***Construction Timeline:***

*Start Date: Monday, May 4th*

***Week 1:***

*4th –* Orientation

*5th –* Tires, Plumbing

*6th –* Tires, Plumbing, Cooling Tubes

*7th –* Tires, Cooling Tubes

*8th –* Tires, Packout, Berm Insulation, Backfill, Cistern Installation

*9th –* Tires, Packout, Berm Insulation, Backfill, Form Bearing Wall Footing, Framing

***Week 2:***

*11th –* Tires, Packout, Berm Insulation, Backfill, Form Bondbeam, Form Front Bondbeam, Rebar, Framing

*12th –* Tires, Packout, Berm Insulation, Form Bondbeam, Form Front Bondbeam, Wall Footings, Rebar, Framing

*13th –* Tires, Packout, Berm Insulation, Backfill, Form Bondbeam, Pour Bondbeams & Footings, Framing

*14th –* Packout, Strip Forms, Install Trex Plates, Framing, Can Walls

*15th –* Packout, Plates, Can Walls, Framing, Bottle Cutting

*16th –* Can Walls, Framing, Bottle Cutting, Leveling

***Week 3:***

*18th –* Can Walls, Framing, Bottle Cutting, Plumbing, Electrical

*19th –* Can Walls, Facia, Bottle Cutting, Plumbing, Electrical, Framing

*20th –* Can Walls, Facia, T&G Ceiling, Front Wall Framing, Bottle Cutting, Plumbing, Electrical, Framing

*21st –* Can Walls, T&G Ceiling, Front Wall Framing, Bottle Cutting, Plumbing, Electrical, Framing

*22nd –* Can/Bottle Walls, Framing, Bottle Cutting, Plumbing, Electrical, Roof Insulation

*23rd –* Can/Bottle Walls, Bottle Cutting, Plumbing, Electrical, Roof Strapping, Planter Excavation, Adobe

***Week 4:***

*25th –* Can/Bottle Walls, Bottle Cutting, Plumbing, Electrical, Roof Strapping, Planter, Glass Installation, Adobe

*26th –* Framing, Plumbing, Electrical, Roof Metal, Planter, Glass Installation, Adobe

*27th –* Framing, Plumbing, Electrical, Ease Trough, Planter, Trim Framing, Adobe

*28th –* Can/Bottle Walls, Bottle Cutting, Plumbing, Electrical, Planter, Trim Framing, Adobe, Flooring, Framing

*29th –* Plumbing, Electrical, Planter, Framing, Adobe, Flooring, Bathroom/Kitchen Finishes, Systems

*30th –* Framing, Adobe, Flooring, Bathroom/Kitchen Finishes, Systems, Metal Flashing, Doors

***Week 5:***

*June*

*1st –* Framing, Adobe, Flooring, Bathroom/Kitchen Finishes, Systems, Metal Flashing, Doors

*2nd –* Trim Framing, Adobe, Flooring, Bathroom/Kitchen Finishes, Systems, Stone Walls, Solar Panels, Grading

*3rd –* Trim Framing, Adobe, Finishes, Systems, Stone Walls, Grading, Planting, Fixtures

*4th –* Cleaning, Finishes, Counter Installations, Tile, Shelving

*5th –* Cleaning, Finishes, Counter Installations, Tile, Shelving

*6th –* Bonfires, Music and Enjoy our beautiful creation

***Description of Building Stages:***

***Tires (Tire Pounding)–*** You will learn how to choose the appropriate tire, prep. it & pound it tight all the way around using a spirit level & a transit.

***Plumbing–*** Those interested will be able to learn the Holistic Home plumbing system from cistern to septic. We will also set aside a time to build a *WOM (Water Organizing Module)* with the entire group.

***Cooling Tubes–*** You will learn where & when to set the cooling tubes, as well as setting the drainage slope and finishing each end.

***Packout– Adobe– Flooring–***

You will learn all the steps to applying Packout to the walls. This will include how to mix cement & cob, prep. the surface for each layer, and finishing the walls.

***Berm Insulation–*** We will learn how & when to install the insulation in the berm, as well as the vapour barrier & backfilling.

***Grading– Backfill–***

As the rows of tires go up, so does the berm insulation on the backside of the tires, accompanied by the berm. We will have a mini excavator on site that will be bringing up and grading the berm.

***Cistern Installation***– On the tire row after the cooling tubes, we will install the cistern behind the tire wall. We will also install the gravity fed plumbing from the cistern to the house, as well as the over flow.

***Form Bearing Wall Footing***– We will be forming & pouring concrete footings for the first bearing wall, mid bearing wall and the outer greenhouse wall. We will learn how to build the forms, cut & bend the rebar, tie rebar together and install the J-bolts that fasten the Trex plate to the footing.

