready to head out all dry!

Clothes

Most RV's have limited storage, but honestly carrying an extra warm coat really does not take up a lot of space. Even a warm hat, boots and gloves can be packed into small spaces. I usually always have a warm coat with me and a toque, even in the summer as conditions in the mountains can change fast. One minute it is warm and the next cool and snowy or rainy so a warm coat is nice.

Cell Phone

PLEASE just because you have a cell phone, don't rely on it for emergency help. Many things can cause the cell to not work like dead batteries or bad service areas. BUT a cell phone can possibly be used to get help. I like to prepare first and have my cell phone as one part of the emergency plan. No cell service - If you have texting and do not have service try sending a text, it may get through. Also in some areas with apparently no cell service, calling 911 can potentially get their attention. For injury emergencies, an emergency texting app on your phone can also help to send a message and your location to a predetermined text number.

Use Your Brain!

Sometimes in an emergency situation, like the cold, we can panic without cause. Even on a nice day and suddenly the temperatures drop and we can start to panic. RELAX! Do not act until you have thought through your situation. I watched a family panic as they realized that they were caught in a freak snow storm. It was a storm that would last for less than 12 hours and when the sun came up it would melt in an hour, but they panicked big time! In reality, they were in a nice motor home, had lots of food and even had a pile of firewood. After a few hours of panic, the kids went outside and played in the snow and soon after the parents went out as well and started a fire. Funny thing was, they enjoyed that snow storm more than the nice weather they had had for a week before. They were excited to return home and tell family and friends that they had survived the storm.

Temperature ranges and what to do to survive and even enjoy them.

Level 1..... 0 to -5C

In this group, I find the most misinformation. According to many, at these temperatures even for one night, life ends, your RV is done for and you have no hope of anything. In actual fact, at these temperatures there is not a lot that is going to happen to you or your RV in one night or even in multiple nights as long as the daytime temperatures rise above freezing. This is the range that most people will find themselves in without preparing for it but the good news is that you really do not have to prepare a lot to make it through. Knowledge is your friend and knowing your RV is a huge benefit. In one night:

- No your water and waste tanks will not freeze solid, your water lines will not explode.
- Your battery will not suddenly die in your RV and or tow vehicle, as long as it is in good shape and charged and you do not go overboard with using it
- You will not get frost bite by going outside for a few seconds and if you use your head, you will not even notice that the temperatures are below freezing.
- Other RV systems will not pack it in at these temperatures

The effects and what to do for yourself:

You may get chilled or cold but it is very simple to fix, dress a little warmer and that is it. If you have a hat and maybe some gloves or mittens, you can use them if you are going outside.

The effects and what to do for your RV:

Water system – One night with these temperatures and your water system will be fine even in a non-heated RV. Letting your hot water tank heat up before bed will ensure that it will not get close to freezing overnight. If you are still concerned, leave it on and as it cools it will heat back up. If you are not hooked up to city water and sewer before bed, turn your water pump off and open your taps, this will allow any pressure that starts to build up from freezing to escape but most likely just the temperature of the water in the RV will prevent freezing. If you are hooked up to city water and sewer you can shut the water off and disconnect but there is really no need.

The issue of burst water lines does not happen at these temperatures, but you may find that first thing in the morning you have icy slush in a line. With heat inside the RV and warmer temperatures outside, this will clear fast. In fact, if your RV has the water tank and supply lines inside, then you can go much colder than this without any extra preparation. In order for pipes to burst, you need either a really hard cold or multiple days and nights of below freezing for your lines to freeze then partially thaw and refreeze. It is the refreezing that will cause bursts. If someone told you their lines exploded in one night at these temperatures, it was most likely from a bad pipe or poor connection.

Waste tanks – One night at these temps will not cause your waste tanks to freeze. It may cause a dump valve to freeze but that is it. In the case of the dump valve, wait until the sun comes up and the temps rise a little and it will work so you can dump. If you have multiple days and nights below freezing, you may need a hair dryer to thaw the dump valves. The biggest reason that your waste tanks will not freeze in one night or even two nights is the

warm water / waste that we send to the tanks as well as the amount of salt in our waste. Antifreeze at these temperatures is not needed unless you are expecting a lot of cold days and nights and even then it will be more of an issue with the dump valves than the tanks.

Heat – The standard RV furnace, while being noisy and an electricity hog, will work well in these temps. At these temperatures most people leave them off at night as most RV's will maintain the day's heat and the noise is annoying to listen to all night. Toss on some extra blankets and turn the furnace higher in the morning to warm up and this will take very little extra energy and no real preparation. An exception is a tent trailer. I found that tent trailers at this temperature and some pop up truck campers cool off VERY fast and when I slept in one at -5, I wanted to have heat – if you are in one of these, I would make sure that the battery is large enough and topped off for even this temperature so you can enjoy some heat.

