

## Introduction

Picture a small, minimalist dwelling that is simple to build, repair and maintain....

....with readily available materials.

....by anyone with little experience.

....using common tools.

This is a kind of manual about how to make that kind of living space from a single 20-foot shipping container. It can sit in the middle of nowhere or your backyard and be hauled without special equipment. If it's built thoughtfully and taken care of, it can last generations.

A few years ago, with no true building experience, I decided to build a container home of my own with some friends. I used the experience as an opportunity to learn, experiment and problem-solve. I think we got some things right, and some things definitely need improvement. I refer to this container home as the Prototype (though it's the only one I've ever built).

Before, during and after the construction of the Prototype, I spent countless hours doing research, collecting bits of information, and determining what was relevant. Although people have been creating living spaces from shipping containers for decades, no standard concerning the size, configuration, number of containers or construction method has yet taken shape. Rather than consulting easily accessible instructions and following a conventional building procedure, I had to essentially rely on opinions about the proper way to build a container home.

If you decide to build your own container home, I hope that this manual can save you time, answer questions and eliminate frustration.

**Part 1** of the manual covers all the necessary steps to prepare you to start working on your container home.

**Part 2** is the building and installation portion of this manual and constitutes the bulk of the construction information. When Part 2 is completed, you'll have your container home roughed-in and ready to be finished out with interior walls, appliances and furniture. This information can also be applied to larger and more complex container homes or container shop projects.

I won't go into much detail about anything that would be considered standard construction practice since there is plenty of good information out there already. Additionally, there may be some technical terms and definitions that you may need to look up.

**Note:** The chapters in Part 2 are in the general order in which they should be completed.

**Part 3** is kind of a catch-all. There's a chapter in there about the Prototype specifically. I also included some electricity basics.

**This manual is for informational purposes only.  
By following any of the procedures described in this manual  
you do so at your own risk.**

### ***About Building Codes***

At this time, there is no regulating entity in the U.S. that recognizes shipping containers as the sole basis for residential construction. A container home is treated as a standard home with regard to engineering, building codes, permitting and inspections.

All of the designs, ideas, procedures and plans in this manual are based on my own research and experience coupled with guidance from a general contractor. None of this information can be substituted for any building codes. (The IRC 2021 is considered to be the comprehensive guidebook to residential building codes in the US for most areas.)

If you need your container home to be approved by your county or municipality, it's up to you to do your research and consult the proper experts and authorities.