

## **Section 9: Eco Building**

When it comes to tiny house designs there are plenty of ways to be eco-friendly. You can use recycled, reclaimed, donated, new, used, and a variety of other kinds of building materials. Living small decreases your footprint and decreases the number of resources used substantially, and on top of that, you can try to be as eco-friendly as possible. Tiny houses, often totaling 400 square feet or less, are definitely cute and popular. However, many people wonder whether they are really helpful to the environment, with the short answer being yes. Tiny houses help to reduce the environmental impact of tiny homeowners by a significant amount.

Tiny houses have one great advantage and that is that they are extremely environmentally friendly. A tiny house design can be built with the use of green building materials or recycled building materials. Tiny houses are so small that they don't require sophisticated heating and cooling systems, and they can easily be moved to a different location and are designed to reduce your carbon footprint. Tiny houses consume much less energy as a standard home, and many tiny houses use sustainable resources during the building process. The following are just some of the ways you can make your tiny home more sustainable.

### **Appliances**

Select appliances with high energy-efficiency ratings. Choose water-efficient appliances and low-flow sanitary fittings.

### **Choose Non-Toxic Building Materials**

Choosing non-toxic building materials is a good way to ensure that your environment is healthy and free from toxic residuals and harmful finishes.

### **Decorate with Plants**

Bring some nature indoors by adding a few potted indoor houseplants. Plants not only help blur the lines between the exterior and interior of your tiny house but they also help to purify the air indoors. Plants also help to relieve stress and tension and can promote peace within a space. Plants provide some natural color and interest to a tiny house with different shapes, flowers, and scents. Choose a tiny house with an extra storage shelf that could become a new home to a couple of potted plants indoors.

### **Garden**

Choose native and local plantlife for gardens and landscaping. Don't forget the outdoor areas of your tiny house as there are many ways you can make the outside of your tiny house eco-friendly. Reuse water, reduce chemical

applications, and use organic matter for fertilizer are all ways to make an impact without much effort. Plant native plants to attract pollinators and require little to no extra water. Plant a garden to provide a food source just steps from your kitchen. Keep the area around your tiny house eco-friendly by using native plants that help to support the local pollinators in the environment.

### **Green/Living Roofs**

Green roofs are just one way that you can make your tiny house more energy-efficient and eco-friendly. Living roofs are an amazing architectural feature that has more benefits than just visual aspects. Green roofs can help in managing stormwater runoff and help to reduce the urban heat-island effect. Green roof construction reflects heat rather than absorbing the heat like a regular roof and helps with lowering the tiny house's cooling costs. Green roofs are also great insulators while requiring very little maintenance. And the best part about green roofs is that they look great too.

### **Install a Rainwater Collection Tank**

A rainwater collection tank will cut your tiny home's demand for drinking water by up to 50 percent and also help protect the environment. Using **rainwater** for washing machines, toilet flushing, and watering the garden saves precious drinking water.

### **Insulation**

Properly insulate the ceiling, walls, and under the floor to aid heating and save on energy costs.

### **Lightbulbs**

Swap out regular light bulbs for eco bulbs. Design for maximum natural light to reduce artificial lighting.

### **Minimize Waste**

Recycle where possible, especially when demolishing and building.

### **Shop Locally**

Shop at local farmer's markets that have grown food within miles of your tiny house as well as using cloth bags at stores instead of plastic ones. Choose recyclable materials such as glass and metal instead of plastic options. Committing to incorporate these eco-friendly options into all areas of your life is essential when staying in a tiny house.

### **Source Building Materials Locally**

This reduces the environmental impact of transporting them.

### **Use Heat Sparingly**

Tiny houses are so small that they are quick to heat. Many tiny house dwellers can turn on an electric fireplace and provide enough heat for the entire house. Turning down the heat, or turning the heat off entirely depending on your location, will help to cut down on energy costs. Consider adding more blankets to the bed to help provide eco-friendly heat without the need to use an energy source. Heating your tiny house space sparingly as well as adopting green practices is vital to being eco-friendly in a tiny house.

### **Use Renewable Electricity Sources**

Generate electricity onsite by installing solar, a small-scale wind turbine or by choosing a power company that generates from renewable sources.

### **Utilize the Sun (Passive Solar)**

Orientate your tiny house for maximum sunshine, install solar water-heating, and consider passive heating options. Talk to your architect or designer for further ideas.

### **Windows**

Install double-glazed windows, or thermal-backed curtains if double-glazing is too expensive. Tiny houses usually include several windows that help the tiny house feel more open to the natural elements. Windows not only provide a clear view outdoors but they also allow for natural sunlight to brighten the space up during the day. Turning off the lights and choosing to use the natural outdoor sunlight will help to create an eco-friendly environment in a tiny house. Choose a tiny house with several windows for natural brightness.