Power – Not plugged in and you will be relying on your RV battery. Other than the furnace using a lot of power there are really no issues to worry about in this temperature range as long as your battery has been maintained and is in good shape.

Some type of meter to tell you what the charge is like on your battery is a great investment. They can be simple like this meter and low power alarm or a lot more advanced.



Level 2..... -5 to -10C

This level is where your knowledge about your RV will come in even more handy. Knowing how it is built (insulation, how well are holes in the unit sealed, where the water lines run – inside or outside) and what accessories your RV has will go a long way in helping you make decisions on how to deal with this level of cold. Knowing if your furnace has ducts running under the floor or inside cabinets will help you know what is getting heated with the furnace. Knowing if you have heat tape on your water tanks and/or waste tanks will help as well but you will need to know how to turn them on. Know if the heat tape works on 12V or 110 - Most heat tape is 110v. Knowing the size and condition of your battery will also help. A 10 year old group 27 battery that can barely hold a charge in 20C will not work for a full night in the cold even without a huge draw.

The biggest issue that I find below the -5C range is that it does not usually warm up enough during the day to do any good. If the temperatures do warm up, many things can improve with that warmth. Even if you are travelling to someplace warmer the next day, that will help to thaw things out.

The effects and what to do for yourself:

Similar to Level 1. If you know that the temps are going to be in this range before you head out, make sure to carry a heavier jacket, gloves, toque and boots so you can stay warm during the day and for emergency use during the night should anything happen with your heat. Take extra blankets and comforters. Take hot meals and drinks to keep your body temperature up. I do not mind it down to -10 as I find it a nice temperature as long as the days either warm up or at least the sun comes out to make you feel warm – without the sun during the day it seems like the following day is even colder even without the temperature going any lower.

The effects and what to do for your RV:

Water system – Like level 1 one night with these temperatures and your water system will be fine but I would make sure that the heat was on in the RV so that the inside warmth will help to keep lines warm. Even if you are not staying in the RV, or you have warm bedding, keep the heat on for the water lines. Leave the hot water tank on. Before bed turn your water pump off and open your taps as this will allow any pressure that starts to build up from freezing to escape. If you are hooked up to city water and sewer, I would suggest disconnecting and releasing pressure on your system by opening your taps. Some people when they have full hook-ups will leave the cold water tap dripping all night. I have done it, and it worked but I think it opens the door to more problems with the drain line starting to freeze or something else going wrong.

Down to -10, burst water lines are not that frequent with the heat on in your RV, even if the heat is not run with ducts into the cupboards or under the floors. Opening the cupboard doors so some heat will go in there will also help. You do not need the cupboards to be hot just above freezing. I would be more worried if your lines were outside of the insulation membrane. In this case, maybe drain the lines by using the low point drain..

Waste tanks – One night at these temps will not cause your waste tanks to freeze solid BUT you will notice them having ice on the surface if you look :-). It will cause the dump valves to freeze and you should not try to force them as the ice will be strong enough to cause something to break if the valve is forced. If the temperature rises during the daytime to above freezing, the valves will thaw quickly and the slush / ice in the tanks will start to melt. If you have multiple days and nights in this range, you will have to add some hot water to the waste tanks to thaw out the waste before dumping. Antifreeze at these temperatures will help BUT if it stays cold, you will find the antifreeze will turn to a slush and still require some help with hot water to dump.

Heat – It is amazing how much heat even the worst insulated RV will retain in cold weather. At these temperatures, I leave the heat set at 10C to 15C over night as much for the water lines as anything. In a couple of my units, at -10 outside and setting the heat at 15C inside, the furnace only starts to cut in closer to morning as the RV retains a lot of warmth. For sleeping, toss on some extra blankets if you have them or even put some coats over your feet to help keep yourself warmer. Again, in a tent trailer or pop up truck camper, you will see a lot more use of the furnace and more of a draw on power so a larger battery will be needed if you are not plugged in. Closing drapes will help to keep heat in. Anything to add a layer of warmth between the cold walls and warmer inside air will help so maybe hang some extra blankets on the wall if you feel drafts.