***Framing– Levelling– Front Wall Framing–***

While much of the structure is tires, our Holistic Homes also incorporates a “log home feel”, with beautiful exposed wood walls, roof beams and T&G ceiling. You will learn how to build wood forms, square & chalk the footings for plates, install the Trex plates to the footing, layout walls, cut a measure studs & other wall components, reverse crown lumber to straighten it, and fasten different components together, as well as install & level the walls.

***Form Bondbeam–*** Before the bondbeam can be formed, we will learn how & where to dig the trench, how to cut the components to build the form and how to install it ready for the concrete pour.

***Rebar–*** Within the footings & bondbeams, are two rows of rebar. We will teach you how to measure, cut, bend and install the rebar into these forms, ready for the concrete pour.

***Form Front Bondbeam–*** The front bondbeam supports the exterior greenhouse wall.

***Wall Footings–*** Wall footings are placed anywhere there is an interior can or bottle wall.

***Pour Bondbeams & Footings–*** We will have two cement mixers on site, so we can have one continuous pour for the bondbeams & footings.

***Strip Forms–*** Once the footings or bondbeams have cured, you will learn how to strip & clean the forms so the lumber can be used elsewhere in the Home.

***Install Trex Plates–*** Trex plates are installed on the concrete bondbeams or footings, and anchored with J-bolts that were set in the cement. We use Trex plates because they are a poly/wood blend that won’t transfer moisture from the cement to the wood above, and won’t rot.

***Can Walls–*** You will learn how to layout & build can walls. Using cans in place of bricks to create interior & exterior walls, and finish tire walls.

***Bottle Walls– Bottle Cutting–***

You will learn how to set up the tile saw to cut bottles, wash them, dry them, join them into bricks and finally, how to place them in the wall to create stunning designs & patterns.

***Systems– Electrical– Solar Panels–***

You will learn how to install the solar panels, run the wire, layout plugs, switches, lights, and install a censor system to monitor temperatures throughout the home, floor and berm to continuously improve the design.

***(T&G) Tongue & Groove Ceiling–*** Once the roof beams are in place, you will learn how to chalk and layout the T&G ceiling, tricks to installing & laying out subsequent rows, how to fasten the T&G, and finish the sides.

***Roof Insulation–*** Once the T&G has been installed, we will install a breathable moisture barrier and begin installing the rigid insulation. We will be using reclaimed insulation so we will learn how to prep the sheets for installation, stagger the layers for maximum R-value and seal the joints and edges.

***Roof Strapping–*** Once the roof insulation has been installed, we will install the roof strapping that the metal roofing gets fastened to. You will learn how to layout the strapping, measure and layout the locations for the 18” screws that pull the strapping & insulation down tight to the roof beams, and finish the edges of the roof.

***Roof Metal– Metal Flashing–***

Once the roof strapping is installed, we will install the metal roofing. You will learn how to stack the roofing sheets so we can layout & drill the holes for the roofing screws, layout the sheets on the roof with the proper overhang, install the sheets so the joints are tight, and install the flashing around the edges to seal the roofing.

***Facia– Ease Trough–***

You will learn how to measure, bend and install the metal facia & ease trough around the home.

***Glass Installation–*** Once the walls are framed, you will learn how to prep. the window openings to receive the glass, how to carry the glass safely & easily, how to place the glass in the frames, and how to secure the units.

***Planter Excavation– Planting–***

We will excavate much of the planter with the mini excavator and begin to securely form the edges of the planters. We will also install the planter plumbing, *EPDM (rubber liner)*, rock bulbs, layers of stone, sand, earth, and finally start planting.

***Trim Framing– Doors– Shelving–***

When we get to the finishing stages of the building, you will learn how to build & install the doors, finish the trim around them, build & finish the custom shelving and attach the hardware.

***Bathroom//Kitchen Finishes– Counter Installation– Tile– Fixtures–***

One of the final stages of construction will be to install the counter tops & tile in the bathroom & kitchen, grout the tile and install the toilet, sink and fixtures.

***Tools:***

If you have access to the tools listed below, we ask that you bring them with you.

* Pouch/Tool Belt with...
	+ Measuring tape
	+ Pencil
	+ Speed square
	+ Chalkline
	+ Hammer
	+ Utility knife
* Drill or saw
* Gloves (multiple types)
	+ Work gloves
	+ Latex (eg. Dish gloves, or “doctor’s” gloves)
* Proper working clothes
	+ Work shoes and/or boots
	+ Hat to protect from the sun
	+ Safety glasses