Power – Not plugged in and you will be relying on your RV battery, and at these temperatures you will find out fast the condition of your battery if you do not already know. A good condition, fully charged Group 27 battery will get you through the night in most RV's that are moderately insulated. Even with using lights and maybe watching a little TV or a movie, you should still be fine. You will more than likely have to charge the battery the next day if it is only a group 27. A group 31 has more capacity, and if you are not running the furnace cranked way up all night and the battery is in good condition and fully charged, you should be able to pull two nights out of it. Again, things like running lights, watching TV, having the furnace turned up high all night will draw down any battery, even a battery in excellent condition and fully charged when you started out.

LED lights can help to cut your power usage WAY down from traditional incandescent lights.



Level 3..... -10 to -20C

At this temperature you will seldom if ever head out camping and find the temperatures drop from nice and warm to this cold without at least a few days warning so you have time to prepare. At this level you need to take precautions beyond just turning up the heat, issues can crop up even with the best prepared RV's. The good news is that once again even a poorly insulated camper will help to keep you sheltered from the wind and some of the cold. BUT at this temperature you need to know what you are doing to make it enjoyable and safe.

The effects and what to do for yourself:

Warm clothes are a must, not for just outside but for inside as well. Warm meals and drinks will help as well to keep your core temperature up and to stop any chills. You will burn more calories so carrying enough food is a necessity. Also at these temperatures you need to prepare for getting snowed in or for vehicle issues so extra food and back-up supplies are a MUST! I also strongly recommend a cell phone and charger as well as letting someone know where you are and when to expect you back.

Good bedding at this temperature is also a must. Even without heat if you have a sleeping bag, or bedding, that is good in the cold it will make your life so much more enjoyable and will make sleeping pleasant.

The effects and what to do for your RV:

Water system – Drain it!! Drain the water system and winterize with RV antifreeze or blowing out the lines. Carry water in a jug so you do not have to worry about lines freezing. I have camped in these temps with water in the lines but when you get home you are faced with draining and winterizing and it just is not worth it.

Waste tanks – I try not to put a lot of anything into the waste tanks at these temperatures as the worst part is trying to find a place to dump and having the dump valves thawed when doing so. The less you put down the longer you can go between dumps. I use RV antifreeze (you can also use windshield washer fluid) to flush my toilet and combined with the salt in your waste the tank will never freeze solid. The mixture will be slush but will not freeze solid. A hair dryer is helpful to thaw dump valves.

IF I was building a cold weather unit with waste tanks I would have the tanks and the dump valves inside a heated compartment and I would add heat tape to the entire system as a back up to the warm inside air. IF I was building an RV for extreme cold and I was going to use it daily I would switch out the toilet and the black tank for a composting toilet, only issue that I have been told with these is that you need to keep the unit above freezing for it to work properly in the winter. I currently own a porta potti and I love it, a little more work but still great! The biggest benefit is that in the real cold you can fill the flush tank with RV antifreeze or windshield washer fluid and take it inside to empty in a toilet. The other benefit is that you can put it in any RV without effecting the current toilet and black tank, some RV's even have enough room in the current bathroom to sit it on the floor. Then when it gets warm you can remove it and use the regular toilet and black tank.

Heat – I Will admit that I am a WHIMP and I like it warm. For me heat at these temperatures

and colder is not just about turning up the thermostat it is about preparation. I have done some simple things like adding underlay and carpet to the floor to get my feet off the cold lino. I have also bought the inserts for the roof vents to stop cold from coming in there (also works well for hot days to stop heat from coming in). Now here is where you need to know how your camper is built, if your camper is a summer only camper doing much more may not have the payback that you want. Zero insulation in the walls will still be zero insulation no matter what else you do. For me I have had a couple campers that were both designed for colder weather with insulation in the walls so when I did a little bit more for making it ready for the cold weather it had HUGE paybacks for how warm the RV was.

If you want to go a little more advanced I built storm windows for the camper so that I could cut out most drafts around the windows. I then added heavier curtains and/or the metal foil with the bubble wrap in between for more insulation value to the windows. In my Class C motor home I also added heavy moving blankets between the cab and the camper and one for the camper door way, these blankets also helped to cut down on drafts and kept the heat in and the cold out.



A moving blanket between the cab and the camper in my class C.

So why not just crank up the furnace and be done with it? Why the extra preparations? The colder it gets the more you have to heat and with drafts it means your furnace will have to work a lot harder warming the cold air that is coming in with the drafts. Cut out cold drafts and the heat stays in, the cold stays out and you will be warmer with less furnace run time.

One thing I do when I am camping at a place with power is I carry a 110v electric heater with thermostatic control. I can use this to either help the main furnace or to run in place of the propane furnace. I am happy to have a propane furnace for many reasons but peace and quiet when sleeping is not one them.

Power – Again knowledge is power (pun intended) in these temperatures.

If you plan on using battery power and you have an old battery that is weak chances are at these temperatures it will be a cold brick if you use it for more than a few minutes. If you have a good smaller battery (group 24 or 27) it may run for a while but if you expect it to heat all night more than likely you will get a cold awakening in the middle of the night as it fails. To add to your energy issues as temperatures drop so does the capacity of your battery, just when you need it the most. A warm fully charged group 31 battery may be able to run your

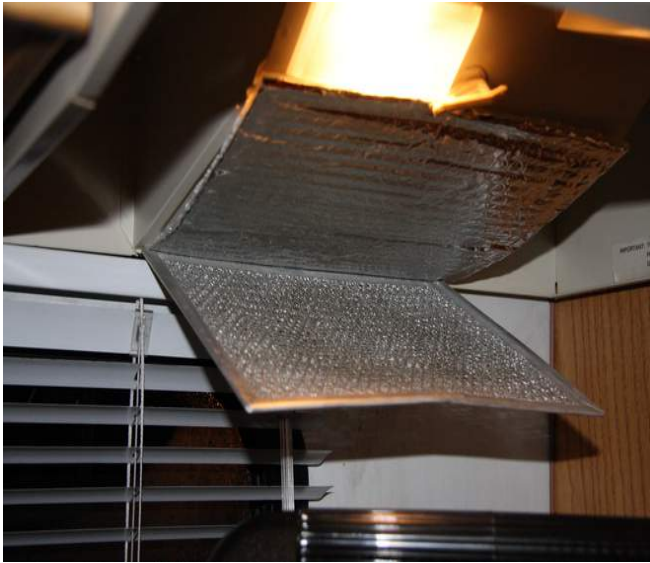
furnace on a cold night, change that to a cold group 31 battery and you may be without enough power to run the furnace for even half the night. This is another of those areas that RV manufacturers do not consider when designing a camper, like adding insulation, nor should they for the vast majority of campers. Adding extra batteries to an RV that will be plugged in 99% of the time, or only used above zero is a waste and will add to the price without a lot of benefit to most campers. If you have a camper with insulation and you do want to make it more capable in cold weather and to be run on batteries only there are a couple things that you can do.

- First try and get at least a group 31 battery if you currently have a group 27, not a huge difference but some.
- A newer battery is also a help, older batteries can lose capacity. Take your current one in and have it tested to see how good it is.
- Adding an extra battery will help. It is best to replace your current battery at the same time so they are matched. Even if they are both mounted outside in the cold they will help.
- Better yet when replacing your current 12v battery consider switching to two 6 volt batteries, more capacity in just about the same space.
- If you can manage it instead of two group 31 batteries add four 6 volt batteries, almost three times the capacity on the 6 volt batteries as the group 31's.

Now the above changes are what I call starter changes. If you truly want to help your batteries this may require a larger modification, move your batteries inside! If you keep your batteries warmer they will hold on to more of their power. If you are moving your batteries inside to a part of the RV that is heated you will also want to go with a sealed battery that does not off gas. Some people say adding a heating blanket to your batteries will help, and it will, but if you are not plugged in you are using your battery power to heat the batteries to get more power and in my book this is not efficient. If you are plugged in you do not need your batteries so heating is not required – it really is a confusing decision.

Side note: If you are out camping in the cold, or for that matter any weather, you should make sure that your batteries are fully charged when you get home before you leave your RV for any length of time. A fully charged battery will handle colder temperatures without damage, a battery that is only partly charged will be more likely to sustain damage when the weather turns cold. If your RV has any phantom draws (Power that is used when the RV is parked like alarms, radio or TV's, etc.) you should also make sure that the battery is being topped up on a regular basis. I either leave my RV plugged in when parked or I plug it in once a month to top up. If you have a solar system this may not be needed BUT check it to make sure that the solar is actually working and it is not covered in snow or leaves.

If you are camped with power I strongly recommend getting a 110v heater. First you may as well use the 110v rather than your 12v and propane. Second is that as much as I love having propane heat anywhere I go the noise drives me nuts!! A electric heater is sooo much quieter. Sometimes you may also find that your RV is hard to heat and having the electric heat to work with the propane may be needed to keep your RV at a good temperature. Modern electric heaters are safe to use and ones with thermostats work well at keeping the temperatures where you set it.



A few modifications will go a long way to making your camping more enjoyable. Here a piece of Reflectix® was cut to stop the cold air from coming in the vent over the stove.

Reflectix® in a window. Helps to reflect heat in and it stops drafts. If you want it to really work well sew a cloth cover over it and add some insulation on both sides. I like quilt stuffing for this.



Level 4..... -20 and colder

After minus 20 there is not a lot that is different than the -10 to – 20 temperature in how you will prepare yourself or how the RV will be prepared. The big difference is how the colder temperatures will use more power and how your batteries will lose capacity. It is a lot more dangerous to your health and possibly your survival so preparations are a must.

A couple other things will also come to light. First, at extreme cold, propane will not flow. Propane needs to be warmer than -43c for it to flow. In my truck camper, this was not an issue as the propane was inside a closed cupboard (no this is not how things are done today but when my camper was built it was). In my class C, the propane is outside and gets colder faster so in -40's I know I will not have propane for the stove or furnace.

In extreme cold, you will feel the cold radiate from the walls of the camper. In a house, you are further away from the outside walls. This can make you feel cool or cold even when the inside temperatures are warm.

Batteries lose a lot of their reserve power and will not charge as well in extreme cold. This is also at the temperature that even a good battery may have an issue.

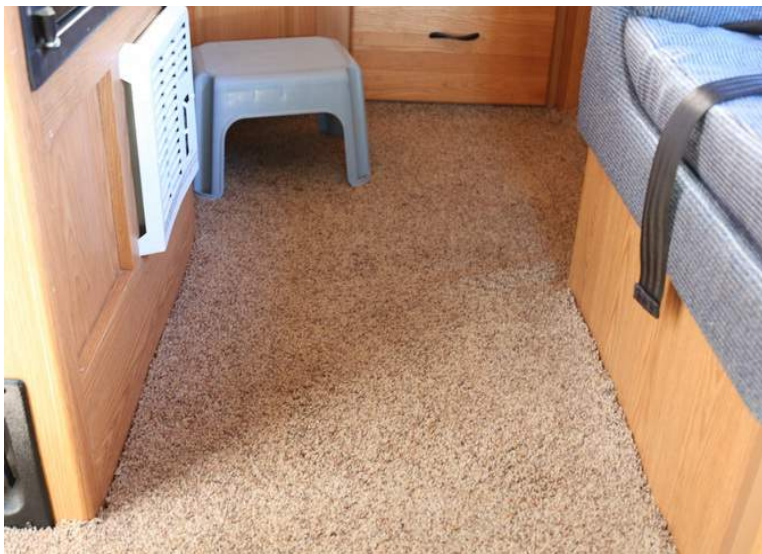
Things break! A door handle that was strong and worked fine at 0 will all of a sudden shatter at -30 or -40 when bumped by a hard object. A knob will turn fine till it gets crazy cold, then it takes all your strength to even start it to turn and then it may just break off.

I take back-ups of back-ups for important items. For my heat in my class c I take the propane furnace, an electric heater (if I have power) and a portable heater just in case. I would not sleep with the portable heater running even though I know it would be fine if I took precautions, but it is nice to have in case of a major failure.



My last line of warmth my portable heater. GREAT also for using outside to thaw things out or warming your hands. Can be a life saver if your other heat sources do not function. Has it's own portable fuel so not reliant on the RV's propane and takes no power.

At these temperatures, I **STRONGLY** recommend that you have your vehicle, tow vehicle or the RV set up for cold weather travel, and maintained in good shape. A block heater is great (again only works if you have a plug in but I have used my generator for this). **GOOD** tires are a must in my book, great tires are even better. As the temperatures drop, standard tires have less traction on ice and most RV's come with tires that have poor traction in snow. Make sure that your vehicle's battery is good and you have everything running as it should. Just this week we had a temperature drop, not huge but down to -9c. Went out yesterday to take the dog for a walk and the car started but had a funny noise and the battery light came on. The light went out and the noise stopped but something was not right. Made an appointment for the car to go into the mechanic and sure enough the alternator was shot. I could have put up with it but as the temperatures drop more things would just get worse.



To help keep my feet warm I have carpet and underlay. A **BIG** difference in warmth!!!

Vent covers can cut down on a lot of drafts and help to reduce the amount your furnace runs.



I really hope this helps. AS I mentioned before this is not everything to do when cold weather camping but it is a start. If you want to do a lot of cold weather camping I recommend you take some courses. There are survival courses that will cover off a lot of situations, not that you will experience them but knowing what to do will help to keep yourself calm when you are out in the cold.

I also recommend letting others know where and what you are doing in any temperatures. This can help to act as a back-up just in case something happens.

Be careful but give cold weather camping a try, even if it is just in your driveway!

Legal notes: Like everything in life you are responsible for what you do and if you plan on doing any cold weather camping I recommend that you do more research than just this article. This is not written to be the sole guide for you just to add to your knowledge. If you are not comfortable with doing this then don't. I take no responsibility for what you do with the above information.